

SEPTEMBER 1, 2022

SCIENTIFIC FRAUD COMMITTED BY EXAMINATION BOARD IN  
COLLUSION WITH SWANSEA UNIVERSITY STAFF,  
AGAINST MR GEOFFREY BLANCHE BSc ,  
AND HIS MSc BY RESEARCH.

## **TITLE OF THESIS**

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**AN INVESTIGATION OF THE PHOTOELECTRIC  
EFFECT TO THE ENDOTHERMIC ELECTRIC  
EFFECT DURING THE ELECTRIC FIELD CHARGE,**

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**ENDOTHERMIC ELECTRIC EFFECT AS AN  
ENERGY GAIN IN THE SYSTEM FOR A  
RENEWABLE ENERGY GENERATOR**

## Table of Contents

1. Personal Statement .....	2
2. Claim against Examination Board and Others for Fraud by Coercion and Collusion.....	5
3. Viva Voce.....	6
4. Fundamental Points of Abstract from Thesis .....	8
The University's academic regulations for research master's level degrees state: .....	9
Physics Science Understandings taken from referenced sources .....	10
5. Examiners Duties that were not met in Examination Process according to Swansea regulations 13	
6. Examination Board Failures.....	15
External Examiner Main Failures in Oral Examination .....	17
Internal Examiner Main Failures.....	46
Failures of the Chairperson and Process, with intent to commit fraud.....	54
7. Emails before and after Viva .....	62
8. 1.1 Pre viva Report by External examiner with Candidate's Comments in Red.....	91
9. 1.2 External Examiners Report on Oral Examination.....	99
10 1.3 External Examiners Report on matters of general concern or interest, including issues related to quality and standards, which should be drawn to the college, or to the university.....	105
11 2 INTERNAL EXAMINER'S REPORT .....	111
12 3. JOINT REPORT BY EXTERNAL AND INTERNAL EXAMINERS .....	120
13 Addendum Report .....	123
14 Viva Transcript part 2 .....	138
15 More Conclusions .....	211
List of add-inns .....	217
16 References from Thesis .....	218

## 1. Personal Statement

I started my study of the endothermic electric effect at Swansea University in October 2019, I had applied to undertake a Masters of Research. This discipline allowed for one year of research and one year to write up the report. I immediately identified that the supervisors at Swansea University did not have electricity physics expertise I thought they would have. They seemed okay with electronics knowledge but were lacking in electricity physics understandings, and this the supervisor allocated to me, Zhongfu Zhou, admitted to me. He did not understand the physics behind electric charge that I was discussing with him, although he came across as a very likeable, amiable person.

My BSc in Renewable Energy Systems as well as personal physics study of electromagnetism, had grounded me with an in-depth understanding of energy physics. I had previously undertaken Level 3 2012-2013 in physics, chemistry and biology at Nantgarw College, and a BSc in Renewable energy systems, 2013 – 2017 at University of South Wales. Whilst I was studying battery technology during my BSc, I had identified an area of electric field charge that I connected to the possibility of producing more energy on the output of an electric field of a system than imputed to start with. For example, Maxwell wrote:

“Total current = Conduction current + Displacement current” during an open circuit electric field charge. This was Maxwell’s 4<sup>th</sup> equation which unified Faraday’s and Ampere’s laws of electromagnetism. James Maxwell (1831-1879) was the Scottish mathematician and the author of electromagnetism symmetry equations, and had identified the displacement current in 1865 (references in Thesis, 46, 47, 85, 86, 87, 88, 89, 90, 91), which became central to my Research Thesis.

I had researched renewable generator claims by several scientists as seen in the PJK Book (ref.93), one being Joseph Westley Newman who had claimed his invention produced more energy on the output than the input of his generator. The only way this claim could be possible was by the adding of the displacement current to the conduction current. The identification of a displacement current at the beginning of an electric field charge, and also being recognised as an endothermic reaction which is an energy gain from the surroundings, inspired me to apply to do a Masters of Research at Swansea University to further my understanding and career prospects as a scientist. I was accepted by Swansea University, having a BSc 2:1 Science Honours Degree from the University of South Wales in Renewable Energy Systems.

I started my study at Swansea in October 2019. In March 2020, just as I was starting my experiments to observe electric field charge using lithium batteries, the University was closed down due to a medical claim by the World Health Organisation and the UK Government. The claim was; there was a bat coronavirus, named covid-19, spreading and causing death around the planet. This stopped any further use of the university laboratories, and I was encouraged to continue my experiments and studies from home. I subsequently borrowed equipment to continue with my experiments at home, and I collected equipment from the lab to do this in April 2020.

My work continued at home and I submitted a draft of my Thesis to the allocated supervisors in August 2020. This is when my supervisors stated they would not support my work if it contained Joseph Newman, the reason being:

*“Please note: Joseph Westley Newman, whose work has been universally rejected by all credible scientific examiners, including the American National Bureau of Standards after they thoroughly examined his apparatus. we would, therefore, be extremely wary of endorsing any published work*

*which referred to Newman's 'Energy Machine'. The supervision team does not support to include the work of Joseph Westley Newman in your thesis."*

The supervisors supplied three references refuting Newman's work which I analysed and wrote about in chapter 3 of my thesis. The claims by the supervisors were false. I had already identified Maxwell's 'Displacement Current', also known as an endothermic reaction. It was from the analysis of Newman's generator and the claims made, that I pinpointed that Newman by the design of his machine was capturing this displacement current due to the open circuit charging of the coil under specific parameters set. Newman had been a victim of an historical crime committed by three US government agencies-The National Bureau of Standards, (NBS then renamed to NIST), the US Patent office and the US Judiciary, in 1989. I did not want to turn my Science Thesis into a political argument but was now forced down this route due to the historical crime observed and the university wanting to reject my work due to this scandal. Although the supervisors claimed Newman's work, *'has been universally rejected by all credible scientific examiners'*, there was no further evidence supplied by Swansea staff from 'apparent credible scientific examiners' to refute, with evidence Newman's machine. Newman's work was fully supported by affidavits from many professional people as seen in his book [reference 42]. There is evidence that he should have been awarded a Patent for his invention, this was claimed by the 'Special Taskmaster' who was employed by the court during his court case against the patent office who had rejected his claim. The Special Taskmaster had examined his work and recommended to the court Newman should be awarded a patent for his invention. Newman's work didn't go unnoticed, and a large amount of scientists, engineers, have carried on with research into his invention. A search on you tube will show you this. I would supply evidence in my Thesis that would confirm Newman's claims in regard to his generator. A displacement current or endothermic reaction at the beginning of an open circuit electric field charge, and hence an over unity efficiency of an electric field charge by adding the displacement current to the conduction current.

In March 2021, the 1<sup>st</sup> supervisory team warned me that if I included the disputed work, i.e, Newman in my work and was then failed, they would use every documentation against me in any appeal.



Zhou Z.

Wed 31/03/2021 13:19

To: BLANCHE G. (946484)

Cc: Kalna K.; Egwebe Augustine.



NITS (Notice of Intention to S...  
121 KB

Dear Geoff,

Thank for sending us the form. Please find the attached NITS (Notice of Intention to Submit) form with our comments.

Please note: As you insist to include the disputed parts in your thesis, the supervisor team has to make it clear to you that to submit the thesis in its current form is going against the advice of your Supervisors, and that if you was unsuccessful in your degree that all documentation would be made available, in the event of any appeal.

Best wishes

Zhongfu, Karol and Augustine

My 1<sup>st</sup> supervisor, Zhongfu Zhou, then subsequently resigned from the Thesis (see emails), and the university decided to offer a new team of supervisors, this was done. Both supervisory teams added no expertise or help of any kind to the Thesis, and both supervisory teams opposed the thesis due the political crime and were not interested in the science I was bringing forward (although they also claimed they just wanted me to pass my Masters). It seemed to me, they were being coerced into this stance by some university hierarchy. Everything suggested the University's agenda was to fail this work at all costs, possibly protecting political and financial interests. This is the situation I found myself in.

The university were not interested in any new possible renewable energy system that could benefit mankind. It seems the agenda was to continue with what is already known, and there was no room for any other energy generation possibilities. This would allow the university, their investors and benefactors to carry on the profitable arrangement they had; developing the currently known ways of producing renewable energy, i.e. solar power with battery storage. This would allow *no new threats* from new competitive energy generation designs that they had rubber stamped by passing Blanche's Thesis. Especially this technology that produced 24 hour excess energy, benefitting the owner of the machine and not just the energy company in terms of profits and cheap renewable energy.

The other very big issue at stake here was the actual educational side to this new understanding. By trying to fail the Thesis and stop it from exposure, was to stop new physics education understandings, science didn't matter, and a total disregard for education was shown by Swansea University. This in my opinion is a very serious crime. And as Chicago University said:

*University of Chicago*

*Report of a faculty committee under the chairmanship of Richard A. Epstein. Passed unanimously by the Council of the University Senate on December 10, 1985. The following is the distributed, corrected version issued January 24, 1986.*

*"Academic fraud is a threat to the intellectual integrity on which the advancement of knowledge depends. Academic fraud can taint the reputation of the University and of its honest scholars and researchers. It can compromise the position of collaborators, subordinates, and supervisors. Fraudulent research can lead other investigators down fruitless paths of inquiry, at enormous costs to knowledge, morale, careers, time, and money. Its occurrence places great strains upon collegial interaction."*

[Procedures for Investigating Academic Fraud - Responsible Science - NCBI Bookshelf \(nih.gov\)](#)

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At this point, I had no alternative but to add-in the details of the crime committed against Newman to my Thesis, and also due to this crime being observed by myself and others; there was no longer any other route available for the good of science, education of past, present and future students, who would no doubt in time, research into this branch of energy physics, with aspirations of forwarding our known boundaries of renewable energy production with new physics understandings.

I submitted my final Thesis in September 2021. Again the university were obstructive and claiming not to have received my initial submission. Ignoring my emails would become one of the tactics of the senior management and faculty, in the ensuing battle for truth, education and research.

The next stage after submitting my thesis, would be the viva voce, the oral examination. Where I would defend my work against two expert examiners (or so I thought). I expected to be failed for daring to go against their indirect orders, as the university postured a position of all 'knowing and powerful' and if they said something was not allowed, it was not allowed. This is what would be dealt to the scientist who went against their agenda. Nevertheless, I was prepared to take them on as this was about Science research and progress in knowledge and understanding, and not about concealing crime for the benefit of a few university or energy company benefactors. I have added the reference chapter from my Thesis to this report for ease of access to the references given; I do recommend you read the Thesis for a full understanding of the report.

You can download the masters at: [Endothermic Electricity - LIMITS ARE ONLY IN THE IMAGINATION \(endothermic-electricity.com\)](#)

## 2. Claim against Examination Board and Others for Fraud by Coercion and Collusion

1. A first class Masters with honours for this ground breaking piece of electricity physics research. Noteworthy of a Nobel Prize for discovery and confirmation of Maxwell's displacement current as a usable renewable energy source. Read chapter's, 12 to 18, a new piece of electricity physics that has laid hidden since Nikola Tesla who first identified 'cold electricity' in the 1890s.
2. Fully published apologies by Swansea University in National Newspapers, dismissal of all staff and examiners involved in this scientific fraud, as-well as a suitable punishment.
3. Publication of Mr Blanche's work in any reputable Journal.
4. A hefty financial settlement for the mental abuse, defamation and the career damages that the examination board along with others have tried to inflict.  
Financial claims against:  
External examiner  
Internal examiner  
Chairperson  
Zoe Perry  
Postgraduate Research Committee  
PAB Board nominee  
Swansea University
5. A written apology to all past, present, and future students for trying to cover up this new educational knowledge by research and failing to represent education in an open, honest, transparent way.
6. Compensation for stopping me being able to undertake a PhD on this subject, if I so desired.

University Staff Involved in Thesis.

Huw Summers, Perumal Nithiarasu, Zhongfu Zhou, Karol Kalna, Augustine Egwebe, Richard Rees, D Penney, Steve Batcup, Zoe Perry, Michelle Rees, Sara Kane,

External Examiner: Dhammika Widanalage

Internal Examiner: Lijee Li

### 3. Viva Voce

The University first tried to get me to agree to hold the viva voce online on the date 22<sup>nd</sup> of April 2022, stating not all required examiners could make it to Swansea. This would be more convenient for them to fail me online, as this was the agenda they had already decided on, and not have to face me in a face to face viva, it's more difficult to lie to someone's face. This I would not accept as I knew their agenda, and I would not let them off so easy. This was a fight for education, truth and justice and not about just being awarded a certificate for a debt or fee which is now the way of universities along with government backing.

The Viva was eventually arranged for May 30<sup>th</sup> 2022 at Swansea University. The university chairperson was Huw Summers and his job was to implement the agenda to fail, he kept no minutes of the Viva, only notes for himself it was later claimed. The examiners kept no notes to anything that was discussed during the viva. They wanted to make the viva as un-recordable and forgettable as possible. However, I had come prepared for the skulduggery that was upon me, I brought a witness and was going to make a voice recording of their 'agenda to fail'.

I met the chairperson at 12.30 pm at the engineering reception, the chairperson immediately stated that Miss Barbara Down, my witness to proceedings, would not be allowed into the Viva. This I objected to and asked for the rule book. The chairperson then said he would ask the examiners if they were okay with the witness attending, he left and when he came back to the viva room he said the examiners were okay with the witness to proceedings. He probably thought this would look reasonable in the event of any appeal or further legal proceedings against the crime that was planned. This agenda to fail was done with motive and planning, and the chairperson thought this would look favourable for the university.

The viva did not disappoint in regards to their tactics to fail, with a complete disregard for science; the examiners kept to their script which had been pre-arranged with the chairperson. To examine only 4 chapters of the Thesis. No minutes were kept; no pre viva reports were exchanged or produced; Mr Blanche was not privy to any notes on the day, even when requested later by Mr Blanche, there was no notes forthcoming (see emails to university and examiners one week after the viva).

Neither the external examiner nor the internal examiner presented a pre viva report on the day of the viva to Mr Blanche. They seemed unprepared, and this becomes evident from the transcript of the recording. One can see from the viva transcript, the examiners had not read all of Mr Blanche's work or any references to the volume of work, and they had decided to cherry pick four chapters as a way of trying to discredit the work. The examiners did not discuss the disputed work and this was veered away from anytime Mr Blanche mentioned anything close to Newman's work. The examiners portrayed little knowledge of electromagnetism, as-well as showing some very inept basic science understandings. It was as if these young men presented as experts in Electromagnetism, were handpicked by the university to be the sacrificial lambs at the pursuing slaughter that would undoubtedly follow, as they were not expert in this field of electromagnetism as they demonstrated. They were actors that went along with the agenda, implemented for one reason only, to commit scientific fraud with an 'agenda to fail' Mr Blanche's scientific research. An advancement in renewable technology and physics understandings was not allowed to be broadcast at any cost.

The Viva Voce is documented in 3 parts from the voice recordings, and only the viva transcript part 2, is currently available.

1. The introduction by Chairperson Huw Summers.
2. The viva voce itself.
3. The deliberation and failure.

Attendees of Viva Voce:

Geoffrey Blanche:	The Candidate
Barbara Down:	Witness
Dhammika Widanalage:	External Examiner
Lijie Li:	Internal Examiner
Huw Summers:	Chairperson



## 4. Fundamental Points of Abstract from Thesis

- 1      The Endothermic Electric Effect - The endothermic electric effect is identified as the initial reaction in an electric field charge. An electric field charge is a physical reaction and can be utilised and stored to release energy, and is known as electric charge or electricity. An endothermic reaction is identified as an energy/heat gain from the system, and surroundings of the system. The Endothermic Electric Effect is a phenomenon measured during an electric field charge where the system fluctuates between an endothermic and exothermic state. The knowledge of this type of electricity charge will allow us to build machines that will gain energy from their material as-well as thermal environmental energy, this has already been achieved but is little known of. With this type of energy production there will be less need for Nuclear, Oil, Wind, and Water or Solar power. As-well as this, endothermic electricity generators will in the future give us the scope to connect to established renewable exothermic energy generators. This type of energy production will benefit mankind's ability to produce cleaner technologies, to generate energy more efficiently and reduce costs of energy production.
- 2      *Displacement Current* - It was James Maxwell who first identified the displacement current, yet this current was never thought of as a useable energy gain. Academia has generally disregarded it as of no real valuable use to energy science except for explaining electromagnetic wave propagation. The endothermic reaction state is a self-charging state of an electric field system where the total current equals the conduction current plus the displacement current. (References in thesis, 47, 79, 85, 86, 87, 89, 90, 91)
- 3      *Efficiency* - Although, there have been some inventors and scientists who have been very interested in this 'free energy' idea that Maxwell and Tesla talked about. The electricity physics within this work show how the Endothermic Electric Effect produces more than a 100% efficiency in a system when certain parameters are engaged. This can be exploited for energy generation. (References in thesis, 41, 42, 45, 48, 49, 56, 72, 93, 94)
- 4      The catalyst is an Electro Magnetic Force (EMF) placed into the system, inducing 'The Photoelectric Effect', demonstrated with an equation written by Albert Einstein. The electric field gains quanta due to the ionisation of the atoms that make up the open system. Contained in this work you will discover how the Endothermic Electric Effect has been seen in different systems in the public domain, and how the Photoelectric Effect or for ambiguity arguments an EMF, is the catalyst to the Endothermic Electric Effect reaction. Within this body of work, you will be introduced to new concepts, and theory. (chapter 5, references, 46, 61, 67, 68)
- 5      The main body of understanding of this event, the charge of an electric field, is described by analysing the experimental results of an electric field charge using different lithium batteries over many different experiments, as-well as showing past empirical generator and theory evidence already in the public domain. (Chapters, 3, 4, 6, 8, 9, 10, 11,19)

The University's academic regulations for research master's level degrees state:

Highlighted in yellow are the points Mr Blanche achieved and demonstrated whilst undertaking this Masters of Research

#### [Guide to Submission and Presentation of the Thesis - Swansea University](#)

**1.3** The qualification shall be awarded to candidates who:

1. have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;
2. can apply their knowledge, understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
3. have the ability to integrate knowledge and handle complexity, and formulate judgements on a body of information, and to reflect on social and ethical responsibilities linked to the application of their knowledge and judgements;
4. can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;
5. have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

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#### [Degree of Master's by Research - Swansea University](#)

**1.1** Master's degrees are awarded to students who have demonstrated:

- A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice.
- a comprehensive understanding of techniques applicable to their own research or advanced scholarship.
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.
- A conceptual understanding that enables the student:
  - to evaluate critically current research and advanced scholarship in the discipline;
  - to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

Typically, holders of the qualification will be able to:

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences.

- demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.
- continue to advance their knowledge and understanding, and to develop new skills to a high level.

Physics Science Understandings taken from referenced sources



*(Endothermic reactions, these are **reactions that take in energy from the surroundings** (ie energy enters the reaction, which will help you to remember the name endothermic). The energy is usually transferred as heat energy, causing the reaction mixture and its surroundings to become colder.)*

[Exothermic and endothermic reactions - BBC Bitesize](#)

*(These are **reactions that transfer energy to the surroundings** (ie the energy exits from the reaction, hence the name exothermic). The energy is usually transferred as heat energy, causing the reaction mixture and its surroundings to become hotter. A thermometer is used to detect the temperature increase.)*

[Exothermic and endothermic reactions - BBC Bitesize](#)

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  <https://study.com/learn/lesson/endothermic-reaction.html?fbclid=IwAR0V04fGKMTF2WVU90BwZh1z/bhnFh57tE3aFEDnlxKP60LSXzZWksRmPSk>

## What is an Endothermic Reaction?

Atoms and molecules in a Compound are held together by **Chemical Bonds**. These bonds contain chemical energy and, when broken, the energy is released. The amount of energy released is equal to the energy that was used to create that bond. We can determine the overall energy change in a chemical reaction by considering the number and type of bonds broken and formed. For example, a bond between Carbon and Oxygen will release a different amount of energy as compared to a bond between Carbon and Nitrogen.

An **Endothermic** reaction is a chemical change in which the System absorbs thermal energy from its Surroundings resulting in the overall increase in its total internal energy level or **Enthalpy**. The energy absorbed is stored in the chemical bonds of the products. The term Endothermic, borrowed from the French word *Endothermique*, was first used by Pierre Eugene Marcellin Berthelot when carrying out his work on, Heat of a Reaction. The term itself is composed of two root Greek words; *endon* meaning inside and *therm* meaning heat.

At times, Endothermic is used interchangeably with Endergonic but, these are not the same and, we will look at this difference in a later section.

## What are Systems and Surroundings?

Physical chemistry is studied through models. In a thermodynamic model, the **Universe** is divided into the **System** and the **Surroundings**. The **System** is the matter or reaction of interest and, the **Surrounding** is everything apart from that. When we consider an ice cube melting, the ice cube is the System and, the space around it is the Surroundings. Similarly, in a photosynthesis reaction, the chloroplast where the carbon dioxide and water are present is the System and everything around is the Surrounding. In both these examples, thermal energy flows from the Surroundings into the System when the changes occur, increasing the Enthalpy of the System.

## What are Enthalpy and Entropy?

A System can be described based on its Enthalpy and Entropy values. **Enthalpy** refers to the sum of all the energies present inside it that can be converted to thermal energy.  $H$  denotes the Enthalpy of a System. A change in this value,  $\Delta H$ , is calculated as;

$$\Delta H = H(\text{final}) - H(\text{initial})$$

Since, in an Endothermic change, thermal energy moves from the Surroundings to the System, the  $\Delta H$  is always positive ( $\Delta H > 0$ ) because the final Enthalpy of the System is higher than its initial value.

[Endothermic Reaction | Characteristics, Examples & Equations - Video & Lesson Transcript | Study.com](#)

[What Is Electricity? - Definition & Concept - Video & Lesson Transcript | Study.com](#)

The **Boltzmann constant** ( $k_B$  or  $k$ ) is the [proportionality factor](#) that relates the average relative [kinetic energy](#) of [particles](#) in a [gas](#) with the [thermodynamic temperature](#) of the gas.<sup>[2]</sup> It occurs in the definitions of the [kelvin](#) and the [gas constant](#), and in [Planck's law](#) of [black-body radiation](#) and [Boltzmann's entropy formula](#), and is used in calculating [thermal noise](#) in [resistors](#). The Boltzmann constant has [dimensions](#) of energy divided by temperature, the same as [entropy](#). It is named after the Austrian scientist [Ludwig Boltzmann](#).

As part of the [2019 redefinition of SI base units](#), the Boltzmann constant is one of the seven "[defining constants](#)" that have been given exact definitions. They are used in various combinations to define the seven SI base units. The Boltzmann constant is defined to be exactly  $1.380649 \times 10^{-23} \text{ J} \cdot \text{K}^{-1}$ .<sup>[1]</sup>

[Boltzmann constant - Wikipedia](#)

## Boltzmann's entropy formula

From Wikipedia, the free encyclopedia

In [statistical mechanics](#), **Boltzmann's equation** (also known as the **Boltzmann–Planck equation**) is a probability equation relating the [entropy](#)  $S$ , also written as  $S_B$ , of an [ideal gas](#) to the [multiplicity](#) (commonly denoted as  $\Omega$  or  $W$ ), the number of real [microstates](#) corresponding to the gas's [macrostate](#):

$$S = k_B \log W \quad (1)$$

where  $k_B$  is the [Boltzmann constant](#) (also written as simply  $k$ ) and equal to  $1.380649 \times 10^{-23} \text{ J/K}$ , and  $\log$  is the [natural logarithm](#) function.

[Boltzmann's entropy formula - Wikipedia](#)

[Boltzmann and Planck constants remeasured \(acs.org\)](#)

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### Physical property of matter

According to 2 sources

In simple terms, electric charge is a **physical property of matter** – it causes matter to experience a force when it is in an electromagnetic field. There are two types of electric charges: Positive charge which is carried by subatomic particles called protons Negative charge which is carried by subatomic particles called electrons

[Electric Charge | Facts, Sum...](#)  
alevelchemistry.co.uk

The electric charge is a **physical property of matter**. The electric charge is always a multiple of the elementary charge  $e$ , the smallest freely existing charge. It is defined as:  $e = 1,602 \cdot 10^{-19} \text{ C}$   $Q = N \cdot e$   $E \text{ in h e i t: } [1 \text{ C}] N = \text{Number of charges, } e = \text{elementary charge}$

[Electric Charge - College Ph...](#)  
college-physics.com

### Electric Charge

Electric charge is the physical property of matter that causes charged matter to experience a force when placed in an electromagnetic field. Electric charge can be positive or negative (commonly carried by protons and electrons respectively). Like charges repel each other and unlike charges attract each other. An object with an absenc... +

Wikipedia

Other units: [elementary charge](#) · [faraday](#) · [ampere hour](#)

Common symbols:  $q$

SI unit: [coulomb](#)

In SI base units:  $C = A \cdot s$

Extensive: yes

Conserved: yes

Related people

### What is a Physical Reaction?

There are two ways that matter can be changed, through a chemical reaction or a physical reaction. People encounter physical reactions every day. But what is a physical reaction? A **physical reaction** is a reaction in which a change to the physical properties of a material or substance occurs. Physical properties include things like density, mass, and volume. The physical reaction definition is a reaction in which molecules undergo molecular rearrangement but are not chemically altered. Physical reactions may include changes in texture, shape, temperature, and state, without a change in the composition. Common examples are melting or boiling a substance and breaking, cutting, or crushing an object.

### [3.15: Exothermic and Endothermic Processes - Chemistry LibreTexts](#)

“A chemical reaction or physical change is **endothermic** if heat is absorbed by the system from the **surroundings**. In the course of an endothermic process, the system gains heat from the surroundings and so the temperature of the surroundings decreases. The quantity of heat for a process is represented by the letter  $q$ . The sign of  $q$  for an endothermic process is positive because the system is gaining heat. A chemical reaction or physical change is **exothermic** if heat is released by the system into the surroundings. Because the surroundings is gaining heat from the system, the temperature of the surroundings increases. The sign of  $q$  for an exothermic process is negative because the system is losing heat.”

“When physical or chemical changes occur, they are generally accompanied by a transfer of energy. The **law of conservation of energy** states that in any physical or chemical process, energy is neither created nor destroyed. In other words, the entire energy in the universe is conserved. In order to better understand the energy changes taking place during a reaction, we need to define two parts of the universe, called the system and the surroundings. The **system** is the specific portion of matter in a given space that is being studied during an experiment or an observation. The **surroundings** is everything in the universe that is not part of the system.

In practical terms for a laboratory chemist, the system is the particular chemicals being reacted

(IN NASA experiment, the system is the battery housed inside the TI BOMB),

while the surroundings is the immediate vicinity within the room

(IN NASA experiment, the volume of air in the ARC surrounding the TI BOMB is the surroundings, which is a sealed unit to the outside room).

During most processes, energy is exchanged between the system and the surroundings. If the system loses a certain amount of energy, that same amount of energy is gained by the surroundings. If the system gains a certain amount of energy, that energy is supplied by the surroundings”

Mr Blanche explores the conservation of energy in chapter 5 and chapter 15.

## 5. Examiners Duties that were not met in Examination Process according to Swansea regulations

**Highlighted in red** ARE THE FAILURES DURING THE EXAMINATION PROCESS.

**Highlighted in yellow** are the Candidate's comments. ( ) Brackets are also candidate's comments

### 1.3.2

A proposed external examiner should:

- Be normally research active and sufficiently experienced to command authority;
- Be aware of the nature and purpose of the degree for which the candidate is being examined;
- Possess specialist knowledge and expertise in the subject of research;

(The examiners did not have the specialist knowledge to examine the Thesis. They demonstrated in the Viva oral examination that they would not and did not consider the thesis or abstract. They had a lack of basic scientific knowledge, electricity physics knowledge, electromagnetism knowledge, and even tried to claim there is no endothermic reaction with the surroundings whilst charging an electric field using lithium batteries.)

13.1 -During the examination process, the examiners shall:

- Consider the thesis and abstract submitted by the candidate.

(Continually did not consider thesis or abstract through the whole process. This was the disputed work the supervisors had mentioned and should be avoided at all costs, even to basic scientific facts, ie. James Maxwell - The displacement current; Boltzmann/Planck constant; Electrons move in air around a conductor.)

## 16 Conduct of the Examination

The external examiner should complete Section 1.1 of the Report form (External Examiner's Report on Thesis) and take the whole form to the oral examination. Some Faculties/Schools may permit an electronic copy to be sent ahead of the examination. The Chair of the Examining Board should arrange for the internal examiner's report to be typed in, or otherwise attached to, Section 2 (Internal Examiner's Report).

There was no handwritten or typed reports presented by chairperson, external examiner or internal examiner at the viva or after when requested by email. There was no original R & R form produced.

### 16.1

The form and content of the examiners' reports should be sufficiently detailed to allow the Examination Board to assess the scope and significance of the thesis and to appreciate its strengths and weaknesses. Reports should, as far as possible, be expressed in terms that may be understood by

those who are not specialists in the particular field of the thesis. Ideally, the report should include, near to its beginning, a statement of what the thesis purports to do, and an account of what it actually covers. Evaluative comments should be as full as possible and should include an indication of strengths as well as weaknesses, limitations and lacunae.

There were no strengths identified, only weaknesses. Mr Blanche failed on everything, quite remarkable. There was no identification of the work covered in the thesis, title and abstract completely ignored by the examiners and only an agenda to fail was presented. The R & R form was not a detailed report including any scientific information or evidence that demonstrated why the examiners disagreed with Mr Blanche's observations.

## 16.2

The Chair of the Examination Board is responsible to ensure that the examiners should meet before the oral examination to compare notes on their reports on the thesis, and agree the strategy for the viva. The Chair of the Examining Board must be present at any such meeting. The Faculty/School is expected to ensure a room and sufficient hospitality is in place for this pre-examiners meeting.

Even where both examiners' thesis reports, indicate that the thesis is of the required standard, the student must not be told at the beginning of the oral examination that the degree will be awarded. The examiners must satisfy themselves through the oral examination that the student is the author of the thesis and completely understands its contents.

Internal and external examiner did not produce any pre viva reports to Mr Blanche at the viva, and the chairperson did meet with the examiners before the viva but presented no pre viva reports to Mr Blanche.

## 17.4

The examiners are not only assessing the thesis in the oral examination, but the candidate's ability to defend it, and to relate the contents of the thesis to the existing body of knowledge within the particular field.

The examiners failed to mention how the candidate defended his theory and thesis rigorously, but instead invented science, and ignored scientific knowledge presented by the candidate with one sole purpose, to fail the candidate, as detailed in chapter 6 of this report. They resorted to defamation and made unfounded derogatory comments in their reports about the candidate's character and behaviour. i.e. *"During his explanations, the student came across as defensive, aggravated and at times condescending. Agreement on many discussion points were difficult to achieve"*.

The examiners demonstrated they had no intention of explaining how the candidate's thesis and theory adds to the body of knowledge in his particular field of renewable energy and the physics of electromagnetism. Internal and external examiner did not demonstrate any understanding of the thesis during the whole procedure.



## 6. Examination Board Failures

Both examiners arrived at the viva having had month's preparation time. They had given no pre viva report to Mr Blanche and had no notes or a list of questions for Mr Blanche, this is a failure of the Chairperson to do his job properly, (for example, The University's own rules and regulations as shown in this report), to make sure the Viva is conducted in an open and transparent manner, this was not the case, and not their plan. This was an agenda to fail Mr Blanche's work. There was no minutes kept by the Chairperson, only notes for himself, see Emails.

The examiners wanted to discuss only four chapters out of 24, during the viva.

The chapters not mentioned or asked questions about in the Viva are:

Prologue, chapters, 1, 2, 3, 5, 6, 7, 8, 12, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.

The examiners heavily criticise the connection to Newman's work in pre viva and addendum reports but never try during the viva to explore the connection that Mr Blanche made through an energy physics correlation, and this correlation is quite evident in the abstract and conclusions of the work. Rather, they just state that battery technology has been well documented and the entropy studies of batteries for battery applications is why Mr Blanche's theory is wrong and hence failed (although they never produce any evidence of this) which is of course a completely incorrect correlation to the work of Mr Blanche, and they offer no evidence of this, before, after or on the day of the viva. Battery coefficient studies do not prove Mr Blanche's theory is incorrect, rather, battery coefficients are different for every system and one must understand, battery coefficients are for charge and discharge relating to state of charge and temperature of a battery system and storage device. **This is not at all what Mr Blanche was reporting or researching.**

The examiners avoided and did not discuss the abstract which had been labelled the 'disputed work' by supervisors, and this is obvious from the transcript. When Mr Blanche discusses anything other than the 'battery agenda', there is silence from the examiners or no questions relating to anything other than batteries. The examiners did ask one question each from another chapter other than the chapters on batteries. The internal examiner asked about figure 52 from chapter 14 and the external examiner asked about equation 10 chapter 13. They did this in my opinion, to make it look like they had read the entire thesis, and to try and cover up the agenda to fail. They wrote comments in their R & R and Addendum reports about chapters they did not discuss in the Viva, probably to make it look like they had read the complete work, which in itself is suspicious, as they demonstrate during the viva they did not read the complete Thesis, and this points to someone else writing these reports. It is completely obvious they did not read the entire thesis from the viva. How they thought they could give Mr Blanche's work a rigorous examination without considerable preparation, and by ignoring the title, abstract and declaration of investigation is baffling. It soon became apparent during the oral viva, the examiners had not examined the Thesis in a rigorous manner, and were far from experts in Mr Blanche's field of study of renewable energy and electromagnetism. They had not read much of the thesis or examined any of the references, the evidence is in the transcript which Mr Blanche made, and he did this as he was suspecting there would be foul play. You might expect the examiners to refer to a reference that was given and explore how Mr Blanche came to his theory. The examiners did not prepare for this viva with any presentation of a pre viva report to Mr Blanche on the day or before the



viva, they were obviously under instructions what to do from some member{s} of the Swansea university staff.

You would have thought the examiners would have had some pre-arranged science references that might conflict or agree with Mr Blanche's theory, but nothing like this was produced on the day of the viva (or after) to give Mr Blanche's theory a rigorous examination and also give Mr Blanche the chance to defend his work against any claims they made. The examiners were supposed to identify strengths and weaknesses, yet it seems this work by Mr Blanche detailed in the examiners reports has only weaknesses! This is quite remarkable, as Mr Blanche is a mature graduate student of 57 years old with a 2:1 degree in Renewable Energy Systems from the University of South Wales. Mr Blanche took out a £15,000 student loan to forward his career by undertaking a 'Masters of Research', but was then to produce a Thesis with no strengths and only weaknesses! Not only this, Mr Blanche would not be allowed by the examiners, to re-submit his thesis with the same title, and would have to change his study to only include battery technology studies that they see fit to examine (see the addendum).

The Journal papers supplied by the examiners on battery technology which they produced post viva in the addendum report, which Mr Blanche requested as evidence of their disagreement to his work, have no correlation to Mr Blanche's Thesis, title or abstract, and this can be seen from the analysis in this rebuttal report chapter 13.

## External Examiner Main Failures in Oral Examination

### 1. VT: 1 MINUTE 13 SECONDS

Admits to not reading reference on NASA experiment. The first hour (40% of the time) of the 2 hour 33 minute Viva discussion is dedicated to this NASA experiment.

*Blanche: you haven't read the experiment, have you?*

*Ext: "ah, not the NASA experiment no,"*

(A rigorous and thorough examination of a Thesis would include reading the references or at the very least familiarising yourself with them.)

### 2. VT: 5 MINS

Mr Blanche explains the EMF or Photoelectric effect that the examiners claim should be removed from the title of Thesis.

*Ext: where do you show that?*

*Blanche: That's in chapter 5 I think.*

*Ext: This one here I guess? Equation 5.*

*Blanche: yea*

*Ext: Is that the one you referred to?*

*Blanche: Yes, that's it, that's Einstein's equation, Yep, where Einstein is saying, that ah when an electromagnetic force, or a photon,*

*Ext: mm*

### 3. VT: 7 MINUTES 16 SECONDS

Examiner claims he understands what Mr Blanche is referring to with the photoelectric effect, but then ignores this in his future addendum report and says it is misleading. Obviously didn't read chapter 5 and the opening paragraph: 'When studying contemporary physics and the photoelectric effect, one cannot ignore an article by Stephen Klassen [61]. Klassen demonstrates the different teachings and concepts for understanding the photoelectric effect'.

*Blanche: well you can see it's a formula or an equation, I mean they're not equal to each other*

*Ext: but there's an identity there right.*

*Blanche: well ok I understand what your saying,*

*Ext: Well I guess, I guess my question is, I understand what you're saying here,*

*Blanche: yea*

#### 4. VT: 8 MINUTES 22 SECONDS

Examiner states he thinks my Thesis should be about the internal workings of a battery, as a battery is used to track the electric field reaction.

Examiner disagrees electric field charge is a physical reaction and thinks it's the result of a chemical reaction.

Blanche: no I haven't come across that at all, because my research is not about the internal workings of a battery

Ext: *uh uh but I think it should be*, because the subsequent explanation for using that led to the internal function, because this dip that your seeing here right

Blanche: so what your trying to say is, that's a chemical reaction? Is that what you're trying to say?

Ext: yes exactly, yes exactly, a bit more there's a thermodynamic element. My next question is going to be, I was going to ask, yes let's talk about how inside the battery works, because this, this observations, are the results from the test are a battery, so we can't ignore the fact. Right the fact

Blanche: There's chemicals in there, a bunch of chemicals

Ext: yea, yea inside the battery, so and an anode and a cathode., so which, which I mean, is is, is there other ways, I guess the question is lets maybe start by asking, how do the electrons go , what happens inside when you apply this load? Why do you get that particular voltage profile?

Blanche: Why do you gain voltage?

Ext: No, Why do you get this particular voltage profile? Why this shape? And then why this particular temperature profile?

Blanche: well ok, so the force hits the lithium, yea ok, yea, do you agree with that?

Ext: not precisely but I understand what your trying to say, the force doesn't hit the lithium, there's a force generating this reaction, bringing about this reaction?

Blanche: so what do you think the force does? Tickle the lithium? No. You smack it, you smack the atoms, the lithium atom, right, with your electrons from your power supply,

Ext: mm

Blanche: your smacking them, and that induces the um, ionisation for the electron to leave the lithium, and create what I've called the photoelectric effect.

Ext: but that's uh that's uh

Blanche: Its exactly the same reaction. *It's not a chemical reaction,*

Ext: *but this I disagree with*

**5. VT: 10 MINUTES 23 SECONDS**

Examiner thinks there is a chemical reaction in the battery, but the examiner doesn't understand that it's a chemical rearrangement.

Examiner doesn't understand constant volume in adiabatic system.

Blanche: Its exactly the same reaction. *It's not a chemical reaction, (it's a chemical rearrangement)*

Ext: *but this I disagree with*

(the ext. doesn't understand the ionisation and chemical rearrangement process due to the emf which causes the photoelectric effect)

Ext: *so what would the values be, what would the figures be?*

(there is no need to try and apply values to the formula to explain the theory!)

Blanche: *if you want to put values in, let's just give them any value right, but the important thing is,  $T_s - T_d$*

Ext *which in this graph, what does it mean then? The volume doesn't change?*

(The examiner should know the volume cannot change, that's one of the reasons why they built and used an adiabatic enclosed environment arc, you have a system and then the surroundings which is of constant volume.)

**6. VT: 12 MINUTES 20 SECONDS**

Examiner avoids abstract –endothermic generator

Blanche: *and Naudin, who did his work with a Newman generator that he built, that's in chapter, I think you've missed that chapter, I think that was in chapter 3.*

Ext: *there's some work from Lancaster that has studied this quite heavily, (referring to entropy of battery study, unrelated to my study of electric field charge) but anyway, the point, ok, the ideas that, there's a different thermodynamic explanation, that's been used and it's predictive, and that's the nice thing, with all equations, right they're predictive, theory, right has to be predictive. Ah otherwise it doesn't serve a purpose. So I suppose, did you come across, what's called ah, the rate of change of enthalpy, and that's how it's linked to the entropic quotient, of this, this, describe this a bit.*

Blanche: *well yea, entropy is a change in state,*

Ext: *mm, and did you come across it?*

Blanche: *and they think, or people say, entropy can only go one way, there can only be more chaos.*

**7. VT: 13 MINUTES 47 SECONDS**

Examiner doesn't know what Boltzmann's constant is and what it means, all in my work.

Ext: *but the explanation you're using here, are, are not consistent with this example you are using, and that's the point I'm going to make here, if you're going to use this data as evidence, as an example,*

Blanche: *my electric field charge?*

Ext: well you don't need an electric field charge to generate this either, you can have this, you can have, you can induce you can also have a temperate effect, you can apply a temperature

Blanche: *Temperature is energy ok, let's start again, you're not making much sense to me.*

*Boltzmann's constant, yea, yea*

Ext: *ok, how does that constant, ok go on*

Blanche: Boltzmann's constant which was written by Boltzmann and Planck in the 1880s to the 1900s, right, they figured out, there's a certain amount of energy in air yea

Ext: sorry what's air?

Blanche: in air right? what we breathe, in temperature, 21 degrees C right, it can be in any temperature, it goes down to absolute zero doesn't it, so in every joules, you are, I have it written here,

Ext: sorry what page you looking at here?

Blanche: this is page, page 31. Ok

## 8. VT: 23 MINUTES AND VT: 24 MINUTES

Mr Blanche teaches examiner what a physical reaction is.

Does not understand Physical reaction the transfer of electrons in the physical reaction

Ext: sure

Blanche: now if this was a chemical reaction

Ext: electro chemical .

Blanche: no, you just said it was a chemical reaction, make your mind up.

Ext: electro chemical reaction

Blanche: what is an electro chemical reaction?

Ext: its when an electron is involved, together with a transfer of species from one form to another

Blanche: *Well there's always electrons involved in chemical reactions, it has to be*

Ext: *No there isn't, in a electro chemical reaction, in this reaction there's no electron right*

[Ionic bonding - Bonding and properties of materials - National 5 Chemistry Revision - BBC Bitesize](#)

The ionic bond is the electrostatic force of attraction between a positively charged metal ion and a negatively charged non-metal ion.

## 9 VT: 29 MINUTES

EXAMINER DOES NOT KNOW THAT ELECTRIC FIELD CHARGE IS WITH RESPECT TO TIME AND DOES NOT KNOW BASIC SCIENTIFIC NOTATION

Blanche: well, electricity is with respect to time isn't it. (Silence)

Ext: but that's not per second, are you dividing by seconds?

Blanche: sorry, that's per.per.per second

Ext: per second?

Blanche: per second, that line, / is also used for per second

Ext: yea but,  $V \times A$  over  $S$ ?, is watts ?

Blanche: volts, watts is Volts x Amps and that is with respect to time. Per second, yea

(Ext doesn't know basic notation and electricity energy to power relationships. Does not know scientific notation, forward slash is used for the word per, as well as divide, does not know basic notation, doesn't understand that electric charge is with respect to time, this is very well documented in my thesis, hasn't read most of it and definitely doesn't understand electricity processes with respect to time)

#### 10. VT: 32 MINUTES

Ext questions if gas laws apply to electromagnetism, or an adiabatic system, and does not want gas laws to be applied to the experiment, with no reason.

Blanche: well, the thing is, what I've just showed you is, by that equation, we end up with a lower pressure,

Ext: no.no. that's not the point, you could have also, you are saying these are the temperatures of the battery, here's a voltage, I'm not familiar with this one, ah sorry, I'm gonna put, your saying, that is applicable to this (equation 2 again)

Blanche: well no, these are the laws of physics as we know them,

Ext: so can this be applied to this (referring to the gas law equation 2)

Blanche: well it should be, because it's electromagnetism we're talking about.

Ext: are you sure? Is that how it works? (he has no clue about electromagnetism physics)

Blanche: well yea, cause, like I said, before, you can only have one rules for electromagnetism.

Ext: yes but not all rules have to be applied because this depends on how it functions right? So this explanation, so you said you didn't come across much more data on NASAs point

(Trying to shift the conversation away from the examined work in thesis)

#### 11. VT: 32 MINUTES

Admits he does not want to discuss any other part of my work other than his limited knowledge on batteries

Ext: if you, my situation is, I don't know if you looked up entropic quotient? There'll be some observations, some papers that can explain this.

Blanche: yea, I haven't found them.

Ext, yea the keyword is entropic quotient,

Blanche: can you show me some?

Ext: yes, sure now?

Blanche: yes why not, this is what we're discussing, there's not a lot more else to discuss unless you want to discuss the crime, or vaccines,

Ext: we can come to that after, I'm keen to stay on the work your done, and we can come back to this

Ext: Because, you've done quite a bit of experiment, and that's quite encouraging, it's good to see but, what's important is understanding the meaning behind it

Ext: if you would like to ask some questions in the meantime (referring to internal examiner), I'm searching the laptop

(Why didn't he bring these papers that explain this to the viva? Prepared notes to challenge my theory with some sort of evidence to see if it's related??)

## 12. VT: 33 MINUTES 30 SECONDS

Ext thinks a physical reaction is not a gaseous form due to there being a liquid in battery? I have never seen a liquid electric charge or liquid electricity, have you?

Blanche: do you see what I mean about the pressure being lower, we've created a lower pressure, while the pressure as actually risen in the electric field. Do you understand that? It's so vital to understand this.

Ext: it is, but I think you are mixing the equation, this is for ideal gases, this is an electrochemical reaction with species in there, these are not a gaseous form (inaudible)

## 13. VT: 34 MINUTES

Ext thinks there is no gas exchange,

Ext: where's the electron gas?

Blanche: the air, the atmosphere

(Unbelievable, this is well explained in thesis, and again he shows he hasn't read it)

Ext, what about the the, but this is is, to do with the voltage and the temperature, right?

Blanche: yea.yea.

Ext: so where is the electron gas, not, where exactly in this NASA experiment, where's the electron gas? Inside the battery? Outside?

Blanche: well, it was outside it, but then it got taken in to the electric field charge.to charge it.

Ext: so there's electrons coming from outside, into

Blanche: into the electric field charge .yea, and that's why the air temperature around the battery lowers,

**14 Time 34.30 minutes**

**Examiner invents vacuum argument to distract from thesis, there is no discussion of vacuum in thesis**

*Ext: are you saying if you do this experiment in a vacuum, this would work.*

*Blanche: I don't know about a vacuum, we don't live in a vacuum*

**15. VT: 39 MINUTES**

**Ext tries to say there is no gas exchange and the entire theory is wrong, this is their planned objective,**

*Blanche: No I haven't, that's the point, because it's an enclosed volume of gas*

*Ext: but there's no electron gas, where's the electron gas?*

*Blanche: it's an enclosed volume of gas in that titanium bomb,*

*Ext: you said electron gas in the battery or something else*

*Blanche: well, is an electron a gas? (it is a fundamental particle, just like a photon)*

*Ext: but where's the electron gas in the battery in this experiment?*

*Blanche: in this experiment the temperature drops, yea, you agree with that,*

*Ext: yes that's observed.*

*Blanche: so where's that energy gone? What was it? What was that energy? Where's it gone?*

**VT: 40 MINUTES**

*Blanche: see, the pressure here in the blue line goes up, that's the voltage pressure gaining while the temperature is dropping, the temperature is dropping on the outside of that bomb is because the electron gases in the air around it, are being sucked into the electron charge, uh, into the electric field charge.*

*Ext: that's what I mean, this is basic, even in a vacuum this would be observed.*

*Blanche: and your disagreeing with that,*

*Ext: Your battery is in outer space, but why don't you look up entropy quotient*

**(trying to change the conversation, why don't you look it up and bring it to the viva in proof of your disagreement.)**

*Blanche: this is not in a vacuum, this is on land,*

**16 . VT: 41 MINUTES**

**Examiner contradicts himself and uses wrong arguments, such as gibbs free energy. Argues there is no such thing as an exchange of electron gases, i.e an endothermic or exothermic reaction.**

*Blanche: why do you think there's a temperature drop then? Where do you think this energy goes from?*



*Ext. ok, you have 2 electrodes in a battery, anode and cathode, and that's a configuration, that configuration has a certain amount of energy*

**(the anode and cathode are just parts of the battery system, they do not have an energy level of their own),**

*Ext: and this then what's related to gibbs free energy, and where the rate of change of gibbs free energy is related to the entropy and reversible heat, not the reversible irreversible heat, and that configuration changes depending on the amount of coulombs that you put in. As you put in coulombs the configuration of your lattice changes and it absorbs (inaudible)*

**(the lattice is the amount of ionised lithium that the negative electron gases are attracted to, this is explained in the thesis many times, didn't answer the question of why there's a temperature drop )**

Exert from Gibbs free energy - Wikipedia

[https://en.wikipedia.org/wiki/Gibbs\\_free\\_energy](https://en.wikipedia.org/wiki/Gibbs_free_energy)

**In thermodynamics, the Gibbs free energy (or Gibbs energy; symbol ) is a thermodynamic potential that can be used to calculate the maximum amount of work that may be performed by a thermodynamically closed system at constant temperature and pressure.**

**(The battery charge system is not a closed system, it is open to interaction with the surroundings, THIS IS WHY WE OBSERVE ENDOTHERMIC AND EXOTHERMIC HEAT IN SURROUNDINGS OF A BATTERY, and my thesis is not about a constant temperature and pressure, Gibbs free energy does not apply.)**

*Blanche: Can I just stop you there, can you tell me, where does the air temperature energy, that energy, where does it go?*

*Ext: to the configuration of the lattice (so now electrons do move to a conductor but later on, i.e. addendum, electrons do not move in the air around a conductor)*

*Blanche: it goes into the, errr to make ions, the energy is to make the ion energy, is that what your trying to say?*

*Ext it's the energy for the configuration of the lattice material right.*

**(The lattice is the positive ions of the system, they are positively charged, and are first generated by the EMF, as described in the abstract, and attract the displacement current, air electrons and conduction current electrons to make a growing electric field, total current = conduction current + displacement current. See Conclusion chapter 12.1 , Maxwell/ampere law )**

**(THE ELECTRONS ARE NOT ABSORBED THEY ARE THE OPPOSITE CHARGE TO THE LITHIUM LATTICE.)**

**(It is the emf energy input that is the catalyst and configures the lattice when there is a neutral or little ionisation charge in the mix of chemicals)**

**(General information on lattice by:)**

WebElements - lithium (Crystal Structure) (shf.ac.uk)

**In the bcc lattice, every lithium atom is surrounded by eight other lithium atoms organised into a cubic array (see above Figure in which the atom coloured red is surrounded by eight lithium atoms**

coloured dark grey). One way to visualize the bcc lattice is as two interlocked cubic infinite arrays of atoms M.R.Nadler and C.P.Kempfer, *Anal. Chem.*, 1959, 12, 2109.

Blanche: so you're trying to say, that energy is sucked in, out of the air around it

Ext: that's not sucking out energy from the outside, the thermo, the temperature energy goes into the, energy, the elect, the material, the thermo dynamics, the lattice configuration changes depending on state of charge, and some charge is endothermic and some charge is exothermic.

Blanche: but you're only talking in um words there, you're not explaining it, I'm explaining it, down to charge and pressure with equations, I'm going further than your description there,

Ext: but equally your using that incorrect, because

Blanche: but it can't be incorrect, I've applied the equation, for gas laws, to the experiment, but you can't tell me I'm wrong.

Ex: you can't apply the gas laws here

Blanche: but you can, but you can,

Ext: no, because there's no electron gas there.

Blanche: so hang on, in the air, what do you think the electrons are, are they gases?

Ext: But those electrons are not what is involved here,

*Let's go back*

Blanche: Can I just stop you there, can you tell me, where does the air temperature energy, that energy, where does it go?

Ext: to the configuration of the lattice

(he says the gases are absorbed by the lattice but now they are not involved, he's making it up as he goes along, he hasn't a clue, the air electrons must have gone somewhere else, it's magic!)

Blanche: but what are they then?

Ext: electrons in a circuit diagram you drew (makes no sense)

Blanche: you're not understanding this I'm afraid,

Ext: where's the circuit diagram you drew?

17. VT: 46 MINUTES

Examiner disagrees with what an endothermic reaction is.

Blanche: out of the air yeah. That's it, we've seen it here, this by these figures, it shows us, it was 35 degrees and now it's 33 degrees all around it. Well it can't just disappear out of there. It was specially built Arc

Ext: so some substance electrons come in, going into there, conducting through the material, into this electric, right.

*Blanche: well, are they conducting, no, they're charging the material, they're making lithium ions and an electron force around it, (mistake, making an electron force around the lithium ion. )*

*Ext, but that's where I disagree.*

*Blanche: well how can you disagree, that's what an electric charge is?*

*Ext: there's a vacuum, still happen, Electrons cannot go from outside through this material, for its fully insulated. What if it's plastic?*

*Blanche: are you serious?*

*Ext: how does then electrons go through it?*

*Blanche: the experiment here, shows it, it's NASAs experiment, not mine, I didn't, I didn't, this is why, this why I've got this experiment in here,*

*Ext: no but then you done it.*

*Blanche: so people if they say oh I want to disagree with it, you're not disagreeing with me,*

*Ext: no I didn't disagree with the observations*

*Blanche: your now disagreeing with a set up that NASA have built, and the results they got. You're not disagreeing with me*

*Ext: that's not true*

**VT: 47 MINUTES**

*Blanche: you're disagreeing with Planck's constant, right, the amount of energy in temperature, and your disagreeing to this is how, this is what the reaction is, at the charge.*

*Ext: ok, so, coming back to this, ah you not look up, other, if you look at there, the, literature, citations, I'm surprised, did you try and look up, look up other explanations, what people have done to explain the dip?*

*Blanche: nobody has, I, I couldn't find anything, nobody has, whether you found something great, I didn't.*

*Ext: ok that's what I'm saying, you need*

*Blanche: whether their explanations are correct or not, I don't know, because I never found them,*

*Ext: inaudible*

*Blanche: this is my explanation of it, backed up by physics.*

*Ext: so that's no, so you didn't come across the entropic quotient right?*

*Blanche: no I didn't*

**VT: 48 MINUTES**

*Ext: ok. I think I can move on to the next chapter.*

18. VT: 1 HR 12 MINS

**The discussion has now moved on to chapter 9 of the thesis**

**Ext does not understand the state of charge of a battery, or efficiency of a charge**

*Ext: so you can't say this is 50%, this is probably 10-20% at most (talking rubbish) at that point, the point you were referring to.*

Ext states 50% of the voltage reached (2.8 to 3.2) for the desired voltage 2.8 to 3.6) after 400 seconds is only 20% of the energy of the complete charge. Shows no expertise in analysing a graph, efficiency of a charge is with respect to time. State of charge of a battery is measured in voltage (the electromagnetic force) 3.2 is 50% of the voltage charge, between 2.8 and 3.6. Ext doesn't know coulombs are equal to amps per second,,  $1C=1A/s$ , The amount of ionisation is related to the amount of voltage. This is well explained in thesis but ext asks no questions on this, does not examine the abstract, ie, efficiency, how this efficiency can be used in energy generation, does not explore the total current = the conduction current and displacement current. Does not have the expertise in the study of electromagnetism or electric field knowledge, basic electric charge to time,

ie, 50% of the electric field charge is not 20% of the overall energy the battery has at 400 seconds, does not understand voltage charging of a battery., Demonstrates he has not read the thesis rigorously or thoroughly and definitely has no expertise..

*Here is a GCSE style Question I have made for the Ext:*

*Based on figure 27,If it takes 400 seconds to charge your system to 50% of the desired voltage, and then takes another 7000 seconds to raise the voltage to 100% state of charge,*

- a) Which part of the charge is more efficient and why, please support your answer with a mathematical comparison of the two charge times, using  $Power = V \times Amps / Sec$ , you can google the relationship between coulombs and amps / second.*
- b) State the relationship between the electromotive force output potential and the measured Open Circuit voltage (OCV) of your electric field at the end of the battery charge.*
- c) Which 50% of the electric field charge is the most energy efficient? 2.8 to 3.2 or 3.2 to 3.6, the first part of the charge or the second part of the charge? Support your answer with some mathematical logic, including the amount of amps to charge time and the efficiency of the charge, i.e endothermic or exothermic and what that means in energy terms.*

19 VT 1 hr 16 mins

**Examiner doesn't understand endothermic gain is free energy from system and surroundings Maxwell's equations in conclusions 12.1.**

*Blanche: ok, so it reaches voltage, in 400 seconds, so what I'm saying is, if I was building an energy generator (I'm talking about the abstract and title), that's where I would discharge it,*

*Ext: but then you haven't got much energy there yet right?*

*Blanche: an endothermic energy generator, yea, but you've always got more than you've put in there, that's the point,*

*Ext: no you won't. you probably, why don't you wait a bit longer then discharge it*

*Blanche: because you're going to get an exothermic reaction, and you lose energy*

*Ext: but there's not much work been done?*

**20 VT: 1HR 20 MINS**

**Discuss endothermic generator and parameters (chapter 3) but examiner does not want to engage and changes subject as I mention climate change agenda**

*Blanche: so the electric field, charge, now has, the emf that you've put in there from your power supply, emf in the form of electrons, that is what we say we do, that's number 1, number 2, we have the electron we've knocked off the lithium,*

*Ext: mm*

*Blanche: le minus we call that, number 3, we've got the attraction from the gases surrounding the battery, yea, that's been attracted to this positive ion, , right, this big positive ion, here, lithium, like I said about the mask scenario, you can't stop anything that is attracted to it, coming to it, ok, if this force here, which is a positive force, has enough force to rip an electron maybe in water, in the air, right, it will rip it out into your electric field, so now you've got another electron gas from the air surrounding this reaction, in your electric field charge, and those are the 3 points I've made there,. So what you've got is an initial amount of energy you put in there, plus an extra 2 amounts of energy that you've put in there, so we can design our, renewable energy generators, to capture these extra energy, so you're getting something for nothing as you would say, but you're not really getting something for nothing, you're actually just benefitting from the reaction and know it's happening, and you discharge it at the right time, because it's all respect to time, and you gain energy from your system, and from your environment, and that's the next generation of renewable energy generators that we're going to see on this planet. So far we've had them stopped by Big Oil,*

*Ext mm*

*Blanche: we've had people murdered because of it, because they've come forward with this sort of evidence, and these machines, and business doesn't want energy getting any cheaper, as we know, we're all enjoying more expensive energy bills these days, and the profits are going up, 40 billion was it umm energy companies made last year, being in the energy business, I'm quite interested in things like this, Big Oil made 20 billion, 30 billion, and another great thing as well, carbon capture, now this*

*is the agenda, whether you believe in climate change or not is up to you, if you look at historical evidence you'll see, that carbon dioxide, follows temperature, with a lag of about 500 years*

*Ext: maybe we can discuss some of these points at the end, when we get through your work I think*

**21. VT: 1 HR 26 MINS,**

We discuss the Swansea experiment which shows I have an understanding of battery rest and voltage relaxation before experiment, as I collected data to show this, yet he then claims in home experiments that I have not rested the battery. Examiners omit anything about the Swansea experiment FROM ADDENDUM, and the fact that I collected pre experiment data in Swansea experiment. This external examiner and internal examiner have an agenda to make Mr Blanche's home experiments look inaccurate and to support their false claims that electrons do not move in the air to a conductor, as well as claiming temperature sensors are NOT WORKING CORRECTLY and voltage increase in home experiments is not due to Boltzmann's constant proof – temperature of air around the battery, but because of voltage relaxation. No evidence provided before the viva, on the day of the viva or after the viva, to back up their statement of voltage relaxation being a trait of internal battery phenomenon and not a displacement current. Instead, Mr Blanche's experiment that is unrelated to the examiners claims, is a the voltage gain from the air electrons, which the temp sensors clearly show there is a displacement current, in agreement with all other experiments on endothermic charge. They would need a study showing that a similar experiment to mine was done and temperature sensors placed outside the battery would show no lower air temperature than the ambient temperature during the time of the experiment, this is not the case and is a clear case of academic fraud to fail Mr Blanche's Thesis and discovery.

*Blanche: the oven isn't on, it's in an oven, but the oven didn't work properly, so I just used that to stop air movement, and then I've got the orange one, which is taped to the battery, and the silver one which is just above the battery, so as you can see, I did a bit of ambient*

*Ext: mm steady state*

*Blanche: yea, steady state as you call it, um, then as you can see it was still reacting (the battery's electric field), it was slightly higher than the temperature of the room (meant temperature of the oven), so it was still then cooling down a little bit, (thought he would like to have explored why this was, but no) and then as you can see, the trend is, umm 17 cm's away from the battery, when I hit the power supply on, the pressure, voltage pressure shoots up, as you would expect, and the temperature sensor 17 cm away from the battery is showing a temperature drop,*

**22 VT 1 HOUR 26 MINS,**

*Examiner then tries to claim the temperature sensor is a random failure at the close of the switch*

*Ext: because if we look at this drop, it seems to be in the, content, 0.1 degree seems to be the measurement accuracy of this thermocouples,*

*(No, incorrect. See 1.1, h. of external examiners report (in this report) for manufacture sensor resolution. A true Examiner investigation would look for this data resolution and point this out to the candidate. A minor add-in correction required, but the resolution of sensors temperature readings are in steps of (0.0625C) which can be read on the figures, see figure 36, compared to the temperature*

measurement steps of the figures on y-axis (0.1C), so there is no data discrepancy and no false analysis or error, the point of the sensors is to show the temperature readings with respect to time and the trend they all show together, which confirms their accuracy together. False statement by External examiner.)

*Blanche: yea*

*Ext: right, one could argue*

*Blanche: it's a small drop*

*Ext: maybe it's a random effect*

(agenda to fail, no the trend is in agreement with the other sensors, ignoring the abstract and the displacement current)

*Blanche: you could argue it was a fluke (condescending)*

*Ext: yea (voice breaks, he wasn't expecting that answer), it's not precise enough to determine yet, right? (Totally ignoring the same effect in NASA experiment)*

*Blanche: yea, you could argue that's a fluke, well why not, you got to have doubt in your experiments, so I agree with that, but you could also say, oh look at that, mm that's interesting,*

*Ext: I guess the question is that, but it's not surprising, because if the battery is cooling down, then there's going to be a temperature gradient, across which the temperature from ambient is gonna cool down right?*

(no, the sensor shows a temperature drop when the switch is closed. and the same trend as other sensors, it shows the same trend later on in the experiment as do other sensors with 2<sup>nd</sup> endothermic reaction, all with respect to time, this has nothing to do with coefficient of batteries as it's about electric field charge with respect to time and applied the theory of the thesis. The lattice of the battery is the positive part of the field and cannot absorb a negative charge. The thesis specifically analyses the electric field charge with continuous charge and time, it is also in agreement with the NASA experiment)

*Blanche: yea, yea, good point, and well spotted and that's true, but at the same time, they're all doing the same trend as well, in they, which is quite remarkable really, they're all trending at the exact same time,*

23. **VT 1hr 29 mins**

Examiner agrees with endothermic gain from air, he cannot make his mind up what is what

*Ext: ok, which is when you started doing the home experiments right?*

*Blanche: yea, but I think we can get a lot from this, (no reply)*

Ext: ah , nothing else on that chapter, so maybe let's move on to your last experiment, um, so , the summary's that, your now moving on to a cylindrical cell, and you want investigate this effect even further, by studying different ambient temperatures, would that be correct?

Blanche: not really, I'm just trying to capture that endothermic reaction, and trying to capture, and how far I can notice it's coming from the battery as well

Ext: ah, but wouldn't the ah, previous experiment already give you the answer

(he just said this previous experiment was inconclusive, but now he agrees with the experiment and theory,)

Blanche: yea it did, that one but now, alright then, what I can say is, I want to prove that this endothermic reaction, is energy out of the air, right?

#### 24. VT 1HR 30 MINS,

##### Home experiment, test 1, THE DISPLACEMENT CURRENT

EXAMINER TRIES TO CLAIM THERE IS NO ELECTRIC FIELD CHARGE. Wrong, a rise in voltage shows there is an electric field charge (electromagnetism laws apply, coulombs law), in this case it's the displacement current without a conduction current that charges the field, but the Ext. does not know about the displacement current, as he is no expert and has not read all the thesis, and he does not want to discuss the displacement current.

Ext: but, there's no electric field anymore, right?

Blanche: this is an electric field charge, voltage is an electric field charge,

Ext: no there's no load (he means power supply, the battery is the load on the surroundings) there's no current going through it

(wrong, Current total = conduction current+ displacement current, i.e, Total current even when there is no conduction current (cc) can still have a displacement current (dc) when an EMF or the photoelectric EFFECT has been applied, as demonstrated in this experiment, i.e total Current,  $I_t = cc + dc$ , this is well discussed in conclusions 12.1, 8 pages, references given to support theory, 85, 86, 87, 88, 90, 91, 92) that the Ext and Int have avoided and do not want to discuss)

(Have you ever touched your car on a hot sunny day and had an electric shock? That's because the sun has caused the photoelectric effect and then there is an ensuing endothermic reaction to the metal of your car, an electric field has been created)

#### 25 VT: 1HR 31MINS

##### EXAMINER HAS NO idea of how the experiment was conducted

Blanche: but the room actually rose in temperature,

Ext: so that's the oven temperature? (does not know how I conducted the experiment with this statement, he should know this)

Blanche: It's not in the oven, it's in my box, I, I, I put it in a box, can you see the photo of that?



Ext: I've got a quality street box (this contains the electronics not the battery, shows he had not examined the work)

Blanche: no, no, no, not that one, um, where is it? Is it down this one? Or is? there it is, there we are, there we are, I've got it in there, look,

Ext: sorry, but you mentioned about oven that's? (again does not know the experiment)

Blanche: yea I'm calling, yea to warm the battery up,

Ext: ok I see, yes

26. VT 1 HR 36 MINS,

Ext will not answer why there is a lower air temperature on and around the battery when asked, will not provide an answer.

Blanche: yes so yea, there's no charge being put into it,

Ext: exactly, so the open circuit voltage, is what your measuring, (and the surrounding air temperature), right and, ok, and the temperature looks different, (does not want to explain this but in report will blame it on faulty temp sensors) umm it's the same here, ok I mean, if, there's er, and your explanation is that this is coming from the external air, right, causing the potential (voltage he means) to go up?

Blanche: yea the voltage yea, and as we can see, the air temperature around the sensor on the battery, is lower than the actual room temperature, so where's that energy gone? Well, that energy has been converted into the voltage,

Ext: now, you can have voltage, going up and down, as well, so there's experiment's that's been done where, you can have a battery, so the voltage your measuring, is a type of potential, so you have a battery with some voltage, and by inducing a temperature you can make the potential go up and go down, (yes, this was what Blanche done by putting the battery in the oven), based on the applied temperature, (evidence please, you have had month's to prepare), and that comes down to properties of the materials you are using, in this case it's a Samsung cell it doesn't matter,

Blanche: yea, yea, it's actually charging, the voltage out of the air, as the room warms up, the battery gains more voltage, out of the air, and and,

Ext, the point is, we don't agree,

Blanche: where does it come from then?

Ext: right, so there's thermal energy and a chemical energy, like you're coming back to the configuration of the lattice, is what's causing the chemical temperature difference (the lattice is the positive ions, see chapter 19.2, in this experiment, 19.2, the lattice is the graphene ions, he didn't read this, which he admits later on,)

Blanche: so why is there a lower temperature on the outside of the battery to the ambient air temperature then? (Doesn't want to answer this)

Ext: can you remind me what you did before, (changed the conversation because he doesn't want to answer this question) was the cell in the oven before you put it into this box?, or was it in the fridge? (Doesn't know what experiment we are now talking about, test 1, just to remind you)

Blanche: in the oven, this one is oven,

Ext: it was warmer before, and then you put it, took it out

Blanche: yea

Ext: right, so, it's cooling down, (yes this is the whole point, it is above ambient temperature and then **cools down below ambient temperature**, but it should equalise to ambient air temperature, but does not, remains below ambient air temperature measured by T2.

T1 and TA stay below ambient air temperature for 5000 seconds, which is 83 minutes 20 seconds, which is when this data was stopped, while increasing in voltage all this time.)

Blanche: yea, and it's cooled below room temperature look, there, so it's below room temperature there, it started off above room temperature,

Ext: which figure are we looking at? 38?

(Does not know what test or figure we are talking about, should have rigorously examined the thesis)

Blanche: yea, do you want to look at the er, next figure, test instead, you can see it better, we're on this one now,

27 VT: 1HR 41 MINS

(In this part, the examiner is trying to make out I discharged the battery immediately before putting it in the oven, that's not what I did, he is now accusing Blanche indirectly of academic fraud, Blanche demonstrated in Swansea experiment, data collection before charge was engaged, demonstrating a constant voltage and an appreciation of voltage steady state, Blanche had been working with batteries all year and knew of this and only worked with rested batteries, Swansea experiment was discussed for 5 minutes, but there was no mention of this experiment in Addendum report, WHY?) The examiner doesn't want to engage on why the temp sensors are below ambient temperature.

*Ext: just on that point,so, in this experiment, you discharged the battery, I guess right? To 0.2 volts?*  
(to charge a battery it would usually be discharged first, but here the voltage is very low as it has been left in a box for a week after discharging)

*Blanche: yea, there's nothing in there,*

*Ext: and then did you , but you did, but you did discharge it in the oven or outside:*

*Blanche: outside I discharged it with a resistor that I had,*

*Ext: so this as nothing, so this was, didn't go in the oven afterwards, everything outside?*

(should know what I done, it's written in the test. The battery was totally rested from a week before, this is a minor add in required, and the battery had hardly any voltage in it, he now has an agenda to his questioning, this is because he needs to find something he thinks he can fail all my research on. An agenda with a motive to commit scientific fraud)

*Blanche: this did go in the oven afterwards, which is the photoelectric effect*

*Ext: so you put it, you discharged it, you take it, it's disconnected, you just keep it in the oven,*

*Blanche: yep,*

*Ext: what temperature is the oven for example, a high temperature*

*Blanche: yea, I just wanted to get heat in there,*

*Ext: and how long did it stay in there before you took it back out,*

*Blanche: well as soon as I got it out of the oven, I connected it to the circuit and started collecting data, so I got the battery a couple of degrees above room temperature,*

*Ext: I guess the question is, what the, you see, when you discharge a battery, and stop it, and dump it in the oven, the volts gonna relax, right, so it hits 2 volts, whatever, 0.3 and it has relaxation effect,*  
(false claim)

*Blanche: yep*

*Ext: right, so the question is, how do you know that's not the relaxation effect you're not seeing there?*

**28 VT 1 HOUR 43 MINS**

Examiner claims the temperature sensors on and outside the battery are cooler because of the battery materials, nothing to do with physics which is all explained in my thesis,

Ext: so then there's ah, there's this entro, this, what I would call the negative entropy quotient effect, and there's a cooling and heating effect (makes no sense, heating effect, meaning energy gain I assume he means) that battery materials have, over some soc ranges, it absorbs energy, and some soc ranges it generates energy,

( it is the endothermic reaction, the displacement current that is charging the electric field of the battery, this is exactly the observation Blanche makes about the electric field charge, but it is with respect to time, as stated in thesis, it is not about overall battery coefficients which are based on the charge and the discharge, a battery is a storage device although we can observe electric field charge with it, **THIS IS THEIR FRADULENT CLAIM TO FAIL, MY THESIS IS NOTHING TO DO WITH ENTROPY QUOTIENT OF A BATTERY**)

Ext: reversible and irreversible, so that, that is again attributed to what is called entropy quotient, um, so that changes, sign, which is probably what partly your seeing here, but the point I'm trying to make here, is you can't conclusively say that this voltage increases you're seeing, is due to that effect or is it just relaxing from the previous Discharge.

(rubbish, the temperature sensors, show exactly where the energy is coming from, just as Nasa experiments did. Where's your data and evidence to challenge Blanche observations are wrong and due to some other explanation with data to show, you made this comment on the 20/ 04/22 but no one was privy to this report before, on the day or after when requested by Mr Blanche, You have had months to prepare, but bring no evidence or pre viva report to viva, agenda to fail, coerced and collusion with Swansea University)

Blanche: right, well no, you're wrong, right, so here's your battery, right, the square is the battery, this is your first temperature sensor stuck on the battery, this one's 15mm away, this one's 10 cm's away, now if we look at the graph, let's look at it on, 5000 seconds, on 5000 seconds, ambient temperature is 21 degrees, ah the one that's 15 mm's away is, 20.8, and then the one that's on the battery

Ext: which colour's which? (he should know this)

Blanche: ambient is yellow, silver is 15mm's away from the battery, and then, the one stuck on the battery is, orange, which is say about 20.7, so you've got this temperature gradient, at 5000 seconds, and as we know from Boltzmann's constant, each one of these has an energy value to them, this one's obviously got more energy in it, than this one, so there's the energy gradient, towards the battery, so it's got nothing to do with the battery, the energy gradient, all this, energy gradient is, what the temperature, temperature sensors are telling you, so the direction of energy is towards the

electric field charge of the battery, and the electric charge is this, and as we can see, it's charging up, now if, if what you were saying was chemical reactions going on in the battery, **then why have you got this temperature gradient towards the battery? It would just be in the battery,**

Ext: 2 points, this, this voltage, right that you're measuring, the trend you're seeing the point I'm making there, it could be a relaxation from the previous effect **(that's rubbish, it's not)** right, so when you, you, because you had to discharge the battery **(doing his best to say it's a previous discharge effect) to start this experiment, (still trying to imply this nonsense that I just discharged the battery)** it takes a long time for the voltage to reach a steady state, ok, right

**(his argument still doesn't explain the temperature gradient, false claim)**

**29 VT 1 HR 49 MINS**

**Another False claim** referring to test 3. Incorrect, the voltage never rises and there is no energy absorption, only diminishes, see figure 44 blue voltage line, so there is no energy absorption, only friction as described in thesis.

Ext: no, no, not to that extent, not to that extreme, so for this, entropy quotient, this positu and negu, so even your graphs, you observed some, when you keep going, it starts to generate heat, at first it dips, then comes back up, **right there's then, energy absorption**, then gives it off

**30 VT 1 HR 51 MINS**

**Examiner claims an endothermic reaction is not heat gain from surrounding air**

Blanche: so when it goes below room temperature, how does it continue to rise in voltage? **( referring to test 2), and how, how, am I still getting that air gradient then? back to this one (test 2) because you haven't put up any decent argument against that?**

Ext: no, the point I'm trying, which one? Look

Blanche: there, that one,

Ext: mm, but over here I'm saying,

Blanche: see, look, it's gone below room temperature, the orange is the one stuck on the battery, the yellow one is room temperature, so the temperature sensor is telling me that the battery as gone below room temperature, and it's still rising in voltage, and it does that for like 5 hours, wow, and it stays below room temperature during the charge, all that time, how is that, that's impossible in it, because it's an energy gradient,

Ext: mm

Blanche: surely, the battery if it's charging with voltage, should be warmer than room temperature if anything, according to exothermic physics, and electric field charge, according to entropy and thermodynamics,

Ext: but in this case, right, at this soc, you have an endothermic point here (hallelujah)

Blanche: yea, you've got an endothermic point all the way, endothermic means heat gain, it's gaining heat all the way around (throughout the time of the charge) and where's it gaining it from? It's gaining it from the air,

Ext: no

Blanche: that's why it's colder

Ext, yea but the temperature gradient of course there's gonna be energy, cause it's cooler here it's gonna of course gonna,

Blanche: why is it cooler though? This is the point? You seem to be missing the point all the time,

Int: the cooler could be anything, the cooler could be explained (I've written my thesis explaining it), by evaporation or any liquid or moisture (oh please) um on the, on the battery,

Blanche: alright then, why is this one cooler then? That's not on the battery,

Int: which one?

Blanche: the one that's 15 mm's, it does get to the same temperature as air temperature, but for two, ah for, there to there, to that point there, 750 seconds, the one that's 15 mm's away from the battery, is cooler than air temperature.

Int: but what you think

Blanche: I don't think the battery is vaping off energy and chemicals

Int: not vaping, so it's just, I see that you if you have anything that um as some um moisture on the surface, and after evaporation, surface will get cold, that is normal.

(so now the battery gains voltage because of evaporation of a liquid on the surface of the battery, and this evaporation causes the surrounding air to cool down, all after I placed the battery in a warm oven to raise the temperature of the battery above room temperature)

Int: that is not caused by something inside the material (the Ext seems to think it is, so now they disagree with each other and their invented physics) that's caused by the surface evaporation, do you know what I mean so

Blanche: well, we're, we're. actually looking at an electric field charge here, and there's, there's a thermodynamic direction of energy, that goes against your theory, you know,

Int: you could use any theory to explain, but it doesn't mean that (Boltzmann and Planck got it all wrong, lets re write history) that is only a theory to be used and you could be using some other, that is why we, I, will refer you to repeat this experiment, with more batteries, with much larger temperature range so (he wants to expand the experiments but never mentions this in the Addendum), so see the temperature range here, is just one degree or two degrees, ah so what happens if you increase temperature range, and also you, pre-process your battery much um, much more appropriately, for example you clean your surface of your battery, ah improve the isolation of the battery and the um equipment, so there's many, many more experiments could be

Blanche: oh yea, you could do a PhD on this,

Int: that is what I say at the beginning, your topic is too wide,

Blanche: well it's not too wide, it's what I decided to explore, and I found something here that you don't know about, your gaining energy, like I said, it all started with this (referring to Newman's book)

Int: no you found something, yea, that's true, you found something, (admitting I found something)

Blanche: yea

Int: but it doesn't mean that

Blanche: it means

Int: means something can be explained by your, your theory, it could be something, but all of us don't understand, could be something that, related to chemical reaction

(I know, you're trying your best to fail the theory because academics AT SWANSEA don't want this theory being an energy gain due to the displacement current, an endothermic electric field charge and because it's linked to Newman's generator.)

Blanche: well I don't think so, because we start with an equation, photoelectric effect, Einstein won the Nobel prize for the photoelectric effect,

Chair: but you're saying it's not the photoelectric effect right?

Blanche: yea, that's the catalyst to the reaction, is the photoelectric effect,

Examiner doesn't know what the displacement current is, abstract, conclusions, central theme of thesis. Examiners doesn't know electricity relationships. Watts, to energy

Blanche: do you know what the displacement current is? (silence)

Ext: so what's the displacement current's in your experiments? (Hasn't read the conclusions, chapter 12.1)

Blanche: I'm going to have to explain the displacement current to you, if you don't know what that is,

Ext: go for it

Blanche: ok, so if we have some capacitor plates, and they're connected to a battery, right, circuit, now the charge will go there, the charge will go to the plates, yeah,

Ext: mm

Blanche: and on the plates you'll have, positive ions, yeah,

Ext: mm

Blanche: both plates, right, both have positive ions, and around there you'll have a negative charge building up yeah, right, (neither of examiners know this and haven't read the conclusions) so what they found was, there's a magnetic field inside here, yeah (silence), but there's no conduction current across there

Ext: mm

Blanche: there's an electric field, building on the plates,

Ext: mm

Blanche: and you have a magnetic field in the plates, between the dielectric, and they measure this as a displacement current, so what Maxwell did was, he um wrote, an extra current in, so you had current  $I$ , which is the conduction, current  $d$ , which is the displacement current, and that equals the total current, yeah, across there (silence), ok and this is the equation he is putting with it, really,

Ext: so where's the  $I_c$  and  $I_d$  here,

Blanche: well, it's the complete lot is  $I_c$  and  $I_d$ , right, and he's saying this is the displacement current, this is the positive part of the displacement current, and this is the negative part of the displacement current, that's the best I can explain it to you, right now, I think you'll have to read it yourself, (silence, they haven't read the conclusions, there's a chapter on this 12.1), and he's calling it free



positive electricity contained in the unit of volume of any air, of any part of the field, so what I'm saying to you is, forget this is a capacitor now, right, this is just a continual wire right, and I put my battery there, right, and what my experiments are showing you is, is this magnetic field, is around the battery, right (silence again, they haven't studied this, it is 8 pages in the conclusions), and this displacement current, that Maxwell taught, and it is written in our electromagnetic theory, IS THAT AIR TEMPERATURE DROP, see, this is how you're getting this temperature displacement, because the energy in the air, is related to current, energy, so you're seeing a lower temperature here, than here, because energy is flowing into the electric field charge, as well as you've got this conduction current, ok, so that's why Maxwell wrote this equation,  $I_{total} = I_c + I_d$ ,

Ext: so there's a current, so  $I_c$ 's coming from the external atmosphere,

Blanche: sorry,  $I_c$  is the battery yeah, (oops) your conduction current, yeah

Ext: so  $I_d$  is coming from the external (I think the penny has dropped)

Blanche: yeah, and that's what my experiments show,

Ext: there's a current coming from the atmosphere, going into, that's,  $I_d$ , I guess (he shouldn't have to guess, he should know this, its electromagnetic theory and written in my conclusions)

Blanche: yeap, and most people, they give this example in physics, you can watch lots of you tube videos on this, and they call it a fictional current, but it's not a fictional current because my battery charges prove, the voltage is rising, and the air temperature around it is getting lower,

Ext: prove is a strong word, (but it is the correct word, as the experiments show, as does the NASA experiment) that voltage rise like I said,

Blanche: well NASA proved it as well isn't it,

Ext: no they didn't prove it either (blatant lie), proof is, well er, proof is a mathematical equation, you demonstrated certain observations, the interpretation of that is where we're trying to understand here, (or not understand, if proof is a mathematical equation, then I did that also in chapter 15 and 16, agenda to fail)

Blanche: right ok, so Maxwell wrote this equation that,  $I_{total}$ , in, in, cause he had Ampere's law see, we had Ampere's law, but in a charging electric field, right between two capacitors (oops, plates), you can't just put Ampere's law,

Ext sure,

Blanche: so that's why he wrote  $I_d$ ,

Ext: so why don't you try and calculate  $I_d$ , so what sort of value will you get for  $I_d$  in your experiments?

Blanche: what values did I get?

Ext: if you were to calculate that

Blanche: well, if you were to calculate them, you could look at the graphs and say that, the temperature starting of the battery is 2 degrees, and it ended up at 1 degree, so that's 1 degree change, so that 1 degree then you could say using Boltzmann's constant is  $1.38 \times 10^{-23}$  per kelvin, so convert C to kelvin, and then you would have the amount of energy that  $I_d$  is.

Ext:  $I_d$  is not energy, right, (oh please release me), how would you go from energy to current, because that's in, I think that's a unit miss-match, right, from what you're saying earlier, was in joules,

**VT: 2 HR 13 MINS**

**Temperature sensors on outside of battery show air temperature is lower than ambient temperature for 6 hours, and examiner cannot explain why, but in Addendum blames the sensors or whatever else he can think of.**

Ext: so that's my impression, so it comes back to this entropic quotient, and what the electrodes are doing, at that stage, (the electrodes cannot do anything, they are simply parts of the system, it is the physical reaction that does something, see chapter 5 and chapter 17 for theory explanation, if only he had read it, he would have had some clue.)

Blanche: so you're saying that the battery, is causing my temperature sensors to show different temperatures lower than ambient temperature, over 6 hours, whilst charging in voltage,

Ext: the, the charging, we can't fully explain the charging (oh really! I think we can!)

Blanche: well we can though see, that's what I'm saying,

Ext: wait a minute, wait a minute,

Blanche: this, this, tells you how it's charging right there,

Ext: ok

Blanche: you're just deciding not to agree with it,

Ext: no, no, no, I'm not deciding, what I'm saying

Blanche: you are, otherwise you don't understand joules into watts per second, and the graph

Ext: so then why do we need this equation? If you were such an even spacing

32 VT: 2 HOURS 20 mins

Examiner will not accept endothermic physical reaction background research. Will only engage in battery conversation, blinkered, claims background research is not my work, but it is my background research within this Thesis. Claims entropy studies in batteries are related to gibbs free energy which somehow refutes my theory, it is unrelated and does not apply to my work, as Gibbs free energy applies for constant temperature and constant pressure,

Exert from [Gibbs free energy - Wikipedia](https://en.wikipedia.org/wiki/Gibbs_free_energy)

[https://en.wikipedia.org/wiki/Gibbs\\_free\\_energy](https://en.wikipedia.org/wiki/Gibbs_free_energy)

In thermodynamics, the Gibbs free energy (or Gibbs energy; symbol ) is a thermodynamic potential that can be used to calculate the maximum amount of work that may be performed by a thermodynamically closed system at constant temperature and pressure.

Blanche: you're into battery technology,

Ext: well you're using batteries,

Blanche: mine is about electric field technology, (cross talk), let me show you another experiment then, alright, and it's nothing to do with batteries,

Ext: that's the whole point (no MY THESIS WAS NOT ABOUT BATTERY TECHNOLOGY)

Blanche: you want to ignore this I think, yea, you are, so, this guy built a Newman generator, right (silence, does not want to engage), there's the, there's the Newman generator, ok, (silence), this is the coil, he's got magnets spinning in the coil, this is the commutator, the commutator is the start, stop, and discharge of the device, it's a mechanical device, and he did a temperature test on it while running it for an hour, and it started at 21.5 degrees, after 15 minutes it dropped to 21.3 degrees and that continued while he run it for an hour, and then he stopped the test. Now this is not a chemical reaction,

Ext: it's not your work either,

Blanche: no, it's background research,

Ext: no

Blanche: no, this is background research, which the theory is built on, which you have to have background research, in your work

(Change of conversation to not engage in the background research)

Ext: mm, but you missed out quite a bit of background research (NASA? Which he didn't even read) you have 4 chapters on batteries, that's the point I'm making here (and they are the only chapters you want to talk about and ignore the rest, there are 24 chapters all together)

Blanche: no, my work is not on batteries, my work is on the electric field

Ext: sure, sure, but

Blanche: here's, here's the (again he tries to avoid the inductor charge chapter 3), here's the temperature sensor,

Ext: mm

Blanche: that he placed on the coil, and he run it for an hour, there's the lab temperature, that was the coil temperature,

Ext: sure

Blanche: so that's not a chemical reaction, that's a physical reaction, where his sensor is showing, that the air around his sensor, is lower than air temperature,

Ext: Geoff, the point I'm making here, you have 4 chapters using batteries as an example

(and they all support my theory, and they forgot to mention anything about 2 of those chapters in their addendum, except Int. says to remove equations 1 and 2. Strange that, don't want to mention NASA experiment although one hour of this viva (40% of the viva) was spent talking about it. Don't want to talk about Swansea experiment either, under orders to avoid this probably) (and yes I get this point your making, it's called scientific fraud)

Ext: to study your effects, the point I'm making here is, there's lots of literature been done on this point, and the question is, I think it's a shame, that you search it, you find it, but there's been a lot of research been done, that's my point

Blanche: did they actually use temperature sensors outside the battery, to show the direction of air, like I have-and got internal temperature,

Ext: the ambient temperatures, they got cell temperatures on the sensors

(All the temperature sensor reading studies shown in Addendum journals were for a set temperature and not analysing endothermic to exothermic electric field reaction, not related to my study)

Blanche: yea

Ext: right, so,

Blanche: and they say it's a chemical reaction

Ext: it counts as thermodynamics, they relate the enthalpy to entropy gibbs energy

(gibbs energy must be at constant temperature, constant pressure to apply to the system, what I am studying is neither constant temperature or constant pressure. An electric field energy gain is time dependant, this is very well defined in the thesis, but it's an agenda to fail)

### 33 VT: 2 HOURS 25 MINS

**Examiner doesn't know what a physical reaction is**

Blanche: it's not chemical reactions though, it's an electric effect, it's ah, it's a physical reaction, you don't, define the difference between a physical reaction and a chemical reaction please.

Ext: Physical reaction I do not know what you mean by that

Blanche: you don't know what a physical reaction is?

Ext: what's the, my point is here, there's a thermodynamic configuration, reconfiguration of the lattice (this is the chemical rearrangement caused by the emf which then becomes a physical reaction, coulombs law, chapter 5, but he doesn't know what that is or how to explain it, he has said this many times, but still does not use the physics, i.e physical configuration, does not have the electric field knowledge)

Blanche: no, I'm sorry, you need to define what a physical reaction is,

Ext: you can't say that,

Blanche: you can't just say it's a chemical reaction,

Ext: electro chemical reaction,

Blanche: you don't know what a physical reaction is. Uh?

Ext: it was an electro chemical reaction, right, batteries are a electro chemical devices,

Blanche: it's electro, meaning it's electrified

Ext: no, electro chemical device

*Blanche: chemicals, meaning it's using chemicals, but there's no, there's no chemical reaction going on create the electricity, it's a physical reaction electricity,*

*Ext: the electrons in a battery, right, come due to a chemical potential differences,*

*Blanche: no, no, they don't, you ionise the atoms,*

**VT: 2 HOURS 27 MINS**

**Examiner doesn't want to engage in anything other than batteries**

### 1 VT: 15 MINUTES

Internal examiner asks his first question, and then goes on to argue against a fundamental gas law equation for nearly 1 hour, (the only variables in this equation that are being examined by Mr Blanche to the NASA experiment are, pressure and temperature. If Int had studied the work and references, he would know this, he portrays a total lack of understanding to what is being discussed. Int then claims in Addendum that equations 1 and 2 which are used to analyse the reaction cannot be applied to the adiabatic Arc.

Int: Does it make sense having capital N equal to small n, multiplied capital N

Blanche: yea, it's just deriving from this equation here, see? But I can't quite remember what it is now but if you look it up, you'll find this is derived to this

Int: Does it make sense, you have one variable equal to the multiplication of 2 variables.

( $PV=nRT=nNkT$ , Because the number of molecules in the sample, N, is  $N=nN$  we have  $PV = NkBT$  (1)

(This is what the Int is arguing against to be incorrect, This is explained in ref. 59 AND 60. I GAVE 2 references for this due to the importance of this formula. The Int hasn't examined the Thesis or the references. )

### 2 VT: 24 MINUTES

Int derives a new theory for constant volume. An adiabatic Arc has two distinct parts, the surroundings, and the system which is the battery, is housed within the Ti bomb. There is an exchange of gases within the Arc between these two parts during the endothermic reaction and exothermic reaction which is initiated by the conduction current and shows a displacement current due to the reaction just as explained in Thesis. Mr Blanche tries to explain the premise of an adiabatic system and how we can examine gas relationships using a fundamental equation but Int has an agenda to fail, science doesn't matter.

Int: yea but when the battery's charging, when you charge the battery, there's some ah molecules or some molecules generated (but there is no increase in net volume of the arc except we have introduced an electric charge, there is an exchange of gases due to this open circuit charge, Maxwell's/ Ampere law applies, as explained in conclusions)

Blanche: would it be fair to say now, they've built this Arc right, and they've enclosed this Arc so it is its own atmosphere right, that's why they built it.

Int: When was ah the NASA experiment, was a long time ago right?

(it doesn't really matter when they did the experiment but the date is on the front cover of the NASA experiment (references 57,58, obviously hasn't pre looked at references)

### 3 VT: 28 MINUTES 30 SECONDS

(Int doesn't understand the concept of needing a voltage to have a current, yes the current flows from the voltage pressure, he does not understand electricity, demonstrated with this statement.)

#### 4 VT: 35 MINUTES

Int continues to argue against equation 1, constant volume, new molecules appear out of a chemical reaction to increase adiabatic volume in arc! Doesn't understand that you can increase the molecules but will still will have the same net volume. i.e a balanced chemical equation, GCSE STANDARD NOT MET BY EXAMINER, AGENDA TO FAIL.

Int: ah that's the main question, I think er, if you use this equation, how to make sure, ah, what are variables, what are constant. for example, in these equations you keep talking about ah, a capital N and volume and constant, you can't be sure that volume is constant. But number of moles, capital N is not constant.

(No, you keep talking about a capital N and volume, and want to argue against the legitimacy of a fundamental equation in gas law theory and whether the NASA adiabatic Arc has a constant volume.)

Blanche: well where did they come from then?

Int: From a chemical reaction

Blanche: so they appear out of nothing. They can't do that, it's impossible.

Int: no I think that you see that ah. For example, I'm no **EXPERT** of batteries, but if there's a chemical reaction, is that um um some more molecules could be generated.

Blanche: No, impossible, that goes against gas laws. You've got to have a balanced equation,

Int: yea, for example, water,  $H_2O$  can be turned into hydrogen and ah oxygen. So one molecule becomes two molecules.

Blanche: No.

Int: Why not?

Blanche (laugh), no a molecule is two or more elements, for a start, a molecule has to have two parts, at least.

Ext: Inaudible

Blanche:  $H_2O$  is water, but if you split them up you've got elements, not molecules. Which, there you are, that supports my theory. No you're wrong, sorry. You can't magic molecules out of other molecules, it has to be a balanced equation. If we look through the gcse book, we'll find that.

#### 6 VT: 48 MINUTES

Internal examiner continues to argue against constant volume in adiabatic arc, and tries to use arguments that are totally unrelated to thesis, he is no expert in electromagnetism and understands very little chemistry.

Ext: ok. I think I can move on to the next chapter.

Int: yea I have more questions, coming back to what I said, about molecules, I found that ah molecule (inaudible) nuclear, that is it consist of ah um um, one chemical element. For example, 2 atoms are in oxygen or 2 hydrogen molecules,  $H_2$ , so, you do have a chemical reaction, which ah ah ah turn one molecule into 2 oxygen molecules, one molecule can generate more, more different atoms and molecules



Blanche: I see what you mean, but you're still going to end up with the same net total.

Int: ok so another, another question that is that do you come up or come across any more views that as selective materials with a coefficient

Blanche: Material expansive coefficient?

Int: thermo expansive coefficient

Int: so you know that when you pick up a material, normally the material expand,

Blanche: right, yea.

Int: that is the relation between  $\alpha$  P and  $\Delta T$  so you increase temperature and pressure increases, so because of material expands,

Blanche: well yea, I'm showing you the opposite effect.

Int: That's what I thought ok. Some materials, they have negative some more expansion coefficients so you increase the temperature, and the volume decreases

Blanche: does it?

Int: yea yea, there are many, there are many.

Blanche: I didn't know that

Int: there are many, so in that case, you have , you can say that there is an endo thermo , but in fact it's not endo thermo, it's just because the material has negative thermo expansive coefficient

Blanche: so, where did the energy go?

Int: they change phase

Blanche: no sorry, you have to explain where the energy has gone. That's not explaining where the energy has gone

Int: The phase changing, inaudible

Blanche: if something's changed, a phase is something changing, yea,

Int: yea yea,

Blanche: something's changed, But what has changed?

Int: the crystal structure

Blanche: the crystal structure has changed

Int: yea the crystal structure has changed and absorbed energy

Blanche: yea it did absorb energy, that's what I'm saying, the electric field, has absorbed energy out of the gases surrounding it, that's the whole point, I'm saying that. It doesn't mean the crystal structure of the material has, makes any difference, if it's changed it's changed, but it doesn't matter, what we're talking about is an electric field charge. The gases have come into an electric field charge, out of the atmosphere around it, it's definitely changed, its changed pressure. But the temperature has dropped around it because, you've taken the energy out of the air.

Int: What I said is that, ha you um couldn't use that formula, simple formula, to apply to anything,

Blanche: well it's Guy Lussac's gas law that we are taught in school, and ah it applies to this experiment. So I disagree with you sorry.

Int: no you can't apply a simple formula to everything, that's what I said.

Blanche: well yea I can,

Int: that has been ah

Blanche: I can, I can apply that because you've got a fixed amount of volume and gases in that experiment. So I, so I can show by using that formula that the pressure has reduced due to the temperature drop. But the pressure hasn't reduced because we know the pressure has gone up in the voltage charge, and I'm saying the energy, has been reduced out of the air around the battery and have gone into the electric field charge. So you've gained energy out of the air into your electric field charge. That's the whole point. That's quite easy to understand.

## 7. VT 1 HR 51 MINS

### Examiner invents evaporation as the cause of the endothermic reaction in test 2 of home experiments

Int: the cooler could be anything, the cooler could be explained (I've written my thesis explaining it), by evaporation or any liquid or moisture (oh please) um on the, on the battery,

Blanche: alright then, why is this one cooler then? That's not on the battery,

Int: which one?

Blanche: the one that's 15 mm's, it does get to the same temperature as air temperature, but for two, ah for, there to there, to that point there, 750 seconds, the one that's 15 mm's away from the battery, is cooler than air temperature.

Int: but what you think

Blanche: I don't think the battery is vapping off energy and chemicals

Int: not vapping, so it's just, I see that you if you have anything that um as some um moisture on the surface, and after evaporation, surface will get cold that is normal. that is not caused by something inside the material that's caused by the surface evaporation, do you know what I mean so

(Int is now disagreeing with Ext, the Ext seems to think it is caused by something inside the battery, so now they disagree with each other and their invented physics, so now according to Int, the battery gains voltage because of evaporation of a liquid on the surface of the battery, and this evaporation causes the surrounding air to cool down for 20,000 seconds whilst the battery gains

voltage, yet the external examiner has tried to argue the reason is due to a previous discharge, these two guys are desperate)

Blanche: well, we're, we're, actually looking at an electric field charge here, and there's, there's a thermodynamic direction of energy that goes against your theory you know,

Int: you could use any theory to explain, but it doesn't mean that (Boltzmann and Planck got it all wrong, lets re write history) that is only a theory to be used and you could be using some other, that is why we, I, will refer you to repeat this experiment, with more batteries, with much larger temperature range so (he wants to expand the experiments, never mentions this in the Addendum), so see the temperature range here, is just one degree or two degrees, ah so what happens if you increase temperature range, and also you, pre-process your battery much um, much more appropriately, for example you clean your surface of your battery, ah improve the isolation of the battery and the um equipment, so there's many, many more experiments could be

Blanche: oh yea, you could do a PhD on this,

Int: that is what I say at the beginning, your topic is too wide,

Blanche: well it's not too wide, it's what I decided to explore, and I found something here that you don't know about, your gaining energy, like I said, it all started with this (referring to Newman's book)

Int: no you found something, yea, that's true, you found something, (admitting I found something!)

Blanche: yea

Int: but it doesn't mean that

Blanche: it means

Int: means something can be explained by your, your theory, it could be something, but all of us don't understand, could be something that, related to chemical reaction

(I know, you're trying your best to fail the theory because academia do not want this theory of an electric field charge being an endothermic electric field charge to start with becoming mainstream knowledge, because they want to keep control, with their funders, the price of energy sales and what machines are used to produce energy,)

Blanche: well I don't think so, because we start with an equation, photoelectric effect, Einstein won the Nobel prize for the photoelectric effect,

## 8. VT 2HOURS

Examiner wants to argue if a photon has mass, **THIS IS NOT PART OF THE THESIS. ALTHOUGH WE HAVE,**

$$h\nu = \phi_o + \frac{1}{2}mv_{\max}^2$$

$$h\nu = h\nu_o + \frac{1}{2}mv_{\max}^2$$

Where  $\nu_o$  = Threshold frequency.  
 $\nu$  = Frequency of radiation  
 $h$  = Planck's constant.

Or we have equation 14 page 101. Either way, there is a mass quantity in the equations.

## 9. TIME 2HR 17 MIN

**ELECTRONS CANNOT FLOW IN THE AIR TO A CONDUCTOR.**

(Doesn't understand electricity flows outside the conductor, and that the figures 52 and 53 are a demonstration to show no resistance, and resistance during the electric field charge of a conductor, the conductor is part of the electric field. He would understand this if he was an expert or had even studied the thesis, see reference 103)

Int: you have copper wire,

Blanche: mm

Int: you draw some electrons flows,

Blanche: yep

Int: are these electrons flowing in the air,

Blanche: ah it's just a, you can depict it how you like, really, this was just ah, to show, that ah, the force out here, the positive ions, is greater than the force in, and it's not creating any resistive force,

Int: asking you, are electrons flowing in the air?

Blanche: Well electrons do flow in the air yes,

(he should have read chapters 5 and 6 and he would HAVE seen National grids description and the earth's atmosphere charge, he knows nothing, as he hasn't read it.)

Int: they flow in the air? (this is beyond stupid)

Blanche: they flow, in air, yea, yea

Int: ok, that's fine,

Blanche: what is the point of your question?

Int: my point is, is, it's not, because the air is is a di-electric, its not conductor

Blanche: yea, but the copper wire's a conductor, (PLEASE READ CHAPTER 6, AND TO MAKE IT EASY FOR YOU, ITS ONLY 1 PAGE, NOW I'M FEELING CONDESCENDING, HAVING HAD TO ENDURE THIS CHAP FOR 2HOURS, HE HAS PRODUCED NO REPORT ON THE THESIS AND HIS BASIC PHYSICS DOES NOT EXIST)

Int: yea but you draw the electron out of the COPPER WIRE (HE THINKS ELECTRICITY HAPPENS IN THE WIRE, HAS NO KNOWLEDGE OF ELECTRICITY PHYSICS, THE SKIN EFFECT, reference 103)

Blanche: yea, because, they're not, there's no frictional, no frictional force there,

Int: that's very vague, frictional force, very vague.

Blanche: well no,

Int: so why electron flowing in the air? Air is not conducting? (oh please) If the air is conducting

Blanche: no the copper wire is the c, this is a depiction of an electric field, yea, and this is I'm saying is, the copper ions+ I'm saying is the positive part of the field,

Int: but I see a lot of ah

Blanche: and this I'm depicting are the electrons around the positive ions+, so do you know what I mean? (the guy shows he knows nothing about electromagnetism)

Int: this is not correct I think this figure is not correct, you need to re draw it, you need to re draw it, and show that, surrounding the copper wire, there's another um, materials

(I'm flabbergasted)

Int: conducting materials, so that the electron can flow inside that materials,

Blanche: no well, no, electrons are free to move in space aren't they, and that being air as well, I don't mean space as up out of the atmosphere, I mean this space, electrons are able to

10. VT: 25 MINS

WHILST ARGUING ABOUT CONSTANT VOLUME AND EQUATION 1 AND 2, EXAMINER STATES HE IS NO EXPERT IN BATTERIES BUT IN ADDENDUM INSTRUCTS MR BLANCHE TO REMOVE EQUATION 1 AND 2 AND WRITE A COMPLETELY DIFFERENT THESIS WITH A DIFFERENT TITLE THAT SHOULD BE ON BATTERY TECHNOLOGY.

Int: no I think that you see that ah. For example, I'm no **EXPERT** of batteries, but if there's a chemical reaction, is that um um some more molecules could be generated.

Blanche: No, impossible, that goes against gas laws. You've got to have a balanced equation,

Int: yea, for example, water,  $H_2O$  can be turned into hydrogen and ah oxygen. So one molecule becomes two molecules.

Blanche: No.

Failures of the Chairperson and Process, with intent to commit fraud

## 1.2 Chair of Examining Board

The Chair of the Board shall be independent in the examining process and shall be responsible to the Postgraduate Research Committee for the conduct of the examination. The Chair of the Examining Board is required to chair the oral examination and any meeting of the examiners.

Have a clear understanding of the University's regulations and procedures

The Chair person was not independent during the examination process as defined by the external examiner, and the rules. The Chairperson was coordinating all feedback, and had all information has stated on the date 07/06/2022, this is 8 days after the oral examination. Why did the Chairperson have all this information when he should have logged the original R & R forms immediately with academic services? It quite clearly states in the rules he should be independent of the examiners, just as he claims in Part 1 of the viva? Summers should have logged the non-existent original R & R form with academic services immediately.

The external examiner states Huw Summers has his notes On 7th June, and Zoe Perry states the R & R forms do not arrive to her until the 10<sup>th</sup> of June.

All involved tell a different story and the truth is revealed. They all lie about what the facts really are.

External Examiner is trying to make out the reports will be his own work from his notes, although admitting his notes will show up as the report after Summers has written them into a report?

So External examiner's notes become a report after he gives them to Summers whilst unable to share his notes with Mr Blanche, maybe because he never wrote any notes and it is Summers and possibly others from the Postgraduate Research Committee that Summers is responsible to, writing the reports?

Zoe Perry and Summers claim Summers will share his viva notes after she receives the reports from the examiners, as he needs these notes to help him complete a one page yes or no sheet No. 4 on the R & R form, WHICH SUBSEQUENTLY YOU WILL SEE THIS ONE PAGE OF THE R & R FORM IS INCORRECTLY COMPLETED.

It quite clearly states on the front page of the R and R form the candidate is entitled to see comments about him on the form, I can only surmise none of the examination board actually are in possession of this original R & R form as it does not exist, perhaps it's the supervisors who are writing the final reports?

Paul Rees being a member of the 2<sup>nd</sup> supervisor team to Mr Blanche, and when one looks who he reports to, he is managed by Summers. The 2<sup>nd</sup> supervisors make a non-committal opinion in emails 49 and 20, and they will not comment on whether they support Mr Blanche's work whilst they claim they have no interest in other peoples or agencies opinions. The supervisors state Mr Blanche will defend his work against so called expert examiners!

Perry lies and is being told what to say by Summers, and she is the go between of deceit, one will notice that lots of the communication in emails is with the Postgraduate research team email address, that all the staff seem to have the privilege of using. This really does show they are all in it together.

Zoe Perry switches between using this and her own email address whilst communicating?

We have established, it is Summers who has the notes (if there are any) and is writing the R & R form and addendum. He then sends it to Perry on the 10<sup>th</sup> June?

There are no signatures or dates to the Addendum?

I bet there will be some email deletion going on when they get this rebuttal report, and note scribbling.

I also guess they'll try and claim the internal examiner was writing the reports in the 12 days it took Summers or the supervisors to write the reports? And then gives it to Zoe Perry who then sends it to academic services? Or perhaps, the external examiner and Perry were mistaken to what was actually proceeding?

They will try and claim it was all a big mix up, all just a big mistake of communication, these things happen, just like the supervisors pre-empting a failure in March 2021 due to Newman 'the disputed work', being in the Thesis, and that was 15 months before Mr Blanche's viva date!

The Internal examiner failed to reply to any emails. Lijie Li has no credibility at all, especially when you read (or listen to) the nonsense he came out with, along with the external examiner during the viva oral exam.

In fact none of the gang have any credibility, all liars and cheats. All in it together to fail Mr Blanche's Thesis. When liars are caught out, no matter what they invent after the fact, it will be another lie to back up the lies already told. Disgraceful behaviour.

Widanalage, Dhammika <Dhammika.Widanalage@warwick.ac.uk>

To: BLANCHE G. (946484)

Mon 06/06/2022 18:38

Dear Geoffrey,

Hope you had a good long weekend.

You should hopefully receive the feedback (including links to battery entropy coefficient work) soon from our discussions during the viva. The feedback will include that of the internal, external and the chairperson as well.

You will receive this from the university and Huw is coordinating the feedback atm.

Regards,

Dhammika

**Dhammika Widanalage** | Associate Professor

WMG, University of Warwick | Energy Systems

Coventry, CV4 7AL



Widanalage, Dhammika <Dhammika.Widanalage@warwick.ac.uk>

To: BLANCHE G. (946484)

Tue 07/06/2022 16:15

Dear Geoffrey,

All documents need to be sent to you via Swansea research office (or equivalent degrees office), I can't directly email to you. My notes appear as the External examination report **which Swansea has,** there is also the Internal examination report as well **(which Swansea will have as well).**

Regards,

Dhammika

### **13. Particular Role of Chair of Examining Board**

**It is the responsibility of the Chair to ensure that the process is rigorous, fair, reliable and consistent with University regulations and procedures.** In the event of a review of an examination decision or an appeal, the Chair is required to provide a written report on the conduct of the examination as necessary.

#### **13.1**

During the examination process, the examiners shall:

- **Consider the thesis and abstract submitted by the candidate.** Any part of the thesis which has already been accepted, or is being concurrently submitted, for any other degree or qualification in the University, or elsewhere shall be excluded from the examination;

**The chairperson fails this task miserably because there is an agenda to fail Mr Blanche. The Chairperson probably reported exactly what the Postgraduate Research Committee wanted to hear, as they were instructing the chairperson, agenda to fail. Mr Blanche sent an enquiry for details of this committee but no, they are data protected.**

#### **16.1**

The form and content of the examiners' reports should be sufficiently detailed to allow the Examination Board to assess the scope **and significance of the thesis and to appreciate its strengths and weaknesses.** Reports should, as far as possible, be expressed in terms that may be understood by those who are not specialists in the particular field of the thesis. Ideally, the report should include, near to its beginning, a statement of what the thesis purports to do, and an account of what it actually covers. Evaluative comments should be as full as possible and should include an indication of strengths as well as weaknesses, limitations and lacunae.

**The Chairperson did not identify the significance of the thesis and to appreciate its strengths and weaknesses and then report this to the Postgraduate research committee**

#### **17.3**

**The Chair should explain the purpose of the oral examination to the examiners and the student. The purpose of the oral examination is:**

- To enable the examiners to assure themselves that the thesis is the student's own work;
- **To give the student the opportunity to defend the thesis and to clarify any obscurities in it;**

- To enable the examiners to assess the student's contextual knowledge in his or her particular field of learning.

The student clarified some technical information in the viva, including giving examples of applying figures to equations - ambient temperature (USW experiments, although this was already in the Thesis), applying equations to experiment (NASA),

The examiners did not update their post viva reports (because they did not write the reports) to show the student demonstrated the above, and the Chairperson failed to report this failure by the examiners to the Postgraduate research committee, and we all know why.

## 17.5

The Chair should ensure that the examiners and the student are aware of the University regulations and guides dealing with the examination of a research thesis. The Chair should explain the structure of the oral examination and clarify the roles of the examiners and any other individuals present. If any other individuals are present, the Chair should confirm that the student and, if appropriate, the examiners have no objections to the presence of those individuals. In such a case the student should sign a statement on the Report form indicating that they have given permission for those individuals to be present. In some cases specific programmes may require that the oral examination is held a public forum. In such cases permission need not be sought for the presence of members of the audience. During the oral examination, the Chair should only interject to provide advice on the University regulations or where there is evidence of any activity that is not in line with the regulations.

The student had a witness but no signature was requested by the Chairperson on any report form.

The chairperson sides with examiners, he shows his agenda! VT Time: 1Hr 56 mins

*Blanche: yea, the photoelectric effect, is in every one of these experiments, it's an electromagnetic force, whether you apply it with a wind turbine, a solar panel, or just punch it, put it on a radiator,*

*Ext: were there photons here applied,*

*Blanche: no, it's not photons, that's the point see, it's called the photoelectric EFFECT right.*

*Chair: but the equation you got, Einstein's equation was a photon,*

## 17.8

At the oral examination, the student should be encouraged to display their knowledge and abilities to best effect, and the strengths as well as the weaknesses of the thesis should be acknowledged and explored. At an early stage in the proceedings, the student should be given an opportunity to explain precisely what the thesis is intended to achieve and what they believe to be its significance as a contribution to knowledge. If there appears to be a major discrepancy between the candidate's aims and the content of the actual thesis, the reasons for this should be explored.

The Chairperson did not encourage this. Rather, he defended the agenda and fraud by the examiners as they were all in it together.

## 17.11

When the examiners feel that they have exhausted their lines of questioning, the Chair should ensure that the student has nothing further to add or ask. The student (and the supervisor, if present) should then be requested to leave the room to allow the examiners to discuss the oral examination.

On the contrary, the Chairperson cut off the candidate from asking any more questions to the examiners and could not wait to end the viva. Last page of viva transcript:

*Ext: well you have 4 chapters on it,*

*Blanche: no, I have 4 chapters on experiments about what the charge of the electric field, which is different to battery chemical reactions, technology. And that's what you came here to talk about, and you don't really know what a physical reaction is in electricity. You didn't study my work enough, to understand it, that's how I'm getting it, have you got anything to say about that?*

*Chair: I think we're gonna stop there (I wonder why?) the examiners have asked their questions, ah, I'm going to ask you to leave the room, now, because the examiners will discuss, your answers, and discuss between themselves, the, the, the outcome to the viva, and while they're doing that, so if you'd like to leave and come back at 4 o'clock*

*Blanche: another point I'd like to make as well, I've spent a very long time to help you digest this information, and you still don't seem to get it,*

*Chair: I think we have had, have had a chance to, we have examined and discussed (4 chapters out of 24, plus one question each from another chapter) in a lot of detail, um, so, so these examiners will consider those answers (yet there was an addendum which contained no answers that was discussed in the viva) then come to their conclusion, (which had already been decided upon, agenda to fail)*

*Blanche: very disappointed with you, you haven't studied my work, you don't know what a physical reaction is, I'm really shocked by that.*

#### 19. Informing the Progression and Awards Board

After the oral examination is completed and all sections of the Report and Result Forms have been signed, the Chair should ensure that the original Report and Result Forms are sent to Academic Services immediately. The viva outcome should also be recorded on the Research Management System. The recommendation of the Examining Board must be presented to the Progression and Awards Board for ratification before a result letter can be prepared. Once confirmation that all conditions have been met is received, the student will be informed by Academic Services of the formal outcome of the examination

This was not done, according to Zoe Perry the R&R forms were not received until Friday 10<sup>th</sup> June from the examiners.

She had said on the 6<sup>th</sup> of June it could take longer than 2 weeks to receive them from the examiners (see email 5).

When Mr Blanche requests the original R & R form from Sara Kane, AND RECEIVES IT BACK on 23<sup>rd</sup> of August it is the same R & R form supplied by Zoe Perry to Sara Kane on the 10<sup>th</sup> of June which was 12 days after the oral examination.

There was no original R & R form sent to academic services immediately. The external examiner confirms that Summers had his notes, and it is obvious that Summers wrote the R & R forms on behalf of the University's agenda to fail, during the time after the oral examination.

As Zoe Perry so well stated.

*" The notes that Professor Summers made during your viva were to assist him in completing the Chair's Report in the Report and Results form."*

*But no, they were to assist him in actually writing all the final and only R & R and Addendum forms (reports).*

See emails 14A, 14B, 14C.

[Guide to the Examination of Research Students - Swansea University](#)

### [15. Report and Result Forms](#)

The Examiners' Report and Result forms are intended as instruments for the reports of the examiners and the Chair of the Examining Board, and are used by the Examining Board to make a formal recommendation to Swansea University on the outcome of the examination process.

Examiners are advised that under the terms of Freedom of Information Act 2000, students have the right to request access to any comments made about them in these reports

Original notes and forms from the oral examination were not forthcoming even when requested.

#### **Events after the oral exam**

1. Zoe Perry on Monday 6<sup>th</sup> June confirms to Mr Blanche he has failed but she has not received the R & R report from the examiners.
2. Perry states again on Wednesday the University has not received the R&R forms from the examiners, and Huw Summers notes were for his use only, to complete the forms. Obviously, Perry was under instruction from Summers what to tell Mr Blanche, and obviously Summers had not completed his writing of the R & R and Addendum forms.
3. Perry states on Friday 10<sup>th</sup> June to Mr Blanche that he has failed, and says she has the R & R and Addendum forms on this date.
4. According to the external examiner, he had already deposited his notes, and not his report, he did not give anyone a report, and he categorically states this on Monday 6<sup>th</sup> and Tuesday 7<sup>th</sup> of June. He says 'hopefully', as he is not writing the forms as he should have, according to the rules. He is under obligation of the Freedom of Information Act 2000, to supply Mr Blanche with this information but he cannot and he doesn't know when the forms will be presented to Mr Blanche. This has all been arranged by Summers and the university to fail Mr Blanche.

*"You should hopefully receive the feedback (including links to battery entropy coefficient work) soon from our discussions during the viva. The feedback will include that of the internal, external and the chairperson as well."*

*You will receive this from the university and Huw is coordinating the feedback atm."*

And states on Tuesday 7<sup>th</sup> June,

*“ My notes appear as the External examination report which Swansea has, there is also the Internal examination report as well (which Swansea will have as well).”*

5. Huw Summers was coordinating all the feedback and was cc'd in all email correspondence between Mr Blanche and Zoe Perry. **Therefore one can only come to one conclusion, Huw Summers wrote the reports as stated by the examiner, he had all the notes and he was coordinating the feedback. Huw Summers was acting as the entire examination board and not independent as the chairperson is supposed to be. Agenda to Fail.**

6. Zoe Perry was also assisting Summers to commit this fraud. Acting as the go between.
7. There were no notes shared by any of the examination board, there was a non-existent ORIGINAL R & R FORM that the Chairperson is supposed to log with academic services immediately after the viva. All of the examination board were asked for their notes (freedom of information act 2000, see above, regulation 15) but none would share as there was no original R & R form. Summers kept the notes (which he would not share) during the oral exam and wrote the R & R and Addendum forms that were eventually produced by Perry on the 10<sup>th</sup> of June.
8. Perry then forwarded it to Sara Kane of Academic services.
9. The Internal examiner failed to respond to any emails.

***I have to repeat these rules here:***

## 1.2 Chair of Examining Board


**The Chair of the Board shall be independent in the examining process and shall be responsible to the Postgraduate Research Committee for the conduct of the examination. The Chair of the Examining Board is required to chair the oral examination and any meeting of the examiners.**

**Have a clear understanding of the University's regulations and procedures.**

## 19. Informing the Progression and Awards Board

**After the oral examination is completed and all sections of the Report and Result Forms have been signed, the Chair should ensure that the original Report and Result Forms are sent to Academic Services immediately.**

The screenshot shows an email interface. On the left is a list of emails with headers like 'Employability - Faculty of Scie...', 'Zoe Perry; PGR - Faculty ...', 'Widanalage, Dhammika', and 'ResearchGate'. The selected email on the right is titled 'Your Viva - Monday 30 May 2022 at 1pm' and is from 'PGR - Faculty of Science and Engineering' to 'BLANCHE G. (946484); PGR - Faculty of Science and Engineering' and cc'd to 'Huw Summers'. The email body contains a greeting 'Dear Geoff,', a thank you, and a detailed explanation about the Viva process, including a 14-day deadline for the Report and Results Form (R&R Form) and a note about the 'clock' for resubmission starting after ratification by the central team. It ends with 'I hope this helps.', 'Many thanks', and the signature 'Zoe Perry, Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwil Ôl-raddedig'.

 PGR - Faculty of Science and Engineering  
To: BLANCHE G. (946484)  
Fri 10/06/2022 11:22

Dear Geoff,

We have received your Report and Result form and can see that the recommendation of the Examination Board is that you have been unsuccessful in your candidature for the degree of MSc by Research. However, the Examining Board has recommended that you be permitted to modify your thesis and re-submit it for the degree of MSc by Research on one further occasion within 12 months.

Once Academic Services have ratified your Report and Result form, you will be sent an e-mail from them confirming your outcome. Your deadline will be a year from the date you receive this e-mail. Once you have received this, an e-mail will also be sent from our team confirming your deadline and providing you with a copy of the Report and Results Form together with details of required corrections in order for your thesis to reach the standard required of an MSc by Research.

Kind regards

Zoë

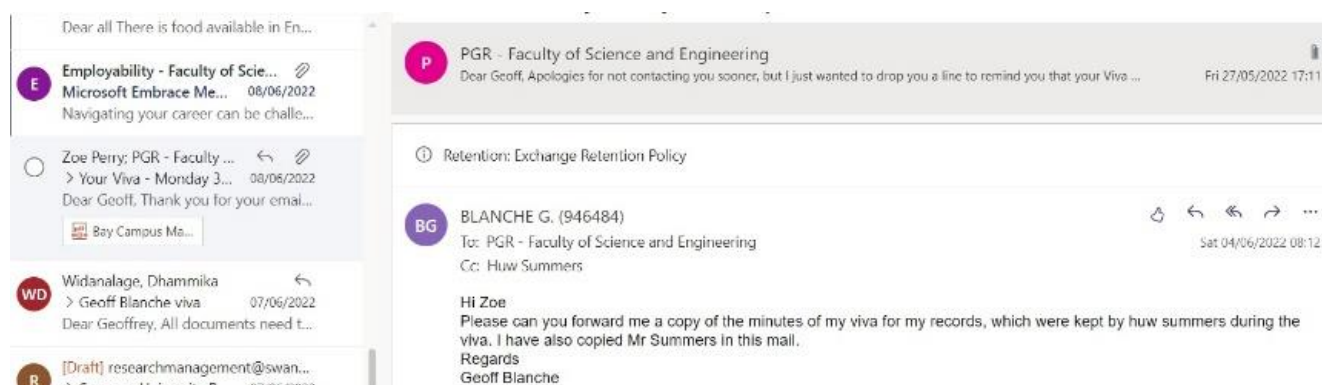
**Zoë Perry**  
Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwil Ôl-raddedig

## 7. Emails before and after Viva

University give a different account of process compared to the external examiner (from Warwick University). Internal examiner fails to reply to three emails.

1. Geoff emails Perry for minutes Sat June 4<sup>th</sup> **EMAIL 1**
2. Geoff emails Widanalage for notes on Monday June 6<sup>th</sup> at 11.25 **EMAIL 8**
3. Perry replies at 15.58 June 6<sup>th</sup> stating R&R form to be supplied to the University by examiners any time within the next month. **EMAIL 5**
4. Geoff requests Summers notes again from Perry at 16.41 Monday 6<sup>th</sup> June **EMAIL 2**
5. Widanalage emails Geoff at 18.38 Monday June 6<sup>th</sup>, stating Huw Summers is coordinating feedback **EMAIL 9**
6. Geoff emails widanalage again requests info on MON June 6<sup>th</sup> 21.11 **EMAIL 10**
7. Widanalage emails Geoff on **Tuesday June 7<sup>th</sup> at 16.15** and says: "All documents need to be sent to you via Swansea research office (or equivalent degrees office), I can't directly email to you. My notes appear as the External examination report **which Swansea has**, there is also the Internal examination report as well (**which Swansea will have as well**)."  
Regards Dhammika" **EMAIL 11**
8. Perry replies to Geoff on **Weds June 8<sup>th</sup> AT 10.55** and says: **EMAIL 6**  
"Dear Geoff, Thank you for your email. The notes that Professor Summers made during your viva were to assist him in completing the Chair's Report in the Report and Results form. **As soon as that form has been received** and ratified therefore, we will provide you with a copy of it."  
Many thanks Zoë
9. Geoff claims victory in viva **EMAIL 15**
10. Perry informs of receipt of R&R form Friday 10<sup>th</sup> June at 11.22 **EMAIL 7**
11. Geoff receives what are supposed to be the ORIGINAL R & R DOCUMENTS FROM VIVA FROM Sara Kane 23<sup>rd</sup> August **EMAIL 14 A**

### EMAIL 1





## EMAIL 2

**Focused**
Other (1)
Filter

Dear all There is food available in En...

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**Employability - Faculty of Scie...**  
 Microsoft Embrace Me... 08/06/2022  
 Navigating your career can be challe...

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**Zoe Perry: PGR - Faculty ...**  
 > Your Viva - Monday 3... 08/06/2022  
 Dear Geoff, Thank you for your email...  
 Bay Campus Ma...

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**Widanalage, Dhammika**  
 > Geoff blanche viva 07/06/2022  
 Dear Geoffrey, All documents need t...

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**[Draft] researchmanagement@swan...**  
 > Swansea University R... 07/06/2022  
 Scroll down for English version. Ann...

### Your Viva - Monday 30 May 2022 at 1pm

To: BLANCHE G. (946484); PGR - Faculty of Science and Engineering  
 Cc: Huw Summers

Mon 06/06/2022 15:58

---

① You forwarded this message on Tue 07/06/2022 13:47

① Retention: Exchange Retention Policy

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BG

**BLANCHE G. (946484)**  
 To: PGR - Faculty of Science and Engineering  
 Mon 06/06/2022 16:41

Hi Zoe,

Mr Summers kept minutes, therefore i would like a copy of these minutes or notes or whatever you call them for my records, this is a reasonable request. A mobile phone photo of these notes, as long as they are readable will suffice, you can email them to me or i will call in to your office for the copy of these notes. this shouldn't be any inconvenience for anyone and only take 15 minutes to do.

Regards  
Geoff Blanche

### EMAIL 3

**Focused** | Other | Filter

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Dear all There is food available in En...

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**E** Employment - Faculty of Scie...  
Microsoft Embrace Me... 08/06/2022  
Navigating your career can be challe...

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**O** Zoe Perry: PGR - Faculty ...  
> Your Viva - Monday 3... 08/06/2022  
Dear Geoff, Thank you for your email...  
[Buy Campus Ma...](#)

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**WD** Widalnalage, Dhammika  
> Geoff Blanche viva 07/06/2022  
Dear Geoffrey, All documents need L...

---

**R** [Draft] researchmanagement@swan...  
> Swansea University R... 07/06/2022  
Scroll down for English version. Anri...

---

**R** ResearchGate  
New login from Edge o... 07/06/2022  
New login from Edge on Win10 Geo...

---

**R** ResearchGate  
Geoffrey, people are rea... 07/06/2022  
Geoffrey, people are reading your w...

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**S** Student Experience - Faculty ...  
Invitation to the FSE Pr... 06/06/2022  
\*\*Sent on behalf of the Faculty Lead...

### Your Viva - Monday 30 May 2022 at 1pm

To: BLANCHE G. (946484)  
Cc: Huw Summers

Wed 08/06/2022 10:55

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Retention: Exchange Retention Policy

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**BG** BLANCHE G. (946484)

To: Zoe Perry: Lijie Li: Widalnalage, Dhammika <Dhammika.Widalnalage@swanwick.ac.uk>; Huw Summers  
Cc: Augustine Egwebe; Paul Rees

Wed 08/06/2022 15:34

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Hi Zoe,

Sharing the minutes which you said you didn't keep and notes sometime in the future is not good enough. Science is a transparent and open process, and these notes and evidence should have been provided to me on the day. I have contacted the 2 panellists and the chairperson, and nobody wants to share their notes, or questions, or any evidence that they brought to the viva as evidence they had on the day to refute my theory. With no minutes there is no evidence what happened at the viva except their word against mine. A viva is what happens on the day and should be evidenced as such and shared amongst all participants as a record of events. This has not been done, no one wants to share their notes, therefore whatever report you make in the future is useless without the minutes and notes that should have been made available on the day. The minutes and notes that should be produced on the day, must tally with the final report. You cannot provide a mishmash of combined notes and report whenever you like and think it is legitimate, after all, this is for a professional qualification. Not following a correct procedure makes the viva null and void.

The chairperson, the 2 panellists are behaving with academic misconduct, but this is no big surprise due to the events of my time at this university. I have a witness that saw there was no order or proper recording or proceedings to the viva, the panellists brought no notes, did not give me a list of questions they wanted to ask, they were totally unprofessional. They did not examine my work thoroughly that was perfectly obvious at the viva, and it's too late for them to read up on my work and pretend to have given my work a thorough investigation, you made claims in the viva but produced no evidence..., if you think you can include information of claims (not that any information of claims will prove my theory incorrect) In any final report you are mistaken, you had your chance to prepare and your chance on the day.

This is obvious to anyone; the panel had been coerced by the chairperson to fail my work just like the University promised in March 2021. Not only that, the chairperson who will not share his notes, but maybe now after pursuing a copy of this information, he might perhaps give me a copy sometime in the future. He claimed impartiality at the beginning of the viva, although he did break all the rules (if there are any) by staying in the room whilst the panel deliberated. I was watching them through the window as they conferred with each other. I destroyed the panel's arguments, they had a fundamental lack of scientific knowledge and the subject to be examined ie. electromagnetism, the clue was in the title of the thesis. They presented no scientific evidence at the viva to show my theory is incorrect, if they had read my work, they might have learned something. I now claim victory at the viva, If the panel and the chair want to challenge my claim, I will be all too willing and eager for this day.

Regards  
Geoff Blanche

## EMAIL 4



## EMAIL 5

**Your Viva - Monday 30 May 2022 at 1pm**

**PGR - Faculty of Science and Engineering**  
To: BLANCHE G. (946484); PGR - Faculty of Science and Engineering  
Cc: Huw Summers  
Mon 06/06/2022 15:58

Dear Geoff,

Thank you for your email.

Viva's are not minuted as a matter of course, however Examiners do produce a Report and Results Form (R&R Form) following the Viva and as soon as it is received and has been ratified we will be able to provide you with a copy. Please note that whilst we do request that examiners complete the Report and Results form within 14 days of a viva, sometimes it can take a bit longer, particularly at this time of year when Examiners also inevitably have large marking commitments.

As soon as we are in receipt of this form we will provide it as a matter of urgency, however please note that the 'clock' for your resubmission does not start running until this document has been ratified by the central team and you receive a letter confirming the deadline for your resubmission.

I hope this helps.

Many thanks

Zoe

**Zoe Perry**  
Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwiliad-deddedig

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**Focus** Other Filter

Dear all There is food available in En...

**E** Employability - Faculty of Scie...  
**Microsoft Embrace Me...** 08/06/2022  
Navigating your career can be challe...

**O** Zoe Perry; PGR - Faculty ...  
> Your Viva - Monday 3... 08/06/2022  
Dear Geoff, Thank you for your email...  
Buy Campus Me...

**WD** Widanalage, Dhammika  
> Geoff Blanche viva 07/06/2022  
Dear Geoffrey, All documents need L...

**R** [Draft] researchmanagement@swan...  
> Swansea University R... 07/06/2022  
Scroll down for English version. Ann...

**R** ResearchGate  
New login from Edge o... 07/06/2022  
New login from Edge on Win10 Geo...

**R** ResearchGate

## EMAIL 6

## EMAIL 7

Focused Other Filter

**PR Postgraduate Research**

New session: Staying w... 10/06/2022  
This brand new session will equip you...

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PGR - Faculty of Science and E... 10/06/2022  
> Viva Outcome - Re-s...  
Dear Geoff, We have received your R...

---

**R ResearchGate**

Paoti Chang published ... 10/06/2022  
This week's research from your netw...

---

**E Employability - Faculty of Scie...**

Summer Work Experie... 09/06/2022  
Deadline: 29 June 2022. Please do n...

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**FR FSE Reception**

Mylini Stand at Rav Rec... 09/06/2022

### Viva Outcome - Re-submission

P

PGR - Faculty of Science and Engineering

To: BLANCHE G. (946484)

Fri 10/06/2022 11:22

Dear Geoff,

We have received your Report and Result form and can see that the recommendation of the Examination Board is that you have been unsuccessful in your candidature for the degree of MSc by Research. However, the Examining Board has recommended that you be permitted to modify your thesis and re-submit it for the degree of MSc by Research on one further occasion within 12 months.

Once Academic Services have ratified your Report and Result form, you will be sent an e-mail from them confirming your outcome. Your deadline will be a year from the date you receive this e-mail. Once you have received this, an e-mail will also be sent from our team confirming your deadline and providing you with a copy of the Report and Results Form together with details of required corrections in order for your thesis to reach the standard required of an MSc by Research.

Kind regards

Zoe

Zoe Perry

## EMAIL 8

The screenshot shows the Outlook web interface for Swansea University. The left sidebar displays the 'Inbox' with 2297 emails. The main pane shows a list of emails, with the selected one being a draft from Dhammika Widanalage to Geoff Blanche, titled 'Geoff Blanche viva'. The email body contains the following text:

**Geoff Blanche viva**

BLANCHE G. (946484)  
To: Dhammika.Widanalage@warwick.ac.uk  
Mon 06/06/2022 11:25

Dear Professor

I am now evaluating my viva and need to write a report. Please can you forward me the notes you wrote in your deliberation that made up your viva decision. If you just take a photo of the original notes as evidence of what you wrote on the day, what questions you asked, and what you based your decision on, and email them to me will be fine. You also said you had links you could share with me about investigation into the endothermic electric effect if you could please send these for my ongoing professional qualification work (Msc), i would be most grateful.

Regards  
Geoff Blanche

Below the email, there is a response from Dhammika Widanalage, dated Mon 06/06/2022 18:38.

## EMAIL 9

The screenshot shows the Outlook web interface for Swansea University. The left sidebar displays the 'Inbox' with 2297 emails. The main pane shows a list of emails, with the selected one being a response from Dhammika Widanalage to Geoff Blanche, titled 'Geoff Blanche viva'. The email body contains the following text:

**Geoff Blanche viva**

To: Dhammika.Widanalage@warwick.ac.uk  
Mon 06/06/2022 11:25

WD Widanalage, Dhammika  
<Dhammika.Widanalage@warwick.ac.uk>  
To: BLANCHE G. (946484) <g.blanche.946484@swansea.ac.uk>  
Mon 06/06/2022 18:38

Dear Geoffrey,

Hope you had a good long weekend.

You should hopefully receive the feedback (including links to battery entropy coefficient work) soon from our discussions during the viva. The feedback will include that of the internal, external and the chairperson as well.

You will receive this from the university and Huw is coordinating the feedback atm.

Regards,  
Dhammika

## EMAIL 10

University of Swanswick Outlook Search

new message Delete Archive Junk Sweep Move to Categorise Snooze

Focused Other 94 Filter

Other: New conversations  
ResearchGate; Employability - Faculty of...

2297

19

ms

Items 6

mail 26

ation His...

Dear Geoffrey, Hope you had a goo...

Student Experience - Faculty ...  
Invitation to the FSE Profess... 16:10  
\*\*Sent on behalf of the Faculty Lead...

Elizabeth Hall  
[Students-fse] Invitation to L... 16:09  
Dear Students, To celebrate the Facu...

PGR - Faculty of Science ...  
> Your Viva - Monday 30 Ma... 15:58  
Dear Geoff, Thank you for your email...

Geoff Blanche viva

<Dhammika.Widanalage@warwick.ac.uk>

To: BLANCHE G. (946484) <g.blanche.946484@swansea.ac.uk> Mon 06/06/2022 18:38

BG To: Widanalage, Dhammika <Dhammika.Widanalage@...>

Hi Professor,

Thanks for your reply, and for letting me know Huw is coordinating everything, but i still need your notes on the day as record of your participation and what you brought to the viva, i.e. a list of questions, evidence that you brought to dispute my theory, and anything you were not sure of. I need to make a full report as you expect, as this is a professional qualification. Although Huw is coordinating everything, you are still responsible for your notes, participation directly to me.. This will take a little bit of your time maybe 5 mins to send this to me and is a reasonable request.

Regards  
Geoff

## EMAIL 11

Focused Other 94 Filter

Other: New conversations  
ResearchGate; Employability - Faculty of...

Widanalage, Dhammika  
> Geoff Blanche viva 16:15  
Dear Geoffrey, All documents need t...

[Draft] researchmanagement@swan...  
> Swansea University Resear... 13:41  
Scroll down for English version. Ann...

ResearchGate  
New login from Edge on Win... 10:44  
New login from Edge on Win10 Geo...

ResearchGate  
Geoffrey, people are reading ... 10:42  
Geoffrey, people are reading your w...

Yesterday

Student Experience - Faculty ...  
Invitation to the FSE Pro... Mon 16:10  
\*\*Sent on behalf of the Faculty Lead...

Elizabeth Hall  
[Students-fse] Invitation Mon 16:09

Geoff Blanche viva

WD Widanalage, Dhammika <Dhammika.Widanalage@warwick.ac.uk> Tue 07/06/2022 16:15

To: BLANCHE G. (946484) <g.blanche.946484@swansea.ac.uk>

Dear Geoffrey,

All documents need to be sent to you via Swansea research office (or equivalent degrees office), I can't directly email to you. My notes appear as the External examination report which Swansea has, there is also the Internal examination report as well (which Swansea will have as well).

Regards,  
Dhammika

BG BLANCHE G. (946484) Tue 07/06/2022 17:36

To: Widanalage, Dhammika <Dhammika.Widanalage@warwick.ac.uk>

Dear Professor,

Firstly, i would like to remind you that the chairperson is supposed to be impartial, so there is no need to avoid sending me your notes from the day no matter what you have been instructed. Science is an open and transparent process, If you're not going to share the documents directly with me, i will claim victory in the viva , as you have presented nothing on the day to show my theory is incorrect and now when approached a week later you will not present your findings to allow me to get on with my report. If you go to the index of my work there is a section on academic integrity, i think you should reconsider your position for 5 minutes of your time. This a reasonable request.

Regards  
Geoff Blanche

## EMAIL 12

Retention: Exchange Retention Policy



BLANCHE G. (946484)

To: PGR - Faculty of Science and Engineering



Tue 29/03/2022 11:05

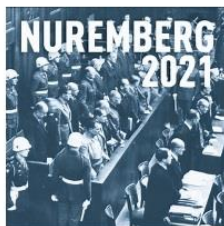
Hi Perumal

I would like to take this opportunity to thank you for your email, i am not sure what you meant by language of my email to Michelle Rees as it was a truthful account of my experiences with University staff. As to a tone, then this i believe you added as it is written word and not spoken. I did take the time to look at the links you supplied and do agree with them. I look forward to meeting with you and my supervisory team at my face-to-face viva as i have already stated to celebrate the innovation and discovery of my work. , please can you forward the venue and time asap.

I would like to take this opportunity to bring to your attention some information i found on social media and online regarding investors in this Welsh Public University. photos of Hillary Clinton and Bill Gates with Notorious rapists and paedophiles, is a most disturbing image for Wales and Swansea University, i find this most disturbing and i would definitely not recommend my children going to this University considering these connections. What do you think? would you like to comment on this? I would also like to make you aware of the Nuremberg 2.0 trials that are being enacted and led by Dr Reiner Fullmich.

[New Nuremberg Trials – Crimes Against Humanity – Awaken New York \(wordpress.com\)](#)

[New Nuremberg Trials – Crimes Against Humanity – Awaken New York \(wordpress.com\)](#)



### [New Nuremberg Trials – Crimes Against Humanity](#)

W.H.O. and C.D.C. – Invisible War The New Nuremberg Trials 2021 A team of over 1,000 lawyers and over 10,000 medical experts lead by Dr. Reiner Fullmich have begun legal proceedings over the ...

[awakenny.wordpress.com](#)

1. Bill Gates -[WORLD'S FIRST VACCINE MURDER CASE AGAINST BILL GATES, ADAR POONAWALLA FILED IN INDIA'S HIGH COURT – Biotech Express Magazine](#)
- 2.



[WORLD'S FIRST VACCINE MURDER CASE AGAINST BILL GATES, ADAR](#)





## WORLD'S FIRST VACCINE MURDER CASE AGAINST BILL GATES, ADAR POONAWALLA FILED IN INDIA'S HIGH COURT – Biotech Express Magazine

Petitioner [Kiran Yadav Vs. State and ors.Criminal Writ Petition (St.) 18017 of 2021] has sought prosecution of AstraZeneca's (Covishield) manufacturer Bill Gates, his partner Adar Poonawalla and other Government officials and leaders involved in the murder of a 23 year old man, who lost his life because of vaccination.

[www.biotechexpressmag.com](http://www.biotechexpressmag.com)

2. 2. Hillary Clinton - [Bill and Hillary Clinton were frequent guests at 'Jeffrey Epstein's New Mexico ranch' | Daily Mail Online](#)



### Drone footage over Epstein's New Mexico ranch house

Bill and Hillary Clinton would stay at Jeffrey Epstein's New Mexico ranch almost every year, former estate workers told DailyMail.com. They didn't stay at the main house but a Western-themed village.

To: PGR - Faculty of Science and Engineering

Tue 29/03/2022 11:05



They didn't stay at the main house but a Western-themed village.

[www.dailymail.co.uk](http://www.dailymail.co.uk)

3.  
4.  
5.



- 6.



- 7.

Kind Regards

Geoff Blanche

## Email 13

**Swansea University Student Charter**

P

PGR - Faculty of Science and Engineering  
To: BLANCHE G. (946484)

Thu 17/03/2022 09:08

👍 ↶ ↷ ⋮

Dear Geoff

I refer to your email below and would like to take this opportunity, on behalf of the Faculty of Science and Engineering, to remind you that the Swansea University Student Charter ([Student Charter - Swansea University](#)) requires Students to ***“...Act as representatives of the University, treating staff, students and members of the local community with respect and courtesy, (including on social media platforms)...”***. Additionally, the University's Dignity at Work and Study Policy (link attached below for your ease of reference) promotes the dignity of all students and staff at the University by eliminating all forms of offensive behaviour to establish a working and learning environment free from harassment and aggression.

I would consider that the content, language and tone of your email falls some considerable way short of these expected standards, and indeed may amount to a disciplinary offence under the University's Disciplinary Procedures (link also attached below). I would urge that you refrain from similar such communications in the future.

[Dignity at Work and Study - Swansea University](#)

[Disciplinary Procedures - Swansea University](#)

Yours sincerely

Perumal Nithiarasu DSc, FIMechE, FIMA, FIPEM, FLSW  
Associate Dean - Research, Innovation and Impact (RII) | Deon Cysylltiol - Ymchwil, Arloesi ac Effaith (RII)  
Faculty of Science and Engineering | Y Gyfadrn Gwyddoniaeth a Pheirianeg  
Professor at Zienkiewicz Centre for Computational Engineering | Athro yng Nghanolfan Zienkiewicz ar gyfer Peirianeg Gyfrifiadol  
Adjunct Professor, IIT Madras, India | Athro Dirprwyol, IIT Madras, India

## Email 13 A

### Declaration of action.

ⓘ Retention: Exchange Retention Policy

BG

BLANCHE G. (946484)  
To: geoffblanche@yahoo.com

Tue 15/03/2022 09:33

👍 ↶ ↷ ⋮

Dear michelle

I have spoken to my legal team and team of scientists about the situation with your university.

We have now decided to give you a month to organise a proper viva voce to celebrate the great discovery geoff has made. So far the university by their own admission have stated they will not support geoffs work due to geoff showing the fraud committed by the USA agency NIST and their judiciary, and now the university seem to be accomplices to covering up science and energy crime. Has a supposed academic and education seat for Wales we find this a demonstrable crime that you are trying to perpetrate against geoff and science progress, and you dont have to be a genius to see this is the case. This we understand to be the facts as brilliantly demonstrated by geoff. Swansea have shown this to be true with how they have insulted this great discovery due to their actions and how they still behave. You even tried to state you had not received geoffs work at the final submission date and acknowledge the receipt of Geoff's work which makes you an accomplice to this cover up. To try and close down scientific progress is one of the most detestible behaviours seen in a Welsh education institute in history. We also would like to point out swansea university renamed their law society after hillary clinton, who herself and her husband befriend the world's biggest, notorious paedophiles, all the evidence is in plain sight for anyone to read and see. Hillary is also under investigation for fraud and trying to fix usa elections. Not only this, you also are funded by the Gates foundation for vaccine deliverable research, with Bill Gates wanted for vaccine murder in India, and thats just one example we can give you for now.

A full apology to Geoff is required for your bad behaviour over the last two years and your cooperation is now demanded going forward to celebrate this discovery in the greatest fashion for Welsh Science and progress

Yours Sincerely  
Legal Science Team

Sent from my Samsung Galaxy A5 2017 - powered by Three

## EMAIL 13 B

### Viva Examination - 22nd April 2022



Michelle Rees

Hi Geoff. Unfortunately, not all your viva panel are able to do a face-to-face viva examination. If you would like to come onto campus on the day and use one of our ...

Wed 09/03/2022 11:23

📄 Retentions: Exchange Retention Policy



BLANCHE G. (946484)

To: Michelle Rees

📄 ↶ ↷ ↸ ...

Mon 14/03/2022 14:56

Hi, i will wait until they can ALL be there for my viva face to face I cannot and will not defend my work online, this i have made clear to you, so far the university have tried to stop me bringing forward the biggest discovery in electromagnetism since the photoelectric effect. The 1st supervisory resigned, due to his lack of physics knowledge, which zongfu openly admitted to me. He tried to say his opinion was different to mine but it is not my opinion, it is fact supported by my experiments and by NASA EXPERIMENTS, IF THE UNIVERSITY WANT TO ARGUE ABOUT THIS I AM QUITE PREPARED TO DO SO. You tried to replace ZONGFU with karol who would not acknowledge my Discovery and was prepared to lie to my face. Augustine would not respond to my questions as to whether the 2nd supervisory team still stood by the comments of the 1st team, so i took that as they do, so this really is a debacle of cover up at all costs by the university's team. i find they tried to deny my discovery because of the criminality of NIST AND THE USA JUDICIARY being uncovered by my proof through experimentation AND NASA's evidence. this leads me to believe there are connections that the university do not want public. If the university does not want to proceed in a professional manner, they can refund me with damages for wasting my time and i Will take my work and Masters elsewhere. The truth will come out.  
Regards  
Geoff

Sent from my Samsung Galaxy A5 2017 - powered by Three

\*\*\*

Reply | Forward

## Email 14

🌐 Translate message to: English | Never translate from: Welsh



Sara Kane

To: geoffblanche@yahoo.com; BLANCHE G. (946484)

Cc: Zoe Perry; ACU - Student Records

📄 ↶ ↷ ↸ ...

Tue 14/06/2022 11:45

📎 Confidential - 946484.pdf  
186 KB

Dear Mr Blanche,

Please find attached a letter regarding your recent viva examination.

Kind regards  
Sara

**Sara Kane**

Assessment & Awards Officer | Swyddog Asesu a Dyfarniadau

Academic Services | Gwasanaethau Academaidd  
Swansea University | Prifysgol Abertawe  
Singleton Park | Parc Singleton  
Swansea | Abertawe  
Wales | Cymru  
SA2 8PP  
Tel/Ffôn: +44(0)1792 602521

## Email 14 A

**From:** Zoe Perry <Z.Perry@Swansea.ac.uk>  
**Sent:** 10 June 2022 13:39  
**To:** Sara Kane <S.L.Kane@Swansea.ac.uk>  
**Cc:** Sinead Hancock <Sinead.Hancock@Swansea.ac.uk>  
**Subject:** R&R Form - Geoffrey Blanche 946484, Resubmission Decision

Dear Sara

Further to our discussion, please see the attached R&R Form and Addendum to the R&R Form for ratification.

Many thanks

Zoë

**Zoë Perry**

Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwil Ôl-raddedig

---

Faculty of Science and Engineering | Cyfadran Gwyddoniaeth a Pheirianeg  
Swansea University | Prifysgol Abertawe  
Fabian Way | Ffordd Fabian  
Crymlyn Burrows  
Swansea | Abertawe  
Wales | Cymru  
SA1 8EN

**Phone | Ffôn** 01792 606090

**Email | Ebost** [z.perry@swansea.ac.uk](mailto:z.perry@swansea.ac.uk)

## EMAIL 14B



**Geoffblanche** <geoffblanche@yahoo.com>  
To: Sara Kane



Mon, 22 Aug at 12:12 ★

Hi Sara,  
I really need to get my viva report finished as a matter of urgency so i can move on with my studies. If you can respond to this request today that would be great.  
Regards  
Geoff

▼ Hide original message

On 20 Aug 2022 17:45, Geoffblanche <geoffblanche@yahoo.com> wrote:

Hi sara,  
I would just like to thank you for your time over the last month and i have just one more freedom of information request.  
1. I require a copy of the original results and report form you received after my oral viva.  
2. The time and date you received this.  
3. Who sent or gave it to you and how you received it with some evidence.  
Regards  
Geoff Blanche





**Sara Kane** <s.l.kane@swansea.ac.uk>  
 To: Geoffblanche  
 Cc: Jane Lewis Normand



Tue, 23 Aug at 10:53

Hi Geoff,

Please see my responses in red below.

1. I require a copy of the original results and report form you received after my oral viva. **Please see attachments**
2. The time and date you received this. - **10 June 2022 at 13:39**
3. Who sent or gave it to you and how you received it with some evidence. - **Zoe Perry, see below e-mail**

Thanks  
 Sara

---

**From:** Zoe Perry <Z.Perry@Swansea.ac.uk>  
**Sent:** 10 June 2022 13:39  
**To:** Sara Kane <S.L.Kane@Swansea.ac.uk>  
**Cc:** Sinead Hancock <Sinead.Hancock@Swansea.ac.uk>  
**Subject:** R&R Form - Geoffrey Blanche 946484, Resubmission Decision

Dear Sara

Further to our discussion, please see the attached R&R Form and Addendum to the R&R Form for ratification.

Many thanks

Zoë

## Email 15



**BLANCHE G. (946484)**  
 To: Zoe Perry; Lijie Li; Widanalage, Dhammika <Dhammika.Widanalage@warwick.ac.uk>; Huw Summers  
 Cc: Augustine Egwebe; Paul Rees



Wed 08/06/2022 15:34

Hi Zoe,


Sharing the minutes which you said you didn't keep and notes sometime in the future is not good enough. Science is a transparent and open process, and these notes and evidence should have been provided to me on the day. I have contacted the 2 panellists and the chairperson, and nobody wants to share their notes, or questions, or any evidence that they brought to the viva as evidence they had on the day to refute my theory. With no minutes there is no evidence what happened at the viva except their word against mine. A viva is what happens on the day and should be evidenced as such and shared amongst all participants as a record of events. This has not been done, no one wants to share their notes, therefore whatever report you make in the future is useless without the minutes and notes that should have been made available on the day. The minutes and notes that should be produced on the day, must tally with the final report. You cannot provide a mishmash of combined notes and report whenever you like and think it is legitimate, after all, this is for a professional qualification. Not following a correct procedure makes the viva null and void.

The chairperson, the 2 panellists are behaving with academic misconduct, but this is no big surprise due to the events of my time at this university. I have a witness that saw there was no order or proper recording or proceedings to the viva, the panellists brought no notes, did not give me a list of questions they wanted to ask, they were totally unprofessional. They did not examine my work thoroughly that was perfectly obvious at the viva, and it's too late for them to read up on my work and pretend to have given my work a thorough investigation, you made claims in the viva but produced no evidence., if you think you can include information of claims (not that any information of claims will prove my theory incorrect) in any final report you are mistaken, you had your chance to prepare and your chance on the day.

This is obvious to anyone; the panel had been coerced by the chairperson to fail my work just like the University promised in March 2021. Not only that, the chairperson who will not share his notes, but maybe now after pursuing a copy of this information, he might perhaps give me a copy sometime in the future. He claimed impartiality at the beginning of the viva, although he did break all the rules (if there are any) by staying in the room whilst the panel deliberated, I was watching them through the window as they conferred with each other. I destroyed the panel's arguments, they had a fundamental lack of scientific knowledge and the subject to be examined ie. electromagnetism, the clue was in the title of the thesis. They presented no scientific evidence at the viva to show my theory is incorrect, if they had read my work, they might have learned something. I now claim victory at the viva, if the panel and the chair want to challenge my claim, I will be all too willing and eager for this day.

Regards  
 Geoff Blanche

## Email 16




**Lijie Li** ☆  
L.Li@Swansea.ac.uk

Send email View profile

**Results** Filter

**All results**

Zoe Perry; Lijie Li; Widanalage, Dhammi...  
> Your Viva - Monday 30 ... 08/06/2022  
Hi Zoe, Sharing the minut... [Sent Items](#)

 Bay Campus Ma...

Lijie Li  
> Geoff Blanche viva 07/06/2022  
No preview is available. [Sent Items](#)

**Geoff Blanche viva**

You forwarded this message on Tue 07/06/2022 14:00

Retention: Exchange Retention Policy


**BLANCHE G. (946484)**  
To: Lijie Li  
Mon 06/06/2022 11:28

Dear Professor  
I am now evaluating my viva and need to write a report. Please can you forward me the notes you wrote in your deliberation that made up your viva decision. If you just take a photo of the original notes as evidence of what you wrote on the day, what questions you asked, and what you based your decision on, and email them to me will be fine.  
Regards  
Geoff Blanche

**BLANCHE G. (946484)**  
(No message text)  
Tue 07/06/2022 14:00

## 17

NHS COVID Pass | Pâs COVID y GIG



Message for Students  
Mon 04/10/2021 10:41  
To: Students

Cymraeg

**myuni**

Swansea University  
Prifysgol Abertawe

**NHS COVID Pass**

This is a reminder that from the 11<sup>th</sup> October Welsh Government guidelines are changing. People will be required to show the NHS COVID pass to prove they are either fully vaccinated or have a recent negative Lateral Flow Test to attend:

- nightclubs
- indoor non-seated events where over 500 people are mixing closely for prolonged periods
- outdoor non-seated events where over 4,000 people are mixing closely for prolonged periods
- any event of more than 10,000 people

Please note, the Students' Union will continue to abide by Welsh Government and University Guidelines and will adapt any events to meet these. Students will be informed of any changes they can expect when booking an event with the SU.

**What is the NHS COVID Pass?**  
The NHS COVID Pass lets you share your coronavirus (COVID-19) vaccination records in a secure way. It also allows you to show others, when travelling abroad, that you've had a COVID-19 vaccine.

**Who can get an NHS COVID Pass in Wales?**  
You can get an NHS COVID Pass if:

- you were vaccinated in Wales or England
- you are aged 16 or over

If you were vaccinated outside the UK, you need to get proof of vaccination from the country where you were vaccinated.

**How to access the NHS COVID Pass in Wales**  
You can access the NHS COVID Pass via the [NHS website \(nhs.uk\)](https://nhs.uk). This will allow you to produce a COVID pass using a smart phone, a computer or laptop.

To access the service, you'll need to register for an NHS login. You will need to upload a photo of your ID (passport, full UK driving licence, full European driving licence).

Please note, in Wales, you cannot get it via the NHS app as this is only valid in England.

For more information please see the full guidelines on the [Welsh Government web pages](#).

Label: Exchange Retention Policy



Egwebe Augustine.

Fri 28/05/2021 17:21

To: BLANCHE G. (946484); Rees P.

Dear Geoff,

I don't know why you have decided to raise this issue again, especially since we have recently had a meeting and discussed the necessary steps to complete and submit your thesis. We are not in a position to comment on the recommendation of the previous supervisory team. As agreed in our last meeting, revise your thesis and include/reference any relevant scientific literature that applies to your work. Do bear in mind that an external and internal examiner would assess the scientific merit of the thesis. You'll also be expected to defend the entire content of the thesis in a formal viva.

Best Regards,

Augustine Egwebe

...

Reply | Reply all | Forward

### Supervisor of masters

① You forwarded this message on Fri 28/05/2021 17:13

① Retention: Exchange Retention Policy



BLANCHE G. (946484)

To: Egwebe Augustine; Rees P.

👍 ↶ ↷ ➡ ...

Fri 28/05/2021 16:41

Hi Augustine,

Just to let you know that I came across endothermic electricity due to studying Joseph Newman's work. My masters is inspired by this unsung hero, so as you know the last supervisory team made these comments,

*"Please note: Joseph Westley Newman, whose work has been universally rejected by all credible scientific examiners, including the American National Bureau of Standards after they thoroughly examined his apparatus. we would, therefore, be extremely wary of endorsing any published work which referred to Newman's 'Energy Machine'. The supervision team does not support to include the work of Joseph Westley Newman in your thesis."*

NBS earthed Newman's machine and did not measure any energy through this ground whilst testing the machine, making the test null and void. Yet amazingly in the court case appeal the judge still ruled against Newman even when knowing this had been done. NBS (NIST) also falsified the engineering reports on how the buildings came down on 9/11.

[www.ae911truth.org](http://www.ae911truth.org)

Can you please confirm if the new supervisory team are of the same opinion as the last supervisory team in their opinion on Newman being included in my work or do the new supervisory team retract these past comments.

Kind Regards

Geoff Blanche

...



BLANCHE G. (946484)

(No message text)

Fri 28/05/2021 17:13

Label: Exchange Retention Policy

**BLANCHE G. (946484)**  
Thu 17/06/2021 11:47  
To: Egwebe Augustine.; Rees P.

**Supervisor Comments**

The student developed electronics circuit for charging battery and monitoring battery charging process, the circuit works well. The student submitted his thesis draft in August 2020.

Supervisors provided an excessive feedback on the Master by Research thesis draft one week before the meeting on 7<sup>th</sup> September 2020. In this meeting, the feedback on the thesis draft was discussed in detail and student's queries answered.

1) It is recommended that the student should review and apply the suggested changes from the supervisors.

2) It is a consensus among the supervisory team that the literature review section is incorrectly presented and, hence, it is recommended that the student should review and apply the suggested changes from the supervisors. Furthermore, the thesis should be thoroughly referenced to have a consistent flow of contemporary scientific theory and practice.

3) The supervisory team suggested some sections of the draft thesis (such as the claims from Newman's book entitled 'Public Evidence of Endothermic Electric Effect Reaction' that are disputed by experts in administration and court proceedings, and the section entitled 'The Photoelectric Effect' that is considered irrelevant) should be removed. The supervisory team also suggested there is no relationship between his experimental results and Newman's claims. However, student has opted to keep Section 'Public Evidence of Endothermic Electric Effect Reaction' in his thesis.

The supervisory team notified the student that it is up to the student to decide on the content that he includes in his thesis.

Hi Augustine,  
You state in point 2 that the literature review section is incorrectly presented, please can you clarify what you actually mean by this as i don't understand what your consensus is?  
Point 3 .. Photoelectric effect,---- can you please clarify why the section on the photoelectric effect is irrelevant? and has nothing to do with the charge of an electric field?  
Point 3, --- You suggest there is no correlation between Newman's claims and an energy gain in the charge of the electric field in my experiments? please can you clarify why you come to this conclusion.  
Regards  
Geoff

**Augustine Egwebe** ☆  
Augustine.Egwebe@swansea.ac.uk  
✉ Send email 📄 View profile

**Results** Filter ▾

**All results**

**Augustine Egwebe**  
What happens next 23/09/2021  
Dear Geoff, I hope you are wel... [Inbox](#)

**Egwebe Augustine.**  
> Supervisory team comm... 25/06/2021  
Dear Geoff, Thank you for you... [Inbox](#)

**Egwebe Augustine.**  
> Supervisor of masters 28/05/2021  
Dear Geoff, I don't know why ... [Inbox](#)

**Supervisory team comments**

Dear Geoff,

I am quite conscious that the deadline to submit your finalised thesis is fast approaching. And we have iterated and repeated a few times that the previous supervisory team suggested these comments/recommendations. We have also recommended that you review and format your thesis based on your preference whilst ensuring that the technical literature is accurate, thoroughly cited and suitable for the degree requirements. You would also be expected to defend the contents of your thesis to the examining panel, including the designated external and internal examiners.

Best Regards,

Augustine Egwebe, PhD, FHEA

...

Label: Exchange Retention Policy

**BLANCHE G. (946484)**  
Thu 17/06/2021 15:48  
To: Egwebe Augustine.

hi Augustine,  
Thanks for your quick reply yet you have failed to address the points of the email.  
I do not want these points thrown at me again as i submit therefore i am asking for you to clarify what i have highlighted by the comments made. As you were part of the previous supervisory team, i would expect you to be able to clarify these points?  
Regards  
Geoff

...

Label: Exchange Retention Policy

**Egwebe Augustine.**  
Thu 17/06/2021 16:00  
To: BLANCHE G. (946484)

Dear Geoff,

Unfortunately, I decline to comment nor revisit the recommendations from the previous supervisory team. The focus of the new team is to ensure that you successfully revised and submit your thesis. Moreover, we have already discussed this matter a few times with you. Therefore, I will recommend that you focus on finalising your MRes thesis and ensure to submit it on/before the deadline.

Best Regards,

Augustine Egwebe, PhD, FHEA

Label: Exchange Retention Policy

BG

BLANCHE G. (946484)  
Tue 22/06/2021 13:49  
To: Egwebe Augustine.

Hi Augustine,

Thanks for your reply, and i agree with you. i would not revist the recommendations by previous supervisory team as most of it is based on no research. Although some things need to be ironed out due to their comments, so i will be addressing some of the objections within the thesis. Due to this i will not be submitting at end of June as first anticipated. I still have 3 months to submit so i will be at the earliest submitting at the end of July but i will let you know in advance if i will be later than this date.

Regards

Geoff

...

Label: Exchange Retention Policy

Egwebe Augustine.

Fri 25/06/2021 10:33  
To: BLANCHE G. (946484)

Dear Geoff,

Thank you for your email, and Yes, do revise your thesis accordingly, but ensure to keep the tone of writing professional and scientifically sound. And regarding any potential late submission, do ensure to inform the PG assessment team in order to adhere to the university's set procedures.

Best Regards,

Augustine Egwebe, PhD, FHEA

...

Label: Exchange Retention Policy

BG

BLANCHE G. (946484)  
Tue 29/06/2021 14:17  
To: Egwebe Augustine.

Thank you, I will do that.

...

22

Sent Items

Filter

Letter to univer...

Message for Students

NHS COVID Pass | Pā... 06/10/2021  
hi , Health and safety have failed to r...

Research Misconduct: Kate Rauwerd...

Coercion to murder 04/10/2021  
Dear Sir /Madam, I see the Universit...

Michelle Rees; Engineerin...

Master of Philosophy 01/10/2021  
hi ok, Here it is with page added, ple...

MSc by Researc...

+7

September

Message for Students

Wearing face coverin... 25/09/2021  
Hi, I have had no response from heal...

mirae

ing a face cold more

+6

[Draft] Customer Service

deletion of email acc... 24/09/2021  
Dear Sir/ Madam I have just complet...

Zoe Perry

Documents for timescal... 24/09/2021  
Dear Zoe, I have now completed my ...

Wearing face coverings on campus, Library Spaces, Santander Cycles and more news | Gwisgo Gorchudd Wyneb ar Gampws, Mannau yn y Llyfrgell, Beiciau Santander a mwy o newyddion

g v

Label: Exchange Retention Policy

BG

BLANCHE G. (946484)  
Fri 24/09/2021 09:35  
To: Message for Students

Dear Sir/ Madam

As you are following government guidelines in respect to face coverings for protection against airborne viruses and asking students to do the same. Please can you supply me with the peer reviewed works that show how face coverings prevent infection from airborne viruses and peer reviewed studies showing how viruses can be transmitted by air. Also, you are promoting the emergency vaccines to students, please can you point me in the direction where you are informing students of the risks of these emergency vaccines, how they can report any adverse reaction to these experimental drugs, what the current death rate in the UK from these vaccines are and any other information that should be available to comply with these guidelines to have a balanced and informed choice to vaccinate or not.

Kind Regards

Geoff Blanche

...

Label: Exchange Retention Policy

MS

Message for Students  
Fri 24/09/2021 09:40  
To: BLANCHE G. (946484)

Thank you for your email Geoff. I have passed your queries on to the Health and Safety team to respond to.

Regards

Annie

...

76

23

**Focused** Other Filter

Dear all There is food available in En...

**Employability - Faculty of Scie...**  
Microsoft Embrace Me... 08/06/2022  
Navigating your career can be challe...

Zoe Perry: PGR - Faculty ...  
> Your Viva - Monday 3... 08/06/2022  
Dear Geoff, Thank you for your email...  
Bay Campus Ma...

Widanalage, Dhammika  
> Geoff Blanche viva 07/06/2022  
Dear Geoffrey, All documents need t...

[Draft] researchmanagement@swan...  
> Swansea University R... 07/06/2022  
Scroll down for English version, Ann...

ResearchGate  
New login from Edge o... 07/06/2022  
New login from Edge on Win10 Geo...

ResearchGate  
Geoffrey, people are rea... 07/06/2022  
Geoffrey, people are reading your w...

**Student Experience - Faculty ...**  
Invitation to the FSE Pr... 06/06/2022  
\*\*Sent on behalf of the Faculty Lead...

**Your Viva - Monday 30 May 2022 at 1pm**  
To: BLANCHE G. (946484)  
Cc: Huw Summers  
Wed 08/06/2022 10:55

Retention: Exchange Retention Policy

**BLANCHE G. (946484)**  
To: Zoe Perry; Lijie Li; Widanalage, Dhammika <Dhammika.Widanalage@swanwick.ac.uk>; Huw Summers  
Cc: Augustine Egwebe; Paul Rees  
Wed 08/06/2022 15:34

Hi Zoe,  
Sharing the minutes which you said you didn't keep and notes sometime in the future is not good enough. Science is a transparent and open process, and these notes and evidence should have been provided to me on the day. I have contacted the 2 panellists and the chairperson, and nobody wants to share their notes, or questions, or any evidence that they brought to the viva as evidence they had on the day to refute my theory. With no minutes there is no evidence what happened at the viva except their word against mine. A viva is what happens on the day and should be evidenced as such and shared amongst all participants as a record of events. This has not been done, no one wants to share their notes, therefore whatever report you make in the future is useless without the minutes and notes that should have been made available on the day. The minutes and notes that should be produced on the day, must tally with the final report. You cannot provide a mishmash of combined notes and report whenever you like and think it is legitimate, after all, this is for a professional qualification. Not following a correct procedure makes the viva null and void.  
The chairperson, the 2 panellists are behaving with academic misconduct, but this is no big surprise due to the events of my time at this university. I have a witness that saw there was no order or proper recording or proceedings to the viva, the panellists brought no notes, did not give me a list of questions they wanted to ask, they were totally unprofessional. They did not examine my work thoroughly that was perfectly obvious at the viva, and it's too late for them to read up on my work and pretend to have given my work a thorough investigation, you made claims in the viva but produced no evidence.. If you think you can include information of claims (not that any information of claims will prove my theory incorrect) in any final report you are mistaken, you had your chance to prepare and your chance on the day.  
This is obvious to anyone; the panel had been coerced by the chairperson to fail my work just like the University promised in March 2021. Not only that, the chairperson who will not share his notes, but maybe now after pursuing a copy of this information, he might perhaps give me a copy sometime in the future. He claimed impartiality at the beginning of the viva, although he did break all the rules (if there are any) by staying in the room whilst the panel deliberated, I was watching them through the window as they conferred with each other. I destroyed the panel's arguments, they had a fundamental lack of scientific knowledge and the subject to be examined ie. electromagnetism, the clue was in the title of the thesis. They presented no scientific evidence at the viva to show my theory is incorrect, if they had read my work, they might have learned something. I now claim victory at the viva, if the panel and the chair want to challenge my claim, I will be all too willing and eager for this day.  
Regards  
Geoff Blanche

24

[Draft] Lijie Li  
> Geoff Blanche viva 07/06/2022  
No preview is available.

**May**  
Elizabeth Hall: researchgrad-fse@s...  
> [Researchgrad-fse] ... 13/05/2022  
Thank you very much! Sent from my...  
Battery-Tech-18... 1 MB +1

**April**  
Augustine Egwebe: Engineering Post...  
> Academic misconduct 27/04/2022

Retention: Exchange Retention Policy

**BLANCHE G. (946484)**  
To: PGR - Faculty of Science and Engineering  
Fri 10/06/2022 12:27


Hi Zoe,  
Can you clarify this please. When does swansea university expect to receive the external and internal examiners reports please.  
Regards  
Geoff

Sent from my Samsung Galaxy A5 2017 - powered by Three

Reply Forward

25

## Viva Examination - 22nd April 2022

 **Michelle Rees**  
To: BLANCHE G. (946484)  
Wed 09/03/2022 11:23

Retention: Exchange Retention Policy

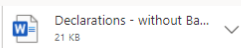
**BLANCHE G. (946484)**  
To: Michelle Rees  
Mon 14/03/2022 14:56

Hi, I will wait until they can ALL be there for my viva face to face I cannot and will not defend my work online, this I have made clear to you,  
so far the university have tried to stop me bringing forward the biggest discovery in electromagnetism since the photoelectric effect. The 1st supervisory resigned, due to his lack of physics knowledge, which Zongfu openly admitted to me. He tried to say his opinion was different to mine but it is not my opinion, it is fact supported by my experiments and by NASA EXPERIMENTS, IF THE UNIVERSITY WANT TO ARGUE ABOUT THIS I AM QUITE PREPARED TO DO SO. You tried to replace ZONGFU with Karol who would not acknowledge my Discovery and was prepared to lie to my face. Augustine would not respond to my questions as to whether the 2nd supervisory team still stood by the comments of the 1st team, so I took that as they do, so this really is a debacle of cover up at all costs by the university's team. I find they tried to deny my discovery because of the criminality of NIST AND THE USA JUDICIARY being uncovered by my proof through experimentation AND NASA's evidence. This leads me to believe there are connections that the university do not want public. If the university does not want to proceed in a professional manner, they can refund me with damages for wasting my time and I will take my work and Masters elsewhere. The truth will come out.  
Regards  
Geoff



## Thesis Submission

2



Hi Geoff,

I have checked through the submission documents that have been received and wanted to let you know that you are enrolled on a MSc in Electrical and Electronic Engineering by Research as opposed to a Master of Philosophy (MPhil), these are two very different courses, the MSc by Research being 1 year where fees are payable (+1 year optional write up) and the MPhil being 2 years where fees are payable (+1 year optional write up). Your title page will therefore need to be changed to 'for the degree of MSc by Research'.

In addition you do not have any declarations within your thesis. I have attached a document with the relevant declarations that need to be included in your thesis. Please can you make these changes and let me have the final version of your thesis once this has been done.

Once these changes have been received I will receipt the submission on E:vision. Your Supervisors are currently nominating an Examination Board for your viva and as soon as that has been approved I will be in touch with a Viva date. Please note that your viva should take place within 6 months of submission.

You can view the Regulations associated with Research Degrees using the following link [Degree of Master's by Research - Swansea University](#)

Finally, as an aside we have had a query regarding your student email being terminated – we have confirmed to the team in question that this should not happen until you have completed your studies.

If you have any queries then please let me know.

Thanks,

Michelle

Wed 29/09/2021 14:33  
To: Michelle Rees

Hi  
I have already replied to this query and sent you an updated thesis. I would also draw your attention to how the university are promoting experimental drugs to students when if you look at the yellow card scheme, there are over 1600 deaths from these experimental drugs in the UK. This is in my opinion coercion to murder, and the university needs to stop going along with this government crime. I will be following this up with facts and evidence, I have already made a query to health and safety, with no reply from them as yet.  
Do you know anything about the yellow card scheme? The amount of deaths? The amount of adverse reactions?  
Regards  
Geoff

Sent from my Samsung Galaxy A5 2017 - powered by Three

---

Label: Exchange Retention Policy

BLANCHE G. (946484)  
Fri 01/10/2021 08:59  
To: Michelle Rees

Hi,  
You did not reply to my last email, can you confirm you have the amended thesis. Also are you aware of what I am flagging in regards to experimental drug vaccines?  
Regards  
Geoff

Sent from my Samsung Galaxy A5 2017 - powered by Three

---

Label: Exchange Retention Policy

Michelle Rees  
Fri 01/10/2021 09:45  
To: BLANCHE G. (946484)

Hi Geoff,

Just to let you know that I haven't received your amended thesis, could you resend this as a matter of urgency.

Would you raise your concerns to [myunihub@swansea.ac.uk](mailto:myunihub@swansea.ac.uk)

Many thanks.

28

Q&As for International & EU Students

Q&As: Student Households

Q&As: Covid-19 Vaccine

Postgraduate Research

## What is 'Yellow Card' reporting?

According to the UK Government website, 'The Yellow Card scheme is a mechanism by which anybody can voluntarily report any suspected adverse reactions or side effects to the vaccine.'

It is very important to note that a Yellow Card report does not necessarily mean the vaccine caused that reaction or event. We ask for any suspicions to be reported, even if the reporter isn't sure if it was caused by the vaccine. Reports to the scheme are known as suspected adverse reactions (ADRs).'

Further information can be found on the [UK Government website](#).

29

Label: Exchange Retention Policy

BG

BLANCHE G. (946484)

Tue 09/11/2021 11:31

To: Dale Barlow

Dear dale

I take offence to your reply. I have repeatedly informed senior management of their inability to folloe the science. They continually highly recommend i and my fellow students take a covid vaccine. This recommendation is Not keeping me or my fellow students safe ,on tge contrary it puts us in danger of severe side effects including death This is reflected in the yellow card scheme that you do not inform students about and the risks associated with this experimental drug. I now demand a meeting with you and senior management on this point before any further action is taken. For your education snd information i suggest you study the following links so you have the bigger picture. I look forward to the meeting.

<https://www.bitchute.com/video/NXcLShYKZ620/>

[www.endothermic-electricity.com](http://www.endothermic-electricity.com)

Regards

Geoff

Sent from my Samsung Galaxy A5 2017 - powered by Three

30



Sent Items

Filter

Letter to univer...

Message for Students

> NHS COVID Pass | Pà...

06/10/2021

hi . Health and safety have failed to r...

Research Misconduct; Kate Rauwerd...

> Coercion to murder

04/10/2021

Dear Sir /Madam, I see the Universit...

Michelle Rees; Engineerin...

> Master of Philosophy

01/10/2021

hi ok, Here it is with page added, ple...

MSc by Researc...

+7

September

Message for Students

> Wearing face coverin...

25/09/2021

Hi, I have had no response from heal...

mraeg

ing a face could more

+6

[Draft] Customer Service

> deletion of email acc...

24/09/2021

Dear Sir/ Madam I have just complet...

Zoe Perry

Documents for timescal...

24/09/2021

Dear Zoe, I have now completed my ...

Augustine Egwebe

> What happens next

22/09/2021

Hi Augustine I assume you have rec...

Coercion to murder

Label: Exchange Retention Policy

BLANCHE G. (946484)

Mon 04/10/2021 13:50

To: Research Misconduct; Kate Rauwerda; Hannah Meldrum; Kirsteen Prescott; Anne Redd; Jodie O'callaghan-Boylard; Nicola Hughes; Sarah Davies; Annabel Morgan; Sarah Jones; Health and Safety

Dear Sir /Madam,

I see the University is strongly recommending to myself and my fellow students to enter into an experimental drug trial. There is no long-term safety data to this experimental drug trial (obviously) but there is now short-term data of around 10 months since the rollout of this experimental drug by the Welsh Government and UK Government. You are now trying to coerce me and my fellow students with false claims. You are claiming this experimental drug is "SAFE AND EFFECTIVE. You are not reporting the facts and there is now data available for everyone to see (links below) This drug is dangerous, causing harm and death. In my opinion this is now **academic misconduct, coercion to murder, and harassment**. You are coercing students to enter into an unsafe experimental trial whilst claiming it is "SAFE AND EFFECTIVE", which is a false claim. I strongly advise you actually give students the facts that are reported by the yellow card scheme immediately. This data should be shown on your website's frontpage immediately. This will give my fellow students an informed choice on whether to enter into, or not to enter into this experimental drug trial. You might like to research this information yourself and quickly before any more harm comes to any more people. If you fail to do this, I will have no alternative but to report this crime and take direct action.

Source data:  
[www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting/annex-1-vaccine-analysis-profile](http://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting/annex-1-vaccine-analysis-profile)

<https://yellowcard.lshtm.nhs.uk/report>

COVID-19 Vaccine Analysis Overview

Report run date: 17/09/2021

Data lock date: 15/09/2021

Manufacturer	Total reports	Total reactions	Total fatalities
AstraZeneca	231,920	825,564	1,072
Moderna	15,916	51,034	17
Pfizer	114,752	324,654	534
Unspecified	1,088	3,292	28
Totals	363,676	1,204,544	1,651

Regards

student 946484

Reply

Reply all

Forward

31

Sent Items

Filter

Last month

Kevin Child

> Academic misconduct

Fri 12/11

Hi kevin i will gladly meet with you t...

academic misco...

+1

Dale Barlow

> Actions causing distre...

Tue 09/11

Dear dale i take offence to your repl...

Anthony Duffy; Andrew Lansdo...

> COVID 19 VACCINATI...

01/11/2021

Anna De Buisseret - Endothermic Ele...

David Rea - (2134611) - (2135...

> covid 19 vaccination ...

01/11/2021

Latest Covid Videos - Endothermic E...

Arron Banfield

> RE: Compromised Ac...

01/11/2021

yes i can confirm i sent the emails a...

SHOH-CHAMA C. (946330)

> It's Caroline

01/11/2021

they are trying to stop me from lett...

Actions causing distress to others

This message was sent with High importance.

Dale Barlow

Thu 04/11/2021 08:28

To: BLANCHE G. (946484)

Dear Geoff,

Your note to staff on 1<sup>st</sup> November 2021 regarding Covid-19 has been flagged as inappropriate and has been forwarded to the Faculty Student Experience Team because it distressed some recipients.

I understand that you may have strong feelings about this topic, but it is important for you to understand that as a university we respect and support all of our staff and students. While we respect that people have different perspectives, we also have a responsibility to ensure that all staff and students feel safe and have equal opportunity to complete their studies in a respectful, professional and safe environment.

I realise that your comment was not directed at any individual person, however if you had directed this comment towards an individual it would have been in breach of our [Dignity at Work and Study policy](#). Further the Student Charter requires students to "respect the personal safety of every student and member of staff, and indeed the wider community, and ensure we can all help to keep the University a safe place to study and work": [Student Charter - Swansea University](#) .

Please consider how your comments and actions may impact those around you, and please desist from sending further emails of this nature to staff or students. Further postings of this nature are likely to be viewed by recipients as a breach of the University's Dignity at Work and Study Policy, which could result in disciplinary proceedings.

Kind Regards

Dale

Student Information Office Coordinator

Tim y Swyddfa Gwybodaeth i Ffynfyr

Faculty of Science and Engineering | Cyffdran Gwyddoniaeth a Phreiranneg

Swansea University | Prifysgol Abertawe

Fabian Way

Crymlyn Burrows | Abertawe

Wales | Cymru


SA1 8EN

80

Label: Exchange Retention Policy

**BLANCHE G. (946484)**  
Thu 07/10/2021 10:43

To: Kate Rauwerda; Hannah Meldrum; Kirsteen Prescott; Anne Redd; Jodie O'callaghan-Boylard; Nicola Hughes; Sarah Davies; Annabel Morgan; Sarah Jones; Health and Safety

 Letter to university.docx  
80 KB

**TO.**

VICE-CHANCELLOR - PROFESSOR PAUL BOYLE, NIAMH LAMOND, PROFESSOR MARTIN STRINGER, PROFESSOR HELEN GRIFFITHS, PROFESSOR JUDITH LAMIE, PROFESSOR ELWEN EVANS, PROFESSOR KEITH LLOYD, PROFESSOR KENITH MEISSNER, SARAH JONES

Again, I am approaching you to stop the support for the Welsh and UK Government in promoting this experimental drug trial to myself and fellow students. I have attached the first email to this email as evidence 1.

This is coercion, collusion, academic misconduct, harassment and now blackmail with the introduction of a covid passport, to commit murder. You must take direct action and warn my fellow students of the risks **including death**, which is highlighted in the Governments own documentation.

I also now draw your attention to Dr Peter McCullough, the most cited MD in his field. The link below will take you to his 1-hour speech this week.

[Latest Videos - Endothermic Electricity \(endothermic-electricity.com\)](https://www.endothermic-electricity.com/)

To ignore this evidence and continue on the course you are, is spreading misinformation, giving false information, blatantly ignoring the scientific evidence. As a scientist enrolled in this organisation, I am now reporting the facts for you to act upon as you are in the position to do this. If you continue to ignore the science, direct action will be taken to stop this false information you are spreading to students. You must advise students not to take any covid experimental drugs, inform students that have taken any of these covid experimental drugs, that they are a victim to false information, and this is now supported by the statistics and analysis from the last 10 months. This is an experiment that has gone wrong and must be withdrawn immediately. This needs an immediate redress before any more people die. Not acting is dereliction of duty by yourselves and you will be held accountable to complicity to attempted murder.

Regards  
Geoff Blanche

Sent Items ★ Filter ▾

Anthony Durt; Andrew Lansdo...  
> COVID 19 VACCINATI... 01/11/2021  
Anna De Buisseret - Endothermic Ele...

David Rea; - (2134611); - (2135...  
> covid 19 vaccination ... 01/11/2021  
Latest Covid Videos - Endothermic E...

**Arron Banfield**  
> RE: Compromised Ac... 01/11/2021  
yes i can confirm i sent the emails a...

SHOH-CHAMA C. (946330)  
> It's Caroline 01/11/2021  
they are trying to stop me from letti...

support@unitu.co.uk  
> Yellow card scheme 01/11/2021  
You have removed important inform...

Unitu  
> 1st Strike - Your post ... 01/11/2021  
I would like to inform you that the y...

Aaron Clarke; Aaron Cookson; Aaron...  
> COVID19 VACCINATI... 01/11/2021  
No preview is available.

Message for Students  
Death by the covid 19 v... 01/11/2021

**RE: Compromised Account**

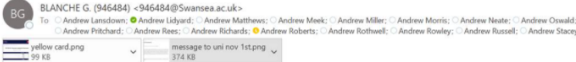
**AB** Arron Banfield  
Mon 01/11/2021 18:20  
To: BLANCHE G. (946484); geoffblanche@yahoo.com

Hello,

I am the Information Security Officer at Swansea University. We have received numerous reports of unusual emails originating from your account ([946484@swansea.ac.uk](mailto:946484@swansea.ac.uk)), this is normally indicative of an account compromise which may be relaying phishing emails.

**The emails:**

**COVID 19 VACCINATION DEATHS**



**HI**  
All staff are being contacted to give them the chance to act or to be complicit.  
I MUST WARN YOU saying I only work for them was not an excuse that was found sufficient to escape justice in the 1947 Nuremberg trials.

[Latest Covid Videos - Endothermic Electricity \(endothermic-electricity.com\)](https://www.endothermic-electricity.com/)

Regards  
Geoff Blanche

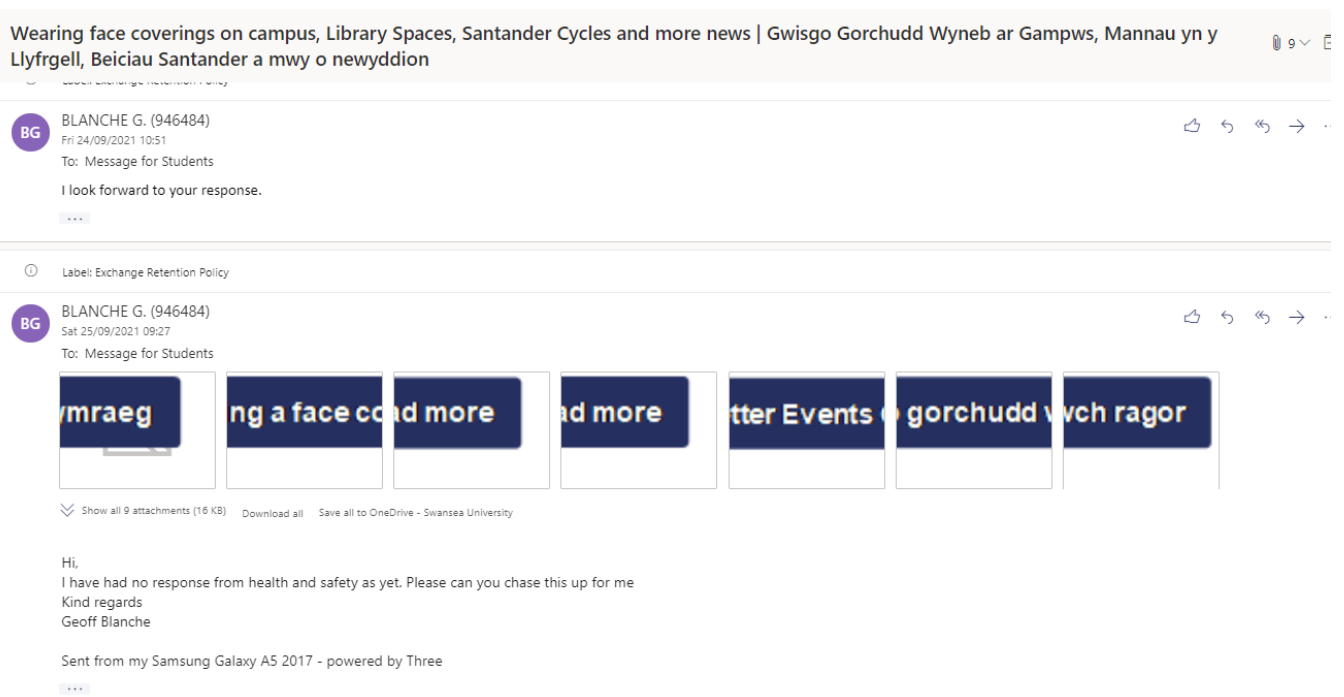
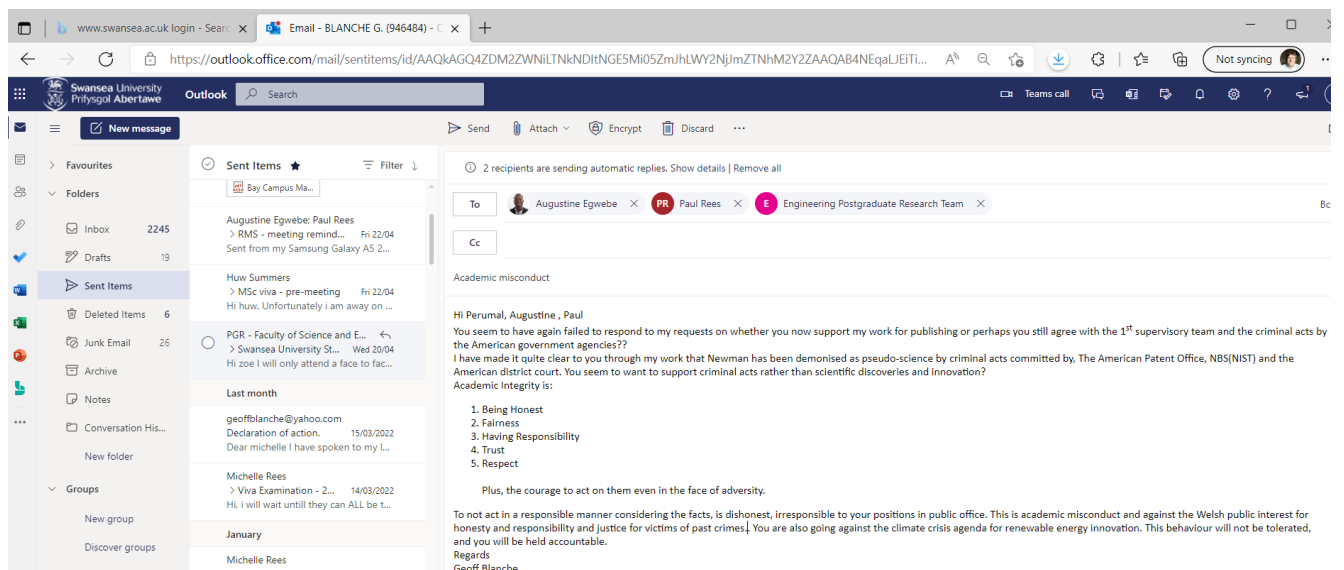
Can you confirm or deny whether the emails were sent by you. If you can confirm- we can close the incident and won't have to take further mitigations like changing the account password.

I have also sent a text to your mobile phone (+447429925970) - as we need an urgent reply to mitigate any account compromise as required by our internal operational security policies.

Thanks- Arron

**Arron Banfield BSc (Hons), MSc**  
Information Security Officer | **Suryddog Diogelwch Gwybodaeth**

Information Technology Security Department | **Adrian Diogelwch Technoleg Gwybodaeth**  
6th Floor | East Tower  
Fawcett Building | Adfaled Fawcett  
Information, Systems and Services | Gwybodaeth, Systemau a Gwasanaethau  
Swansea University | Prifysgol Abertawe  
Singleton Park | Parc Singleton  
Swansea | Abertawe



Sent Items

1st Strike - Your post ...

I would like to inform you that the y...

Aaron Clarke: Aaron Cookson: Aaron...

COVID19 VACCINATL...

01/11/2021

No preview is available.

Message for Students

Death by the covid 19 v...

01/11/2021

No preview is available.

October

Michelle Rees

Thesis Submission

07/10/2021

Hi Thanks for this and just to confir...

MSC by Resear...

+1

Kevin Child: myunisupport: My...

Safety of the Experim...

07/10/2021

Hi Kev. Again I am approaching you ...

Letter to univer...

Kate Rauwerda: Hannah Meldr...

Coercion to murder

07/10/2021

To: VICE-CHANCELLOR - PROFESSO...

Letter to univer...

Message for Students

NHS COVID Pass ( Pá...

06/10/2021

hi . Health and safety have failed to ...

Research Misconduct: Kate Rauwerd...

Coercion to murder

04/10/2021

Dear Sir /Madam, I see the Universit...

Safety of the Experimental drug Covid vaccine

Label: Exchange Retention Policy

BLANCHE G. (946484)

Fri 01/10/2021 17:46

To: MyUniHub; Liza Leibowitz; Carys Jones: info@swansea-union.co.uk

Dear Sir /Madam,

I see that you strongly recommend the covid 19 vaccine to students yet your facts on the vaccine are not supplied. I strongly advise you to actually give students the facts reported by the yellow card scheme. This data should be shown on your website. This would give students an informed choice on whether to take or not take this experimental drug. Failure to do this and just go along with government guidelines could be seen as coercion to manslaughter if some student was to die after a vaccine that you strongly recommended. By not displaying the risks that are associated with this experimental drug trial is sadly letting down your students and shows a lack of research and foresight at this university.

Source data: gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting#annex-1-vaccine-analysis-profile

Please keep me up to date on your decision whether to pass this information on to students

Regards

student 946484

[https://yellowcard.ukcolumns.org/yellow\\_card\\_report](https://yellowcard.ukcolumns.org/yellow_card_report)

COVID-19 Vaccine Analysis Overview

Report run date: 17/09/2021

Data lock date: 15/09/2021

Manufacturer	Total reports	Total reactions	Total fatalities
AstraZeneca	231,920	825,564	1,072
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Unspecified	1,088	3,292	28
<b>Totals</b>	<b>363,676</b>	<b>1,204,544</b>	<b>1,651</b>

MyUniHub sent an automatic reply

Coronavirus FAQs

Q&As: Covid-19 Vaccine

Q&AS: COVID-19 VACCINE

All health boards in Wales are currently offering Covid-19 vaccinations for 18-30 years olds. If you are **registered with a local GP** you will be proactively contacted with details of your vaccination appointment. However, you may still access the vaccination by contacting your local health board if you are not yet registered with a local GP.

The University strongly advises students and staff to get vaccinated as the best protection against COVID-19. This is based on expert scientific advice and the guidance issued by both Public Health Wales and the Welsh and UK Governments.

All vaccines and medicines have some side effects, which need to be balanced against the expected benefits in preventing illness.

Detailed safety analysis of data to relating the vaccine can be found [here](#):

Q&As about the vaccine can be found [here](#):

Faculties

Student News

Remote PC Access Service

ISS Service Desk

Study Spaces

Unitu

Coronavirus FAQs

Q&As: Asymptomatic

Sent Items

1st Strike - Your post ... 01/11/2021

I would like to inform you that the y...

Aaron Clarke: Aaron Cookson: Aaron...

COVID19 VACCINATL... 01/11/2021

No preview is available.

Message for Students

Death by the covid 19 v... 01/11/2021

No preview is available.

October

Michelle Rees

Thesis Submission 07/10/2021

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MSc by Researc... +1

Kevin Child: myunisupport: My...

Safety of the Experim... 07/10/2021

Hi Kev, Again I am approaching you ...

Letter to univer...

Kate Rauwerda: Hannah Meldr...

Coercion to murder 07/10/2021

To: VICE-CHANCELLOR - PROFESSO...

Letter to univer...

Message for Students

Safety of the Experimental drug Covid vaccine

1

MyUniHub sent an automatic reply

myunisupport

Mon 04/10/2021 18:14

To: BLANCHE G. (946484)

Dear Geoff

Thank you for your email and feedback, which we will ensure we consider.

We will update our Covid-19 vaccine FAQ webpage shortly to provide information on the Yellow Card scheme.

Kindest regards,

The MyUniSupport Team

myunisupport

Academic Services | Gwasanaethau Academaidd

Swansea University | Prifysgol Abertawe

Singleton Park | Parc Singleton

Swansea | Abertawe

[www.swansea.ac.uk](http://www.swansea.ac.uk) | [www.abertawe.ac.uk](http://www.abertawe.ac.uk)

We Are Professional. We Work Together. We Care.

Rydym ni'n Broffesiynol. Rydym yn Gweithio Gyda'n Gilydd. Rydym ni'n Gofalu.

39

Label: Exchange Retention Policy

ZZ

Zhou Z

Tue 04/05/2021 12:55

To: BLANCHE G. (946484)

Cc: Perry Z; Penney D; Egwebe Augustine.

Dear Geoff,

Considering the big difference between your point of view and the supervisory team, I decide to step down as your first supervisor as well as second supervisor to give you an opportunity to have an alternative supervisor to support your study. It is not in my position to suggest an alternative supervisor for you, I believe you had an email from Zoe Perry dated the 22<sup>nd</sup> of April asking you to suggest anyone they could approach on your behalf to represent you as your first supervisor. Hence, I strongly advise you to get in touch with Zoe at the PGR office to arrange an alternative supervisor for you.

Kind regards,  
Zhongfu

40

Label: Exchange Retention Policy

BG

BLANCHE G. (946484)

Tue 04/05/2021 14:08

To: Zhou Z.

Hi Zhongfu.

Just to underline my point of view is based on scientific evidence and facts I have presented, and not all my own work, mainly work and studies, by others ie, NASA, Naudin, Physics that have already been written. Please check the NBS experiment again for your own piece of mind and specifically notice how they changed the design of Newman's machine by adding an Earth Ground. Please can you provide the information documentation that you said will be used against me, you seem to have ignored this point and request. Also please can you back up the supervisors points of view with scientific evidence and facts, The credible science that was quoted at me, please be precise as I can then have a reason to review my stance

Thank you.

Geoff Blanche BSc

...

Reply

Forward

84

41

41

Results

Top results

2 Zhou 2  
> NITS (Notice of Inten... 31/03/2021  
Dear Geoff, Thank for sendi... [index]

2 Zhou 2  
Comments on the draft ... 26/08/2022  
Hi Geoff, Below are the thre... [index]  
endothermic-ei... +2

2 Zhou 2  
Advice on submission 08/03/2021  
Dear Geoff, Please see the ... [index]  
Using OneDrive... +5

All results

BLANCHE G. (946484) 01/10/2021  
> Master of Philosophy  
Hi ok, Here it is with pa... [Sent Items]  
MSc by Resear... +7

BLANCHE G. (946484) 01/10/2021  
Thesis Submission  
Hi Michelle, Here is the... [Sent Items]  
MSc by Resear... +1

BLANCHE G. (946484) 01/09/2021  
> Master of Philosophy...  
No preview is available. [Sent Items]  
new masters 9... +2

NITS (Notice of Intention to Submit) form

Hi Zhongfu

I regret that you have decided to resign as 1st supervisor. During our conversations you did realise what I have uncovered is a new discovery in electricity physics and is good for the future of energy generation, although I don't think you fully saw how useful and how big an impact this type of energy generation could have. What is also remarkable about the stance of the supervisors and possibly backed by swansea university which is yet to be seen, is the fact and proof of a remarkable invention that is a renewable energy machine but yet opposed by yourselves, when you and universities are backing the climate crisis with an energy future based in renewable energy machines!!!  
Like John Archibald Wheeler once said,

*"We live on an island surrounded by a sea of ignorance. As our island of knowledge grows, so does the shore of our ignorance."  
"In any field, find the strangest thing and then explore it."*

This is what I have done, I have explored the strangest field, and the evidence presented and the scientific conclusions are in agreement with the laws of physics as demonstrated and I have found and written something amazing. I insist on keeping Neuman in my work and for all the right reasons. The work I have done along with NASA in plotting an electric field charge, proves that electricity is first an endothermic reaction and is how Neuman's machine works by benefitting from this reaction. There is wrong information being perpetuated by Academia by agreeing with the NBS experiment, who are a government agency and it can be quite easily seen that their actions to stop Neuman was to protect Big Oil. I suggest you first watch the movie they made about Neuman just after his death, then read his book.

(155) Joseph Neuman - YouTube

NST might be a government agency, but they don't write science on Neuman's Machine or electricity physics. Now why you would align to NBS (I would guess financial ties) when the facts presented show otherwise is for you to decide but as you now know this is fake science by NBS and either they made a real mess of the experiment, which is possible, or they deliberately sabotaged Neuman. I am not interested in the politics of it, **but the science of endothermic electricity is for everyone** and cannot be cherry picked or hidden anymore, as this now seems to be the new normal!

Unknown at the time Neuman had invented an endothermic electricity Motor / Generator, which is now proven 25 years later. Rather than contesting my thesis I thought you would have been glad to be part of this new scientific knowledge. I suggest you also read his book. The credible science is what I present and NOT what NBS present. If we cannot question and present new discoveries in science, then that is the end of advancements in science for government control.

I still ponder why you and other supervisors wish to stop this knowledge coming forward? One thinks of all possible fails or agreements in place with governments that state that only certain science is allowed, and or other advancements/knowledge in energy science is not allowed? One does wonder, but it looks like we are very soon going to find this out.

Going forward I was going to ask you to reconsider your resignation as 1st supervisor. Other than that, I would ask you to suggest a replacement to yourself with your integrity intact. I respect Idris Kalina as my supervisor due to his opinions that detract from the facts of the physics involved, although I do like his opinions, they are only opinions and have no facts or equations to back them up, if they do, I would be very interested to see this and the logic and who wrote it.

I also commend you on thinking I would make an appeal to being unsuccessful in my thesis, yet I will not be unsuccessful as I have already been successful in my discovery and writing. The piece of paper the university would offer would be worth nothing if I omitted Neuman from his greatest hour, I would be perpetuating fake science along with academia through yourselves. I would most definitely challenge any fake science being perpetuated as you pre-empt, and all this judgement based in fiction about the evidence-based facts in my thesis that is yet to be submitted!

I would like a list of all documentation that would be made available at any future appeal immediately to have a fair and level playing field.

I also suggest we have a face-to-face meeting to see if there is some common ground we can find, to save any long-drawn-out personal embarrassment.

Your Sincerely  
Geoff Blanche BSc

42

42

Focused Other 10 Filter

Dear all There is food available in En...

Employability - Faculty of Scie...  
Microsoft Embrace Me... 08/06/2022  
Navigating your career can be challe...

Zoe Perry, PGR - Faculty ...  
> Your Viva - Monday 3... 08/06/2022  
Dear Geoff, Thank you for your email...  
Bay Campus Ma...

Widanalage, Dhammika  
> Geoff Blanche viva 07/06/2022  
Dear Geoffrey, All documents need t...

[Draft] researchmanagement@swan...  
> Swansea University R 07/06/2022

Your Viva - Monday 30 May 2022 at 1pm

Zoe Perry  
To: BLANCHE G. (946484)  
Cc: Huw Summers  
Wed 08/06/2022 10:55

Dear Geoff,

Thank you for your email. The notes that Professor Summers made during your viva were to assist him in completing the Chair's Report in the Report and Results form. As soon as that form has been received and ratified therefore, we will provide you with a copy of it.

Many thanks

Zoë

Zoe Perry  
Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwil Ôl-raddedig



PGR - Faculty of Science and Engineering

To: BLANCHE G. (946484)

👍 ↶ ↷ ➡ ...  
Fri 10/06/2022 11:22

Dear Geoff,

We have received your Report and Result form and can see that the recommendation of the Examination Board is that you have been unsuccessful in your candidature for the degree of MSc by Research. However, the Examining Board has recommended that you be permitted to modify your thesis and re-submit it for the degree of MSc by Research on one further occasion within 12 months.

Once Academic Services have ratified your Report and Result form, you will be sent an e-mail from them confirming your outcome. Your deadline will be a year from the date you receive this e-mail. Once you have received this, an e-mail will also be sent from our team confirming your deadline and providing you with a copy of the Report and Results Form together with details of required corrections in order for your thesis to reach the standard required of an MSc by Research.

Kind regards

Zoë

**Zoë Perry**

Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwil Ôl-raddedig



PGR - Faculty of Science and Engineering

To: BLANCHE G. (946484)

Cc: PGR - Faculty of Science and Engineering

👍 ↶ ↷ ➡ ...  
Tue 14/06/2022 12:58

 RandR Form MA MSc LLM by...  
426 KB

 Addendum to R&R Form.pdf  
144 KB

2 attachments (570 KB) ☁ Save all to OneDrive - Swansea University ⬇ Download all

Dear Geoff,

Further to your outcome letter from Academic Services. I enclose for your attention a copy of your Report and Results form together with an addendum to that form which details requirements for your resubmission.

To re-iterate, your deadline to re-submit your thesis is **14 June 2023**.

Please note that before you submit your thesis, you must pay the re-submission fee of **£102.00**. You will be able to make this payment through [myunihub@swansea.ac.uk](mailto:myunihub@swansea.ac.uk), who will provide you with a receipt number. We will need proof of the payment when you submit.

Please can you respond to this e-mail to confirm you are fully aware of the deadline to re-submit.

Kind regards

Zoë

**Zoë Perry**

Post Graduate Research Support Lead | Arweinydd Cymorth Ymchwil Ôl-raddedig



To "Jane Lewis Normand" <j.m.e.lewis-normand@swansea.ac.uk>

Cc Sara Kane <s.l.kane@swansea.ac.uk>

Bcc

Subject Re: Automatic reply: Postgraduate research committee

Attach files

Hi,  
 Today i telephoned [swansea](#) hub and spoke to a Sian [Sirlanki](#), who said she would pass on my comments to you. My main concern is the amount of emails required to obtain some information from you, and also the fact that you seem only to be able or willing to communicate two days a week and then your out of the office until the next week.  
 Regards  
 Geoff Blanche

▼ Hide original message | [Edit](#)

On Wednesday, 17 August 2022, 11:33:36 BST, Jane Lewis Normand <j.m.e.lewis-normand@swansea.ac.uk> wrote:

*DDiolch am eich e-bost. Fydda'i ddim yn y swyddfa tan 22 Awst e atebaf eich e-bost cyn gynted â phosibl ar ôl i mi ddod nôl.*

*Os yw eich ymholiad yn un brys cysylltwch â*

Graduation@swansea.ac.uk for queries relating to graduation/extensions to candidature.  
 Studentcases@swansea.ac.uk for queries relating to student cases.  
 Examsoffice@swansea.ac.uk for queries relating to examinations  
 Assessmentandawards@swansea.ac.uk for queries relating to assessment  
 Academicintegrity@swansea.ac.uk for queries relating to academic misconduct


Thank you for your email. I am out of the office until 22 August and I will answer your e-mail as soon as possible on my return.

If your query is urgent please contact

Graduation@swansea.ac.uk for queries relating to graduation/extensions to candidature

**Postgraduate research committee**

geoffblanche@ya.../Sent

 **Geoff Blanche** <geoffblanche@yahoo.com>

To: j.m.e.lewis-normand@swansea.ac.uk  
 Cc: Sara Kane <s.l.kane@swansea.ac.uk>

17 Aug at 11:33 • ☆  
[Print](#) [Raw message](#)

Dear J.M.E.Lewis-Normand,

I have put in a request for the details which make up the members of the postgraduate research committee, as i believe this committee would have ratified the examination boards results for my masters of research. I believed this would have been a simple request and process as science is an open and transparent discipline. Yet your colleague for some unexplained reason has forwarded my emails to you (reply copied below), and now i must wait for a response from you. This to me now seems to be a rather complicated procedure to find what i would consider information that would be available to a postgrad student, as this committee seem to be the people who decide on the attainment of the professional qualification one is trying to achieve. Your mantra is 'We are Professional, We Work Together, We Care', yet i am now beginning to think this is not the case, i sincerely hope i am mistaken.

I am currently writing my full report on the events of my masters of research viva examination and results. I now require these peoples' contact details of this committee so i can finish my report. I hope this does not turn into an email extravaganza which i have already had unfortunately with your colleague Sara. Can you or Sara please let me know when i can expect a response with this information please.

Regards  
 Geoff Blanche ( student id. 946484)

Hi Geoff,

I am unable to assist with your request. I have therefore sent your e-mails to my Head of Section, Jane Lewis-Normand for response on her return to work.

Kind regards  
 Sara



47



**Geoffblanche** <geoffblanche@yahoo.com>  
To: Sara Kane <s.l.kane@swansea.ac.uk>

16 Aug at 11:19 ● ★

[Print](#) [Raw message](#)

1 file | 342.7kB



Screenshot\_...

[Download](#)

Hi sara

It says in 1.2, screenshot below, the chair is answerable to the postgrad research committee, i require the names and contact details of all the members of this committee, and the regulations they abide by. I don't think i can make it any clearer than this.

Regards

Geoff Blanche

On 16 Aug 2022 09:38, Sara Kane <s.l.kane@swansea.ac.uk> wrote:

Hi Geoff,

The examiners names would be contained in the Report and Result form that was sent to you by the Faculty of Engineering. The regulations that the exam board are sent are included below:

[Guide to Submission and Presentation of the Thesis - Swansea University](#)

[Guide to the Examination of Research Students - Swansea University](#)

[Degree of Master's by Research - Swansea University](#)

If you wish to appeal against the Examining Board's decision, details of the appeals procedure can be downloaded via the link below: <https://myuni.swansea.ac.uk/academic-life/academic-appeals/>

Kind regards

Sara

48

## Re: Automatic reply: Automatic reply: Confidential - result letter

geoffblanche@ya.../Inbox



**Sara Kane** <s.l.kane@swansea.ac.uk>  
To: Geoffblanche <geoffblanche@yahoo.com>

17 Aug at 10:38 ● ★

[Print](#) [Raw message](#)

Hi Geoff,

I am unable to assist with your request. I have therefore sent your e-mails to my Head of Section, Jane Lewis-Normand for response on her return to work.

Kind regards

Sara

---

**From:** Geoffblanche <geoffblanche@yahoo.com>

**Sent:** 16 August 2022 11:16

**To:** Sara Kane <S.L.Kane@Swansea.ac.uk>

**Subject:** Re: Automatic reply: Automatic reply: Confidential - result letter

Hi sara

It says in 1.2, screenshot below, the chair is answerable to the postgrad research committee, i require the names and contact details of all the members of this committee, and the regulations they abide by. I don't think i can make it any clearer than this.

Regards

This year sees our first Postgraduate...

**CS** Customer Service  
[Urgent Message] Stud... 28/04/2022  
From: IT Service Management <ISS-I...

**MS** My Surveys  
Last chance to comple... 28/04/2022  
This is your last chance to complete ...

**FR** FSE Reception  
[Postgrads-fse] Partici... 28/04/2022  
Male participants wanted for paid sl...

○ Paul Rees; Engineering Postgra...  
> Academic misconduct 27/04/2022  
Dear Geoff, As a supervisory team w...

**P** PGR - Faculty of Science ...  
> Your Viva - Please Re... 27/04/2022  
Dear Geoff, Thank you for your email...

Bay Campus Ma...

**BG** BLANCHE G. (946484)  
To: Augustine Egwebe; Paul Rees; Engineering Postgraduate Research Team  
Wed 27/04/2022 10:12

Engineering Postgraduate Research Team sent an automatic reply

**PR** Paul Rees  
To: BLANCHE G. (946484); Augustine Egwebe; Engineering Postgraduate Research Team  
Wed 27/04/2022 15:10

Dear Geoff,

As a supervisory team we believe it is important to give you the opportunity to present your work and defend it in a viva as would be afforded to any research degree student. We completely agree it is every scientist's right to put forward new theories and give them the chance to explain these ideas. At the viva you will be given the opportunity to outline your work and you will be examined by two expert examiners who will discuss your methods, results and interpretation and expect you to defend them in order to obtain your degree. We have no interest in the work or opinions of other people or agencies, we are only concerned with giving you the opportunity to present your work and defend your results in a fair and transparent manner.

Best wishes,  
Paul and Augustine

○ Paul Rees  
> Academic misconduct 27/04/2022  
Dear Geoff, As a supervisor... [Inbox]

**P** PGR - Faculty of Science and Engine...  
> Your Viva - Please Re... 27/04/2022  
Dear Geoff, Thank you for y... [Inbox]

Bay Campus Ma...

**BG** BLANCHE G. (946484)  
> Master of Philosophy 01/10/2021  
hi ok. Here it is with p... [Sent Items]

MSc by Researc... +7

All results

**R** researchmanagement@swansea.ac....  
Swansea University Res... Mon 22/08  
Scroll down for English vers... [Inbox]

**WD** Wulf Dettmer  
> PGR student me... (2) 07/07/2022  
Dear all, I just realise that t... [Inbox]

meeting-96170... +1

**BG** BLANCHE G. (946484)  
> Your Viva - Monday 3... 08/06/2022

**BG** BLANCHE G. (946484)  
To: Augustine Egwebe; Paul Rees; Engineering Postgraduate Research Team  
Wed 27/04/2022 10:12

Hi Perumal, Augustine, Paul

You seem to have again failed to respond to my requests on whether you now support my work for publishing or perhaps you still agree with the 1<sup>st</sup> supervisory team and the criminal acts by the American government agencies??

I have made it quite clear to you through my work that Newman has been demonised as pseudo-science by criminal acts committed by, The American Patent Office, NBS(NIST) and the American district court. You seem to want to support criminal acts rather than scientific discoveries and innovation?

Academic Integrity is:

1. Being Honest
2. Fairness
3. Having Responsibility
4. Trust
5. Respect
- 6.
7. Plus, the courage to act on them even in the face of adversity.

To not act in a responsible manner considering the facts, is dishonest, irresponsible to your positions in public office. This is academic misconduct and against the Welsh public interest for honesty and responsibility and justice for victims of past crimes. You are also going against the climate crisis agenda for renewable energy innovation. This behaviour will not be tolerated, and you will be held accountable.

Regards  
Geoff Blanche

Browser tabs: (54,410 unread) - geoffblan... x | MSc by Research\_1.pdf x | (2) Facebook x | examination rebuttal report x | RandR Form MA MSc LLM x | Email - BLANCHE G. (94648... x

Address bar: https://outlook.office.com/mail/id/AAQkAGQ4ZDM2ZWNI...

Swansea University Prifysgol Aberlawe

Navigation: New message, Delete, Archive, Report, Move to, Categorise, Snooze

Message list:

- Top results
  - Paul Rees > Academic misconduct 27/04/2022 Dear Geoff. As a supervisor... [Inbox]
  - BLANCHE G. (946484) > Your Viva - Please Re... 27/04/2022 Dear Geoff. Thank you for y... [Inbox]
  - BLANCHE G. (946484) > Master of Philosophy 01/10/2021 hi ok. Here it is with B... [Sent Items]
- All results
  - researchmanagement@swansea.ac... Swansea University Res... Mon 22/08 Scroll down for English vers... [Inbox]
  - Wulf Dettmer > GR student me... (2) 07/07/2022 Dear all. I just realise that t... [Inbox]
  - BLANCHE G. (946484) > Your Viva - Monday ... 08/06/2022 Hi Zoe. Sharing the mi... [Sent Items]
  - BLANCHE G. (946484) > Academic misconduct 27/04/2022

Academic misconduct

Retention: Exchange Retention Policy

BLANCHE G. (946484)  
To: Augustine Egwebe: Engineering Postgraduate Research Team: Paul Rees  
Wed 27/04/2022 16:54

Thats a strange reply when the 1st supervisory team were very interested in the work and opinions of others, but now you seem to have completely forgotten what was said before, i quote you...

Please note: Joseph Westley Newman, whose work has been universally rejected by all credible scientific examiners, including the American National Bureau of Standards after they thoroughly examined his apparatus. we would, therefore, be extremely wary of endorsing any published work which referred to Newman's 'Energy Machine'. The supervision team does not support to include the work of Joseph Westley Newman in your thesis.

Paul and Augustine i suggest you read what you have previously said before you reply next time. My questions to you have still not been answered. You are behaving with academic misconduct as ive already pointed out as you refuse to offer support to my work, this is clear due to your inaccuracy of your reply and the reason for this academic integrity

Sent from my Samsung Galaxy A5 2017 - powered by Three

Retention: Exchange Retention Policy

BLANCHE G. (946484)  
To: Augustine Egwebe: Engineering Postgraduate Research Team: Paul Rees  
Wed 27/04/2022 18:25

Hi  
Good reply, whereas the 1st supervisory team believed what was written on wikipedia and couldnt see through the lies, this team supports good honest research. Cheers guys and thank you for your support.

Regards  
Geoff

Sent from my Samsung Galaxy A5 2017 - powered by Three

Reply, Reply all, Forward

Windows taskbar: Type here to search, 16°C Cloudy, ENG UK, 23:44, 26/08/2022

## 8. 1.1 Pre viva Report by External examiner with Candidate's Comments in Red

### 1.1

a) The primary study of the thesis is on the "Endothermic Electric Effect". The candidate uses Li-ion batteries as an example to demonstrate that the battery temperature, during a charge, first experiences an endothermic effect causing the cell temperature to decrease before increasing (from a subsequent exothermic effect). This observation is then however used as an explanation to the Newman machine (an energy generator machine). **Misleading and false statement**

**The endothermic electric effect is identified as the second reaction in an electric field charge after the EMF (photoelectric effect) takes place, all explained in thesis and abstract. Every energy generating system is privy to the same electric field charge behaviour however the candidate does state that this is reliant on a parameter based system to capture the reaction for renewable energy benefits, chapter 3 of thesis. We have only one set of rules for electromagnetism, and this is ignored by the examiner throughout the examination process. Blanche correlates this reaction to the displacement current, which is discussed in the abstract and ignored by examiner, and there are 8 pages in the Conclusions chapter 12.1, ignored by examiner, References are placed in the text, 88, 89, 90 as well as in references chapter. Temperature sensors placed on and around the battery categorically show energy removal from the air to the charging electric field, we know this through one of the fundamental gas laws, Boltzmann gas constant energy with temperature relationship.**

**THE DISPLACEMENT CURRENT IS DISCUSSED IN THE ABSTRACT BUT COMPLETELY IGNORED BY EXAMINERS THROUGHOUT THE VIVA AND PRE/POST VIVA REPORTS.**

**Mr Blanche asks the examiners if they know what the displacement current is twice during the viva, (VT 2hr 6 mins) The examiners are silent twice, and do not engage, showing they did not thoroughly investigate or rigorously examine the thesis or there is another agenda. Mr Blanche then discusses the displacement current that James Maxwell wrote to unify the theory of electromagnetism, a charging electric field with respect to time, Faraday's Law, a charging electric field, and, Ampere's Law, a constant conduction current with respect to time. Maxwell's 4 equations are our contemporary physics of today for electromagnetism theory, chapter 12 and 17. The displacement current is correlated to the Newman machine as the Newman machine is kept in a state of an endothermic reaction of an electric field charge due to the timing device of the machine. Chapter 3 is completely ignored by examiner, which shows a test on a Newman generator by Naudin, where Naudin measures the temperature of the machine's conductor during operation, compared to ambient laboratory air temperature. The examiner asks no questions to explore the displacement current in viva, or the title of the work and what the Renewable Energy endothermic generator is and how it would work. 'Endothermic electric effect as an energy gain in the system for a renewable energy generator'.**

**The examiner asks no questions about the crime and fraud against Newman, chapter 3, or anything else to do with Newman's machine or the historical facts, that is strange for an apparent expert in this field who should be rigorously investigating the thesis.**

b) Here the student gives several explanations to the observed temperature and voltage behaviour and provides the photo-electric effect, and Maxwell's equations as a way of explanation (however the equations are not applied to predict or verify any of the observations).

## FALSE STATEMENT.

Mr Blanche provides a complete chapter (chapter 17) on Faraday's and Maxwell's equations, and how they are related to the endothermic electric effect reaction. This chapter was completely ignored in the pre viva, viva, and post viva by the examiner, with no related questions. Yet the examiner has mentioned it here in his writings dated 20/04/22 (which Mr Blanche was not privy to). Mr Blanche provided an explanation in the viva how one could apply mathematical equations during the viva. This was never discussed in post viva report (Addendum) Mr Blanche also applies a mathematical projection to this reaction in chapter 16, completely ignored.

c) There are several concerns to the work and quality of the work presented: -

The endothermic effect in a lithium-ion battery is well understood and reported in existing literature. It is related to the lattice structure of the electrodes and is characterised by a coefficient known as the "entropy-coefficient", which relates the open circuit voltage to temperature. **FALSE STATEMENT.**

**The examiner never presented any document before or at the viva, or any related scientific evidence as to what he is claiming, so as to allow Mr Blanche a fair chance to defend his theory.** The examiner claims are not correct, entropy coefficient of a battery system are not related to Mr Blanche's study, they are deduced by applying gibbs free energy equations (constant temperature constant pressure) which do not apply to Mr Blanche's work. Mr Blanche's theory which is EVIDENT IN the title of the work, is related to open circuit charge of an electric field, temperature direction and most importantly time, time of the charge controls whether the electric field charge is endothermic (gaining energy from its surroundings and materials due to the 2 parts of the displacement current, which is fully discussed in conclusions 12.1, or exothermic (losing energy to its surroundings). Mr Blanche correlates this with renewable energy generator design but this is totally ignored throughout the process and ridiculed in Addendum with no scientific report or explanation. The 1<sup>st</sup> supervisor team tried this approach as well, yet the candidate dealt with this in chapter 3 of the thesis. This then was called the disputed work by 1<sup>st</sup> supervisory team in an email, and a direct threat of failure if Newman was included in thesis, and again provided no evidence why this was still disputed? The candidate had provided evidence of fraud and this has been ignored, the question is why? THERE SEEMS TO BE AN AGENDA THAT THIS TYPE OF ENERGY GENERATION IS NOT WHAT THE MAINSTREAM ACADEMIC COMMUNITY WANT, with a total disregard to scientific research as Mr Blanche has demonstrated, PERHAPS IT WOULD RENDER PROFITS ON ENERGY GENERATION LESS AND NOT WHAT CORPORATE INVESTORS AND FUNDERS OF ENERGY GENERATION STUDY AT UNIVERSITY WOULD DESIRE.

All systems will have individual endothermic to exothermic coefficients, Mr Blanche mentions this on page 93, equation 11 of his thesis:

*"Newman's Law = EMF output*  $= V \times I(X)$  *Endothermic (11)*

*Ohm's Law or impedance Z*  $=$  *Exothermic (12)*

*(X) = Heat gain coefficient constant for a specific design of a specific system."*

but this has been ignored by the examiner. Coefficients for any system was not the purpose of this study (was it mentioned in the title or abstract and declaration of investigation as primary research?) although the examiner wants it to be about this which is evident in his report and during the viva, he states in the viva, the candidate should have studied the mechanics and chemical composition of batteries. (VT 8 mins 22 seconds). The title, The declaration of investigation chapter 1 and abstract

definitely define what the study relates to, but this is totally ignored by the examiner as this scientific knowledge is not the 'mainstream academic community' investors desire.

However, the candidate does not follow this route in explaining the endothermic effect observed in his battery experimental data (there are no citations to the entropy coefficient, how heat is generated in a battery or to the basic workings of a lithium-ion battery), but attempts to make a connection to the photo electric effect in attempt to justify the Newman machine. This is where the connections and equations provided were incoherent. – **FALSE STATEMENT:**

Mr Blanche fully explains and demonstrates with temperature sensor measurements, how the battery's electric field is both endothermic or exothermic, this is an original piece of work and this has not been explored in this manner in other peoples' work, there are citations made in the Thesis about entropy, but this is ignored, references 70, 71, 94, 100, 101, 102.

There are several examples in Mr Blanche's background research that show how the endothermic reaction makes a system more efficient i.e. chapter 8, reference 48, – ignored by examiner. The examiner also ignores, Self-Charged Graphene Battery Harvests Electricity from Thermal Energy of the Environment by by Zihan Xu et al chapter 19.2, this demonstrates that light and hence the photoelectric effect (as they claim they want to understand what the photoelectric effect is, see chapter 5) is responsible for thermal energy gain in a system.

**THIS IS DEFINITELY AN AGENDA BEING PLAYED ON THE CANDIDATE. YOU DON'T HAVE TO BE A SCIENCE EXPERT TO UNDERSTAND WHAT IS GOING ON HERE.**

The Masters is not about battery coefficients, rather it explains how the reaction relates to the displacement current and how we can design endothermic energy generators, this is a renewable energy thesis, (abstract and title) and the interaction between the positive and negative parts of the electric field charge is explored in a physics explanation, the examiner ignores this and does not grasp the thesis (or pretends not too), both examiners do not exhibit enough Physics understanding and are not experts in this field. We have very defined work in our literature on how the photoelectric effect is what initiates an electric field with equations to be interpreted to the reaction, this is discussed in the **Abstract** and in detail in chapter 5, chapter 19.2, but ignored by the examiners.

e) The experiments conducted, and subsequent conclusions drawn are not conclusive. A battery has two heat source terms, reversible (exothermic) and irreversible (endothermic). Depending on the magnitude of the applied current one dominates over the other. – **FALSE STATEMENT.**

The conclusions are conclusive. The Thesis is not about coefficients of batteries as consistently claimed by the examiners agenda to fail. An endothermic reaction is NOT irreversible in the design of a Newman generator. One hour of the viva was dedicated to discussion on the NASA experiment (40% of the time of the viva) and this is conveniently left out of any of the examiners reports. THE NASA REPORT IS CONCLUSIVE EVIDENCE OF THE CONCLUSIONS IN THE THESIS. The NASA experiment is not mentioned in the pre viva report, although it is seen that the pre viva report, pages 1.1 and 1.3 are written before the viva and then never mention the NASA discussion in the post viva report, the addendum? The external examiner confirms in Viva that he had not read the report by NASA, VT 1 min 13 secs, reference 57 and 58 of thesis. The conclusions about the electric field charge are conclusive, NASA and all of Mr Blanche's experimental data support the theory of the thesis. Yes the examiner is correct to point out there are two heat source terms but fails to be able to link the significance of this, which is more than well explained in relation to the , title, abstract and the renewable energy design of an endothermic generator.

f) In the USW data (Chapter 9, figure 27) why are the three starting cell temperatures different and what is the ambient temperature?

Obviously didn't read the Index - Oven Temperature set to 25 degrees centigrade, step 1, 111, page 144. Mr Blanche refers to the index in the description of figure 27.

Variant of 1 degrees centigrade Mr Blanche explains this in the viva and why he experimented with 3 different starting temperatures.

**VT: 59 MINUTES,** Why were these explanations not updated in the addendum report? **Failure by chairperson to report Mr Blanche's findings and left out of addendum to the Postgraduate Research Committee and the inept standard of expertise shown by the examiners during the whole Viva examination process. Agenda to fail.**

g) If the ambient temperature is lower than the initial cell temperature, the cell can cool down to ambient despite the battery being charged. The temperature gradient, between ambient and cell temperature, can outweigh the heat generated (by both irreversible and reversible heat) in the cell. To determine if the cell cooling is truly the endothermic heat generation of the cell (rather than cooling to ambient), the cell temperature must be at equilibrium with the ambient before charging commences. – **False statement.**

The battery charge becomes exothermic before cooling to ambient temperature. The examiner didn't read the index where the oven temperature is stated.

Oven Temperature set to 25 degrees centigrade, step 1, 111, page 144. Variant of 1 degrees centigrade

The cell temperatures (3 of) FIGURE 27, Mr Blanche explains why and how the reaction happens in his thesis report, but this is ignored by the examiner and not discussed. THE CELL COOLING IS ENDOTHERMIC HEAT GENERATION INITIALLY (TAKING IN ENERGY FROM SURROUNDINGS) AND THEN SECONDLY, IN ALL 3 CHARGES, BECOMING EXOTHERMIC AND THEN AGAIN ENDOTHERMIC IN THE CHARGE, NEVER REACHING OVEN TEMPERATURE OF 25 DEGREES CENTIGRADE, ALWAYS ABOVE AMBIENT TEMPERATURE OF THE OVEN. THE CELL TEMPERATURE DOES NOT HAVE TO BE AT EQUILIBRIUM WITH THE AMBIENT BEFORE CHARGING COMMENCES TO SEE THE CHANGE OF STATE OF THE ELECTRIC FIELD, AS THE EXAMINER CLAIMS, TO EXPLAIN WHY THE REACTION FLUCTUATES AS IT DOES. MR BLANCHE EXPLAINS THIS THOROUGHLY IN HIS THESIS BUT THIS IS IGNORED BY THE EXAMINER.

h) In the home experiments (Chapter 11) the cell voltage should at equilibrium before the experiments are conducted. If not, the measured voltage is the relaxation voltage (OCV + over potentials) which appears as "air charge". The cell could be still relaxing since the over potentials in the cell have not vanished to zero from the discharge step it has undergone. No details of how long the cell was kept in the oven or how long the cell was allowed to relax (after fully discharging the cell is given). The results are therefore inconclusive, and the voltage could simply be the relaxation voltage.

—

**False Statement** It cannot appear as "air charge", it either is or is not. Mr Blanche's experiments conclusively demonstrate it is "air charge" due to the lower than ambient temperature gradient towards the charge of the electric field which is seen by a raise in voltage and temperature data with respect to time. In agreement with electromagnetism's, Boltzmann's constant, Faraday's law and Maxwell's/Ampere equation law. Mr Blanche is NOT trying to commit academic fraud by simply missing a minor point that the battery was fully rested. The objective of Test 1 and 2 in chapter 11 was to raise the cell above room temperature to instil an EMF and collect data as stated in the

experiment. The candidate did thoroughly rest the battery before the experiment, and the examiner is assuming the candidate did not. The candidate demonstrates in figure 35 of the Swansea experiments that data collection before an applied charge was logged, showing Mr Blanche does have an understanding of voltage relaxation, (this was discussed in viva, Vt 1hr 24 mins and referred to as ambient and steady state, but examiner ignores this to claim a voltage relaxation effect in home experiments, and then omits this from the Addendum. You will learn voltage relaxation is an electric field charge to a certain voltage charge, academia calls it voltage relaxation after a discharge. Mr Blanche's experiments conclusively show by measuring the outside air temperature around the battery and identifying a displacement current, the displacement current is the reason for the charge of the battery after the EMF caused by a discharge. A discharge will act as an EMF due to being exothermic and raising the battery above room temperature, just as raising the battery temperature in an oven does. Academia need to show there is no displacement current whilst there is this voltage relaxation occurring after a discharge as claimed by examiner.

The examiner did not present any evidence at the viva although writing about it on 20/04/22, his claims of voltage relaxation are incorrect in Mr Blanche's experiments. The examiners claims do not explain the displacement current detected by the temperature sensors deployed on and around the charging electric field of the battery cell and ignoring electromagnetism's, Maxwell's/Ampere equation law see chapter 12.1. The examiner will not answer why there is a displacement current detected by the temperature sensors in home experiments and ignores Mr Blanche's questions. (VT Time 2 hr 13 mins)

The candidate did not state how long the batteries were in the oven before the data collection but this is an incidental minor point and has no bearing on conclusions.

### Exploration of Voltage relaxation

[Development of a voltage relaxation model for rapid open-circuit voltage prediction in lithium-ion batteries - ScienceDirect](#)

<https://doi.org/10.1016/j.jpowsour.2013.12.083>

In this report, voltage relaxation is defined as, '*depending on the study of the relaxation process of the diffusion over potential, which is caused by the insufficient transport of the reactants and dominates during most of the time of the entire relaxation process*', with a variant of around 50 milli Volts is identified over many experiments as the voltage relaxation over 20 hours or 2000 seconds in this report. They develop and present a rapid mathematical model to predict this phenomenon, with a less than a few millivolts error. There are no temperature sensors placed around batteries to try and identify whether this relaxation effect is due to a displacement current from its environmental surroundings in any of the provided reference reports. The journal papers supplied by the external examiner show no evidence of any study that would refute Mr Blanche's observations being wrong, Mr Blanche's study definitely provides evidence that challenges what is currently accepted by the examiner in battery technology theory as an event taking place between the reactants of the electrochemical device. **The experiments and findings by Mr Blanche in his experiments, make any journal papers work inconclusive and show this voltage relaxation claim has, a reaction of the electrochemical device having not been thoroughly investigated with regards to surrounding air temperature to cell reaction, they ignore the fundamental laws of electromagnetism, i.e, Boltzmann constant, Maxwell/ ampere law, which are the fundamental laws of electric field charge relating to any open circuit voltage measurement (OCV) of any electric field charge to equilibrium (force of**



positive attraction equal to force of negative attraction with no load, i.e open circuit voltage). Electric charge is a physical reaction and this is and has not been taken into consideration in these battery technology academic papers.

Below are links to other Papers investigated on voltage relaxation, with no evidence found of an investigation into a displacement current being the cause of voltage relaxation, and no study to rule out a displacement current being the reason of voltage relaxation.

<https://doi.org/10.1016/j.jpowsour.2015.11.044>

<https://doi.org/10.1016/j.electacta.2019.02.055>

<https://doi.org/10.1016/j.jpowsour.2013.03.053>

This claim by examiner is a false claim.

1. How many batteries were used in the investigation (seems to be one battery)?
2. Observations should ideally have error bars.

#### **FALSE STATEMENTS:**

1. It is evident after reading the 4 chapters on electric field charge of a battery cell, chapters, 4, 9 10, 11, (out of a total of 24 chapters in thesis), there are a total of six different cell designs used over a total of 9 different charge experiments analysed, with battery cell data shown in chapter 20, the Glossary, as one would expect, as it is not crucial to the theory of the thesis.

It is quite clearly stated what battery was selected and why battery selection was made in chapter 11.

The glossary chapter 20, and index, shows the mechanics of the data collection but it appears the examiner did not read this information. His claims contradicts the information supplied in thesis.

2. FALSE STATEMENT Error bars were not required due to the type of analysis. There was no error under investigation.

3. What is the accuracy of the thermocouple and voltage sensors? Are the observations systematic or random?

4. These were not discussed in the results. –

Points 3. 4.

#### **Minor information could be added to thesis from:**

[DS18B20 pdf, DS18B20 Description, DS18B20 Datasheet, DS18B20 view ::: ALLDATASHEET :::](#)

OPERATION - MEASURING TEMPERATURE The core functionality of the DS18B20 is its direct-to-digital temperature sensor. The resolution of the DS18B20 is configurable (9, 10, 11, or 12 bits), with 12-bit readings the factory default state. This equates to a temperature resolution of 0.5C, 0.25°C, 0.125°C, or 0.0625°C.

The above resolution of the temperature sensors information highlighted in yellow correlates with the figures, 35, 36, 38, 39, 40, 41, 43, 44, 45. An expert would go with this information and point it out to candidate.

Temperature sensor trends and accuracy are discussed in the conclusions of chapter 10 and results of chapter 11, page 69. Correlation of accuracy between sensors is seen in figure 38, TA and T1 showing same reading compared to T2 and with no error, there might be some flicker but this is discussed in thesis, but this is easily identifiable, and it is the trend of the sensors in all the experiments that confirm the theory and the observations made are correct, and in-line with endothermic charge in NASA experiment. Point 3, T1 shows same trend as T2, definitely not random or systematic.

NASA stated an accuracy of the thermocouple and Arc temperature thermocouple sensor variant of 0.1 degrees Celsius, chapter 4, (reference 57 and 58, page 7 and 9). Examiner did not read this report (VT time 1min 13 secs)

The candidate states a temperature variant, chapter 9, figure 26, thermal temperature variant of 1 degree centigrade measured by the thermostat on oven during the experiment. Other data was placed in index for ease of reading the thesis,

Temperature set to 25 degrees centigrade, step 1, 111, page 144.

Data and collection software program is shown in chapter 20.

The voltage is converted to digital by arduino software a standard accepted technology in electronics. There is a range of 1023 bits of analogue to digital, to analyse the voltage rise per second on graph, a lot of data per second for the graphs produced. Never questioned in Viva, this surely has been questioned by someone who is not an expert in any field of electricity or even electronics.

Can the T2 temperature on pg 62 really be considered as a drop and not a fluctuation due to measurement errors? – **FALSE STATEMENT**

It is not a fluctuation due to measurement errors, THE SENSOR CHANGES WHEN THE CONDUCTION CURRENT (THE EMF- the photoelectric effect) IS ENGAGED, ALL EXPLAINED IN THESIS, the data collected by the sensor then stays constant for nearly 400 seconds, see figure 36. The trend of the sensor is consistent with the 2 other sensors, VT Time 1hr 26 mins. Discussed in viva, not updated in Addendum. WHY?

On Pg 72 "you state that some of the electric field charge is coming from the surrounding air electrons", this is not true. There are no electron exchange from the external air, it's the change in – the electrode entropy that is causing the voltage to increase (in Figure 41) –

**FALSE STATEMENT ,** There will be a 'change of state' at the electrode, and that is the very definition of the word 'entropy'. Electrodes do not produce energy from nowhere, they will gather the charge due to attraction, Coulombs law, chapter 5.. It is the attraction of negative electrons from the surrounding air to the positive lithium ions that causes an increase in voltage in the electric field and the air temperature around the system drops.

**EXAMINER DOES NOT UNDERSTAND WHAT AN ENDOTHERMIC REACTION IS, AND CONTINUALLY TRIES TO MAKE THIS CLAIM THROUGHOUT THE VIVA AS-WELL. FRAUD, agenda to fail.**

TA is attached to the outside of the battery measuring outside air temperature, T1 is 15 mm from battery and measuring a lower air temperature(and not internal electrode entropy as claimed by examiner) compared to T2, energy IN THE FORM OF ELECTRONS have been removed from surrounding air just like we expect in an endothermic reaction. Voltage increase is due to this, there will be a change of state at the electrode. i.e more lithium ions and more attracted electrons.

On Pg 75, what the cell temperature below ambient for Test 3? – **(grammatically incorrect) I'm assuming you meant 'was'.**

Yes it can be quite clearly seen in figure 43 that TA is 4 degrees Centigrade lower than T2 at the beginning of data collection. **HASN'T READ THE EXPERIMENT**

On Pg 76 TA increases because the cell is placed in warmer environment and not because of an exothermic reaction. **False statement**

**NO, there is a discharge of cell voltage and an increase in cell temperature, this is an exothermic reaction on the conductor, this is the very definition of a discharge, as seen in figure 43 and 44 in thesis.**

- On Pg 77 you state "hence discharge of the ions..." there is no discharge reactions taking place in these results (the

Name (block capitals) DHAMMIKA WIDANALAGE (External Examiner)

Signature *W.D. Widanage* Date 20/04/2022

## 9. 1.2 External Examiners Report on Oral Examination

In black is examiners report, in red is exerts from viva, in brackets are Mr Blanche's comments.

1. During the examination, the student explained that the motivation for his work is the Newman energy machine and that lithium-ion batteries are meant to be an example of a electrochemical device displaying endothermic thermal effects as a way of verifying the Newman machine phenomena.

**VT: 10 MINUTES 23 SECONDS**

*(During the examination, the student explained,*

*Blanche: no, the key motivation was Joseph Newman*

*Ext: ok Fine*

*(the ext doesn't want to talk about Newman)*

*Blanche: he was my key motivation, because he was getting the same reaction as your seeing in (with) the battery. See.*

*Ext: ok, so this then was to support that?*

*Blanche: yea, like I said, (referring to what's written in the thesis) you can only have one set of rules for an electric field charge, you know, it's called electromagnetic theory written by Maxwell. If you're going to say that's different to any other electric field charge, then you're going to have another set of equations.*

*(There is a chapter on Maxwell in my work, Ext avoids this subject, and he hasn't read it and doesn't want to engage, as he doesn't have the knowledge. Wrong guy for this thesis, he wants it to be about something else about the battery.)*

2. The student was not aware of the work that has been done in the scientific literature that explains the observed endothermic (and exothermic effects) in batteries (which does not rely on nor need photo-electric effects or ideal gas equations).

**FALSE STATEMENTS VT: 5 MINS to VT: 7 MINUTES 16 SECONDS**

**(Examiner agrees with equation 5 and 6. The Examiner never presented any contradictory evidence to Mr Blanche's theory in pre viva or in the viva or the addendum to back up his claims. The examiner presented journal studies IN THE ADDENDUM REPORT WHICH WAS POST VIVA but WHEN analysed they provide no evidence that refutes Mr Blanche's theory, or supports Ext. claims in viva, and all are unrelated to Mr Blanche's theory.)**

*Blanche: well you can see it's a formula or an equation, I mean they're not equal to each other*

*Ext: but there's an identity there right.*

*Blanche: well ok I understand what you're saying,*

*Ext: Well I guess, I guess my question is, I understand what you're saying here,*

*Blanche: yea*

**VT: 12 MINUTES 20 SECONDS**

**(Ext claims there is theory that refutes my theory but never presents this theory.)**

*Blanche: and Naudin, who did his work with a Newman generator that he built, that's in chapter,*

*I think you've missed that chapter, I think that was in chapter 3.*

*Ext: there's some work from Lancaster that has studied this quite heavily, but anyway, the point, ok, the ideas that, there's a different thermodynamic explanation, that's been used and it's predictive, and that's the nice thing, with all equations, right they're predictive, theory, right has to be predictive. Ah otherwise it doesn't serve a purpose. So I suppose, did you come across, what's called ah, the rate of change of enthalpy, and that's how it's linked to the entropic quotient, of this, this, describe this a bit.*

*Blanche: well yea, entropy is a change in state,*

*Ext: mm, and did you come across it?*

*Blanche: and they think, or people say, entropy can only go one way, there can only be more chaos.*

*Ext: mm, exactly*

*Blanche: that's what's written, but that's wrong isn't it obviously.*

*Ext, that's what's written, but that's what's called the, well that's the irreversible component, the irreversible heat component. But there's reversible heat as well, right.*

*Blanche: so what do you mean by irreversible and reversible? Can you give a bit more explanation than that please?*

*Ext: sure, so it comes down to understanding how the temperature of the battery behaves, what's causing*

*Blanche: no, no, we're talking about an electric field charge, not a battery, my research is into the electric field.*

**VT: 13 MINUTES 47 SECONDS    NASA EXPERIMENT**

**(Mr Blanche applies fundamental gas laws to the adiabatic system, from the data of the electric field charge of the battery that NASA provide. Maxwell's theory of the displacement current in an electric field charge is for an open circuit voltage charge, which is what the battery charge is. (chapter 12.1 fundamental electric field theory), and how this relates to the abstract theory, but Ext. just wants to disagree with THE FACTUAL DATA IN CHAPTER 4 giving no reason why other, than claims there is data that refutes this and never presents this data.)**

**VT: 41 MINUTES**

**(Examiner contradicts himself and uses wrong arguments, such as gibbs free energy. Argues there is no such thing as an exchange of electron gases, i.e an endothermic or exothermic reaction.)**

*Blanche: why do you think there's a temperature drop then? Where do you think this energy goes from?*

Ext. ok, you have 2 electrodes in a battery, anode and cathode, and that's a configuration, that configuration has a certain amount of energy

**(they are just parts of the battery, they do not have an energy level of their own),**

Ext: and this then what's related to gibbs free energy, and where the rate of change of gibbs free energy is related to the entropy and reversible heat, not the reversible irreversible heat, and that configuration changes depending on the amount of coulombs that you put in. As you put in coulombs the configuration of your lattice changes and it absorbs.... inaudible

**(the lattice is the amount of ionised lithium that the negative electron gases are attracted to, this is explained in the thesis many times, didn't answer the question of why there's a temperature drop)**

(Exert from Gibbs free energy - Wikipedia)

[https://en.wikipedia.org/wiki/Gibbs\\_free\\_energy](https://en.wikipedia.org/wiki/Gibbs_free_energy)

(In thermodynamics, the Gibbs free energy (or Gibbs energy; symbol ) is a thermodynamic potential that can be used to calculate the maximum amount of work that may be performed by a thermodynamically closed system at constant temperature and pressure.)

**(The battery charge system is not a closed system, it is open to interaction with the surroundings, THIS IS WHY WE OBSERVE ENDOTHERMIC AND EXOTHERMIC HEAT IN SURROUNDINGS OF BATTERY, and my thesis is not about a constant temperature and pressure, Gibbs free energy does not apply.)**

Blanche: Can I just stop you there, can you tell me, where does the air temperature energy, that energy, where does it go?

Ext: to the configuration of the lattice

Blanche: it goes into the, errr to make ions, the energy is to make the ion energy, is that what your trying to say?

Ext it's the energy for the configuration of the lattice material right.

**(The lattice is the positive ions of the system, they are positively charged, and attract the air electrons and conduction electrons to make a growing electric field,)**

**(THE ELECTRONS ARE NOT ABSORBED THEY ARE THE OPPOSITE CHARGE TO THE positive LITHIUM LATTICE.)**

**(It is the emf energy input that is the catalyst and configures the lattice when there is a neutral or little ionisation charge in the mix of chemicals)**

**(General information on lattice by:)**

WebElements - lithium (Crystal Structure) (shef.ac.uk)

(In the bcc lattice, every lithium atom is surrounded by eight other lithium atoms organised into a cubic array (see above Figure in which the atom coloured red is surrounded by eight lithium atoms coloured dark grey). One way to visualize the bcc lattice is as two interlocked cubic infinite arrays of atoms M.R.Nadler and C.P.Kempfer, *Anal. Chem.*, 1959, 12, 2109.)

Blanche: so you're trying to say, that energy is sucked in, out of the air around it

Ext: that's not sucking out energy from the outside, the thermo, the temperature energy goes into the, energy, the elect, the material, the thermo dynamics, the lattice configuration changes depending on state of charge, And some charge is endothermic and some charge is exothermic.

Blanche: but your only talking in um words there, your not explaining it, I'm explaining it, down to charge and pressure with equations, I'm going further than your description there,

Ext: but equally your using that incorrect, because

Blanche: but it can't be incorrect, I've applied the equation, for gas laws, to the experiment, but you can't tell me I'm wrong .

Ex: you can't apply the gas laws here

Blanche: but you can, but you can,

Ext: no, because there's no electron gas there.

Blanche: so hang on, in the air, what do you think the electrons are, are they gases?

Ext: But those electrons are not what is involved here,

**(Let's go back to VT: 42 MINUTES)**

**Blanche: Can I just stop you there, can you tell me, where does the air temperature energy, that energy, where does it go?**

**Ext: to the configuration of the lattice**

**(he says the gases are absorbed by the lattice but now they are not involved, he's making it up as he goes along, he hasn't a clue, give me strength, the air electrons must have gone somewhere else, it's magic!)**

Blanche: but what are they then?

Ext: electrons in a circuit diagram you drew **(makes no sense)**

Blanche: you're not understanding this I'm afraid,

Ext: where's the circuit diagram you drew?

**(Examiner disagrees with what an endothermic reaction is)**

**VT: 46 MINUTES**

Blanche: out of the air yeah. That's it , we've seen it here, this by these figures, it shows us, it was 35 degrees and now it's 33 degrees all around it. Well it can't just disappear out of there. It was specially built Arc

Ext: so some substance electrons come in, going into there, conducting through the material, into this electric, right.

Blanche: well, are they conducting, no, they're charging the material, they're making lithium ions and an electron force around it, (mistake, making an electron force around the lithium ion.)

Ext, but that's where I disagree.

Blanche: well how can you disagree, that's what an electric charge is?

*Ext: there's a vacuum, still happen, Electrons cannot go from outside through this material, for its fully insulated. What if it's plastic?*

*Blanche: are you serious?*

*Ext: how does then electrons go through it?*

### **(UNBELIEVABLE RUBBISH FROM A SO CALLED EXPERT)**

3. He was not aware of the entropy coefficient of lithium-ion batteries, which is key characteristic of the electrodes and can be used to predict the cell temperature (endo and exothermic) to a given applied current and ambient temperature.)

**False Statement** Mr Blanche was and is aware of entropy coefficients, yet the examiner is trying to falsify what the Thesis is about, it is not about electrodes or battery coefficients. All battery systems and other systems will have different coefficients unless they are identical systems.

However Mr Blanche states in chapter 14, equation 11:

(X) = Heat gain coefficient constant for a specific design of a specific system.

### **OBVIOUSLY WENT UNREAD BY THE EXAMINER**

**Another point that must be made, what difference does battery coefficient research make to the thesis? Every system has a different coefficient and depends on many factors, i.e – parameters placed on system. Totally false statement meant to mislead the non- expert reader. Scientific fraud.**

### **VT: 12 MINUTES 20 SECONDS**

*Blanche: and Naudin, who did his work with a Newman generator that he built, that's in chapter, I think you've missed that chapter, I think that was in chapter 3.*

*Ext: there's some work from Lancaster that has studied this quite heavily, but anyway, the point, ok, the ideas that, there's a different thermodynamic explanation, that's been used and it's predictive, and that's the nice thing, with all equations, right they're predictive, theory, right has to be predictive. Ah otherwise it doesn't serve a purpose. So I suppose, did you come across, what's called ah, the rate of change of enthalpy, and that's how it's linked to the entropic quotient, of this, this, describe this a bit.*

*Blanche: well yea, entropy is a change in state,*

*Ext: mm, and did you come across it?*

*Blanche: and they think, or people say, entropy can only go one way, there can only be more chaos.*

*Ext: mm, exactly*

*Blanche: that's what's written, but that's wrong isn't it obviously.*

### **MR BLANCHE IS AWARE OF ENTROPY AND IT IS REFERENCED MANY TIMES IN HIS THESIS – FALSE STATEMENT.**

4. During his explanations, the student came across as defensive, aggravated and at times condescending. Agreement on many discussion points were difficult to achieve



**FALSE STATEMENT**, listen to the viva and judge for yourself. Agreement was difficult to achieve due to the lack of expertise or inept scientific knowledge both examiners exhibited, refuting known scientific theory and laws to commit fraud. The external and internal examiner had no expertise in electromagnetism which is quite clear from their false statements and had a basic lack of scientific understanding. i.e.

1. Electrons do not move in the air around a conductor
2. Electrons cannot enter the battery from outside air, therefore an endothermic reaction does not exist.
3. Constant volume concept and applying gas laws to an adiabatic process.

Name (block capitals)	DHAMMIKA WIDANALAGE	(External Examiner)
Signature	<u>W.D. Widanage</u>	Date <u>30/05/2022</u>

## 10 1.3 External Examiners Report on matters of general concern or interest, including issues related to quality and standards, which should be drawn to the college, or to the university.

The thesis was far from a conventional high-quality report, expected of a MSc by Research.

**FALSE STATEMENT.** The thesis is an original work and the first in history to demonstrate endothermic charge for renewable energy efficiency to make endothermic energy generators, such as the Newman Generator by utilising Maxwell's displacement current. It is a high quality report with very little add-ins required. This thesis could possibly attract a Nobel Prize due to being the first theory of endothermic electric charge for a renewable energy generator.

**The only thing that is not high quality are the two fraudulent examiners and chairperson. As you can plainly see from this Rebuttal Report. The minutes were not kept for one specific reason: an agenda to fail this work due to the correlation with the Newman Generator and a factual presentation of a new endothermic electricity theory.**

The key motivation of the work by the student was to verify the Newman energy machine, a machine claimed to be capable of generating more power at the output than at its input (efficiency >100%).

The key motivation of the work was described in the Title, Abstract, and chapter 1. **As there is an agenda to fail**, the examiner tries to mention Newman as if he is a derogatory scientist, instead, all the evidence supports Newman's invention along with the affidavits in his book, the testimony by the special taskmaster and the research by Naudin (chapter 3). The examiners are desperately trying to make up a new scientific theory that refutes current physics to claim that Newman's machine does not do what was claimed. Ignoring research by Mr Blanche and links supplied by supervisors and what they show. i.e the NBS fraud.

The lithium-ion battery experiments presented in the thesis do not provide proof of the Newman machine and such claims cannot be supported by the data presented.

**FALSE STATEMENT** The displacement CURRENT that is discussed in the Abstract is identified by tracking the electric field charge of the lithium ion battery charge BY TEMPERATURE CHANGE. The thesis **does provide proof that an electric field charge is first endothermic and a displacement current can be utilised for renewable endothermic energy generation, such as a Newman generator, an open circuit charge is the connection here, that is exactly what the Newman generator is and the electric field charge of the battery charge demonstrates a correlation of charge.**

TOTAL CURRENT = CONDUCTION CURRENT + DISPLACEMENT CURRENT, CHAPTER 12.1. There can only be one set of laws for an open circuit electric field charge, and these we know and were written by the Scottish mathematician James Clerk Maxwell. As stated in the thesis, there are parameters to obtaining the displacement current for energy gain efficiency.

Examiner ignores work by Naudin, chapter 3. Also this was discussed with examiners in viva but they were *silent, and would not engage on this topic.*

**VT: 12 MINUTES 20 SECONDS**

### Examiner avoids abstract –endothermic generator

*Blanche: and Naudin, who did his work with a Newman generator that he built, that's in chapter, I think you've missed that chapter, I think that was in chapter 3.*

*Ext: there's some work from Lancaster that has studied this quite heavily,*

*(referring to entropy of battery study,)*

*Ext: but anyway, the point, ok, the ideas that, there's a different thermodynamic explanation, that's been used and it's predictive, and that's the nice thing, with all equations, right they're predictive, theory, right has to be predictive. Ah otherwise it doesn't serve a purpose. So I suppose, did you come across, what's called ah, the rate of change of enthalpy, and that's how it's linked to the entropic quotient, of this, this, describe this a bit.*

*Blanche: well yea, entropy is a change in state,*

*Ext: mm, and did you come across it?*

*Blanche: and they think, or people say, entropy can only go one way, there can only be more chaos.*

---

There is already an existing body of scientific work capable of explaining (and predicting) the temperature dynamics of lithium ion batteries.

**FALSE STATEMENT** That's exactly why the thesis is not a study of that!!! Again the examiner is trying to relate this Thesis to unrelated information and temperature dynamics and coefficients of lithium ion batteries WHICH was never the purpose of the study and was never said to be the purpose by Mr Blanche, and as demonstrated in the Abstract, title of thesis and chapter 1. The examiners never provided any data that refutes Mr Blanche's theory, i.e studies of outside air temperature measurements related to a charging electric field of a battery system or other system, with respect to time.

Some experiments were conducted at the student's home. This should not have been the case or allowed, primarily as a safety concern for the student and secondly the data is not reliable for any scientific investigation. Any tests involving li-ion batteries should be done in an appropriate lab setting with necessary safety precautions in place.

**FALSE STATEMENT** Mr Blanche was subjected just like everyone else to covid restrictions. The supervisors of the Thesis encouraged Mr Blanche to continue his work at home and arranged for Mr Blanche to go to the Lab and remove equipment for use at home. This is a crass comment by the examiner.

Mr Blanche is a mature graduate, age 57, and demonstrated he was able to build a circuit which controlled the charge of the battery automatically, see CHAPTER 10 AND CHAPTER 20 the glossary, Arduino sketch float voltage limits, with relay control. You can see the limits placed on the charging requirements, again the examiners fail to have read the Thesis rigorously. Safety measures were implemented in the software programme and a volume containment box was used just as in a laboratory setting, see figure 42.

The data is reliable and confirms itself! Why is the data not reliable? Just an opinion with no substance, literally accusing Mr Blanche of academic fraud? Mr Blanche used all possible methods to collect correct data and analysis in a scientifically rigorous method.

The student also dedicated several chapters (Prologue, Declaration of Investigation) to his views on the scientific funding landscape and Covid pandemic theories. These served no purpose in supporting his work.

**FALSE STATEMENT** The prologue is not a chapter which is the first thing a reader will notice from the list of contents. The covid research included, was done as a balance to the official narrative as Mr Blanche knew he was dealing with an academic establishment that would just repeat the government narrative, no matter what the science actually said. Covid was something that was directly affecting Mr Blanche's work at the time of research and writing the thesis. The main reason was to demonstrate that there were lots of medical experts challenging THE OFFICIAL NARRATIVE. Universities were going along with the official narrative when an experimental drug was taking lives in the thousands in the UK alone, and adverse reactions in the millions. Any scientist should have been concerned with this! Mr Blanche reported this to deaf ears- the senior management team of the university, who were actively encouraging students to take the experimental medical treatment ignored Mr Blanche's research and failed to respond to many emails. As Mr Blanche stated, the University system is not fit for purpose if it blindly follows politicians over their own scientists. ONCE UPON A TIME IF SOMEONE DIED OF AN EXPERIMENTAL DRUG TRIAL, THE TRIAL WOULD BE STOPPED AND SCIENTISTS WOULD INVESTIGATE WHAT WENT WRONG. THAT IS THE VERY REASON YELLOW CARD SCHEMES OR KNOWN AS 'VAERS' IN THE USA, WERE INTRODUCED.



As can be seen, the deaths have risen by 690 from the experimental drug since Mr Blanche first reported this to the University in his report.

Source Data:

[Coronavirus vaccine - summary of Yellow Card reporting - GOV.UK \(www.gov.uk\)](https://www.gov.uk/coronavirus-vaccine-summary-of-yellow-card-reporting)

## COVID-19 Vaccine Analysis Overview

Report run date: 01/07/2022  
Data lock date: 29/06/2022

Manufacturer	Total reports	Total reactions	Total fatalities
AstraZeneca	245,771	870,712	1,291
Moderna	39,809	131,815	64
Pfizer	171,913	495,365	803
Unspecified	1,768	5,429	49
<b>Totals</b>	<b>459,261</b>	<b>1,503,321</b>	<b>2,207</b>

The examiners seem to have many views about this work, yet Mr Blanche is criticised for having a view that is fully researched.

The declaration of investigation supports the Abstract and is definitely relevant, and that is another false claim by the examiners.

Many equations were written however their use and purpose were not clear neither applied to make any predictions of the experimental observations.

**FALSE STATEMENT**, all equations were relevant and their use and purpose is quite clear AND DOCUMENTED to support the theory presented. Mr Blanche applied mathematical figures to equations as an example for the examiners in the Viva, yet it seems the examiners forgot this when they wrote their Addendum report.

*Blanche: I don't need a diagram on this one, Boltzmann's constant, it goes back to that. Do you understand Boltzmann constant?*

*Ext: explain it to me*

**VT: 44 MINUTES**

*Blanche: There's a certain amount of, in this box here (NASA's Arc) of 35 degrees, right, there's a certain amount of energy yea, which Boltzmann said if it was 35 degrees on this, we've got it to  $1.38 \times 10^{-23}$  j/k right, right, that's the amount of energy there is right, in 1 kelvin right, say this is 35 kelvin not 35 centigrade ok,*

*Ext mm*

*Blanche: so we are saying is  $35 \times 1.38 \times 10^{-23}$  j/k inside this Arc, right, when we start the experiment, ok, 15 minutes into the experiment, the thermometer, thermistor ( I meant thermocouple) is now measuring 33 degrees. So we're saying,  $33 \times 1.38 \times 10^{-23}$  j/k inside there now alright, it's gone less, so there's 2 kelvin's of energy, joules energy, disappeared into the battery, to create the pressure right, P gone up, but the miraculous thing is the temperature's gone down, the temperature has gone down because this energy that was here, this 35 degrees, is now 33 degrees, that energy has gone into the pressure into the electric field, that's what I'm saying, that's, and they're electron gases, they're air, they've been ' they've been taken out of molecules, maybe water molecules in there, yea, there could be water in there,*

*Ext: so in this diagram we see, you're saying here, there's applied load (the battery is the load) and then there's electrons coming from the external air*

*Blanche: yea,*

*Ext: going in there*

*Blanche : yea as well yea , yep*

*Ext: so there's electrons being extracted,*

*Blanche: the load, the force, you put on it causes this reaction. At the beginning of the electric field charge.*

*Ext: and these electrons are stripped from some molecules,*

**NEVER UPDATES Addendum with any of the comments made in viva.**

The thesis was difficult to follow and very poorly structured. Some chapters were only one or two pages long (Chapter 13, 14 and 15).

**FALSE STATEMENT** Information is given its own chapter on merit of stand-alone information and relevance, i.e. **A ONE PAGE CHAPTER IS CHAPTER 6, WHERE NATIONAL GRID STATE THAT ELECTRONS MOVE IN THE AIR TO A CONDUCTOR, BUT IT SEEMS THEY FAILED TO READ THIS ONE PAGE CHAPTER (see below). THIS REACTION IS IMPOSSIBLE ACCORDING TO THESE EXAMINERS. THEY SHOULD HAVE ALSO READ THE THESIS RIGOROUSLY AND PERHAPS THEN IT MAY NOT HAVE BEEN SO DIFFICULT TO FOLLOW.**

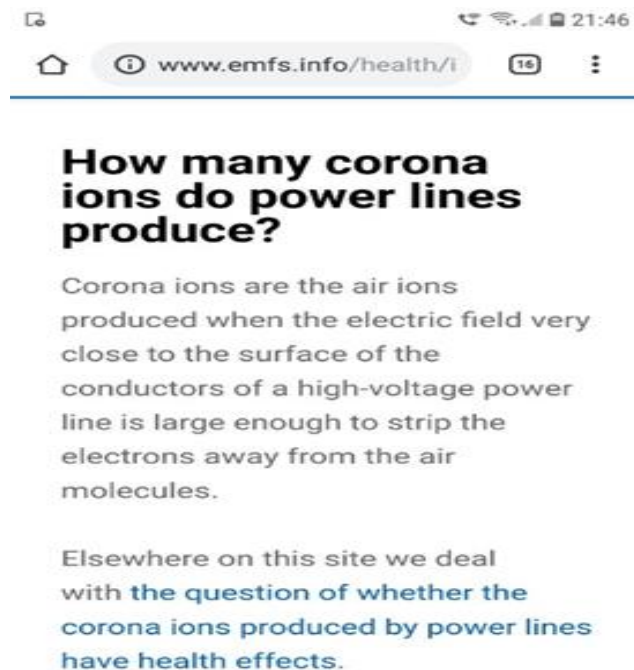


Figure 18: This is a description by national grid taken from their website. I have since found this information difficult to find but screenshot this figure when I came across it.

This statement by the examiners demonstrates they have been coerced and colluded with university hierarchy and are just trying to stop this work becoming public knowledge. It is an original work of significant importance to electricity physics and the advancement of educational learning within energy physics and renewable energy production. The funders of university and current renewable devices do not want this made public or the education knowledge it contains, this is why Mr Blanche apparently got everything wrong, and has no strengths to his work.

The quality of the report is well below standard and the student needs more experience in writing a coherent technical report for an MSc by Research qualification. I am not sure how much supervision the student may have received or if his work was read before submission.

**FALSE STATEMENT** The quality of the work is very high and the most original and correct piece of electricity physics to be written in a university for a very long time. It has the same significance as the discovery of electricity, but this time the fact is we can use an electric field charge with parameters placed on the machine to benefit from a natural phenomenon reaction to gain the displacement current and this leads to more energy on the output than the input of the device. The examiners and supervisors were obviously under instruction by the university's hierarchy to stop this work progressing and objected to the work in any way they could find, even if their claims went against the

fundamental laws of physics we know. The supervisors claimed they just wanted Mr Blanche to pass his Masters, but according to the examiners, this is only possible if Mr Blanche removes his complete study, as the title of the work demonstrates. See chapter 1.

Name (block capitals) DHAMMIKA WIDANALAGE (External Examiner)  
Signature WD Widanage Date 20/04/2022

## 11 2 INTERNAL EXAMINER'S REPORT

(Additional sheets may be appended, if necessary.)

THIS APPARENTLY IS A PRE VIVA REPORT, IT IS DATED THE DAY OF THE VIVA. THIS WAS NEVER PRESENTED TO MR BLANCHE ON THE DAY, OR AFTER THE VIVA.

The below technical recommendations must be addressed **before re-submission of thesis.**

FROM THIS OPENING STATEMENT, Mr Blanche has already failed before the oral exam? Did Summers get confused what part of the report he was writing whilst rushing to finish his reports?

1. Equation (1) needs to be corrected.

**FALSE STATEMENT** We cannot ask Lussac or Boltzmann to correct this equation, as they've been dead a long time. The examiner spent the first hour OF Viva arguing with the legitimacy of a fundamental gas law and THE constant volume of an adiabatic designed Arc. He tries to claim volume can increase by new molecules being generated in the battery, Due to the electric charge and hence increasing the net volume inside the adiabatic arc.

**VT: 15 MINUTES**

(the only variables in this equation that is being applied to the NASA experiment are, pressure and temperature, )

$PV=nRT=nNkT$  - Because the number of molecules in the sample,  $N$ , is  $N=nN$  we have  $PV = NkBT$  (1)

(This is what the Int is arguing against to be incorrect, This is explained in ref. 59 AND 60. I GAVE 2 references for this due to the importance of this formula. The Int hasn't examined the Thesis or the references and doesn't understand how the, **MAINSTREAM ACADEMIC PHYSICS COMMUNITY APPLY GAS LAWS TO ADIABATIC PROCESSES.**)

[Below is taken from reference 59 which explains relationships.

We also need the gas constant expressed per molecule rather than per mole. **Since there is Avogadro's number of molecules per mole**, we can divide any of the values above by  $N$  to get  $R$  on a per-molecule basis. Traditionally, however, this constant is given a different name; it is **Boltzmann's constant**, usually given the symbol  $k$ .

$k=R/N=1.381\times 10^{-23} \text{ J K}^{-1} \text{ molecule}^{-1}$

This means that we can also write the ideal gas equation as  $PV=nRT=nNkT$

Because the number of molecules in the sample,  $N$ , is  $N=nN$ , we have  $PV=NkT$  ]

**VT: 17 MINUTES**

Internal examiner is not an expert.

*Int: can you change the capital  $N$ , because it doesn't make sense that capital  $N$  equals small  $n$  multiplied by big  $N$ .*

*Blanche: perhaps it's a typing error, perhaps it's a typing error but I don't think so.*

*Int: it can't be true*



*Blanche: I can't quite remember now but I can look in to that. I will look into that for you.*

*Int: no, no, look, what is the correct version of this equation?*

*Blanche: this one here. Equation 1.*

*Int: But obviously it's not correct because you have capital N equal to small n times capital N*

*Blanche: yea there is an explanation for it, but I can't remember to give to you now but I can look it up for you. Ok, and I guarantee that equation is right.*

(I HAD GIVEN THE EXPLANATION in the thesis, it was referenced)

(Int. is again underlining the fact that he hasn't examined the Thesis or the references AND IS NOT AN EXPERT IN THIS FIELD OF PHYSICS)

**VT: 35 MINUTES**

Int continues to argue against equation 1, constant volume, molecules appear out of a chemical reaction to increase adiabatic volume in arc!

*Int: aa that's the main question, I think er, if you use this equation, how to make sure, ah, what are variables, what are constant. for example, in these equations you keep talking about ah, a capital N and volume and constant, you can't be sure that volume is constant. But number of moles, capital N is not constant.*

*Blanche: well where did they come from then?*

*Int: From a chemical reaction*

*Blanche: so they appear out of nothing. They can't do that, it's impossible.*

*Int: no I think that you see that ah. For example, I'm no **EXPERT** of batteries, but if there's a chemical reaction, is that um um some more molecules could be generated.*

*Blanche: No, impossible, that goes against chemistry. You've got to have a balanced equation,*

---

2. Equation (2) cannot be used for explaining the special case presented in the experiment, i.e. the endothermic effect at the start of charging process.

**FALSE STATEMENT**

You can because there is only one variable unknown. That is the temperature energy which we observe from the graph. GIVES NO REASON WHY this is a special case and cannot be used? Quite ironic, the examiner thinks you cannot apply Gas laws based on Boltzmann constant to an adiabatic system but you can argue the Thesis is wrong based on Boltzmann's entropy, see chapter 4 of this report.

The equation can be used, as it shows the relationship between the pressure and temperature reaction in the experiment during the endothermic reaction using an adiabatic system. Agenda to Fail.

This is an example of applying an equation or formula, to an experiment, which the examiners complain Mr Blanche does not do, that is ironic!

**VT: 51 MINUTES**

*Int: no you can't apply a simple formula to everything, that's what I said.*

*Blanche: well yea I can,*

*Int: that has been ah*

*Blanche: I can, I can apply that because you've got a fixed amount of volume and gases in that experiment. So I, so I can show by using that formula that the pressure has reduced due to the temperature drop. But the pressure hasn't reduced because we know the pressure has gone up in the voltage charge, and I'm saying the energy, has been reduced out of the air around the battery and have gone into the electric field charge. So you've gained energy out of the air into your electric field charge. That's the whole point. That's quite easy to understand.*

The following **science** is taken from

### [3.15: Exothermic and Endothermic Processes - Chemistry LibreTexts](#)

"A chemical reaction or physical change is **endothermic** if heat is absorbed by the system from the **surroundings**. In the course of an endothermic process, the system gains heat from the surroundings and so the temperature of the surroundings decreases. The quantity of heat for a process is represented by the letter  $q$ . The sign of  $q$  for an endothermic process is positive because the system is gaining heat. A chemical reaction or physical change is **exothermic** if heat is released by the system into the surroundings. Because the surroundings is gaining heat from the system, the temperature of the surroundings increases. The sign of  $q$  for an exothermic process is negative because the system is losing heat."

"When physical or chemical changes occur, they are generally accompanied by a transfer of energy. The **law of conservation of energy** states that in any physical or chemical process, energy is neither created nor destroyed. In other words, the entire energy in the universe is conserved. In order to better understand the energy changes taking place during a reaction, we need to define two parts of the universe, called the system and the surroundings. The **system** is the specific portion of matter in a given space that is being studied during an experiment or an observation. The **surroundings** is everything in the universe that is not part of the system.

In practical terms for a laboratory chemist, the system is the particular chemicals being reacted (**IN NASA experiment the system is the battery housed inside the TI BOMB**), while the surroundings is the immediate vicinity within the room (**IN NASA experiment the volume of air in the ARC surrounding the TI BOMB is the surroundings, which is a sealed unit to the outside room**). During most processes, energy is exchanged between the system and the surroundings. If the system loses a certain amount of energy, that same amount of energy is gained by the surroundings. If the system gains a certain amount of energy, that energy is supplied by the **surroundings**"

Mr Blanche explores the conservation of energy in chapter 5 and chapter 15.

3. All equations must be used quantitatively and correctly referenced, i.e. calculated results must be presented with the equation.

**FALSE STATEMENT** there is no need to apply values with calculated results to explain a formula or equation to a theory. Not all formulas or equations are presented with calculated results in any scientific paper although in chapter 16 Mr Blanche gives a full mathematical equation related to endothermic charge for a renewable endothermic generator. **TOTALLY IGNORED BY EXAMINERS**. Mr Blanche gives equations value and describes it in viva **WHICH EXAMINER IGNORES IN HIS POST VIVA COMMENTS**.

**VT: 19 MINUTES**

*Ext: so what would the values be, what would the figures be?*

*Blanche: if you want to put values in, let's just give them any value right, but the important thing is,  $T_s - T_d$*

*Ext which in this graph , what does it mean then*

*Blanche: temperate start is 35, yea? Minus temperature drop, right, say 33 not 33.26, just to make it easy for us right, so we end up with 2 there, yea,*

*Ext: mm*

**VT: 20 MINUTES**

*Blanche: so the pressure will be equal to  $N \times K \times 2$  (should have said  $\times 33$ ) divided by the volume, there's a set volume in that Arc as I told you. Right, so what we're seeing is, seeing a lower pressure at the bottom of that temperature curve,*

*Ext : inside the battery? Outside the battery? does it matter?*

*Blanche: on the battery, yep, where they put the temperature sensor, yea*

*(It's on the T1 bomb, which is on outside of the containment of the battery)*

*Ext: mm*

*Blanche: yea, I showed you where that was, I'll show you again, see there, that's the titanium bomb they hung from the arc, and they put the temperature sensor at the bottom of it,*

*Ext: ok, ok*

*Blanche: right, so when they run that experiment, with a C5 charge, 4.2 constant voltage I think, you ended up with a lower temperature there in the first 15 to 20 minutes, whatever it was than when you started, so, the pressure on this equation that we have, so is going to be lower than we started. Because when we started it was 35, yea,  $T_s$ , so when we finish it's going to be lower, it's gonna be, so the pressure on the other side of the equation,*

*Ext: The volume doesn't change?*

*Blanche: no the volume in the arc is the same yea,*

*Ext: mm (Ext agrees about the volume, but Int. says nothing)*

*Blanche: yea, they built the Arc, and put this hanging from the Arc, it's all enclosed environment,*

*Ext: mm ok*

*Blanche: so the volume is the same, that is why we can use this equation see.*

*Ext: mm*

*Blanche: yea*

*Ext: what's (inaudible)*

*Blanche: so the point is,*

Ext: mm

Blanche: which I'm getting to, is this, as we were starting to talk about entropy, the point is this, we are taught that when temperature goes up so does pressure, but as we have found on this experiment, pressure has gone down

4. Photoelectric effect is not applicable to this experiment.

What experiment? I'm going to assume you mean the NASA experiment. The photoelectric effect is applicable to all the experiments contained in the thesis, as it is the first event in a charging electric field.

External examiner agrees with formula of photoelectric effect, this is not discussed in Addendum.

**VT: 7 MINUTES 16 SECONDS**

Blanche: well you can see it's a formula or an equation, I mean they're not equal to each other

Ext: but there's an identity there right.

Blanche: well ok I understand what you're saying,

Ext: Well I guess, I guess my question is, I understand what you're saying here,

Blanche: yea

Ext: as the mathematics is not right, this is in Newton's, what units is this? (Inaudible)

(I HAVE DEMONSTRATED THE EQUATIONS WITHOUT MATHEMATICS,

THE FORMULAS OR EQUATIONS ARE RELATIONSHIPS BETWEEN FIGURES AND FORMS)

Blanche: um, volts and amps

Ext: right this is Newton's (inaudible), I think what your trying to say is, there's an electromotive force bringing about this right

Blanche: yes, exactly (if you had read my work it is thoroughly explained)

Ext: and that electromagnetic, agreed, that's true.

(EXT Agrees with equation 5 and 6, but says it is misleading in Addendum!)

Int: ok the equation not right

Examiners ignore Chapter 19.2, the reason this is ignored is due to the fact it is an evaluation of a journal paper. So some journal papers that support Mr Blanche's theory must be ignored and, other journal papers which are totally unrelated to Mr Blanche's thesis are marked as some sort of evidence that Mr Blanche's theory is incorrect. Yet the examiners offer no extracts from these journals to underline their reasoning. Agenda to Fail.

5. The image quality of all experimental figures needs to be improved. All experimental figures need to be added error bars.

FALSE STATEMENT TRYING TO MISLEAD THE NON-EXPERT.

THESE ARE THE SAME COMMENTS IN ADDENDUM, COPY AND PASTE, WHY? NEVER DISCUSSED IN VIVA, SEE Mr Blanche's addendum comments.

6. Figures 52 and 53 are not correct, electrons don't flow in air circling a conductor.

**FALSE STATEMENT.** Examiners try to argue against electron gas exchange, therefore, endothermic and exothermic reactions do not exist, all our electricity and physics observations since Sir Isaac Newton are wrong, and this is a farce.

**VT: 38 MINUTES**

*Blanche: I don't know what, all I know that, the chemistry I studied, a molecule is 2 or more elements added together and if you split them up, you can end up with more molecules, but they'll be the same sum of the one you split up. I know that, and when we go back to this equation here, back to this experiment here, you end up with a lower air pressure, on the outside of the bomb, because you've removed electrons out of the air into the electric field charge of the battery. Which I prove in my home experiments test 2 as well. So it's not a chemical reaction, your being side tracked by chemical reactions, chemical reactions need heat and then they can absorb heat and you can have an endothermic reaction. But this is a physical electric field charge reaction.*

*Ext: there I disagree*

**(The external examiner has no understanding of electric field charge or basic chemistry and physics, he has not read my work and does not understand electromagnetism processes. He does not know what a physical reaction is, and he does not know the difference between physical and chemical reactions, see chapter 4 of this report.)**

*Blanche: Well you're disagreeing with Planck's law then.*

*Ext: so here's here's what I'm saying is the equipment your showing is not relevant to the experiments you've shown against it, that's the point I'm making (makes no sense)*

**(I used batteries to show how an electric field charge is endothermic as well as exothermic, same as NASA.)**

**Naudin used a Newman generator to show an electric field charge is endothermic, THIS WENT UN-CHALLENGED IN THE VIVA.**

**From Thesis chapter 8, -A study by Chih-Chung Lai et al / Nano Energy 25 (2016) pages 218–224 [72], showed how a tuneable endothermic plateau can enhance energy storage efficiency up to 21% at specific identified temperatures using binary metal alloys, chapter 8.**

**My theory is on an electric field charge, but this equipment according to the examiner, is not relevant to study an electric field charge, obviously a battery doesn't generate an electric field and a magnetic field! (Condescending comment)**

7. Basic operation principle of the battery under investigation must be presented.

**FALSE STATEMENT** A BATTERY WAS NOT UNDER INVESTIGATION, Basic battery technology was presented in chapter 9. Six references were also offered in this part about battery development [references, 73, 74, 75, 76, 77, 78]

**This is not an undergraduate assignment. Operating principles of a battery is not what I am studying. I am not investigating batteries, this has already been done many times, and my study is an original renewable energy thesis, read the title and abstract.**

8. Part or full of reference papers cannot be directly copied and pasted into thesis, for example on page 114, section 19.2

**FALSE STATEMENT** If including other peoples' study develops my theory then it is perfectly acceptable and this is what scientists do, I am not trying to claim their work as mine. Again the examiner gives no reason for his comment. Also, the example referenced by the examiner is a journal that supports my theory and therefore they don't want it in my thesis.

9. References should be correctly formatted, for example using standard IEEE conference or journal format. More literature study needs to be conducted in relation to batteries, battery charging, temperature characteristics of batteries.

**THIS IS A MASTERS AND NOT A CONFERENCE OR JOURNAL PAPER, - FALSE STATEMENT.**

A battery project was not the purpose of my study, again, agenda to fail.

References given are very accessible and are standard and are not just quoting from journal papers, I referenced books written by Nobel Prize winners, i.e Mr Bridgman reference 94, Townsend chapter 7 of thesis. Use the below references to study what gas laws equations are and see how they are applied.

[Ideal Gases under Constant Volume, Constant Pressure, Constant Temperature, & Adiabatic Conditions \(nasa.gov\)](http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20070032054.pdf)

The screenshot shows the NASA LTP (Lunar Technology Program) website. The main navigation bar includes links for Aeronautics, Virtual Visits, Math/Science, Teacher's Corner, IAR Archive, and LTP Home. Below this, there is a sub-navigation bar with links for Math & Science Home, Proficiency Tests, Mathematical Thinking in Physics, and Aeronauts 2000. The main content area is titled 'Ideal Gases under Constant Volume, Constant Pressure, Constant Temperature, & Adiabatic Conditions'. It includes a note to the student, the equation of state for an ideal gas, and the first law of thermodynamics.

**Math & Science Home** | [Proficiency Tests](#) | [Mathematical Thinking in Physics](#) | [Aeronauts 2000](#)

**CONTENTS**

- [Introduction](#)
- [Berni's Piano Tuner Problem](#)
- [How Old is Old?](#)
- [If the Terrestrial Poles were to Melt...](#)
- [Sunlight Exerts Pressure](#)
- [Walking Eastward](#)
- [What if an Asteroid Hit the Earth?](#)
- [Using a Jeep to Estimate the Energy in Gasoline](#)
- [How do Police Radars really work?](#)
- [How "Fast" is the Speed of Light?](#)
- [How Long is a Light Year?](#)
- [How Big is a Trillion?](#)
- [Seeing the Earth, Moon, and Sun to Scale](#)
- [If Stars and Drops of Water](#)
- [If I Were to Build a Model of the Cosmos...](#)

**Ideal Gases under Constant Volume, Constant Pressure, Constant Temperature, & Adiabatic Conditions**

*Note to the student: The following section is a reduction of college notes I made in introductory thermodynamics. It does not read as easily as the preceding sections. I include it here because, for me, it represented a significant unification of the ideas presented in the text and during lecture. The first year college student will certainly find it useful.*

The equation of state for an ideal gas is

$$pV = \mu RT \quad 1.$$

where  $p$  is gas pressure,  $V$  is volume,  $\mu$  is the number of moles,  $R$  is the universal gas constant ( $= 8.3144 \text{ J}/(^{\circ}\text{K mole})$ ), and  $T$  is the absolute temperature. The first law of thermodynamics, the conservation of energy, may be written in differential form as

$$dq = du + p dV \quad 2.$$

where  $dq$  is a thermal energy input to the gas,  $du$  is a change in the internal energy of the gas, and  $p dV$  is the work done by the gas in expanding through the change in volume  $dV$ .

<https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20070032054.pdf>

[2.7: The Ideal Gas Constant and Boltzmann's Constant - Chemistry LibreTexts](https://www.libretexts.org/Bookshelves/Chemistry/Book%3A_Chemistry_LibreTexts/Chapter_2%3A_The_Ideal_Gas_Constant_and_Boltzmann's_Constant)

[Ideal gases and the ideal gas law:  \$pV = nRT\$  \(chemguide.co.uk\)](https://chemguide.co.uk/physics/ideal_gases/ideal_gas_law.html)

## Thermodynamics

The **adiabatic process** has been important for **thermodynamics** since its early days. It was important in the work of Joule because it provided a way of nearly directly relating quantities of heat and work. Energy can enter or leave a thermodynamic system enclosed by walls that prevent mass transfer only as heat or work.

### [Adiabatic process - Wikipedia](#)

Microsoft Bing

what is an adiabatic environment

geoffrey 4586

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Adiabatic System: An adiabatic system is a **system that has no exchange of energy or matter with the surrounding environment**. Isolated System: An isolated system is a system that has no transfer of energy and matter through its boundaries and has no surrounding environment. Surrounding

**Difference Between Adiabatic and Isolated System**

[pediaa.com/difference-between-adiabatic-and-isolated-system/](https://pediaa.com/difference-between-adiabatic-and-isolated-system/)

Exchange of energy  
Exchange of matter

Was this helpful?

Adiabatic Process

In thermodynamics, an adiabatic process (Greek: adiabatos, "impassable") is a type of thermodynamic process that occurs without transferring heat or mass between the thermodynamic system and its environment. Unlike an isothermal process, an adiabatic process transfers energy to the surroundings only as work. As a key concept in thermodynamics, the adiabatic process supports the theory that explains the first law of thermodynamics.

Wikipedia

At constant volume in a closed container, how do you explain that increasing temperature leads to increasing gas pressure?

Chemistry > Gases > Gay Lussac's Law

#### 1 Answer

Truong-Son N.  
Feb 16, 2017

There are two ways to explain it.

----

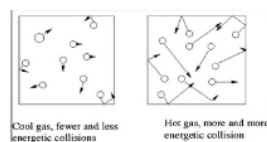
Here's the context.

At a constant volume, we have a rigid container. We can keep the quantity of gas constant simply by making sure the container is sealed tight.

Overall, we have a rigid, closed container.

#### CONCEPTUAL WAY

Heating the gas inside will make the gas particles move faster, and they will collide with the walls more often.



Pressure is defined as the force per unit area:

$$P = \frac{F}{A}$$

So, the **higher** the temperature, the **higher** the speed in general for each gas particle, and the **stronger** the force at which it hits the walls of the container.

Therefore, the pressure is **higher**.

#### MATHEMATICAL WAY

From the **ideal gas law**:

$$PV = nRT$$

Keeping volume and moles of gas constant, we have the initial and final states as:

$$\begin{aligned} P_1V &= nRT_1 \\ P_2V &= nRT_2 \end{aligned}$$

#### Related questions

Question #9bcb0

What is the Gay Lussac's law formula?

If the temperature of a gas in a container is doubled on the Kelvin scale, what will happen to...

If the original pressure of a gas sample at 20 °C was 5.00 atm, and it is heated up to 40. °C ...

What does Gay Lussac's law state?

What does Gay Lussac's law relate?

A sample of O2 under 2.00 atm occupies 500 ml at 25.0 °C. What pressure will the sample have at 0.0 °C ?

A sample of O2 under 2.00 atm occupies 500 ml at 25.0 °C. What temperature will be needed to...

Is Gay Lussac's law direct or inverse?

Determine the pressure change when a constant volume of gas at 1.00 atm is heated from 20.0 °C...

See all questions in Gay Lussac's Law

#### Impact of this question

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[At constant volume in a closed container, how do you explain that increasing temperature leads to increasing gas pressure? | Socratic](#)

[Ideal Gases under Constant Volume, Constant Pressure, Constant Temperature, &](#)

← ↻ [https://www.grc.nasa.gov/www/k-12/Numbers/Math/Mathematical\\_Thinking/ideal\\_gases\\_under\\_constant.htm](https://www.grc.nasa.gov/www/k-12/Numbers/Math/Mathematical_Thinking/ideal_gases_under_constant.htm)

calculating the energy from sunlight over a 14 hour period

Calculating the Energy from Sunlight over actual full day

Perfect Numbers-A Case Study

Gravitation Inside a Uniform Hollow Sphere

Further note on Gravitation Inside a Uniform Hollow Sphere

Pythagorean Triples

Black Holes and Point Set Topology

Additional Notes on Black Holes and Point Set Topology

Field Equations and Equations of Motion (General Relativity)

The observer in modern physics

A Note on the Centrifugal and Coriolis Accelerations as Pseudo Accelerations - PDF File

On Expansion of the Universe - PDF File

### Constant Temperature Process

If  $T = \text{const.}$ , then  $dT = 0$ , and, from 1,  $d(pV) = 0$ , i.e., pressure and volume are inversely proportional. Further, from 2,  $dq = p dV$ ; i.e., there is no change in internal energy (from 3,  $du = 0$ ), and all the thermal input to the gas goes into the work of expansion.

### Adiabatic Process

If  $q = \text{const.}$ , then  $dq = 0$ , and, from 2 (with 3),  $0 = \mu C_V dT + p dV$ ; i.e., internal energy of the gas might be reduced in favor of expansion, or vice versa. This expression may be written in an equivalent form as

$$0 = (C_V/R)(dT/T) + dV/V \quad 5.$$

(division of the first term by  $\mu RT$ , and the second term by  $pV$ ). Further, from 1,

$$p dV + V dp = \mu R dT$$

or, equivalently,  $dp/p + dV/V = dT/T \quad 6.$

(division of the Left Hand Side by  $pV$ , and the Right Hand Side by  $\mu RT$ ).

Equations 5 and 6 may be used to develop relationships between  $p$  and  $V$ , or  $p$  and  $T$ .

[Adiabatic Conditions \(nasa.gov\)](https://www.nasa.gov)

[Scientists sent to prison for fraudulent conduct \(universityworldnews.com\)](https://www.universityworldnews.com)

Name (block capitals) Lijie Li (Internal Examiner)

Signature *Lijie* Date 30 May 2022



## 12 3. JOINT REPORT BY EXTERNAL AND INTERNAL EXAMINERS

The thesis presents an experimental study of temperature-dependent battery characteristics and claims that the results validate the theories developed by Joseph Newman in regard to his energy machine. **FALSE STATEMENT**

**This is also repeated in the addendum, copy and paste.**

The thesis presents 4 chapters out of 24 using batteries to track the traits of an electric field charge of a lithium battery system. Thesis presents what it says in the title and Abstract

**An Investigation of The Photoelectric Effect to the Endothermic Electric Effect during the Electric Field Charge,**

**Endothermic Electric Effect as an energy gain in the system for a Renewable Energy Generator**

The Thesis and theory relies on the electromagnetic theory of James Maxwell, (chapter 12, and 17), which is contemporary physics that we base our study of electromagnetism on today. This is claimed in the Abstract. Mr Blanche demonstrates how an endothermic electric effect Reaction identified in an electric field charge of: lithium and graphene batteries; inductor generators, and metal alloys can be utilised to produce endothermic generators for better renewable energy production efficiency. This work includes, by analysing not only his own findings but also other peoples' findings from the 'Mainstream scientific community', including ,NASAs lithium battery charging analysis, chapter 4, JL Naudin chapter 3, Chih –Chung Lai et al chapter 8, Zihan Xu et al chapter 19.2.

These theories are open to debate, have not been independently validated in a scientifically rigorous manner, and are not accepted by the mainstream research community. **False statement**

Mr Blanche only presents one theory in his thesis. What are 'these theories' that are open to debate? Specify these theories, vague statement, what is not accepted by mainstream research community and who are they? Am I, MR Blanche BSc not mainstream for some unknown reason? What is the evidence?

Mr Blanche's work includes, by analysing not only his own findings but also other peoples findings from the scientific community (mainstream research community) including, NASAs lithium battery charging analysis, chapter 4, JL Naudin inductor charge chapter 3, Chih –Chung Lai et al efficiency with endothermic plateau's, chapter 8, and Zihan Xu et al self-charging battery, chapter 19.2.

Any evidence presented to support these theories must therefore be extensive, accurate, repeatable and clearly related to the specific claims made. **The examiners agree that the work presented does not meet these requirements. (THIRD PARTY COMMENT BY SUMMERS) False Statement**

What theories? Mr Blanche has presented a theory that is extensive and accurate. The title and abstract clearly defines what the thesis and theory is about, the charge of an electric field for an endothermic renewable energy generator.

The battery experiments are repeatable and the results and conclusions all support each other as shown. The battery experiments are used to demonstrate the characteristics of an electric field charge, just as other systems by other scientists included in the thesis do the same. Most importantly,

the displacement current that is under investigation is identified, and known physics is applied throughout the thesis to confirm the theory is correct.

Chapter 4, NASA experiment. Electric field charge using a lithium battery. Gains energy from environment and clearly shows more energy in the form of a displacement current in the system compared to the input, at the endothermic to exothermic crossover, also chapters 9, 10 and 11. Mr Blanche did an example of mathematical figures to equation during the viva, ignored by examiners in their reports. Chapter 16, Mr Blanche writes a mathematical equation for an endothermic generator.

Chapter 8, Tuneable Endothermic Plateau at High Temperature shows repeatable efficiency gain using alloy design.

The examiners now seem to have the same opinion as the 1<sup>st</sup> supervisors, yet have no evidence other than scientific fraud to relate their statements to? Fraud was committed by The National Bureau of Standards against Newman by changing the design of his machine before testing, all explained in chapter 3, ignored by examiners as this is supposed to be a post viva comment section and the examiners are supposed to follow what it states at the beginning of this section, i.e

#### **JOINT REPORT BY EXTERNAL AND INTERNAL EXAMINERS**

The examiners are invited to provide a brief joint report after the oral examination has concluded.

The report should draw together any disparate views on the thesis which may have been expressed by the examiners in their individual reports. A brief agreed view on the candidate's principal strengths and weaknesses, the approach to the topic, and on the performance at the oral examination might also be expressed.

The joint report might also comment on any difficulties experienced during the examination process and, especially in the case of unsuccessful candidatures, on the manner in which the examination was conducted and on whether the candidate was given the opportunity to draw the examining board's attention to any particular circumstances which might have affected his/her performance.

The examiners were not interested in exploring chapter 1 or chapter 3 which is labelled the 'disputed work', although they mentioned some of this in their individual reports as has been already demonstrated in this report.

As can be seen from this section, there was **NO STRENGTHS AND ONLY WEAKNESSES** and an agenda to fail.

The viva had no minutes kept and or any notes were forthcoming from the examiners or the chairperson for the oral viva when requested.

It is a good job Mr Blanche had the sense to record the entire procedure. If one was to read the examiners reports, the only reference to a viva taking place, was derogatory comments about Mr Blanche! And no comments about the science (or lack of by examiners) that was discussed in viva!

The experiment data has limited accuracy and the format of the investigations allows multiple interpretations of the results. **False statement**

The work presented is scientifically correct, all data in any experiment has limited accuracy, yet we use our observations in science to see the trend to verify a theory.

The only reason this is being rejected is due to scientific fraud, initially by NBS and conspirators, and now by Swansea University staff in coercion and collusion with the two examiners.

**Motive for fraud, to stop new renewable energy generator research and this educational knowledge being known to the 'MAINSTREAM ACADEMIC COMMUNITY'.**

Various scientific theories are presented but then applied in error to unrelated phenomena.

There is only one scientific theory presented, the title and abstract confirm this. There is no unrelated phenomena that is a **FALSE STATEMENT**.

**AGAIN THE EXAMINERS REPEAT THEMSELVES, AS IN ADDENDUM**

During his explanations, the student came across as defensive, aggravated and at times condescending.

Same statement again by examiners, as external examiners oral report 1.1.4. Summers must have forgot he had already used this statement or just wanted to reiterate the statement to make Mr Blanche look bad, it's just defamation.

I give the same reply:

**FALSE STATEMENT**, listen to the viva and judge for yourself.

Agreement on many discussion points were difficult to achieve.

Same statement by examiner again as external examiners oral report 1.1.4.

I give the same reply: **FALSE STATEMENT**

Agreement was difficult to achieve due the lack of expertise or inept scientific knowledge both examiners exhibited, refuting known scientific theory and laws to commit fraud. The external and internal examiner had no expertise in electromagnetism which is quite clear from their false statements and had a basic lack of scientific understanding. i.e.

1. Electrons do not move in the air around a conductor.
2. Electrons cannot enter the battery from outside air, therefore an endothermic reaction does not exist.
3. Constant volume concept and applying gas laws to an adiabatic process.

The examiners were made aware of difficulties faced by the student in getting access to university laboratories and note the significant disruption caused by COVID restrictions. These were taken into account when deciding to allow the student to resubmit his work.

Specific requirements for the resubmission of this thesis are provided as an Addendum to this Report.

**FRAUD.**

[Scientists sent to prison for fraudulent conduct \(universityworldnews.com\)](https://www.universityworldnews.com)

Signature	<u>W.D. W. Lorange</u>	(External Examiner)
Signature	<u>Lijie</u>	(Internal Examiner)
Date	<u>30/05/2022</u>	

## 13 Addendum Report

The black text is written by the two examiners. The red text is written by Mr Blanche.

Student: Geoffrey Blanche 946484

Viva Date: 30 May 2022

Level of Study: MSc by Research Decision: Decision suspended pending re-examination following re-submission within 12 months Joint Examiner Comments and Requirements for Resubmission

(Addendum to Report and Results form).

### THE ADDENDUM IS A POST ORAL VIVA REPORT

Everything that was discussed in oral viva examination is ignored in the addendum comments, it is as if the oral examination never happened. There were no minutes kept in the oral exam, only notes made by the Chairperson for his own use. No details or notes were shared to Mr Blanche by chair, external or internal examiner even after requesting several times. See emails.

The thesis presents an experimental study of temperature-dependent battery characteristics and claims that the results validate the theories developed by Joseph Newman in regard to his energy machine.

**COPY AND PASTE False Statement** There is a study of the electric field charge of lithium batteries in 4 chapters out of 24 contained in the thesis of 24 chapters.

Title of Thesis,-,

**An Investigation of The Photoelectric Effect to the Endothermic Electric Effect during the Electric Field Charge**

**Endothermic Electric Effect as an energy gain in the system for a Renewable Energy Generator**

The Thesis and theory relies on the electromagnetic theory of James Maxwell, chapter 12, and 17, which is contemporary physics that we base our study of electromagnetism on today. This is claimed in the Abstract. Mr Blanche demonstrates how an endothermic electric effect reaction identified in an electric field charge of lithium and graphene batteries, inductor generators and metal alloys can be utilised to produce endothermic energy generators for better energy production efficiency. This work includes, by analysing not only his own findings but also other peoples' findings from the scientific community including NASAs lithium battery charging analysis, chapter 4, JL Naudin chapter 3, Chih – Chung Lai et al chapter 8, Zihan Xu et al chapter 19.2.

These theories are open to debate, have not been independently validated in a scientifically rigorous manner, and are not accepted by the mainstream research community.

**COPY AND PASTE – FALSE STATEMENT.** What are 'these theories' that are open to debate?

Specify these theories, vague statement, what is not accepted by mainstream research community and who are they? Am I, MR Blanche BSc not mainstream for some unknown reason? What is the evidence?

Jl Naudin independently validated Newman's generator (chapter 3 of thesis) in a scientifically rigorous manner and as been ignored by examiners. Chih –Chung Lai et al chapter 8, Zihan Xu et al chapter 19.2. both independently validated better efficiency by endothermic reactions.

Any evidence presented to support these theories must therefore be extensive, accurate, repeatable and clearly related to the specific claims made. False Statement COPY AND PASTE

Mr Blanche has presented a theory that is extensive and accurate. The battery experiments are repeatable as they all support each other, and the title and abstract clearly defines the claims made, the charge of an electric field for a RENEWABLE endothermic generator. The battery experiments are used to demonstrate the characteristics of an electric field charge and most importantly, the displacement current that is under investigation. An electric field charge is related to every type of energy generator, and is related to the specific claims made.

Chapter 4, NASA experiment. Electric field charge using a lithium battery. Gains energy from environment and clearly shows more energy in the system than the input at the endothermic to exothermic crossover, also chapters 9, 10 and 11. Mr Blanche did an example of this in the viva, ignored by examiners.

Chapter 8, Tuneable Endothermic Plateau at High Temperature

Only batteries were discussed in the viva as that was the agenda. The thesis was not explored, i.e Title and abstract. None of this was discussed during the viva.

The work presented does not meet these requirements. The experiment data has limited accuracy and the format of the investigations allows multiple interpretations of the results. False Statement Some copying and pasting again.

The work presented is scientifically correct, all data in any experiment has limited accuracy, yet we use our observations in science to see the trend to verify a theory.

The only reason this is being rejected is due to scientific fraud, initially by NBS and conspirators, and now by Swansea University staff in coercion and collusion with the two examiners.

**Motive for fraud, to stop new renewable energy generator research and this educational knowledge being known to the 'MAINSTREAM ACADEMIC COMMUNITY'.**

Various scientific theories are presented but then applied in error to unrelated phenomena.

COPY AND PASTE There is only one scientific theory presented, the title and abstract confirm this. There is no unrelated phenomena, this is a false statement.

In its present form the thesis is scientifically incorrect and does not meet the MSc by Research standard.

COPY AND PASTE The work presented is scientifically correct, and a first in scientific history, worthy of a Nobel Prize nomination. (Minor, not theory changing omissions accepted, see list in chapter 15). The reason this is being rejected is due to scientific fraud by NBS and now Swansea University staff with coercion and collusion with the two examiners. Mr Blanche demonstrates far superior intellect in the Viva, and the examiners show themselves to be inept, below GCSE standard, and ignore basic scientific principles. They are not experts in electromagnetism and were unable to engage in the subject and even argued against accepted scientific principles.

A complete re-writing of the thesis is required.

A complete investigation is required into how Swansea University staff by coercion and collusion with the two examiners produced this report and Viva EXAMINATION FRAUD.

The examiners believe that a focused report, limited to presentation and explanation of the temperature-dependent battery performance could potentially meet the requirements of an MSc and will therefore consider a resubmission if made within a 12 month period.

Mr Blanche's thesis is not about an 'explanation of the temperature-dependent battery performance', it is about what it says in the title and the abstract.

This work is by a mature graduate with life experience and Mr Blanche has applied his hard gained knowledge to this research work. It is not written by an undergraduate. This is not an assignment set by examiners, it is a serious piece of scientific research that cost Mr Blanche time and money to produce, to then be ridiculed by fools.

The re-submitted thesis MUST meet all of the requirements listed below:

If the Thesis met all the requirements below it would be a different Thesis.

1. The thesis title is: An Investigation of the Photoelectric Effect to the Endothermic Electric Effect during the Electric Field Charge. This is misleading and must be changed. The photoelectric effect has not been studied. **False Statement.**

The photoelectric effect has been studied and is detailed in the abstract.

Also, Self-charging battery chapter 19.2,

also Chapter 5 The Photoelectric effect.

As far as physicists now understand, electrons and photons are both fundamental particles.

2. A chapter on the relevant standard models of battery operation (what happens at the anode and cathode during a charge or discharge), how a battery generates heat as irreversible and reversible heat and the temperature effects, should be presented so that the experimental data can be assessed in reference to accepted knowledge of the device under study.

I suggest the examiners do this type of research if they are so inclined, the thesis is not about discharge. My thesis is about what it says in the title. They seem to think some accepted knowledge refutes this thesis, and then give no evidence from any journal or scientific work, all they offer is - false claims.

3. The above chapter must include a section explaining the battery entropy coefficient and how it plays a part as a reversible heat source term behaving either as an exothermic or endothermic heat source term (based on the state-of-charge the battery is at).

What Chapter? They seem to be proposing a different study, which I suggest they do themselves.

I will not be writing a masters of research on different coefficients for different battery types. My study was what it says in the title and abstract and chapter 1.

An electric field charge is with respect to time and this thesis is not related to a study of soc of a battery and battery coefficients. Mr Blanche states quite clearly in his thesis that different systems will have different parameters for this reaction in the electric field. It is related to whether the electric field is either endothermic or exothermic with respect to time and what that means as an energy gain for a RENEWABLE Energy Generator, as stated in the title.

4. The limitations and inaccuracies of the experiment must be discussed. These include the resolution of the temperature measurement, calibration of multiple sensors to ensure cross sensor accuracy, experimental error in relation to repeated measurement and the possibility of thermocouple hysteresis. **False Statement**

The only hysteresis here is in the examiners brains. All experiments have limitations, and inaccuracies and discarded experiments are shown in the glossary, however this is ignored by the examiners. The temperature sensors show the same trends throughout all the experiments, the examiners could have questioned this in the viva, yet this is now a statement to make Mr Blanche look as if he had a weakness in this part of experimental observation. Defamation.

**Minor information could be added to thesis from:**

[DS18B20 pdf](#), [DS18B20 Description](#), [DS18B20 Datasheet](#), [DS18B20 view :: ALLDATASHEET ::](#)

OPERATION - MEASURING TEMPERATURE The core functionality of the DS18B20 is its direct-to-digital temperature sensor. The resolution of the DS18B20 is configurable (9, 10, 11, or 12 bits), **with 12-bit readings the factory default state.** This equates to a temperature resolution of 0.5°C, 0.25°C, 0.125°C, or **0.0625°C.**

The above resolution of the temperature sensors information highlighted in yellow correlates with the figures, 35, 36, 38, 39, 40, 41, 43, 44, 45. An expert would go with this information and point it out to candidate.

Temperature sensor trends and accuracy are discussed in the conclusions of chapter 10 and results of chapter 11, page 69. Correlation of accuracy between sensors is seen in figure 38, point 1. TA and T1 showing same reading compared to T2 and with no error. Point 3, T1 shows same trend as T2.

NASA stated an accuracy of the thermocouple and Arc temperature sensor variant of 0.1 degrees Celsius, chapter 4, (reference 57 and 58, page 7 and 9). Examiner did not read this report (VT time 1min 13 secs)

The candidate states a temperature variant, chapter 9, figure 26, thermal temperature variant of 1 degree centigrade measured by the thermostat on oven during the experiment. Other data was placed in index for ease of reading the thesis,

Temperature set to 25 degrees centigrade, step 1, 111, page 144.

Data and collection software program is shown in chapter 20.

The voltage is converted to digital through a resistor with a range of 1023 bits of analogue to digital, to analyse the voltage rise per second on graph, a lot of data per second for the graphs produced. **Never questioned in Viva.**

5. The design of the experiments means that multiple processes influence the battery characteristics: heating/cooling following heat pre-treatment, battery relaxation effects, temperature dependent battery open-circuit voltage. All of these factors must be considered and taken into account when interpreting the observed behaviour (see points 6 and 7 below). **FALSE STATEMENT**

The examiners are still only discussing battery experiments and not the thesis. See points 6 and 7 below. **All of the thesis must be considered and taken into account when interpreting the observed behaviour (see points 6 and 7 below).**

6. In the USW data (Chapter 9, figure 27) why are the three starting cell temperatures different and what is the ambient temperature? If the ambient temperature is lower than the initial cell temperature, the cell can cool down to ambient despite the battery being charged. The temperature gradient, between ambient and cell temperature, can outweigh the heat generated (by both irreversible and reversible heat) in the cell. **FALSE STATEMENT, COPY AND PASTE FROM PRE VIVA REPORT.**

Mr Blanche explains in the viva why he experimented with 3 different starting temperatures.

**VT: 59 MINUTES**

*Blanche: Yea, it was run on bitrode equipment, which I think is a good standard of equipment, they didn't have anything like this in Swansea, um so yea, it's good equipment, it runs on an LCN program, I've put the program in the index, at the back for you to read, and the steps of charge, so these were taken from a top charge, sorry, these were a top charge, after discharge, yea, near to the graph*

Why was his explanations not updated in this addendum report? Because it was an agenda to fail Mr Blanche. Mr Blanche did make an error in the viva he stated the oven temperature was 24C, but it is in the Index AS HE STATED IN THE VIVA, a rigorous examination by the examiners would have seen this, no expertise by the examiners. Oven Temperature set to 25 degrees centigrade, step 1, 111, page 144. Variant of 1 degrees centigrade, variation in temperature of the oven on page 50 figure 26.

The examiners never updated 1.1 or 1.3 of report to include what was discussed in the viva.

To determine if the cell cooling is truly the endothermic heat generation of the cell (rather than cooling to ambient), the cell temperature must be at equilibrium with the ambient before charging commences. **False statement. COPY AND PASTE FROM PRE VIVA REPORT**

The cell temperatures (3 of) never reach oven temperature of 25C during the charge, figure 27, yet the cells fluctuate between endothermic to exothermic, then back to endothermic and then exothermic again at the end of the charge, always above ambient temperature of the oven. Theory is correct as explained, chapter 9, but this is ignored by the examiner and not discussed. The cell temperature does not have to be at equilibrium with the ambient before charging commences as the examiner states to explain why the reaction fluctuates as it does. Mr Blanche explains this thoroughly in the viva and in his report but this is ignored by the examiner.

7. In the home experiments (Chapter 11) the cell voltage should be at equilibrium before the experiments are conducted. If not, the measured voltage is the relaxation voltage (OCV + over potentials of the cell due to the discharge that the cell has undergone prior to the experiment) which then appears as "air charge".

**COPY AND PASTE FROM EXTENAL EXAMINERS PRE VIVA REPORT**

False statement. The cells voltage were at voltage equilibrium.

Examiners try to re-write science in viva, claiming air charge is impossible and an endothermic reaction is something that can only happen inside the battery and the surroundings are not involved. How could it appear as air charge? When you categorically state below, on your point 17, "electrons don't flow in air circling a conductor".



The cell could be still relaxing since the over potentials in the cell have not reached to zero from the discharge step it has undergone.

False statement, assumes the battery was discharged before experiment and not rested before experiment.

No details of how long the cell was kept in the oven

The idea was to raise temperature of battery above ambient temperature which was achieved, the time in oven should have been recorded but not an important point at all.

or how long the cell was allowed to relax (after fully discharging the cell is given).

The cell had been rested for a week, this is a minor omission and a correction could be added in.

The results are therefore inconclusive, and the voltage could simply be the relaxation voltage appearing as a “charging effect” (there is no current applied in this chapter, and voltage relaxation is not a charging phenomenon).

**FALSE STATEMENT** The examiners claim voltage relaxation is not a charging phenomenon, yet it clearly is, and caused by the heat dissipation of a discharge, i.e an EMF. A certain amount of ionisation is caused by this above room ambient temperature of the battery after discharge and therefore the electric field **ATTRACTION BY THE POSITIVE IONS** will be endothermic and attract electrons from the air, hence air charge, EMF applies, Boltzmann’s constant applies. Coulombs law applies.

To confirm the examiners claims, a journal paper would need to have temperature sensors placed on and at a distance from the battery to see if there is NO temperature gradients in air around the battery to the ambient temperature after a discharge and whilst this voltage relaxation occurs. **No evidence provided by examiners.**

**THIS IS NOT WHAT MR BLANCHE DID.** Mr Blanche took a fully rested battery and then placed it in an oven to raise the thermal temperature above ambient temperature to induce an EMF (the Photoelectric effect) into the battery system and then collect data to study the effect of the charging electric field on the air surroundings. Also if the experiments are inconclusive according to the examiners, why didn’t the examiners ask Mr Blanche to do the experiments again?

When interpreting the measurements established models, that have been validated by peer review should be presented.

(This sentence does not make sense, grammatically incorrect.)

It is apparent from the examiners reports, Mr Blanche got everything wrong and did nothing correct, weaknesses and no strengths. However, the claims made throughout this examination process by the examiners should be presented through **related** and validated scientific peer reviewed material, and should be **relevant** to Mr Blanche’s work. This the examiners failed to do. Another false statement.

In particular, the literature relating to endothermic effects and entropic changes within the battery should be thoroughly assessed and considered when interpreting the results. See for example:

**GIBBS FREE ENERGY DOES NOT APPLY TO MR BLANCHE’S STUDY.**

**HAVING STUDIED THE FOLLOWING JOURNAL PAPERS, THERE ARE NO PAPERS THAT ARE A STUDY OF THE ELECTRIC FIELD CHARGE AND DISPLACEMENT CURRENT FROM THE SURROUNDINGS with AN ENDOTHERMIC REACTION. MR BLANCHE’S STUDY IS NOT ABOUT CHANGES OF BATTERY ENTROPY**

AND DIFFERENT BATTERY COEFFICIENTS FOR BATTERY STORAGE EFFICIENCY MODELS, LIKE THE EXAMINERS SEEM TO THINK IT SHOULD BE.

IT IS ABOUT EFFICIENCY OF AN ELECTRIC FIELD CHARGE AND HOW THIS CAN BE USED IN AN ENDOTHERMIC ENERGY GENERATOR FOR A RENEWABLE ENERGY GENERATOR, AS STATED IN THE TITLE AND THE ABSTRACT, AND CHAPTER 1, WHICH WAS IGNORED BY THE EXAMINERS DUE TO THE AGENDA TO FAIL, DUE TO THE HISTORICAL CRIME AND THE DESIRE BY FRAUD TO HIDE THIS EDUCATIONAL RESEARCH FROM THE 'MAINSTREAM ACADEMIC COMMUNITY.'

MOST OF THESE STUDIES DISPLAY THE STUDY IN THE TITLE AS DOES MR BLANCHE

1a - Richardson, Giles, and Ivan Korotkin. "Heat generation and a conservation law for chemical energy in Li-ion batteries." *Electrochimica Acta* 392 (2021): 138909.

<https://doi.org/10.1016/j.electacta.2021.138909>

THIS JOURNAL IS UNRELATED TO REFUTING MY WORK, IE. THERE ARE NO SIMILAR EXPERIMENTS AND IS A FALSE CLAIM BY THE EXAMINERS.

As can be seen from the abstract below this study is totally unrelated to Mr Blanche Thesis. It is about lithium ion Battery Technology and deriving a *theoretical treatment of energy transport and losses in such devices*. It is not about charge of an electric field and how energy is gained from surroundings. All experiments in this journal paper study discharge of an electric field of the battery, totally unrelated and nothing to compare to Mr Blanche's work. i.e page 8

#### ABSTRACT

*Present theories of irreversible energy losses and heat generation within Li-ion cells are unsatisfactory because they are not compatible with energy conservation and typically give rise to significant errors in the estimation of these quantities. This work aims to provide a consistent theoretical treatment of energy transport and losses in such devices. An energy conservation law is derived from the Doyle–Fuller–Newman (DFN) model of a Li-ion cell using a rigorous mathematical approach. The resulting law allows irreversible chemical energy losses to be located to seven different regions of the cell, namely: (i) the electrolyte, (ii) the anode particles, (iii) the cathode particles, (iv) the solid parts of the anode (ohmic losses), (v) the solid parts of the cathode (ohmic losses), (vi) the surfaces of the anode particles (polarisation losses), and (vii) the surfaces of the cathode particles (polarisation losses). Numerical solutions to the DFN model are used to validate the conservation law in the cases of a drive cycle and constant current discharges, and to compare the energy losses occurring in different locations. It is indicated how cell design can be improved, for a specified set of operating conditions, by comparing the magnitude of energy losses in the different regions of the cell.*

AS WE CAN SEE FROM AN EXTRACT OF THE CONCLUSIONS THIS IS ABOUT ENERGY LOSSES AND CALCULATING THIS.

Page 12 6. Conclusions In this work we have formally derived and validated, an energy conservation law (17)–(22), for Li-ion batteries, from the Doyle–Fuller–Newman (DFN) model (2)–(13). The significance of this result is twofold: (i) it highlights the fact that most, if not all, other works that purport to calculate heating, associated with irreversible energy losses, from the DFN model neglect important sources of energy dissipation within the cell and (ii) computations of energy dissipation within a cell provide a sound basis on which to optimise cell design, particularly as the formulation of the energy conservation law allows energy losses to be located to particular components of the cell.

2a. - Viswanathan, Vilayanur V., et al. "Effect of entropy change of lithium intercalation in cathodes and anodes on Li-ion battery thermal management." Journal of Power Sources 195.11 (2010): 3720-3729.

<https://doi.org/10.1016/j.jpowsour.2009.11.103>

**AS SEEN FROM THE ABSTRACT, THIS IS A TOTALLY UNRELATED PIECE OF WORK TO MR BLANCHE'S THESIS. FALSE INFORMATION BY EXAMINERS, AS A COMPARISON TO REFUTE MR BLANCHE'S WORK.**

#### **Abstract**

*The entropy changes ( $\Delta S$ ) in various cathode and anode materials, as well as in complete Li-ion batteries, were measured using an electrochemical thermodynamic measurement system (ETMS).  $\text{LiCoO}_2$  has a much larger entropy change than electrodes based on  $\text{LiNi}_x\text{Co}_y\text{Mn}_z\text{O}_2$  and  $\text{LiFePO}_4$ , while lithium titanate based anodes have lower entropy change compared to graphite anodes. The reversible heat generation rate was found to be a significant portion of the total heat generation rate. The appropriate combinations of cathode and anode were investigated to minimize reversible heat generation rate across the 0–100% state of charge (SOC) range. In addition to screening for battery electrode materials with low reversible heat, the techniques described in this paper can be a useful engineering tool for battery thermal management in stationary and transportation applications.*

3a. Geng, Zeyang, Jens Groot, and Torbjörn Thiringer. "A time-and cost-effective method for entropic coefficient determination of a large commercial battery cell." IEEE Transactions on Transportation Electrification 6.1 (2020): 257-266.

<https://doi.org/10.1109/TTE.2020.2971454>

**AS CAN BE SEEN FROM ABSTRACT AND CONCLUSION, THIS IS UNRELATED STUDY, COMPLETELY NOTHING TO DO WITH AN ELECTRIC FIELD CHARGE BENEFITING FROM A DISPLACEMENT CURRENT AND ENDOTHERMIC ENERGY GAIN FROM SURROUNDINGS for renewable energy generator.**

**Abstract—** *The entropic coefficient of a lithium-ion battery cell is used to calculate the reversible heat of a battery during operation, which is a nonnegligible part of the battery thermal modeling. The contribution of this article is to propose a novel method to establish the entropic coefficient profile of a 26-Ah commercial pouch cell and compare the results with those obtained from the traditional potentiometric and calorimetric methods, and all are found to be in a good agreement. The originality of this article is to use a method, which consists of supplying a square pulse current waveform at a certain frequency, and thus, the resulting heat variation could be successfully linked to the input current using Fourier analysis. The current magnitudes used were 1 and 1.5 C, which are representative of the normal operation current in an electrified vehicle application. The method proposed is found to be cost efficient with a short experiment time and simple experiment setup. In fact, it can be used to characterize cells that are already mounted in a pack without access to a climate chamber or calorimeter.*

**VII. CONCLUSION** *In this article, a novel method was demonstrated to determine the entropic coefficient for a large commercial lithiumion pouch cell. In this method, alternating current was applied within a small SoC range to create a temperature swing, and thus, the entropic coefficient can be obtained by Fourier analysis. This method is fast and requires a low effort to set up the experiment. The result obtained from the proposed method was also compared with the potentiometric and calorimetric methods with a very good agreement*

4a. - Mercer, Michael P., et al. "The influence of point defects on the entropy profiles of Lithium Ion Battery cathodes: a lattice-gas Monte Carlo study." *Electrochimica Acta* 241 (2017): 141- 152.

<https://doi.org/10.1016/j.electacta.2017.04.115>

This report is about the influence the point defects on the lithium ions lattice contribute to the temperature response of the open circuit voltage of the electrodes. This is a totally non-related subject to Mr Blanche's thesis, the only thing in common is that they are studying a part of the battery, whereas Mr Blanche is analysing the electric field charge using different batteries and other systems. This report by [Michael P.Mercer<sup>a</sup>SophieFinnigan<sup>a1</sup>DenisKramer<sup>b</sup>DanielRichards<sup>c</sup>Harry E.Hoster<sup>a</sup>](#) is a battery 'parts performance study', due to entropy, i.e. the cathodes ageing, it says it in the title. Their study is not with respect to time, only voltage profile to temperature, and temperature is not considered has an energy gain to an electric field only a reason for a defect effect in the cathode electrode or negative conductor.

An interesting point is they used similar equations such as disputed equation 1 and 2 in their works, and also use Boltzmann constant on page 144:

$y P = \exp (-DH/kBT)$ , where  $kB$  is the Boltzmann constant.,

they also go on to say in the conclusions: 'As has been previously found, we find that features observed in the profile are due to an order/disorder transition in the Li sub-lattice'.

In all, similar use of equations and knowledge as Mr Blanche to explain theory to the reader but there is not one study or figure with respect to time in this report, totally unrelated projects.

5a. - Schmidt, Jan Philipp, André Weber, and Ellen Ivers-Tiffée. "A novel and precise measuring method for the entropy of lithium-ion cells:  $\Delta S$  via electrothermal impedance spectroscopy." *Electrochimica Acta* 137 (2014): 311-319.

<https://dx.doi.org/10.1016/j.electacta.2014.05.153>

- He, Tengfei, et al.

Abstract states study is about 'discharge' IRELEVANT NOT RELATED TO THESIS THEORY

Modelling the electrochemical and thermal behaviours of cylindrical lithium-ion batteries (LIBs) is complicated by their multi-unit jellyroll structure. To evaluate the accuracy of cylindrical LIB models, eight electrochemical-thermal models (ECT) with different levels of fidelity and dimensionality (from one-dimensional (1D) to three-dimensional (3D) electrochemical and thermal models) are established for a  $\text{Li}[\text{Ni}_8\text{Co}_1\text{Mn}_1]\text{O}_2/\text{graphite}$  18,650 type cylindrical LIB. The effect of different levels of model simplification on the predicted LIB thermal and electrochemical characteristics are compared under different **discharge and cooling rates**. Non-uniformity indexes are also introduced to compare the differences between the eight models for predicting electrochemical reactions and heat generation non-uniformity. The accuracy and computation time of different models are compared, and the applicable scope of different models is discussed comprehensively. Furthermore, the non-uniformity mechanism inside the battery are also analysed. The present work can be used to help other researchers select appropriate electrochemical thermal models under different applicable conditions and study the battery thermal management system.

6a. "A comprehensive numerical study on electrochemical-thermal models of a cylindrical lithium-ion battery during discharge process." Applied Energy 313 (2022): 118797. <https://doi.org/10.1016/j.apenergy.2022.118797>

**IRRELEVANT, MY STUDY WAS ABOUT CHARGE NOT DISCHARGE**

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9. Any hypotheses presented must be referenced to existing refereed, scientific literature, or justified by detailed evidence from experiment.

**FALSE STATEMENT** The hypothesis does contain refereed references, i.e. *'James Clerk Maxwell [47] wrote the unifying theory of electromagnetism by adding a displacement current to Ampere's law'*. Also detailed evidence of endothermic electric effect by experiment and other peoples scientific research, i.e chapters 3, 4, 8, 9, 10, 11, 12 and 19.2.

The experiments presented do not provide proof of the electric field charge theories of Joseph Newman and no such claim should be made in the thesis.

**FALSE STATEMENT** The experiments presented do provide proof of an endothermic electric field state at the beginning of an electric field charge, which is consistent with James Maxwell displacement current ( DISCUSSED IN CHAPTER 12.1) in a charging electric field with respect to time. It is also consistent with Naudin's work on a Newman generator, chapter 3, it is also consistent with Newman's claims and the Special taskmaster's claims in Newman's court case that his machine produces more on the output than the input DURING OPEN CIRCUIT CHARGING OF AN ELECTRIC FIELD CHARGE.

**I WILL REMIND YOU OF THE POINTS RAISED IN :**

**Degree of Master's by Research - Swansea University**

**1.1** Master's degrees are awarded to students who have demonstrated:

- A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice.
- a comprehensive understanding of techniques applicable to their own research or advanced scholarship.
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.
- A conceptual understanding that enables the student:
  - to evaluate critically current research and advanced scholarship in the discipline;
  - to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

Typically, holders of the qualification will be able to:

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences.

Discussion of Newman's work should be limited to its presentation as an alternative explanation of the observed phenomena, which cannot be proven due to the limited scope and accuracy of the measurements.

**FALSE STATEMENT BY EXAMINERS as written above, Newman should be removed, and now should only be an alternative explanation.**

Ignoring the abstract, the title of the Thesis, chapter 1, AND chapter 3. The thesis is not about Battery Technology which examiners are trying to claim.

There is no limited scope to the measurements of the voltage readings (see table A, B, C) Glossary page 124, Voltage measurement is given with a total of 1023 bits analogue conversion to 5v digital. **In simple terms for Arduino**

**The Arduino has a 10-bit Analog-to-Digital-Converter (ADC), which maps sensor readings between 0 and the operating voltage (5V or 3.3V) into integer values between 0 and 1023. This is derived using the calculation  $2^{10} = 1024$ , so the range ends up being 0-1023. The resolution of an Arduino is about 4.9mV per unit ( $5/1024 = 0.0049$  or 4.9mV).**

[ADC in Arduino - Analog to Digital Conversion » PIJA Education](#)

[Analogue to Digital Converter \(ADC\) Basics \(electronics-tutorials.ws\)](#)

The temperature sensors, 3 of in Swansea and Home experiments all show the same trends and THIS is easily identifiable in all experiments. The temperature sensors do exactly what they should do, measure temperature in increments of 0.0625 degrees centigrade as per manufacturer specification, see figure 36.

10. Where scientific theories are presented the link and relevance of the theory to the measurement data must be more clearly made.

**FALSE STATEMENT BY EXAMINERS, THE LINK BETWEEN TEMPERATURE TO ENERGY GAIN IS CLEARLY DEFINED THROUGHOUT THE THESIS, i.e chapter 4, chapter 12.1, equations, 1, 2, 3, 7.**

Where equations are stated, each term should be specified and applied to the experimental observations. Explanations must be given on how the equation links to measured variables and any prediction be corroborated by the experiment. **FALSE STATEMENT BY EXAMINERS,**

**THIS IS EXACTLY WHAT MR BLANCHE DID, AND ALL TERMS ARE SPECIFIED, AND APPLIED TO OBSERVATIONS, i.e. CHAPTER 4 PAGE 31, 32, EQUATIONS 1 AND 2, CHAPTER 5 MR BLANCHE EXPLAINS EQUATIONS 5 AND 6 AND HOW IT IS APPLICABLE. CHAPTER 9, CHAPTER 19.2 PAGE 115, CHAPTER 17 MAXWELL'S EQUATIONS TO ENDOTHERMIC CHARGE.**

**Mr Blanche gave mathematical examples in Viva, VT 44 mins using Boltzmann's constant but this has been ignored in the Addendum.**

Why weren't any prediction of the cell temperature and voltage made with the equations that were presented? **False Statement.**

Why the need to try and predict when you can actually analyse the data collected?

**Mr Blanche gave mathematical examples in Viva, VT 44 mins using Boltzmann's constant,**

**VT 2 HR 12MINS,**

*Ext: so why don't you try and calculate  $I_d$ , so what sort of value will you get for  $I_d$  in your experiments?*

*Blanche: what values did I get?*

*Ext: if you were to calculate that*

### **EXAMPLE GIVEN IN VIVA BUT THIS HAS BEEN IGNORED IN THE ADDENDUM? WHY?**

VOLTAGE AND TEMPERATURES WERE MONITORED AND RECORDED, EQUATIONS WERE APPLIED TO THE RESULTS TO SUPPORT THEORY AND NOT JUST THE BATTERY EXPERIMENTS AS THIS WAS ABOUT A RENEWABLE ENERGY GENERATOR AS DEMONSTRATED WITH A MATHEMATICAL EQUATION IN CHAPTER 16. OTHER EXAMPLES, I.E. CHAPTER 4, CHAPTER 9, CHAPTER'S 13, 14, 15, CHAPTER 17, CHAPTER 19.2

Where well established theories are presented, they need to be interpreted in the standard way, as understood by the scientific community. **FALSE STATEMENT,**

Mr Blanche presents his theory from the observed electric field reaction and how it can be utilised, as discussed in the title and the abstract. Who are the scientific community, am I one of them? Please give an example of what you mean! Apparently there shall only be one standard way of interpreting, which must be agreed by the MAINSTREAM SCIENTIFIC COMMUNITY.

This is an original thesis and theory that relies on past scientific theory, and then this theory base is applied to the observations, i.e, Boltzmann's constant. Gas Laws to adiabatic systems, photoelectric effect, displacement current, ETC.

The above statement suggests there can be nothing new and only what they decide, there is a 'standard way' of presentation of whatever they decide they want the subject to be about apparently. Fraud.

11. The purpose of the thesis is to present the student's work. Where other work is referred to it should be referenced, instances of full reproduction of other reports and papers should be removed from the thesis.

**FALSE STATEMENT**, the student has the right to analyse and quote other peoples' work if he feels it necessary to support his work. Mr Blanche did present his research but most of it is ignored due to the agenda to fail. There was no full reproductions of other peoples' work in the Thesis. Mr Blanche fully referenced any work by other people.

12. Any material in the thesis relating to other areas of science, unrelated to endothermic properties of batteries must be removed.

**It is Mr Blanche's 'scientific right', to include what he feels necessary to support his theory. What material are the examiners referring to? Biology, Chemistry and Physics are the sciences interlinked in any theory, THIS IS A FALSE AND DIABOLICAL STATEMENT BY EXAMINERS.**

**All systems are analysed with science we know, when a new observation is made, the scientist who has made the observation writes a thesis on it containing his or her theory. This is exactly what Mr Blanche has done.**

13. The formatting and presentation quality of the thesis needs to improve. Avoid one-page chapters (Chapter 13, 14 and 15). Why does the Glossary come before the Reflections and recommendations chapter (move it to the end)? Citations must be appropriately formatted with the relevant information, authors, date of publication, title, publisher etc. Equations should be numbered (some

were numbered as letters, avoid copying equations as images), the variables in them defined and used within the main text of the body.

**FALSE STATEMENT.** The significance of a one page chapter was too much for these examiners to understand. The examiners demonstrate many times and also admit not rigorously reading the thesis, external examiner admitted to browsing chapter 19.2 for instance, and failed to examine the references, vt time 1 min, admits to not reading the reference for the NASA experiment which was discussed for the first hour (40%) of the viva. Citations are placed in the text and the reference chapter, yet this is too confusing for the examiners to follow? References are easily accessible , including references to books, something the examiners do not do is reference any of their comments and when they do offer some citations, they are all unrelated to the thesis being examined. Fraud(one word sentence). If Mr Blanche wants to give an equation a 'letter' instead of a 'number', that is acceptable, the examiner should be an expert, and be able to follow a high quality, **first in scientific history** theory.

14. Equation (1) needs to be corrected.

**COPY AND PASTE FROM PRE VIVA REPORT, DISREGARDS ORAL VIVA.**

**FALSE STATEMENT.** VT Time 44 mins, Examiners disagrees with Boltzmann's constant chapter 4. References 58, 59, disagree with fundamental application of gas laws to an adiabatic process, the very SYSTEM we apply gas law equations to. Did not read the references and he is not an expert, otherwise internal examiner would not spend an hour of the viva trying to disagree with fundamental gas laws. He would have known what the equation is if he was an expert and then possibly understood the application of the equation to the experiment.

15. 2. Equation (2) cannot be used for explaining the special case presented in the experiment, i.e. the endothermic effect at the start of charging process.

**COPY AND PASTE FROM PRE VIVA REPORT, DISREGARDS ORAL VIVA.**

**FUNDAMENTAL DERIVATION USE OF A GAS LAW TO APPLY TO EXPERIMENT, FALSE STATEMENT BY EXAMINERS.** In point 10 above, examiners complain of not applying equation to experiments, when Mr Blanche does this it is of course wrong, due to the agenda to fail.

16. The image quality of all experimental figures needs to be improved. All experimental figures need to be added error bars. **False Statement**

Examiners do not discuss this in viva or give a reason or an example, yet the experimental figures are every bit as good as any in the given links to journals above. Error bars do not need to be added, there is no errors being looked for or examined in figures, therefore error bars are not required. .

17. Figures 52 and 53 are not correct, electrons don't flow in air circling a conductor

**FALSE STATEMENT,**

**ELECTRONS DO MOVE IN AIR CIRCLING A CONDUCTOR**, This is accepted electricity physics theory and fact. They are disagreeing with, Coulombs law chapter 5 of thesis, Photoelectric effect chapter 5

Examiners give no evidence why they disagree with the following:

VTime 44 mins, Examiners disagrees with Boltzmann's constant chapter 4. References 58, 59,

Examiners disagree with National Grid, Chapter 6. A ONE PAGE CHAPTER WHERE NATIONAL GRID SPECIFICALLY STATE ELECTRONS MOVE IN AIR, OBVIOUSLY DIDN'T READ THIS.



Examiners disagree with and OBVIOUSLY DIDN'T READ The following.

19.1 A study into high voltage Transmission Lines A study into high powered systems was carried out by F.W.Peek [100] and was presented at the 28th Annual Convention of the A. I. E. E., Chicago, June 26-30, 1911.

Cassius M. Davis [102] states on page 2337: *"The general mechanism of corona formation may be described as follows: Upon the gradual increase of the applied voltage a value is reached which gives, at the conductor surface, a potential gradient sufficient to break down the air. In this way the air becomes conducting as far from the conductor as the gradient exceeds the breakdown value."*

Peek further demonstrates how the law of corona follows the quadratic law [100]. On page 1011 he writes:

*"In the early work it was stated that with a polished conductor, no loss would be expected below the visual critical voltage  $e_v$ . It was further stated that the loss should then start quite suddenly and follow the quadratic law.*

*The measurements by the cathode ray oscillography are thus quite in agreement with laws formulated in the former work as follows:*

*a) At the visual critical voltage and above, corona loss follows the quadratic law over a wide voltage range, or,  $p = k (e - e_o)^2$*

*b) There is no loss below  $e_v$  for polished wires.*

Page 1520 [100]: *"The fact that the curves pass through the zero point does not necessarily mean that there is no loss at zero frequency or continuous impressed voltage." What takes place is probably this: "When excessive continuous voltages are applied to a conductor, the air is broken down and a transfer of energy which appears as corona takes place. Now if the conditions were constant, such as still air, constant temperature, and no electrostatic repulsion, there would be no further loss than the first energy rush. However, as this over strained air is probably driven away and replaced by fresh air, which is in turn broken down, there is actually a power loss with continuous voltage. "*

## 19.2 Self-Charged Graphene Battery Harvests Electricity from Thermal Energy of the Environment

Zihan Xu<sup>1†\*</sup>, Guoan Tai<sup>1,3†</sup>, Yungang Zhou<sup>2</sup>, Fei Gao<sup>2</sup>, and Kin Hung Wong<sup>1</sup>

<sup>1</sup> Department of Applied Physics and Materials Research Centre, The Hong Kong Polytechnic University, Tseung Koon O, Kowloon, Hong Kong SAR, China

<sup>2</sup> Pacific Northwest National Laboratory, P.O. Box 999, Richland, Washington 99352, USA

<sup>3</sup> The State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, 29 Yudao St., Nanjing, China [105]

**The experiment scientists conclude:**

**1. Thus, we reasonably predicted that all single-atom-layer materials should have this kind of effect.**

**2. Based on the proposed mechanism, we predicted that any ions or small molecules which have enough energy can excite electrons out of graphene.**

**3. So the atomic-layer nature of graphene is crucial for the electricity generation.**

4. In conclusion, we could not find any evidence that support the opinion that the induced voltage came from chemical reaction. The mechanism for electricity generation by graphene in solution is a pure physical process, which is discussed in detail in the text.

5. We also measured the output power of a typical device whose exposed area was about 10 mm × 5 mm. When a 22 Kohm resistor loaded to it, the output power reached a peak of about 1.38 μW, which means that the theoretical power density is about 73.3 KW/Kg

**THIS BEING ONE OF THE CHAPTERS THE EXAMINERS AVOIDED DISCUSSING.**

## 14 Viva Transcript part 2

TIME: 2HOUR 33 MINS

The Viva transcript begins after introductions were made, around 2 minutes into the viva.

First question on chapter 4 by Ext.

Blanche: yep, there's a link in the references for you to use, and you're going to read about a 25 page um um, explanation of their experiment.

Ext: For that gave you then the motivation to do your own experiment afterwards, is that how it led from this to the experiments you done afterwards?

Blanche: Um not really, that's just a bit of evidence showing that the electric field is endothermic and it was examined by NASA to start with.

Ext: mmm

Blanche: So yes in a way, it's a bit of motivation you could say, but it's a bit of background research showing that I'm not the first person to discover this, yea

Ext: ok for then I guess why do we need all the other chapters, wouldn't one be enough? Why have you done experiments?

Blanche: well I didn't do that experiment,

Ext: Exactly.

Blanche: that was NASA's

Ext: you wanted to reproduce it.

Blanche: uh no well, it would have been great to reproduce it, but the equipment they had, they had an Arc specially built

Ext: yea

Blanche: That ah, would keep to 35 degrees centigrade,

Ext: mmm

Blanche: you haven't read the experiment, have you?

**VT: 1 MINUTE 13 SECONDS**

Ext: ah, not the NASA experiment no

Blanche: ok, so what they did was, they built an Arc, They called it an Adiabatic Arc,

Ext: yep

Blanche: it had a 0.1 c degrees C variant in it, so it would keep the same temperature, and so it was its own atmosphere inside yea?

Ext: mmm

Blanche: so the volume of air in it would stay in there, right, so you could apply gas laws to that, yep, so I can go into that, hang on, let me get chapter 4 up, uh I'm just useless without a mouse, I didn't put a picture of the Arc in there, or did i? that's the graph, yea, ok, that the Arc, I've drawn it there, it's a square, rectangle, it stays to 35 degrees in there, alright, centigrade, and this part here, they call the bomb right, a Ti Bomb.

Ext: mmm

Blanche: They hang that from the roof, as you can see, and they got a thermocouple, attached to the bottom of the bomb, and goes up there and out of the Art, ARC, right.

Ext: yea

Blanche: So inside the bomb here, the Arc, is the battery, right, they got the battery in there. Right, and they got it connected to the circuit obviously, ahh then they do the experiment 3 times and they log it there in their graph,

Ext: mmm

Blanche: Can I make this screen a bit bigger?

Chair: inaudible

Blanche: so as you can see, it's a very small screen to see it on, you can see it better in other chapters as I have a bigger drawing of it. So they start the experiment, in the first 20 minutes, approximately, the temperature inside the bomb,

Ext: mmm

Blanche: Which is measured by the thermocouple, underneath, which is, the bomb's made of Titanium, which is not a very conductive metal, so that's probably why they used Titanium.

Ext: mm

Blanche: inside the bomb it dropped to 33.26 degrees

Ext: mm

Blanche: Yea, so what in essence it's done, it's sucked out the energy out of the air, into the electric field charge of the battery, and as you can see, with, on their graph, as it sucks out the energy in the air, the temperature drops obviously, cause it would, because the energy as gone, at the same time the voltage shoots up, yea,

Ext: mmm

Blanche: yea,

Ext: because they're charging the battery, because they're applying external current, external load

Blanche: they've got a C5 charge on it as well, yea

Ext: mmm

Blanche: and at the same time then, the C5 charge is like the photoelectric effect catalyst, that's starting the reaction that sucks in t

Ext: so you think it's light not quite an analogy..... is that what you mean?

Blanche: it is an analogy, because we're not hitting it with photons, I've had this conversation with physicists before, and they say the photoelectric effect is about when you use photons, right, that's what was fixed in their mind. That's why I wrote equation 5 and equation 6,

**VT: 5 MINS**

Ext: where do you show that?

Blanche: That's in chapter 5 I think.

Ext: This one here I guess? equation 5.

Blanche: yea

Ext: Is that the one you referred to?

Blanche: Yes, that's it, that's Einstein's equation, Yep, where Einstein is saying, that ah when an electromagnetic force, or a photon,

Ext: mm

Blanche: hits a piece of metal, it causes this reaction.

Ext: ok

Blanche: You ionise an atom, the electron leaves the atom to ionise it. Yea, that's the reaction, and  $h\nu$  is the frequency and the amount of energy.

Ext: And you say that's not what is happening in that, it's similar to that.

Blanche: well it's the same, instead of it being  $h\nu$ , where it's photons in Einstein's equation, we're using an electron force, say from a battery or a power supply, yea.

Ext: mm

Blanche: so in essence

Ext: I just wondered, so equation, equation 6, can you explain that, as units are Newtons, (inaudible) how is that equal to each other?

Blanche: Right ok, so, mm,mm, so in essence, that's Nasa's circuit (drawing),

Ext or Int: is that the battery there?

Blanche: yes that's the battery, we close the circuit,

Ext: mm

Blanche: it (temperature) drops down by 2 degrees, while, then the voltage shoots up. yea

Ext: mm

Blanche: so, it's something like that (Showing Drawing) it's not very good but

Ext: yea exactly like that,

Blanche: anyway

Ext. yea

Blanche: so what you're doing then, is your taking a force from the battery ,

Ext: mm

Blanche: Force from the power supply I should call this, right

Ext: mm

Blanche: To hit the battery, yea.

Ext: mm

Blanche: and what that does is what I say there, that's the force and it's causing this inside the battery, it's causing you to ionise your lithium, by losing an electron.

Ext: can you right an equation like this, force equal to lithium + electron?

**VT: 7 MINUTES 16 SECONDS**

Blanche: well you can see it's a formula or an equation, I mean they're not equal to each other

Ext: but there's an identity there right.

Blanche: well ok I understand what you're saying,

Ext: Well I guess, I guess my question is, I understand what you're saying here,

Blanche: yea

Ext: as the mathematics is not right, this is in Newton's, what units is this? (Inaudible)

Blanche: um, volts and amps

Ext: right this is Newton's (inaudible), I think what your trying to say is, there's an electromotive force bringing about this right

Blanche: yes, exactly

Ext: and that electromagnetic, agreed, that's true.

Int: ok the equation not right

Ext: it, it, it's ok that's fine. Have you heard of Butler Volman kinetics, If I say that to you does it mean anything to you? Butler Volman?

Blanche: Butler warmer, no.

Ext: Inside the battery, it's what its (inaudible) its extra force that you need to bring about this reaction. So you have an external load. You have a reversible reaction as your working with lithium ion, like you said, you apply a load To induce a certain direction, charge and discharge

Blanche: mm

Ext: and yea, that's driven by the Butler Volman kinetics, but you haven't come across this I guess?

Blanche: no I haven't come across that at all, because my research is not about the internal workings of a battery

#### **VT: 8 MINUTES 22 SECONDS**

Ext: uh uh but I think it should be, because the subsequent explanation for using that led to the internal function, because this dip that your seeing here right

Blanche: so what you're trying to say is, that's a chemical reaction? Is that what you're trying to say?

Ext: yes exactly, yes exactly, a bit more there's a thermodynamic element. My next question is going to be, I was going to ask, yes let's talk about how inside the battery works, because this, this observations, are the results from the test are a battery, so we can't ignore the fact. Right the fact

Blanche: There's chemicals in there, a bunch of chemicals

Ext: yea, yea inside the battery, so and an anode and a cathode., so which, which I mean, is is, is there other ways, I guess the question is lets maybe start by asking, how do the electrons go , what happens inside when you apply this load? Why do you get that particular voltage profile?

Blanche: Why do you gain voltage?

Ext: No, Why do you get this particular voltage profile? Why this shape? And then why this particular temperature profile?

Blanche: well ok, so the force hits the lithium, yea ok, yea, do you agree with that?

Ext: not precisely but I understand what your trying to say, the force doesn't hit the lithium, there's a force generating this reaction, bringing about this reaction?

Blanche: so what do you think the force does? Tickle the lithium? No. You smack it, you smack the atoms, the lithium atom, right, with your electrons from your power supply,

Ext: mm

Blanche: you smacking them, and that induces the um, ionisation for the electron to leave the lithium, and create what ive called the photoelectric effect.

Ext: but that's uh that's uh

Blanche: Its exactly the same reaction. It's not a chemical reaction,

Ext: but this I disagree with

#### **VT: 10 MINUTES 23 SECONDS**

Blanche: well you can disagree with, but what evidence have you got though?

Ext: because there's no pure lithium in the battery, there's no lithium, I think you refer to it as lithium plate in many places

Blanche: yes I know, I know what you're going to say,

Ext: is there metal in this battery that you investigated the A123,

Blanche: there is yea

Ext: Pure lithium sheet?

Blanche: ah no there's chemicals in there, I do say what they're made of, lithium ion, phosphates, hexafluorine.

Ext: What happens to all the other stuff's?

Blanche: well that will recombine,

Ext: well why aren't they important in there?

Blanche: Because we are actually using the lithium to charge, because it's because it's, because it's a soft dense metal, it's easy to ionise

Ext: yep, mm sure,

Blanche: and by ionising the lithium, that's where you're gaining your voltage and amps, it's like

EXT: ok

Blanche: It's a joules charge, would you agree with that?

Ext: ok fine, fine, I'm going to come to come back to this question, so this dip if I'm not mistaken, is the key feature which has motivated you, to write, there's some evidence, there's some evidence,

Blanche: no, the key motivation was Joseph Newman

Ext: ok Fine

Blanche: he was my key motivation, because he was getting the same reaction as your seeing in (with) the battery. See.

Ext: ok, so this then was to support that?

Blanche: yea, like I said, (referring to what's written in the thesis) you can only have one set of rules for an electric field charge, you know, it's called electromagnetic theory written by Maxwell. If you're going to say that's different to any other electric field charge, then you're going to have another set of equations.

Ext: so what if I say, have you looked at, so, this, this, this, thermal, temperature, thermo effect, this dipping in temperature has been studied since the day this work has come out. Are you familiar with the other work, since the NASA data?

Blanche: no, I looked at your work, I didn't see any work by you investigating it.

Ext: yep, not directly myself



Blanche: no I didn't find anything. No but I haven't found anybody investigating the endothermic electric effect. Nobody, NASA is the only one I could find.

Ext: ok.

**VT: 12 MINUTES 20 SECONDS**

Blanche: and Naudin, who did his work with a Newman generator that he built, that's in chapter, I think you've missed that chapter, I think that was in chapter 3.

Ext: there's some work from Lancaster that has studied this quite heavily, but anyway, the point, ok, the ideas that, there's a different thermodynamic explanation, that's been used and it's predictive, and that's the nice thing, with all equations, right they're predictive, theory, right has to be predictive. Ah otherwise it doesn't serve a purpose. So I suppose, did you come across, what's called ah, the rate of change of enthalpy, and that's how it's linked to the entropic quotient, of this, this, describe this a bit.

Blanche: well yea, entropy is a change in state,

Ext: mm, and did you come across it?

Blanche: and they think, or people say, entropy can only go one way, there can only be more chaos.

Ext: mm, exactly

Blanche: that's what's written, but that's wrong isn't it obviously.

Ext, that's what's written, but that's what's called the, well that's the irreversible component, the irreversible heat component. But there's reversible heat as well, right.

Blanche: so what do you mean by irreversible and reversible? Can you give a bit more explanation than that please?

Ext: sure, so it comes down to understanding how the temperature of the battery behaves, what's causing

Blanche: no, no, we're talking about an electric field charge, not a battery, my research is into the electric field.

**VT: 13 MINUTES 47 SECONDS**

Ext: but the explanation you're using here, are, are not consistent with this example you are using, and that's the point I'm going to make here, if you're going to use this data as evidence, as an example,

Blanche: my electric field charge?

Ext: well you don't need an electric field charge to generate this either, you can have this, you can have, you can induce you can also have a temperate effect, you can apply a temperature

Blanche: Temperature is energy ok, let's start again, you're not making much sense to me. Boltzmann's constant, yea, yea

Ext: ok, how does that constant, ok go on

Blanche: Boltzmann's constant which was written by Boltzmann and Planck in the 1880s to the 1900s, right, they figured out, there's a certain amount of energy in air yea

Ext: sorry what's air

Blanche: in air right? what we breathe, in temperature, 21 degrees C right, it can be in any temperature, it goes down to absolute zero doesn't it, so in every joules, you are, I have it written here,

Ext: sorry what page you looking at here?

Blanche: this is page, page 31. Ok

Ext: 31

Blanche: this is a constant ok? That they developed. Right, per joule per kelvin, page 31?

Ext: this is on 31?

**VT: 15 MINUTES**

Blanche: ah, this is an older version of the work, sorry, it might be on page 32 I would suggest?

Int: You're talking about equation 1 right?

Blanche: equation 1 yep.

Int: 32, page 32.

Ext: Ok I can't seem to find the pages

Int, so with regard to equation 1, about the equation 1, you have  $n$  capital N equal to small  $n$  times capital N

Blanche: yea

Int: Does it make sense having capital N equal to small  $n$ , multiplied capital N

Blanche: yea, it's just deriving from this equation here, see? But I can't quite remember what it is now but if you look it up, you'll find this is derived to this

Int: Does it make sense, you have one variable equal to the multiplication of 2 variables.

Blanche: well if you look at equation 1, you've got pressure, volume on the one side, yes, ok.

Int: yes

Blanche: will equal, number of atoms, Boltzmann's constant to temperature

Int: what is the capital N?

Blanche: The capital N is the number of atoms,

Int: what is it for then? Blanche: it's ah, it's ah, the moles per gram I think they measure it in, or kilogram

Ext: oh I see yea. Centimetre squared.

Blanche: Avogadro's constant is what it's called.

Ext: mm

Blanche: it's the amount of atoms they measure in a mole.

#### **VT: 17 MINUTES**

Int: can you change the capital N, because it doesn't make sense that capital N equals small n multiplied by big N.

Blanche: perhaps it's a typing error, perhaps it's a typing error but I don't think so.

Int: it can't be true

Blanche: I can't quite remember now but I can look in to that. I will look into that for you.

Int: no no, look, what is the correct version of this equation?

Blanche: this one here. Equation 1.

Int: But obviously it's not correct because you have capital N equal to small n times capital N

Blanche: yea there is an explanation for it, but I can't remember to give to you now but I can look it up for you. Ok, and I guarantee that equation is right.

Blanche: So there's an amount of energy they discovered in air,

Ext: mm

Blanche: per kelvin per metre squared per kilogram, however you're going to measure it. There's energy there, and this is the constant they derived, Max Planck and Boltzmann, I think it was max Planck who came up with the equation, not Boltzmann, it was based on Boltzmann's work. So what I'm saying is with this, we can apply this equation,

Ext: mm

Blanche: to NASA's experiment. It's the guy Lussacs law it is, isn't it? That's another name for it, it's the same thing, and you can apply that equation, and in the equation, you'd have to rearrange it, to Equation 2. To find the pressure, so in this experiment by NASA, at the end of what I'm calling the endothermic electric effect, if you apply this equation, (looking for equation on laptop) equation 2, you end up with lower pressure.

#### **VT: 19 MINUTES**

Ext: so what would the values be, what would the figures be?

Blanche: if you want to put values in, let's just give them any value right, but the important thing is,  $T_s - T_d$

Ext which in this graph, what does it mean then

Blanche: temperate start is 35, yea? Minus temperature drop, right, say 33 not 33.26, just to make it easy for us right, so we end up with 2 there, yea,

Ext: mm

**VT: 20 MINUTES**

Blanche: so the pressure will be equal to  $N \times K \times 2$  ( should have said  $\times 33$ ) divided by the volume, there's a set volume in that Arc as I told you. Right, so what we're seeing is, seeing a lower pressure at the bottom of that temperature curve,

Ext : inside the battery? Outside the battery? does it matter?

Blanche: on the battery, yep, where they put the temperature sensor, yea (It's on the T1 bomb, which is on outside of the containment of the battery)

Ext: mm

Blanche: yea, I showed you where that was, I'll show you again, see there, that's the titanium bomb they hung from the arc, and they put the temperature sensor at the bottom of it, Ext: ok, ok

Blanche: right, so when they run that experiment, with a C5 charge, 4.2 constant voltage I think, you ended up with a lower temperature there in the first 15 to 20 minutes, whatever it was than when you started, so, the pressure on this equation that we have, so is going to be lower than we started. Because when we started it was 35, yea, Ts, so when we finish it's going to be lower, it's gonna be, so the pressure on the other side of the equation,

Ext: The volume doesn't change?

Blanche: no the volume in the arc is the same yea,

Ext: mm

Blanche: yea, they built the Arc, and put this hanging from the Arc, it's all enclosed environment,

Ext: mm ok

Blanche: so the volume is the same, that is why we can use this equation see.

Ext: mm

Blanche: yea

Ext: whats (inaudible)

Blanche: so the point is,

Ext: mm

Blanche: which I'm getting to, is this, as we were starting to talk about entropy, the point is this, we are taught that when temperature goes up so does pressure, but as we have found on this experiment, pressure has gone down

Ext: and what happens afterwards, when the temperature goes up again?

Blanche: well then you become exothermic, that's when you're getting friction on the lithium, and you're creating exothermic reaction. So what I'm saying is, the first charge of electricity of an electric field

Ext: mm

Blanche: in this parameters that are set here, is an endothermic reaction, which creates a lower pressure, on the outside at the bottom of that curve, yea at the bottom of that curve there, that's the voltage the top one, this is the temperature, at this point here, by applying this equation, which you can do, you've ended up with a lower pressure. Yea

**VT: 22 MINUTES**

Ext: ok

Blanche: but that goes against physics, we are saying pressure, when pressure goes up, temperature goes up,

Ext: but isn't that applicable to ideal gases? This curve isn't it true for only ideal gases?

Blanche: well would do you think this is, this is gases. These are gases

Ext: it's a battery and a chemical reaction there, I mean your (inaudible)?

Blanche: it's not a chemical reaction, IT'S A PHYSICAL REACTION,

Ext: no the battery is a chemical reaction.

Blanche: there's chemicals in the battery, but it's not a chemical reaction, A chemical reaction, right, there's an example right in here that I can show you, here we are (referring to GCSE revision book)  $\text{CaCO}_3 = \text{CaO} + \text{CO}_2$  calcium carbonate, add heat, a lot of heat, and you end up with calcium oxide and calcium dioxide, you've changed the chemical by using heat

**VT: 23 MINUTES**

Ext: sure

Blanche: now if this was a chemical reaction

Ext: electro chemical .

Blanche: no, you just said it was a chemical reaction, make your mind up.

Ext: electro chemical reaction

Blanche: what is an electro chemical reaction?

Ext: its when an electron is involved, together with a transfer of species from one form to another

Blanche: Well there's always electrons involved in chemical reactions, it has to be

Ext: No there isn't, in a electro chemical reaction, in this reaction there's no electron right

Blanche: A chemical reaction is when you start with one chemical and you end up with two different chemicals, right.

EXT: ok mm

Blanche: that's a chemical reaction, it's stated right here, gcse. ok, so call it an electro chemical if you want, alright

Ext: mm

Blanche: so what we're doing is, we start off with lithium tied to another bunch of chemicals

Ext: yea

Blanche: yea, and we end up with lithium on its own, ionised

Ext: mm

Blanche: plus an electron

Ext: where's the other stuff?

Blanche: the other stuff is over here, whatever, that's recombined with each other over there. But the electron as left the lithium, right, because that's what we're using the lithium for.

Ext: mm

Blanche: to conduct electricity

Ext: mm

#### **VT: 24 MINUTES**

Blanche: like you said, so where was I, yea, so when we gain pressure in the system which we're doing do here with voltage, right, the voltage is going up, we should gain in temperature as-well then. But we're not. We're losing temperature.

Int: that probably some of the constant you created, electro is not constant ah for example, you know the volume is constant right,

Blanche: yea the volume is constant.

Int: what about the N? is N constant

Blanche: what's that sorry?

Int: Capital N

Blanche: that's the number of atoms in the, yea, that's constant as well. It's in the volume in it?

Int: yea but when the battery's charging, when you charge the battery, there's some ah molecules or some molecules generated

Blanche: would it be fair to say now, they've built this Arc right, and they've enclosed this Arc so it is its own atmosphere. right, that's why they built it.

Int: (inaudible)

Blanche: so whatever is inside it, is staying inside it that was the point of the experiment see. Yes

Int: that's correct.

Blanche: so we can apply this equation. It's a fixed volume.

Int: yes that volume is constant, I have no doubt of that

Blanche: well whatever makes up the volume is constant as well. Whether it rearranges and does effects that you don't know what it's doing, is another matter, but you're not going to get more atoms in there because it's a constant volume of atoms. Is that what you mean.

Int: No.

Blanche: ok, I'm lost now

Int: Constant volume, doesn't mean that there are constant molecules, inside of the battery

Blanche : yea it must do, no , it must do. yea, because that's why they built it, see

Int: Ah there are some chemical reactions, within this chamber,

Blanche: sorry , sorry your wrong. They built the arc to enclose everything that is in there.as a constant. that's why they did it.

Int: including the battery?

Blanche: And the battery, everything in there, that's a constant volume.

Int: yea I know

Blanche: so when you start the experiment, you're not adding any more into it, except for perhaps the charge then,

Int: no.no.no

Blanche: the electromagnetic, you could say that's added to it.

Int: do you admit there is chemical reactions, when the battery is charging?

Blanche: you dissemble some of the chemicals, I agree, I agree with that.

Int: you do agree with that,

Blanche: yea, but that's not, that's not electricity, electricity is a physical reaction.

Int: no,no.no we're not talking about physical reaction, we're talking about chemical reaction, so if there's chemical reaction, there could be some more molecules generated.

Blanche: some what sorry?

Int: There'll be more molecules, molecules,

Blanche: well you could rearrange them, I can agree, but you haven't created them out of nothing, because they're in there.

Int: for example, for example,

Int: ok let me put it simple ok, ah so for example, water can be de composite to h2 , ah hydrogen and oxygen right.

Blanche: yea but it's still the same things in there, even if you

Int: it is the same thing, but what I mean is

Blanche: its still the same volume although you've altered their state. You've changed their state, I understand what you're saying there, but you haven't added or taken anything away from it. That's why we can use this equation, that's why they built it like that. But they didn't apply the equations themselves, which is very peculiar.

**VT: 27 MINUTES 30 SECONDS**

Ext: so are you interested in this pressure of this gas surrounding the battery? is that

Blanche: So no, what I'm saying is we've created a , as we've gained pressure in voltage, yea,

EXT: oh wait a minute, your referring to pressure to voltage,

Blanche: yes, yea, we are taught if pressure goes up,

Ext: so that's in volts, the vertical axis here,

Blanche: joules, call it joules. Voltage is equivalent to joules, isn't it.

Ext: ok, so you're talking about this voltage curve effectively

Blanche: yea we're talking about the voltage curve, yes, when the voltage rises, the pressure of the electric field, yea, isn't there a, look if I got 500 volts or 10 volts, and I'm going to stick one of them on you, which one is going to kill you, quickly. That's the pressure, yea

Ext: mm

Blanche: that's the force coming.

Int: no.no that's not voltage that kills somebody, that's the current, if you apply a voltage to ah, let me finish,

Blanche: Ok

**VT: 28 MINUTES 30 SECONDS**

Int: if you apply a voltage to a perfect di electric, there's no current' there's no harm.

Blanche: yep. I agree, but, but

Int: we have equivalent voltage to force exactly.

**VT: 29 MINUTES**

Blanche: anyway, this is, you're going off, off, we're going a bit off topic here, right, Joules = watts per second, ok, yea, alright, watts = voltage x amps per second, yea, this is what we're talking about,

Int: you have current, no voltage, current (inaudible)



Ext: Sorry watts is not volts, sorry, seconds aren't right, you say watts is volts times amps per second?

Blanche: Power, power is watts, watts is power,

Ext: equal to?

Blanche: equal to volts times amps

Ext: over seconds?

Blanche: well, electricity is with respect to time isn't it.

Ext: but that's not per second, are you dividing by seconds?

Blanche: sorry, that's per.per.per second

Ext: per second

Blanche: per second, that line, / is also used for per

Ext: yea but ,  $V \times A$  over  $S$ ?, is watts ?

Blanche: volts, watts is  $V \times A$  and that is with respect to time. Per second, yea

Ext: yea

Blanche: yea, and it's watts per second as well and it's kilowatt hour

Int: When was ah the NASA experiment, was a long time ago right?

Blanche: 2007

Int: so after that, ah, as anybody done any experiments similar?

Blanche: well NASA said at the end of the experiment, that they are going to look into it further,

Ext: but did they, they?

Blanche: I haven't found anything and I've been looking, as you can imagine

Ext: well

Blanche: so anyway, I still haven't finished with this

Ext: so on this point, this is the volts of the battery, and this is the temperature curve, so that's what you're trying to explain here right?

The voltage of the battery is proportional to the temperature

Blanche: Yea

Ext: and where did you come up with this? This straight line graph

because of this equation?

Ext: ah no, that's Guy Lussac's law, that's based on it,

Ext: is that applicable to batteries?

Blanche: ah well that's applicable to physics, um that's applicable to electromagnetism,

Ext: have you plotted this versus this to check if you get this, Well you had the two variables right, you could have plotted it.

Blanche: well, the thing is, what I've just showed you is, by that equation, we end up with a lower pressure,

Ext: no.no. that's not the point, you could have also, you are saying these are the temperatures of the battery, here's a voltage, I'm not familiar with this one, ah sorry, I'm gonna put, your saying, that is applicable to this (equation 2 again)

Blanche: well no, these are the laws of physics as we know them,

Ext: so can this be applied to this (referring to the gas law equation 2)

#### **VT: 32 MINUTES**

Blanche: well it should be, because it's electromagnetism we're talking about.

Ext: are you sure? Is that how it works?

Blanche: well yea, cause, like I said, before, you can only have one rules for electromagnetism.

Ext: yes but not all rules have to be applied because this depends on how it functions right? So this explanation, so you said you didn't come across much more data on NASAs point

Ext: if you, my situation is, I don't know if you looked up entropic quotient? There'll be some observations, some papers that can explain this.

Blanche: yea, I haven't found them.

Ext, yea the keyword is entropic quotient,

Blanche: can you show me some?

Ext: yes , sure now?

Blanche: yes why not, this is what we're discussing, there's not a lot more else to discuss unless you want to discuss the crime, or vaccines,

Ext: we can come to that after, I'm keen to stay on the work your done, and we can come back to this

Ext: Because, you've done quite a bit of experiment, and that's quite encouraging, it's good to see but, what's important is understanding the meaning behind it

Ext: if would like to ask some questions in the meantime, I'm searching the laptop

Blanche: do you see what I mean about the pressure being lower, we've created a lower pressure, while the pressure as actually risen in the electric field. Do you understand that? It's so vital to understand this.

**VT: 33 MINUTES 30 SECONDS**

Ext: it is, but I think you are mixing the equation, this is for ideal gases, this is an electrochemical reaction with species in there, these are not a gaseous form (inaudible)

Blanche: what we are talking about is the electric field charge, we are not talking about chemical reactions see. this is my point.

Ext: this is to do with the effect, so in this equation you said here, ah N is the

Blanche: Number of atoms,

Ext Number of moles of the gas, what gas are you referring to there?

Blanche: Electron gas

**VT: 34 MINUTES**

Ext: where's the electron gas?

Blanche: the air, the atmosphere

Ext, what about the the, but this is is, to do with the voltage and the temperature, right?

Blanche: yea.yea.

Ext: so where is the electron gas, not, where exactly in this NASA experiment, where's the electron gas? Inside the battery? Outside?

Blanche: well, it was outside it, but then it got taken in to the electric field charge.to charge it.

Ext: so there's electrons coming from outside, into

Blanche: into the electric field charge .yea, and that's why the air temperature around the battery lowers,

**VT: 35 MINUTES**

Ext: are you saying if you do this experiment in a vacuum, this would work.

Blanche: I don't know about a vacuum, we don't live in a vacuum

Ext: m

Blanche: we don't live in a vacuum do we?

Ext: but that's the thing, hypothetically if you do this experiment in a vacuum would this observation not be observed?

Blanche: I don't know

Ext: Yes it will be

Blanche: so what you trying to say, there's nothing in a vacuum

Ext: There's no electron transfer from outside

Ext: yes

Blanche: yea , it would still happen, have you got evidence of that

Ext: evidence to why it works and say that's the predictive nature, like if I can bring up something, and that's my point that I'm saying, I just want to clarify, you've mentioned gases a few times, I'm not sure exactly what you meant there, sorry carry on

Int: aaa that's the main question, I think er, if you use this equation, how to make sure, ah, what are variables, what are constant. for example, in these equations you keep talking about ah, a capital N and volume and constant, you can't be sure that volume is constant. But number of moles, capital N is not constant.

Blanche: well where did they come from then?

Int: From a chemical reaction

Blanche: so they appear out of nothing. They can't do that, it's impossible.

Int: no I think that you see that ah. For example, I'm no **EXPERT** of batteries, but if there's a chemical reaction, is that um um some more molecules could be generated.

Blanche: No, impossible, that goes against chemistry. You've got to have a balanced equation,

Int: yea, for example, water,  $\text{H}_2\text{O}$  can be turned into hydrogen and ah oxygen. So one molecule becomes two molecules.

Blanche: No.

Int: Why not?

Blanche (laugh) , no a molecule is two or more elements, for a start, a molecule has to have two parts, at least.

Ext: Inaudible

Blanche:  $\text{H}_2\text{O}$  is water, that's a molecule, but if you split them up you've got elements, not molecules. Which, there you are, that supports my theory. No your wrong, sorry. You can't magic molecules out of other molecules, it has to be a balanced equation. If we look through the gcse book, we'll find that.

Int: I have other examples of ah, ah for example, ah, there's one very typical, endo thermo chemical process, which is dissolving the salt into the water, so in that case, some more molecules have been generated, and ah, absorbing temperature, do you agree with that?

**VT: 38 MINUTES**

Blanche: I don't know what, all I know that, the chemistry I studied, a molecule is 2 or more elements added together and if you split them up, you can end up with more molecules, but they'll be the same sum of the one you split up. I know that, and when we go back to this equation here, back to this experiment here, you end up with a lower air pressure, on the outside of the bomb, because you've removed electrons out of the air into the electric field charge of the battery. Which I prove in my home experiments test 2 as well. So it's not a chemical reaction, your being side tracked

by chemical reactions, chemical reactions need heat and then they can absorb heat and you can have an endothermic reaction. But this is a physical electric field charge reaction.

Ext: there I disagree

Blanche: Well you're disagreeing with Planck's law then.

Ext: so here's here's what I'm saying is the equipment your showing is not relevant to the experiments you've shown against it, that's the point I'm making

**VT: 39 MINUTES**

Blanche: No I haven't, that's the point, because it's an enclosed volume of gas

Ext: but there's no electron gas, where's the electron gas?

Blanche: it's an enclosed volume of gas in that titanium bomb,

Ext: you said electron gas in the battery or something else

Blanche: well , is an electron a gas

Ext: but where's the electron gas in the battery in this experiment?

Blanche: in this experiment the temperature drops, yea , you agree with that,

Ext: yes that's observed.

Blanche: so where's that energy gone? What was it? what was that energy? Where's it gone?

Ext: ok, so, go on

Blanche: so the temperature has dropped, it's a lower temperature now on the outside of the bomb, than when we started by 2 degrees centigrade, and Planck's and Boltzmann's constant, tell us that energy has a certain amount of energy per kelvin, joules/kelvin Yea? Right, so that energy has been removed, it's gone, its disappeared, and it's gone into the electric field charge, because we've got a growing pressure on the battery.

Ext: did you not say

**VT: 40 MINUTES**

Blanche: see, the pressure here in the blue line goes up, that's the voltage pressure gaining while the temperature is dropping, the temperature is dropping on the outside of that bomb is because the electron gases in the air around it, are being sucked into the electron charge, uh, into the electric field charge.

Ext: that's what I mean, this is basic, even in a vacuum this would be observed.

Blanche: and your disagreeing with that,

Ext: Your battery is in outer space, but why don't you look up entropy quotient

Blanche: this is not in a vacuum, this is on land,

Ext: inaudible

Blanche: perhaps you have a different theory for up in space, I don't know. I'm not in space, this works on the ground,

**VT: 41 MINUTES**

Ext: but then you just said the rules would be applicable

Blanche: maybe not in space, I don't know, we'd have to go up in space and do the experiment. You can't use that argument against me. because I'm talking about what's on earth.

Ext: because what im seeing is the dip will be observed and the pressure will go up, even if this was done in a vacuum, Where does the gas come from then? Where does the energy come from then?

Blanche: why do you think there's a temperature drop then? Where do you think this energy goes from?

Ext. ok, you have 2 electrodes in a battery, anode and cathode, and that's a configuration, that configuration has a certain amount of energy and this then what's related to gibbs free energy, and where the rate of change of gibbs free energy is related to the entropy and reversible heat, not the reversible irreversible heat, and that configuration changes depending on the amount of coulombs that you put in. As you put in coulombs the configuration of your lattice changes and it absorbs

Blanche: Can I just stop you there, can you tell me, where does the air temperature energy, that energy, where does it go?

Ext: to the configuration of the lattice

Blanche: it goes into the, errr to make ions, the energy is to make the ion energy, is that what you're trying to say?

Ext it's the energy for the configuration of the lattice material right.

Blanche: so you're trying to say, that energy is sucked in, out of the air around it

Ext: that's not sucking out energy from the outside, the thermo, the temperature energy goes into the, energy, the elect, the material, the thermo dynamics, the lattice configuration changes depending on state of charge And some charge is endothermic and some charge is exothermic

Blanche: but your only talking in um words there, you're not explaining it, I'm explaining it, down to charge and pressure with equations, I'm going further than your description there,

Ext: but equally your using that incorrect, because

Blanche: but it can't be incorrect, I've applied the equation, for gas laws, to the experiment, but you can't tell me I'm wrong.

Ex: you can't apply the gas laws here

Blanche: but you can, but you can,

Ext: no, because there's no electron gas there.

**VT: 43 MINUTES**

Blanche: so hang on, in the air, what do you think the electrons are, are they gases?

Ext: But those electrons are not what is involved here,

Blanche: but what are they then?

Ext: electrons in a circuit diagram you drew

Blanche: you're not understanding this I'm afraid,

Ext: where's the circuit diagram you drew?

Blanche: in the air

Ext: that one

Blanche: I don't need a diagram on this one, Boltzmann's constant, it goes back to that. Do you understand Boltzmann constant?

Ext: explain it to me

**VT: 44 MINUTES**

Blanche: There's a certain amount of, in this box here (NASA's Arc) of 35 degrees, right, there's a certain amount of energy yea, which Boltzmann said if it was 35 degrees on this, we've got it to  $1.38 \times 10^{-23}$  j/k right, right, that's the amount of energy there is right, in 1 kelvin right, say this is 35 kelvin not 35 centigrade ok,

Ext mm

Blanche: so we are saying is  $35 \times 1.38 \times 10^{-23}$  j/k inside this Arc, right, when we start the experiment, ok, 15 minutes into the experiment, the thermometer, thermistor ( I meant thermocouple) is now measuring 33 degrees. So we're saying,  $33 \times 1.38 \times 10^{-23}$  j/k inside there now alright, it's gone less, so there's 2 kelvin's of energy, joules energy, disappeared into the battery, to create the pressure right, P gone up, but the miraculous thing is the temperature's gone down, the temperature has gone down because this energy that was here, this 35 degrees, is now 33 degrees, that energy has gone into the pressure into the electric field, that's what I'm saying, that's, and they're electron gases, they're air, they've been ' they've been taken out of molecules, maybe water molecules in there, yea, there could be water in there,

Ext: so in this diagram we see, you're saying here, there's applied load (the battery is the load) and then there's electrons coming from the external air

Blanche: yea,

Ext: going in there

Blanche : yea as well yea , yep

Ext: so there's electrons being extracted,

Blanche: the load, the force, you put on it causes this reaction. At the beginning of the electric field charge.

Ext: and these electrons are stripped from some molecules,

**VT: 46 MINUTES**

Blanche: out of the air yeah. That's it , we've seen it here, this by these figures, it shows us, it was 35 degrees and now it's 33 degrees all around it. Well it can't just disappear out of there. It was specially built Arc

Ext: so some substance electrons come in, going into there, conducting through the material, into this electric, right.

Blanche: well, are they conducting, no, they're charging the material, they're making lithium ions and an electron force around it,

(mistake, making an electron force around the lithium ion, coulombs law)

Ext, but that's where I disagree.

Blanche: well how can you disagree, that's what an electric charge is?

Ext: there's a vacuum, still happen, Electrons cannot go from outside through this material, for its fully insulated. What if it's plastic?

Blanche: are you serious?

Ext: how does then electrons go through it?

Blanche: the experiment here, shows it, it's NASAs experiment, not mine, I didn't, I didn't , this is why , this why I've got this experiment in here,

Ext: no but then you done it.

Blanche: so people if they say oh I want to disagree with it, you're not disagreeing with me,

Ext: no I didn't disagree with the observations

Blanche: your now disagreeing with a set up that NASA have built, and the results they got. You're not disagreeing with me

Ext: that's not true

**VT: 47 MINUTES**

Blanche: you're disagreeing with Planck's constant, right, the amount of energy in temperature, and your disagreeing to this is how, this is what the reaction is, at the charge.

Ext: ok, so, coming back to this, ah you not look up, other, if you look at there, the, literature, citations, I'm surprised, did you try and look up , look up other explanations, what people have done to explain the dip?

Blanche: nobody has, I, I couldn't find anything, nobody has, whether you found something great, I didn't.



Ext: ok that's what I'm saying, you need

Blanche: whether their explanations are correct or not, I don't know, because I never found them,

Ext: inaudible

Blanche: this is my explanation of it, backed up by physics.

Ext: so that's no, so you didn't come across the entropic quotient right?

Blanche: no I didn't

**VT: 48 MINUTES**

Ext: ok. I think I can move on to the next chapter.

Int: yea I have more questions, coming back to what I said, about molecules, I found that ah molecule **inaudible** nuclear, that is it consist of ah um um, one chemical atom. For example, 2 atoms are in oxygen or 2 hydrogen molecules,  $H_2$ , so, you do have a chemical reaction, which ah ah ah turn one molecule into 2 oxygen molecules, one molecule can generate more, more different atoms and molecules

Blanche: I see what you mean, but you're still going to end up with the same net total.

Int: ok so another another question that is that do you come up or come across any more views that as selective materials with a coefficient

Blanche: Material expansive co efficient?

Int: thermo expansive coefficient

Int: so you know that when you pick up a material, normally the material expand,

Blanche: right, yea.

Int: that is the relation between ah P and key (?) so you increase temperature and pressure increases, so because of material expands,

Blanche: well yea, I'm showing you the opposite effect.

Int: That's what I thought ok. Some materials, they have negative some more expansion coefficients so you increase the temperature, and the volume decreases

Blanche: does it?

Int: yea yea, there are many, there are many.

Blanche: I didn't know that

Int: there are many, so in that case, you have , you can say that there is an endo thermo , but in fact it's not endo thermo, it's just because the material has negative thermo expansive coefficient

Blanche: so, where did the energy go?

Int: they change phase

Blanche: no sorry, you have to explain where the energy has gone. That's not explaining where the energy has gone

Int: They phase changing, **inaudible**

Blanche: if something's changed, a phase is something changing, yea,

Int: yea yea,

Blanche: something's changed, But what has changed?

Int: the crystal structure

Blanche: the crystal structure has changed

Int: yea the crystal structure has changed and absorbed energy

Blanche, yea it did absorb energy, that's what I'm saying, the electric field, has absorbed energy out of the gases surrounding it, that's the whole point, I'm saying that. It doesn't mean the crystal structure of the material has, makes any difference, if it's changed it's changed, but it doesn't matter, what we're talking about is an electric field charge. The gases have come into an electric field charge, out of the atmosphere around it, it's definitely changed, its gained pressure. But the temperature has dropped around it because, you've taken the energy out of the air.

Int: What I said is that, ha you um couldn't use that formula, simple formula, to apply to anything,

Blanche: well it's Guy Lussac's gas law that we are taught in school, and ah it applies to this experiment. So I disagree with you sorry.

Int: no you can't apply a simple formula to everything, that's what I said.

Blanche: well yea I can,

Int: that has been ah

Blanche: I can, I can apply that because you've got a fixed amount of volume and gases in that experiment. So I, so I can show by using that formula that the pressure has reduced due to the temperature drop. But the pressure hasn't reduced because we know the pressure has gone up in the voltage charge, and I'm saying the energy, has been reduced out of the air around the battery and have gone into the electric field charge. So you've gained energy out of the air into your electric field charge. That's the whole point. That's quite easy to understand.

Ext: so coming back to that, if there's nothing around it, would this not be observed? There's no air?

Blanche: if there's no air,

Ext: mm

Blanche: well there's always air isn't it? we live on earth I mean

Ext: listen if you done it in a vacuum

Blanche: I don't know I haven't done it in a vacuum and that would be, that would be taking the experiments further

Ext: but if you extrapolate, if there's no (air) in a vacuum, would this not then be observed, because this does no air to provide the electrons?

Blanche: I don't know, I have no idea, I haven't done the experiment,

Ext: but the explanation is (inaudible) right?

Blanche: if there was no air around it, well it wouldn't be, yea it wouldn't happen like that, it wouldn't draw in energy from it, because there would be nothing there to draw in

Ext: and so therefore

Blanche: it doesn't mean mm, it doesn't mean you wouldn't get the pressure rise if you hit it with a force though

Ext: but would the temperature drop?

Blanche: I have no idea, well if there's nothing there

Ext: has a prediction?

Time 53 minutes

Blanche: if there's a vacuum there's no temperature then, is there? It's absolute zero.

Ext: no but you can have a heat source right, because a battery is a heat source

Blanche: heat is energy so you'd draw in the energy then. So you'd still see the endothermic reaction.

Ext: so where's the energy coming from? If not from the outside?

Blanche: well if you added heat to it, it would be coming from wherever you added heat to it.

Ext: well there's nothing to add it.

Blanche: if it's in a vacuum and there's nothing, there's nothing to go in there, I agree with that. Right

Ext: mm, but then you won't see this dip?

Blanche: but we're not in a vacuum

Ext: that's beside the point that's beside the point,

Blanche: it is not beside the point.

Ext: it's an explanation, well it should validate the explanation further right?

Blanche: should you still see an endothermic reaction out of the atmosphere around it in a vacuum, well if there's no atmosphere around it, you wouldn't be able to. I'd have to agree with that

Ext: My point is that, you can still charge a battery in a vacuum right, and then it 'll

Blanche: so there is an atmosphere around it then, because there's an atmosphere in the battery

Ext, well it's pressurised, it's sealed.

Blanche, well yea, but there's an atmosphere in there,

Ext: sure, there's an atmosphere in there

Blanche: yea, exactly

Ext: so you're saying it's coming from there?

Blanche: well it will come from there and it will come from outside as this shows, it comes from all around, depends on how much of a force you hit it with, depending on the, it's a bit like ampere's law isn't you know, it's ampere's law, (making a drawing, and silence from examiners,) clean piece of paper, right, connect that to a battery as well, and we gonna give this the value of 3 ohms, the wire, and we're gonna put say 12 volts in it, so what's the current gonna be? Er 4 amps would you agree with that? VIR. So 12 into, 3 into 12 is 4 amps, so we're sending 4 amps around there, so we'll have a certain size electric and magnetic field around the conductor, so, so, let's increase this to 4 ohm's, so we're gonna get 3 amps this time, so then we're gonna get a smaller field around the conductor, so back to this experiment, so the temperature drop is 35 to 33, so, so what are we putting in it, we're putting in 3.6 volts and it's a C5 charge, of how many amp hour battery is it, I'm not sure now, well let's make it up. It doesn't matter does. Lets say it's a 4 volt charge and a 10 amp hour battery, and it's C5 so what's that,

#### VT 56 MINUTES

Ext: 2

Blanche: 2 amps, so if we increase the volts here, and increase the amp hours, what are we gonna have, we gonna have a bigger electric field, and a bigger magnetic field, so you're going to get more of a temperature drop, because it's going to have more force to suck that energy towards it, because it attracts it by force, you're creating a lithium ion right, a bigger positive ion, which is 1850 times bigger than an electron right, an electron's tiny, so this is in a lattice, a fixed lattice, as you said about batteries, so where's this, this is gonna be attracted to it, this is fundamental electromagnetic theory of attraction, coulombs law so this gonna be attracted, so the bigger the voltage we put on this battery, right, see, here's the battery now, the bigger the voltage we put on that battery the more attraction we are going to get of electrons out of the molecules around them, and it doesn't you know, this is showing a fundamental law of physics that we don't know, or are not appreciating

Ext: well the point I'm making's that (inaudible) I'm coming to the same point? Source term?

Blanche: electrons are so small, they're like, how big are they,  $10^{-31}$ , it's a bit like the mosquito going through a fence, it's a bit like the mask, you know the masks we've all been wearing? For covid,

Ext: mm

Blanche: well you mask right, is like this (drawing) right here's your mask, when you put it under the microscope, , right, these are 10 microns or something, right, and , along comes the virus, which is 2 microns, right, yea, it's useless, it's the same with electrons being attracted into that battery, you know, there's nothing you're going to be able to put there, to stop something  $10^{-31}$  getting in there if it's attracted to it.

Ext: any more questions Int?

Int: yea ah, yea I have a question about your experiment, and you have done um some experiment um where you put your battery in the

Ext: which page you looking at, 52?

Int: 52,

Blanche: what page is it sorry?

Int: 52, in your experiment, can you describe your experiment?

Int: Swansea, South wales experiment.

Blanche: it's a purpose built lab, they were testing and building batteries for formula 1 racing cars there.

Int: can you describe the make up of your experiment

#### **VT: 59 MINUTES**

Blanche: Yea, it was run on bitrode equipment, which I think is a good standard of equipment, they didn't have anything like this in Swansea, um so yea, it's good equipment, it runs on an LCN program, I've put the program in the index, at the back for you to read, and the steps of charge, so these were taken from a top charge, sorry, these were a top charge, after discharge, yea, near to the graph

Int: so this is for the ah graph?

Blanche: this one yea?

Int: yea.

Blanche: yea, so there's 3 different batteries, charge 1,2, and 3, charge 3, the battery was at 32 degrees starting, charge 2, 29 and charge 1 just under 27. Ah it was done with a C2 charge, its an 18 amp hour battery, A123 battery , I think made by sony maybe,

#### **VT: 60 MINUTES**

Ext: A123 is the company itself.

Blanche: oh it is , sorry. So that was the battery, and, ah, this was the top charge, and this was the data collected, during the C2 charge. And ah , I think it was 4'2 volts, maybe less, I'm not sure now, um, I'll have a look. Table 2 I think, 3.6 vols. And we've got the same results here as what we got with NASA. Now if I was designing and energy machine, like Joseph Newman's machine, where would I turn it off and discharge it? Well you would probably turn it off somewhere round here, yea

Blanche: see the steepness of the curve there,

Ext: of the temperature?

Blanche: of the temperature drop, yea, the red one (line) yea, and look at the voltage there, the voltage as gone up from, 2.8 volts, up to, it's up to, I've put this in a table it's actually,

Ext: that seems the point, why do the temperature start at three different points? Like why wasn't the cell allowed to rest, sufficiently long enough to start at the same point

Blanche: that didn't matter, what I was looking for was different reactions, and see what happens at different reactions (oops Temperatures)

Ext: what you mean, the reactions are the same reactions are happening right?

Blanche: well not really no, look how long does it stay endothermic, for a start, yea

Ext: what is the ambient temperatures in this one?

Blanche: 24 degrees I do believe, I have written it in there, I think it's about 24

Ext: but isn't that why it's cooling down?

Blanche: no

Ext: because the cell was warmer to begin with?

**VT: 1HR 2MINS**

Blanche: I like that argument, but I can dispel that argument, in my home tests, but it's a good argument, it's a valid question but no, the cell is cooling down because again it is absorbing heat

Ext: but but I think

Blanche: it's rising in pressure, and absorbing

Ext: but ah, no you can't distinguish, I did it to show that, you should have started at ambient temperature, right?

Blanche: well NASA did that,

Ext: but this is your work, your experiment,

Blanche: the whole idea was to go further,

Ext: what you want, is here is the ambient temperature, here's my battery starting , here it dips and here it goes up, right now you can't verify that ,,

ok your home experiment, we'll come back to that, you're starting up here, even in the absence of an applied load its subsequently gonna go down, if you

Blanche: yea yea.

Ext: should i then , I guess the question is how do you know which ones which?

Blanche: it's a valid question, but it's

Ext: cross talking inaudible

Blanche: like I said, NASA did that experiment,

Ext: that's fine, it's your work

Blanche: yea. This is my work and I've taken it a step further than NASA here, I've, I've put the temperature of the battery different to the temperature of the oven,

Ext: temperature of the battery, different, ok, and what were you trying to study from that?

Blanche: How long it would stay endothermic at any temperature.

Ext: There's a cooling effect and an endothermic effect mixed in this at this moment

Blanche: the cooling effect is the endothermic effect,

Ext: no, there's a cooling effect, there's a cooling effect even in the absence of an applied current, they will still be going down

Blanche: that's an endothermic reaction yea,

Ext: that's not a reaction there, there's no applied current there, the surface is cooling, right oh you think that's ah

Blanche: oh I see what you mean, yea

Ext: so you have a hot battery, you just put it in the oven, it's cooler, you haven't start the experiment yet, **inaudible**

Blanche: but what this, this proves is, it goes against known theory of physics, of thermodynamics, there should be a rise in entropy shouldn't there, and chaos because, we're putting more pressure in to it, **(current at a constant voltage)**, and the temperature should rise, but it doesn't, see, the temperature is coming right down here, all the way for 2000 seconds, it's cooling down, that's an amazing amount of time, to cool something down, how many minutes is 2000 seconds? It's quite a few, 3360 seconds is an hour,

Ext: no but if the..

Blanche: 45 minutes, but it's still above room temperature, and it's still cooling down,

Ext: no that could be explained, well ok, that's a possible answer, explanation, but what is, what if the temperature gradient is still large enough, there's a big gradient between the cell temperature to begin with, at time zero, 33, what is the ambient did you say,

Blanche: 24

#### **VT 1HR 5 MINS**

Ext: 24, there's a. uh. Mm, well some degree temperature, well maybe that gradient, is sufficient to drag it down, before the cell, you know, all of the endothermic, exothermic observation become observable,

Ext: so maybe this graph is dominated by the fact, there's a large gradient to begin with

Blanche: yea, yea, maybe yea

Int: ah, ah did you try ah not charging the battery? And measure the temperature?

Blanche: of the battery?

Int: of the battery, so when you have the battery now, ok, in my temperature, and you connect your battery, to outside temperature, ahh some equipment, so there's a temperature gradient, between

ah inside, and outside oven right, so, even, you don't charge your battery, you can, cannot, ca, check the temperature over the time,

Blanche: ambient temperature you're talking about, ambient temperature, is that what you mean?

Int: I mean that you measure the temperature of the battery

Blanche: which is what this is doing, this is taped to the battery,

Int: without charging it

Blanche: without charging it, ok yea, just so that to see what it's temperature is, yea, will at the beginning these were the temperatures, before the charge,

Int: when you connect your battery, to outside equipment, the temperature of outside equipment, is 24 degrees Celsius, is that right?

Blanche: yes

Int: so there is thermal conduction between the battery and outside equipment, is that right?

Blanche: well, yea that's possible, and you're saying that, that equipment could affect the temperature of the battery

Int: exactly , conducted by the wire

Blanche: yea I mean, you'd have to have incredible equipment to

Int: so you can do a further experiment, ok after that, to check, ah without ah charging it, just to measure the temperature of the battery, when they're connected to the outside

Blanche: yea that's possible

Int: and to see there's a temperature drop, I believe there will be some temperature drop,

Blanche: yea that's possible, but these are specifically battery charges, that's what we're doing here, we're seeing how long the battery stays in the endothermic

Int: I can see what experiment you can do in the future, its very interesting, is that ah. you can put the battery, in a lower temperature, than the ambient temperature

Blanche: yes I've done that, that's in test 3

Int: and what was that experiment in?

Blanche : test 3 that was

#### **VT 1HR 8MINS**

Ext: ah so come back to this point, so, I think um, any reason why you only selected one battery, and you didn't try anymore, **inaudible**

Blanche: it's just what was available at the time, yea

Ext: ok that's a shame because, ah um, for a good experiment you would need more than one sample,



Blanche: you could do more, always do more,

Ext: at least three, ah is good practice, ah, did you have access to more than one cell.

Blanche: not at the time no,

Ext: and was it a fresh cell or had it been used by others.

Blanche: it had had a discharge yea, it had been used

Ext: but not like many times,

Blanche: no it was bought in for lab testing, it wasn't cycled

Ext: ok so, so, in this work, so this sentence you make on page 52, ah your saying, which ah, um I don't understand. Towards the end of section 9.1 your saying, ah it can be seen from table 3, how the 50% soc is reaching 400 cycles (he means 400 seconds), yet 100% soc takes 7500 seconds, whats the point your trying to get across, from that comparison,

Blanche: seconds you mean was it? not cycles?

Ext: yea, if you scroll down a bit, on this page, um ah yea, over here. Yea exactly just before this,

Blanche: ok,

Ext: so your saying, it can be seen from table 3, do you see that,

Blanche: yes

Ext: I guess my question is, what's, what you trying to get across from there?

Blanche: ok, yea right good yea, and that's a. like I started explaining, if I was building an endothermic energy generator, where would you start it, stop it and discharge it? this is the point I'm making, right

Ext: mm

Blanche: because this reaction doesn't last forever, it's, it's in parameters, ok, this energy gain from the air,

Ext (inaudible) when you say parameters, what are the parameters? (this is well defined in thesis,)

Blanche: ah well there's 5 parameters, there's voltage, current, temperature of the ambient air is a parameter as we've discussed, ah, there's the surface area, that's a parameter, and there's probably more, is there? Without looking at my notes. I do mention that in chapter 3 I think (you forgot time!)

Ext: ok so carry on sir

Blanche: yea, so these are the parameters set on the charge, so say we're doing, Newman' energy machine, we've got a big coil, 50,000 ohms, 50, meters, I don't know, it's quite long, right, there's a lot of it, and what he's doing then, he's putting a very high voltage on it, because you can hit, hit um copper with a high voltage cause it's dense, right, and you want to hit it hard, so you can make the electrons bounce out of the atoms, to ionise them

Ext: mm

Blanche: right, so he's putting a big voltage on, and a minimal current, he doesn't want to put much current on it, because if you put too much current in there, it completes the circuit, and causes friction quickly, and by doing that, you'll miss the energy gain, which is coming from the air around it, so depending on the materials you are using, will depend on where you set your parameters, now with lithium batteries, they're not for charge, they're not generating energy anyway, they're for storing energy, but if you say for, imagine we were using lithium has, for energy generation, we wouldn't be able to put many volts on it would we, we'd catch it on fire, but you can put lots of amps at it, like we know we can run a 1C charge into it, so again you can see the difference in parameters

Ext: mm (doesn't engage in the abstract at all)

Blanche: yea, to catch this endothermic reaction, cause as we know, as I've explained already from the NASA experiment, this endothermic charge, is, is, is, two gains, there's one of the electrons coming out of the material, of the lithium, or copper as in an inductor, and also electrons coming out of the air, and that's why your seeing a temperature drop around the, the machine. And now if you don't, and now in this, if I, if this was a graph of my energy generator, made of lithium, I would be discharging it somewhere around here, I'd start, stop and discharge somewhere about by there, because you've gained most of your voltage, as you can see,

Ext: mm

Blanche: you've gained, 50 -60% of your voltage charge, there

Ext: mm, what's the state of charge (soc) do you think around there?

Blanche: there, iv'e got it in my tables for that one, ahhh there it is for that one, it's on 3.4 is it,, less than that, 3.3 would you agree

Ext: mm

Blancher: just above 3.2,

Ext: mm

Blanche: and we're charging it from 2.8, less than that 2.7, to 3.6, so we're not far off 50% there,

Ext: ok, so that's, that's what I was going to say, you're saying the soc is proportional to the voltage, right,, that's that's

Blanche: yea, I've measured it here as 2.8, and we're going to finish at 3'6, so that's 0 to 100%

Ext, yea but that's that's where I have to disagree on that, the voltage is not proportional to the soc, in this battery, definitely not in this

Blanche: no. no, cause it's not

Ext: so you can't say this is 50%, this is probably 10-20% at most at that point, the point you were referring to.

Blanche: well the point is, I'm saying is, it's got to almost 3.2, from 2.8, yea

Ext: mm

Blanche: and it's going to go to 3.6, so that's about 50% , between to 2.8 and 3.6,

Ext: in voltage but not in energy, the amount of energy the battery would have soc ,

Blanche: in voltage yea

Ext: ok

**VT: 1HR 14 MINS**

Blanche: yea, and voltage is how you measure how much energy is in a battery. I do believe.

Ext: no that you multiply that by the amount of charge is stored, voltage times the coulombs, is the energy

Blanche: is the power,

Ext: No,no,no, not the

Blanche: voltage times amps is power isn't it,

Ext: charge, coulombs,

Blanche: charge is energy

Ext: charge is coulombs,

Blanche: sorry, sorry,

Ext: coulombs and volts is joules,

Blanche: yea,

Ext right, so if you look, I you look at this particular battery and plot the open circuit voltage, of the battery. So no load applied, no load applied, just the open circuit, the function of OCV, is soc it's not a straight line, had it been a straight line, this sentence makes sense to me, so I would have understood why you thought that, but in this, in this particular case, cause of the material properties, coming back to the lattice structure, etc, it's very flat line and then goes up like that, so this is OCV, this is SOC, right, and I think in your case, around whatever 3.2, is somewhere round here, this might be give or take around 20%,

Blanche: yea

Ext: So there's no linearity at all, and this is the key again, key point to the amount of, so there's fundamental, have you looked at OCV of this curve: the OCV of this battery, so that's the energy storing, the chemical potential is the (inaudible)

Blanche: I think you're, you're going off course a bit here,

Ext: no no its comes off this sentence

Blanche: ah alright ok,

Ext: that's why, I want to make a point.

Blanche: yea that's a good point I suppose

Blanche: it still doesn't matter, it's still showing 3.2 volts, at this point here, yea

Ext: so then, is that sentence relevant now?

Blanche: is it 50% of where it goes to, yes,

Ext: but that doesn't mean anything about energy

Blanche: ah I don't know, we're picking on a sentence here, let me have a look at the sentence, 50% soc, is reached in 400 seconds,

Ext: and that's yea, that's not correct,

Blanche: in voltage

**VT: 1HR 16 MINS**

Ext: for then it's not

Blanche: alright, 50% of the voltage reached in 400 seconds, you'd agree with that,

Ext: yes

Blanche: ok, so it reaches voltage, in 400 seconds, so what I'm saying is, if I was building an energy generator, that's where I would discharge it,

Ext: but then you haven't got much energy there yet right?

Blanche: an endothermic energy generator, yea, but you've always got more than you've put in there, that's the point,

Ext: no you won't. you probably, why don't you wait a bit longer then discharge it

Blanche: because you're going to get an exothermic reaction, and you lose energy

Ext: but there's not much work been done?

Blanche: because you have internal resistance in a battery

Ext ok how much.

Blanche: but like I said, this is a bit off subject, because if you were designing an energy generator, you wouldn't design it using a battery,

Ext: if you always use the last bit, and then keep switching on and off?

Blanche: yep that's what we do, that's what Newman did with his machine, he'd start it, and stop it and discharge it, have you heard of Stanley Meyer?

Ext: m?

Blanche: have you heard of Stanley Meyer? Stanley Meyer invented an hydrogen generator, and he put 20,000 cycles per second on it, of start, stop and discharge, well he didn't have to discharge it, just start and stop it, with a hydrogen generator

Ext mm

Blanche: and the amount of hydrogen he was getting out of it was incredible, they kil, he got murdered actually,

Ext ok, right

Blanche: so anyways, the point is, the reaction is time dependant, it's one of the parameters, it's also dependant on your voltage, your current, your surface area, depending on what materials you using, and it's a physical reaction with your surroundings, it's an open exchange reaction, um, I can just babble on if you want, or you can ask me questions

Ext: that's alright, yea ok I mean, yea I think what the question was, I was trying to understand, why you wrote that sentence, but then, I want to try, or check whether, you agree or disagree with this OCV as a function of soc?

Blanche: yea I agree with that, yea, I could have put it like that I could have put it as voltage rather than soc

Ext: I guess the next question is, um on page 53, on this chapter, on the next page, so you got 3 points, um maybe next one, keep going, this one on top, yea these two points, is this, is this, your, your, explanation, to this figure? Is that correct to say

Blanche: yea,

Ext: could you explain those 3 points,

Blanche: yea, well the kinetic energy you've put in there from your power supply, yea

Ext: mm

Blanche: is the conduction current to the reaction,

Ext: mm mm

Blanche: ah, electrons that have actually come out of the lithium, now you have to remember if your basing this idea on an energy generator rather than a lithium battery, you see, ok, you mustn't get confused, but yea, point 2 is , you've gained your current inside your battery, is gained from the current you put in from your power supply, the electrons from them

Ext: mm,

Blanche: it's gained from the electrons that have come out of the lithium by the photoelectric effect,

Ext: that is the gases your talking about or?

Blanche: well no, you got lithium, it's a neutral atom to start with, it's just L neutral to start with right, it's got it's 2 rings , yea, 2 atoms on the inner ring, um electrons sorry, and one on the outer ring, this is the nucleus, that's neutral

Ext: mm

Blanche: that would be it's neutral form so then what we're doing is, we're hitting this electron here, with the power supply, see, and you will knock it off, then this lithium becomes lithium positive,

Ext: mm

#### **VT: 1HR 20 MINS**

Blanche: so the electric field, charge, now has, the emf that you've put in there from your power supply, emf in the form of electrons, that is what we say we do, that's number 1, number2, we have the electron we've knocked off the lithium,

Ext: mm

Blanche: le minus we call that, number 3, we've got the attraction from the gases surrounding the battery, yea, that's been attracted to this positive ion, , right, this big positive ion, here, lithium, like I said about the mask scenario, you can't stop anything that is attracted to it, coming to it, ok, if this force here, which is a positive force, has enough force to rip an electron maybe in water, in the air, right, it will rip it out into your electric field, so now you've got another electron gas from the air surrounding this reaction, in your electric field charge, and those are the 3 points I've made there,. So what you've got is an initial amount of energy you put in there, plus an extra 2 amounts of energy that you've put in there, so we can design our, renewable energy generators, to capture these extra energy, so you're getting something for nothing as you would say, but you're not really getting something for nothing, you're actually just benefitting from the reaction and know it's happening, and you discharge it at the right time, because it's all respect to time, and you gain energy from your system, and from your environment, and that's the next generation of renewable energy generators that we're going to see on this planet. So far we've had them stopped by Big Oil,

Ext mm

Blanche: we've had people murdered because of it, because they've come forward with this sort of evidence, and these machines, and business doesn't want energy getting any cheaper, as we know, we're all enjoying more expensive energy bills these days, and the profits are going up, 40 billion was it umm energy companies made last year, being in the energy business, I'm quite interested in things like this, Big Oil made 20 billion, 30 billion, and another great thing as well, carbon capture, now this is the agenda, whether you believe in climate change or not is up to you, if you look at historical evidence you'll see, that carbon dioxide, follows temperature, with a lag of about 500 years

Ext: maybe we can discuss some of these points at the end , when we get through your work I think

Blanche: ok, I'm just going off on one now, well I've got a lot to tell you,

Ext: I guess on this chapter, I just, one more, so I think, for me the key point is, my questions was, they should have ideally started this, at the same point the temperatures, um would have helped

Blanche: well that's what NASA did and I did it different, to see something different, which is what you do with experiments or I do with experiments, is to build them up you know, you start at a point and look for other things

Ext: that's ok, but this is not helping, to study your other cases, is what i'm saying

#### **VT: 1HR 24 MINS**

Blanche: yea ok , it's confusing, different things to look

Ext: umm. I'm moving into the next chapter, but few more questions here, then I'm done, um, so then you had your Swansea experiment um, right this is er, from page 62, for example, maybe can er, so then you had this, Swansea experiment, and home experiments, could you summarise what was the objective of these two further experiments, different to that of the er, the one before.

Blanche: the Swansea experiment, I used 3 temperature sensors

Ext: mm

Blanche: one I stuck on the battery, this one is balance above the battery, about 15mm above

Ext: mm

Blanche: 10 mm's – 15 mm's above, and this one is about 17 cm's away from the battery, and that's why I put the rule there, so you could see that. Umm, I made a circuit to charge it, the circuit is in the , in the chapter, if you want to look at that, Umm the yellow here is the ambient temperature, which I'm calling ambient temperature, that's the furthest away from the battery,

Ext: yep mm

Blanche: the oven isn't on, it's in an oven, but the oven didn't work properly, so I just used that to stop air movement, and then I've got the orange one, which is taped to the battery, and the silver one which is just above the battery, so as you can see, I did a bit of ambient

Ext: mm steady state

Blanche: yea, steady state as you call it, um, then as you can see it was still reacting (the battery's electric field), it was slightly higher than the temperature of the room (meant temperature of the oven), so it was still then cooling down a little bit, (I thought he would like to have explored why this was, but no) and then as you can see, the trend is, umm 17 cm's away from the battery, when I hit the power supply on, the pressure, voltage pressure shoots up, as you would expect, and the temperature sensor 17 cm away from the battery is showing a temperature drop,

**Time 1hr 26 mins**

Ext: I suppose the question is, there seems to be a quantisation, right, how can you, how can you guarantee that's not a flicker, a random flicker, and a systematic. (it is not a flicker, the reading then stays constant for nearly 400 seconds, see figure 36. The trend of the sensor is consistent with the 2 other sensors,)

Blanche: and yea I'll show you that now, when we get on to my next experiment, but all being well and they're working correctly (the temp sensors, as they are working correctly, can be seen from the trend direction, up or down) it is showing a temperature drop, I didn't repeat this experiment because I did this experiment on March the 19<sup>th</sup> 2020, and then we had

Ext: because if we look at this drop, it seems to be in the, content, 0.1 degree seems to be the measurement accuracy of this thermocouples,

(No, incorrect. See Rebuttal Report 1.1, h, for manufacture sensor resolution. A true Examiner investigation would look for this data resolution and point this out to the candidate. A minor add-in correction required, but the resolution of sensors temperature readings are in steps of (0.0625C) which can be read on the figures, see figure 36, compared to the temperature measurement steps of the figures on y-axis (0.1C), so there is no data discrepancy and no false analysis, the main point of the sensors is the trend they all show together. False statement by External examiner.)

Blanche: yea

Ext: right, one could argue



Blanche: it's a small drop

Ext: maybe it's a random effect (no the trend is in line with the other sensors, ignoring the abstract and the displacement current)

Blanche: you could argue it was a fluke (condescending)

Ext: yea (voice breaks, he wasn't expecting that answer), it's not precise enough to determine yet, right? (Totally ignoring the same effect in NASA experiment)

Blanche: yea, you could argue that's a fluke, well why not, you got to have doubt in your experiments, so I agree with that, but you could also say, oh look at that, mm that's interesting,

Ext: I guess the question is that, but it's not surprising, because if the battery is cooling down, then there's going to be a temperature gradient, across which the temperature from ambient is gonna cool down right?

(no, the sensor shows a temperature drop when the switch is closed. and the same trend as other sensors, it shows the same trend later on in the experiment as do other sensors with 2<sup>nd</sup> endothermic reaction, all with respect to time, this has nothing to do with coefficient of batteries as it's with respect to time and applied the theory of the thesis, and the lattice of the battery is the positive part of the field and cannot absorb a negative charge. The thesis specifically analyses the electric field charge with continuous charge and time, it is also in agreement with the NASA experiment)

Blanche: yea, yea, good point, and well spotted and that's true, but at the same time, they're all doing the same trend as well, in they, which is quite remarkable really, they're all trending at the exact same time,

Ext uermm, I suppose it's ah, well the temperature is going down, yea so, this orange one, is a bit more systematic I would say, but the yellow is not conclusive,

(the orange sensor is attached to outside of the battery and the yellow is 17 cm away from the battery, which shows a temperature gradient to the charge reaction, obviously hasn't read the 2<sup>nd</sup> law of thermodynamics and the 8 pages on the displacement current in the conclusions, the without doubt and without dispute, the endothermic reaction in the electric field at the beginning of the charge. Plus what is said in the abstract

(You will also notice from figure 35 that data is collected before the charge is engaged. The reason for this is to show that the battery was at rest and there is no voltage relaxation taking place, this

Blanche is well aware of due to working with, and charging batteries and discharging batteries during the yearlong Masters Research.)

Blanche: not conclusive, no, thanks good point, I can't argue with that,

Ext: yes , I guess that's why I was wondering you know, doing battery experiments, it's prone to systematic and random errors, which it would have been nice to have more than one battery or repeat experiment. (NASA repeated the experiment 3 times with the same result with proper equipment, not like what was available in Swansea,)

Blanche: yea, yea, but we had lockdown, and I wasn't invited back into the university (I wonder why?)

Ext: ok, which is when you started doing the home experiments right?

Blanche: yea, but I think we can get a lot from this, (no reply)

Ext: ah , nothing else on that chapter, so maybe let's move on to your last experiment, um, so , the summary's that, your now moving on to a cylindrical cell, and you want investigate this effect even further, by studying different ambient temperatures, would that be correct?

**Time 1hr 29 mins**

Blanche: not really, I'm just trying to capture that endothermic reaction, and trying to capture, and how far I can notice it's coming from the battery as well

Ext: ah, but wouldn't the ah, previous experiment already give you the answer (he just said this previous experiment was inconclusive,)

Blanche: yea it did, that one did (he agrees now with the experiment and theory) but now, alright then, what I can say is, I want to prove that this endothermic reaction, is energy out of the air, right?

Ext: ok

Blanche: yea, you seemed a bit against that, on the NASA experiment

Ext: well, to me, my argument is the all vacuum thing, (this guy is inventing a vacuum argument, nothing to do with NASA's, or my experiments)

Blanche, yea, but that's

Ext: and how a battery works (I am not examining batteries, I am using a battery to track the electric field charge) it's coming back to the entropic question

Blanche: but i think you need to brush up on your physics there,

Ext: mm

Blanche: that's my personal opinion, so, and er, we won't do test 1, we'll look at test 2, well alright let's look at test 1 first, as we're on test one, right it's the same colours, the yellow is the ambient room temperature, orange is the sensor on the battery, and silver is the one, 15mm from the battery, and what I did with this test was, I put it (battery) in my oven in the house, as the photoelectric effect,

Ext: mm (they do not want the photoelectric effect to be linked to an electric field charge,)

Blanche: and as you can see with the yellow, the ambient temperature, excuse me, it rose all afternoon, this experiment was through 20,000, over 5,000 I've got this one at, I'll go on to that, but as you can see, the battery was warmer than the room to start with ok, yea, same thing, right, yea

Ext: mm

Blanche: so, the voltage was really little, 1.24V, and then for 1250 seconds, the temperature on the battery stayed the same, would you agree with that?

Ext: mm

Blanche: but the room actually rose in temperature,

Ext: so that's the oven temperature? (Does not know how I conducted the experiment with this statement, he should know this)

Blanche: It's not in the oven, it's in my box, I, I, I put it in a box, can you see the photo of that?

Ext: I've got a quality street box (this contains the electronics not the battery, shows he had not examined the work)

Blanche: no, no, no, not that one, um, where is it? Is it down this one? Or is? there it is, there we are, there we are, I've got it in there, look,

Ext: sorry, but you mentioned about oven that's? (Again does not know the experiment)

Blanche: yea I'm calling, yea to warm the battery up,

Ext: ok I see, yes

Blanche: I'm not putting any charge into this battery, at all, right

Ext: mm

Blanche: this is just charged by air, right,

Ext: so hang on which, ok

Blanche: right, so I've just charged this battery by air, right, I haven't used any power supply (he should know this) I took the power supply off,

Ext: mm

Blanche: I put the battery in the oven which is at 200 degrees centigrade (he denies this in his addendum report) or something, I left it in there for a bit, (careful not to leave it too long in the oven, to not catch it on fire) I took it back out, connected it to the circuit

Ext: mm, with a voltmeter? (inaudible)

Blanche: ah no the circuit I've got on there, the only thing that is different, there's no power supply,

Ext: ok.

Blanche: so I'm still collecting the temperature sensors and the voltage rise,

Ext: voltage, and the current should be zero right? There shouldn't be any current (except the displacement current but he doesn't want to discuss this although it's the abstract and conclusions claim)

Blanche: there's no (applied) current, no it's not connected,

Ext: ok

Blanche: so all I'm doing is collecting data through the Arduino,

Ext: mm, yea, (not interested on how I collected data, but criticises this in his Addendum)

Blanche: to ah, see what happens after putting it in the oven

Ext: yea

Blanche: so the battery stayed the same temperature for 1200 seconds, and the room rose by, what can we say, by half a degree is it? Or less than that, to that point there, nearly half a degree, and the voltage rose by 1.24 to 1.32 say, in the first 1200 seconds, and then around here look, the battery starts going up, with room temperature, and at the same time, but it always stays below room temperature,

Ext: mm

Blanche: so the battery is always colder than the room, so how is it colder? Because the air around it, (the battery), is colder, but it's warmer than room temperature, sorry,(laugh) it's colder than room temperature, but the air around it is colder than room temperature, because that's where the sensor is stuck on the battery, yea, stuck on the battery around the air around the battery, so it charges and gains voltage over this time, and remains cooler than the room, so the room, the energy around the battery, is less than the room temperature, and that's the sensor, the sensor, back to the sensors, there we are, one under the orange tape is the one on the battery

Ext: mm

Blanche: and this is the ambient temperature, 10 centimetres up above the battery, so this is staying lower, this temperature here, than this temperature here, whilst it gains voltage, and that's because, it's back to what I said about the NASA experiment, the direction of the energy, is towards the electric field, the positive ions of the battery, of the lithium, are attracting the energy towards them, and that continues

Ext: but , there's no electric field anymore, right?

(wrong, a rise in voltage shows there is an electric field charge, in this case it's the displacement **current** without a conduction current that charges the field, but the Ext. does not know about the displacement current until I teach him later on in the Viva, didn't read the thesis)

Blanche: this is an electric field charge, voltage is an electric field charge,

Ext: no there's no load there's no current going through it

(wrong, Current total = conduction current+ displacement current, i.e, Total current even when there is no conduction current (cc) can still have a displacement current (dc) as demonstrated in this experiment and in Maxwell's equations

i.e total Current,  $I_t = cc + dc$ ,  $I_t = 0 + 1$ , this is well discussed in conclusions (8 pages )that the Ext and Int have avoided and do not want to discuss)

Blanche: there's no current going through it, it's an air charge, I'm charging it with air,

Ext: that's the thing, but that's voltage, isn't that the open circuit voltage,

(this is discussed in the conclusions, open circuit charging, Maxwell-ampere law, page 83)

Blanche: well, it's, it's, it's rising, it's a rising voltage,

Ext: yea and what

Blanche: yes so yea, there's no charge being put into it,

Ext: exactly, so the open circuit voltage, is what your measuring, (and the surrounding air temperature), right and, ok, and the temperature looks different, (does not want explain this but in report will blame it on faulty temperature sensors) umm it's the same here, ok I mean, if, there's er, and your explanation is that this is coming from the external air, right, causing the potential (voltage he means) to go up,

Blanche: yea the voltage yea, and as we can see, the air temperature around the sensor on the battery, is lower than the actual room temperature, so where's that energy gone, well, that energy has been converted into the voltage,

Ext: now, you can have voltage, going up and down, as well, so there's experiment's that's been done where, you can have a battery, so the voltage your measuring, is a type of potential, so you have a battery with some voltage, and by inducing a temperature you can make the potential go up and go down, (yes, this was what Blanche done by putting the battery in the oven), based on the applied temperature, (evidence please, you have had month's to prepare), and that comes down to properties of the materials you are using, in this case it's a Samsung cell (claims in report dated 20/04/22 only one type of battery was used, false claim, haven't read the thesis rigorously, test 1, a Sony battery was used, which is what is currently being discussed at this time, I hr 36 mins, into viva, test 2, a Panasonic battery was used, test 3, a Samsung battery was used), it doesn't matter,

Blanche: yea, yea, it's actually charging, the voltage out of the air, as the room warms up, the battery gains more voltage, out of the air, and and,

Ext , the point is, we don't agree,

Blanche: where does it come from then?

Ext: right, so there's thermal energy and a chemical energy, like you're coming back to the configuration of the lattice, is what's causing the chemical temperature difference (the lattice is the positive ions, see chapter 19.2, in this experiment, 19.2 ,the lattice is the graphene ions, he didn't read this, which he admits later on,)

Blanche: so why is there a lower temperature on the outside of the battery to the ambient air temperature then? (Doesn't want to answer this)

Ext: can you remind me what you did before, (changed the conversation because he doesn't want to answer this question) was the cell in the oven before you put it into this box ?, or was it in the fridge? (Doesn't know what experiment we are now talking about, test 1, just to remind you)

Blanche: in the oven, this one is oven,

Ext: it was warmer before, and then you put it, took it out

Blanche: yea

Ext: right, so, it's cooling down,

(yes this the whole point, it is above ambient temperature and then cools down below ambient temperature, but it should equalise to ambient air temperature, but does not, remains below ambient air temperature and surrounding air temperature  $T_1$ ,  $T_A$  stays below ambient air temperature for 5000 seconds, which is 83 minutes 20 seconds, which is when this data was stopped, while increasing in voltage,)

Blanche: yea, and it's cooled below room temperature look, there, so it's below room temperature there, it started off above room temperature,

Ext: which figure are we looking at? 38?

(Does not know what test or figure we are talking about, should have rigorously examined the thesis)

Blanche: yea, do you want to look at the er, next figure, test instead, you can see it better, we're on this one now,

**Time: 1hr 37 mins**

Ext: ah, did the colours over here, there that's gone down again,

Int, ah , have we got, have we got data set? For the , ahh battery?

(out of nowhere he asks this question, does not say why or what the question is related to, there is an example of the A123 data set for A123 battery on page 120 of the thesis, and manufactures specs in glossary of batteries used in home experiments, of course if he had read the thesis he would know this)

Blanche: for these charges?

Int: no, for the battery itself? Have you downloaded pdf data set? The specification

Blanche: yea, I think so yea,

Int: do they provide, any temperature characteristics?

(no they don't, but he should know this if he had looked, and why wasn't this question pre prepared in a pre viva report?)

Blanche: ahh, they're non protected batteries that I used, so you can, you know, you can, they won't cut out in voltage or whatever when you charge them,

Int: is (inaudible), voltage of, the variation against the temperature variation,

Blanche: voltage does effect the temperature of a battery, I agree with that

Int: yes

Blanche: and but I think they're manufactured to use in our thermal temperatures, down to a certain, they won't work, when they get to cold will they, ah, zero, yea, if you, if you, charge them at zero compared to 40 degrees, you'll get different reactions with batteries and, but that wasn't the point of my experiment. But you will get different reactions, at lower temperatures, (see USW experiments) not so energetic, and that takes us back to Boltzmann and Planck's constant about energy, every degree kelvin has a certain amount of energy, and that's why you're seeing this here, rising in voltage, the temperature sensor on the battery, is showing colder, than the ambient temperature, yea, and that's because there's less energy in the air around the battery, because that energy as gone into the battery, and it's not from the supply, the start with, because as that shows there, it goes colder than the air temperature, but it still rises in voltage,

Int: it would be good if, you could umm, cool down, the battery, and er see if we can go back to the lower voltage, or not.

(Hasn't read test 3, this is what I did, it reduces in voltage, the opposite to test 1 and 2)

Blanche: yea, I've got that test, I'll show it to you now,

Time: 1hr 40 mins

Blanche: so let's move on to the next one,

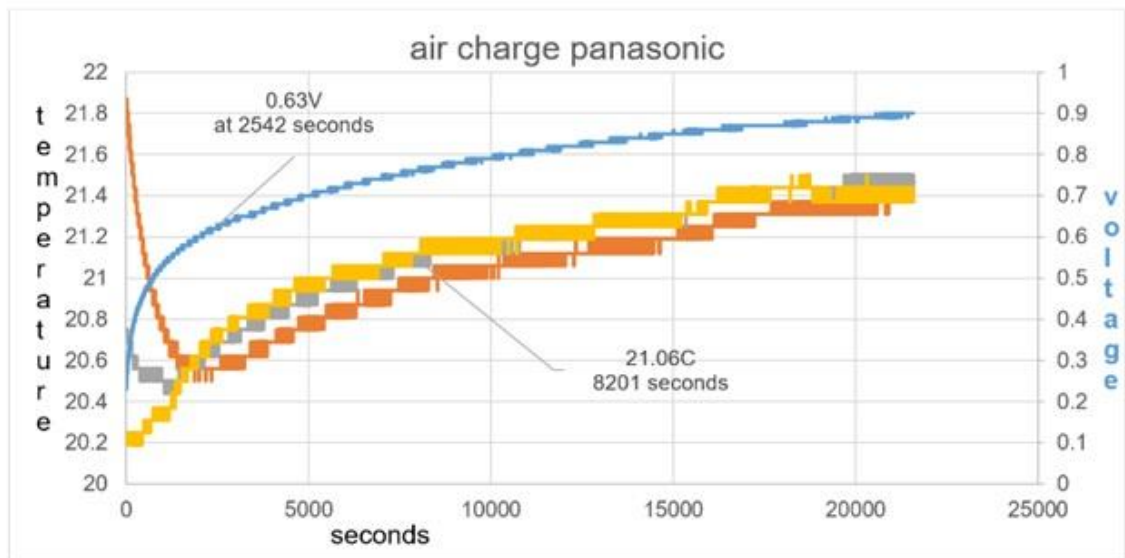
Ext: mm

Blanche: this is a much better

Ext: test 2? Which one?



Blanche: test 2, yea, this is much better, ah, much better for the eye, the blue is the voltage,



*Figure 40: T1 at first is raised in temperature compared to T2, this is the thermal heat of the battery rising the temperature reading of T1. T1 continues to show a lower temperature than T2 at least until 8201 seconds as seen.*

the yellow is the ambient temperature, same positioning of the temperature sensors, and as you can see, there was any voltage in this battery, to start with, there was only 0.3, and when I took it and connected it to the circuit, it was up here, 21.8, compared to room temperature at 20.2, but again, this confirms what we just looked at, the battery cools right down, while the voltage shoots up, it gets below ambient temperature, and so does the one, 15 centi, ah, millimetres away from the battery as well, that goes below room temperature, although it's warmer to start with, because it's getting residual heat off the battery, because it's nearer, when I connected it to the circuit,

Ext: just on that point, so, in this experiment, you discharged the battery, I guess right? To 0.2 volts?  
(to charge a battery it would usually be discharged first,)

Blanche: yea, there's nothing in there,

Ext: and then did you, but you did, but you did discharge it in the oven or outside:

Blanche: outside I discharged it with a resistor that I had,

Ext: so this as nothing, so this was, didn't go in the oven afterwards, everything outside?

Blanche: (the battery was totally rested from discharge days before, and had hardly any voltage in it,) this did go in the oven afterwards, which is the photoelectric effect

Ext: so you put it, you discharged it, you take it, it's disconnected, you just keep it in the oven,

Blanche: yep,

Ext: what temperature is the oven for example, a high temperature?

Blanche: yea, I just wanted to get heat in there,

Ext: and how long did it stay in there before you took it back out,

Blanche: well as soon as I got it out of the oven, I connected it to the circuit and started collecting data, so I got the battery a couple of degrees above room temperature,

Ext: I guess the question is, what the, you see, when you discharge a battery, and stop it, and dump it in the oven, the volts gonna relax, right, so it hits 2 volts, whatever, 0.3 and it has relaxation effect,

Blanche: yep

Ext: right, so the question is, how do you know that's not the relaxation effect you're not seeing there?

(he's trying to make out I discharged the battery before putting it in the oven, that's not what I did, he is now accusing Blanche indirectly of academic fraud, Blanche demonstrated in Swansea experiment, data collection before charge was engaged, demonstrating a constant voltage and an appreciation of voltage steady state, Blanche had been working with batteries all year and knew of this and only worked with rested batteries, Swansea experiment was discussed for 5 minutes, but there was no mention of this in final report, WHY?)

Blanche: Well again, it's down to the temperature sensors, they are showing you a colder temperature sensor on the battery, than the ambient temperature sensor, why you've got to ask yourself, why is it colder, it wasn't to start with, it was above it, it was above room temperature, but after 200 and odd seconds, is it, about that, the battery then becomes colder than the ambient temperature, of the box it's in, well why is that?

Ext: so then there's ah, there's this entro, this, what I would call the negative entropy quotient effect, and there's a cooling and heating effect (heating effect meaning energy gain I assume he means) that battery materials have, over some soc ranges, it absorbs energy, and some soc ranges it generates energy,

( this is exactly the observation Blanche makes about the electric field charge, which is the objective of the thesis, electromagnetism can only have one set of rules as we only have one set of equations,)

reversible and irreversible, so that, that is again attributed to what is called entropy quotient, um, so that changes, sign, which is probably what partly your seeing here, but the point I'm trying to make here, is you can't conclusively say that this voltage increases your seeing, is due to that effect or is it just relaxing from the previous discharge.

(where's your data and evidence to challenge Blanche observations are wrong and due to some other explanation with data to show, you made this comment on the 20/ 04/22 but no one was privy to this report before, on the day or after when request by Mr Blanche, You have had months to prepare, but bring no evidence or pre viva report to viva,

Blanche: right, well no, you're wrong, right, so here's your battery, right, the square is the battery, this is your first temperature sensor stuck on the battery, this one's 15mm away, this one's 10 cm's away, now if we look at the graph, let's look at it on, 5000 seconds, on 5000 seconds, ambient temperature is 21 degrees, ah the one that's 15 mm's away is, 20.8, and then the one that's on the battery

Ext: which colour's which? (he should know this)

Blanche: ambient is yellow, silver is 15mm's away from the battery, and then, the one stuck on the battery is, orange, which is say about 20.7, so you've got this temperature gradient, at 500 seconds, and as we know from Boltzmann's constant, each one of these has an energy value to them, this one's obviously got more energy in it, than this one, so there's the energy gradient, towards the battery, so it's got nothing to do with the battery, the energy gradient, all this, energy gradient is, what the temperature, temperature sensors are telling you, so the direction of energy is towards the electric field charge of the battery, and the electric charge is this, and as we can see, it's charging up, now if , if what you were saying was chemical reactions going on in the battery, then why have you got this temperature gradient towards the battery? It would just be in the battery,

Ext: 2 points, this, this voltage, right that you're measuring, the trend you're seeing the point I'm making there, it could be a relaxation from the previous effect

(it could be, but that's rubbish, it's not) right, so when you, you, because you had to discharge the battery (doing his best to say it's a previous discharge effect) to start this experiment, it takes a long time for the voltage to reach a steady state, ok, right

Blanche: so you're just saying it's flickering then, the voltage is gonna flicker around,

Ext: Not flicker, it's gonna relax.

Blanche: I'd expect the voltage to go up because I put it in the oven

Ext: no.no, the point is when you, when you start the experiment, you discharge the battery, you want to investigating from 0% soc, whatever some low soc, and when you discharge the battery, your voltage does this, right there's the voltage, time, discharge this, then, you took it out, put it in the oven, right , and you weren't measuring at that point, and the battery starts to relax, and perhaps you took it out somewhere around here and there's still relaxation happening which is this blue curve, right

Blanche: so, this gain in voltage,

Ext: is a relaxation effect,

Blanche: is a relaxation effect, what about the temperature effect then?

Ext: so then coming, that, that, that is where this is, the um, the ah, sorry, ah, the cell started off hot, hot to begin with, it was in the oven, it cooled down,

Blanche: below room temperature,

Ext: because you're saying the orange curve is, the orange is

Blanche: the orange is the one attached to the battery

Ext: um ok yea,

Blanche: right, so it cooled down below room temperature, and it's still gaining voltage, because of your relaxation effect, your saying, why is the battery lower than room temperature then? That's the chemical reaction going on inside

Ext: the entropic quotient

Blanche: ok, what about the other ones then, why is that lower than room temperature? And you can see it's a trend,

Ext: yes, so now at that stage because the entropic quotient is negative, it's going to, there's a thermal gradient induced, for the heat, is cooling down, and then at that point, perhaps this battery, so the entropic quotient is a function of soc, so maybe at this soc that you're studying, is negative enough, that induces this temperature gradient that you drew here

(he finally admits there is a temperature gradient)

Blanche: rubbish, rubbish, absolute rubbish,

Ext: my point is that you could

Blanche: I'm not trying to disrespect you in anyway, I just disagree with what you're saying,

Ext: that's alright

Blanche: I'd like that, prove me wrong, and prove yourself right on that point, and also, it's not only on that experiment, it's also on that experiment

Ext: mmmnnnoo the (inaudible) experiments

Blanche: then we'll go to the next experiments, where the battery was put in the fridge,

Ext: yes, yes I know it doesn't matter, these observations will remain, I think where we disagree is a subsequent explanation, and the equations (what equations and where did that statement come from?) and in the

Blanche: you need to prove me wrong I think because, I'm the one with the evidence and the physics here, you are just coming up with battery technology chemical reactions, and that's go nothing to do with the endothermic electric effect, or the charge of an electric field,

Ext: all your specimens are batteries

Blanche: no, no they are not, my experiments are, but there are other ones in my report, that are not, and we'll get on to them now,

Ext: ok, I've got no other questions on this one.

Blanche: so we put them in the fridge, and you'll see, the opposite reaction, so that proves my reaction of the other one was correct then, one would say, yeah?

(silence)

TIME 1HR 49 MINS

Blanche: so, this one I put in the fridge, it's the same colours, yellow, red sorry, is your battery, silver is the one just off the battery, and yellow is temperature, ambient temperature

Ext: is this one, you charged it up a bit did you? Or what did you do there?

Blanche: er, it was at 1.8 volts, when I took it out of the fridge, and it dropped down to one degrees, ah one volt, in 22,000 seconds (no voltage relaxation effect this time) complete opposite effect, and I haven't induced the photoelectric effect in that battery because I, took it out of the fridge, and it had less energy in it, less temperature, than the room temperature,

Ext: how did you get it to 1.8, what did you do before this experiment?

Blanche: yea, it was already at 1.8

Ext: mm. I mean, to me, I've got the same, lets say you have your, you can induce the potential, the open circuit voltage, is a function of temperature, right this is the entropic quotient, I'm referring to

Blanche: function of temperature, right, depends on the actual temperature of the room, doesn't it?  
The open circuit voltage, the amount of voltage you get, in a battery

Ext: mm

Blanche: can depend on the temperature of the room, (That's because an endothermic reaction is a reaction that gains energy from its surroundings)

Ext: sure

Blanche: yea, now say I stuck a battery on top of a radiator

Ext: mm

Blanche: that would increase in voltage

Ext: it can depending on where you are on the soc of the battery

Blanche: yea, depends on how much soc, yea, if you, if you, drain batteries too much some of them, they won't come back to life, you'll kill the chemistry in them,

Ext: no no.. not to that extent, not to that extreme, so for this, entropy quotient, this positu and negu, so even your graphs, you observed some, when you keep going, it starts to generate heat, at first it dips, then comes back up, right there's then, energy absorption, then gives it off

(referring to test 3) (incorrect, the voltage never rises, only diminishes, no energy absorption, only friction as described above for entropy quotient definition, highlighted in yellow , that causes friction and discharge)

Blanche: so when it goes below room temperature, how does it continue to rise in voltage,

(referring to test 2), and how, how, am I still getting that air gradient then, back to this one (test 2) because you haven't put up any decent argument against that?

Ext: no, the point I'm trying, which one? Look

Blanche: there, that one,

Ext: mm, but over here I'm saying,

Blanche: see, look, its gone below room temperature, the orange is the one stuck on the battery, the yellow one is room temperature, so the temperature sensor is telling me that the battery as gone below room temperature, and it's still rising in voltage, and it does that for like 5 hours, wow, and it stays below room temperature during the charge, all that time, how is that, that's impossible in it, because it's an energy gradient,

Ext: mm

Blanche: surely, the battery if it's charging with voltage, should be warmer than room temperature if anything, according to exothermic physics, and electric field charge, according to entropy and thermodynamics,

Ext: but in this case, right, at this soc, you have an endothermic point here (hallelujah)

Blanche: yea, you've got an endothermic point all the way, endothermic means heat gain, it's gaining heat all the way around (throughout the time charge) and where's it gaining it from? It's gaining it from the air,

Ext: no

Blanche: that's why it's colder

Ext, yea but the temperature gradient of course there's gonna be energy, cause it's cooler here it's gonna of course gonna,

Blanche: why is it cooler though? This is the point? You seem to be missing the point all the time,

Int: the cooler could be anything, the cooler could be explained (I've written my thesis explaining it), by evaporation or any liquid or moisture (oh please) um on the, on the battery,

Blanche: alright then, why is this one cooler then? That's not on the battery,

Int: which one?

Blanche: the one that's 15 mm's, it does get to the same temperature as air temperature, but for two, ah for, there to there, to that point there, 750 seconds, the one that's 15 mm's away from the battery, is cooler than air temperature.

Int: but what you think

Blanche: I don't think the battery is vaping off energy and chemicals

Int: not vaping, so it's just, I see that you if you have anything that um as some um moisture on the surface, and after evaporation, surface will get cold, that is normal.

(so now the battery gains voltage because of evaporation of a liquid on the surface of the battery, and this evaporation causes the surrounding air to cool down, oh please save me) that is not caused by something inside the material

( the Ext seems to think this, so now they disagree with their invented physics)

that's caused by the surface evaporation, do you know what I mean so

Blanche: well, we're, we're. actually looking at an electric field charge here, and there's, there's a thermodynamic direction of energy, that goes against your theory, you know,

Int: you could use any theory to explain, but it doesn't mean that

(Boltzmann and Planck got it all wrong, lets re-write scientific facts and history)

that is only a theory to be used and you could be using some other, that is why we, I, will refer you to repeat this experiment, (never mentions this in his Addendum report) with more batteries, with much larger temperature range so (he wants to expand the experiments and thesis), so see the temperature range here, is just one degree or two degrees, ah so what happens if you increase temperature range, and also you, pre-process your battery much um, much more appropriately, for example you clean your surface of your battery, ah improve the isolation of the battery and the um equipment, so there's many, many more experiments could be

Blanche: oh yea, you could do a PhD on this,

Int: that is what I say at the beginning, your topic is too wide,

Blanche: well it's not too wide, it's what I decided to explore, and I found something here that you don't know about, your gaining energy, like I said, it all started with this

(referring to Newman's book)

Int: no you found something, yea, that's true, you found something,

(admitting I have found something)

Blanche: yea

Int: but it doesn't mean that

Blanche: it means

Int: means something can be explained by your, your theory, it could be something, but all of us don't understand, could be something that, related to chemical reaction



Blanche: well I don't think so, because we start with an equation, photoelectric effect, Einstein won the Nobel prize for the photoelectric effect,

Chair: but you're saying it's not the photoelectric effect right?

Blanche: yea, that's the catalyst to the reaction, is the photoelectric effect,

**Time: 1 Hr 56 mins**

Chair: But it's not involving photons? sorry

Blanche: yea, it's a force, it's an electro magnetic force, a photon is an electro magnetic force, it's, it's the same thing, right, similar thing, this is the theory that James Maxwell wrote, and he came up, and he linked them together, he made er, er,  $\mu_0$  equals the speed of light, and he found two things in his mathematical equations that equal the speed of light, and that's why he said it's an electro magnetic force, this is where it came from.

Int: we use any equations, we cannot vaguely ah, to use that equation, in a particular problems, we have to configure any boundary conditions, any ah, any, other conditions,

Ext: I suppose ea

Int: For example, there is a very famous Hooke's law, so you have a spring

Blanche: I know it,

Int: with force it expands, you have  $f=kx$ , that is very simple equation, but can you use the equation for any problem, no

Blanche: well I haven't, that's the point,

Int, because, because, you haven't used any spring, (inaudible)

Blanche: I've started at the photoelectric effect, this is how we describe how electricity starts, electric field charge starts with the photoelectric effect,

Ext: you are not using that here,

Int: but you cannot

Blanche: yea, the photoelectric effect, is in every one of these experiments, it's an electromagnetic force, whether you apply it with a wind turbine, a solar panel, or just punch it, put it on a radiator,

Ext: were there photons here applied,

Blanche: no, it's not photons, that's the point see, it's called the photoelectric EFFECT right.

Chair: but the equation you got, Einstein's equation was a photon,

(incorrect, Under the right circumstances light can be used to push electrons, freeing them from the surface of a solid. This process is called the photoelectric effect (or photoelectric emission or photoemission), a material that can exhibit this phenomenon is said to be photoemissive, and the ejected electrons are called photoelectrons; but there is nothing that would distinguish them from other electrons. All electrons are identical to one another in mass, charge, spin, and magnetic moment.) [Photoelectric Effect – The Physics Hypertextbook](#)

**Time: 1hr 58 mins**

Blanche: when they did the experiment to prove it, right, lennard did the experiment, to prove it, it's in chapter 5, right, they used light in those days, yea, they used light rays, that's what they had, but what you're doing is you're putting a force on to the metal, have you ever touched your car and got an electric shock, it's the same thing, the force of the heat or the light, have hit the metal, and caused an ionisation, just like you get in a battery, you lose an electron and now you've got Q positive and q negative, you have an electric field, you can't have one without the other, you have to have a photoelectric EFFECT TO START IT. Right now putting this in the oven, was inducing the photoelectric EFFECT, or the force into the lithium to make it ionise.

Int: Does the photon have a mass?

Blanche: a photon, or I'm not getting into this conversation about masses, because

Int: no I ask you a question, so answer

Blanche: I'll answer that question right because, ke right, kinetic energy which is what we're talking about, equals half mv squared. Ok. So does that have mass? My argument is not about light, my argument is about electromagnetic force,

Int: **inaudible**

Blanche: well it must have force, so if something hits something else with force, it must have some sort of mass interaction, I would say,

Int: so you agree the photon has mass

Blanche: well it has force, and so does kinetic energy, and that has mass, so I don't know, this is just a circular argument

**TIME 2 Hr**

Int: Photon energy is expressed by the,  $h\nu$  in the equation

Blanche: yea I know, but I'm not here to talk about photons, I'm talking, it's a force it's an electromagnetic force, however you induce it, the subject, you're going off subject, I'm just saying Einstein wrote an equation from it, that's the starting point of an electric field charge, that's what we did, we took that as the electric field, equation charge, otherwise what equation have you got? You haven't got anything otherwise, give me another one

Ext: there's the Butler Volmann expressions

Blanche: sorry

Ext: there's the Butler Volmann expressions

Blanche: it's the what sorry

Ext: there's the Butler Volmann equations right, for all these, materials and these choices, and the entropic quotient, relating enthalpy to work done by a battery

( read the abstract, it's not about batteries, and you will notice the ext never produces this work by Butler Volmann, before, during or after the viva)

to the entropic quotient, it counts for other materials as well, coming back, anyway, you've got a lot of equations here, what's not clear to me's that, so, we now move to the last few chapters, I mean the equations,

Blanche: can we take a break a minute, cause I need the toilet,

**TIME: 2hr 4 mins**

Ext: um it's a general question, you've got quite a few equations in your work, which is good to see, but what wasn't clear was how they were used, with the cells that you presented, I don't know, for example, one chapter, chapter 13, I'm a bit lost, how is this used? How is this used to explain, how these values, been, how these values you assume, and how they've been used.

Blanche: yea ok.

Ext: page 92,

Blanche: so your're missing all the conclusions here then, there's Maxwell's free energy equation, on page 86,

Ext: ok, let me listen to that, if you were to use these equation in your work, how would you go about using them,

Blanche: these equations, well what he's describing is ah the displacement current, and he's saying it's in the in the, he's put it in a 3 vector form,  $e$  is the positive charge, or the negative charge, whichever which one you want to use, and these are the 3 vectors of the electric field charge against  $e$ , see you got an electric field charge is positively negative, do you understand that,

Ext: but how would you apply this, in your work, what would, how would, in the experiments you've done

Blanche: how would you explain it?

Ext: applied

Blanche: apply it. Well it's not really for applying,

Ext: so then what's the purpose of this equation, (he hasn't read the work )-

Blanche: He's describing at any point in the electric field, this is the displacement current you can find,

Ext: this diagram here? In this figure here

Blanche: mmm do you know the displacement current?

Silence

Blanche: do you know what the displacement current is?

Ext: so what's the displacement current's in your experiments?

(Hasn't read the conclusions, chapter 12.1, and is careful to use the word, 'experiments' in his reply, motive to fail the thesis )

Blanche: I'm going to have to explain the displacement current to you, if you don't know what that is,

Ext: go for it

Blanche: ok, so if we have some capacitor plates, and they're connected to a battery, right, circuit, now the charge will go there, the charge will go to the plates, yeah,

Ext: mm

Blanche: and on the plates you'll have, positive ions, yeah,

Ext: mm

Blanche: both plates, right, both have positive ions, and around there you'll have a negative charge building up yeah, right, (neither of examiners know this and haven't read the conclusions) so what they found was, there's a magnetic field inside here, yeah (silence), but there's no conduction current across there

Ext: mm

Blanche: there's an electric field, building on the plates,

Ext: mm

Blanche: and you have a magnetic field in the plates, between the dielectric, and they measure this as a displacement current, so what Maxwell did was, he um wrote, an extra current in, so you had current  $I$ , which is the conduction, current  $d$ , which is the displacement current, and that equals the total current, yeah, across there (silence), ok and this is the equation he is putting with it, really,

Ext: so where's the  $I_c$  and  $I_d$  here,

Blanche: well, it's the complete lot is  $I_c$  and  $I_d$ , right, and he's saying this is the displacement current, this is the positive part of the displacement current, and this is the negative part of the displacement current, that's the best I can explain it to you, right now, I think you'll have to read it yourself, (silence, they haven't read the conclusions, there's a chapter on this 12.1), and he's calling it free positive electricity contained in the unit of volume of any air, of any part of the field, so what I'm saying to you is, forget this is a capacitor now, right, this is just a continual wire right, and I put my battery there, right, and what my experiments are showing you is, is this magnetic field, is around the battery, right (silence again, they haven't studied this, it is 8 pages in the conclusions), and this displacement current, that Maxwell taught, and it is written in our electromagnetic theory, IS THAT AIR TEMPERATURE DROP, see, this is how you're getting this temperature displacement, because the energy in the air, is related to current, energy, so you're seeing a lower temperature here, than here, because energy is flowing into the electric field charge, as well as you've got this conduction current, ok, so that's why Maxwell wrote this equation,  $I_{\text{total}} = I_c + I_d$ ,

Ext: so there's a current, so  $I_c$ 's coming from the external atmosphere, sorry,

Blanche:  $I_c$  is the battery yeah, (oops) your conduction current, yeah

Ext: so  $I_d$  is coming from the external

(I think the penny has dropped, but he's still going to fail, because that's the agenda),

Blanche: yeah, and that's what my experiments show,

Ext: there's a current coming from the atmosphere, going into, that's,  $I_d$ , I guess

(he shouldn't have to guess, he should know this, its electromagnetic theory and written in my conclusions)

Blanche: yeap, and most people, they give this example in physics, you can watch lots of U tube videos on this, and they call it a fictional current, but it's not a fictional current because my battery charges prove, the voltage is rising, and the air temperature around it is getting lower,

Ext: prove is a strong word, that voltage rise like I said,

(but it is the correct word, as mine and the NASA experiments show)

**VT: 2HR 10MINS**

Blanche: well NASA proved it as well isn't it,

Ext: no they didn't prove it either (blatant lie), proof is, well er, proof is a mathematical equation (such as I wrote in chapter 16?), you demonstrated certain observations, the interpretation of that is where we're trying to understand here, (or not understand,)

Blanche: right ok, so Maxwell wrote this equation that, I total, in, in, cause he had Ampere's law see, we had Ampere's law, but in a charging electric field, right between two capacitors (oops, plates), you can't just put Ampere's law,

Ext sure,

Blanche: so that's why he wrote  $I_d$ ,

Ext: so why don't you try and calculate  $I_d$ , so what sort of value will you get for  $I_d$  in your experiments?

Blanche: what values did I get?

Ext: if you were to calculate that

Blanche: well, if you were to calculate them, you could look at the graphs and say that, the temperature starting of the battery is 2 degrees, and it ended up at 1 degree, so that's 1 degree change, so that 1 degree then you could say using Boltzmann's constant is  $1.38 \times 10^{-23}$  per kelvin, so covert C to kelvin, and then you would have the amount of energy that  $I_d$  is.

Ext: Id is not energy, right, (oh please release me), how would you go from energy to current, because that's in, I think that's a unit miss-match, right, from what you're saying earlier, was in joules,

Blanche ok, so like I said before, joules = watts/second, and watts/second =  $V \times I$ , and I is I total,

Ext: ok, and there from that,

Blanche: and I total is the conduction current, say that is 3 amps, plus one degree drop,  $1 \times 1.38 \times 10^{-23}$  in kelvin, convert it, and then you'd end up with 3 plus the conduction, er the displacement current.

Ext: what if, what if in some of the experiments there was no er, no current being applied, there was no  $I_c$ , there was I zero,

Blanche: yeah well I did that when I put them in the oven, didn't apply in currents then, the voltage rose but you said that was because some other effect,

Ext: relaxation effect,

Blanche: relaxation effect, but that doesn't agree with the temperature gradient on my temperature sensors,

**VT: 2HR 11MIN**

Ext: I guess, so then

Blanche: so you'd have to try and prove why those temperature sensors acted that way for 6 hours,

( oh yes, they're faulty was his conclusion, Blatant lie, bad workman blames his tools, in this case, my tools)

Ext: well if you stayed long enough, they will converge right? Or they not converge at all?

Blanche: they did converge at the end of the experiment

(end of the charge and equilibrium was met)

**TIME: 2hr 12 mins**

Ext: so, ok

Blanche: at the end of the charge, but before that for 5,6 hours, they didn't converge, they were , they were, there was a temperature gradient

Ext: mm

Blanche: which also agrees with NASA's work,

Ext: yea, yea that I don't agree with (I will be condescending here, IDIOT)

Blanche: your argument can't be right,

Ext: lets break it down a bit, so, while the voltage is relaxing, so why's that shift coming in, so if you look at why the voltage is relaxing in a certain way, is because you discharged the battery (false claim) before you started the experiment, and you started, and the battery starts to relax, that's an indication of the chemical potential in the battery (rubbish, if the voltage rises, it is because there is more ionisation and current in field), and the reason it relaxes and you observe the shift, is because there's a reconfig, there's a gradient inside the electrode, so when you discharge, you bring about, temperature gradients, temperature concentration gradients inside the electrodes ( still doesn't explain the temperature sensor gradient outside the battery, he is speaking more rubbish) when you stop it, when you stop the load

(there is no load in test 2, which is what we are talking about, he is trying to accuse me of discharging the battery, then putting it in the oven, then the voltage rise recorded is because of the discharge, that he assumes happened before the oven, which it didn't, but he is still not explaining the displacement current measurement, or is he? He is confused)

they start to relax, that relaxation brings about, ocv

(open circuit voltage, all explained in my conclusions which he hasn't read)

change, now that ocv change, leads to a certain, lattice configuration

(the lattice are lithium positive ions which attract electrons, and that's why you see a raise in voltage and lower air temperature around battery, but he will not accept the displacement current, a fundamental part of electromagnetic theory,)

and that lattice configuration, so happens to be a irreversible case in this particular case.

(if you were to read the abstract and declaration of investigation, you would realise it is not an irreversible case), so you get  $ds$  by  $dt$ , being entropic (entropy he means), being negative, and that acts as heat, absorbing temp, and it cools it down,

(if you were to just see this in a battery, with no Maxwell/ampere law, and all the other examples in my thesis then, you could think this guy was talking some sense, but he's ignored history and my work)



Ext: so that's my impression, so it comes back to this entropic quotient, and what the electrodes are doing, at that stage,

Blanche: so you're saying that the battery, is causing my temperature sensors to show different temperatures lower than ambient temperature, over 6 hours, whilst charging in voltage,

Ext: the, the charging, we can't fully explain the charging

Blanche: well we can though see, that's what I'm saying,

Ext: wait a minute, wait a minute,

Blanche: this, this, tells you how it's charging right there,

Ext: ok

Blanche: you're just deciding not to agree with it,

Ext: no, no, no, I'm not deciding, what I'm saying

Blanche: you are, otherwise you don't understand joules into watts per second, and the graph

Ext: so then why do we need this equation? If you were such an even spacing

Blanche: well I didn't write that equation, Maxwell wrote that equation,

Ext: how's it serving, what purpose is it serving by being here?

Blanche: because that's part of our electromagnetic theory on electric field charge.

Ext: you could have written this expression right? What you just wrote there.

Blanche: I could have wrote that, but I decided to write what Maxwell wrote because we base our electromagnetic theory on his equations,

Ext: so I suppose that's so um, lets try and read it, you've got quite a few equations, but its, you're writing it, to explain certain things, which is fine, but I think it would have been a lot better had you tried and, applied these equations, to the observations right?

**TIME: 2HR 15 MIN**

Blanche: well I did in the NASA experiment

Ext: what just, just, afternoon you mean?

Blanche: yea, the pressure one, the very first one, equation 1, and equation 2, I applied them, because they built that Arc, that was a constant volume, so I applied the equation, I derived the equation as-well

Ext: where did you do that bit?

(THE PROBLEM HE HAS, IS HE JUST DOES NOT HAVE THE EXPERTISE IN ELECTROMAGNETISM, AND HE DONSN'T KNOW MUCH ABOUT BATTERIES, JUST REMEMBERS TEXT BOOK WORDS, BUT HAS NO IDEA ABOUT WHAT IT MEANS AND HE CANNOT APPLY IT TO ELECTRICITY.)

Blanche: equation 2, I derived

Ext: ok that was a rearrangement of equation 1 (no it is not rearranged, it is re-arranged and derived to show pressure is lower on battery due to outside air pressure dropping due to the charge)

Blanche: yep,

Ext: right,

Blanche: well, not quite a rearrangement, of equation 1,

Ext: umm, I guess, I've no further questions Geoff , thanks

(bailed out as he does not want to delve into the equations, he knows he's lost)

Blanche: we haven't finished yet, I've got lots more to show you,

Int: yea I have another question before you show us, so can you go to the page 94 please,

Blanche: what page sorry

Int: 94 , maybe your page number is different to my number, cause of new version,

Blanche: ah, ok, what text am I looking for?

Int: figure 52, 53

**TIME 2HR 16 MIN**

**LOOKING FOR FIGURE**

**TIME 2HR 17 MIN**

Int: you have copper wire,

Blanche: mm

Int: you draw some electrons flows,

Blanche: yep

Int: ar these electrons flowing in the air,

Blanche: ah it's just a, you can depict it how you like, really, this was just ah, to show, that ah, the force out here, the positive ions, is greater than the force in, and it's not creating any resistive force,

Int: asking you, are electrons flowing in the air?

Blanche: Well electrons do flow in the air yes, (he should have read chapters 5 and 6 and he would HAVE seen National grids description and the earth's atmosphere charge, he knows nothing, as he hasn't read it.)

Int: they flow in the air? (this is beyond stupid)

Blanche: they flow, in air, yea, yea

Int: ok, that's fine,

Blanche: what is the point of your question?

Int: my point is, is, it's not, because the air is is a di-electric, its not conductor

Blanche: yea, but the copper wire's a conductor,

(PLEASE READ CHAPTER 6, AND TO MAKE IT EASY FOR YOU, IT'S ONLY 1 PAGE, NOW I'M FEELING CONDESCENDING, HAVING HAD TO ENDURE THIS CHAP FOR 2HOURS, HIS BASIC PHYSICS DOES NOT EXIST)

Int: yea but you draw the electron out of the COPPER WIRE

(HE THINKS ELECTRICITY HAPPENS IN THE WIRE, HAS NO KNOWLEDGE OF ELECTRICITY PHYSICS, THE SKIN EFFECT, reference 103)

Blanche: yea, because, they're not, there's no frictional, no frictional force there,

Int: that's very vague, frictional force, very vague.

Blanche: well no,

Int: so why electron flowing in the air? Air is not conducting? (oh please) If the air is conducting

Blanche: no the copper wire is the c, this is a depiction of an electric field, yea, and this is I'm saying is, the copper ions+ I'm saying is the positive part of the field,

Int: but I see a lot of ah

Blanche: and this I'm depicting are the electrons around the positive ions+, so do you know what I mean? (the guy is just there to collude with the uni's agenda to fail, and in the doing, shows he knows nothing about electromagnetism)

Int: this is not correct I think this figure is not correct, you need to re draw it, you need to re draw it, and show that, surrounding the copper wire, there's another um, materials

(I'm flabbergasted)

Int: conducting materials, so that the electron can flow inside that materials,

Blanche: no well, no, electrons are free to move in space aren't they, and that being air as well, I don't mean space as up out of the atmosphere, I mean this space, electrons are able to

Int: for example, if you have an electric windmill ok, I have electrode over here, electrode over here, I apply 10 volts,

Blanche: yea

Int: where are the electrons flowing between these two electrodes

Blanche: well, they'll be attracted to the positive ions,

Int: I asked you,

Blanche: I'm giving you the answer, I'm giving you the answer, they'll be attracted to the positive ions, that's where the electrons will flow to, and that's what I'm showing there, I'm showing a positive ion, with electrons attracted around it, that's what the idea of the diagram is,

Int: yes, the answer is that, there is no electrons flow between these two electrodes, in the air, because the air is not a conductor:

Blanche: no, sorry, electrons will flow to a positive ion, they're attracted to it, wherever you put your positive ion, electrodes, like static, you know, it'll, do you know what static is when you take your jumper off, you can feel the electric of it, well that's electrons being attracted to the static of your body

Int: that is the breakdown of the air, because the voltage to high,

Ext: you mean a positive charge?

Blanche: coulombs law is  $Q$  little  $q$ , yeah (Chapter 5 equation 4) right, and if you have big  $Q$ , say is the positive ion, yeah, the positive ion, it has a mass greater than little  $q$ , and it will attract, the little  $q$  to it, right, that will move in the air, it's force, it's Newton's law as well

Int: I KNOW, BUT IT DOESN'T value what you're saying, but I ask you, if I have two electrodes, I have a 10 volt, are there any electrons flowing in the air,

Blanche: well the first thing you do if you've got a voltage, is, you've got a field of positive and negative, right,

Int: I'm sure there are some electrode fuse

Blanche: if you've got a voltage, you've got a field of positive and negative, right, it's not just a voltage, it's made up of two things, to have force you need two things, like a hand clap, you got force, you can't have a hand clap with one hand can you, there's no force there, and it's the same with electric, electricity, you have to ionise the atom, let me finish, because I don't think you understand electricity, you have to ionise the atom to, to two different parts, one is going to be positive, one is going to be negative, this is coulombs law, and big  $Q$ , say the positive atom, which is got more mass, which is this here, it'll attract the negative electron, from a distance depending on your voltage force,

Int: that is when the voltage is very high, but this voltage is not, ah not very high, you can't ionise it,

Blanche: well your talking semantics now, I mean, if you, if you put a 10000 volt supply on, it'll jump meters, you know, it's called laws of attraction, positive and negative, you have, to have an electric field you have to have positive and negative, and you make that by hitting (metal or some material) it with a force, by hitting it with the photoelectric effect, back to that, (it's explained in the abstract and chapter 5) but that's what you do, that's what Einstein told us, hit it with a force, and you'll end up with positive ions and negative electrons, and the very catalyst of the reaction to the endothermic effect, which is what we're seeing, is the photoelectric effect, and the endothermic electric effect, due to our temperature gradient, which I drew and we saw on the graphs, that's because of this endothermic electric effect that's going on, it's not magic, it really is happening, and then we're back to  $I_{total}$ ,  $I_c + I_d$

Ext: on that point, how, any reason you haven't included any journal papers in your citations? (lie, there are plenty and most significantly Maxwell's paper) and did you not look up, battery temperature profiles, heat generation, and most of them are internet linked, is there any reason you didn't look at any recent publications? (this is just a lie)

Blanche: well, I wasn't investigating batteries for a start,

Ext: no

Blanche: I was investigating the electric field charge

Ext: that's not true, you can't say that, all your work on batteries, you were investigating batteries  
(liar)

Blanche: I was investigating the electric field charge, of a battery, yes,

Ext: ok, so, this effect has been observed quite a few times, so how come, coming back to the point why, there aren't any journals here, any reason you left them

Blanche: I didn't find any, (I used what was appropriate to explain my theory)

Ext: that's not true, what did you search for

Blanche: endothermic electric effect ah, probably,

Ext: ok, well I mean there's, lot of, I guess, generally, for good, research bit of work, right, you would in addition to ah links from websites, which is fine, you would try and ah, see what others have tried to explain with this, right, how others have tried to explain this, in publications,

Blanche: well, yeah, and that's why I used the NASA one to explain it, but they didn't explain it,

Ext: but since then, there's been a lot of work been done, yea, right, and that's

(why didn't you show this in a pre viva report)

Blanche: can you send me these papers, and I can have a look at them,

Ext: yea sure, the keyword, entropic quotient, reversible heat, irreversible heat,

Blanche: but that's not, that's mmm, ok, that's what you're saying going on in a chemical reaction,

Ext: well that's the observations we are seeing here, (ignored the rest of my thesis)

Blanche: it's not chemical reactions though, it's an electric effect, it's ah, it's a physical reaction, you don't, define the difference between a physical reaction and a chemical reaction please.

Ext: Physical reaction I do not know what you mean by that

Blanche: you don't know what a physical reaction is,

Ext: what's the, my point is here, there's a thermodynamic configuration, reconfiguration of the lattice (this is the physical reaction, but he doesn't know what that is or how to explain it, he has said

this many times, but still does not use the physics, i.e physical configuration, does not have the electric field knowledge)

Blanche: no, I'm sorry, you need to define what a physical reaction is,

Ext: you can't say that,

Blanche: you can't just say it's a chemical reaction,

Ext: electro chemical reaction,

Blanche: you don't know what a physical reaction is. Uh?

Ext: it was an electro chemical reaction, right, batteries are a electro chemical devices,

Blanche: it's electro, meaning it's electrified

Ext: no, electro chemical device

Blanche: chemicals, meaning it's using chemicals, but there's no, there's no chemical reaction going on create the electricity, it's a physical reaction electricity,

Ext: the electrons in a battery, right, come due to a chemical potential differences,

Blanche: no, no, they don't, you ionise the atoms,

Why do you need an electrolyte then? What is the point of an electrolyte?

Blanche: Store the energy

Ext: the electrolyte does not store the energy

Blanche: it stores the energy and provides energy,

Ext: no it does not, the electrolyte stores the energy is what you're saying, that is incorrect, so why do you need electrodes then,

Blanche: well it's part of the system isn't it, you know, this is my whole point

Ext,: this is the point

Blanche: you're into battery technology,

Ext: well you're using batteries,

Blanche: mine is about electric field technology, (cross talk), let me show you another experiment then, alright, and it's nothing to do with batteries,

Ext: that's the whole point (no MY THESIS WAS NOT ABOUT BATTERY TECHNOLOGY)

Blanche: you want to ignore this I think, yea, you are, so, this guy built a Newman generator, right (silence, does not want to engage), there's the, there's the Newman generator, ok, (silence), this is the coil, he's got magnets spinning in the coil, this is the commutator, the commutator is the start, stop, and discharge of the device, it's a mechanical device, and he did a temperature test on it while running it for an hour, and it started at 21.5 degrees, after 15 minutes it dropped to 21.3 degrees and that continued while he run it for an hour, and then he stopped the test. Now this is not a chemical reaction,

Ext: it's not your work either,

Blanche: no, it's background research,

Ext: no

Blanche: no, this is background research, which the theory is built on, which you have to have background research, in your work

Ext: mm, but you missed out quite a bit of background research (NASA? Which he didn't even read) you have 4 chapters on batteries, that's the point I'm making here (and they are the only chapters you want to talk about and ignore the rest, there are 24 chapters all together)

Blanche: no, my work is not on batteries, my work is on the electric field

Ext: sure, sure, but

Blanche: here's, here's the (again he tries to avoid the inductor charge chapter 3), here's the temperature sensor,

Ext: mm

Blanche: that he placed on the coil, and he run it for an hour, there's the lab temperature, that was the coil temperature,

Ext: sure

Blanche: so that's not a chemical reaction, that's a physical reaction, where his sensor is showing, that the air around his sensor, is lower than air temperature,

Ext: Geoff, the point I'm making here, you have 4 chapters using batteries as an example (and they all support my theory, and they forgot to mention anything about 2 of those chapters in their addendum, except Int. says to remove equations 1 and 2. Strange that, don't want to mention NASA



experiment although one hour of this viva (40% of the viva) was spent talking about it. Don't want to talk about Swansea experiment either, under orders to avoid this probably) (and yes I get this point your making, it's called scientific fraud) to study your effects, the point I'm making here is, there's lots of literature been done on this point, and the question is, I think it's a shame, that you search it, you find it, but there's been a lot of research been done, that's my point

Blanche: did they actually use temperature sensors outside the battery, to show the direction of air, like I have-and got internal temperature,

Ext: the ambient temperatures, they got cell temperatures on the sensors

Blanche: yea

Ext: right, so,

Blanche: and they say it's a chemical reaction

Ext: it counts as thermodynamics, they relate the enthalpy to entropy gibbs energy

(gibbs energy must be at constant temperature, constant pressure to apply to the system, what I am studying is neither constant temperature or constant pressure, and an electric field energy gain is time dependant, this is very well defined in the thesis, but it's an agenda to fail)

Blanche: so they are saying it's a chemical reaction, it's either a chemical reaction or a physical reaction

EXT: it's a thermodynamic effect,

Blanche: no, no, look you need to get this straight in your head, it's either a chemical reaction or a physical reaction,

Ext: it's a thermodynamic

Blanche: thermodynamic effect means there's a transfer of energy, right, that's what thermo means, thermo means heat, you got it?

Ext: heat then,

Blanche: and it means a transfer of energy, that's what thermodynamic means, it's a transfer of energy, so you're saying there's a transfer of energy, dynamic, but is it a chemical reaction or a physical reaction? This is the point I am making, and my, , my, my work is on the charge of an electric field which is a physical reaction, to do with the atoms

Ext: well, it doesn't matter too much,

Blanche: and the electrons, the chemicals in the battery is not my study, so you're getting confused there,

Ext: the reason you can't separate them out, the key observations you're making there, are intrinsically related to how the battery behave, that's why it's important, I don't think we're getting anywhere with this, so, um, um, I've got no further questions, on that point.

Chair: Lijje?

Int: no, I don't have more questions,

Blanche: ok well shame you ended on a bad note there, because you don't know, and you can put this in your notes, that you don't know the difference between a physical and chemical reaction, so until you do, you can't really appreciate my work, whereas I'm examining what happens with the atoms and what that reaction causes, using a battery yes, a bunch of chemicals, but you are not actually knowing, what the physical reaction is, if you don't know it' if you haven't studied it, and I'm a bit sorry for you for that, because you've had plenty of time to, brush up and read all my notes, and read all the links I've given you, and you don't seem to have done that, all you've come here today to do, is talk about chemical reactions in a battery

(and it's evident from the viva they don't know what the difference there is between a chemical rearrangement and a chemical reaction, and a physical reaction is an alien term to them)

Ext: well you have 4 chapters on it,

Blanche: no, I have 4 chapters on experiments about what the charge of the electric field, which is different to battery chemical reactions, technology. And that's what you came here to talk about, and you don't really know what a physical reaction is in electricity. You didn't study my work enough, to understand it, that's how I'm getting it, have you got anything to say about that?

Chair: I think we're gonna stop there (I wonder why?) the examiners have asked their questions, ah, I'm going to ask you to leave the room, now, because the examiners will discuss, your answers, and discuss between themselves, the, the, the outcome to the viva, and while they're doing that, so if you'd like to leave and come back at 4 o'clock

Blanche: another point I'd like to make as well, I've spent a very long time to help you digest this information, and you still don't seem to get it,

Chair: I think we have had, have had a chance to, we have examined and discussed (4 chapters out of 24, plus one question each from another chapter) in a lot of detail, um, so, so these examiners will consider those answers (yet there was an addendum which contained no answers that was

discussed in the viva) then come to their conclusion, (which had already been decided upon, agenda to fail)

Blanche: very disappointed with you, you haven't studied my work, you don't know what a physical reaction is, I'm really shocked by that.

End of Viva.

## 15 More Conclusions

The external examiner confirmed on Tuesday the 7<sup>th</sup> of June, that Summers had his notes, "*Huw is coordinating the feedback atm*". He would not and could not share his notes with Mr Blanche, he was not in possession of any notes.

*Zoe Perry and Huw Summers state the examiners had not sent their reports to them on Monday 6<sup>th</sup> June and Wednesday 8<sup>th</sup> June and this could take up to a month due to examiner marking schedules.*

*Conclusion: Huw Summers was writing the reports.*

There was no original R & R form, and it is obvious Summers wrote the R & R and Addendum forms on behalf of the University during the time after the oral examination before it was sent to academic services for ratification on the 10<sup>th</sup> of June, 12 days after the oral exam. There is only one conclusion possible due to how these events unfolded; to fail Mr Blanche's Masters of Research. The examiners had no expertise in renewable energy or electromagnetism and along with all the university staff involved in this fraud, show themselves to be a disgrace to academic integrity. The grasp the examiners demonstrated of science, is so poor, I would not want them teaching GCSE level.

The examination board has failed to report how the contents of Mr Blanche's Thesis adds to the existing body of Knowledge within this particular field of renewable energy generation and electromagnetism.

Electromagnetism and electric charge is analysed with the accepted existing science we know, which has been built upon throughout our short science history in regards to electricity and electromagnetism. When a new observation and correlation is made, the scientist who has made this observation usually writes a thesis on it containing his or her theory. This is exactly what Mr Blanche has done.

It is very clear that the University has specific rules and regulations for this examination process, reporting new observations and awarding Masters Degrees. We have seen from this report, during the examination process, Swansea University have completely disregarded science to perpetuate false claims, and completely disregarded procedure to fail Mr Blanche's theory and Thesis. The reasons this University fraud has been perpetrated is because of - **The historical scientific fraud that Mr Joseph Westley Newman endured, by NBS and conspirators. There is a clear motive for fraud, to stop endothermic renewable energy generator research and this original educational knowledge being known to the 'mainstream academic community'. Swansea university demonstrate they have vested interests to block educational research discoveries due to being answerable to corporate interests and political will. This is not in the interest of the Welsh public or wider audience and participants.**

This Thesis is by a mature graduate with life experience and Mr Blanche has applied his hard gained knowledge to his research work. It is not written by a young undergraduate. This is not an assignment set by examiners, it is a serious piece of scientific research that cost Mr Blanche time and money to produce, and then only to be ridiculed by deceitful conspirators with non-scientific scrutiny. As soon as Newman was introduced into the work, the university supervisors acted like juveniles, and all understanding of science ceased to exist. Even when they were shown the evidence of the crime committed against Newman by NBS, their attitudes remained the same, and all Mr Blanche got was a resignation from his supervisor and cannot comment from others. They acted with no scientific integrity.

It is quite clear, the examiners were coerced, and colluded by the staff of Swansea University to commit scientific fraud against Mr Blanche. They try to claim Mr Blanche's Thesis, is a different study to what the title and abstract quite clearly state what the research is about. Mr Blanche had already dealt with the historical crime against Newman in his Thesis, and so they avoided this due to the facts presented by Mr Blanche. The University staff came up with another plan to fail Mr Blanche. In the oral exam they go about trying to re-write science and Summers writes a final report full of false scientific statements and claims. They clearly demonstrate for supposedly expert examiners, a non-expert science understanding. They only wanted to discuss one topic during the examination process, batteries, and then try to pick non-related arguments, i.e. *a vacuum, mass of a photon, evaporation as the cause of a displacement current, electrons do not move in the air around a conductor, voltage relaxation is the cause of a displacement current etc.*

This is the agenda that was played out and pre-arranged by the Chairperson in collusion with Swansea University hierarchy, using these examiners to fail Mr Blanche's Thesis and hence commit this fraud. The chairperson writes the final and only reports.

### Summary of Experiments and Examiners Beliefs

**NASA Experiment** You will notice the NASA experiment took up 40% of the discussion in the oral exam but the only reference to it in all examiners reports and that's without mentioning NASA, is to remove equation 1 and 2 from Mr Blanche's work. NASA did a comprehensive experiment and went to the trouble of building an adiabatic system, where they housed a Panasonic lithium battery inside a titanium bomb, suspended from the roof of the Arc. The objective of the experiment was to see what reaction the conduction current would cause with the surrounding air in the Arc. This is why they placed a thermocouple on the outside of the housing of the titanium bomb. They repeated the experiment three times and collected the same results. The electric field charge, which is recognised by increasing voltage in the system, caused the surrounding air temperature in the Arc, to drop by almost 2 degrees centigrade within the first 15 minutes of the experiment. Displaying an endothermic energy gain to the system and also revealing the displacement current as an energy source from the material and the environment, just as James Maxwell predicted with his unification of electromagnetic theory in 1865. The external examiner claims NASA didn't prove anything with this experiment at **VT 2h 10 mins** stating, *"no they didn't prove it either, proof is, well er, proof is a mathematical equation"*. *"You demonstrated certain observations, the interpretation of that is where we're trying to understand here."*

Mr Blanche applied a fundamental gas law using a mathematical equation in his theory to this experiment which is a standard practice in Physics with an adiabatic system, demonstrating whilst the electric field charge rises, which is measured in voltage, the pressure of the surrounding air temperature drops as demonstrated with equation 2. The examiners claim in the Addendum report, using this mathematical equation is not allowed, but give no reason, although also claim that NASA, *"no they didn't prove it either, proof is, well er, proof is a mathematical equation"*.

At VT 15 mins in the viva, the internal examiner demonstrated he had not checked the references, and tries to claim the very gas law is wrong, although it has been in our Physics gas law theory for over 200 years.

*$PV=nRT=nNkT$ , because the number of molecules in the sample,  $N$ , is  $N=nN$  we have  $PV = NkBT$  (1)*

This is what the internal examiner is arguing against and he states it is incorrect. This equation is explained in ref. 59 AND 60. Mr Blanche GAVE 2 references for this, due to the importance of this mathematical formula. The equation contains Boltzmann constant ( $k_B$ ), which is fundamental to how

we understand the relationship between energy and temperature, yet the examiners demonstrate they have no understanding of fundamental gas laws and how we can apply them to electromagnetic equation theory relating pressure and temperature and how we relate energy to air temperature.

**USW Experiment** The first thing you will observe, is the copying and pasting of the same paragraph in the external examiners pre viva report and then into the Addendum report, about this experiment. The questions raised in the pre viva were already contained in Mr Blanche's thesis but both examiners demonstrate they simply had not read the work thoroughly and rigorously, and then go on to complain it was difficult to read! (but as already demonstrated, it was Summers who wrote the reports). This experiment was discussed in viva, yet there was no update in the Addendum?

The ambient temperature is questioned by the external examiner, he tries to fool the reader by saying the battery is cooling to ambient and is not anything to do with an endothermic reaction but the problem with his argument is that the battery never gets to ambient before the reaction changes to an exothermic reaction. This has already been dealt with in the comments in chapter 8, 1.1, f, of this report.

*Ext: what is the ambient temperatures in this one?*

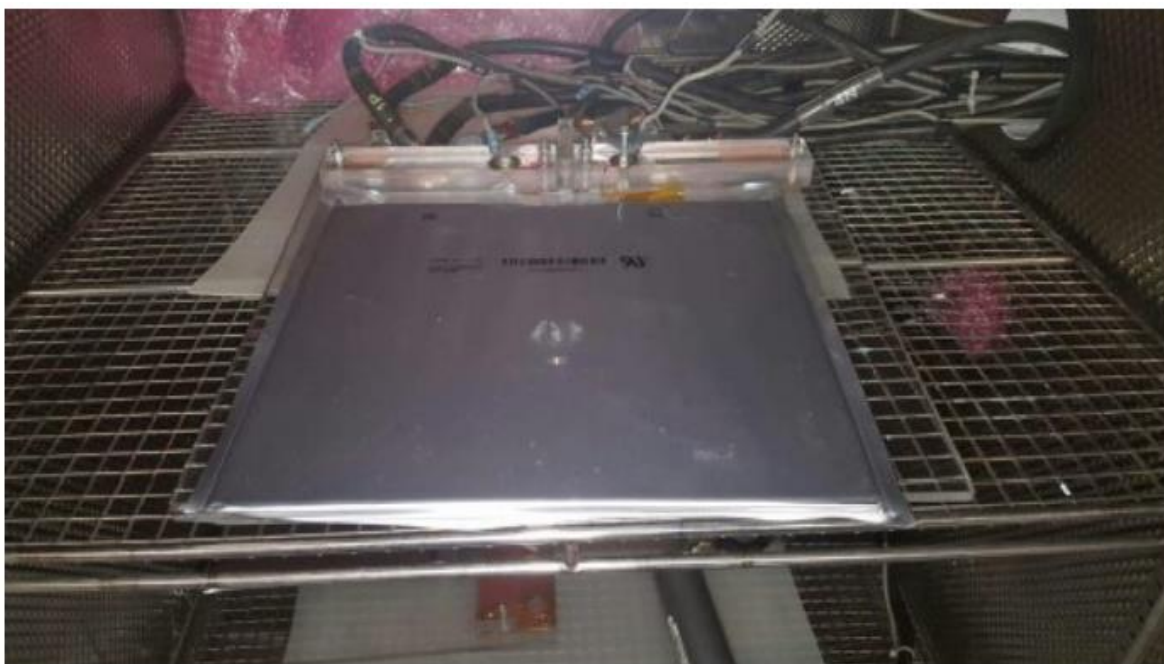
*Blanche: 24 degrees I do believe, I have written it in there, I think it's about 24 (it is actually 25 with one degree variant)*

*Ext: but isn't that why it's cooling down?*

*Blanche: no*

The motive of fraud is to try and make out there is no endothermic reaction with the surrounding air, and the reaction is only taking place between the electrodes inside the battery due to a chemical reaction. If this was true the opposite would be true also, an exothermic reaction in a battery would only happen between the electrodes and there would be no heat exchange to the outside environment. This is just a pathetic stance for so called experts to take and try and fool anyone! This is the theory the external examiner is trying to present to fraudulently dismiss the observations and the analysis of Mr Blanche's theory in his Thesis. He continually argues that entropy is the reason this theory is incorrect and then produces journal studies in the Addendum that are unrelated to Mr Blanche's theory in any way. This has already been dealt with in chapter 13 of this report.

## Temperature Sensors



The temperature sensors are clearly placed on the outside and away from the batteries in experiments to detect any displacement current. The NASA experiment showed the thermocouple on the outside of the Titanium bomb housing to the battery, and that's not even touching the battery which is housed within the titanium bomb. In the USW experiment, the temperature sensor is taped on the outside of the battery with the orange tape, as seen.

**Swansea Experiment** The Swansea experiment was only mentioned in one question pre viva and discussed for 5 minutes in the oral viva.

*Can the T2 temperature on pg 62 really be considered as a drop and not a fluctuation due to measurement errors? –*

YES IS THE ANSWER TO THIS QUESTION. It is not a fluctuation due to measurement errors as the examiner tries to claim. THE T2 SENSOR which is 17 cm away from the battery as seen in figure 34, changes its temperature reading when the conduction current (the emf- the photoelectric effect) is engaged, all explained in thesis, the data collected by the sensor then stays constant for nearly 400 seconds (6 minutes and 40 seconds), see figure 36. The trend of the sensor is consistent with the 2 other sensors when the conduction current is engaged and changes in time with TA at 700 seconds.

VT Time 1hr 26 mins. Discussed in viva, not updated in Addendum. WHY?

**Home Experiments** There were false claims made about these experiments by the examiners as to rubbish Mr Blanche's work throughout the reports and viva. I will not repeat it here as it has already been dealt with, in depth.

### Summary of false claims, actions and ineptness by examination board

1. There is no endothermic reaction between the system and the surroundings during the charge of the batteries electric field charge.
2. Electrons do not move in the air around a conductor.

3. They provide unrelated journal studies as fake evidence to try and refute Mr Blanche's theory.
4. You cannot apply gas laws to an adiabatic process.
5. Everything is wrong and nothing is correct with the Thesis.
6. The examiners do not exhibit any expert knowledge, and in-fact demonstrate a below GCSE knowledge of electricity physics.
7. Fail to rigorously examine the work and demonstrate many times during the viva, they never read most of the work or references which includes the title and the abstract.
8. Do not know what a physical reaction is, the difference between a chemical rearrangement and a chemical reaction
9. The university coerced the examiners and demonstrate from August 2020 they had a motive and agenda to fail this educational research.
10. Huw Summers produced the final reports and not the examiners.
11. Zoe Perry conspired with Huw Summers after the oral exam to commit fraud against Mr Blanche.
12. Both examiners conspired with Huw Summers and Swansea University staff to commit fraud against Mr Blanche.

There are 33 main failures identified during the viva by external examiner listed in this report, chapter 6.

There are 10 main failures identified during the viva by internal examiner listed in this report, chapter 6.

There are 10 main failures identified by the chairperson listed in this report, chapter 6.

Almost every point made in the examiners reports, which is the R & R report and the Addendum report are false statements. The viva had no minutes kept and or any notes including no original Report and Results form, which should have been sent to Academic Services immediately after the oral exam. Notes were never forthcoming from the examiners or the chairperson after the oral viva, and when requested by Mr Blanche one week after the viva which is his right under the Freedom of Information Act. This is quite clearly stated on the R & R form and within the rules.



The following sections of this document require completion:

1. The **External Examiner's Report** (three sub-sections);
2. The **Internal Examiner's Report** on the thesis;
3. The **Joint Report by the External and Internal Examiners** (to be completed after the oral examination);
4. The **Report by the Chair of Examining Board** on the conduct of the examination;
5. The **Confirmation of Address** form;
6. The **Result Form** making a formal recommendation.

Also in addition the Swansea University **Guide to the Examination of Research Students** and **Guide to the Submission and Presentation of a Thesis for Research Students** should be appended to the above forms, and examiners are asked to read them before proceeding.

A deadline to consider minor corrections/major amendments/resubmitted theses will be set by the College/School. If for any reason you are unable to meet this deadline, please contact the College/School Administrator.

**Examiners should be aware that, under the General Data Protection Regulation (GDPR) 2016, candidates have the right to request access to any comments made about them in these reports.**

## 15. Report and Result Forms

*The Examiners' Report and Result forms are intended as instruments for the reports of the examiners and the Chair of the Examining Board, and are used by the Examining Board to make a formal recommendation to Swansea University on the outcome of the examination process. Examiners are advised that under the terms of Freedom of Information Act 2000, students have the right to request access to any comments made about them in these reports*

It is obvious from the procedure and email exchange after the viva that it was the Chairperson who wrote the final reports with Zoe Perry supporting the deceit being played on Mr Blanche, and then presenting the reports has the work of the examiners. This is a heinous crime; to stop Mr Blanche's research and theory, to censor and to destroy Mr Blanche's career from advancing. The evidence and lies are well documented in this rebuttal report. Further evidence and testimony can and will be supplied if required.

There is no guessing to the motivation for this crime, with US government agencies being involved in fraud against Newman, Swansea University hierarchy try to protect American government agencies and past criminality. There is a connection between American Politicians and Swansea University, for example, Swansea renamed their law society in 2017 to, the 'Hillary Clinton Law Society', and the Clinton foundation is also an investor in the University, see reference 12. Another motivation is to protect the University's benefactors in current renewable energy research and development. Endothermic Renewable energy generators will be a serious threat in terms of corporation profits from energy.

What is quite remarkable as-well, is the fact that this University along with all other universities, are preaching the climate change agenda for carbon reduction and a change of energy production sources. Yet, they are prepared to commit crime to oppose this renewable scientific educational research Thesis! They are prepared to lie about fundamental science as if their lives depended upon it!

They have a total disregard for past, present and future education of students by trying to suppress this study. I say once more, this is a heinous crime; to stop this science research and theory. You have to ask yourself, WHY do they go to this extreme?

If you cannot see the motive and fraud behind what has been played on Mr Blanche by the examination board and Swansea University staff all that can be said is, you choose not to.

[Scientists sent to prison for fraudulent conduct \(universityworldnews.com\)](https://www.universityworldnews.com)

#### List of add-inns

- |  |            |
|--|------------|
| 1. Temperature sensor factory default incremental settings | (0.0625C)  |
| 2. Temperature of oven in home experiments                 | (200C)     |
| 3. Resting time of batteries in home experiments           | (one week) |

The information in this report is true to the best of my knowledge and research.

Signed

Geoffrey Blanche  
1st September 2022

## 16 References from Thesis

1. [University funding by the Bill & Melinda Gates Foundation — UniversityPhilanthropy.com](#)
2. [Bill And Melinda Gates Foundation Funds Global Ivermectin Clinical Trial | Covid Call To Humanity](#)
3. [Swansea University developing world's first COVID-19 'smart-patch' vaccine that will measure effectiveness - Swansea University](#)
4. [New book reveals shocking details about Microsoft founder Bill Gates' ties with sex trafficker Jeffrey Epstein \(msn.com\)](#)
5. [Hillary Clinton praises Swansea University's response to Covid-19 crisis - Swansea University](#)
6. [Bill Clinton Went to Jeffrey Epstein's Island With 2 'Young Girls,' Virginia Giuffre Says \(newsweek.com\)](#)
7. [Jeff Epstein Kept Super Creepy Painting Of Bill Clinton In Manhattan Townhouse - The Ring of Fire Network \(trofire.com\)](#)
8. [The Cover-Up Continues: The Truth About Bill Gates, Microsoft, and Jeffrey Epstein - unlimitedhangout.com](#)  
[CHILD SEX TRAFFICKING AND SATANIC RITUAL ABUSE TIED TO WHITE HOUSE – HOWARDNEMA.COM](#)  
[\(594\) The Clinton Pedophilia Connection - YouTube](#)  
[Proof That the Clinton's Are Tied to Epstein and Cartels – Government Propaganda](#)
9. [Hillary Clinton Condemns Donor As GOP Remains Silent On Trump ★ \(palebluenews.com\)](#)
10. [Bill and Chelsea Clinton begin Africa tour with entourage of donors | Daily Mail Online](#)
11. [Honorary Doctorates: Only the famous faces benefit - Gair Rhydd \(cardiffstudentmedia.co.uk\)](#)
12. [Hillary Clinton in London to launch scholarship programme in partnership with Sky and Swansea University | London Evening Standard | Evening Standard](#)
13. [FTR: The Degree was Hillary Clinton's EIGHTH Honorary Doctorate – The Law School Name is a First! | Still4Hill](#)
14. [Hillary And Bill . . . Gates - Activist Post](#)
15. [University funding by the Bill & Melinda Gates Foundation — UniversityPhilanthropy.com](#)
16. [BBC receives millions from the Gates Foundation - BigTechtopia](#) [Nuremberg trials - Wikipedia](#)
17. [Plandemic Part 2: Indoctrination \(plandemicvideo.com\)](#)

18. [Plandemic: Indoctrination World Premiere - Digital Freedom Platform](#)
19. [Judy Mikovits - Wikipedia](#)
20. [Joseph Westley Newman - Wikipedia](#)
21. [The Great Reset | Reset and shape the future](#)
22. [COVID-19: The Great Reset: Amazon.co.uk: Schwab, Klaus, Malleret, Thierry: 9782940631124: Books](#)
23. [- The Change Starts With You \(blanchemedia.co.uk\)](#)
24. [Klaus Schwab | World Economic Forum \(weforum.org\)](#)
25. [Robert F Kennedy Jr. Exposes Bill Gates' Vaccine Dictatorship Plan - cites Gates' twisted 'Messiah Complex' - Fort Russ \(fort-russ.com\)](#)  
  
[https://www.google.com/url?sa=t&source=web&rct=j&url=https%3A%2F%2Fcommittees.parliament.uk%2Fwrittenevidence%2F1619%2Fdefault%2F&ved=2ahUKEwjCo9Hou7LyAhVERkEAHW3PCmEQFnoECAMQAQ&usg=AOvVaw05mBSJ\\_cxaKBQBYsw\\_eudH&fbclid=IwAR3\\_n6Rpp;2qHbemSxrHgJth7QnnhMt0CIUfzmud068-XHSrOU44W7EEV\\_i24M\\*p./](https://www.google.com/url?sa=t&source=web&rct=j&url=https%3A%2F%2Fcommittees.parliament.uk%2Fwrittenevidence%2F1619%2Fdefault%2F&ved=2ahUKEwjCo9Hou7LyAhVERkEAHW3PCmEQFnoECAMQAQ&usg=AOvVaw05mBSJ_cxaKBQBYsw_eudH&fbclid=IwAR3_n6Rpp;2qHbemSxrHgJth7QnnhMt0CIUfzmud068-XHSrOU44W7EEV_i24M*p./)  
  
[Top COVID Doc Peter McCullough: 'These Jabs Are Killing People' | Principia Scientific Intl. \(principia-scientific.com\)](#)
26. [Great Barrington Declaration \(gbdeclaration.org\)](#)
27. [Dr. Lee Merritt: In Animal Studies, After Being Injected With mRNA Technology, All Animals Died Upon Reinfection. | Varjager's Weblog \(wordpress.com\)](#)
28. [Dr. Lee Merritt on COVID vaccine shedding, mind control and medical madness – Bible Science Forum](#)
29. [COVID-19 Yellow Card Data | UKColumn](#)  
  
[- The Change Starts With You \(blanchemedia.co.uk\)](#)  
  
[- The Change Starts With You \(blanchemedia.co.uk\)](#)
30. [Patents Prove SARS-CoV-2 Is A Manufactured Virus | Citizens Journal | Citizens Journal](#)  
[The Fauci COVID-19 Dossier - Dr David E Martin - \(covidtruths.co.uk\)](#)  
  
[Dr David Martin | Dr Reiner Fuellmich - July 9, 2021 \(brandnewtube.com\)](#)  
  
[Dr. Reiner Fuellmich: scientific evidence that covid is crime against humanity \(stopworldcontrol.com\)](#)
31. [Centers for Disease Control and Prevention \(cdc.gov\)](#)
32. [Fact check: It is standard practice for vaccine safety monitoring to continue after approval | Reuters](#)

33. [Vernon Coleman - international bestselling novelist and campaigning author](#)
34. [David Icke – News](#)
35. [Kary B. Mullis - Facts - NobelPrize.org](#)
36. [PCR Test Inventor Kary Mullis Tells the Truth About the Flawed COVID-19 Test | SOTN: Alternative News, Analysis & Commentary \(stateofthenation.co\)](#)
37. [Vaccinated people make up 75% of recent COVID-19 cases in Singapore, but few fall ill | Reuters](#)
38. [Lab Alert: Changes to CDC RT-PCR for SARS-CoV-2 Testing](#)
39. [COVID-19 Yellow Card Data | UKColumn](#)  
[Pandemrix v18 web \(bmj.com\);'](#)  
[The Chronicles of the Life and Times of The Bernician](#)  
[Britain's Yellow Card System Red Alert Warning - Stephen Lendman](#)
40. [Gates Foundation Buys Stakes in Drug Makers - WSJ](#)  
[New partnership between GSK and the Bill & Melinda Gates Foundation to accelerate research into vaccines for global health needs | GSK](#)
41. [Nikola Tesla dreamed of free electricity; what happened? | The Fifth Estate](#)
42. The Energy Machine Published by Joseph Newman. Newman, Joseph; *"The energy machine of Joseph Newman: An invention whose time has come". 5th ed. Soule (?), Evan R. (ed). 1987 \$38.45, ISBN 0-961 3835-5-2, J. Newman Pub.)*[https://archive.org/details/TheEnergyMachineOfJosephNewman8thEdition/mod e/2up](https://archive.org/details/TheEnergyMachineOfJosephNewman8thEdition/mod/e/2up)
43. [John Archibald Wheeler, 1911-2008 | Department of Physics \(princeton.edu\)](#)
44. [Richard Gage, AIA, Architect, Founder & President \(ae911truth.org\)](#)
45. [Free Energy Secrets \(teslasociety.ch\)](#)
46. Paul Huray Maxwell's Equations Copyright © 2010 by John Wiley & Sons, Inc. All rights reserved Published by John Wiley & Sons, Inc., Hoboken, New Jersey Published simultaneously in Canada [Maxwell's Equations | IEEE eBooks | IEEE Xplore](#)
47. Clerk-Maxwell, J., "A Dynamical Theory of the Electromagnetic Field", Philos. Trans. Roy. Soc. London 155, pp 459-512 (1865). Abstract: Proceedings of the Royal Society of London 13, pp. 531-- 536 (1864). The original eight Maxwell's equations are found in the link below in Part III entitled 'General Equations of the Electromagnetic Field' which begins on page 480, [Maxwell 1864 3.pdf \(zpenenergy.com\)](#)
48. [Espacenet - Bibliographic data](#)

49. <http://jnaudin.free.fr/html/qmmv11.htm>
50. [Home - John Kay](#)
51. <https://history.aip.org/phn/21612008.html#:~:text=National%20Bureau%20of%20Standards%20Institutional%20History.%20The,the%20Electrochemical%20Section%2C%20National%20Bureau%20of%20Standards%2C%201961.>
52. <https://www.ae911truth.org/justicerising>
53. <http://ine.uaf.edu/wtc7> Download file for final report on Building 7 collapse
54. <https://files.ncas.org/nbsreport/index.html>
55. [Why do electrical circuits need to be grounded? | Early Bird Electric \(earlybirdelectricians.com\)](#)
56. [Joseph Newman - YouTube](#)
57. 10<sup>th</sup> Electrochemical Power Sources Symposium August 20-23, 2007 Thermal Characterization Study of Lithium-Ion Cells By Doris L. Britton & Thomas B. Miller NASA Glenn Research Center Cleveland OH, William R. Bennett ASRC Aerospace Corp. Cleveland, OH Williamsburg, VA
58. <https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20070032054.pdf>
59. [2.7: The Ideal Gas Constant and Boltzmann's Constant - Chemistry LibreTexts](#)
60. [Ideal gases and the ideal gas law:  \$pV = nRT\$  \(chemguide.co.uk\)](#)
61. The Photoelectric Effect: Reconstructing the Story for the Physics Classroom [The Photoelectric Effect: Reconstructing the Story for the Physics Classroom | SpringerLink](#)
62. [Planck's Constant | Science Facts](#)
63. <https://www.britannica.com/science/ozone-layer>
64. <https://physics.info/photoelectric/>
65. <https://www.britannica.com/biography/Isaac-Newton/The-Principia>
66. <https://www.britannica.com/science/Coulombs-law>
67. <https://pdfs.semanticscholar.org/aa2e/5bdbb59bf61c26b294f861d111ded08534e2.pdf>
68. <https://www.nobelprize.org/prizes/physics/1921/summary/>
69. <https://www.bmj.com/content/330/7503/1290.full>
70. John Sealy Townsend, Ionization of gases by collision. Digitized by Michigan University  
<https://babel.hathitrust.org/cgi/pt?id=mdp.39015049046926&view=1up&seq=9>
71. High Voltage Engineering Fundamentals, EDITION 2, AUTHORS, E. Kuffel, W. S. Zaengl, and J. Kuffel. PUBLISHER Elsevier Science & Technology, PRINT PUB DATE 2000-07-17  
<https://ebookcentral.proquest.com/lib/swansea-ebooks/detail.action?docID=318258>
72. Tunable endothermic plateau for enhancing thermal energy storage obtained using binary metal alloy particles, Author: Chih-Chung Lai, Shih-Ming Lin, Yuan-Da Chu, Chun-Che Chang, Yu-Lun Chueh, Ming-Chang Lu Publication: Nano Energy, ©

2016 Published by Elsevier Ltd.

<https://www.sciencedirect.com/science/article/abs/pii/S2211285516300088>

73. [https://www.bibliotecapleyades.net/ciencia/ciencia\\_hitech02a.htm](https://www.bibliotecapleyades.net/ciencia/ciencia_hitech02a.htm)
74. [https://en.wikipedia.org/wiki/Lead%E2%80%93acid\\_battery](https://en.wikipedia.org/wiki/Lead%E2%80%93acid_battery)
75. [How to Recycle Lead-Acid Batteries – RecycleNation](#)
76. [Battery University Homepage](#)
77. ACS Nano 2013, 7, 6, 5131–5141, Publication Date: May 7, 2013  
<https://doi.org/10.1021/nn400731g>, Copyright © 2013 American Chemical Society
78. P. Biller, A.B. Ross, in [Handbook of Biofuels Production \(Second Edition\)](#), 2016  
[Hydrothermal Processing - an overview | ScienceDirect Topics](#)
79. <https://www.youtube.com/watch?v=AWI70HXrbG0> Dr physics (Bob Eagle)  
Maxwell's equations
80. <https://www.britannica.com/science/Boltzmann-constant>
81. [Lithium - Element information, properties and uses | Periodic Table \(rsc.org\)](#)
82. [Difference between Joules, Coulombs and Volts - CHEMISTRY COMMUNITY \(ucla.edu\)](#)
83. [Cation: Definition & Examples - Video & Lesson Transcript | Study.com](#)
84. [Corona Discharge: What is the Corona Effect? | Electrical4U](#)
85. [Maxwell's Original Presentation of Electromagnetic Theory and Its Evolution | SpringerLink](#)
86. [The London, Edinburgh and Dublin Philosophical Magazine and Journal of Science - Google Books](#)
- [Describe Hertz Experiment of Electromagnetic Waves - QS Study](#)
- [PPT - Maxwell's Equations in Vacuum PowerPoint Presentation, free download - ID:1588347 \(slideserve.com\)](#)
- [Bohr's Model of an Atom with Postulates and Limitations | BYJU'S \(byjus.com\)](#)
87. [Innovation in Maxwell's Electromagnetic Theory: Molecular Vortices ... - Daniel M. Siegel - Google Books](#)
88. [Introduction to electrodynamics : David J. Griffiths : Free Download, Borrow, and Streaming : Internet Archive](#)
89. [Measuring Maxwell's displacement current inside a capacitor \(uiowa.edu\)](#)
90. G Scheler and G Paulus 2015 Eur. J. Phys. 36 055048. [Measurement of Maxwell's displacement current - IOPscience](#)
91. [\(PDF\) Maxwell's Original Equations | Frederick David Tombe - Academia.edu](#)
92. [Computer Setup \(mit.edu\)](#)
93. [PJKbook : Patrick Kelly : Free Download, Borrow, and Streaming : Internet Archive](#)
94. The Nature of Thermodynamics, P. W. Bridgman, Published 1941, Harvard University.  
URL// <https://archive.org/details/natureofthermody031258mbp/page/n21/mode/2up>
95. [Michael Faraday | Faraday \(cam.ac.uk\)](#)
96. [What is Kinetic Energy? - Definition, Formula, Examples, Unit, Types \(byjus.com\)](#)

[www.spark.iop.org/speed-electrons](http://www.spark.iop.org/speed-electrons)

97. [Electron - Wikipedia](#)
98. [Atomic mass - Wikipedia](#)
99. [Hall effect | Definition & Facts | Britannica](#)
100. F. W. Peek, "The Law of the Corona and the Dielectric Strength of Air," Transactions of A.I.E.E. **30**, 1889 (1911). [IEEE Xplore Full-Text PDF:](#)
101. [Radio-Influence and Corona-Loss Aspects of AEP 765-kV Lines](#) [Nestor Kolcio](#) ; [Vincent Caleca](#) ; [Stephen J. Marmaroff](#) ; [W. L. Gregory](#) [IEEE Transactions on Power Apparatus and Systems](#) Year: 1969 | Volume: PAS-88, Issue: 9 | Journal Article | Publisher: IEEE
102. "Discussion on "electric strength of air II," "the law of corona and dielectric strength of air." Chicago, June 29, 1911. (see proceedings for June and July, 1911)," in Proceedings of the American Institute of Electrical Engineers, vol. 30, no. 11, pp. 2333-2355, Nov. 1911.  
<https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6660021>
103. <https://www.allaboutcircuits.com/textbook/alternating-current/chpt-3/more-on-the-skin-effect/>
104. <https://www.youtube.com/watch?v=AWI70HXrbG0> Dr physics, Maxwell's equations
105. [https://www.researchgate.net/publication/221667990\\_Self-Charged\\_Graphene\\_Battery\\_Harvests\\_Electricity\\_from\\_Thermal\\_Energyof\\_the\\_Environment](https://www.researchgate.net/publication/221667990_Self-Charged_Graphene_Battery_Harvests_Electricity_from_Thermal_Energyof_the_Environment)  
<https://reader.elsevier.com/reader/sd/pii/S0375960119307315?token=318D474463E63FFF61C07411008F178B8D>

#### [Other Research Links](#)

<https://www.graphene-info.com/graphene-structure-and-shape>

<https://www.khanacademy.org/science/physics/linear-momentum/elastic-and-inelastic-collisions/a/what-are-elastic-and-inelastic-collisions>

<https://pubs.acs.org/doi/10.1021/nn400731g>

<https://www.mdpi.com/2311-5629/4/3/38>