## Curriculum Vitae



## Pr. DESOBGO ZANGUE Steve Carly

# (Associate Professor at the University Institute of Technology of the University of Ngaoundere, Cameroon)

Associate Professor, University of Ngaoundere, Cameroon

Postdoctoral fellow, University of Johannesburg, Doorfontein Campus Ph.D in Process Engineering, University of Ngaoundere Master of Science in Process Engineering, University of Ngaoundere Master of Engineering in Agricultural and Food Industries, University of Ngaoundere

#### **Personal Informations**

| Name (s)                | DESOBGO ZANGUE Steve Carly   |
|-------------------------|--|
| Adress                  | PO. Box 455 University Institute of Technology (IUT), Ngaoundéré, Cameroun |
| Phone                   | (+237) 697160004 / 672790222 / 656858527 / 222251650                       |
| Email                   | desobgo.zangue@gmail.com / desobgo@yahoo.fr / stevedesobgo@gmail.com       |
| Nationality             | Cameroonian  |
| Date and place of birth | January 02, 1977 in Douala, Cameroon                                       |
| Sex                     | Male   |
| Marital status          | Married and father of 4 children   |

| Field of competence | Food   | Technology,     | Biotechnology,     | Process    | Engineering,    | Chemical   |
|---------------------|--------|-----------------|--------------------|------------|-----------------|------------|
|                     | Engine | ering, Develop  | oment of new pr    | oducts, Er | nvironment (bio | ochemistry |
|                     | compr  | ehension of was | ste transformatior | ו)         |                 |            |

## **Scientific Activities**

| Domain                       | Process Engineering, Chemical Engineering, Development of new products,<br>Environment, Food Technology and Biotechnology, Environment (biochemistry<br>comprehension of waste transformation) |
|------------------------------|--|
| Direction of activities      | - Food Technology, Biotechnology, Beverages, Enzymology  |
|                              | - Modeling (Response Surface Methodology)  |
|                              | - Environmental science (biochemistry comprehension of waste transformation)   |
| Publications in the activity | - <b>38 papers</b> in refereed journals, <b>3 books chapters</b>   |
|                              | - 1 communication to the GP3A, UCL Belgium.  |
|                              | - 2 communications in Annual Conference of the Cameroon Biosciences<br>Society   |
|                              | - 1 communication to the Johannesburg Winter Beverage Symposium of the University of Johannesburg at Sedibeng brewery, South Africa  |
|                              | - 2 patents submitted to OAPI  |
| Supervision of students      | - 4 Ph.D completed   |
|                              | - 10 Masters completed   |
|                              | - Many engineer students (more than 24), Licence (BAC+3) and DUT students (BAC+2) completed  |

## **Professional experience**

| Dates Since November 2019 | Dates | Since | Novem | ber 2019 |
|---------------------------|-------|-------|-------|----------|
|---------------------------|-------|-------|-------|----------|

Name of employer University of Ngaoundere/University Institute of Technology (UIT)

| Activity sector                 | Higher education               |  |
|---------------------------------|--------------------------------|--|
| Position occupied               | Associate Professor/Researcher |  |
| Activities and responsibilities | - Lecturing                    |  |
|                                 | - Research                     |  |
|                                 | - Practicals                   |  |
|                                 | - Students supervision         |  |
|                                 |                                |  |
| Dates                           | 2021 until now                 |  |

| Name of employer  | Journal of the American Society of Brewing Chemists |
|-------------------|---|
| Activity sector   | Scientific papers publication                       |
| Position occupied | Reviewer  |
|                   |   |
| Dates             | 2021 until now                                      |
| Name of employer  | Heliyon   |
| Activity sector   | Scientific papers publication                       |
| Position occupied | Reviewer  |
|                   |   |
| Dates             | 2020 until now                                      |
| Name of employer  | Journal of Food Processing and Preservation         |
| Activity sector   | Scientific papers publication                       |
| Position occupied | Reviewer  |
|                   |   |
| Dates             | 2019 until now                                      |
| Name of employer  | Journal of Food Stability                           |
| Activity sector   | Scientific papers publication                       |

Position occupied Associate Editor

| Dates                           | 2019 until now  |
|---------------------------------|---|
| Name of employer                | SCIREA Journal of Food  |
| Activity sector                 | Scientific papers publication                                     |
| Position occupied               | Editorial Board Member  |
|                                 |   |
| Dates                           | 2012-2019   |
| Name of employer                | University of Ngaoundere/University Institute of Technology (UIT) |
| Activity sector                 | Higher education  |
| Position occupied               | Senior Lecturer/Researcher  |
| Activities and responsibilities | - Lecturing   |
|                                 | - Research  |
|                                 | - Practicals  |
|                                 | - Students supervision  |

| Dates             | 2017 until now                       |
|-------------------|--------------------------------------|
| Name of employer  | American Society of Brewing Chemists |
| Activity sector   | Scientific papers publication        |
| Position occupied | Member                               |

| Dates             | 2017-2019  |
|-------------------|--|
| Name of employer  | Ministry of Scientific Research and Innovation (MINRESI) |
| Activity sector   | Research/Technology                                      |
| Position occupied | Member of the National Technology Development Committee  |

| Activities and responsibilities | <ul> <li>Biotechnology development policy in Cameroon</li> <li>Project selection</li> <li>Project supervision</li> </ul>                     |
|---------------------------------|--|
|                                 |  |
| Dates                           | 2016-2017  |
| Name of employer                | GIZ Cameroon (Gesellschaft Für Internationale Zusammenarbe)  |
| Activity sector                 | <ul> <li>Environmental, climate and forest policy</li> <li>Governance and decentralization</li> <li>Rural development</li> </ul>             |
| Position occupied               | Consultant   |
| Activities and responsibilities | - Work meeting with the representatives GIZ, SNV, and the company SOCTRACAO. Definition of terms of reference and on-site visit of equipment |
|                                 | - Evaluation of machine yields according to processing needs.  |
|                                 | - Analysis of the quality of materials related to hygienic requirements and sanitary and their availability on the market.                   |

| Dates                           | 2015-2016  |  |
|---------------------------------|--|--|
| Name of employer                | University of Johannesburg, South Africa   |  |
| Activity sector                 | Higher education   |  |
| Position occupied               | Postdoctoral fellow at Biotechnology and Food technology department  |  |
| Activities and responsibilities | <ul> <li>Lecturing</li> <li>Research on brewing science</li> <li>Practicals</li> <li>Students supervision</li> </ul> |  |

### Dates 2017 until now

Name of employer African Journal of Science, Technology, Innovation and Development

| Activity sector                 | Scientific papers publication                                       |
|---------------------------------|---|
| Position occupied               | Reviewer  |
|                                 |   |
| Dates                           | 2017 until now  |
| Name of employer                | Journal of Food Science and Technology                              |
| Activity sector                 | Scientific papers publication                                       |
| Position occupied               | Reviewer  |
|                                 |   |
| Dates                           | 2014- until now   |
| Name of employer                | Journal of Food and Bioprocess Technologies                         |
| Activity sector                 | Scientific papers publication                                       |
| Position occupied               | Reviewer  |
|                                 |   |
| Dates                           | 2014- until now   |
| Name of employer                | African Journal of Biotechnology                                    |
| Activity sector                 | Scientific papers publication                                       |
| Position occupied               | Editorial Board Member  |
|                                 |   |
| Dates                           | 2013-2014   |
| Name of employer                | University of Johannesburg, South Africa                            |
| Activity sector                 | Higher education  |
| Position occupied               | Postdoctoral fellow at Biotechnology and Food technology department |
| Activities and responsibilities | - Lecturing   |
|                                 | - Research on brewing science                                       |

- Practicals
- Students supervision

| Dates                           | 2008-2012   |  |  |
|---------------------------------|---|--|--|
| Name of employer                | University of Ngaoundere/University Institute of Technology (UIT) |  |  |
| Activity sector                 | Higher education  |  |  |
| Position occupied               | Assistant Lecturer  |  |  |
| Activities and responsibilities | - Lecturing   |  |  |
|                                 | - Research  |  |  |
|                                 | - Practicals  |  |  |

- Students supervision

| Dates                           | 2002-2008  |  |  |
|---------------------------------|--|--|--|
| Name of employer                | University of Ngaoundere/ENSAI of Ngaoundere   |  |  |
| Activity sector                 | Higher education   |  |  |
| Position occupied               | Research assistant   |  |  |
| Activities and responsibilities | <ul> <li>Practicals in Agro-industrial process technology</li> <li>Practicals in biodynamics</li> <li>Practicals in Enzymology</li> <li>Practicals in Mechanical and transfer unit operations</li> </ul> |  |  |
|                                 |  |  |  |

| Dates             | May – September 2001  |
|-------------------|---|
| Name of employer  | CAM Assistance  |
| Activity sector   | Food technology (Manufacture of machinery, development of new products) |
| Position occupied | Trainee (Internship End of Master of Engineering degree)                |

- Activities and responsibilities Development of the manufacturing processes of juice and pineapple wine
  - Developing a taste panel
  - Development of the best process for juice and pineapple wine

| Dates                           | June – August 2000  |  |  |
|---------------------------------|---|--|--|
| Name of employer                | Cameroon Development Corporation (CDC)  |  |  |
| Activity sector                 | Food Technology (Rubber, Tea, oil, etc)   |  |  |
| Position occupied               | Trainee (Internship Master of Engineering, year 2)  |  |  |
| Activities and responsibilities | - Investigations on the rubber quality issues   |  |  |
|                                 | - Development of a device to drain water from washing the coagulated latex to pretreatment zone |  |  |

| Dates                           | July – August 1999  |  |  |
|---------------------------------|---|--|--|
| Name of employer                | SPC du Cameroon   |  |  |
| Activity sector                 | Food Technology (Feed mills)  |  |  |
| Position occupied               | Trainee (Internship Master of Engineering, year 1)                        |  |  |
| Activities and responsibilities | - Contribution to the production of provender for poultry, pigs, rabbits, |  |  |
|                                 | - Contribution to management of feed stocks and Maintenance               |  |  |

| Dates                           | June – September 1998                            |
|---------------------------------|--|
| Name of employer                | Guinness Cameroon S.A.                           |
| Activity sector                 | Food Technology (Brewery)                        |
| Position occupied               | Trainee (Internship for end of degree, DUT)      |
| Activities and responsibilities | - Bottle breakages analysis in Packaging service |

- Investigation on critical areas of thermal shock and breakage of bottles on the bottling line.
- Bottle breakages and valuation costs

| Dates                           | June – July 1997   |  |  |
|---------------------------------|--|--|--|
| Name of employer                | Guinness Cameroon S.A.   |  |  |
| Activity sector                 | Food Technology (Brewery)  |  |  |
| Position occupied               | Trainee (Internship)   |  |  |
| Activities and responsibilities | - Bottle breakages analysis in Packaging service   |  |  |
|                                 | - Investigation on critical areas of thermal shock and breakage of bottles on the bottling line. |  |  |
|                                 | - Bottle breakages and valuation costs   |  |  |

## **Education and formation**

| Dates                          | 2004 – 2012   |
|--------------------------------|---|
| Title of qualification awarded | Ph.D in Process engineering   |
| Skills covered                 | <b>General domain:</b> Process Engineering and Chemical Engineering, Food technology, Mathematics, Statistics |
|                                | <b>Specific Domain:</b> Modeling, Process Optimization of Agricultural and Food Industries (Beverages)        |
| Établissement Institution      | National Advanced School of Agro-Industrial Sciences (ENSAI), Ngaoundere,<br>Cameroon                         |
| Dates                          | 2001 – 2003   |
| Title of qualification awarded | Master of Science in Process Engineering (D.E.A - GP)   |

| Skills covered                 | <b>General domain:</b> Process Engineering and Chemical Engineering, Food technology, Mathematics, Statistics |
|--------------------------------|---|
|                                | <b>Specific Domain:</b> Modeling, Process Optimization of Agricultural and Food Industries (Beverages)        |
| Établissement Institution      | National Advanced School of Agro-Industrial Sciences (ENSAI), Ngaoundere,<br>Cameroon                         |
| Dates                          | 1998 – 2001   |
| Title of qualification awarded | Master of Engineering   |
| Skills covered                 | <b>General domain:</b> Process Engineering and Chemical Engineering, Food technology                          |
| Établissement Institution      | National Advanced School of Agro-Industrial Sciences (ENSAI), Ngaoundere,<br>Cameroon                         |
|                                |   |
| Dates                          | 1996 – 1998   |
| Title of qualification awarded | University Institute of Technology Diploma (DUT)  |
| Skills covered                 | General domain: Agro-Industrial Engineering   |
| Établissement Institution      | University Institute of Technology (UIT), Ngaoundere, Cameroon  |
|                                |   |
| Dates                          | 1995 – 1996   |
| Title of qualification awarded | Bachelor of Secondary Education (Series D)  |
| Skills covered                 | General domain: Mathematics and Natural Sciences  |
| Établissement Institution      | Polyvalent Private Institute of Bonamoussadi (IPPB), Douala, Cameroon   |

### Personal skills and competences

## Language French

| Selfevaluation         | If evaluation Understand Speak  |   |  | Write   |  |
|------------------------|---|---|--|---|--|
|                        | Listen  | Read  | Conversation   | Orally  |  |
|                        |   |   | · · · ·  |   |  |
| English                | Well  | Well  | Well enough  | Well enough   | Well   |
| Social skills          | - Good to<br>- Good co  | eam skills, easy t<br>ommunication s                                      | to adapt to multic   | cultural environi                                     | nents  |
| Organizational skills  | - General Manager of the Ngaoundere Veterans Football Association ( <b>2018</b> )                         |   |  |   |  |
|                        | - Academic supervisor of the Bioengineering mention level 2 (2009-2011)                                   |   |  |   |  |
|                        | - Regular Interim position of Head of Department of Food Engineering and Quality Control (GACQ)           |   |  |   |  |
|                        | - President of the Association of Monitors and PhD students of the University of Ngaoundere <b>(2005)</b> |   |  |   |  |
|                        | - Labora<br><b>2005/2</b>   | tory Techniciar<br><b>006</b>   | n at ENSAI of  | Ngaoundere  | 2004/2005 &  |
|                        | - Membe   | er of the Junior E  | Interprise Club, N   | lgaoundere <b>(199</b>                                | 8–2000)  |
|                        | - Registr<br>Studen   | ar of the Comr<br>ts of ENSAI, Nga  | nission of projec<br>aoundere <b>(2001-2</b>                     | cts in the Assoc<br>2 <b>004)</b>                     | iation of Ph.D   |
|                        | - Audito  | r of the Agro - In  | dustrial Club, UI1   | 「, Ngaoundere <b>(</b> 1                              | 1996-1997)   |
| <i>Computer skills</i> | - Word,<br>Matlab<br>SPSS, S<br>Sphinx  | Excel, PowerPo<br>, Minitab, Mat<br>Systat, S Plus 20<br>, Design Expert, | int, Publisher, S<br>hematica, Scien<br>00, Derive 5, Adc<br>etc | igmaPlot, Statis<br>tific Workplace<br>obe Photoshop, | stica, Mathcad,<br>, Statgraphics,<br>fortran, Origin, |

| Artistic skills  | -  | Practice drawing and poetry  |
|--|----|--|
| Other skills   | -  | Practice of Football, basketball, tennis, table tennis etc   |
| Driving Licence  | -  | Driving licence B  |
| Complement   | -  | Special Distinction awarded for completion of all the lectures exams in a normal session by Prof. Maurice TCHUENTE Rector (Rector of the University of Ngaoundere) <b>(1998)</b> .   |
|  | -  | Highest performance in Master of science results (2003)  |
| List of lessons taught<br>(ENSAI/IUT) in the<br>University of Ngaoundere<br>and National Polytechnic<br>School of Douala (ENSPD) |    | <ol> <li>Enzymology</li> <li>Process diagrams and technical drawing</li> <li>Industrial hygiene</li> <li>Fruits and vegetables</li> <li>Malting &amp; Brewing</li> <li>Food process practical (beer, fruit juice, wine and spirit, etc)</li> <li>Student professional project</li> <li>Advanced Brewing</li> <li>Wine and spirits</li> <li>Initiation to engineering equipment</li> <li>Industrial Enzymes and Applications</li> <li>Biostatistics and experimental design (ENSAI/IUT)</li> <li>Processes of Food Industries II (Beverages)</li> <li>Mechanical and Transfer Unit Operations</li> <li>Experimental designs (ENSPD)</li> <li>Agri-Food Processes 1 (ENSPD)</li> </ol> |
| Academic direction of Ph.D   |    | List of Ph.D. completed  |
| students   | 1) | <b>Makebe Calister Wingang. 2022.</b> Development of probiotic fermented beverage from soursop ( <i>Annona muricata</i> Linn.) fruit. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; <b>Pr. Desobgo, Z.S.C.</b> )   |

- 2) Wiyeh Claudette Bakisu Muala. 2022. Probiotic beverage production from a mixture of baobab (*Adansonia digitata* L.) pulp and lemongrass (*Cymbopogon citratus* L.) extract using lactic acid bacteria. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 3) Ninga Kombele Aimé. 2021. Modeling and optimization of the enzymatic depectinization of guava pulp by the use of polygalacturonases extracted from banana. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI). (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 4) Nguemogne Annick Chancelle. 2020. Modeling the extraction and purification of the limit dextrinase of *Safrari* sorghum cultivar. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI) (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)

#### List of Ph.D. students still in progress

- Acha Anna Affeck. Modeling the production and clarification of a standardized « Nkang » beer. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI) (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- Assabjeu Djoufack Armel Césaire. Study of the mechanism of enzymatic hydrolysis by fragmentation for the production of bioethanol from corn cobs. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- Brai Olivier. Production of a probiotic sorghum beer. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- Tiemuncho Habass. Construction and evaluation of a novel hybrid mash-tun for sorghum mashing. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 5) Longpa Kuitché Yannick. Design of a sorghum and mushroom flour manufacturing process for diabetics. Ph.D in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 6) **Ntoukam Ntoukam Second Fabrice.** Development of a probiotic drink based on a cocktail of local fruit juices obtained by enzymatic depectinization. Ph.D in Process Engineering, National School of Agro-

Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)

7) Fiacre Katlezir. Non-dairy probiotic need: modeling and optimization of the viability, physicochemical properties and sensory analysis of a fermented drink of *Phoenix dactilifera* L. Doctoral School of Sciences, Techniques and Environment (ED-STE) of the University of Ndjamena, Chad. (Directors: Pr. Mohagir, A.M.; Pr. Desobgo, Z.S.C.)

## Academic direction of Masters and Engineers Students

#### Masters and Engineers completed

#### **Masters** completed

- Tiemuncho Habass Noulambeh, 2019. Modeling the Operating Limits of a Mashing Process of Sorghum, Attainable Region Concept. Master of Science in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- Mekok Abizou Rostand, 2019. Optimized seed roasting and ultrasound-assisted extraction of baobab oil (*Adansonia digitata* Linn). Master of Science in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- Kadlezir Fiacre, 2017. Optimization of some physicochemical parameters during juice extraction of a date cultivar (*Phoenix dactylifera* L.). Master of Science in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Dr. Desobgo, Z.S.C.)
- 4) Wiyeh Claudette Bakisu Muala, 2016. Influence of drying and mixture conditions on some physico-chemical characteristics of lemongrass (*Cymbopogon citratus*) blended with ginger (*Zingiber officinale*) tea. Master of Science in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Dr. Desobgo, Z.S.C.)
- 5) Makebe Calister Wingang, 2016. Optimisation of the extraction process and investigation on must fermentation of ripe plantains. Master of Science in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Dr. Desobgo, Z.S.C.)
- 6) **Tiyou Jules Padrik, 2014.** Application of hydrothermolysis and organosolv treatments for the solubilization of hemicellulosic fractions and lignin of sorghum stalks for the production of bioethanol. Master of Science in Process Engineering, National School of Agro-Industrial

Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Dr. Desobgo, Z.S.C.)

7) Nkoum Sem Ronald, 2014. Optimising Sugar Release by the CSLF Technology and Dilute Acid Hydrolysis from Maize (*Zea mays* I.) Stalks as a Potential for Bioethanol Production. Master of Science in Process Engineering, National School of Agro-Industrial Science (ENSAI), Cameroon. (Directors: Pr Nso, E. J.; Dr. Desobgo, Z.S.C.)

#### **Engineers** completed

- Gnassiri Simon, 2021. Formulation of a beer based on red sorghum (Sorghum bicolor), cinnamon (Cinnamomum zeynalicum), lemon peel (Citrus limon) and Khaya senegalensis bark. Engineering degree, National Polytechnic School of Douala (ENSPD), Cameroon. (Pr. Desobgo, Z.S.C., Dr Nkene)
- Fometeu Zamo Audrey Niquème, 2018. Standardization of calcium and free amino nitrogen contents in the wort at the brewhouse. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Dr. Desobgo, Z.S.C., Dr Agwanande W.)
- Chano Kuitche Gaëlle, 2018. Sulfur dioxide control in breweries. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Dr. Desobgo, Z.S.C., Dr Agwanande W.)
- Awah Noella, 2018. Study of factors influencing saccharification during mashing. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Fombang Edith, Dr. Desobgo, Z.S.C.)
- Ayossa-Hanthe Lonam, 2018. Ameliorating beer brightness: case of SABC Douala and Yaounde factories. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Dr. Desobgo, Z.S.C., Dr Agwanande W.)
- 6) Minkoumou Augustin Caleb, 2018. Brewer's yeast management for the improvement of the quality of the finished beer. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- 7) Kamche Josianna Clarence, 2018. Formulation of tropical fruit compotes (pineapple, banana and papaya). Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Dr. Desobgo, Z.S.C., Dr Ngatchic J.)
- Tset III Steve F., 2017. Improvement of stage times and reduction of extract losses during filtration in brewhouse 2. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- Nsoh Cyril Fru, 2017. Production of a malt drink from sorghum. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)

- 10) Tiemuncho Habass N., 2017. Model-based design: A novel mash tun, mashing and fermentation process simulation software for food process applications. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- Makamté Mukam F., 2017. Analysis of the fermentation process at UBC: The case of King Beer. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- Kembeu Kaleu Pavell, 2017. Control of the duration of the stages and reduction of extract losses during the filtration of mash in brewhouse 1. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- 13) Metutu Kakoua Bessong V., 2017. Evaluation of the impact of roller mills on the quality of the final product (flour). Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- 14) Fali Mbeh H., 2016. Production of sorghum coffee-milk stouts and modelling of some physicochemical characteristics. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- 15) Takela Feudjo Moïse F., 2016. Evaluation and reduction of water consumption during brewing. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Pr Nso E.J., Dr. Desobgo, Z.S.C.)
- Nana Njouyep Mervil, 2016. Improvement and control of mash filtration. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Dr. Desobgo, Z.S.C., Amba)
- 17) Nomo Nomo G., 2016. Improvement and control of bitterness in isenbeck and high-density mother beers. Engineering degree, National School of Agro-Industrial Science (ENSAI), Cameroon. (Dr Fombang Edith, Dr. Desobgo, Z.S.C.)

#### **Thesis & Reports**

- Desobgo, Z.S.C., 2012. Optimization of the action of hydrolases on some physico-chemical characteristics of the wort of two sorghum cultivars. Ph.D Thesis in Process Engineering. ENSAI of the University of Ngaoundere.
- Desobgo, Z.S.C., 2003. Study of the effect of some hydrolases on the filterability of unmalted sorghum-based worts (*Madjeru, Safrari, S.35*). Master of Science thesis in Process Engineering. ENSAI of the University of Ngaoundere.

- **3) Desobgo, Z.S.C., 2001.** Production of juice and pineapple wine for a semi-automated unit. Master of Engineering thesis. ENSAI of the University of Ngaoundere.
- Desobgo, Z.S.C., 2000. Investigation into rubber problems. Internship Report, Master of engineering year 2. ENSAI of the University of Ngaoundere.
- 5) **Desobgo, Z.S.C., 1999.** Contribution to the production of the Feed for poultry, pigs, rabbits. Internship report, Master of engineering year 1. ENSAI of the University of Ngaoundere
- 6) **Desobgo, Z.S.C., 1998.** Analysis bottles breakages of the packaging line No. 2 (1998). DUT end of thesis. UIT of the University of Ngaoundere.
- 7) **Desobgo, Z.S.C., 1997.** Monitoring of the packaging lines. Training report. UIT of the University of Ngaoundere.

#### Conferences

- Man-Ikri B., Desobgo Z.S.C., 2022. Study of the impact of Grewia mollis on the clarification of Mbayeri sorghum cultivar worts. Conference on Scientific and technological innovations: catalysts for growth and sustainable development. From 11 to 13 May 2022, University Institute of Technology, University of Douala, Cameroon. N° SS 167
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