

CURRICULUM VITAE

Prof. DESOBGO ZANGUE Steve Carly

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PERSONAL INFORMATION

Nationality: Cameroonian

Date of Birth: January 02, 1977, Douala,
Cameroon

Sex: Male

Marital Status: Married, father of 5 children

FIELD OF COMPETENCE

Food Sciences, Food Technology, Biotechnology, Process Engineering, Chemical Engineering, Development of new products, Environment (biochemistry comprehension of waste transformation)

SCIENTIFIC ACTIVITIES

Domain: Process Engineering, Chemical Engineering, Development of new products, Environment, Food Technology and Biotechnology, Environment (biochemistry comprehension of waste transformation)

Direction of Activities:

- Food Technology, Biotechnology, Beverages, Enzymology
- Modeling (Response Surface Methodology)
- Environmental science (biochemistry comprehension of waste transformation)

Publications & Communications:

- 47 papers in refereed journals,
- 1 book,
- 15 book chapters
- 14 Conferences papers

Supervision of Students:

- 5 Ph.D completed
- 14 Masters completed
- Many Engineers (BAC+5), Licences (BAC+3) and DUT students (BAC+2) completed

PROFESSIONAL EXPERIENCE

February 2026	APPPMA Djibouti / Togo
Position	APPPMA (Pan-African Agency for the Promotion of Products Made in Africa) Standardization and Certification Manager
Sector	Promotion of products Made in Africa
Responsibilities	– Multidimensional development of African skills around the world – Inter-African Initiative for Sociocultural Cohesion and the Comprehensive Development of Africa
March 2025	University of Bertoua / Faculty of Sciences Bertoua, Cameroon
Position	Expert
Sector	Higher Education
Responsibilities	– Elaboration of the curriculum of the business incubator at the Faculty of Sciences
Since November 2024	University of Ngaoundere / IUT Ngaoundéré, Cameroon
Position	Professor
Sector	Higher Education

Responsibilities	– Lecturing – Research – Practicals – Student supervision
June 2024	SIAGROS Garoua, Cameroon
Position	Member of the Scientific Committee
Sector	Agro-pastoral industries & food security
Responsibilities	– Evaluation of articles and communications submitted
December 2023	ANRPEC Baré Bakem, Cameroon
Position	Consultant
Sector	Agriculture
Responsibilities	– Organiser of the first national networking days for agri-food value chain stakeholders
October 2023	ANOR (Cameroon Standards Agency) Douala, Cameroon
Position	Consultant
Sector	Quality & Standardisation
Responsibilities	– Seminar on standardisation: challenges in local production of beverages and spirits
October 2023	APME — Small and Medium-sized Enterprises Promotion Agency Douala, Cameroon
Position	Consultant
Sector	Agri-food — French Development Agency Programme
Responsibilities	– Inaugural lesson: Impact of food quality on SME performance and contribution to food security in Cameroon
August 2023	University of Ngaoundere / ENSAI Ngaoundéré, Cameroon
Position	Examiner
Sector	Higher Education

Responsibilities	– PhD defence committee — Zomegni Gaston: Potentiel technologique des amandes de mangue en panification pour la réduction du rassissement du pain
Since June 2023	GIE-MADIKA Yaoundé, Cameroon
Position	Consultant / Researcher
Sector	Agri-food
Responsibilities	– New product development – Research
May 2023	University of Dschang / DSST Dschang, Cameroon
Position	Examiner
Sector	Higher Education
Responsibilities	– PhD defence committee — Tchamani Pame Laverdure: Caractérisation techno-fonctionnelle des levures de levains du Sha'a et mise au point d'un starter
May 2023	University of Douala / ENSPD Douala, Cameroon
Position	Member of the Scientific Committee
Sector	Higher Education
Responsibilities	– Project PDEMOPTRACCA — Development and modernisation of agri-food transformation, conservation and packaging processes
Since March 2023	UCB Douala, Cameroon
Position	Consultant / Researcher
Sector	Brewery
Responsibilities	– New product development – Research
Since January 2023	UNIPAC FARMING Yaoundé, Cameroon
Position	Member

Sector	Agri-food
Responsibilities	– New product development
Since January 2023	UNIPAC INVEST Yaoundé, Cameroon
Position	Member
Sector	Finance / Agri-food
Responsibilities	– Shareholder
Since March 2023	COOP-CA TRAALIT Douala, Cameroon
Position	Consultant / Researcher
Sector	Agri-food
Responsibilities	– New product development – Research
Since November 2020	KINDAK Makak, Cameroon
Position	Consultant / Researcher
Sector	Agri-food
Responsibilities	– New product development – Research
Since November 2019	University of Ngaoundere / IUT Ngaoundéré, Cameroon
Position	Associate Professor
Sector	Higher Education
Responsibilities	– Lecturing – Research – Practicals – Student supervision
2021–present	Journal of the American Society of Brewing Chemists USA
Position	Reviewer
Sector	Scientific publication

Responsibilities	– Review scientific papers
2021–present	Heliyon Netherlands
Position	Reviewer
Sector	Scientific publication
Responsibilities	– Review scientific papers
2020–present	Journal of Food Processing and Preservation USA
Position	Reviewer
Sector	Scientific publication
Responsibilities	– Review scientific papers
2019–present	Journal of Food Stability Buea, Cameroon
Position	Associate Editor
Sector	Scientific publication
Responsibilities	– Review scientific papers and journal paper editing
2019–present	SCIREA Journal of Food New York, USA
Position	Editorial Board Member
Sector	Scientific publication
Responsibilities	– Review scientific papers and journal paper editing
2017–present	American Society of Brewing Chemists USA
Position	Member
Sector	Scientific publication
Responsibilities	– Review scientific papers
2017–present	African Journal of Science, Technology, Innovation and Development London, UK
Position	Reviewer
Sector	Scientific publication

Responsibilities	– Review scientific papers
2017–present	Journal of Food Science and Technology India
Position	Reviewer
Sector	Scientific publication
Responsibilities	– Review scientific papers
2017–2019	Ministry of Scientific Research and Innovation (MINRESI) Yaoundé, Cameroon
Position	Member of the National Technology Development Committee
Sector	Research / Technology
Responsibilities	– Biotechnology development policy in Cameroon – Project selection – Project supervision
2014–present	Journal of Food and Bioprocess Technologies USA
Position	Reviewer
Sector	Scientific publication
Responsibilities	– Review scientific papers
2014–present	African Journal of Biotechnology Nigeria
Position	Editorial Board Member
Sector	Scientific publication
Responsibilities	– Review scientific papers and paper editing
2012–2019	University of Ngaoundere / IUT Ngaoundéré, Cameroon
Position	Senior Lecturer / Researcher
Sector	Higher Education
Responsibilities	– Lecturing – Research – Practicals

	– Student supervision
2016–2017	GIZ Cameroon Yaoundé, Cameroon
Position	Consultant
Sector	Environmental, climate & rural development
Responsibilities	– Work meeting with GIZ, SNV and SOCTRACAO representatives — terms of reference and on-site equipment visit – Evaluation of machine yields according to processing needs – Analysis of material quality for hygienic requirements
2015–2016 & 2013–2014	University of Johannesburg Johannesburg, South Africa
Position	Postdoctoral Fellow — Biotechnology and Food Technology Dept.
Sector	Higher Education
Responsibilities	– Lecturing – Research on brewing science – Practicals – Student supervision
2008–2012	University of Ngaoundere / IUT Ngaoundéré, Cameroon
Position	Assistant Lecturer
Sector	Higher Education
Responsibilities	– Lecturing – Research – Practicals – Student supervision
2002–2008	University of Ngaoundere / ENSAI Ngaoundéré, Cameroon
Position	Research Assistant
Sector	Higher Education
Responsibilities	– Practicals in Agro-industrial process technology

	– Practicals in biodynamics, Enzymology, Mechanical and transfer unit operations
May–September 2001	CAM Assistance Douala, Cameroon
Position	Trainee — Internship (Master of Engineering)
Sector	Food Technology
Responsibilities	– Development of manufacturing processes for juice and pineapple wine – Development of taste panel – Identification of best process for juice and pineapple wine
June–August 2000	Cameroon Development Corporation (CDC) Tiko, Cameroon
Position	Trainee — Internship (Master of Engineering Year 2)
Sector	Food Technology
Responsibilities	– Investigations on rubber quality issues – Development of device to drain water from washing coagulated latex
July–August 1999	SPC du Cameroon Bafoussam, Cameroon
Position	Trainee — Internship (Master of Engineering Year 1)
Sector	Food Technology (Feed mills)
Responsibilities	– Contribution to provender production for poultry, pigs, rabbits – Contribution to stock management and maintenance
June–September 1998	Guinness Cameroon S.A. Douala, Cameroon
Position	Trainee — Internship (DUT end of degree)
Sector	Food Technology (Brewery)
Responsibilities	– Bottle breakage analysis in Packaging service – Investigation on critical areas of thermal shock and breakage on the bottling line – Bottle breakage valuation costs

June–July 1997	Guinness Cameroon S.A. Douala, Cameroon
Position	Trainee — Internship
Sector	Food Technology (Brewery)
Responsibilities	– Bottle breakage analysis in Packaging service – Investigation on thermal shock and breakage on the bottling line – Bottle breakage valuation costs

EDUCATION & QUALIFICATIONS

2004–2012	Ph.D in Process Engineering
Institution	<i>National Advanced School of Agro-Industrial Sciences (ENSAI), University of Ngaoundere, Cameroon</i>
Skills	Process Engineering, Chemical Engineering, Food Technology, Modeling, Process Optimization of Agricultural and Food Industries (Beverages)
2001–2003	Master of Science in Process Engineering (D.E.A-GP)
Institution	<i>National Advanced School of Agro-Industrial Sciences (ENSAI), University of Ngaoundere, Cameroon</i>
Skills	Process Engineering, Chemical Engineering, Food Technology, Modeling, Process Optimization (Beverages)
1998–2001	Master of Engineering in Agricultural and Food Industries
Institution	<i>National Advanced School of Agro-Industrial Sciences (ENSAI), University of Ngaoundere, Cameroon</i>
Skills	Process Engineering, Chemical Engineering, Food Technology
1996–1998	University Institute of Technology Diploma (DUT)
Institution	<i>University Institute of Technology (UIT), Ngaoundere, Cameroon</i>
Skills	Agro-Industrial Engineering

1995–1996	Bachelor of Secondary Education (Series D)
Institution	<i>Polyvalent Private Institute of Bonamoussadi (IPPB), Douala, Cameroon</i>
Skills	Mathematics and Natural Sciences

PERSONAL SKILLS & COMPETENCES

Languages	French (native) — English (good comprehension, spoken, written)
Social Skills	Good team skills; easy to adapt to multicultural environments; good communication skills
Organisational	– Président départemental (département de la VINA) de la FECASVET (Fédération Camerounaise de Sports Vétérans) (2026) – Attending the annual general meeting of the Adamaoua Regional Soccer League (FECAFOOT) (2026) – Chair of the Organizing Committee for the “N'DERE FESTI-FOOT 2025” Veterans' Soccer Tournament (under the high patronage of the Mayor of Ngaoundéré) (2025) – PCA — Ngaoundere Veterans Football Association (2025) – Player of the ASVN soccer three-team tournament (2022) – General Manager — Ngaoundere Veterans Football Association (2018) – Academic supervisor — Bioengineering mention level 2 (2009–2011) – Regular Interim Head of Department of Food Engineering and Quality Control (GACQ) (Since 2008) – President — Association of Monitors and PhD students, University of Ngaoundere (2005) – Laboratory Technician, ENSAI Ngaoundere (2004/2005 & 2005/2006) – Member — Junior Enterprise Club, Ngaoundere (1998–2000)

	– Registrar of the Commission of Projects — Association of Ph.D Students of ENSAI (2001–2004) – Auditor — Agro-Industrial Club, UIT, Ngaoundere (1996–1997)
Computer Skills	Word, Excel, PowerPoint, Publisher, SigmaPlot, EdrawMax, Statistica, Mathcad, Matlab, Minitab, Mathematica, Scientific Workplace, Statgraphics, SPSS, Systat, S Plus 2000, Derive 5, Adobe Photoshop, Fortran, Origin, Sphinx, Design Expert, JMP...
Other	Drawing, poetry, football, basketball, tennis, table tennis. Driving Licence B.
Distinctions	– Special Distinction for completion of all lecture exams in a normal session — Prof. Maurice TCHUENTE, Rector, University of Ngaoundere (1998) – Highest performance in Master of Science results (2003)

COURSES TAUGHT

ENSAI / IUT (University of Ngaoundere), National Polytechnic School of Douala (ENSPD), ISAGO of Obala:

- Enzymology (IUT)
- Process diagrams and technical drawing (IUT)
- Industrial hygiene (IUT)
- Fruits and vegetables (IUT)
- Malting & Brewing (IUT/ENSAI)
- Food process practical — beer, fruit juice, wine and spirit (IUT)
- Student professional project (IUT/ENSAI)
- Advanced Brewing (IUT)
- Wine and spirits (IUT)
- Initiation to engineering equipment (IUT)
- Industrial Enzymes and Applications (IUT)
- Biostatistics and experimental design (ENSAI/IUT)
- Processes of Food Industries II — Beverages (ENSAI)

- Mechanical and Transfer Unit Operations (ENSAI)
- Experimental designs (ENSAI/IUT)
- Agri-Food Processes 1 (ENSPD)
- Introduction to process engineering (ISAGO)
- Unit operations in food processing (BTS IUT)
- Food formulation engineering (ENSAI)
- Food industry processes (BTS IUT)

ACADEMIC SUPERVISION

Ph.D Completed

- 1) Kadlezir Fiacre, **2024**. Boisson probiotique non-laitière: Modélisation et optimisation de l'extraction et de la fermentation du jus d'un cultivar de datte (*Phoenix dactilifera* L.) « Bournow » par la méthodologie des surfaces de réponses. Thèse de Doctorat Ph.D en Sciences de l'Ingénieur, Génie des Procédés. Université de Ndjamen, Tchad. (Directors: Pr. Mohagir, A.M.; Pr. Desobgo, Z.S.C.)
- 2) Makebe Calister Wingang, **2022**. Development of probiotic fermented beverage from soursop (*Annona muricata* Linn.) fruit. Ph.D in Process Engineering, ENSAI, Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 3) Wiyeh Claudette Bakisu Muala, **2022**. Probiotic beverage production from a mixture of baobab pulp and lemongrass extract using lactic acid bacteria. Ph.D in Process Engineering, ENSAI, Cameroon. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 4) Ninga Kombele Aimé, **2021**. Liquéfaction d'une pulpe de goyave à chair blanche par les pectinases industrielles d'*Aspergillus niger* et clarification du jus par centrifugation. Ph.D Génie des Procédés, ENSAI, Cameroun. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 5) Nguemogne Annick Chancelle, **2020**. Purification de la dextrinase limite du cultivar de sorgho Safrari (*Sorghum bicolor* L. Moench). Ph.D Génie des Procédés, ENSAI, Cameroun. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)

Ph.D Students in Progress

- 1) Acha Anna Affeck. Modeling the production and clarification of a standardised 'Nkang' beer. Ph.D in Process Engineering, ENSAI. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)

- 2) Assabjeu Djoufack Armel Césaire. Study of the mechanism of enzymatic hydrolysis by fragmentation for bioethanol production from corn cobs. Ph.D in Process Engineering, ENSAI. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 3) Brai Olivier. Production of a probiotic sorghum beer. Ph.D in Process Engineering, ENSAI. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)
- 4) Tiemuncho Habass. Construction and evaluation of a novel hybrid mash-tun for sorghum mashing. Ph.D in Process Engineering, ENSAI. (Directors: Pr Nso, E. J.; Pr. Desobgo, Z.S.C.)

Masters Completed

- 1) Kamga Ndé Marthe, **2024**. Optimisation du procédé de séchage de *Justicia carnea* et formulation d'une tisane aromatisée à *Mentha spicata* L. et *Cymbopogon citratus*. ENSAI, Cameroun.
- 2) Dekbai Mirimbai Marie N., **2024**. Optimization of the clarification process of cashew wines using filter aids consortium of *Grewia mollis* and *Bombax costatum*. ENSAI, Cameroon.
- 3) Ngono Awoumou, **2022**. Clarification of a *Dacryodes macrophylla* wine by *Corchorus olitorius*. ENSAI, Cameroon.
- 4) Epée Willie Aurelien, **2022**. Etude de la potentialité de *Khaya senegalensis* dans l'amérisation des moûts et bières de sorgho. ENSAI, Cameroun.
- 5) Amassoka Frédéric Jonathan, **2022**. Paramètres de fermentation de *Dacryodes macrophylla* et essai de carbonatation. ENSAI, Cameroun.
- 6) Bassa Zacharie Carime, **2020**. Clarification d'une bière de sorgho à l'aide de la gomme de nkui (*Triumfetta cordifolia*). ENSAI, Cameroun.
- 7) Limegne Kameugne Daruis Gayus, **2020**. Potentialité d'un extrait de patate douce (*Ipomoea Batatas* Lam.) sur la saccharification de la maische de sorgho. ENSAI, Cameroun.
- 8) Tiemuncho Habass Noulambeh, **2019**. Modeling the Operating Limits of a Mashing Process of Sorghum, Attainable Region Concept. ENSAI, Cameroon.
- 9) Mekok Abizou Rostand, **2019**. Optimized seed roasting and ultrasound-assisted extraction of baobab oil (*Adansonia digitata* Linn). ENSAI, Cameroon.
- 10) Kadlezir Fiacre, **2017**. Optimization of some physicochemical parameters during juice extraction of a date cultivar (*Phoenix dactylifera* L.). ENSAI, Cameroon.
- 11) Wiyeh Claudette Bakisu Muala, **2016**. Influence of drying and mixture conditions on physico-chemical characteristics of lemongrass blended with ginger tea. ENSAI, Cameroon.

- 12) Makebe Calister Wingang, **2016**. Optimisation of the extraction process and investigation on must fermentation of ripe plantains. ENSAI, Cameroon.
- 13) Tiyou Jules Padrik, **2014**. Application of hydrothermolysis and organosolv treatments for solubilisation of hemicellulosic fractions and lignin of sorghum stalks for bioethanol production. ENSAI, Cameroon.
- 14) Nkoum Sem Ronald, **2014**. Optimising Sugar Release by the CSLF Technology and Dilute Acid Hydrolysis from Maize (*Zea mays L.*) Stalks for Bioethanol Production. ENSAI, Cameroon.

THESES & REPORTS

- 1) 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, University of Ngaoundere.
- 2) Desobgo, Z.S.C., **2003**. Study of the effect of some hydrolases on the filterability of unmalted sorghum-based worts. Master of Science Thesis in Process Engineering. ENSAI, 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, University of Ngaoundere.
- 4) Desobgo, Z.S.C., **2000**. Investigation into rubber problems. Internship Report, Master of Engineering Year 2.
- 5) Desobgo, Z.S.C., **1999**. Contribution to the production of feed for poultry, pigs, rabbits. Internship Report, Master of Engineering Year 1.
- 6) Desobgo, Z.S.C., **1998**. Analysis of bottle breakages of the packaging line No. 2. DUT end of thesis, UIT, University of Ngaoundere.
- 7) Desobgo, Z.S.C., **1997**. Monitoring of the packaging lines. Training report, UIT, University of Ngaoundere.

CONFERENCES

- 1) Desobgo, Z.S.C., **2026**. Are communities really asking for AI, or are they actually looking for simple, robust, and accessible solutions? Deep Learning INDABAX Cameroon Conference on Frugal Innovation: Artificial Intelligence and Local Ingenuity for Resilient Food Systems and Communities. May 12-14, University of Ngaoundere

- 2) Desobgo, Z.S.C., 2026. Does Africa really need AI today, or should we first address more fundamental issues? Deep Learning INDABAX Cameroon Conference on Frugal Innovation: Artificial Intelligence and Local Ingenuity for Resilient Food Systems and Communities. May 12-14, University of Ngaoundere.
- 3) Desobgo, Z.S.C., 2025. An Overview of “Made in Cameroon” Food Products and Counterfeiting. Training Conference and Awareness Workshop on Food Safety Practices (Food Safety: Science in Action). June 6, University of Ngaoundere.
- 4) Nenbé N., Zomegni G., Saidou C., Nkouam G. B., Desobgo, Z.S.C.*, 2024. Influence des paramètres de mélange et deprocédé sur le rassissement du pain à base desfarines composées de blé- amandes de mangues (*Mangifera indica* L.). Symposium on the theme “Agriculture and Environmental Sustainability: The Pathway to transforming agrifood systems in West and Centra Africa”. CORAF. November 19-21, Accra, Ghana.
- 5) Miyoupo, M.V.C. , Nguimbou, R. M. Desobgo, Z.S.C., 2023. Effet de la germination, de la cuisson et de la torréfaction sur les propriétés techniques et fonctionnelles des poudres de soja : application à la production de boissons fermentées. Symposium on the theme “Promoting research on the processing of agricultural products: gains and opportunities available to the private sector for the creation of jobs and wealth in West and Central Africa”. CORAF. November 21-23, Lome, Togo.
- 6) 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. May 11–13, 2022, IUT, University of Douala, Cameroon.
- 7) Desobgo, Z.S.C., 2021. The wort boiling techniques and energy requirements: A Review. 1st International Conference on Local Resource Exploitation (LOREXP). April 20–23. IUT, University of Ngaoundere.
- 8) Tize, D., Fogang, B.*, Desobgo, Z.S.C., Nukenine, E. 2019. Formulation et caractérisation des farines composites enrichies aux larves des hannetons (*Rhynchophorus phoenicis*). 26th Annual Conference of the Cameroon Biosciences Society, University of Maroua
- 9) Nguemogne A.C., Desobgo, Z.S.C.*, Nso E.J., 2018. A screening method for the expression of total amylase activity during malting of sorghum. 25th Annual Conference of the Cameroon Biosciences Society, University of Ngaoundere.
- 10) Mbarga, M.J.A., Desobgo, Z.S.C., Tatsadjieu, N.L., 2017. Optimisation de quelques paramètres de fermentation de la sève de raphia par *Lactobacillus fermentum* et *Bifidobacterium bifidum*. 24th Annual Conference of the Cameroon Biosciences Society, University of Buea.

- 11) Waimane, A., Fogang, B., Desobgo, Z.S.C., Adamou, M., Nukenine, E. 2017. Entomophagie dans la région de l'Adamaoua : Identification des acteurs de la filière et caractérisation physico-chimique de quelques espèces. 24th Annual Conference of the Cameroon Biosciences Society, University of Buea.
- 12) Desobgo, Z.S.C., 2013. Introduction to experimental design in brewing science. University of Johannesburg Winter Beverage Symposium. June 20, 2013, Sedibeng Brewery, South Africa.
- 13) Desobgo, Z.S.C., 2008. Modeling and optimization of the effect of industrial enzymes on the filtrate yield of sorghum mash. 1st Scientific Days of GP3A. September 11–12, 2008, Louvain-la-Neuve, Belgium.
- 14) The polyphenol paradox in alcoholic beverages: a beer and wine paradox? 13th Chair J. DE CLERCK. September 7–10, 2008, Louvain-la-Neuve, Belgium.

BOOKS

- 1) Desobgo, Z.S.C., 2026. Brewing with Sorghum : A comprehensive guide to sorghum beer, in: Desobgo, Z.S.C., Ramesh, C.R. (Eds.), Applied Biotechnology Reviews. Elsevier, United Kingdom, p. 636. <https://doi.org/10.1016/C2024-0-01156-3>

BOOK CHAPTERS

- 1) Desobgo, Z.S.C., 2026. Chapter 1 - Introduction to sorghum beer, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer, Applied Biotechnology Reviews. Elsevier, pp. 1–67.
- 2) Desobgo, Z.S.C., Nguemogne, A.C., 2026. Chapter 2 - Sorghum as a raw material, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer, Applied Biotechnology Reviews. Elsevier, pp. 69–142.
- 3) Epée, W., Ndé, M.K., Desobgo, Z.S.C., 2026. Chapter 3 - Malting process for sorghum beer production, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer, Applied Biotechnology Reviews. Elsevier, pp. 143–219.
- 4) Desobgo, Z.S.C., Abdou, B.A., Emmanuel, N.J., 2026. Chapter 4 - Brewing process for sorghum beer, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer, Applied Biotechnology Reviews. Elsevier, pp. 221–294.

- 5) **Desobgo, Z.S.C., 2026.** Chapter 5 - Sorghum beer brewing: Traditional practices, regional variations, and modern perspectives, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), *Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer*, Applied Biotechnology Reviews. Elsevier, pp. 295–340.
- 6) **Desobgo, Z.S.C., Ray, R.C., 2026.** Chapter 6 - Quality control and sensory evaluation, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), *Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer*, Applied Biotechnology Reviews. Elsevier, pp. 341–421.
- 7) **Desobgo, Z.S.C., Nso, J.E., 2026.** Chapter 7 - Microbiology and safety considerations, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), *Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer*, Applied Biotechnology Reviews. Elsevier, pp. 423–481.
- 8) **Desobgo, Z.S.C., Makebe, C.W., Muala, W.C.B., 2026.** Chapter 8 - Innovations and future trends in sorghum beer production, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), *Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer*, Applied Biotechnology Reviews. Elsevier, pp. 483–540.
- 9) **Desobgo, Z.S.C., Ninga, K.A., Nguemogne, A.C., 2026.** Chapter 9 - Case studies and success stories, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), *Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer*, Applied Biotechnology Reviews. Elsevier, pp. 541–600.
- 10) **Desobgo, Z.S.C., 2026.** Chapter 10 - Conclusion and future directions, in: Desobgo Zangué, S.C., Ray, R.C. (Eds.), *Brewing with Sorghum : A Comprehensive Guide to Sorghum Beer*, Applied Biotechnology Reviews. Elsevier, pp. 601–607.
- 11) **Desobgo, Z.S.C., 2024.** Utilization of Agricultural Waste for Water and Wastewater Treatment Processes. In *Transforming Agriculture Residues for Sustainable Development: From Waste to Wealth* (pp. 295–320). Cham: Springer Nature Switzerland.
- 12) Mishra, S.S., Behera, S.S., Bari, M.L., Panda, S.K., & **Desobgo, Z.S.C. 2021.** Microbial bioprocessing of health promoting food supplements. In *Microbial Biotechnology in Food and Health* (pp. 113–141). Elsevier.
- 13) **Desobgo, Z.S.C. & Nso, E.J. 2021.** Winemaking: Control, Bioreactor and Modelling of Process. In *Wine Making: Basics and Applied Aspects* (pp. 495–519). CRC Press, Taylor & Francis Group.
- 14) **Desobgo, Z.S.C. 2018.** Modernization of Fermenters for Large-Scale Production in the Food and Beverage Industry. In *Innovations in Technologies for Fermented Food and Beverage Industries* (pp. 343). Springer International Publishing.

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