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## CURRICULUM VITAE

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### Research interest

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Current research interests encompass the investigation of physical and physico-chemical properties of sweet potato cultivars' leaves and roots, the assessment of quality attributes throughout processing and storage, and the examination of processing methods' impact on textural, physicochemical, and sensorial characteristics of innovative food ingredients. Furthermore, studies delve into the influence of packaging on the physical, chemical, and sensory attributes of indigenous food products in Ghana. Additionally, the focus extends to the development of resource-efficient technologies aimed at fostering sustainable food systems with health benefits and prolonged shelf life. Complementary research pursuits include exploring the utilization of food processing residues for bioenergy production (e.g. conversion of fruit pomace into biogas, and advancing bio-based materials and packaging within the food processing sector to diminish dependency on fossil fuels).

### Academic Degrees earned with dates:

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2010-2013 Candidate of Science (Ph.D. in Food Science & Processing Technology (Area of Specialization: Technology of Processing, Storing and Reprocessing of cereals, legumes, groats products, fruits, vegetables and Viticulture)).  
Voronezh State University of Engineering Technologies, Russia

1997-2004 Masters, Dipl. -Ing. (Certified Engineer) Fermentation Productions and Wine-Making Technology,  
Voronezh State University of Engineering Technologies, Russia

### University Teaching and or Research experience with dates:

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(a) Academic Ranks held and subjects taught

2016 - Lecturer

Department of Food Science and Technology, College of Science, Kwame Nkrumah University of Science and Technology  
Teaching responsibilities include the following:

- Food Packaging and Shelf Life (BSc, MSc)
- Food Quality Assurance and Legislation (BSc)
- Food Processing Technology (BSc)
- Food Processing and Preservation (BSc)
- Food Plant Design and Economics (BSc)

Publications in print including journal publications and conference proceedings:

1. Adjetei F.A., Ofori K.F., Torko F., Vale-Hagan W., De-Souza L.D.K., Oduro I.N., (2020). Characteristics of Spondias Mombin fruit (Yellow Mombin) seed flour and its potential in Glutenfree biscuit production. *Journal of Ghana Science Association (JGSA)*, Vol. 21, No. 1, April 2023. ISSN 2737-713X.
2. Gifty Williams, Leonard D.K. De-Souza, Fidelis M. Kpodo and Jacob K. Agbenorhevi, Physicochemical evaluation of okra residue obtained after pectin extraction. *International Journal of Food Properties*, Volume 26, 2023 - Issue 1
3. Tsimese A. A., Appiah E., De-Souza L.D.K, Oduro I.N., (2020). Production and Evaluation of Gluten-Free cookies from Tiger Nut Flour, Cassava Flour, Ginger Flour and Coconut Milk. 9th GSA Research Seminar and Poster Presentations, Kumasi, KNUST Kumasi, July, 2020, page 23.
4. Adjetei F.A., Ofori K.F., Torko F., De-Souza L.D.K., Oduro I.N., (2020). Study of the Functional properties of Solar-dried seed flour of Spondias Mombin fruit (Yellow Mombin). 9th GSA Research Seminar and Poster Presentations, Kumasi, KNUST Kumasi, July, 2020, page 64.
5. Djan P.K.S., De-Souza L.D.K., Vale-Hagan W., (2020). Proximate and Antioxidant composition of oven dried soursop seeds and pulp. 9th GSA Research Seminar and Poster Presentations, Kumasi, KNUST-Kumasi, July, 2020, page 70.
6. S.T.E. Mills, D. Laryea and L.D.K. De-Souza, (2019). Development of Purple –flesh Sweetpotato drinks. 8th GSA Research Seminar and Poster Presentations, Kumasi, KNUSTKumasi, May, 2019, page 53.
7. M. Arthur, J. Saaka and L.D.K. De-Souza, (2018). Proximate composition of Orange flesh Sweetpotato (*Ipomoea batatas*) leaves at early development phase. 7th GSA Research Seminar and Poster Presentations, Kumasi, KNUST-Kumasi, April, 2018, page 46.

8. N.S. Rodionova, E.S. Popov and L.D.K. De-Souza, Effect of pre- hydration on the thermal processing of rice for specialty foods. Journal of Storage and processing of agricultural raw materials, 2012 (No 3), pages 25-27.
9. N.S. Rodionova, E.S. Popov, L.D.K. De-Souza and M. Lukili, Influence of processing parameters on forms of bound water in rice and vegetable mixtures. Journal of Agricultural Sciences, 2012 (No 5), pages 78-80, ISSN 0869-3730.
10. N.S. Rodionova, E.S. Popov, V.V. Hripushin and L.D.K. De-Souza, Influence of low temperature hydrothermal processing on colour and biochemical properties of semi-finished products from carrots and beetroots. J. News of Institutes of Higher Education, Food Technology 2012 (No 5-6), pages 15-17, ISSN 0579-3009.

Patents:

11. Rodionova Natalya Sergeevna, Popov Evgenij Sergeevich, Bakhtina Tatyana Ivanovna, DeSouza Leonard Delali Kodjo, Food Product Manufacturing Method. Russian Federation, Federal Service for Intellectual Property, Patent Application No. 2013119755/13, Filed: 29.04.2013; Published: 20.09.2014; Bull. No. 26; Patent No. RU 2528499 C1 (20.09.2014).
12. Kuchmenko Tatyana A., Rodionova Natalia S., Umorkhanov Ruslan U., Popov Evgenij S., Bakhtina Tatyana I., Berdnikova Evgeniya V., De-Souza Leonard D. K., Method of assessing the safety of packaging polymer materials for thermal processing of vacuum packed food products. Russian Federation, Federal Service for Intellectual Property, Patent Application No. 2013122429/15, Filed: 15.05.2013; Published: 20.05.2015; Bull. No 15; Patent No. RU 2550962 C2 (20.05.2015).

Record of Service to Community:

Service	Date
Coordinator for Postgraduate, Department of Food Science and Technology	2023 to date
Academic Tutor	2017 to date
Assistant Coordinator for Postgraduate, Department of Food Science and Technology	2019 to date
Chairman, Food Product Development Committee, Department of Food Science and Technology	2019-2020
Internal Examiner for Postgraduate Students	2017 to date

Other Professional and Working experience:

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Dec., 2010-Dec., 2013

Department of Service Technologies –Voronezh State University of Engineering Technologies (VSUET), Russian Federation.

Researcher/ Teaching Assistant

Researched into Food Processing, Foodservice, Functional and Specialty Foods.

Presented seminars, taught and supervised undergraduate laboratory works

Oct., 2009-Dec., 2010

Food and Drugs Board, Ghana.

Assistant Regulatory Officer

Dealt with consumer queries and complaints

Participated in regular facility inspections, carried out Post Market Surveillance

Products vetting and Registration, Advert monitoring and vetting

Public education, Operational report writing, label evaluation and vetting

Investigation and Client counseling

Dec., 2006 – Aug., 2008

United Nations Industrial Development Organization, Ghana.

Project Assistant (stationed at CSIR-Food Research Institute)

Coordinated implementation of field activities

Sent project reports to international consultant for further evaluation

Laboratory analysis, test procedures and results

Collected process data and wrote reports on analyses

Operated pilot malting and brewing plants

Responsible for all levels of quality assurance on the pilot plant

Nov., 2004- Aug., 2005

Food and Drugs Board, Ho, Ghana.

National Service Personnel

Jan., 2001 - Jan., 2003 (Holidays between this period) Working

Holiday-Maker in the United Kingdom

Nov., 2001- Sept., 2002 Industrial

Attachments:

Engineering practice at Voronezh Yeast Plant (4 weeks), Voronezh, Russian Federation

Technology practice at Voronezh Liquor and Distillery (4 weeks), Russian Federation Pre-Thesis

(Diploma) practice at Voronezh Brewery (5 weeks), Russian Federation

Extracurricular activities

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Awards and Merit Scholarships

KNUST-KRef multi grant award for research project titled “Design of a process to produce Pectin from okra and potential application in the food and pharmaceutical industries”: July, 2020 – June, 2021.

Ph.D. / BSc. /MSc. Scholarship, Russian / Ghanaian Government: Dec., 2010 – May, 2014/ Dec., 1997 –July, 2004

Unilever Scholarship for Secondary School Education July, 1992–Nov.,1995

Hobbies: Reading Personal, Professional & Spiritual Development materials, Farming, Cycling.