

Harold Ofori Akrofi-Mantey

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● ABOUT ME

I am a highly-motivated team player with a keen interest in research and academia. I have a bachelors and a masters degree in Chemical Engineering. I currently hold a Teaching and Research Assistantship position in Chemistry at the University of Kentucky. My research interests are homogeneous and heterogeneous catalysis.

● EDUCATION AND TRAINING

08/2023 – CURRENT Lexington, United States
PHD CHEMISTRY University of Kentucky

03/2022 – 06/2022
ELECTROCHEMISTRY HarvardX (edX) (Online)

04/2018 – 11/2021 Dortmund, Germany
MSC. CHEMICAL ENGINEERING (SPECIALIZATION PROCESS SYSTEMS ENGINEERING) Technical University of Dortmund

09/2012 – 06/2016 Kumasi, Ghana
BSC. CHEMICAL ENGINEERING (FIRST CLASS HONOURS) Kwame Nkrumah University of Science and Technology (KNUST)

● WORK EXPERIENCE

07/2023 – CURRENT Lexington, United States
TEACHING AND RESEARCH ASSISTANT UNIVERSITY OF KENTUCKY

08/2016 – 07/2017 Kumasi, Ghana
TEACHING AND RESEARCH ASSISTANT KWAME NKUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

- Assisted lecturer in teaching (holding tutorials) thermodynamics, experimental data analysis, mechanical separation process, corrosion engineering and engineering drawing
- Assisted lecturer in carrying out research and analyzing data

10/06/2014 – 30/07/2014 Tafo, Ghana
INTERN COCOA RESEARCH INSTITUTE OF GHANA (CRIG)

- Studied and aided in production of soap, body lotions, wine, gin, brandy and biscuits.
- Researched and experimented on alternative formulations for body lotion

11/06/2013 – 08/08/2013 Koforidua, Ghana
INTERN INTRAVENOUS INFUSIONS LIMITED

- Studied and aided in preparation and packaging of intravenous fluids
- Carried out quality assurance tests on finished products

● LANGUAGE SKILLS

Mother tongue(s): **ENGLISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
GERMAN	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● ADDITIONAL INFORMATION

PROJECTS

04/2021 – 11/2021

Co-Solute effects on enzymatic activity and reaction equilibrium of formate dehydrogenase (TU Dortmund) Experimentally investigated various co-solutes and evaluated their effects on enzyme-catalyzed reactions

09/2018 – 02/2019

Continuous production of high quality perhydropolysilazane in a modular and automated plant (TU Dortmund) Investigated the best method of production for perhydropolysilazane

08/2015 – 04/2016

Plant design for the production of soya bean oil (KNUST)

- Drew a process flow diagram for the process
- Calculated a material and energy balance for the process
- Ascertained the economic viability of the project

08/2014 – 04/2015

Process design for production of carpenters' glue from local raw materials (KNUST)

- Considered various existing methods of production
- Experimentally carried out the processes and obtained best process
- Optimized best process

PUBLICATIONS

[Osmolyte Effect on Enzymatic Stability and Reaction Equilibrium of Formate Dehydrogenase](#) – 2022

CONFERENCES AND SEMINARS

22/08/2016 – 26/08/2016 – Kwame Nkrumah Uni. of Science and Technology (in collaboration with Ruhr Master School, Germany)

Summer School 2016 (Renewable Energies)

- Theoretical study and practical work on photovoltaic cells (solar energy), biogas production, biomass energy and energy efficiency