Kaosidi Obioha
60 S Boulder Circle Boulder, CO 80303 • Mobile: 281-739-9020 E-Mail:
Kaob8265@colorado.edu

Education

University Of Colorado Boulder **Boulder, CO**
Bachelor of Science in Biological & Chemical Engineering **May 2022**

Engineering Experience

NREL Renewable Polymer, National Renewable Energy Laboratories Golden, CO **January 2022 – May 2022**

- Developed and designed the process for the manufacturing of Non-isocyanate Polyurethanes from Renewable Lipids
- Modeled and calculated mass flows and process flow based on mass balance to achieve desired production goal
- Utilizing SuperPro to simulate final process design – Performed economic, energy, environmental, and safety analyses on final design

Vinyl Chloride Production Design Project, **University of Colorado Boulder, CO** **November 2021 – December 2021**

- Modeled a chemical production plant centered around specified vinyl chloride production goal
- Designed reactors, distillation columns, heat exchangers, and separators using MATLAB and Microsoft Excel
- Performed economic, energy, environmental, and safety analyses on final design
- Utilized Aspen HYSYS to simulate final process design

Employment History

3D R & D Chemist **August 2022 – May 2023**
Arkema, Sartomer 1880 S Flatiron Ct STE J, Boulder, CO 80301

- Obtained a fundamental understanding of chemistry and structure-property relationship of polymeric UV-curable materials.
- Conducted routine laboratory testing tasks using analytical techniques such as DMA, HPLC, TGA, UV/Vis, FTIR spectrometry, and tensile testing.
- Analyzed test results from experimental trials and prepared summary reports and documentation.
- Organized and presented data to direct supervisor and functional management, providing explanations, recommendations, and insights for improvements.
- Formulated chemical compositions of 3D printing ink and characterized materials using various chemical and physical techniques.
- Solved technical problems through manipulation of chemical recipes, printing hardware, and characterization of 3D printing inks and materials.

Research Assistant **October 2021 - June 2022**
Institute of Arctic and Alpine Research (INSTAAR) at the University of Colorado Boulder
Department of Atmospheric and Oceanic Sciences

- Developed and modeled Coastal Oceanic behaviors using python.
- Achieved hands on understanding on the Ecosystems being studied and how to model them using the correct packages.
- Collaborated with cross-functional teams to achieve milestones and contribute to core research and development programs.

Licenses & Certificates

- Sigma Six: Green & Black Belt
- Runaway Reactions ELA902
- Chemical Reactivity hazards ELA962
- Hazard Identification & Risk Analysis ELA974
- Process Safety Ethics ELA975
- Introduction to Process Safety ELA950
- Introduction to Process Safety for PI and MCPI ELA306
- Transport of Hydrogen Fuel Cell ELA263
- Improving Gender Diversity and Inclusion ELA251

Skills

- Able to quickly learn and adapt to new tasks.
- Able to work Efficiently and thoroughly.
- Proficient in Aspen: Plus, Hysys
- Proficient in AutoCAD, Plant 3d, Tinkercad, and Solid works
- Proficient at all Microsoft office programs (including VBA)
- Familiar with MATLAB and coding language(s) similar to Python