CHRISTOPHER OZIGAGU

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EXECUTIVE SUMMARY:

A multi-discipline professional with an undergraduate degree in Chemical Engineering, 3 years work experience as a Process Engineer, a Master's degree in Physical Chemistry and currently pursuing a Ph.D. degree in Materials and Analytical Chemistry. Possess exceptional skills in thin film/coating deposition techniques, material characterizations, and corrosion mitigation. A team player with proven leadership skills, strong creative mind, problem-solving skills and analytical skills.

SKILLS:

- Adept at the use of electrochemical deposition techniques for Ni, Ni-Mo and Ni-Zn alloys films/ coatings.
- Proficient at corrosion mitigation study of materials exposed to chemical and oil and gas harsh environments
- Knowledge of surface chemistry
- Adept at the use of conventional corrosion techniques such as potential anodic polarization, Tafel plot, electrochemical impedance and linear polarization resistance
- Adept at materials polishing
- Intermediate knowledge in the use of XRD, XPS,CV, FTIR, AFM, SEM and SECM
- Knowledge of HPLC, GC, Mass spectrometer, and NMR
- Proficient at design of electrochemical cell, pipeline for natural gas and chemical transport

EDUCATION AND ACADEMIC EXPERIENCE:

PhD in Material/ Analytical Chemistry   (In-view)
University of North Texas, Denton, Texas
GPA: 4.00/4.00

Thesis: Sweet Corrosion behavior and mechanism of Ni coating and Steel in the presence of high salt content and gas hydrate environments

- Designed an electrochemical glass cell capable of accommodating low/high temperature and simulating high chloride environment
- Determined the general and localized corrosion behavior of Ni and steel materials in high salt concentration at gas hydrate formation temperature, and room temperature
- Proffered a proposed mechanisms using SECM, SEM, CV, AFM, XPS techniques

Master of Science in Natural Science
(Major in Chemistry, minor in Environmental Health and Safety)   August 2015
Stephen F. Austin State University, Nacogdoches, Texas, USA
GPA: 3.806/4.00

Thesis: Comparative Computational Study of the Binary Vapor-Liquid Equilibria of Methane and Thermodynamic Inhibitors at Hydrate Formation Conditions Using the Soave-Redlich-Kwong and Peng-Robinson Equations of State

- Performed a computational sensitivity analysis on the Peng Robinson and the Soave- Redlich-Kwong equations of state in predicting VLE data of different binary systems.

Bachelor of Engineering in Chemical Engineering   November 2008
University of Benin, Benin City Edo State, Nigeria
GPA: 3.08/4.00 (**Second Class Honors Upper Division**)

WORK EXPERIENCE
Teaching Assistant: Organic Chemistry Course and General Chemistry labs
University of North Texas, Denton, Texas   Fall 2015 –To Present
Stephen F. Austin State University, Nacogdoches, Texas   Fall 2013 – Fall 2015
- Supervised and taught students during laboratory and class
- Prepared reagents for introductory and general chemistry laboratories
- Assisted in supervising and teaching students during laboratory
- Graded students' laboratory reports

Process Engineer   April 2010 – July 2013
International Energy Service Limited (IESL) Project
Assisted the Principal Process Engineer in delivery training on crude oil stabilization using HYSYS. At the end of the training, the participants were able to understand the following:
- Basic Flowstation Process Components Such As FWKO, TEG Unit, Separator, Heater Treater, Pump, Compressor, and LACT Unit
- Basic Wellhead Safety Control System (SCSSV, SSV)
- Concept Of Crude Oil Stabilization
- Importance Of Reid Vapor Pressure(RVP) in Crude Oil Stabilization
- Rule of Thumb for Predicting Optimum Separator Operating Pressure
- How to use HYSYS Simulation Software to Predict Optimum Separator Pressure
- Crude Oil Emulsion and Methods of Achieving Desired BS&W

Process Engineer
Avalon Simulation and Process Consulting Ltd Training
- Assisted in the analysis of Dry Gas Stream (DGS) and Water Saturated Gas Stream (WSGS) using PIPESIM
- Developed Compositional Model of Dry Gas Stream(DGS)
- Generated Phase Envelope and determined Hydrate Formation Temperature
- Selected Pipeline Size using PIPESIM
- Involved in determining Pipeline Insulation Requirement
- Screened the Pipeline for Severe Riser Slugging

Junior Process Engineer
PanOcean Oil Corporation/Flowline Energy Services Project (Dummy Project)
- Involved in investigating the arrival conditions of the NGL at Obagira export hub
- Assisted in validating the adequacy of the proposed 10''x 89km Gas pipeline

Trainee Process Engineer
UERL-Sinopec Project (Dummy Project)
- Took part in the Crude Oil Stabilization of Stubb Creek Flowstation using the HYSYS Simulation
- Assisted in the Development of PFD for the Stubb Creek Marginal Oil Field Project

Assistant Learning Adviser   April 2009 – March 2010
Nigerian National Petroleum Corporation (NNPC), Sagamu Nigeria
- Assisted in identifying and making researches on modern training needs
- Took part in training administration

PRESENTATION:
- NACE Conference & Expo 2017, New Orleans, LA, March 2017 (poster).

AWARDS:
- NACE Foundation Travel Assistance, Spring 2017
- UNT Travel Grant, Spring 2017
- Texas Public Education Grant (TPEG), Fall 2016, Spring 2017
- Graduate Assistant Teaching Scholarship, Fall 2015, Spring 2016, Fall 2016, Spring 2017

PROFESSIONAL MEMBERSHIP
- American Institute of Chemical Engineers (ID Number 009900183139)
- Society of Petroleum Engineers (ID Number 4132234)
- International Association of Engineers (IAENG 110482)
- National Association of Corrosion Engineers(NACE)

LEADERSHIP SKILL / STUDENT ACTIVITY
- President, NACE UNT Student Section

SOFTWARE PROFICIENCY
- Air Quality Dispersion Modeling software (AERMOD)
- AutoCAD (2D & 3D)
- PIPESIM version 2003(licensed by Schlumberger)
- Aspentech HYSYS 2004
- Microsoft Office (Excel, Words, PowerPoint)

TRAINING COURSES ATTENDED
- Localized corrosion investigation using Scanning Electrochemical Microscope (SECM)
- The use of Mass Spectrometer
- Material characterization using X-ray Diffraction technique
- Oil & Gas Facilities Process Design Fundamentals
- Pipeline Hydraulics Analysis/ Simulation using PIPESIM
- Crude Oil Processing Fundamentals using HYSYS
- API RP 14C & SAFE CHART Preparation
- Offshore Oil and Gas Systems