

UTILITY ENGINEER

Profile

Detail oriented and motivated Chemical Engineer with strong research, analytical and problem solving skills seeks a position in the industry. Team player with proven strengths in customer relationship management, leadership, and communications skills. Demonstrated ability to multitask, and work under pressure to meet critical deadlines. Fluent Hindi-Urdu, English

Areas of Expertise

Site Manager, Gamry VistaShield, and Microsoft Office Design Software: Matlab, Aspen Plus Imaging skills: SEM, Microscopic Imaging Key Qualities: Excellent management and interpersonal skills, Reliable, Responsible, Resourceful, Quick learner, Organized, Hard-worker who takes pride in a job well done. Self-motivated, Very friendly, enjoy helping others.

Professional Experience

January 2015

to

December 2016

Company Name City , State Utility Engineer

- Monitored and evaluated the design, operation, and maintenance of electric utility systems to ensure that New York State's electric customers are provided with safe and reliable electric service.
- Evaluated Utility's budget and program in rate Cases; Reviewed Utility's Emergency Response Plan, Research and Development, and System Reliability filings.
- Cooperated with the staffs of city and state agencies on issues of mutual concern.
- Conducted field inspections of electric and communication facilities to determine compliance with Public Service Commission wire crossing and line extension permits, underground and overhead facility rules, and electric construction and maintenance regulations.
- Researched technical reports, long-range planning studies and other data to obtain information and made recommendations.
- Developed data for engineering and operational studies involving Public Service Commission cases.

June 2014

to

December 2014

Company Name City , State Transportation Construction Inspector

- Supervised construction operations under the regulation of a Department of Transportation's Engineer-in-Charge Reviewed and interpreted maps, plans, diagrams and contract specifications.
- Utilized "Site Manager" software to enter inspection details and related information.
- Assisted in conducting air content tests, slump tests, and in obtaining cylinders for subsequent load tests on concrete Verified thickness of the layer of materials placed and maintained As built as the work was completed.
- Updated and retrieved information as required.
- Prepared various reports, notices, and letters as required.
- Archived correspondence and kept record of daily work tickets and field pictures.

April 2013

to

May 2014

Company Name Research Assistant

- Laboratory for Nanoparticle Modification and Assembly Mentor Prof.
- Ilona Kretzschmar Provided research support to faculty member and assisted PhD students with research related to the Dye Sensitized Solar Cells.
- Designed and ran experiments in the laboratory.
- Acquired data using Gamry VistaShield instrument and Electrochemical Impedance Spectroscopy software.
- Assembled and characterized titanium dioxide inverse opal structures.
- Fabricated dye-sensitized solar cells using ionic liquid electrolytes and investigated the performance of the cells using ionic electrolytes.
- Performed Physical Vapor Deposition of Platinum and Titanium on FTO slides.
- Organized and maintained laboratory to ensure safety.
- Senior Design-I- Simulation Production of Ammonia from Shale Gas Designed a process flow system (PFD) to synthesize ammonia from shale gas using ASPEN-Plus simulation software.
- Determined equipment sizes and rating based on the operating specifications.
- Comprehensive economic analysis of overall process was done to determine feasibility of the process Senior design-II- Simulation Production of Ethylene via Dehydration of Ethanol Designed a simulation process to produced ethylene via ethanol dehydration with commercial gamma-alumina catalyst.
- Modeled dehydration of ethanol using the Peng-Robinson equation of state.
- Products of dehydrations were separated by a flash drum, absorption column, and cryogenic and distillation columns.
- Performed economic analysis to determine feasibility of the process.
- Performed process hazard analysis to provide environment friendly process.
- Kinetics and Mass Transfer Effects of a Chemical Reaction in Batch Reactor Analyzed the kinetics and mass transfer effects for the reaction between citric acid and sodium bicarbonate.
- The overall objective was to design an experiment to determine the amount of sodium bicarbonate tablets needed to reach pH 5 of citric

acid and sodium bicarbonate solution in 4 minutes.

Education

May, 2014

City College of New York B.E : Chemical Engineering Chemistry, Mathematics Chemical Engineering Chemistry, Mathematics 3.3

Affiliations

Member of American Institute of Chemical Engineers, (AIChE) Member of Omega Chi Epsilon Honors Society Member of Society of Women Engineers President- Chemistry Club, Fall 2011 Secretary- Physics Club, Spring 2011

Work History

Company Name

Certifications

Inorganic Chemistry Organic Chemistry Materials Science Nanomaterials Unit Operations Fluid Mechanics Thermodynamics Transport Phenomenon Process Control Reaction Engineering Separation Operations Calculus I, II, III Linear Algebra Differential Equations Engineering Economics

Skills

acid, budget, Calculus I, Chemistry, interpersonal skills, content, Design Software, economic analysis, Economics, Engineer, experiment, experiments, flash, Imaging, inspection, letters, materials, Materials Science, Matlab, Mentor, Microsoft Office, PhD, Platinum, Process Control, Quick learner, Research, safety, Self-motivated, Simulation, Transportation