

**The University of Iowa College of Engineering
Student Development Center/Engineering Professional Development**

**CBE Co-op/Internship Employers
Locations and Descriptions, 2002-06**

- 3M** Austin, Texas
Sterilization assurance project in medical division
- 3M** St. Paul, Minnesota
Synthesis, compounding, testing, and reporting results of experimental materials for development of dental restoratives/Prepared samples for lab testing involving mixing, syringing, and coating polymers
- Abengoa Bioenergy Systems/University of Nebraska P2** York, Nebraska
Pollution prevention and control program intern; develop a fugitive dust emission plan, sludge management
- Advanced Micro Devices, Inc.** Sunnyvale, California
Linewidth standard characterization and implementation in production CD SEM system
- Aramark** Rockford, Illinois
Production Management Intern-Operations Support, research ways to reduce costs associated with fluid discharge and reclamation, supervision and management duties as assigned
- Argonne National Laboratory** Argonne, Illinois
Team member in program aimed at a generalized understanding of how the three-dimensional structure of a membrane protein defines its function/wet chemistry in lab/work closely with principal investigator on the bioinformatics of membrane proteins
- BP Corporation** Houston, Texas
Update wellbore utility chart design, create forecast for production in Cheyenne West oil field and track new well performance, predict performance using decline curve analysis
- BP Corporation** Iowa City, Iowa
Completing RAR/ARR; installing alarm and strobes in facilities; improvement of the flare system; using new program to maximize reporting of air emissions
- Burgess-Norton, Inc.** Geneva, Illinois
Working with new technology group in assessing new products and processes and materials engineering
- Cambrex** Charles City, Iowa
Production engineering, emissions control standards and implementation, design

Cargill Cedar Rapids, Iowa
Process improvement projects for plant, updating documentation, maintenance projects

Cargill Eddyville, Iowa
Quality Control and production testing

Cargill Hammond, Indiana
Design and construction of heat recovery and waste reduction system in food starch plant

Cargill Sydney, Ohio
Chemical Design Project Engineer Intern, focusing efforts towards testing, installing, and optimizing run procedures for a proposed Reverse Osmosis Disk Centrifuge system

Cedar River Paper Cedar Rapids, Iowa
Process Engineer Intern, assist process engineers in the implementation of projects to optimize productivity, optimize savings, and eliminate bottle necks in the paper making process

Deere Technology Center Moline, Illinois
Metallurgical research and testing; process evaluation; quality control

Emerson-Fisher Controls International, Inc. Marshalltown, Iowa
Sales support engineer co-op/provided day to day support for sales representatives/responsibilities include pricing, product selection, materials

Engineered Seal Products Cedar Rapids, Iowa
Engineering Intern, develop marketing information, spectroscopy and quality assurance, materials processing and testing

GE Healthcare Milwaukee, Wisconsin
CT Detectors area of General Electric Healthcare's Diagnostic Imaging branch, design processes by which the oxidation and hydration of terbium oxide could be determined

Gelita USA Sioux City, Iowa
Assist with AutoCad drawings and engineering projects

Genencor, Inc Palo Alto, California
Purification of proteins in R & D environment with aim of scaling up processes to work in industrial environment

General Mills Cedar Rapids, Iowa
Plant engineering staff in food products facility

HJ Heinz Muscatine, Iowa
Engineering Intern, production, plant processes, and quality, projects included Product Heating Systems, Deaerator Conversion, Water Use Reduction and Pouch Film Waste Reduction

HamiltonSundstrand Corporation Rockford, Illinois
Engine and Control Systems engineering project team

Hutchinson Technologies Hutchinson, Minnesota
Inspect, characterize and analyze parts to insure highest production quality

IPSCO Steel Muscatine, Iowa
Materials and process design/improvements

Iowa Department of Natural Resources P2 Program/AutoProfile Keokuk, Iowa
Monitor waste products generated from manufacturing processes, including rubber; design and implement waste reduction policies and procedures

Iowa Department of Natural Resources P2 Program/Dial Corp. Ft. Madison, Iowa
Resource conservation projects, process improvements, and pollution control

Iowa Department of Natural Resources P2 Program/Fansteel Creston, Iowa
Research and recommend alternatives to processes which produce a high amount of pollution, in order to reduce pollutants and create an economic benefit to the company

Iowa Department of Natural Resources P2 Program/Pella Pella, Iowa
Reduce quantity of paint used during production by reducing overspray waste.

John Deere Product Engineering Center Waterloo, Iowa
Learning about gasket materials and their proper application/coordinate activities between material suppliers, part manufacturers, and John Deere/working on installing and operating UniForce program to aid in testing out gaskets.

John Deere Waterloo Works Waterloo, Iowa
Testing of purchased painted parts to insure quality control/assist in development of paint reclaim and paint process improvements for the final paint line

Lawrence Berkeley National Lab Berkeley, California
Run reduction reactions of pyruvate, carbon dioxide/analyze products on CE, perform thermal analyses of Polymers and synthesize monomes for polymerization

Los Alamos National Laboratory Los Alamos, New Mexico
Basic and applied research on various project teams

Lyondell-Equistar Clinton, Iowa
Calculated emissions, created database of all decomposition reactions, waste solvent piping project, and other plant engineering projects as assigned

Maytag-Newton Newton, Iowa
Materials development, testing and procedures, customer support

Monsanto Muscatine, Iowa
AST project design and implementation for salt tank level probe coupling testing, testing and documentation of interlocks and MCB compression fitting, other process/plant engineering projects as assigned

NSF: Materials Research Science and Engineering Center Minneapolis, Minnesota
Zeolite synthesis and characterization

Northwestern University Material Research Center Evanston, Illinois
Research Assistant on various projects involving application and testing of materials

Penford Products Cedar Rapids, Iowa
Team member of Customer Applications Group of R & D/provide service to customers of corn and starch products/ID types of starch using microscopy, staining and other methods/pilot projects working with new coatings/testing and analysis of paper products, corn starch products, and paper coating products

Polaris Industries Spirit Lake, Iowa
Work on paint system to reduce MAP's, reverse osmosis, plasma cleaner redesign to remove the contamination from mixtures

Procter and Gamble Cincinnati, Ohio
Product Development Intern, Fabric and Home Care/cite scale up recommendations for a process after testing whether process conversion from batch to continuous was feasible

Science Applications International Corporation Washington, D.C.
Reviewing and analyzing greenhouse gas emissions reports

University of Hawaii at Manoa Manoa, Hawaii
Research and data collection with Manoa Summer Undergraduate Research Program

UI College of Engineering Chemical and Biochemical Engineering Iowa City, Iowa
Laboratory Assistant/Research and data analysis

UI Department of Chemistry Iowa City, Iowa
Lab/Research Assistant

UI Department of Physiology Iowa City, Iowa
Physiology lab research assistant

UI Engineering Orientation Services Iowa City, Iowa
Orientation advisor for incoming freshmen and parents, and transfer students to the College of Engineering, mentoring, scheduling, and advising

UI Water Treatment Plant Iowa City, Iowa
Lab testing, environmental systems, Oakdale plant operations

University of Nebraska at Lincoln P3 Program

Lincoln, Nebraska

Provide technical assistance to the Environmental Health and Safety Department of Pfizer Genetics

Virginia Tech University

Blacksburg, Virginia

Research into fuel cells, using ionic polymer membranes as actuators/sensors