ASEE ANNUAL MEETING

Milwaukee, Wisconsin
June 15-18, 1997

Chemical Engineering Division Program

REGULAR SESSIONS

#1213 Effective Teaching in Large Lectures

- Students Plus!
- Teaching and Reaching Large Classes
- Integration of Critical Thinking and Technical Communication into Undergraduate Lab Course
- A Secret to Large Classes—Showing You Care
- Beating the Numbers Game

#1613 Homework Problem and Lecture Exchange

- Estimation of Optimum Pipe Diameter and Econonomics for a Pump and Pipeline System
- Reactor Design with MATLAB in a Manufacturing Environment
- Simulation Graphics: Software for Visualizing Stagewise Design
- Designing a Pumping System: Why Worry About Other Process Elements?

#2213 Curriculum Assessment

- Linking Classroom Teaching to Assessment in an Ability-Based Curriculum
- Preparing for Criteria 2000: A Chemical Engineering Perspective
- Criteria 2000—The New Game—How Does it Play Out?
- Experiences with ABET Criteria 2000 and Outcomes Assessment

#2313 Undergraduate Research Experiences in ChE

- The Case for Uundergraduate Research: Experience in its Use at the University of Missouri-Rolla
- Building an Active Environmental/Chemical Engineering Research Program with Undergraduate Students
- Introducing Underrepresented Students to Research Through Funded Programs
- Outcomes Assessment of a Multi-Task, Multi-Institutional Project
- Undergraduates Research Experiences Developing Virtual-Reality Based Educational Modules

Check out the 1997 ASEE National Meeting Program at http://.asee.org

#2513 Laboratory and Lecture Demonstrations

- Fluid-Phase Equilibria from a Process Simulator
- Small Group In-Class Problem Solving Exercises
- A New Multipurpose Fluid Flow Experimental Module
- Experiments in Waste Processing for Undergraduates
- The Use of Peer Review in the Undergraduate Laboratory
- Demonstration of Chemical Engineering Principles to a Multidisciplinary Engineering Audience

#2613 Developing New Courses in the Chemical Engineering Curriculum

- The Start-Up Company Approach to Teaching Semiconductor Processing
- An Interdisciplinary Program and Laboratory for Printed Circuit Board (PCD) Design and Manufacturing
- A Course in Chemical, Pharmaceutical, and Food Procesing
- Revitalizing Statistics in the Chemical Engineering Curriculum
- A New Senior-Level/Graduate Course in Cellular Bioengineering

#3213 Innovative Use of Computers in Chemical Engineering

- Ten Steps to Developing Virtual Reality Applications for Engineering Education
- Framework for a Computer-Based Corrosion Course
- Experiments in Learning Chemical Engineering Modeling Skills
- Applications of ASPEN in Senior Design Projects
- The Use of Process Simulation Software in Suphomore and Junior Chemical Engineering Courses.

#3513 Case Studies in Chemical Engineering

- Choices and Foundations—An Introduction to Chemical Engineering for First-Year Students
- Allyl Chloride Production—A Case Study in Debottlenecking, Retrofitting, and Design
- A Case Study in Stoichiometry Course Using Excel and Power Point Presentation
- The Story of Polyethylene Garbage Bags
- Early Introduction of Design Fundamentals into the Chemical Engineering Curriculum

#3613 Environmental Chemical Engineering

- Chemical and Environmental Engineering: A Partnership in Pollution Prevention
- Developing and Interdisciplinary Environmental Engineering Program
- Educating Chemical and Environmental Engineers in Semiconductor Processing
- Infusing Environmental Education into the Chemical Engineering Curriculum: A Minor in Environmental Engineering Science

OTHER SESSIONS

#1413 Chemical Engineering Division Chairperson Luncheon
#2412 Chemical Engineering Division Executive Committee Luncheon
#3413 Chemical Engineering DivisionBusiness Meeting and Luncheon

Chemical Engineering Division Dinner at Milwaukee Public Museum

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Dine with your Chemical Engineering colleagues in 1900's Milwaukee in *The Streets of Old Milwaukee* at the Milwaukee Public Museum

Join us for appetizers, dinner, and a program on Tuesday, June 17th, from 7:00 pm to 10:30 pm