

# ASEE ANNUAL CONFERENCE

Seattle, Washington  
June 28 - July 1, 1998

## REGULAR SESSIONS

### Session 1213 • Getting Faculty Buy-In to Good Teaching

- Faculty Development: Getting the Sermon beyond the Choir
- Changing the Culture: What's at the Center of Engineering Education
- Re-Engineering Faculty Development: Lessons LEA/RNed

### Session 1313 • Breathing Life into Traditional Courses

- A Traditional Material Balances Course Sprinkled with Non-traditional Experiences
- Chemical Engineering Thermodynamics – Transforming 'Thermo' Lectures into a 'Dynamic' Experience for Undergraduates
- Bringing Active Learning into the Traditional Classroom: Teaching Process Control the Right Way
- A Tournament to Exercise Process Economics Concepts
- A Project-Based, Spiral Curriculum for Chemical Engineering

### Session 1413 • Computer Survey-Training for ChE Profession

- Results of a recent CACHE survey of Computer Usage
- Panel Discussion of Ramifications for Curriculum Implications with Academic and Industrial Participants

### Session 2213 • Fitting the Essential Extras in the ChE Curriculum

- Jump-Starting Life-Long Learning
- Fitting the Essentials into the ChE Curriculum: Ethics, Professionalism, Environmental Health & Safety
- Leadership and Mentoring in Undergraduate Engineering Programs
- Integrating Process Safety into the Unit Operations Laboratory
- Applied Chemical Process Statistics: Bringing Industrial Data to the Classroom
- An Industrial Approach to the Unit Operations Laboratory Course

### Session 2413 • Experimental Education in ChE

- "If You Let Them Build It, They Will Come": Hands-on Projects for Freshman to Enhance Student Learning and Interest
- A Multidisciplinary Electrochemical Engineering

Laboratory Course

- Structured Cooperative Learning in the Undergraduate Chemical Engineering Laboratory
- Implementing a Computer Laboratory
- Chemical Engineering Principles in a Freshman Engineering Course using a Cogeneration Facility

### Session 2513 • Outcomes Assessment I: Is a "C" Good Enough?

- Assessment for Improvement: Coming Full Cycle
- Assessment Process at a Large Institution
- Assessment for Improvement in the Classroom
- Feedback Loops in Large Service Courses
- Implementing an Integrated System for Program Assessment and Improvement
- Panel Discussion

### Session 2613 • Outcomes Assessment II: Is a "C" Good Enough?

- Closing the Assessment Loop
- Electronic Portfolios: What to Do with the Information
- Using a Faculty-Generated Matrix to Close the Assessment Loop
- Lessons Learned from a Decade of Assessment
- An EC2000 Visit: Perspectives from Both Sides of the Fence
- Panel Discussion

### Session 3213 • Academic Advising Issues

- Recruiting and Advising of High School Students from "Non-Traditional" Groups
- Enhancing Under-represented Student Opportunities Through Faculty Mentoring and Peer Interactions
- A Department-Wide Distributed Advising System
- Issues Important to the Advising of Student Chapters of Professional Societies
- Career Choices for Chemical Engineering Students
- Is Grad School for Me?

### Session 3413 • Pollution Prevention/WERC Design Contest

- Design Contest: Pollution Prevention by Design and

Capstone Design Course

- Government, Industry and Academia: An Effective Partnership to Address Real Environmental Challenges
- An Alumni Survey as an Assessment Tool for New Mexico Tech's BS Environmental Engineering Curriculum
- Subterranean Spout Bed Technology for Removal of Contaminants from Groundwater
- Remediation of Radionuclide-Contaminated Aquifer
- Importance of Chemical Reactivity in Understanding Environmental Hazard
- Chemical Processes in Environmental Engineering

***Session 3513 • Innovative Uses of Computers in ChE***

- Interactive Web Site for Teaching Chemical Reaction Stoichiometry
- A World Wide Web Based Textbook on Molecular Simulation
- Novel Uses of the World Wide Web to Manage an Undergraduate Process Control Course
- Web Lab: Running Laboratory Experiments via the World Wide Web
- Multimedia Encyclopedia of Chemical Engineering

Equipment

- Improvements in the Teaching of Separation Process Design Through Interactive Computer Graphics
- Virtual Reality in the Chemical Engineering Classroom

***Session 3613 • Effective Use of Process Simulators***

- A Novel Use of HYSIS to Design an Industrial Refrigeration System
- Process Simulation in ChE Design: A Potential Impediment to, Instead of a Catalyst for, Meeting Course Objectives
- Experiences Using MATLAB/Simulink for Dynamic "Real-Time" Process Simulation in an Undergraduate Process Control Course
- Teaching ChE Principles by Use of Sophisticated Process Design Software to Design a Ketchup Manufacturing Process
- Integration of AspenPlus (and other Computer tools) into the Undergraduate Chemical Engineering Curriculum
- Coordinating Equilibrium-based and Rate-based Separations Courses with the Senior Process Design Course

**OTHER SESIONS**

***Session 1113 • ChE Div. Executive Committee Meeting***

***Session 1613 • Chemical Engineering Division Meeting /Lectureship Presentation***

- The Chemical Engineering Division will have a short business meeting that will be immediately followed by the Division Lectureship presentation

***Session 1713 • ChE Division Reception/Mixer Sponsored by the CACHE Corporation - Monday Evening***

- This reception will be provided to the members of the Chemical Engineering Division for a chance to socialize and to honor the Division Lectureship Award winner

***Session 2713 • Chemical Engineering Division Dinner-Tuesday Evening***

- The ChE Department at the University of Washington will host an optional pre-dinner visit that will include a wine and cheese poster session of department activities and research
- All chemical engineering division members and guests are invited to attend the annual Chemical Engineering Division Dinner at the Faculty Club on the University of Washington campus. Winners of the ChED awards will be recognized, and an entertaining non-technical presentation will be made.

***Session 3113 • ChE Chairpersons Breakfast***

- ABET 2000 - What curriculum changes are being planned because of new procedures (e.g. Chemistry, design, PE exams, etc.)?
- Discussion: Graduate's Employment, 1998
- Discussion: Industry Participation in Design

Check out the 1998 ASEE Annual Conference & Exposition Information at  
[http://www.asee.org/conferences/html/annual\\_98.htm](http://www.asee.org/conferences/html/annual_98.htm)