

# ASEE ANNUAL MEETING

*Washington, D.C.*  
*June 23-26, 1996*

## Chemical Engineering Division Program

### FEATURE SESSION

The Chemical Engineering Curriculum  
#1213 - Is Anyone Out There Doing Anything Different?

*Panelists:*

- |                  |                 |
|------------------|-----------------|
| ◆ Harold Knickle | ◆ Mahbub Uddin  |
| ◆ Barrie Jackson | ◆ James Watters |
| ◆ David DiBiasio | ◆ Andrew Wilson |

A panel discussion of current attempts to make sea changes in the total chemical engineering curriculum. Panelists will represent schools offering an alternative approach to delivering chemical engineering education. The discussion will focus on the rationale for each approach, good and bad experiences, student acceptance, and measures of success.

### ADDITIONAL SESSIONS

- #1413 - Chemical Engineering Chairperson's Lunch  
#3413 - Chemical Engineering Division Business Meeting and Lunch  
#2613 - Chemical Engineering Division Award Lecture  
#2713 - Chemical Engineering Division Dinner

## REGULAR SESSIONS

### **#1613 *Innovative Uses for Educational Software Available Through CACHE***

- ▶ Employing the CACHE CD-ROM as an Educational Resource
- ▶ Facilitating Numerical Problem Solving With POLYMATH
- ▶ Picles™ for Bridging the Gap Between Laboratory and Textbook Learning
- ▶ Course Implementation of the Michigan PC Modules for Chemical Engineering

### **#2213 *Experimental Experience in the Undergraduate Curriculum***

- ▶ Integration of a Manufacturing Experience into the Undergraduate Curriculum in Polymer Engineering
- ▶ Implementation of Peer Feedback and Improvement Planning in the Unit Operations Laboratory
- ▶ Supercritical Fluid Extraction in the Undergraduate Laboratory
- ▶ Development of Multifunctional Laboratories in a New Engineering School
- ▶ Development of a Multidisciplinary Biochemical Engineering Laboratory
- ▶ Teaching Senior Unit Operations Laboratory Experiments to Engineering Freshmen

### **#2313 *Assessment of Learning Outcomes***

- ▶ Student Learning Assessment and the ABET Student Outcomes Criteria: Good News/ Bad News
- ▶ Project Gelegenheit: Skills Certifications Curricula for Engineering and Computer Science Disciplines
- ▶ A Portfolio-Based Assessment Program
- ▶ Outcomes Assessment Measures
- ▶ Assessment - Recent Regional Accreditation Experience

### **#2513 *Mentoring Graduate Students—Panel Session***

- ▶ Panelists: Richard C. Seagrave, Janice A. Phillips, Timothy J. Anderson, John P. O'Connell, and Jennifer Sinclair

### **#3213 *Homework Problem and Lecture Exchange***

- ▶ Exercises in Process Design for a Freshman Course in Chemical Engineering
- ▶ A Process Troubleshooting Program
- ▶ Entropy: Esoteric or Utility Infielder?
- ▶ Design of a Propylene Storage Facility
- ▶ Using Statistical Experimental Design to Optimize GC Operation
- ▶ Statistical Exercises in Chemical Engineering
- ▶ Teaching Data Analysis Techniques Using Practical Polymer Examples

### **#3513 *Technology Enhanced Instruction***

- ▶ Use of Computational Tools in Engineering Education
- ▶ Problem-Centered Course Objectives Leading to Multimedia Lessons
- ▶ Recent Developments in Virtual-Reality Based Education
- ▶ Controls Laboratory Teaching Via the World Wide Web
- ▶ Incorporating Bioengineering Examples into the Core ChE Courses