

# ASEE Annual Conference & Exposition

Charlotte, N.C.

June 20 - 23, 1999

## **WORKSHOPS**

### 0213 - LabVIEW for Chemical and Mechanical Labs - Sunday

Jim Henry, Charles Knight  
*University of Tennessee-Chattanooga*

### 0214 - Green Engineering Curriculum Development - Sunday

David Allen, David Shonnard  
*University of Texas, Michigan Technological University*

## **TECHNICAL SESSIONS**

### 1313 - Promoting & Rewarding Effective Teaching - Monday

- ***Promoting and Rewarding Effective Teaching***  
Richard Felder, Rebecca Brent, Douglas Hirt, Debi Switzer, Siegfried Holzer  
*North Carolina State University, Clemson University, Virginia Tech*

### 1613 - Innovative ChE Experiments and Demos - Monday

- ***A Heat Exchanger as a Student Design Project***  
M. Mavromihales  
*University of Huddersfield*
- ***Experiments to Accompany a First Engineering Thermodynamics Course***  
T. Scott, John O'Connell  
*University of Virginia*
- ***Cost Effective Experiments in Chemical Engineering Core Courses***  
Stewart Slater, Robert Hesketh  
*Rowan University*
- ***Classroom Demonstrations of Separation Process Principles***  
Keith Schimmel  
*North Carolina A&T State University*
- ***Introduction of Process Dissection into the Undergraduate Laboratory***  
Robert Ybarra  
*University of Missouri-Rolla*

### 2213 - Revitalizing Traditional ChE Courses I - Tuesday

- ***ChE Fundamentals Course - Better Learning Through Computer-Based Delivery***  
Billy Crynes  
*University of Oklahoma*
- ***Using Your Unit Operations Lab***  
Valerie Young • *Ohio University*

- ***The Vertical Integration of Design in Chemical Engineering***

Ronald Gatehouse, George Selembo Jr., John McWhirter  
*Pennsylvania State University*

- ***Group Projects-Based Final Exams: A Novel Approach to Integrate Fundamentals and Practical Applications***

Pedro Arce • *Florida State University*

- ***Raising the Level of Questioning in the Undergraduate ChE Curriculum***

Anthony Muscat  
*University of Arizona*

### 2313 - Revitalizing Traditional ChE Courses II - Tuesday

- ***The Evolution of Engineering - Incorporating Biology into Traditional Engineering Curriculum***

Jennifer Maynard, Anneta Razatos  
*University of Texas*

- ***Catalytic Oxidation Experiment for Chemical Reaction Engineering***

Robert Hesketh, Stewart Slater  
*Rowan University*

- ***A Real-Time Approach to Process Control Education***

William Svrcsek, Donald Mahoney, Brent Young  
*University of Calgary and Hyprotech*

- ***Structured Trouble-Shooting in Process Design***

Anthony Vigil, Dendy Sloan, Ron Miller  
*Colorado School of Mines*

### 2513 - Getting the Best Students to Enter ChE - Tuesday

- ***Role of the Honor Program in the Attraction and Retention of the Brightest and the Best ChemE Students***

Pedro Arce • *Florida State University*

- ***The Promise of Silver and Gold: Not the Only Way to Attract and Retain a Devoted Miner***

Robert Ybarra, Douglas Ludlow  
*University of Missouri-Rolla*

- ***How to Attract Top Students to a Chemical Engineering Program - The Experience at NJIT***

Dana Knox, Reginald Tomkins  
*New Jersey Institute of Technology*

■ ***Outreach and Recruitment to Attract Students to Chemical Engineering***

Robert Hesketh, Stephanie Farrell, Zenaida Keil,  
James Newell  
Rowan University

3213 - Process Safety in the ChE Curriculum - Wednesday

■ ***Teaching Chemical Process Safety: A Separate Course Versus Integration into Existing Courses***

Anton Pintar  
Michigan Technological University  
• Panel Discussion

3513 - ABET 2000: Improving ChE Education? - Wednesday

■ ***Preparing for the First ABET Accreditation Visit under Criteria 2000***

Gary Patterson  
University of Missouri-Rolla

■ ***A Process for Developing and Implementing an Assessment Plan in ChE Departments***

James Newell, Heidi Newell, Thomas Owens, John Erjavec, Rashid Hasan, Steven Sternberg  
Rowan University and University of North Dakota

■ ***Performance Assessment of EC-2000 Student Outcomes in the Unit Operations Laboratory***

Ron Miller, Barbara Olds  
Colorado School of Mines

■ ***Development of a Dynamic Curriculum Assessment Examination***

John Wagner, David Finley  
Tri-State University

■ ***Developing an Assessment Plan to Meet ABET EC 2000***

Anton Pintar, Besty Aller, Tony Rogers, Kirk Schulz,  
David Shonnard  
Michigan Technological University

■ ***Round 1: The Curricular Aftermath***

Dennis Miller, Daina Briedis  
Michigan State University

3613 - Innovative Uses of Computers in ChE - Wednesday

■ ***Implementing Computational Methods into Classes Throughout the Undergraduate Chemical Engineering Curriculum***

William Perry, Victor Barocas, David Clough  
University of Colorado

■ ***Laptop Computers and Curricula Integration***

Jerry Caskey  
Rose-Hulman Institute of Technology

■ ***Integrating Research Into The Undergraduate Curriculum - NASA's Microgravity Bioreactor***

Shani Francis, Keith Schimmel, Neal Pellis  
North Carolina A&T State University and NASA

■ ***A Phenomena-Oriented Environment for Teaching Process Modeling: Novel Modeling Software and Its Use in Problem Solving***

Alan Foss, Kevin Geurts, Peter Goodeve, Kevin Dahm,  
George Stephanopoulos, Jerry Bieszczad,  
Alexandros Koulouris  
University of California, Berkeley and Massachusetts Institute of Technology

■ ***Teaching Material and Energy Balances on the Internet***

Alec Scranton, Randy Russell, Nicholas Basker, Lisa Scranton  
Michigan State University

■ ***Virtual Laboratory Accidents Designed to Increase Safety Awareness***

John Bell, Scott Fogler  
University of Michigan

## ***OTHER SESSIONS***

1113 - ChE Div. Executive Committee Meeting/Breakfast - Monday Morning

1413 - ChE Chairpersons Luncheon - Monday

This luncheon meeting will provide an opportunity for department chairpersons to exchange ideas and information about issues relevant to chemical engineering. The meeting will open with a discussion of the following issues: enrollment, placement, accreditation, and new curricular trends.

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

2613 - Union Carbide Lectureship Award Presentation - Tuesday Afternoon

■ ***Particle Dynamics in Fluidization and Fluid-Particle Systems***

Dr. L. S. Fan • The Ohio State University

2713 - Chemical Engineering Division Dinner - Tuesday Evening

3413 - ChE Div. Business Meeting/Luncheon - Wednesday

More information about the 1999 ASEE Annual Conference & Exposition can be found at  
<http://www.asee.org/conferences/annual99/>