American Society for Engineering Education
Pacific Southwest Section
Spring 2002 Conference

Engineering Education at Crossroads

Hosted by
College of Engineering & Computer Science
California State University, Fresno

April 8 and 9, 2002

University Student Union
2002 ASEE/PSW CONFERENCE

“Engineering Education at Crossroads”

Monday, April 8, 2002

8:00-9:00 AM  Registration
Location: University Student Union Room 314

9:00-10:15 AM  Plenary Session
Location: University Student Union (Rm 312)

Welcome: J. Michael Ortiz, Provost, California State University, Fresno

Keynote Address:
Speaker: Karl E. Longley, Topic: Engineering Education at Crossroads
Dean, College of Engineering and Computer Science, California State University, Fresno

Panel and Discussion: Engineering Education at Crossroads
Moderator: Karl Longley, Dean, (California State University, Fresno)
Panelist: Ray Haynes (TRW)
Panelist: Paul Rainey (California State Polytechnic University, SLO)
Panelist: Diane Schwartz (California State University, Northridge)
Panelist: Lee Sneller (Getting You There)

10:15-10:30 AM  Break  (Room 314, University Student Union)

10:30-12:00 AM  Session I

Session IA: ABET Accreditation-Panel and Discussion
Moderator: Derek Dunn-Rankin (University of California, Irvine)
Location: Room 309 University Student Union
Panelist: Marie Dahleh (University of California, Santa Barbara)
Panelist: Mel Mendelson (Loyola Marymount University)
Panelist: Crist Khachikian (California State University, Los Angeles)
Panelist: Uei-Jiun Fan (California State University, Pomona)
Panelist: Julia Gelfand (University of California, Irvine)
Session IB: Computer-Aided Instruction
Location: Room 317 University Student Union
Moderator: S. K. Ramesh (California State University, Sacramento)
Speaker: S. Baksi (w/M.K. Das)  Topic: Learning Engineering Through Simulation
(California State University, Long Beach)
Speaker: Paul Blowers  Topic: Use of Interactive Web-Based Examples in Engineering Courses
(University of Arizona)
Speaker: Kal Toth  Topic: Simulating Software Product Evolution in the Classroom
(Oregon State University)
Speaker: Tom Kanneman  Topic: Application of Simulation as a Tool for Practical Engineering Design
(University of San Diego)

12:00-1:15 PM  Luncheon
Location: University Residence Dining Hall

1:30-3:00 PM  Session II

Session IIA: Distance Learning
Location: Room 312, University Student Union
Moderator: Walt Loscutoff (California State University, Fresno)
Speaker: Charles Feldhaus  Topic: The IDEALS Model; Teaching Strategies for Instructors Using Two-Way Interactive Distance Learning Systems
(Indiana University Purdue University Indianapolis)
Speaker: Mihir Das  Topic: MSEM: An Innovative Graduate Program Via the Internet
(California State University, Long Beach)
Speaker: Riadh Munjy  Topic: Lessons Learned From Teaching an Engineering Course on the Web
(California State University, Fresno)

Session IIB: How to Interest (and Retain) Women in Engineering
Location: Room 309, University Student Union
Moderator: Marci Ryan-Alapati (MentorNet)
Panelist: Amy Maki (MentorNet)
Panelist: Karin Mack (University of California, Davis)
Panelist: Mary Anderson-Rowland (Arizona State University)

Session IIC: An Innovative Approach to Engineering Graphics-Blending 2D and 3D
Using AutoCAD 2002
Location: Room 317, University Student Union
Instructor: Mihir Das (California State University, Long Beach)

3:00-3:15 PM  Break  (Room 314, University Student Union)

3:15-5:00 PM  Session III

Session IIIA: Industry Role in Engineering Education-Panel and Discussion
Location: Room 309, University Student Union
Moderator: Walter Mizuno (California State University, Fresno)
Panelist: Don Fantz (PG&E)
Panelist: Ray Haynes (TRW)
Panelist: Lee Sneller (Getting You There)
Panelist: Dan Walsh (California Polytechnic State University: San Luis Obispo)

Session IIIB: Engineering Students as Learners
Location: Room 317, University Student Union
Moderator: Tom Yarbrough (Fresno City College)
Speaker: Shashi Nambisan  Topic: Enhancing Team Efforts and Communication Skills: An Illustration in a Civil Engineering Course (University of Nevada, Las Vegas)
Speaker: Thaddeus Chase  Topic: Teaching Mechanical Design to Students or Helping An Unwilling Donkey Over a Narrow Bridge (California State University, Fresno)
Speaker: Helen Zong  Topic: Teaching Teamwork Techniques to Engineering Students (California State University, Hayward)
Speaker: Paul Blowers  Topic: Group Selection Processes-How to Use Student Skill Self Assessment to Get Balanced Groups (University of Arizona)

Session IIIC: Attracting and Retaining Engineering Students
Location: Room 312, University Student Union
Moderator: James Shackelford (University of California, Davis)
Speaker: Marci Ryan  Topic: The Role of E-Mentoring in Engineering Education for Women (MentorNet)
Speaker: Mary Anderson-Rowland  Topic: Why Aren't There More Women in Engineering: Can We Really do Anything? (Arizona State University)
Speaker: Mark Tufenkjian  Topic: Results From a Summer Engineering Program at California State University, Los Angeles (California State University, Los Angeles)
Speaker: Vern Johnson  Topic: The Arizona Educational Assessment Plan
6:00-7:00 PM  Social Hour  
University Restaurant “Bistro 1540”

7:00-9:00 PM  ASEE-PSW Awards Banquet  
Location: University Restaurant “Bistro 1540”  
Moderator: Walt Loscutoff (California State University, Fresno)  
Speaker: Joe O’Brien (Hewlett-Packard)  
Topic: University-Industry Collaboration
Tuesday, April 9, 2002

7:30-8:30 AM Registration
Location: Room 314 University Student Union

7:30-9:00 AM ASEE Executive Board Meeting
Location: Room 309, University Student Union

8:30-10:00 AM Session IV

Session IVA: Engineering Education
Location: Room 317, University Student Union
Moderator: Ramakrishna Nunna (California State University, Fresno)
Speaker: Dan Walsh Topic: An Accelerated Route to the BS+MS Engineering Degrees, The 4+1 Program
(California Polytechnic State University, San Luis Obispo)
Speaker: Paul Blowers Topic: Breaking the Curve-Why a Straight-Scale is Appropriate in Engineering Courses
(University of Arizona)
Speaker: D. Dal Bello Topic: Online Courseware for Strength of Materials
(University of California, Santa Barbara)

Session IVB: Creative Concepts in Engineering Education
Location: Room 312, University Student Union
Moderator – Suresh Vadha (California State University, Sacramento)
Speaker: William Reiter Topic: The Impact of Virtual Product Realization on Mechanical Design Education
(Oregon State University)
Speaker: Lili He Topic: Development of Animated Teaching/Learning Tools for Microelectronics
(California State University, San Jose)
Speaker: Paul Lam Topic: A Description of the First Two Years’ Experience of the McNair Scholar Program at U
of Akron
Speaker: Fareed Nader Topic: What’s in a Name?
(California State University, Fresno)
10:00-10:15 AM  **Refreshment Break**  
Location: University Student Union 314

10:15-12:00 PM  **Session V**

**Session VA: Engineering Education Needs**  
Location: Room 312, University Student Union  
Moderator: Walt Loscutoff (*California State University, Fresno*)  
Speaker: Dan Walsh  
*Topic: The Critical Importance of Industry Partnership in 21st Century Engineering Education*  
(*California Polytechnic State University, San Luis Obispo*)  
Speaker: Paul Blowers  
*Topic: A course on Freshman Survival Skills*  
(*University of Arizona*)  
Speaker: Mike Meier  
*Topic: Laboratories – Necessary!*  
(*University Of California, Davis*)

**Session VB: Creative Concepts in Engineering Instruction**  
Location: Room 317, University Student Union  
Moderator: Fareed Nader (*California State University, Fresno*)  
Speaker: Brent Auernheimer  
*Topic: Experience with Simultaneous Use of Blackboard and WebCT in a Graduate Course*  
(*California State University, Fresno*)  
Speaker: Raymond Yee  
*Topic: The Benefits of Engineering Design Projects For Engineering Curriculum*  
(*San Jose State University*)  
Speaker: Yahia Baghzouz  
*Topic: Application of Interactive Animated Software in Teaching Power Electronic Circuits*  
(*University of Nevada, Las Vegas*)

**Session VC: Outcomes Assessment-Panel and Discussion**  
Location: Room 309, University Student Union  
Moderator: Tom Kanneman (*University of San Diego*)  
Panelist: James Crossfield (*California State University, Fresno*)  
Panelist: Anthony Sebald (*University of California, San Diego*)  
Panelist: Richard Phillips (*Harvey Mudd University*)  
Panelist: Vern Johnson (*University of Arizona*)