



2006 ASEE/PSW SECTION CONFERENCE ENGINEERING FOR THE FUTURE – WHAT IS NEEDED NOW?

Preliminary Program (April 16, 2006)

The 2006 annual American Society for Engineering Education/Pacific Southwest Section (ASEE/PSW) Conference will be held on Thursday and Friday morning, **April 20 & 21, 2006**, at California State Polytechnic University, Pomona, CA.

Below is the Preliminary Program at a glance.

Thursday	Activity	Location
8:00-8:45	Registration and Continental breakfast	Kellogg West, Mountain Vista
8:45-9:00	Welcome	Kellogg West, Mountain Vista
9:00-9:30	Keynote Speaker: Mr. William J. Meehan	Kellogg West, Mountain Vista
9:30-10:30	Session 1	Kellogg West, Mountain Vista
10:30-10:45	Coffee break	Kellogg West, Mountain Vista
10:45-11:45	Session 2	Kellogg West, Mountain Vista
11:45-1:00	Lunch	Kellogg West Restaurant
1:00-2:00	Session 3	Kellogg West, Mountain Vista
2:00-3:00	Session 4	Kellogg West, Mountain Vista
3:00-3:15	Coffee break	Kellogg West, Mountain Vista
3:15-4:15	Session 5	Kellogg West, Mountain Vista
4:15-5:15	Session 6	Kellogg West, Mountain Vista
5:30-6:30	Reception	Kellogg West, Hillside East
	Sponsored by IEEE Coastal LA Section	1/2
6:30-7:45	Dinner	Kellogg West, Hillside East
	Banquet Speaker: Dr. Donald C. Mayer	1/2

Friday	Activity	Location
8:00-8:30	Registration and Continental breakfast	Kellogg West, Mountain Vista
8:30-9:30	Session 7	Kellogg West, Mountain Vista
9:30-10:30	Session 8	Kellogg West, Mountain Vista
10:30-10:45	Coffee break	Kellogg West, Mountain Vista
10:45-11:45	Session 9: Workshop	Building 17- 2660
11:45-12:30	Lunch for PSW Board members	Building 17-1210
12:30-3:00	PSW Board meeting	Building 17-1210

Welcoming Remarks: Thursday 8:45-9:00

Location: Kellogg West Conference Center, Mountain Vista Room Sima Parisay, Professor of Industrial and Manufacturing Engineering Edward Hohmann, Dean of College of Engineering

Keynote Speaker: Thursday 9:00-9:30

Location: Kellogg West Conference Center, Mountain Vista Room

Mr. William J. Meehan, Director of Environmental Systems Research Institute (ESRI) Utility Solutions

Topic of talk: Location is Where it's At

Business is rapidly embracing the use of location. Map enabled smart phones, navigation systems, Radio Frequency Identification devices (RFID), Global Positioning Systems (GPS) and Geographic Information Systems (GIS) are becoming commonplace. Why? Not because these things are interesting or cool. Business and government need to transform their processes to lower costs, improve decision making, and increase communication and collaboration. They can use all the help they can get. Spatial technology is not just for planners, landscape architects and cartographers. Nearly every engineering discipline deals with some aspect of location. Engineering educators have an wonderful opportunity to weave spatial technologies into their programs and courses. Business will need graduates who appreciate the strategic aspect of location. Location is where it's at!

Session 1: Thursday 9:30-10:30

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Lyle McCurdy

- Ronald W. Mehler, Cal State Northridge, "Keeping up with Moore's Law"
- Brita Olson, Cal Poly Pomona, "An Undergraduate Camera System-on-a-Chip Design Senior Project"
- Laurie Starkey, Cal Poly Pomona, "Improving Student Preparation and Student Learning with Online Pre-lab Quizzes"
- Wolf-Dieter Otte, Northern Arizona University, "Teaching Software Engineering with Industry Partnership"

Coffee Break: Thursday 10:30-10:45

Session 2: Thursday 10:45-11:45

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Alan Felzer

- Richard N. Savage, Cal Poly San Luis Obispo, "Integrating Project Based Learning Throughout the Undergraduate Curricula"
- Robert Ryan, Nhut T. Ho, Cal State Northridge, "A Sophomore Design Course Sequence for Mechanical Engineering Students"
- Michael E. Manoogian, Rachel Adams, J. Dorsey, j. Landry, W.Trott, Loyola Marymount University, "Biology and Chemistry Applications for Engineers: A New Coruse"

• Sean Gallagher, UVP (Ultraviolet Products), "Team-Based Clinic and Master's Program in Industry: Observations from a Life Science Instrumentation Company"

Lunch Break: Thursday 11:45-1:00Location: Kellogg West Restaurant

Session 3: Thursday 1:00-2:00

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Mariappan Jawaharlal

- Irving Kett, Cal State LA, "The Emphasis in our Engineering Ethics Courses Should Be on Personal Moral Values"
- Thomas A. Kanneman, University of San Diego, Lyle B. McCurdy, Cal Poly Pomona, "Impact of Student Evaluation on Quality and Integrity of Instruction"
- Erik Buckanan, Tamara Denning, Michael Kelly, David Lindquist, William Griswold, Beth Simon, UC San Diego, "Technology Enabled Active Learning: What to Do in Large Classrooms with Few Devices?"
- Kyu-Jung Kim, Cal Poly Pomona, "Computer-Aided Instruction of Vector Statics using MATLAB"

Session 4: Thursday 2:00-3:00

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Lina Neto

- Taufik, Cal Poly San Luis Obispo, "Experience From Switching Power Supply Design Course"
- Milton Cone, Tom Gally, Randall Shaffer, Ron Madler, Paul Hriljac, Steve Chadwick, Embry-Riddle Univ., "Lessons Learned from an Introductory Interdisciplinary Engeering Course"
- Xiaojun (Ashley) Geng, Cal State Northridge, "Experience from Supervising Senior Design Projects"
- Nancy Warter-Perez, Jianyu (Jane) Dong, Cal State LA, "An Active-Learning Teaching Model for Engineering Instruction Based on Mobile Technology"

Coffee Break: Thursday 3:00-3:15

Session 5: Thursday 3:15-4:15

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Saeed Monemi

- Hany J. Farran, Ann Duty, Cal Poly Pomona, "The Comprehensive Civil Engineering Senior Projects Course as a Capstone Design Integration Experience"
- Salomón Oldak, Cal Poly Pomona, "Learn by Playing: LEGO Robots Experiences in Undergraduate Robotics Laboratories"
- Amir Rezaei, Cal Poly Pomona, "A Visual Demonstration of Some of the Fundamental Theories in an Undergraduate Vibration Course"

• Taufik, Cal Poly San Luis Obispo, "Small-Scale High Power Laboratory Experiments for Power Electronics Courses

Session 6: Thursday 4:15-5:15

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Peter Blakey

- Shigeo Hayashibara, Jim Helbling, Audrey Erb, Embry-Riddle Aeronautical University, "ERAU Senior Aircraft Preliminary Design Capstone: A Comprehensive Approach for the First Semester Capstone Experience"
- Jim Helbling, Shigeo Hayashibara, Angela Beck, Embry-Riddle Aeronautical University, "ERAU Senior Aircraft Detail Design Capstone: Preparing Students for Professional Challenges"
- Ahmad Pourmovahed, Kettering University, "An Introductory Aerodynamics Experiment at Kettering University"
- Mel Mendelson, Loyola Marymount University, "Half-Life of an Engineering Education"

Reception: Thursday 5:30-6:30

Location: Kellogg West Conference Center, Hillside East 1/2

Banquet Speaker: Thursday 7:00-7:30

Location: Kellogg West Conference Center, Hillside East 1/2

Dr. Donald C. Mayer, Director of the Space Electronics Vulnerability Office at The Aerospace Corporation in El Segundo, CA

Topic of talk: Intelligent Life in the Universe

It is a probabilistic analysis of the likelihood of intelligent life on another planet somewhere in the Milky Way. It is an attempt to put an engineering framework around the nebulous question - are there aliens out there. It has aspects of astronomy, earth science, geology, anthropology, probability and statistics.

Session 7: Friday 8:30-9:30

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Massoud Moussavi

- Kevin Anderson, Angela Shih, Cal Poly Pomona, "Using National Instruments ELVIS for ME 340 and ME 435 Labs in Mechanical Engineering"
- Vilupanur Ravi, Jawaharlal Mariappan, Cal Poly Pomona, "Integrating Context-Based, Just-in time Activities in a Traditional Design Class"
- Rebecca Leopard, Mariappan Jawaharlal, Kamran Abedini, Cal Poly Pomona, "Statics Visualization Kit"

Session 8: Friday 9:30-10:30

Location: Kellogg West Conference Center, Mountain Vista Room

Session Chair: Dr. Tariq Qayyum

- Cherian Mathews, University of the Pacific, "Enhancing the Classroom Learning Environment Using a Tablet PC"
- Saeed Monemi, Tim Lin, Cal Poly Pomona, "Service Learning Projects of the Electrical and Computer Engineering Students"
- Lou Rosenberg, Cal Poly San Luis Obispo, "Time-lapse Video as a Self-Reflection Tool for Collaborative Design Experiences"

Coffee Break: Friday 10:30-10:45

Session 9: Workshop, Friday 10:45-11:45

Location: Building 17, Room 2660

• Phil Rosenkrantz, Cal Poly Pomona, "A Demonstration and Critique of Tools and Techniques Used for Teaching a Hybrid On-Line Engineering Economics Course"

For more information, please send email to sparisay@csupomona.edu or visit https://www.csupomona.edu/~sparisay/ASEE/PSW/

Last updated: April 16, 2006