



**American Society for Engineering Education
Pacific Southwest Section Conference
April 20-21, 2006**

Hosted by:
**California State Polytechnic University, Pomona
College of Engineering**



ENGINEERING FOR THE FUTURE – WHAT IS NEEDED NOW?

Final Program

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 Sponsored by IEEE Coastal LA Section	Kellogg West, Hillside East
6:30-7:45	Dinner Banquet Speaker: Dr. Donald C. Mayer	Kellogg West, Hillside East

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**

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

Lunch Break: Thursday 11:45-1:00

Location: 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 Engineering 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

Banquet Speaker: Thursday 7:00-7:30

Location: Kellogg West Conference Center, Hillside East

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**

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”

Conference Planning Committee (members from Cal Poly Pomona):

- Dr. UJ Fan, Associate Dean of College of Engineering
- Dr. Alan Felzer, Electrical and Computer Engineering Department
- Dr. Jawa Mariappan, Mechanical Engineering Department
- Dr. Lyle McCurdy, Engineering Technology Department
- Dr. Saeed Monemi, Electrical and Computer Engineering Department
- Dr. Lina Neto, Civil Engineering Department
- Dr. Sima Parisay, Industrial and Manufacturing Engineering Dept., Program Coordinator

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IEEE Coastal LA Section

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