

## **ASEE IE Division Newsletter May 2009**

This newsletter includes:

- 1) Welcome from our Division Chair
- 2) Brief Notes
- 3) Paper Selection for the 2009 Conference
- 4) Best Paper Selection for the 2009 Conference
- 5) Minutes from Business Meeting, 2008 Conference
- 6) The Schedule of the 2009 Conference Sessions, including abstracts

### **1) Welcome from our Division Chair—from Terri Lynch-Caris:**

"Greetings to members of the Industrial Engineering Division (IED) of ASEE. It is always a pleasure to gather with Industrial Engineering educators to discuss ideas, promote research and share best practices from universities around the world. Many of us will have the opportunity to come together at the ASEE conference in Austin, Texas just two short weeks after attending the IIE conference in Miami, Florida. I'm hopeful that both conferences will provide insights into the changing needs of our profession and build a network of professionals willing to work together for a common cause. Our ASEE-IED program chair, Bill Peterson, has put together some exciting sessions that will promote formal and informal networking opportunities within the Austin Convention Center and beyond. I'm looking forward to seeing you all at ASEE."

### **2) Brief Notes**

- We hope we can share "lessons learned" from the IIE conference and the ASEE conference at the ASEE IE Business Meeting, session #3457, from 12:30 to 2pm Wednesday in Convention Center 5C.
- **At the end of this document is the relevant schedule for the conference, including abstracts.**
- We encourage other potential authors to consider submitting a paper for next year's conference.

### **3) Paper Selection Process for 2009 Conference ---Bill Peterson, Program Chair**

We received 27 abstracts this year and, after an arduous review process, selected 15 papers. The steps included were

- review of abstracts (2 declined at this point)
- conversion of abstracts to papers (3 accepted abstracts were not converted into papers)
- double blind reviews of first submittals
- author's incorporation of reviewers' comments
- second review to insure reviewers comments were addressed appropriately (7 papers were declined)

The 15 remaining papers were organized into 5 sessions. The two 75 minute slots each have three papers, and the two 104 minute slots have four papers, which allows all the authors equal times of 23 to 24 minutes to present.

As always we tried to group papers in logical order. The final groupings were driven by the papers submitted and accepted by the peer-review process with the sessions' titles adjusted to reflect the eclectic mix of topics in the final pool.

I hope you will all find the sessions interesting and thought provoking - see you at the 7:00 AM sessions and start your day with worthwhile presentations on topics of interest to dedicated IE educators.

#### **4) Best Paper Selection Process—Bill Peterson, Program Chair**

Five papers were nominated by reviewers for consideration. It was difficult to limit the nominees to one out of three due to the high quality of papers the reviewers accepted. Four of these papers are in session 2557 and the remaining one is in session 3557 with three other papers. All the authors are to be congratulated on their submissions. The Best Paper Award will be presented at the dinner on Tuesday evening.

#### **5) Minutes from 2008 Business Meeting**

### **ASEE Industrial Engineering Division Business Meeting**

Wednesday, June 25, 2008

Pittsburgh, PA

Prepared by Judith Norback

#### **Call to Order—David Elizandro**

David Elizandro called the meeting to order at 12:40 pm and welcomed everyone to the IED business meeting.

#### **Introductions—**

David asked those attending to introduce themselves, giving their name and organizational affiliation. The following members were present:

Name	Institution	Email address
John Ballard	UNL	<a href="mailto:jballard2@unl.edu">jballard2@unl.edu</a>
David Elizandro	Tennessee Tech University	<a href="mailto:delizandro@tntech.edu">delizandro@tntech.edu</a>
Jane Fraser	Colorado State U—Pueblo	<a href="mailto:jane.fraser@colostate-pueblo.edu">jane.fraser@colostate-pueblo.edu</a>
Terri Lynch-Caris	Kettering University	<a href="mailto:tlynch@kettering.edu">tlynch@kettering.edu</a>
Jessica Matson	Tennessee Tech University	<a href="mailto:jmatson@tntech.edu">jmatson@tntech.edu</a>

Don Merino	Stevens Institute of Tech.	<a href="mailto:dmerino@stevens.edu">dmerino@stevens.edu</a>
Judith Norback	Georgia Tech	<a href="mailto:jnorback@isye.gatech.edu">jnorback@isye.gatech.edu</a>
William R. Peterson	ASU	<a href="mailto:drbillpeterson@aim.com">drbillpeterson@aim.com</a>
Al Soyster	NSF	<a href="mailto:asoyster@nsf.edu">asoyster@nsf.edu</a>
Lawrence Whitman	Wichita State	<a href="mailto:larry.whitman@wichita.edu">larry.whitman@wichita.edu</a>

### **Approval of 2007 Minutes**

The 2007 minutes were approved.

### **PIC I Chair—Jessica Matson**

Jessica is our PIC I chair, and she described the following issues and information:

- 1) ASEE may begin to have a roster of “Best Papers” on the website.
- 2) The registration fee may be waived for program chairs.
- 3) Program chairs need access to author emails, through smoothpaper, after the papers are submitted.
- 4) Division chairs have the same access to papers as program chairs.
- 5) ASEE may implement a shorter time to review abstracts, since now two months is allowed to review abstracts while only two weeks is allowed to review papers.
- 6) Next year all Divisions will require publication to present.
- 7) For ASEE 2008, 1440 papers were accepted out of 1684 submitted.
- 8) ASEE current has 10,000 members, with 13,800 active members.
- 9) The ASEE 2008 registration surpassed the ASEE 2007 registration.

Jessica asked if there were other ideas to go to the Board. None were suggested.

### **Program Chair Report—Terri Lynch-Caris**

Terri Lynch-Caris reported that 25 abstracts were submitted this year; all were reviewed and accepted. Twelve papers were submitted and reviewed, and eight papers were published.

Discussion centered on how we could determine who was attending of the 269 IE members so we could encourage others, or those already attending, to submit papers. It was decided that the Program Chair for next year, Bill Peterson, will email authors with dates regarding submitting the paper and paying the \$75 copyright fee. Another suggestion was made about having some initiative reaching out to other industrial engineering faculty on our membership list: Maybe we should have invited sessions. Could we work together with IIE or maybe IERC (16 educational papers were presented this year, with Kim Needy being chair of the educational piece.)

Attendees discussed how to encourage higher attendance to the Division Business meeting. Ticketing discourages people, and the Wednesday time also discourages people. The decision was made to have a brown bag lunch open to everyone next year.

#### **Treasurer's Report—Bill Peterson**

Bill reported we have \$16,950 in the Bass account and \$380 in the operating account.

#### **Old Business**

##### **Awards—**

John Jasper worked on awards but was unable to attend the business meeting.

Best Paper Award: This award is not monetary, and was not awarded for 2006 and 2007. A decision was made not to return to these years and give an award. Instead an award was given for 2008 and will continue to be given for every year in the future. A decision was made to change the Best Paper Award to make it monetary, hopefully by next year. The Best Paper Award for 2008 went to Dale Masel and Arun Nambiar, for their paper on “Teaching Concepts Of Lean Manufacturing Through A Hands-On Laboratory Course.” The award plaque was given to Dale Masel at the dinner meeting on Tuesday evening of the 2008 conference.

##### New Awards

The following was approved in the meeting:

- The Distinguished Service Award
- The Lifetime Achievement Award (This award will reflect contribution as an IE educator. An honorarium of \$500 will be considered.)
- The Best Paper Award (This will include a \$250 honorarium for all the authors of the winning paper.)
- The New IE Educator Award will be maintained at \$250 per author up to two authors.

##### Bylaw Changes

David noted the bylaws need to be revised every 10 years. He suggested having a subcommittee look at the bylaws and update them by the next Business Meeting. David was nominated to head the committee.

##### Website

ASEE now has a site for each Division, and Larry Whitman will take care of sending in our Division's information.

## **New Business**

### **Installation of New Officers—**

The following officers were installed for 2008-2009:

Division Chair: Terri Lynch-Caris

Program Chair: Bill Peterson

Program Chair-Elect: Lawrence Whitman

Secretary/Treasurer: a nomination was made for Abhijit Gosavi by Jane Fraser. This was followed up after the meeting.

Awards Chair: David Elizandro

Newsletter Editor: Judith Norback

Web Editor: Larry Whitman

### **Goals for the Upcoming Year—**

David thanked Terri for her work as Program Chair and turned the meeting over to her.

Terri described these goals for this next year:

- Updating the bylaws
- Having the new awards in place
- Making a connection with IERC
- Establishing better communication with Systems Engineering Division, Engineering Management Division, and Engineering Economy Division

Terri will also follow up on getting access to listserv for the Newsletter Editor, the Program Chair and the Division Chair.

Terri adjourned the meeting at 2 pm.

---end of 2008 meeting minutes---

**NOTE: List of 2009 Sessions with Abstracts starts on next page:**

## **ASEE 2009 Schedule for Industrial Engineering, Engineering Management, and Engineering Economy Divisions**

### **Sunday, June 14, 2009**

9:00 a.m.-Noon Neal Kocurek Memorial Austin Convention Center, 9B

**Moderator(s):**

**Division(s):** Industrial Engineering Division

**0157: Introduction to Discrete Event Modeling and Simulation: Arena and ProModel**

Ticketed Event - \$35 advanced/\$45 on site. This workshop will provide hands-on experience with two competing modeling and simulation software programs, Arena and ProModel, in creating a model of processes and running the model simulation to obtain data about the process. Analyzing the data generated from the simulation and how they can be used to help make or confirm a decision will be shown. Also included will be how to teach modeling and simulation, potential textbooks that can be used, suggested project-based instructional methods, sample syllabi, and several specific case studies.

Speaker: Samuel Guccione, Eastern Illinois University

Speaker: Thomas McDonald, Eastern Illinois University

### **Monday, June 15, 2009**

7:00-8:15 a.m. Neal Kocurek Memorial Austin Convention Center, 19B

**Moderator(s):** William Peterson, Minnesota State University, Mankato

**Division(s):** Industrial Engineering Division, Engineering Management Division

**1157: Applying What We Teach to IE Education**

This session looks at the creative use of "standard" IE tools and techniques in the business of IE education.

AC 2009-169: THE DEVELOPMENT AND IMPLEMENTATION OF AN EXPANDED CAPSTONE DESIGN EXPERIENCE BY REPLACING AN INTERNSHIP COURSE

E. Delbert Horton, Texas A&M University, Commerce

Matthew Elam, Texas A&M University, Commerce

Ben Cranor, Texas A&M University, Commerce

AC 2009-842: GREEN ISSUES IN A FACTORY: STUDENT PERCEPTIONS

Lawrence Whitman, Wichita State University

Janet Twomey, Wichita State University

Barbara Chaparro, Wichita State University

Veronica Hinkle, Wichita State University

AC 2009-1333: APPLYING THE SIX SIGMA PROCESS WHEN CREATING A MODULAR SIX SIGMA GREEN BELT PROGRAM

Andrew Jackson, East Carolina University

Sherion Jackson, East Carolina University

Merwan Mehta, East Carolina University

10:30 a.m. -Noon Neal Kocurek Memorial Austin Convention Center, 10B

**Moderator(s):** Robert Lundquist, Ohio State University

**Division(s):** Engineering Economy Division, Industrial Engineering Division

**1339: Advances in Engineering Economy Pedagogy**

This session will provide innovative strategies for teaching the principles of engineering economy.

AC 2009-1884: INTERESTING DIFFERENT DECISION PROBLEMS

Jane Fraser, Colorado State University, Pueblo

Ray Tsai, Taiwan

AC 2009-7: ENGINEERING ECONOMICS: TIME FOR NEW DIRECTIONS?

John Ristroph, University of Louisiana, Lafayette

AC 2009-242: TEACHING REVENUE MANAGEMENT IN AN ENGINEERING DEPARTMENT

Abhijit Gosavi, Missouri University of Science and Technology

12:30-2:00 p.m. Neal Kocurek Memorial Austin Convention Center, ML 6

**Moderator(s):**

**Division(s):** Engineering Economy Division

**1439: Engineering Economy Business Meeting**

This is the Engineering Economy Division's annual business meeting and brown-bag lunch. All are welcome!

2:15-4:00 p.m. Neal Kocurek Memorial Austin Convention Center, ML 1

**Moderator(s):** Kevin Dahm, Rowan University

**Division(s):** Engineering Economy Division, Industrial Engineering Division

**1539: Frontiers in Engineering Economy**

This session will examine advances and innovations in engineering economy and their use in undergraduate and graduate teaching.

AC 2009-780: REAL OPTIONS AND THE USE OF DISCRETE AND CONTINUOUS INTEREST RATES

Neal Lewis, University of Bridgeport

Ted Eschenbach, TGE Consulting

Joseph Hartman, University of Florida

AC 2009-1014: THE PEDAGOGY OF TAXES AND TAX PURPOSE DEPRECIATION

Robert Lundquist, Ohio State University

AC 2009-825: ENGINEERING ECONOMICS APPLIED TO PUBLIC-POLICY ISSUES

Philip Brach, University of the District of Columbia

Ahmet Zeytinci, University of the District of Columbia

Pradeep Behera, University of the District of Columbia

## **Tuesday, June 16, 2009**

7:00-8:15 a.m. Neal Kocurek Memorial Austin Convention Center, ML 8

**Moderator(s):** Kathryn Abel, Stevens Institute of Technology

**Division(s):** Engineering Management Division, Industrial Engineering Division

**2142: Engineering Management Program Design**

This session will discuss challenges, strategies, and best practices related to the design and development of engineering management programs.

AC 2009-936: USING ABET ASSESSMENT REQUIREMENTS AS A CATALYST FOR CHANGE: ENHANCING AND STREAMLINING THE ENGINEERING MANAGEMENT UNDERGRADUATE PROGRAM AT MISSOURI S&T

Stephen Raper, Missouri University of Science and Technology

Susan Murray, Missouri University of Science and Technology  
Christa Weisbrook, Missouri University of Science and Technology  
William Daughton, University of Missouri

AC 2009-208: PREPARING AN ABET SELF-STUDY: CONTINUOUS IMPROVEMENT THE SECOND TIME AROUND  
Kathryn Abel, Stevens Institute of Technology

AC 2009-1143: BENCHMARKING DISTANCE EDUCATION IN ENGINEERING MANAGEMENT PROGRAMS  
Ertunga Ozelkan, University of North Carolina, Charlotte  
Agnes Galambosi, University of North Carolina, Charlotte

AC 2009-1190: EM AT NCSU.PDF  
Natalie Cherbaka, North Carolina State University  
Jerome Lavelle, North Carolina State University

10:30 a.m. -Noon Neal Kocurek Memorial Austin Convention Center, ML 8

**Moderator(s):** Gene Dixon, East Carolina University

**Division(s):** Engineering Management Division, Industrial Engineering Division

**2342: Contemporary Practices in Engineering Management Programs**

This session will discuss best practices related to the execution of engineering management programs.

AC 2009-137: HUMAN BEHAVIOR SKILLS AND EMOTIONAL INTELLIGENCE IN ENGINEERING  
Raymond Price, University of Illinois, Urbana-Champaign  
Rose Mary Cordova-Wentling, University of Illinois, Urbana-Champaign

AC 2009-1337: TEAM WORK AND DEMOCRATIC LEARNING IN PROJECT MANAGEMENT TRAINING  
Ivan Lidon, University of Zaragoza  
RUBEN REBOLLAR, University of Zaragoza  
Palle Qvist, Aalborg University  
Juan Luis Cano, University of Zaragoza

AC 2009-812: AN APPLICATION OF CUSTOMER-SATISFACTION STANDARDS IN ENGINEERING MANAGEMENT COURSES  
Stanislav Karapetrovic, University of Alberta  
John Doucette, University of Alberta

AC 2009-1429: A CASE STUDY OF REENGINEERING  
Gene Dixon, East Carolina University

12:30-2:00 p.m. Neal Kocurek Memorial Austin Convention Center, ML 8

**Moderator(s):**

**Division(s):** Engineering Management Division

**2442: EMD Business Meeting**

This annual meeting of the Engineering Management Division will include a report from the Division officers for the past year. A new secretary and board of directors will be elected.

2:15-4:00 p.m. Neal Kocurek Memorial Austin Convention Center, ML 7  
**Moderator(s):** William Peterson, Minnesota State University, Mankato  
**Division(s):** Industrial Engineering Division, Engineering Management Division  
**2557: Best Practices in IE Education**

This session presents ideas to be considered for inclusion in IE programs and in curriculum improvement and development.

AC 2009-5: A UNIVERSITY'S APPROACH TO TEACHING A FRESHMAN-LEVEL INTRODUCTORY COURSE IN INDUSTRIAL ENGINEERING  
Matthew Elam, Texas A&M University, Commerce  
E. Delbert Horton, Texas A&M University, Commerce  
Sukwon Kim, Texas A&M University, Commerce  
Bob Wilkins, Texas A&M University, Commerce

AC 2009-460: INTEGRATING STUDENT EXPERIENCE INTO THE CLASSROOM  
Terri Lynch-Caris, Kettering University  
Daniel Ludwigsen, Kettering University

AC 2009-1177: PROBLEM-BASED TEACHING AND LEARNING IN AN INTRODUCTORY-LEVEL LEAN MANUFACTURING SYSTEMS COURSE  
Alister McLeod, Purdue University  
April Savoy, Purdue University

AC 2009-1926: GOOD JOBS, BAD JOBS: DESIGNING PROGRAM EDUCATIONAL OBJECTIVES  
Jane Fraser, Colorado State University, Pueblo

4:30-6:00 p.m. Neal Kocurek Memorial Austin Convention Center, 8A  
**Moderator(s):** Howard Eisner, George Washington University  
**Division(s):** Engineering Management Division, Industrial Engineering Division  
**2642: Frontiers in Engineering Management Education**

This session showcases presentations on best practices and innovations in teaching engineering management.

AC 2009-327: SYSTEMS ENGINEERING EDUCATION IN ENGINEERING MANAGEMENT  
Howard Eisner, George Washington University

AC 2009-694: BREAKING THE ICE: CUTTING THROUGH GEOGRAPHIC, CULTURAL, AND TIME-ZONE BARRIERS TO EFFECTIVELY LEAD IN A GLOBAL ENVIRONMENT  
Lenisha Gandhi, IBM

AC 2009-1142: ASSESSING ENGINEERING MANAGEMENT STUDENTS' PERCEPTION OF ON-LINE LEARNING  
Ertunga Ozelkan, University of North Carolina, Charlotte  
Agnes Galambosi, University of North Carolina, Charlotte

AC 2009-1703: VIRTUAL ENGINEERING DESIGN TEAMS  
David Wyrick, Texas Tech  
Adji Cisse, Texas Tech

7:00-8:30 p.m. Offsite Division Events, Fogo De Chao, 309 E 3rd St., Austin, TX  
**Moderator(s):**  
**Division(s):** Engineering Management Division  
**2742: EMD, EED, IED, and SECG Joint Annual Awards Dinner**

Off-site Ticketed Event - \$55 advanced/\$65 on site. This is an annual event held jointly with the IE and EED Divisions. Several awards will be presented at the event: Best Paper, Service Award, and Distinguished Service Award. This is a great occasion for members of the sponsoring Divisions and Groups to network and mingle in an informal get-together. An event not to be missed! Location: Fogo De Chao, 309 E. 3rd St., Austin.

### **Wednesday, June 17, 2009**

7:00-8:15 a.m. Neal Kocurek Memorial Austin Convention Center, 10A

**Moderator(s):** William Peterson, Minnesota State University, Mankato

**Division(s):** Industrial Engineering Division, Engineering Management Division

#### **3157: Starting the Last Day with New Ideas**

This session offers thoughts on on-line and similar courses--lessons learned and suggestions for adopters of the paradigm.

AC 2009-158: TEACHING COURSES ON PROBABILITY AND STATISTICS FOR ENGINEERS: CLASSICAL TOPICS IN THE MODERN TECHNOLOGICAL ERA

Natarajan Gautam, Texas A&M University

AC 2009-2203: A SPECIALIZATION IN FINANCIAL SYSTEMS IN SYSTEMS SCIENCE AND INDUSTRIAL ENGINEERING DEPARTMENT

Nagen Nagarur, State University of New York, Binghamton

Krishnaswami Srihari, State University of New York, Binghamton

Sarah Lam, State University of New York, Binghamton

AC 2009-1166: DEVELOPMENT OF A HEALTH-SYSTEMS CURRICULUM IN INDUSTRIAL AND SYSTEMS ENGINEERING

Shengyong Wang, State University of New York, Binghamton

Mohammad Khasawneh, State University of New York, Binghamton

Krishnaswami Srihari, State University of New York, Binghamton

12:30-2:00 p.m. Neal Kocurek Memorial Austin Convention Center, 5C

**Moderator(s):** Terri Lynch-Caris, Kettering University

**Division(s):** Industrial Engineering Division

#### **3457: Industrial Engineering Division Business Meeting**

Ticketed Event - \$20 advanced/\$30 on site. This is the annual business meeting of the Division. New officers will be elected, and plans will be made for the coming year.

2:15-4:00 p.m. Neal Kocurek Memorial Austin Convention Center, 10A

**Moderator(s):** William Peterson, Minnesota State University, Mankato

**Division(s):** Industrial Engineering Division, Engineering Management Division

#### **3557: Issues and Opportunities in IE Education**

The papers in this session address opportunities to develop and improve IE education and programs.

AC 2009-220: A QRW PARADIGM FOR INDUSTRIAL ENGINEERING CURRICULA

Marlin Thomas, Air Force Institute of Technology

AC 2009-517: FACTORS INFLUENCING HIGH-SCHOOL STUDENTS' CAREER CONSIDERATIONS IN STEM FIELDS

Paul Kauffmann, East Carolina University

Cathy Hall, East Carolina University

David Batts, East Carolina University

Michael Bosse, East Carolina University  
Laurie Moses, East Carolina University

AC 2009-2249: EXPERIENTIAL LEARNING AND STRICTLY PROPER SCORING RULES  
J. Eric Bickel, University of Texas, Austin \*\*\* Paper may be presented at earlier session  
due to author's conflict\*\*\*

AC 2009-1414: USING THE NINTENDO WII ® TO TEACH HUMAN FACTORS PRINCIPLES  
Lesley Strawderman, Mississippi State University

4:30-6:00 p.m. Neal Kocurek Memorial Austin Convention Center, 10A

**Moderator(s):** William Peterson, Minnesota State University, Mankato

**Division(s):** Industrial Engineering Division, Engineering Management Division

**3657: Concluding Thoughts in Engineering Education**

New and different ideas for engineering education are offered in this session, which wraps  
up the conference and offers concluding thoughts.

AC 2009-938: CONVERTING FACE-TO-FACE CLASSES TO WEB-BASED ON-LINE COLLEGE  
CLASSES

Harry Petersen, Minnesota State University, Mankato

William Peterson, Minnesota State University, Mankato