



American Society for Engineering Education Industrial Engineering Division Newsletter

SPRING 2013

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This edition of the newsletter is devoted to the 2013 ASEE Annual Conference and Exposition to be held in Atlanta. As you will read, the IED sessions will present 16 papers in three sessions that will appeal to people teaching across the IE curriculum. The IED sessions are supplemented by sessions sponsored by the *Engineering Economy*, *Engineering Management*, and *Systems Engineering Divisions*. In addition, be certain to buy a ticket for the Tuesday dinner held jointly with the Engineering Economy, Engineering Management, and Systems Engineering Divisions. We'll see you in Atlanta!

MARK YOUR CALENDAR

It's never too early to think ahead to future opportunities to submit your best pedagogic work to conferences featuring engineering education and industrial engineering. If you aren't able to attend an ASEE Annual Conference, you should consider presenting at the IERC or FIE conferences, or a regional ASEE conference. Plan ahead this summer so you aren't rushed as the deadlines approach.

CONFERENCES

10/23-10/26/2013	2013 IEEE Frontiers in Education Conference (FIE) – Oklahoma City, OK
5/31-6/3/2014	2014 IIE Annual Conference/ISERC Conference – Montreal, Canada
6/15-6/18/2014	2014 ASEE Annual Conference – Indianapolis, IN
10/22-10/25/2014	2014 IEEE Frontiers in Education Conference (FIE) – Madrid, Spain

ABSTRACT DEADLINES

9/4-10/9/2013	2013 ASEE Conference Abstract Submission Period (Dates Approximate)
11/16/2013	2013 ISERC Abstract Deadline (Date Approximate)
1/31/2014	2014 Frontiers in Education Conference Abstract Submission Deadline

IED 2013 ANNUAL CONFERENCE TECHNICAL SESSIONS

The IED is the lead sponsor of three sessions at the 2013 Annual Conference. Sixteen papers will be presented in these sessions on topics ranging from the role of IE in preparing student for careers in energy, to problem-based learning, to making our students more culturally aware. The papers and authors are identified below along with an abbreviated version of the original abstracts. Use this as a starting point to plan a conference program that will give you new ideas for your courses and suggestions that you can share with your colleagues. If you aren't able to attend the conference, look for these papers on the ASEE Proceedings web site.

Session W144: Innovative IE Curricula

Wed. June 26, 2013 7:00 AM to 8:30 AM

Georgia World Congress Center, A302

Moderated by Dr. Ona Egbue

A New Model for Mentoring Graduate Students: Teach Them How to Teach

Dr. Yunchen Huang (Mississippi State University), Dr. Lesley Strawderman (Mississippi State University), and Dr. John M. Usher P.E. (Mississippi State University)

Abbreviated Abstract: Though graduate student mentoring has received a lot discussion in recent years, there is little discussion on the best way to train graduate students how to teach. A good mentoring system between professors and graduate students not only helps build a solid path through graduate students' careers, but is also pivotal to the success of engineering education. In this paper, a new teaching mentoring model used in an industrial engineering department is introduced. A brief comparison with other graduate teaching preparation approaches is provided. Feedback from administration, mentor, mentee, and students of the mentee are discussed and suggestions for improvement for future mentoring programs are presented

Measuring intercultural sensitivity: A case study of the REU program at UPRM

Dr. Saylisse Davila (University of Puerto Rico, Mayaguez Campus), Dr. Viviana I. Cesani (University of Puerto Rico, Mayaguez Campus), and Dr. Alexandra Medina-Borja (University of Puerto Rico at Mayaguez)

Abbreviated Abstract: In 2009, NSF funded a Research Experiences for Undergraduates (REU) site at the University of Puerto Rico at Mayagüez (UPRM) named Educating a culturally sensitive Industrial Engineer: A complex interdisciplinary systems perspective to global IE issues. Did this exhaustive intercultural program have an effect in the students' intercultural skills? The Intercultural Sensitivity Scale (ICSS) was applied to a cohort of 43 students. This paper presents the results of the analysis and identifies the factors that contribute more heavily toward changes in the students' intercultural sensitivity. Every REU summer program was able to trigger a statistically significant improvement in the interaction confidence and interaction enjoyment constructs of the ICSS.

Educating the Professional Engineer of 2020

Dr. Susan L. Murray (Missouri University of Science & Technology) and Dr. Terri M. Lynch-Caris (Kettering University)

Abbreviated Abstract: Starting in 2014 the various FE exams will contain some overlapping content (e.g., mathematics and engineering economics), but there will no longer be a common breadth portion. Each FE exam, including industrial engineering, will be a freestanding exam. The PE exam specifications have also been revised; the new specifications will be used beginning in 2013. This paper highlights these recent changes to the discipline-specific content of the industrial engineering (IE) exams and suggests possible resulting curriculum modifications. The paper concludes with a discussion of how these specifications have been used to assess and update academic curriculum.

Training Industrial Engineering Students as Energy Engineers

Dr. Masud Salimian (Morgan State University), Mr. Yaseen Mahmud (Morgan State University), and Ms. Avis L. Ransom (Morgan State University School of Engineering)

Abbreviated Abstract: Currently, the U.S. workforce is not adequately trained in the area of energy efficiency. At the present time, those providing "energy efficiency" services are typically either too technical in their approach or possess inadequate analytical and design. We need to concentrate on increasing energy efficiency in current and future industry and commercial operations. To train an adequately skilled is the goal of our initiative. Having skills and knowledge in engineering fields combined with the ability to do engineering economic analyses, are extremely valuable. Energy engineers will both be able to define better solutions as well as present compelling cases to managers and owners to invest in retrofits, upgrades, maintenance and efficient operations in general.

Evaluation of Perceptual Changes in an Engineering Sales Program

Dr. David Paul Sly (Iowa State University), Dr. Daniel P Bumblauskas (University of Missouri Harvard University), and Dr. Adam R Carberry (Arizona State University)

Abbreviated Abstract: This study presents preliminary results of how a sales engineering course is impacting industrial engineering students' perceptions of sales as a skill and a potential profession. An established technical sales program framed the syllabus for the course. An assessment of students enrolled in the course over a period of three years uncovered statistically significant changes in student perceptions regarding interest, need, and rank of current ability toward technical sales. This paper will detail those results and seeks to draw conclusions on how the course is impacting student perceptions towards seeking a profession in technical sales.

Session W244: Innovative IE Course Content

Wed. June 26, 2013 8:45 AM to 10:15 AM

Georgia World Congress Center, A306

Moderated by Dr. Kathryn D. Abel

Towards Improving Stochastic Awareness

Dr. John P. Mullen (New Mexico State University)

Abbreviated Abstract: It is possible for a student to pass a course on stochastic analysis without actually understanding that $W = 1/(\mu - \lambda)$ is not the same sort of equation as $F = ma$. That is a student might grossly underestimate the role of variability in stochastic systems. Failure to grasp this concept early can cause a student to mischaracterize much of the presented information. This is especially an issue in distance courses because students do not interact as much as in residence courses. This paper describes a collection of exercises intended to determine the level of students' understanding of stochastic behavior and build their stochastic awareness early in a course so that they will better understand the role of randomness and correlation in such systems.

Experimental Assessment of Higher-Level Data Analysis Skills

Capt. Julie Ann Layton (Rensselaer Polytechnic Institute) and Prof. Thomas Reed Willemain (Rensselaer Polytechnic Institute)

Abbreviated Abstract: Data analysis is a process learned over time that requires comprehension of all facets of statistics (summary statistics, statistical graphics, estimation, and inference). The goal of this research is to understand how better to help novices become expert data analysts. The first step to solving this problem is to find out how novices analyze. The second step is to observe the behavior each student and relate it to factors such as the number of statistics courses taken, year group, or course level. The next goal is to identify distinct types of behaviors. This paper reports on an experiment to understand and describe these behaviors.

To Be Green Or Not To Be Green? Ethical Tools for Sustainability Engineering

Dr. Connie Gomez (Galveston College), Dr. Heidi A. Taboada (University of Texas, El Paso), and Dr. Jose F. Espiritu (University of Texas, El Paso)

Abbreviated Abstract: To adequately prepare students to meet the demand for sustainable engineering, students need to have an understanding of the technical needs of society as well as the human component in design. In this class students from multiple engineering disciplines are introduced to the code of engineering ethics and to the application of engineering ethics to sustainability dilemma within a series of group activities. During the activities, students address the questions where there is not a clear conclusion to a “good” choice including, for example, how a society might decide who will have access to the resources. As students discuss reach conclusions they discuss not only the technical merits of each alternative, but the change in levels of advocacy the class has undergone.

Teaching Gage Reproducibility and Repeatability using the Mouse Factory

Dr. Douglas H Timmer (University of Texas, Pan American) and Dr. Miguel Gonzalez (University of Texas, Pan American)

Abbreviated Abstract: This paper active learning activities to teach gauge reproducibility and repeatability (R&R) using the Mouse Factory Learning suite: a set of web-based, active learning laboratories for teaching statistical quality control and design of experiments. Students will conduct gage repeatability and reproducibility studies using gage blocks constructed from a high-resolution rapid prototyping machine and having different amounts of variability in the height, width and depth dimensions. Students use commonly found measuring instruments including a steel rule, dial caliper, digital caliper, micrometer and digital micrometer. Assessment of student performance and perceptions (behavior and attitudes) from a small-scale (initial) pilot study will be measured, evaluated and discussed.

Using Informal Oral Presentations in Engineering Classes: Training Students for the “You Got a Minute” Moment

Dr. Justin W. Kile (Quinnipiac University)

Abbreviated Abstract: In today’s workplace, employers expect their employees to communicate with supervisors, peers, and others in the organization through formal reports and presentations, as well as impromptu meetings that often begin with the common phrase “you got a minute.” This paper presents examples of assignments that include these informal communications, rubrics for evaluating students, and discussion of using these assignments in fulfilling the ABET standards. Although the informal communication activities presented in the paper are geared towards specific industrial engineering situations, they share a lot in common with all quick informal conversations that are commonly known as an “Elevator Talk.” Thus, preparing students for these technical informal communications will also prepare them for other aspects of their careers as professionals.

Session W544: Improving Course Effectiveness

Wed. June 26, 2013 2:15 PM to 3:45 PM

Georgia World Congress Center, A302

Moderated by Mr. Eric Specking

Problem-Based Learning and Industrial Engineering

Dr. Abhijit Gosavi (Missouri University of Science & Technology) and Dr. Jane M. Fraser (Colorado State University, Pueblo)

Abbreviated Abstract: Problem-based learning (PBL), is a well-known approach for teaching engineering courses. While PBL has been studied in the literature in the context of engineering in general, there is little by the way of how PBL can be used in IE courses. We undertake a study of concepts that can be taught via PBL, along with an analysis of courses and topics in the industrial engineering (IE) curriculum suitable for PBL. First, we enumerate a number of topics from some IE courses that could potentially be taught with PBL. Then, we illustrate how PBL can be used in IE with two specific examples drawn from the following courses: Probability and Statistics and Discrete-Event Simulation. Finally, we present a discussion on IE topics/concepts that are perhaps unsuitable for the PBL style.

Electronic Flashcards as a Tool to Improve Exam Readiness

Dr. Susan L. Murray (Missouri University of Science & Technology) and Mrs. Julie Phelps (Missouri S&T, Educational Technology)

Abbreviated Abstract: Many college classes have basic information that must be learned before students can master the more complex application and analysis of advanced ideas in the class. Students often struggle with identifying and learning these facts, terms, and principles. This paper reports on a project that evaluated the use of electronic flashcards in two undergraduate engineering classes. The study materials (online flashcards) were developed in conjunction with the university's Educational Technology Office.

The Converged Classroom

Prof. Gregory L. Wiles P.E. (Southern Polytechnic State University) and Mr. Thomas Reid Ball (Southern Polytechnic State University (ENG))

Abbreviated Abstract: The growing need to work smarter in teaching classes while making effective use of classroom space gives way to a rethinking of how classrooms should be structured to accommodate today's students. One engineering department at Southern Polytechnic State University developed and offers a converged online and face-to-face (f2f) interactive learning environment. The uniqueness of this converged learning environment is our ability to offer multiple delivery modalities simultaneously as one single classroom. Students have a choice of attending as a distance learner (online), or as a hybrid learner (both f2f and online). The lecture meetings are recorded for later playback in case students are unable to attend. This flexible environment accommodates job and family commitments, provides consistent course content, promotes student interaction, and improves student retention while using space effectively.

A proposal for using problem posing to connect learning of basic theory with engineering design

Dr. Richard L Marcellus (Northern Illinois University)

Abbreviated Abstract: There is a need for educational methods that enable transfer of academic content to engineering practice. Such methods appear frequently in freshman and senior design courses (cornerstone and capstone courses), but not so often in basic theory courses, such as calculus, probability, and statistics. This paper presents a proposal for methods to achieve this connection, and the author's experience with using the proposed methods in applied probability courses. The essence of the proposal is that learners should be doing engineering while learning basic theory.

Enjoyable Instructional Technology Can Enhance Learning

Dr. Terri M. Lynch-Caris (Kettering University) and Dr. Mark A. Palmer P.E. (Kettering University)

Abbreviated Abstract: The Center for Excellence in Teaching and Learning surveyed a predominantly engineering campus on the many instructional technologies that exist for instruction. The purpose of the survey was to understand the types of instructional and identify the technological gaps for future purchases. Three categories of instructional technology were used to group the many technological tools that were found in various classrooms across the campus: (1) seating and room layout, (2) boards and projection and (3) computers and video capture. There were several conclusions resulting from the data analysis including differences between faculty and student preferences. The most interesting result was the compelling relationship between enjoyment and learning that became evident in a simple scatter plot of the data. This relationship, while not surprising, may influence the types of instructional technologies for the modern classroom.

SPECIAL CONFERENCE EVENTS FOR IED MEMBERS

ASEE Division Mixer

Sunday, June 23, 4:30pm – 6:00pm

Georgia World Congress Center – Thomas Murphy Ballroom

The *Division Mixer* provides a networking opportunity that encourages conference attendees to meet with members of the ASEE divisions in an informal setting with light refreshments. Officers from the IE Division will be staffing a table to answer your questions about IED sessions and activities, and your suggestions for how the IED can provide better value to you. Please come by and say hello!

Joint Dinner with EMD, IED, EED, SED (Ticketed Event)

Tuesday, June 25, 6:30pm-9:00pm

McCormick & Schmick's Seafood & Steaks

This annual dinner is held along with the *Engineering Management, Engineering Economy, and Systems Engineering* divisions. Awards from all four divisions are presented at the dinner, so be sure to attend and share in the success of your colleagues and friends. It's a perfect way to wind down from the first days of the conference and charge your batteries for the IED sessions on Wednesday. This ticketed event costs \$55 with advanced registration and \$65 dollars on-site. Register now and apply the savings to refreshments.

Industrial Engineering Division Business Meeting

Wednesday, June 26, 12:30pm-2:00pm

Georgia World Congress Center, A308-A

The annual business meeting of the IED always takes place on Wednesday afternoon. Division officers will be there, but it isn't just for officers. The IED sessions at the 2014 ASEE Conference will be influenced by the ideas you bring to this meeting, so plan on attending this session and helping to make the division even more effective. Oh, yes--the lunch is free.

ENGINEERING ECONOMY DIVISION SESSIONS

M430: Engineering Economy Business Meeting

Mon. June 24, 2013 12:30 PM to 2:00 PM

Georgia World Congress Center, A405

M531: Engineering Economy Division Technical Session

Mon. June 24, 2013 2:15 PM to 3:45 PM

Georgia World Congress Center, A306

Moderated by Dr. Gene Dixon

1. **Present Value Analysis of Traditional Loans** Dr. Robert C. Creese (West Virginia University)
2. **Development of a Mobile App for Engineering Economics** Prof. Weihang Zhu (Lamar University), Dr. Alberto Marquez (Lamar University), and Prof. Julia Yoo (Lamar University)
3. **Extending the Case Study on When to Collect Social Security: Economic Decision Making for Couples** Dr. Neal Lewis (University of Bridgeport) and Dr. Ted Eschenbach (University of Alaska Anchorage)

Session M631: Engineering Economy Division Technical Session

Mon. June 24, 2013 4:30 PM to 6:00 PM

Georgia World Congress Center, A306

Moderated by Dr. Karen Bursic P.E.

1. **Project based learning in engineering economics: Teaching advanced topics using a stock price prediction modeling** Dr. Lizabeth T Schlemmer (California Polytechnic State University)
2. **A Comparative Review of Two Engineering Economics Sections: One Traditional and One Online** Dr. Joseph Hubert Wilck IV (East Carolina University) and Dr. Paul J. Kauffmann P.E. (East Carolina University)

ENGINEERING MANAGEMENT DIVISION SESSIONS

T236: Enhancing Engineering Management

Tue. June 25, 2013 8:45 AM to 10:15 AM

Georgia World Congress Center, A306

Moderated by Dr. Amy K. Zander

1. **Partnering With Students to Continuously Improve the Systems Engineering & Engineering Management Program** Dr. Jonathan Philip Mayhorn (University of North Carolina, Charlotte) and Dr. Ertunga C Ozelkan (University of North Carolina, Charlotte)
2. **Improving Generic Skills among Engineering Students through Project-Based Learning in a Project Management Course** Ms. Ana Valeria Quevedo (Universidad de Piura), Dr. Ing. Dante Arturo Guerrero (Universidad de Piura), Prof. Martin Palma (Universidad de Piura), and Mrs. Susana Vegas (Universidad de Piura)
3. **Developing Community for Distance Learners in an Engineering Management Program** Dr. La Tondra Murray (Duke University)
4. **The Development and Delivery of an Online Graduate Course: Lessons Learned and Future Direction** Dr. Garth V Crosby (Southern Illinois University Carbondale) and Dr. Julie Dunston (Southern Illinois University, Carbondale)
5. **Converting Point Estimates for Cost-Risk Analysis** Dr. Robert C. Creese (West Virginia University)
6. **An understanding of psychology to enhance organizational strength** Liana H. Bayatyan (Baruch College, City University of New York (CUNY)) and Dr. S. Jimmy Gandhi (California State University, Northridge)

T536: EMD Business Meeting

Tue. June 25, 2013 2:15 PM to 3:45 PM

Georgia World Congress Center, A410

T636: Engineering Management In The Classroom

Tue. June 25, 2013 4:00 PM to 5:30 PM

Omni CNN Center Hotel, Omni – Chestnut

Moderated by Dr. Craig G Downing

1. **Comparing Study Abroad Interest between Universities** Mr. Eric Specking (University of Arkansas), Dr. Kathryn D. Abel (Stevens Institute of Technology (SES)), and Dr. Kim LaScola Needy (University of Arkansas)
2. **Development of a minor in Sustainable Manufacturing for Manufacturing Systems Engineering program** Mr. Mazyar Aram (California State University Northridge) and Dr. Ileana Costea (California State University, Northridge)
3. **The Impact of Clickers on Your Classroom and Your Career** Dr. Ted Eschenbach (University of Alaska Anchorage), Dr. Neal Lewis (University of Bridgeport), Dr. Gillian M. Nicholls (University of Alabama in Huntsville), and Dr. Jani M Pallis (University of Bridgeport)
4. **The Case for On-Line College Education - a work in progress** Dr. Brian E. White (CAU-SES) and Dr. S. Jimmy Gandhi (California State University, Northridge)
5. **Modifications of Engineering Management Program at California State University Northridge** Alireza Kabirian (California State University Northridge), Dr. S. Jimmy Gandhi (California State University, Northridge), Dr. Ileana Costea (California State University, Northridge), Dr. Ahmad R Sarfaraz (California State University, Northridge), and Dr. Mark Rajai (CSUN)
6. **Dreyfus Five-Stage Model of Adult Skills Acquisition Applied to Engineering Lifelong Learning** Nora Honken (University of Louisville)

SYSTEMS ENGINEERING DIVISION SESSIONS

M466: Panel Discussion: The Academic View- Applying Systems Engineering to the Lunabotics Mining Competition Capstone Design Challenge

Mon. June 24, 2013 12:30 PM to 2:00 PM

Georgia World Congress Center, A304

Moderated by Ms. Gloria A. Murphy

Panelists: Dr. David G. Beale, Dr. Will C Holmes, Dr. Patrick Currier

M666: Systems Engineering Business Meeting

Mon. June 24, 2013 4:30 PM to 6:00 PM

Georgia World Congress Center, A403

T266: Systems Engineering Education Research

Tue. June 25, 2013 8:45 AM to 10:15 AM

Georgia World Congress Center, A302

Moderated by Mr. Chet Boncek Jr

1. **Systems Architecting and Software Architecting - On Separate or Convergent Paths?** Dr. Howard Eisner (George Washington University)
2. **Use of an Analogy to Demonstrate the Origin and Nature of Steady-State Errors in Control Systems** Dr. Robert J. Albright P.E. (University of Portland)
3. **Analyzing K-12 Education as a Complex System** Dr. Donna C. Llewellyn (Georgia Institute of Technology), Dr. Marion Usselman (Georgia Institute of Technology), Mr. Douglas Edwards (Georgia Institute of Technology), Roxanne A Moore (Georgia Institute of Technology), and Pratik Mital (Georgia Institute of Technology)
4. **Learning Performance Analysis of Engineering Graduate Students from Two Differently Ranked Universities Using Course Outcomes** Lin Li (University of Illinois at Chicago) and Yong Wang (University of Illinois at Chicago)
5. **Online Teaching Best Practices: Faculty Preferences** Dr. Agnes Galambosi (UNCC) and Dr. Ertunga C Ozelkan (University of North Carolina, Charlotte)

T566: Programs in Support of Systems Engineering Education

Tue. June 25, 2013 2:15 PM to 3:45 PM

Georgia World Congress Center, A305

Moderated by Dr. Saeed D. Foroudastan

1. **A Novel Partnership for Advancing K-12 STEM Education & Entrepreneurship** Mr. Chet Boncek Jr (Raytheon Company)
2. **Engineering Management Creating Individuals with a Mind for Business and a Heart for Engineering** Dr. Saeed D. Foroudastan (Middle Tennessee State University) and Ms. Brigette Elizabeth Prater Thompson (Middle Tennessee State University)
3. **Presenting a New Opportunity for Engineering Students: Introduction of an Undergraduate Degree Plan in Leadership Engineering** Dr. Roger V. Gonzalez P.E. (The University of Texas at El Paso), Ms. Elsa Q. Villa (University of Texas, El Paso), Dr. Peter Golding (University of Texas, El Paso), and Mr. Joseph A Ramos (The University of Texas at El Paso)
4. **Establishing A Community College Pathway to Baccalaureate Systems Engineering Programs** Prof. Susan K Donohue (University of Virginia) and Mr. Ali Bouabid (Piedmont Virginia Community College)
5. **Systems Engineering Graduate Education for Veterans - A Pilot Program** Dr. Michael C Smith (University of Virginia), Dr. Barry Horowitz (University of Virginia), and Dr. Thomas S. Brett (Dept. of Systems Engineering, School of Engineering and Applied Science)
6. **Systems Engineering Educators Workshop** Dr. Valerie Maier-Speredelozzi (University of Rhode Island), Ms. Colleen Grinham (Affiliation unknown), and Dr. Manbir Sodhi (University of Rhode Island)

SPECIAL THANKS

The success of the IED sessions depends on having members sharing the workload. These people deserve special recognition for their roles in making this year's conference a success.

IE Division Chair - Lesley Strawderman, Mississippi State University

IED Program Chair - Rick Olson, University of San Diego

ASEE Division Mixer Arrangements - Heidi Taboada, University of Texas, El Paso

Session Moderators

Eric Specking - University of Arkansas

Kathryn D. Abel - Stevens Institute of Technology

Ona Egbue - Missouri University of Science & Technology

Abstract and Paper Reviewers

Mohamed Aboul-Seoud - Rensselaer Polytechnic Institute

Daniel P. Bumblauskas - Iowa State University

Saylisse Davila – Univ. of Puerto Rico, Mayaguez Campus

Okechi G. Egekwu - James Madison University

Darin Ellis - Wayne State University

Joseph T. Emanuel - Bradley University

Connie Gomez - Galveston College

Yunchen Huang - Mississippi State University

Maria Irizarry – Univ. of Puerto Rico, Mayaguez Campus

Philip M. Kazemersky – Univ. of Tennessee, Chattanooga

Justin W. Kile - Quinnipiac University

Julie Ann Layton - Rensselaer Polytechnic Institute

Suzanna Long - Missouri Univ. of Science & Technology

Yaseen Mahmud - Morgan State University

Richard L. Marcellus - Northern Illinois University

Dale T. Masel - Ohio University

John P. Mullen - New Mexico State University

Susan L. Murray – Miss. Univ. of Science & Tech.

Frank Peters - Iowa State University

William R. Peterson - WRP Associates

William J. Schell - Montana State University

David Paul Sly - Iowa State University

Yong Wang – Univ. of Illinois at Chicago

John A. White – Univ. of Arkansas

Cecelia M. Wigal – Univ. of Tennessee, Chattanooga

Joseph Wilck - East Carolina University

Gregory L. Wiles - Southern Polytechnic State Univ.

IED AWARD CRITERIA

The division offers four awards to recognize excellent papers presented at the ASEE Annual Conference and acknowledge outstanding service on behalf of the division. Please be aware of the paper awards as you review submissions for the Annual Conference, and note the qualifications for the Outstanding Service and Lifetime Achievement award so that you can nominate your well-qualified colleagues.

Best Paper Award

The purpose of this award is to encourage and recognize industrial engineering educators for the preparation and presentation of outstanding papers at sessions sponsored by the IE Division during the ASEE Annual Conference. The award consists of a plaque of recognition for first place, and a letter of recognition for second.

Qualifications and Eligibility Requirements: To be eligible, papers should be presented at sessions sponsored by the IE Division and be accepted for publication in the conference proceedings. Selection among individual or team nominees will be primarily based upon the quality of the written paper and its relevance to IE education.

Nominations: Announcement of the award competition will be included in the call for papers for the IE Division. Papers eligible for this award must be peer reviewed and recommendations for consideration be submitted by reviewers or review coordinator (Program Chair). Special Nomination Instructions: The Award Selection Committee will select an award winner and a runner-up. The award winner will be automatically nominated for competition for PIC I Best Paper Award. In the event that the IE Division nominee shall receive the PIC I Award, the runner-up would be selected for the IE Best Paper Award.

New Industrial Engineering Educator Outstanding Paper Award

The purpose of the award is to encourage and recognize new industrial engineering educators for the preparation and presentation of outstanding papers at sessions sponsored by the IE Division during the ASEE Annual Conference. The recipient will be awarded \$250 per author up to \$500 per paper. Senior faculty are eligible for the award as co-authors, but not for the monetary award. The award also includes a plaque of recognition.

Qualifications and Eligibility Requirements: Papers should be submitted and presented by tenure-track faculty or faculty having less than seven years of full-time teaching experience. The paper should be presented at a session organized by the IE Division, and be accepted for publication in the conference proceedings. Selection will be primarily based upon the quality of the written paper and its relevance to IE education.

Nominations: Announcement of the award will be included in the call for papers for the IE Division. Questions regarding eligibility will be sent to any author whose abstract is accepted for presentation during the ASEE conference. Papers eligible for this award must be peer reviewed and recommendations for consideration be submitted by reviewers or review coordinator (Program Chair).

Distinguished Service Award

This award recognizes exemplary service to the Industrial Engineering Division and is presented to a member of the division who has provided significant service to the division. The award consists of an engraved plaque and can be received only once by any individual.

Award Criteria: While service as an officer in the division will be a common trait of recipients of this award, it is not routinely awarded to outgoing officers. Selection for this award will be based on:

- Current and continuing active membership in the Industrial Engineering Division. Exemplars of this would include (1) presenting papers at the annual conference, (2) attendance at the annual business meeting, and (3) participation in the annual banquet at the annual conference.
- Exemplary service to the Industrial Engineering Division over an extended period of time. Service to the division, both before and after service as an officer in the division, is required. Exemplars would be (1) service elsewhere in ASEE as a representative of the division, and/or (2) service to the division directly or indirectly.

Lifetime Achievement Award

This award recognizes an outstanding industrial engineering educator in recognition of the educator's contributions to the profession. The award, which recognizes lifetime achievement in industrial engineering education, is presented annually to an individual who has made significant contributions over an extended period of time to the discipline and the division, and who exemplifies the highest standards of the professorate in industrial engineering. The award consists of a suitably engraved plaque presented at the annual Joint IE/EMD/EED Division Dinner. The award can be received only once by any individual.

Award Criteria:

Current or past membership in the industrial engineering professorate, which is defined for this award as teaching in a university program that offers one or more degrees in industrial engineering.

- Exemplary service to the industrial engineering discipline. Exemplars would be (1) service as a chair, head, or program director of a major industrial engineering program; (2) service as editor, associate editor, reviewer of a peer-reviewed publication in the discipline; or (3) a national reputation for promoting the academic discipline of industrial engineering.
- Exemplary service to the Industrial Engineering Division of ASEE. Exemplars would be (1) service in a leadership role in ASEE or the Division, (2) active support of Division programs and initiatives, (3) service to the professorate in industrial engineering, and/or (4) service to the students in industrial engineering programs.
- A national reputation in industrial engineering through service to the practice of industrial engineering. Exemplars of this would be (1) membership and office in a relevant industrial engineering professional organization, (2) a publication record promoting industrial engineering practice, or (3) other service to industrial engineering practitioners.

HOW CAN YOU HELP THE IED?

As is the case with every Division in ASEE, the success of the IED depends on the participation of its members. We are hoping you can help us to achieve these goals in specific ways. If you'd like to help, or have ideas on how the IED can help you, talk to one of the officers at the *Division Mixer* at the conference or one of the technical sessions in San Antonio, or send a message to an officer. Contact information is at the end of the newsletter.

- Make certain you renew your IED membership.
As you renew your ASEE membership this year, make certain that you check the box for the IED. The nominal dues provide the money needed to appropriately recognize the award recipients, but even more importantly, your membership in the IED sends a signal to ASEE that the Division is important and deserving on continuing to receive four technical paper sessions at the conference.
- Make a special effort to encourage your colleagues to join ASEE, and the IED.
- Submit a paper to the Annual Conference
High quality submissions means high quality sessions, and a more valuable conference for everyone. Plan on submitting a paper to the next ASEE conference.
- Volunteer to review abstracts and papers submitted to the IED.
Everyone appreciates a thorough review of the papers they submit. Those reviews have to start somewhere. By offering a few hours of your time, you'll help to improve the quality of the IED program even if you aren't able to attend the conference.
- Identify a deserving recipient for IED awards.
Outstanding papers don't receive the recognition they deserve unless the reviewers are aware of the awards, and then identify the best papers for the awards. When reviewing papers, keep an eye out for outstanding work. At the same time, review the criteria for the Distinguished Service and Lifetime Achievement awards. If you can identify deserving colleagues, please tell the Division leadership.
- Attend IED sessions at the Annual Conference, and rate the sessions.
Among the factors that ASEE uses when allocating technical sessions are the attendance at the session and the evaluations of the quality of the sessions. By attending the sessions you will ensure the IED's place at future conferences; and you'll become a better IE educator.
- Represent IE at Regional ASEE Conferences
Regional conferences often offer forum for your work that is close to home and may be more convenient for you than the National Conference. Keep your eyes out for the Call for Papers from your local section and submit paper there. This may also prove to be an opportunity to find a future collaborator.
- Share your ideas with the board.
We're always looking for new ideas that can make the IED more valuable for the members. Your ideas are as good as anyone else's. Please share them with the board. If you don't know how to contact us, keep reading.

NEWSLETTER SUBMISSIONS WELCOME!

The most valuable newsletters are the ones that contain actual news submitted by the members. If you have something that you'd like to share with the IED, please forward the details to me at r_olson@sandiego.edu.

Anything that might be of interest to the members is welcome including:

- Calls for Papers for conferences related to engineering education including ASEE regional conferences
- Reminders of deadline submissions to agencies funding educational research
- Announcements of members receiving teaching awards or other related accolades
- Announcement of papers related to IE education

This is your newsletter. Please help to make it valuable. Thanks for your help—

IED BOARD MEMBER CONTACT INFORMATION

Until the end of the ASEE Conference, the IED officers are:

Awards/Past Division Chair:	Abhijit Gosavi (gosavia@mst.edu) (573)341-4624
Division Chair:	Lesley Strawderman (strawderman@ise.msstate.edu) (662) 325-7214
Program Chair:	Rick Olson (r_olson@sandiego.edu) (619) 260-6853
Program Chair-Elect:	Heidi Taboada (hataboada@utep.edu) (915) 747-5734
Secretary/Treasurer:	Leonardo Bedoya-Valencia (l.bedoyavalencia@colostate-pueblo.edu) (719) 549-2788
Directors:	Jane Fraser (Jane.Fraser@colostate-pueblo.edu) (719) 549-2036 Jessica Matson (matson@tntech.edu) (931) 372-3260 Kim LaScola Needy (kneedy@uark.edu) (479) 575-6029 Terri Lynch-Caris (tlynch@kettering.edu) (810) 762-9859
Newsletter Editor:	Rick Olson
Webmaster:	Lawrence Whitman

After the conference, the Division Chair, Program Chair, Program Chair-Elect and Secretary/Treasurer will move up one position. Who would you like to nominate for Secretary Treasurer?

The ASEE IED web site is at: http://ied.asee.org/ASEE_IED/Welcome.html