ASEE Chemical Engineering Division Newsletter



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more....

ELECTIONS

Page 2: Please vote for one candidate for Chair-Elect, one candidate for Secretary/Treasurer and one candidate for Director. Vote online at http://www.engr.uky.edu/survey/ index.php?sid=32697&lang=en

DIRECTOR EFFORTS

Page 7: Provide your feedback on a course initiation survey and on the 12 section level chemical engineering ASEE efforts.

AICHE EDUCATIONAL DIVISION

Page 8: A new Education Division was formed with AIChE to compliment ASEE's role. Learn more and join!

PROGRAM FOR THE 2009 MEETING

Page 9: Program overview for the Austin meeting is included. Thanks to Sundar Madihally for organizing and coordinating this excellent program!

A Message from the Chair

Hello ChE Division Members.

This latest issue of our Division's newsletter has a lot of information. First, this is the election issue. The Nomination Committee has identified two candidates for Chair-Elect, two candidates for Secretary/Treasurer and three candidates for Director. Details on the candidates for each office and how to vote are described within. Also, this issue will highlight the upcoming ASEE Annual Conference & Exposition to be held in Austin, Texas from June 14 – 17. Details on ChE Division sponsored sessions are contained within this newsletter and special thanks go out to Sundar Madihally (Program Chair) and Christine Schmidt (local liaison). Another important matter affecting our Division is enrollment. To this end, we have looked to communicate better with the 12 Sections of ASEE to learn about what (if anything) is happening in these Sections related to chemical engineering education. Adrienne Minerick, one of the Division Directors, is overseeing this activity and describes her efforts in the newsletter. There is a link to a very quick on-line survey and I ask for your participation.

In an effort to more efficiently catalog past Division activities, an Archives Committee has been established within our Division with Joseph Shaeiwitz agreeing to Chair this Committee (he is listed, formally, as the Division Historian). In another personnel move, David Miller has recently resigned as Chair of the Membership Committee and Allen Hersel has agreed to step into this role. I would like to thank David for his service to the Division in this capacity. Also in the newsletter is an update by our other Division Director, Margot Vigeant, referencing the restarting of National Chemical Engineering Course Surveys. This activity is a collaborative venture with the Education Division of AlChE. Speaking of which...our colleagues at AlChE have formed an Education Division and their Formation Committee Chairperson, David Silverstein, has an article within this newsletter updating this development. Interacting with the Education Division of AlChE will provide the ChE Division of ASEE access to many faculty who have limited (or no) knowledge of ASEE.

Last, but certainly not least, I would like to formally thank all the sponsors of our Division awards. Chemstations (Division Lectureship), Eastman Chemical (Corcoran), the CACHE Corporation (Excellence in Computing) and Chemical Engineering Education (Fahien) are generous in support of this important Division activity.

I look forward to seeing you in Austin.

Dr. Donald P. Visco, Jr. Tennessee Tech



VOLUME 11, NUMBER 1 SPRING 2009

CHEMICAL ENGINEERING DIVISION ELECTION 2009

TO VOTE:

- Access the ballot online http://www.engr.uky.edu/survey/index.php?sid=32697&lang=en
- OR use the attached pdf version of the ballot and fax to 270-534-6292
- * Email David Silverstein at silverdl@engr.ukv.edu with any problems.

<u>Choose one for Division Chair-Elect:</u> Sundar Madihally or Margot Vigeant Choose one for Director:
Taryn Bayles, Tamara Floyd Smith, or
Lale Yurttas

<u>Choose one for Secretary-Treasurer:</u> Laura Ford or Milo Koretsky

Votes must be received by May 15th, 2009

Position: Division Chair

This person would serve one year as Chair-Elect and then serve as Chair in 2010-2011.

- I) Sundar Madihally
- 2) Margot Vigeant

Sundar Madihally

School of Chemical Engineering Oklahoma State University

I am greatly honored to be nominated for the Chemical Engineering Division Chair of ASEE. My first exposure to ASEE was through the 2002 summer school which has significantly enriched my personal career. Recognizing the importance of effective teaching, I have made a significant personal effort to be an active participant in educational research. I have regularly attended ASEE annual conferences, serving as chemical engineering division program chair for the 2009 annual conference, moderating sessions, reviewing papers for ASEE proceedings



and Chemical Engineering Education (CEE) journal. I have published four articles in CEE and six papers in the ASEE proceedings. Stimulating ASEE experiences led me to participate in educational programs of AIChE, where I have served as the Chair/co-chair of the Meet the Faculty Candidates poster session for the last five years. The objective of this session is to help prospective faculty candidates interact with search committees.

As a division chair, I would like to pursue two initiatives with the cooperation of ASEE members and the ASEE executive committee. First, develop a repository containing training material from the summer school for new faculty members. Training materials could be offered through the chemical engineering division web portal. Second, broaden participation from the research community, who generally lack awareness about ASEE. Organizing sessions at the national conference and regional conferences relevant to research community could help promote awareness. The sessions could focus on topics such as management of research groups, mentoring

Sundar Madihally, Chair-Elect continued

graduate students, time management, best teaching practices and career development from invited faculty members. I believe ASEE can play a significant role in connecting research and education.

I received BE degree in Chemical Engineering from Bangalore University, India and a PhD from Wayne State University in Chemical Engineering. I was a research fellow at Massachusetts General Hospital, Harvard Medical School and Shriners Hospital for Children. I am currently an Associate Professor at OSU. In 2008, I received the ASEE best poster award. In 2006, Oklahoma State University (OSU) chemical engineering students elected me as the best teacher and in 2005, I received the Outstanding Advisor Award from the OSU President for services to the Indian Student Association. I have been the faculty advisor to the OSU AICHE Student chapter for the past four years, which recently received its 10th consecutive outstanding rating. I have also enjoyed mentoring fourteen graduate students and thirty undergraduate students at OSU. Some of the students have received various awards at the regional and national competitions. I am also involved in summer academies for high school students in Oklahoma where students are introduced to basics of chemical and biomedical engineering. I am partnering with another faculty member at OSU to mentor high school teachers on research education during summer recess.

I am committed to serving ASEE and look forward to continually serving in ASEE!

Chair-Elect Candidates cont...

- I) Sundar Madihally
- 2) Margot Vigeant

Margot Vigeant

Department of Chemical Engineering
Bucknell University

Hello Colleagues and Friends! I appreciate this opportunity to run for Chair-Elect for the ASEE Chemical Engineering Division. I am an associate professor of chemical engineering at Bucknell University, and graduated from Cornell (BS '94) and the University of Virginia (MS '97, PhD '99). In teaching and educational research, I focus on thermodynamics education as well as improving the first-year engineering experience. Within ASEE, I have held the role of Director for the CHED, and also chaired and presented in numerous sessions. At the moment, I am stretching my educational comfort zone by proposing (with colleagues from



Bucknell and Lafayette College) a summer engineering course to be held in Brazil in summer of 2010.

The collective dedication of our division membership to the enterprise of creating the best possible chemical engineering education for our students is inspiring. I see the ultimate goal of ASEE CHED as fostering this work through opportunities for professional development, collaboration, conversation, and recognition. With budget troubles impacting everyone, it is essential we make ASEE membership useful and relevant to the widest possible base of Chemical Engineers in order to maintain our programming. To do so, I view collaboration with CHED in ASEE and the new Educational Division of AIChE as critical. Together, we can broaden our membership base and thereby work to improve the educational experience of Chemical Engineering students nationwide. I hope through co-sponsoring sessions and workshops, as well as through other novel ideas, we can introduce AIChE members to ASEE. I would also like to continue the work of my predecessors, for example working to reach-out to ASEE regional conferences.

Position: Secretary/Treasurer

This person would serve as a member of the executive board for a term of 2 years.

- I) Laura Ford
 - 2) Milo Koretsky

Laura Ford

Department of Chemical Engineering
University of Tulsa

I earned my BS in chemical engineering at Oklahoma State University and my MS and PhD in chemical engineering at the University of Illinois at Urbana-Champaign. I joined the faculty at the University of Tulsa in 1999 and ASEE in 2003. My interests in engineering education began at Illinois, though, where I took a course on teaching in the university setting and completed a Graduate Teacher Certificate. I am interested in K-12 outreach and involvement of students in projects such as the Chem-E-Car Competition and Engineers Without Borders. I've presented papers at ASEE national and sectional conferences, and I was the conference co-chair for the Midwest sectional meeting in Fall 2008. I look forward to this opportunity to become more involved in ASEE's Chemical Engineering Division.



Milo Koretsky

Department of Chemical Engineering
Oregon State University

Milo Koretsky is an Associate Professor of Chemical Engineering at Oregon State University. He currently has research activity in areas related to thin film materials processing and engineering education. He is interested in integrating technology into effective educational practices and in promoting the use of higher level cognitive skills in engineering problem solving. Dr. Koretsky is a six-time Intel Faculty Fellow and has won awards for his work in engineering education at the university and national levels.



Position: Director

This person would serve as an advisor to the executive board for a term of 2 years.

- I) Taryn Bayles
- 2) Tamara Floyd Smith
- 3) Lale Yurttas

Taryn Bayles

Department of Chemical & Biochemical Engineering University of Maryland, Baltimore County

I would consider it an honor and privilege to serve as one of the Chemical Engineering Division Directors of ASEE. I was first introduced to ASEE in 2002 when I had the opportunity to attend CED Summer School in Boulder, CO. I thoroughly enjoyed this experience as I learned innovative ways to teach traditional classes and was inspired by sharing ideas with so many colleagues across the county. Since then, I have been actively involved with ASEE in the CHE, ERM,



Taryn Bayles, Director continued

First-Year Programs, K-12 & Pre-College Engineering and Women in Engineering divisions. I have reviewed papers, chaired sessions, and served as an ERM Apprentice Faculty Grant reviewer (was a 2004 recipient); as well as being the author or co-author of 20 papers presented in these divisions over the last six years. I was delighted to work with Dr. Karen High (Oklahoma State University) in delivering a 2007 ASEE Summer School session on Pre-College Activities.

I am currently a Professor of the Practice of Chemical Engineering (non-tenure track) in the Chemical & Biochemical Engineering Department at the University of Maryland Baltimore County (UMBC) and serve as the Undergraduate Program Director. I received my BSChE from NMSU; and MSChE, MSPetE and PhD in Chemical Engineering from the University of Pittsburgh. I have spent ten years working in industry and incorporate my industrial experience by bringing practical examples and interactive learning to help students understand fundamental engineering principles while teaching at UNR, Pitt, UMCP and UMBC. I have had the opportunity to teach every core course in Chemical Engineering (except for kinetics). At UMBC, I have revamped the freshman Introduction to Engineering Design course from a traditional lecture and design-on-paper course, to an active learning lecture and hands-on engineering design course which emphasizes teamwork and communication skills.

My current research focuses on Engineering Education and Outreach. The goal of this research is to increase awareness and interest in pursuing engineering as a career, as well as to understand what factors help students be successful once they have chosen engineering as a major. In the last six years, I am (or have been) the PI or co-PI on six NSF funded grants totaling \$5.6M. I am the co-author of the INSPIRES (INcreasing Student Participation, Interest and Recruitment in Engineering & Science) curriculum which introduces high school students to engineering design through real-hands-on experiences and inquiry-based learning with real world engineering design challenges. This curriculum targets the ITEA standards as well as national standards in science and mathematics. I am also an Affiliate Professor for Project Lead the Way, and have been training high school teachers in Principles of Engineering for the last five years.

Director Candidates cont...

- I) Taryn Bayles
- 2) Tamara Floyd Smith
- 3) Lale Yurttas

Tamara Floyd Smith

Department of Chemical Engineering
Tuskegee University

I bring you greetings from Tuskegee University and gratitude for the honor of being considered for the position of director in the Chemical Engineering Division of ASEE. I am an associate professor of chemical engineering at Tuskegee University in Tuskegee, AL. I received my B.S. in chemical engineering from Tuskegee University in 1996. I completed my graduate work at the Massachusetts Institute of Technology in Cambridge, MA where I earned a M.S.C.E.P. in 1998 and completed a Ph.D. in chemical engineering in 2001. Upon completing my Ph.D., I accepted a position as a member of technical staff at Lucent Technologies, Bell



Labs (now OFS) in Norcross, GA in the optical fiber research and development division where I worked for two years. In 2003, I accepted a position as an assistant professor of chemical engineering at Tuskegee University and was promoted to associate professor in 2007. I also became a licensed professional engineer in 2007.

In addition to research interests in the area of microfluidics, I have a commitment to chemical engineering education and education in general. I have been responsible for new course development and innovation in the

Tamara Floyd Smith, Director continued

chemical engineering department at Tuskegee University. For example, I developed the department's first bioprocess engineering course and also developed a nanoscience course for non-science majors. I was also responsible for bringing Matlab to our department through a curriculum grant and am currently chairperson of the university academic affairs committee. I have been a member of AIChE since 1993 and ASEE since 2004. I am active in the educational division of AIChE serving as co-chair of several sessions at national conferences, serving on the committee for the AIChE Education Group centennial and also helping to create the AIChE division. I am also active in ASEE having previously served as a poster session judge, paper reviewer and presenter. Additionally, my commitment to chemical engineering education has led to one publication in Chemical Engineering Education and current submissions to both Chemical Engineering Education and the Journal of Materials Education.

More importantly, however, I am a chemical engineering educator with administrative and organizational skills that would serve the ChE division of ASEE well. I would be honored to serve you and look forward to the opportunity!

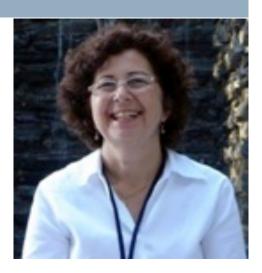
Director Candidates cont...

- I) Taryn Bayles
- 2) Tamara Floyd Smith
- 3) Lale Yurttas

Lale Yurttas

Department of Chemical Engineering
Texas A&M University

I am honored to be considered for the Director position in the ChE Division of ASEE. Over the years, ASEE has provided me with a platform from which to participate in activities that I enjoy and have grown to care very much about. Through ASEE, I have also gained invaluable knowledge and interacted with others who share the same interests and goals. Therefore, I welcome the opportunity to contribute service to and play a bigger role in the ChE division and the ASEE toward accomplishing our shared goal of advancing engineering education. I am dedicated to engineering education and research, and strive continually in my own career to be an effective educator.



I have received BS, MS, and PhD degrees in Chemical engineering. I received my PhD degree in Chemical Engineering from Texas A&M University 1988, and was one of first women to be awarded a PhD from this department. I then worked as a research associate in the Engineering and Biosciences Research Center at Texas A&M. I am currently a senior lecturer in the Chemical Engineering Department and serve as an Assistant Department Head for Upper Division. I also chair the Departmental ABET Committee. As a long-time member of my department, I have seen the evolution of Chemical Engineering curricula and developed an interest, early on, in optimizing teaching methods to be more inclusive and effective. As a result, I now have 12 years of experience in engineering education, curriculum development, and assessment. I serve as an academic advisor to upper level chemical engineering students and as an advisor to the Student Chapter of American Institute of Chemical Engineers. I enjoy interacting with students and have taught chemical engineering courses at all levels from freshmen to senior. My favorite course to teach is thermodynamics. As a co-investigator on an NSF Departmental Level Reform grant project, I have incorporated service learning into chemical engineering curriculum. I have also started Engineering Projects in Community Service Program (EPICS, Purdue University) at the college level at Texas A&M. As AIChE Chapter Advisor, I have developed a Chem-E-Car Design course, which is offered to freshmen through seniors to introduce students early in their education to engineering design, safety, teaming, and communication. Since the start of the program, Chem-E-Car teams have won three regional competitions and a third place in the 2008 National Competition. My current interests are teaching and learning in chemical engineering; undergraduate curriculum reform, development, and assessment; incorporation of environmental sustainability; service learning; and online web modules for instruction.

NEW TEACHING ASSIGNMENT SURVEY

Effort led by Margot Vigeant, Director



When given a new teaching assignment, what sort of research do you do to prepare? Typical responses to an informal survey of professors in their first or second year of teaching were:

- 1) Googled the topic to see what other people do
- 2) Looked at notes / text from the same course as taught by a previous instructor
- 3) Looked at notes / text from the same course when taken in undergrad / grad school.

While this is a good start, not all of these sources are available to every new instructor. Additionally, the information available in this way is far from comprehensive. Some of relevant information may be available from educational journals or conference proceedings, but this is generally only for courses or parts of courses that are significantly innovative. So we are left with the question: If you want to know what topics are typically taught and what methods are typically used to teach and assess those topics, where can you look?

Between the years of 1975 and 1992 the answer to this question was Chemical Engineering Course Survey. This survey, distributed and compiled by the AIChE Educational Projects Committee, queried every Chemical Engineering department in the US and Canada about the content and educational approach for each of the core chemical engineering courses. After a hiatus of about 17 years, we are happy to report that the survey is coming back! As an initiative of the newly formed Education Division within AIChE, David Silverstein and Donald Woods are reintroducing the course survey. Soon, we will once again have a standard reference point for the development of new courses. Look for the first survey later this year, examining the topic of First-Year Courses in Chemical Engineering.

SECTION-LEVEL COMMUNICATION

Effort led by Adrienne Minerick, Director & Allen Hersel, Membership Chair



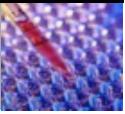
This effort is focused at facilitating contact and communication between the 12 regional sections of ASEE and the national chemical engineering community. Many chemical engineering educators are active in their regional communities - increasing dialogue between this level and our membership could offer benefits for the entire community. Please participate in a survey to help us learn about your attitudes toward regional chemical engineering ASEE as well as activities in your regional ASEE. Feel free to forward the survey link to any colleagues who may be interested.

http://www.che.msstate.edu/research/MDERL/ASEE/

If you have any additional comments or suggestions for this effort, please feel free to email Adrienne Minerick at minerick@che.msstate.edu

AICHE FORMS EDUCATION DIVISION

Effort led by David Silverstein



After months of work by a committee including many officers and members of the ASEE ChED, AIChE has given probationary status to the Education Division (EDU). Built upon the foundation of the Group 4 (Education) Programming Group, the Education Division seeks to:

- Provide the focal point for AIChE members with interests in educational methods and their assessment, the scholarship of education including both practice and theory as well as outreach activities regarding chemical engineering education.
- Develop a relevant technical program in education for meetings within the assigned programming areas through discussion with the Committees of the Institute
- Encourage chemical engineering educators to strengthen their own learning in the field of engineering education and on the development of appropriate curricular material focused for the ever-diversifying field of chemical engineering.
- Recognize educational achievements of AIChE members through awards and honors.
- Provide a high-profile home for programming and activities related to educational research and teaching within the chemical engineering community performed by Institute members.
- Encourage, through programming and other activities, the training of chemical engineering graduate students in chemical engineering educational methods

The Division is already hard at work, developing new programs for professional development of new and prospective faculty; conducting annual multi-national surveys of how chemical engineering courses are taught; and working with the ASEE ChED to find ways to collaborate on achieving our common goal of improving the quality of chemical engineering education. If you would like to comment on or discuss the formation, please contact David Silverstein at SilverDL@engr.uky.edu or (270) 534-3132.

A membership in the EduDiv is a natural complement to membership in the ChED. If you're a member of AIChE, please consider joining us when you renew your membership for 2010. Or better yet, go to http://www.aiche.org/DivisionsForums/ViewAll/EDU.aspx and join the Division today!

2009 AIChE Call For Education Papers

The AIChE Education Programming Group is following up on last year's Centennial Education Topical Conference with another slate of excellent programming. This year's program also marks the first organized under the AIChE's newest division, the Education Division. Highlights of education programming this year include:

- A session on research in engineering education co-sponsored by the ASEE ChED. This session will feature extended presentations on those submissions selected by a peer review panel as the best in question-driven educational research.
- A special expanded track on career development for new and prospective faculty. This includes Tim Anderson's Career Development workshop, the "Meet the Faculty Candidate" poster session, a primer workshop by Phil Wankat on "How to Teach", a session on "Education and the NSF: CAREER, CCLI, and Beyond", and a cosponsored session with the Materials Division on "Accessing Facilities at National Centers, Laboratories, and Synchrotron Radiation Sources", all in addition to the two NSF Workshops and New Faculty Forum.
- Invited sessions on key topics of interest to chemical engineering educators on ABET assessment and the NAE's Grand Challenges
- Workshops by Tom Marlin on troubleshooting techniques and by Chip Howat on Teaching Process Safety (held in sequence with a regular session on "Best Practices in Teaching Process Safety")
- The 2nd Annual Education Division banquet
- And as always, session featuring educators like you sharing your innovations, ideas, research, projects, and experiences in chemical engineering education during sessions like "Quick, In-Class Demonstrations", "Global Programs in ChE", "Interactions with K-12", and the ever-popular Free Forum.

You can submit proposals to present at http://aiche.confex.com/aiche/2009/cfp.cgi. The deadline for submissions is Monday, May 11th, 11:59 pm.

Meeting Schedule

Monday June 15, 2009

[1113] CHE EXECUTIVE COMMITTEE MEETING 7:00 a.m.-8:15 a.m.

Moderator(s): Donald Visco Tennessee Technological University, Austin Convention Center, Room 4C

[1313] NEW TRENDS IN CHE EDUCATION I 10:30 a.m. -Noon

Moderator(s): Karen High Oklahoma State University, Margot Vigeant Bucknell University Austin Convention Center, Room 9C

- 1 AC 2009-29: IDEAS TO CONSIDER FOR NEW CHEMICAL ENGINEERING EDUCATORS: PART 2 (COURSES OFFERED LATER IN THE CURRICULUM), Jason Keith Michigan Technological University, David Silverstein University of Kentucky, Donald Visco Tennessee Technological University
- 2 AC 2009-116: THE EFFECT OF IMPROVEMENTS IN SOPHOMORE DESIGN INSTRUCTION ON PERFORMANCE IN SUBSEQUENT COURSE OFFERINGS, Kevin Dahm, William Riddell Rowan University
- 3 AC 2009-2331: STUDENTS CREATE PROBLEMS FOR TEACHING AND LEARNING, Claire Komives San Jose State University, Erik Fernandez University of Virginia
- 4 AC 2009-1202: SERVICE-LEARNING AND SUSTAINABILITY: STRIVING FOR A BETTER FUTURE, Jennifer Christensen Texas A&M University, Lale Yurttas Texas A&M University
- 5 AC 2009-1936: TEACHING MATERIAL AND ENERGY BALANCES TO FIRST-YEAR STUDENTS USING COOPERATIVE TEAM-BASED PROJECTS AND LABS, Michael Hanyak, Timothy Raymond Bucknell University
- 6 AC 2009-2241: CROSS-CURRICULAR TOPIC INVENTORY: STRATEGIC TOPIC PLACEMENT AND RESULTING STUDENT ACCOUNTABILITY, Adrienne Minerick, Keisha Walters, Bill Elmore Mississippi State University, Rebecca Toghiani, Priscilla Hill, Rafael Hernandez, Hossein Toghiani, Todd French Mississippi State University

[1413] NEW TRENDS IN CHE EDUCATION II- 12:30-2:00 p.m.

Moderator(s): Marina Miletic University of Illinois at Urbana-Champaign, J.Patrick Abulencia Manhattan College, Austin Convention Center, Room 7

- 1. AC 2009-2283: A DEGREE-PROJECT APPROACH TO ENGINEERING EDUCATION, Gisele Ragusa, Ted Lee University of Southern California
- 2 AC 2009-269: HYDROGEN CURRICULUM AT MICHIGAN TECHNOLOGICAL UNIVERSITY, Jason Keith Daniel Crowl, David Caspary, Jeffrey Allen, Dennis Meng, Jeff Naber, Abhijit Mukherjee, John Lukowski, Jay Meldrum, Barry Solomon Michigan Technological University
- 3 AC 2009-1211: A NOVEL PARADIGM FOR TRAINING GRADUATE STUDENTS IN SOFT SKILLS, Sundararajan Madihally Oklahoma State University
- 4 AC 2009-2508: ONLINE SOCIAL NETWORKING: A MECHANISM TO ACCLIMATIZE INCOMING FRESHMEN AND FACILITATE DEPARTMENT COMMUNICATION, J.Patrick Abulencia Manhattan College
- 5 AC 2009-2320: ALIGNING ASSESSMENT TOOLS WITH COURSE SUBJECT AND GOALS, Paul Golter, Bernard Van Wie, Gary Brown, Dave Thiessen, Nurdan Yurt Washington State University, Baba Abdul Washington State University

[1513] CHEMSTATION LECTURESHIP AWARD AND PRESENTATION 2:15 p.m.-4:00 p.m

Moderator(s): Donald Visco Tennessee Technological University

Hilton Austin Hotel, Room Salon B

This year's winner is Dr. Antonios Mikos from Rice University. The title of the presentation is "Building a Better Biomaterial"

Meeting Schedule

Tuesday June 16, 2009

[2113] CHE DEPARTMENT CHAIR MEETING 7:00 a.m.-8:15 a.m

Moderator(s): Donald Visco Tennessee Technological University Austin Convention Center, Room 5A

[2313] CONTEMPORARY ISSUES IN CHE EDUCATION 10:30 a.m. -Noon

Moderator(s): Randy Lewis Brigham Young University, Valerie Young Ohio University-Athens Austin Convention Center, Room 12A

- AC 2009-852: THE ROLE OF CHEMICAL ENGINEERING IN ENGINEERING EDUCATION RESEARCH, Phillip Wankat Purdue University
- 2 AC 2009-1716: SABBATICAL AND ACADEMIC LEAVES AN INVESTMENT IN YOUR FUTURE!, William Krantz University of Colorado Boulder
- 3 AC 2009-1567: ENHANCING INTERACTIONS BETWEEN ENGINEERING PROGRAMS AND THE K-12 SYSTEM, Richard Zollars, Donald Orlich Washington State University
- 4 AC 2009-1522: LONGITUDINAL CONTACT WITH INDIVIDUAL STUDENTS AS A ROUTE OF ENCOURAGING SELF-DETERMINATION IN CHEMICAL ENGINEERS, Paul Blowers University of Arizona
- 5 AC 2009-1257: IMPACT OF INTEGRATION OF UNDERGRADUATE STUDENTS IN AN ENGINEERING RESEARCH LABORATORY: A CASE STUDY, Adam Ekenseair, Carolyn Bayer, Margaret Phillips University of Texas, Austin

[2413] CHE DIVISION BUSINESS MEETING 12:30 p.m.-2:00 p.m.

Moderator(s): Donald Visco Tennessee Technological University Austin Convention Center, Room 5C

[2537] e-LEARNING IN CHEMICAL ENGINEERING 2:15-4:00 p.m.

Moderator(s): Jim Henry University of Tennessee-Chattanooga, Allen Hersel Trine University Austin Convention Center, Room 15

- 1 AC 2009-1848: BLENDING ONLINE LEARNING WITH A TRADITIONAL COURSE, Christi Patton Luks University of Tulsa
- 2 AC 2009-1312: WEB BASED CLASSES FOR ENHANCEMENT OF PRELABORATORY LECTURES, Tiffany Hesser, University of New Haven
- 3 AC 2009-493: IMPROVING STUDENT LEARNING BY ENCOURAGING REFLECTION THROUGH CLASS WIKIS, David Silverstein, University of Kentucky
- 4 AC 2009-1529: ENHANCING STUDENT LEARNING VIA THE USE OF VISUALLY ORIENTED SOFTWARE MODULES, Richard Zollars Christopher Hundhausen, Pawan Agrawal, Washington State University
- 5 AC 2009-1314: SIMULATOR FOR TEACHING PROCESS HEATER OPERATING PRINCIPLES, Charles Baukal, Wes Bussman, John Zink Institute
- 6 AC 2009-2140: NON-ITERATIVE DESIGN OF MULTIPLE EFFECT EVAPORATORS USING EXCEL ADD-INS, Jeremy VanAntwerp, Aubrey Sykes, April Xiuhau Si, Calvin College

[2713] CHE DIVISION AWARDS DINNER 6:30 p.m.-8:00 p.m.

Moderator(s): Christine Schmidt University of Texas at Austin, Donald Visco Tennessee Technological University. Dinner will be at Iron Cactus (offsite), 606 Trinity Street, Austin, TX 78701 in the heart of historic 6th Street.

Meeting Schedule

Wednesday June 17, 2009

[3413] INNOVATIONS IN THE CHE LABORATORY INSTRUCTIONS 12:30-2:00 p.m.

Moderator(s): Claire Komives San Jose State University, Michael Prudich Ohio University-Athens, Austin Convention Center, Room 6A

- 1 AC 2009-1438: NOVEL OPEN-ENDED LIQUID-LIQUID EXTRACTION MODULE FOR THE CHEMICAL ENGINEERING LABORATORY, Marvi Matos, Danilo Pozzo, University of Washington
- 2 AC 2009-2123: UNDERGRADUATE VALIDATION OF CUTTING EDGE CALORIMETRY OF AN INDUSTRIAL AFFILIATE'S NOVEL ENERGY SOURCE, Peter Mark Jansson, Ulrich Schwabe, Nathaniel Downes, Patrick Hoffman, Matthew Abdallah, Rowan University
- 3 AC 2009-1609: DESKTOP EXPERIMENT MODULE: HEAT TRANSFER, Adrienne Minerick, Mississippi State University
- 4 AC 2009-1273: UTILIZING DIVERSITY IN A BIOPROCESS
 ENGINEERING COURSE FOR A GROUP PROJECT TO DESIGN AND
 CHARACTERIZE A BIOREACTOR TO CONVERT CELLOBIOSE TO
 GLUCOSE, Heather Gappa-Fahlenkamp, Mark Wilkins Oklahoma State
 University
- 5 AC 2009-1122: AN EVALUATION OF PEDAGOGICAL GAINS IN A FLUID FLOW CLASS WHEN USING DESKTOP LEARNING MODULES IN AN AFRICAN UNIVERSITY, Baba Abdul, Paul Golter, Jerome Babauta, Bernard Van Wie, Gary Brown, Washington State University, Emmanuel Shide ABU Zaria, Nigeria, Raymond Bako ABU Zaria, Nigeria
- 6 AC 2009-1188: CLOSING THE GAP BETWEEN PROCESS CONTROL THEORY (CLASS ROOM) AND PRACTICE (LABORATORY), Carlos Velazquez, Nelson Cardona University of Puerto Rico at Mayaguez, Edwin Velazquez, Automation Technologies



Register at: http://www.asee.org/conferences/annual/2009/

CHEMICAL ENGINEERING DIVISION LEADERSHIP

Don Visco

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Randy Lewis

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David Silverstein

Secretary / Treasurer silverdl@engr.uky.edu

Margot Vigeant

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Adrienne Minerick

Director, Newsletter Editor minerick@che.msstate.edu

Allen Hersel

Membership Chair hersela@trine.edu

Valerie Young

Co-Awards Chair Past Division Chair youngv@ohio.edu

Jason Keith

Co-awards Chair jmkeith@mtu.edu

Joe Shaeiwitz

Division Historian Joseph.Shaeiwitz@mail.wvu.edu

John P. O'Connell

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2009 ASEE ChED Election
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