

The ASEE Chemical Engineering Division Newsletter

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Spring 2007

A Message from the Chair



Dr. Polly Piergiovanni
Lafayette College

Greetings!

The spring semester is underway, and I am in the midst of trying new projects I heard about at the AIChE education sessions in Chicago. How to use the ideas from “Sneaking into Chemical Engineering” in my courses is a challenge, but I’ve shared them with colleagues, and the ideas will be used among many faculty! In any case, I returned energized to try new things.

Looking forward –

First, with this issue, we list the nominees for our new officers for Chair Elect, Secretary / Treasurer and Director. Please read their biographies and VOTE! They will be leading the ChE Division of ASEE for the next one or two years.

Also, the ASEE meeting in Honolulu is coming soon. With the many papers

submitted, we expect a large crowd. Please attend the sessions! I know the beach beckons, but there will be many great ideas presented – ones you won’t want to miss. We also have a wonderful dinner planned at Tiki’s Gill and Bar where we will have great food and fellowship along with a wonderful view.

The Chemical Engineering Summer School is also taking place this summer, and your department chair should have received information about nominating faculty from your department to attend. This week is highly recommended for beginning faculty, and I encourage every department to send someone.

At the recent AIChE meeting and last year’s ASEE meeting, I met several people involved with CASEE. The Center for the Advancement of Scholarship on Engineering Education (CASEE) is dedicated to “fostering a climate of continuous improvement in engineering education through the promotion and support of rigorous research on all aspects of the engineering education system.” Engineering schools are beginning to see the value of pedagogical research. I encourage you to become involved. An easy way to do this is to support the Chemical Engineering Educator’s Forum (aseeched.org) by posting interesting assignments and discussions you have had in your classes.

See you in Honolulu! Please attend the sessions!

The ASEE Chemical Engineering Division Election 2007

How To Vote: Send e-mail to PiergioP@lafayette.edu with your selections. Please include your name to assist in verifying your division membership. Use "ChED Election" as your subject line.

Choose for Division Chair:
Marina Miletic or Don Visco

Choose for Director:
Adrienne Minerick or Margot Vigeant

Choose for Secretary-Treasurer
David Silverstein or write-in

**Votes must be received
by May 31st**

Division Chair



Marina Miletic
University of Illinois at Urbana-Champaign

Marina Miletic has a Ph.D. in Chemical Engineering from the University of Michigan. While there, she was actively involved in the student chapter of ASEE, planned numerous pedagogical events, and served as

Treasurer for three years. Marina volunteered in organizing the 2002 Summer School and will be involved in helping with the upcoming Summer School. She was also the Local Arrangements Chair for the ASEE meeting in Chicago. She has given numerous talks at AIChE on pedagogy and has been teaching at the University of Illinois as a Lecturer since Fall 2003.



Don Visco
Tennessee Technological University

Hi! My name is Don Visco and I am an Associate Professor and the Undergraduate Program Coordinator in the Department of Chemical Engineering at Tennessee Technological University. I am finishing my eighth year at Tennessee Tech and I look forward to the opportunity to continue to serve the Chemical Engineering Division of ASEE.

I have ample leadership experience associated with professional organizations both on and off campus. On-campus I serve as the ASEE Campus Representative and facilitate the Brown Bag Lunch Seminar Series. Additionally, I have served as President-Elect, President and Past-President of our Sigma Xi chapter. Regionally, I was the founder and Chair of the Chemical Engineering Division of the SE Section of ASEE. I currently serve as Secretary of the Programs Unit in this organization. On the National level, I am involved in area 4a (Education) in AIChE and currently serve as a co-Chair of the Awards Committee for the ChE Division of ASEE. Additionally, I have previously been the Program Chair and Division Chair for the New Engineering Educators Division of ASEE.

With regards to the position of Chair-Elect, I have several goals associated with this opportunity, three of which I will mention here. First, I would like to try and raise the number of applicants for the various division awards. This, I think, is feasible through proper mentoring and identification of qualified candidates. Second, I would like to try to get more ChE Division members to attend the regional and national conferences. There are useful internet surveying tools that can be used to help gauge what would be attractive for potential attendees. Third, improved coordination with the various ASEE sections which have Chemical Engineering divisions could be an outlet to improve both the number of submissions and attendance at the national conference.

On a personal note, I have always been interested in education and my love of teaching started as an undergraduate student where I worked for seven semesters in the Math Place tutoring students with “math anxiety” on algebra and geometry topics. As a graduate student, I formed a student chapter of ASEE and subsequently authored a paper (in the Journal of Engineering Education) suggesting a new, inclusive model for ASEE Student Chapters in the future. I have given twelve education-related presentations at sectional and national meetings of ASEE and AIChE as well as have published 7 peer-reviewed educational articles. I have taught classes at the Freshman level all the way through the Ph. D. level; 15 unique classes in all.

Among other honors, I have been awarded the 2006 Ray E. Fahien Award from this division last year and was awarded a PECASE Award in 2004. I hope to be given the chance to serve my division in the capacity of Chair-Elect and, eventually, Division Chair. The ChE Division is truly a great group of people and I have learned a tremendous amount through my involvement in ASEE. I am truly honored to be nominated.

Division Director



Adrienne Minerick
Mississippi State University

Adrienne Minerick is an Assistant Professor of Chemical Engineering at Mississippi State University. She received her M.S. and Ph.D. from the University of Notre Dame and B.S. from Michigan Technological University. Since joining MSU, Dr. Minerick has taught the graduate Chemical Engineering Math, Process Controls, Introduction to Chemical Engineering Freshman Seminar, and Heat Transfer Courses. She is also the faculty advisor for MSU's chapter of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE).

Adrienne is an active mentor of undergraduate researchers and serves as co-PI on an NSF REU site, “Chemistry – Chemical Engineering: The Bonds Between Us”. Her undergraduate students have won four ASEE - SE poster presentation awards from 2004 to 2006, and have also presented and won awards at national conferences. She has published 9 education-focused papers in the ASEE proceedings since joining ASEE in 2003. Adrienne has served as the Treasurer, Vice-Chair, Programming Chair, and Division Chair of the New Engineering Educator's Division and was

elected in 2006 as Member at Large in the Women in Engineering Division of ASEE.

Dr. Minerick recently earned a 2007 NSF CAREER award and serves as PI on other NSF and DOE funded projects. Her research interests include electrokinetics, predominantly dielectrophoretic characterizations of cells, and the development of biomedical microdevices. Research within her Medical micro-Device Engineering Research Laboratory (M.D. – ERL) also inspires the development of Desktop Experiment Modules (DEMOs) for use in undergraduate chemical engineering classrooms or as outreach activities in area schools.



Margot Vigeant
Bucknell University

Margot Vigeant is an Associate Professor of Chemical Engineering at Bucknell University. She has been active in the area chemical engineering education, within both ASEE and AIChE, for seven years, authoring or co-authoring 19 educational presentations over that time, including eight conference papers. Margot has also helped present workshops on active, collaborative, and problem-based learning at both ASEE and Bucknell's "Engineering Engineering Education" summer workshops. Margot's current interests in chemical engineering education include chemical engineering in the first year and enhancement of conceptual learning in thermodynamics and heat transfer (for which she shares an NSF grant).

Margot lives in Lewisburg, PA, with her husband, her five- and two-year old sons, and a frog named Penelope.

Secretary-Treasurer



David L. Silverstein
University of Kentucky

David L. Silverstein is currently an Associate Professor of Chemical and Materials Engineering at the University of Kentucky College Of Engineering Extended Campus Programs in Paducah. He received his B.S.Ch.E. from the University of Alabama in Tuscaloosa, Alabama; his M.S. and Ph.D in Chemical Engineering from Vanderbilt University in Nashville, Tennessee; and has been a registered P.E. since 2002.

In addition to teaching and research in interfacial phenomena, Dr. Silverstein is developing a computer framework for applying learning styles to a multimedia computer-based supplement to engineering courses.

Silverstein is the 2004 recipient of the William H. Corcoran Award for the most outstanding paper published in Chemical Engineering Education during 2003. He has served as Membership Chair for the Chemical Engineering Division of ASEE and is the current secretary-treasurer for the division.

What a great idea!



Come up with a great idea that enhanced one of your classes that others might use? Post your innovation at the ChE Educator's Forum at <http://www.asee-ched.org/forum> today!

**2007 ASEE National Meeting
ChE DIVISION SCHEDULE
Randy S. Lewis, Program Chair**

Sunday, June 24th

9:30 Session 0213 Workshop: Recent Advances in Numerical Problem Solving by Integrating Software- Polymath, Excel, and MATLAB

12:00 Session 0413 Workshop: High Performance Learning Environments (Hi-PeLe)

Monday, June 25th

7:00 AM Session 1113: ChE: Executive Committee Meeting

10:30 AM Session 1313: ChE: Innovations in the Laboratory

12:30 PM Session 1413: ChE: Assessment

2:30 PM Session 1513: ChE: Safety, Sustainability, and Global Opportunities

6:30 PM Session 1713: Chemical Engineering Division Awards Dinner

Tuesday, June 26th

7:00 AM Session 2113: ChE: Department Chair Meeting

8:30 AM Session 2213: ChE: Innovations in Student Learning

12:30 PM Session 2413: ChE: Division Business Meeting

2:15 PM Session 2513: ChE: Innovations in the classroom

4:30 PM Session 2613: ChE: Innovations in undergraduate/graduate programs

Wednesday, June 27th

7:00 AM Session 3113: ChE: Computers and Simulation in the Classroom

2:15 PM Session 3513: ChE: Bioengineering, nanotechnology, and systems engineering in the classroom

4:30 PM Session 3613: ChE: Retention and Outreach

Make sure you take advantage of the Online Session Locator to create your custom calendar of all of the “must-see” sessions this June. The OSL is available at

<http://www.asee.org/osl/index.cfm>