

The ASEE Chemical Engineering Division Newsletter

Volume 7, Issue 2

Fall 2005

A Message from the Chair



Dr. Richard Zollars
Washington State University

I would like to take this opportunity to thank all of you for your very active support of the Chemical Engineering Division of ASEE over the years. Right now I feel a little like Phil Bengston. (For those of you unfamiliar with NFL history, Bengston took over as the head coach of the Green Bay Packers after Vince Lombardi.) Coming after such people as Stew Slater, David DiBiasio and Daina Bredis, I certainly do have big shoes to fill. With the help of the other division officers I do believe that that you will see a great deal of activity this year.

Those of you that attended the 2005 meeting in Portland know what a terrific

event it was. In addition to the awards that are presented (see the award recipients listed later in this newsletter) the opening reception at the Oregon Museum of Science and Industry and the division dinner while we cruised the Willamette River were truly memorable. Many thanks to Jim Henry (program chair) and Skip Rochefort (local arrangements chair) for all of their efforts. David Miller and Marina Miletic are busy in preparation for the 2006 meeting in Chicago. Don't miss it.

As is usual, division meetings were held at both the Portland meeting and at the AIChE Annual meeting (on October 31 in Cincinnati). Among the items covered at these meetings were the program arrangements for the meeting in Chicago (eight technical sessions, one poster session, two workshops and one lectureship session), the appointment of Ted Wiesner as a co-Awards chair with Stew Slater, announcement of a discussion forum on the division website, and proposed by-law changes.

All of this sets us up for this year's slate of activities. For the next year there are a number of items I would like to see accomplished within the Chemical Engineering Division.

- 1) David Silverstein has put forth a great deal of effort in transferring the division website to his location and instituting a

- discussion forum at the site. Among the various discussion sites are a number of course discussion sites. The intent is to have these moderated by volunteers. Some people have already volunteered to do this but there are sites still awaiting a moderator. If you would like to help, please contact David Silverstein (SilverDL@engr.uky.edu) and let him know which of the topics you would monitor. The intent of these sites is to provide a place where faculty interested in a particular course can discuss any topic related to that course topic. Please take a look at this site and get the conversations started.
- 2) Soon after taking over as chair I also received an e-mail from ASEE containing a current listing of division members. As of the end of October there were 656 division members (down from 670 at this time last year and down from a high of about 800 when there were no dues for the Chemical Engineering Division). While most of the US schools are represented there are a number with only one division member; other departments have numerous members up to 12, for the New Jersey Institute of Technology (highest in the US), and 16, at the University of Alberta (highest overall). In looking through the names of the members I was encouraged to see that 294 members have been members for 10 years or more, 144 for 20 years or more, and 117 for 25 years or more. It is obvious that these people find something worthwhile in their membership that keeps them renewing year after year. But I have also noticed something I've heard from many of the recruiters who have been on campus this fall, namely that the "baby boomers" are about to start retiring and there is a need to start replacing them right now before all of that knowledge and experience is lost. So here is a challenge for all of you. Go out and recruit a new member for the division. Also talk with your dean since most of them have a deal where they will share the first two years of a member's ASEE dues 50:50 with ASEE. This is a great way to get new faculty introduced to the benefits of membership in ASEE and in the Chemical Engineering Division.
 - 3) We need more volunteers. Currently we have need of a membership chair and, pending a by-laws change, a newsletter editor. Any one who is interested in becoming more involved in the division activities should let me know if they would be interested in either of these positions.
 - 4) Nada Assaf-Anid submitted a preliminary draft of an update of the division by-laws at the meeting in Cincinnati. After some discussion further revisions are under preparation. It is my intent to have the proposed by-law changes finalized and presented to the membership in the spring for a vote prior to the Chicago meeting.
 - 5) And finally, the planning for the 2007 ASEE Chemical Engineering Summer School has

started. The 2007 Summer School is going to be held August 4 - 9, 2007 at Washington State University in Pullman, WA. Steve LeBlanc is currently working on the programming so if there is something you would like to see included in the 2007 Summer School get in touch with Steve.

This coming year promises to be very full as we conduct our normal business and getting into the planning for the two big events in 2007 (the ASEE meeting in Honolulu and the Summer School). I know that all of the members of the Chemical Engineering Division are ready to lend a hand to make all of these upcoming events a huge success.

Announcing the Chemical Engineering Educator's Forum!

If you've visited the Chemical Engineering Division Website at <http://www.asee-ched.org> lately you might have noticed a new link. A discussion forum is now available for experienced educators to share, new educators to learn, and all to communicate on a timely basis on everything of interest to chemical engineering educators.

If you are familiar with such boards, go ahead and visit. Take a look around and see what interests you. See a topic you'd like people to post about? Let us know. See

something you'd like to post about? Go ahead and give it a try. For those of you who would like more instruction, a detailed tutorial will appear in the 2006 Proceedings of the ASEE Annual Conference as well as on the division web site.

The official opening of the forum will be in June 2006, but for the grand opening to be a success, the board must be active well in advance. Please take a few minutes to register and post a message containing your best teaching tip or a link to a useful resource. Your email address is protected against "harvester bots" and we will never share your information without your authorization!

Please send questions or comments to David Silverstein, ChE Division Secretary/Treasurer, at SilverDL@engr.uky.edu.

Join us online at <http://www.asee-ched.org/forum> today!

*ASEE Chemical
Engineering Division
2004 Award Recipients*

The ASEE Chemical Engineering Division gratefully acknowledges the sponsors of these awards:

The Dow Chemical Company
Eastman Chemical Corporation

The Joseph J. Martin Award
(for the best paper in the ChE Division at
the previous ASEE meeting that also
appears in the proceedings)

The author is recognized for her paper
entitled: "STEM Teams and the Great
Orange Squeeze: A Unique Approach to
Preparing Middle School Educators for
the Massachusetts Engineering
Framework Requirements"



Katherine S. Zeimer
Department of Chemical Engineering
Northeastern University

**The Chemical Engineering
Division Lectureship**
(for lifetime achievement in research,
teaching, and service)
*Sponsored by The Dow Chemical
Company*



Bruce A. Finlayson
Department of Chemical Engineering
University of Washington

Dr. Finlayson has made outstanding achievements in the development and application of numerical methods for the solution of chemical engineering problems, for promoting and developing computer tools that students can use to enhance their education, and for leadership in promoting changes in the chemical engineering curriculum and how it is delivered. His research contributions, summarized in over 100 published papers and book chapters and three books, have had a lasting impact on chemical engineering research, practice and education.

Lifetime Achievement Award in Chemical Engineering Pedagogy



H. Scott Fogler
Department of Chemical Engineering
University of Michigan

Dr. Fogler has made sustained contributions to chemical engineering pedagogy and influenced numerous educators. He is the author of “Elements of Chemical Reaction Engineering,” which is used in over 70% of chemical engineering programs in the US and is the leading text worldwide. This text introduced students to learn reaction engineering in a new way – interactively and self-paced. He has built one of the most extensive textbook and CD-ROM combinations in engineering education. He is also co-author of the ASEE Meriam-Wiley Award winning “Strategies for Creative Problem Solving.”

William H. Corcoran Award (for the best paper published in the previous calendar year in *Chemical Engineering Education*) Sponsored by Eastman Chemical Corporation



James A. Newell¹, Kevin D. Dahm¹,
Roberta Harvey², Heidi L. Newell³

¹ Dept of Chemical Engineering

² Dept of Composition and Rhetoric

³ College of Engineering

Rowan University

The winners are recognized for their
paper entitled: “Developing
Metacognitive Engineering Teams”

Ray W. Fahein Award

(for teaching effectiveness and educational scholarship in the first ten years as a faculty member)

Sponsored by Chemical Engineering Education



Kevin D. Dahm

Department of Chemical Engineering
Rowan University

Dr. Dahm has established himself as a leading engineering educator, making significant contributions in diverse areas such as pedagogically sound uses of process simulation, assessment of student learning, and engineering economics education. He is a recipient of the ASEE PIC-III and Joseph J. Martin best paper awards. He has served as PI or co-PI on over \$1 Mil in educational grants and published ten journal articles on educational methods.

The CACHE Award

(for contributions to computing in chemical engineering)

Sponsored by the CACHE Corporation



David M. Himmelblau

Department of Chemical Engineering
University of Texas at Austin

Dr. Himmelblau has been a leader in the introduction of computing into chemical engineering since the 1960s. He has authored outstanding textbooks in material and energy balances, process simulation, statistical analysis, and optimization that utilize computer-based problem solving techniques, and has performed pioneering research in these same areas. He also has provided leadership in AIChE, ASEE, CACHE to facilitate national efforts for computer-based education.

Announcing ASEE ChE Division Awards for 2006

The Dow Lectureship Award

This award, sponsored by The Dow Chemical Company, is presented to a distinguished engineering educator to recognize and to encourage outstanding achievement in an important field of fundamental chemical engineering theory or practice. The individual shall demonstrate achievement through the formulation of fundamental theory or principles, improvements of lasting influence to chemical engineering education with books and/or articles, and the demonstration of success as a teacher. In addition, evidence of the ability to conduct original, sound, and productive research, and an interest in the progression of chemical engineering through participation in professional and educational societies shall be demonstrated. The recipient presents a lecture at the ASEE summer school. The award consists of a \$3,000 honorarium, \$500 travel allowance, and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

William H. Corcoran Award

This award, sponsored by Eastman Chemical Corporation, is presented each year to the author of the most outstanding article published in Chemical Engineering Education. Nominations are not accepted. All published papers in a calendar year are automatically

considered. The award consists of a \$1500 honorarium (per paper) and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

Best Poster Award

The Best Poster Award is presented for the most outstanding Chemical Engineering Division poster presentation at the ASEE Annual Conference. Nominations are not accepted. Papers must be presented at the chemical engineering division poster session to be considered. The award consists of a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

Joseph J. Martin Award

The Joseph J. Martin Award is presented for the most outstanding Chemical Engineering Division paper presented at the ASEE Annual Conference. Nominations are not accepted. All papers presented that also appear in the conference proceedings are automatically considered. The award consists of a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

CACHE Award for Excellence in Computing in Chemical Engineering Education

This award, sponsored by the CACHE Corporation, is presented for significant contributions in the development of computer aids for

chemical engineering education. The award consists of a \$1,000 honorarium and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

Ray W. Fahien Award

This award is sponsored by *Chemical Engineering Education* and given in honor of Ray Fahien, who was editor of the journal from 1967-1995, and who was effectively the founding father of the journal, establishing it as a premier publication vehicle in the field of chemical engineering education.

Professor Fahien selflessly gave his time and talents to advance pedagogical scholarship, particularly in the careers of young educators, through his dedication to the journal and the profession. The award is given annually to an educator who has shown evidence of vision and contribution to chemical engineering education, consists of a \$1,500 honorarium and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference. See the Division web site for more details on the award criteria. Educators who have been faculty members for not more than ten years as of July 1st in the year of the award are eligible.

Lifetime Achievement in Chemical Engineering Pedagogical Scholarship

This award will normally given for lifetime achievement, recognizing a sustained career of pedagogical scholarship that not only caused innovative and substantial changes, but

also inspired younger educators to new behaviors that benefit students in Chemical Engineering.

The award will be presented on an as-merited basis, not necessarily annually. Acceptance of the award implies the obligation to attend the Chemical Engineering Division Awards Banquet at the ASEE Annual Conference.

A condition of receiving any of the above awards is attendance at the Chemical Engineering Division banquet at the 2006 ASEE Meeting in Chicago, IL, June 18-21, 2006

Nomination Deadline: January 16, 2005

For more information on ChE Division awards, see the web site <http://www.asee-ched.org/>

Instructions for Assembling a Nomination Package

Please assemble the nomination package in the following order. These instructions parallel those available at

<http://www.asee.org/awards/nominationinfo/program.cfm>.

Nomination packages not conforming to these guidelines will be discarded. Nominating a faculty member for an award implies that the nominee has been informed and consents to the nomination and conditions of the award.

Do not submit to ASEE either electronically or with hard copy!

Submit nominations

ELECTRONICALLY following the procedure described below to the ASEE ChE Division Awards Co-Chair, Ted Wiesner, at Ted.Wiesner@ttu.edu by January 15, 2006.

Paper submissions will not be accepted. Nominations should be sent as ONE Word or PDF file. The document should have sections for nominee information, citation, rationale, curriculum vitae, additional information as required for that award, and letters of support. It is the nominator's responsibility to assemble all of the pertinent information into ONE electronic document that committee members can easily read.

1. Nominee Information – list the information found on the general ASEE awards form that may be found at http://www.asee.org/members/awards/nomForm_paper.cfm
2. Include a 100-word maximum citation, which will be used if the nominee wins the award.
3. Include a 700-word maximum description of the rationale for the nomination.
4. Include a Curriculum Vitae containing the following information: Degrees earned (university and granting dates); other postgraduate study; record of positions held; publications,

including all books, published papers and articles; ASEE activities and offices held; awards, honors and inventions.

5. Include Other Supporting Information as required for that particular award. Please see the Chemical Engineering Division web site for details on particular award criteria.
6. Include a maximum of 8 Letters of Support for the nomination. These letters may be from peers, students, and/or former students as appropriate to the award.

Any nominee for an award may be renominated using the original nomination package for one additional year only by sending an email to the Awards Chair along with the electronic award nomination. After that a complete new nomination is required.

Submit the entire nomination as ONE electronic file to ASEE ChE Division Awards Co-Chair, Ted Wiesner at Ted.Wiesner@ttu.edu by January 15, 2006.

General, procedural or other questions about the awards should be directed to the ChE Division Awards Chair, Stewart Slater at slater@rowan.edu or 856-256-5312.