

# The Voice - CPDD Newsletter

## May 2011

### From the Editor

#### **Women in Engineering**

You'd think with years of work on increasing enrollments and improving students' early college experiences that enrollment of women in engineering would be approaching 50% of total enrollments. You'd be wrong of course as anyone who pays attention to such things can tell you.

No matter what college's do there still exists a sentiment among too many in the general public that engineering is a man's profession. We recently hosted an "engineering day" at the college and a number of high school students attended, including some from an all-girls school that has an introduction to engineering course at the school. A male high school student from another school was puzzled by all the girls at the visit. He asked a young lady from the all-girls school about all the women and she indicated that her engineering class all came for the visit. Even more puzzled, he commented "that can't be a real engineering course!"

I got to see how things looked from the women's point of view recently. I was visiting an all-girls school that I work with and was asked to be a judge on some student projects. The other three judges were all practicing women engineers. I said to an aerospace engineer whom I knew – "gee, I

feel like a fish out of water." Her comment to me – "Good!!"

She made her point well – it is difficult to be in a (significant) minority and it can take a lot more commitment to stay in a program where you feel like you may not belong.

While many programmatic additions have been made to make women and other minorities welcome, there's no substitute for looking around and seeing people like you.

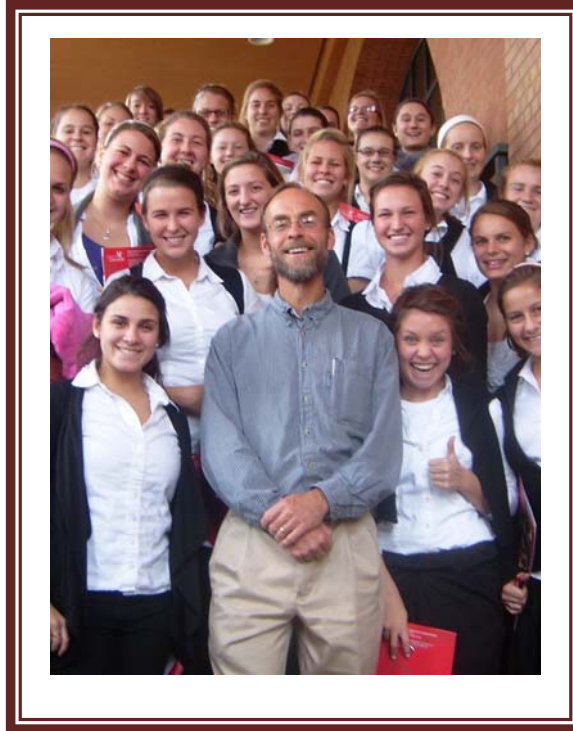
One of the girls schools I work with has developed an approach that seems particularly relevant. The teacher has recruited a panel of female professionals who come to the

school about once a month. They share their experiences, describe the interesting work they are doing, and provide lots of encouragement for the young ladies to continue on to engineering in college. Of the 23 girls in last years' class, 12 went to study engineering.

There are many of you who can have a similar impact on a student. When called on, I hope you'll share your experiences and help someone discover careers they didn't know were possible.

*Eugene Rutz, Editor*

(email comments / rebuttals / kudos to [eugene.rutz@uc.edu](mailto:eugene.rutz@uc.edu))





## Chair's Corner

The CPDD Executive Board met in Tulsa, Oklahoma last November for the Fall Planning Meeting. We had a very busy 2 ½ days. In addition to discussing the everyday business of the division, we also turned our attention to addressing these items:

- Establishing/updating a budget for the division with the goal to keep a minimum balance in the BASS account and guidelines for managing the new budget
- Establishment of a CIEC Financial Chair Assistant and Finance Committee
- Reinstating the CPDD Research and Publication Awards Committee
- Updating the CPDD Website and the need to make it more interactive
- Focused on CPDD Membership and the benefits of being/becoming involved in CPDD for both schools and companies

More information about these items will be made available as soon as possible.



*A view of downtown Tulsa from Centennial Park.*

They were also treated to an entertaining history lesson on the *Glenn Pool Oil Field and the Start of the Oklahoma Oil Boom* by Dr. Norman J. Hyne. Dr. Hyne is one of TU-CESE's most popular instructors. He teaches a "Basic Petroleum Geology for the Non-Geologist" three-day seminar.

The Board was given a guided tour of one of Tulsa's treasures, the Gilcrease Museum. The museum houses the world's largest, most comprehensive collection of art and artifacts of the American West, including an unparalleled collection of Native American art.

One evening, they ventured out for a "Taste of Tulsa" progressive dinner. We hit some of Tulsa's original eateries, such as Coney I-Lander and Weber's Root Beer, both located along what used to be known to Tulsans as 'The Restless Ribbon'.

I look forward to this upcoming year as Chair of the Continuing Professional Development Division because there are many things 'in the works' that your board members are working on that will move CPDD forward.

*Nancy Kruse*  
CPDD Chair (2010-2012)

The University of Tulsa  
Continuing Engineering & Science Education

## Division News

At the CIEC 2011 the slate of nominees for open board positions was presented. The Treasurer's position as well as two Director positions were open.

Greg Ruff, Director of Engineering Outreach and Continuing education for the Samuel Ginn College of Engineering at Auburn University was re-elected for another term as Treasurer. He will be the Division treasurer from 2011-2013.

There were two nominees on the slate for the open Director positions:

- 1) Mark Schuver, Associate Director of the Center for Professional Studies in Technology and Applied Research (ProSTAR), College of Technology, Purdue University, and
- 2) Dr. Keith Plemmons, Assistant Professor at The Citadel in the Dept of Civil and Environmental Engineering; President and Chief Executive officer for the VAB Group LLC.

Both Keith and Mark were re-elected to the board director positions and their terms are 2011 – 2014

The call-out for open board positions to be voted upon at the 2012 CIEC in Orlando, FL will be sometime in Fall. Please watch for this message and consider a board position.

## CIEC 2012

The theme for CIEC 2012 is “Expanding the Workforce Pipeline: Beyond K-12” at the Hilton Walt Disney World resort.

The planning meeting for the conference was held in April at the Hilton Walt Disney World Resort. So far, we have four (4) pre-conference workshops on Tuesday, January 31, 2012. The topics of the workshops are:

- “Dealing with DOE Rule about State’s DE Regulations” (CPD),
- “A Picture is worth a Thousand Words: Making More Effective Graphs & Figures for Proposals, Papers and Presentations” (CPD),
- “Writing for JET” (ETD),
- “Through the Looking Glass Revisited” (CEED).

The program chairs have received excellent session proposals and we expect CIEC 2012 to be a great conference in Orlando. Additional information as we progress in planning will be on the website at:

<http://www.asee.org/conferences-and-events/conferences/ciec/2012>. Registration will open October 15. Watch your email for ongoing information.

We hope you can all make plans to attend!

### *CPD Sessions at CIEC 2012:*

For the 2012 CIEC meeting CPD presentations will include 11 sessions over a range of Continuing Professional Development topics, including: structures of professional

development programs within universities, CPD roles in utilizing our retiring engineering workforce, universities providing international engineering workforce development, financial models of non-credit professional development programs, industry-academic partnerships for professional development, structuring group projects for online distance learning students, legal issues with providing international education, industry early career leadership programs, professional development program self-assessment practices, and many more Continuing Professional Development related areas.

## Kudos

### **CPDD is Awarded ASEE PIC Special Projects Fund**

ASEE’s Professional Interest Councils (PIC) awarded CPDD \$500 to use for our FOCUS ON MEMBERSHIP DRIVE. The funding will provide resources for CPDD to seek out new, as well as on-going, professionals working in engineering professional development in both the corporate and university environments. This effort is expected to increase and diversify the division’s membership.

### **Appreciation**

The following recipients were awarded the CPD Division Certificate of Appreciation at the CIEC Conference in February 2011:

Mark Schuver, Director  
2008 - 2011

Keith Plemmons, Director  
2008 - 2011

Greg Ruff, Treasurer  
2009 - 2011

Keith Plemmons  
2010 ASEE Program Chair

Lea-Ann Morton  
2011 CIEC Program Chair

## ASEE Annual Conference

Make plans to join the American Society for Engineering Education in Vancouver, BC, Canada for the 118th Annual Conference & Exposition. June 26 - 29, 2011.

### Monday – June 27

M417-Professional Development from a Distance

12:30 PM to 2:00 PM

Vancouver International Conference Centre, 304

Professional development at a distance can be a challenge for many institutions. In this session, practitioners present their programs, along with descriptions of their plans, experiences, lessons learned, and results.

Moderated by Ms. Julayne Moser

*Building a Distance Learning Hybrid Program in Organizational Leadership.* Dr. Mitchell L. Springer (Purdue University, West Lafayette) and Dr. Gary R. Bertoline (Purdue University, West Lafayette)

*Optimizing Quality and Resources for Worldwide Online Delivery of Engineering Education.* Pamela L. Dickrell (University of Florida)

*Building an Academic Center Infrastructure for Professional Development.* Mitchell L. Springer (Purdue University, West Lafayette), Gary R. Bertoline (Purdue University, West Lafayette), and Mark T. Schuver (Purdue University, College of Technology, West Lafayette)

*Implementing an Effective Support Model for Innovation in Engineering Education and Technology-Enhanced Learning.* Deborah L. Helman (University of Wisconsin, Madison), Ryan J. Kershner (University of Wisconsin, Madison), Diana Wheeler, MA-LIS (University of Wisconsin, Madison), Amy L. Kindschi (University of Wisconsin, Madison), Steven M. Cramer (University of Wisconsin, Madison), Sandra Shaw Courter (University of Wisconsin, Madison), and Ms. Moira Lafayette (University of Wisconsin, Madison)

M517-Innovative Adult and Technology Enhanced Programs

2011 2:15 PM to 3:45 PM

Vancouver International Conference Centre, 215

The distance learning environment places special requirements on faculty, course developers, and students. Successfully responding to these requirements can be a transformative experience for everyone involved. This session will explore the best practices associated with innovations in adult education, distance education, and technology enhanced learning.

Moderated by Ms. Nancy L Kruse

*Building an Engaged, Collaborative, and Inspired Teaching Culture.* Suzanne M. Kresta (University of Alberta), Uttandaraman Sundararaj (University of Calgary), and John A. Nychka (University of Alberta)

*Lessons Learned Offering a Combined B.S. Engineering (with Cooperative Education) and M.B.A.* Eugene Rutz (University of Cincinnati)

*m-Outreach for Engineering Continuing Education: A Model for University-Company Collaboration.* Gale Tenen Spak, Ph.D. (New Jersey Institute of Technology), Peter Schmitt (Schmitt & Associates, LLC), and Cesar Bandera (Cell Podium LLC)

*A Successful Plan for Faculty Development that has a Lasting Impact.* Stephen W. Crown (University of Texas, Pan American), Arturo A. Fuentes (University of Texas, Pan American), and Robert A. Freeman (University of Texas-Pan American)

*Alternative Approach to Assessing Military Training for Advanced Placement into Engineering and Technology Programs.* Kevin James Wainwright (BC Institute of Technology), Barbara Ellen Endicott-Popovsky (University of Washington, Information School), and Sarah A. Rajala (Mississippi State University)

Tuesday - June 28

T417-CPDD Business Meeting Luncheon  
12:30 PM to 2:00 PM

Vancouver International Conference Centre,  
110

This ticketed event is \$30 advance registration and \$40 on-site registration. All members of the CPD Division are encouraged to attend this annual planning meeting. This is a great time to have your ideas heard and to meet fellow members.

T517-Session D: Panel Discussion on  
Fostering the Implementation of Best  
Practices

2:15 PM to 3:45 PM

Vancouver International Conference Centre,  
206

In conjunction with CPDD, the Strategic Engineering Education Development (SEED) Office at the University of Puerto Rico, Mayaguez will host a panel discussion focusing on The Cycle of Innovation and its

connection with engineering education. Representatives from academia will discuss and debate the barriers against implementation and the strategies associated with the implementation of best practices.

Moderated by Dr. Keith Plemmons P.E.

*Panel Discussion: Completing the Cycle of Innovation in Engineering Education by Fostering Implementation of Best Practices.*

Aidsa I. Santiago-Román (University of Puerto Rico, Mayagüez), Christopher Papadopoulos (University of Puerto Rico, Mayagüez), Matthew W. Ohland (Purdue University, West Lafayette), Ruth A. Streveler (Purdue University, West Lafayette), Dr. Anna Dollar (Miami University), Dr. Cynthia J. Atman (University of Washington), Dr. Jennifer A. Turns (University of Washington), and Dr. Sunil Saigal, P.E. (New Jersey Institute of Technology)

