
Summer 2011

ASEE Students Newsletter



A message from the outgoing Student Division Chair

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Dear Student Division Members:

I want to thank you for being a student member of ASEE and congratulate you and the ASEE Student Constituent Committee executive officers for their efforts to elevate us from “constituent committee” to full ASEE Division status - we are now the *ASEE Student Division!* One of my primary activities as chair in 2010-2011 was to take this step to become a full-fledged ASEE division. This would not have been possible without the commitment of you as members and our officers as leaders representing us all.

While I am proud of all we accomplished in 2010-2011, much work remains in developing students in STEM disciplines. Nearly every day in the media we are reminded of the skill shortage we have in the United States when it comes to engineering, science and technology. This is clear from the data when you consider that we are facing 9-10 percent unemployment nationally and yet we have thousands of unfilled positions available. As the student voice of ASEE, we need to continue to develop our students as educators and leaders in the field of engineering and technical disciplines.

It has been a pleasure serving as program in 2009-2010, Louisville was a blast, and as chair in 2010-2011. I was very disappointed that I was unable to attend the 2011 ASEE conference in Vancouver; I heard it was great, but I had a good excuse since I was teaching a summer study abroad course in Dublin, Ireland. The current team of officers, led by program chair Alexandra Coso, is already hard at work on 2012 conference planning. We welcome your feedback from 2011 and recommendations for the 2012 conference.

Best wishes and luck in the future,

A handwritten signature in black ink, appearing to be 'D. Bumblauskas', written in a cursive style.

Daniel P. Bumblauskas, Ph.D.

Officer Updates



**Alexandra Coso, Outgoing Membership Chair, Incoming Program Chair
Cognitive Engineering Center in the School of Aerospace Engineering
Georgia Institute of Technology**

As I wrap up my second year as the SCC Membership Chair, I am excited to say that we have surpassed the goal of 200 members and now officially have 231 members!!! Thank you to everyone who forwarded emails and talked to colleagues, etc. It was incredible to see the support demonstrated by faculty, deans, and students from schools all across the country and around the world. Every little bit helped!



**Adam Carberry, Outgoing Zone Liaison
Assistant Professor, CTI Department of Engineering
Arizona State University, Polytechnic Campus**

The 2010-2011 year has been an eventful one regarding zone communications. During the past year, a zone liaison sub-committee was formed to investigate ways that the SCC could help in encouraging student opportunities and events at ASEE conferences. The task set upon the four zone representatives (one per ASEE zone) turned out to be an immense project. Minor interventions were undertaken, but the overall takeaway from the sub-committee was to establish a future hierarchy of zone representatives. Over the 2011-2012 year, the goal will be to recruit additional zone representatives in order to increase SCC representation and further the zone liaison mission.

ASEE Student Chapters were again growing. Entering the 2011 ASEE Conference, the SCC has been able to help support, start, and revive 15 student chapters (http://students.asee.org/?page_id=102) with 5-6 other institutions interested over the 2011-2012 school year. For all those interested in starting a chapter of their own, please reference the Start-up Guidebook (<http://aseestudentchapterguidebook.pbworks.com/>).

As my time as the Zone Liaison has come to an end, I'd like to thank all of those who have made this experience a memorable one. It has been a honor to serve as the SCC Zone Liaison over the past 2 years. As I embark on my post-graduate school journey, I am excited to take on a new role in the Student Division as an Advisory Board member. I look forward to seeing how the next wave of students advance the Student Division.



**Geoffrey Herman, Ph.D. Information Chair
Electrical and Computer Engineering Department
University of Illinois at Urbana-Champaign**

This past year has been an amazing year for me as the information chair. We have revamped some features of the website and have begun faculty spotlights and graduation celebrations for the quarterly newsletters. As a reminder, if you are graduating soon and plan to stay involved with engineering education (in any capacity) after you graduate, we would love to hear about your plans! Send me an e-mail (glherman@illinois.edu) if you have any exciting engineering education news and I will help you spread the news. I look forward to serving you all as information chair for another year!

Introducing the 2011-2012 ASEE Student Division Officers

Chair: Brian Schertz

Program Chair: Alexandra Coso

Secretary/Treasurer: Kelly Cross

Immediate Past Chair: Dan Bumblauskas

Information Chair: Geoffrey Herman

Membership Chair: Mary McCormick

Zone Liaison: Julie Little-Wiles

Graduation Celebrations!



**Josh Peterson
University of Texas, Austin
Nuclear Engineering**

How did Josh become interested in engineering education?

Josh came from a family of teachers. His mom, dad, and two sisters all received the bachelors in education. However, he became an engineer and graduated with a PhD in Nuclear Engineering. His dissertation was titled "Expansion of Perturbation Theory Applied to Shim Rotation Automation of the Advance Test Reactor."

While finishing his research at a government laboratory in Idaho, he had the opportunity to teach engineering at many levels: technical, college, and industry. While teaching, specifically at the technical and industry level, he saw the burden of textbook prices on students and also his inability to customize a textbook to meet his students' needs. Fortunately, he discovered the open source textbook movement. Since, he has written a paper on the need for open source textbooks in the nuclear industry and has had the opportunity to present his research to the training director and his staff at Idaho National Laboratory.

What's next for Josh?

Josh is currently working as a research scientist at Oak Ridge National Laboratory. His goal is to gain more research experience and in the next three to five years apply to a tenure position

at a research university. He is also working on two different open source textbooks related to the nuclear industry, one hosted by Connexions and the other by Wikibooks.

Josh's advice on how to succeed in engineering education

“I would recommend to all that are going into Engineering Education to have courage to execute new ideas. Five years ago if I was told that I in the next five years I would be teaching three professional classes and writing two books I would have never believed them. However, as I suspended my doubts, insecurities, and fears I was able to execute my ideas. I once heard that courage is doing what you are afraid to do. “

News from our partnerships

Graduate Engineering Education Consortium for Students (GEECS)

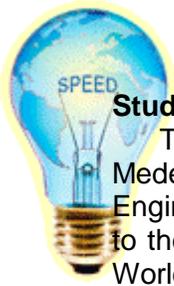
This past year, the ASEE Student Division has developed a new partnership with GEECS. Below is a quick F.A.Q. to introduce you to GEECS and how you can become involved!

What is GEECS?

- GEECS aims to bring together emerging researchers in Engr. Ed. to build a *supportive network* of students, who will influence and shape the future of engineering through **scholarly research, evidence-based practice, and active service**. By engaging in **collaboration, encouragement, knowledge sharing, and critical and reflective analysis**, GEECS members will contribute to the Engr. Ed. discipline and enhance each other's scholarly, professional, and personal development.
- GEECS is centered on an annual event, where graduate students in engineering education attend a research-based symposium at the National Science Foundation (NSF) Engineering Education Awardees Conference. The multi-day event provides opportunities for graduate students researching Engr. Ed. to share in-progress work, exchange feedback, collaborate, and network with other graduate students and NSF-supported faculty.
- Outside of the annual event, GEECS members maintain contact with each other via peer mentoring groups, ASEE and FIE conference events, and/or research collaborations.

How can I become involved? (e-mail GEECS.PR@gmail.com with any inquiries)

- Peer Mentoring Groups: Looking for additional members to join. Potential benefits include:
 - Peer review papers, additional circle of support / advice
 - Study literature and discuss recent issues in engineering as a group
 - Collaborate with each other on research projects
- Committee Members: Seeking additional members to assist with the following committees:
 - Professional Development
 - GEECS Annual Symposium (dates and location TBD)
- GEECS Annual Symposium: Accepting applications for the 2012 GEECS event (due Dec. 1, 2011)



Student Platform for Engineering Education Development

This August two SPEED representatives, Claudio Freitas and David Delaine, traveled to Medellin Colombia to participate in the 8th Annual Latin American and Caribbean Consortium of Engineering Institutions (LACCEI) conference. While on-site they presented a 3-hour workshop to the conference's student participants entitled "Connecting Engineering Students Around the World". The workshop included personal accounts, interactive activities, and connections to resources to help foster the development of global engineers with substantial international exposure while still students.

In inspiring future global leaders, the workshop first discussed "how to find your community" delivering the message that connecting passions to career objectives and finding a community to work in is integral to international success. This portion of the workshop included interactive sessions on what the students were passionate about and how they could connect those to their careers and potential work with a student or professional organization.

Secondly, gaining international exposure was discussed through increasing professional output via publications, conferences and outreach and disseminating results on a global scale. Next a brief introduction on what is SPEED was presented followed by how to leverage available resources and how SPEED can help maximize these opportunities. Lastly, as generally is the case with SPEED activities an Action Plan workshop was held so that the participants could develop personal plans or group plans for how they could develop into global engineers.



Furthermore, in performing SPEED's duties to help foster student involvement in EE practices, SPEED is helping LACCEI establish a stronger student community and presence at its conference through our established partnership. Increasing countries represented, refining conference activities, growing numbers of participants are several of the objectives SPEED is helping optimize.

Opportunities

SPEED AND CENGAGE 2011 Contest for Student Initiatives

Motivation: We are running a contest highlighting student initiatives around engineering education. Finalists will be awarded a scholarship to attend the IFEEES Summit/SEFI Flashweek in Lisbon. We are looking for student-driven initiatives that make an impact on their communities in order to improve engineering education. There are many different ways to do impact our communities. This could be outreach to high schoolers, renewable energy on campus, or organizing a student workshop.

Application Procedure:

- a write up (~ 2 pages) of the work you have done
- one letter of recommendation from a professional knowledgeable of the work
- pdf or doc file
- send to contest@worldspeed.org

DEADLINE: AUGUST 31, 2011

Eligibility: This competition is open to all official members of SPEED. If you are not yet an official member you can easily become one and become eligible for the competition: [http://worldspeed.org/index.php?option=com_content&view=article&id=60&Itemid=167].

Award:

- travel to Flashweek in Lisbon, Portugal
- registration fee
- housing
- presentation space to highlight your community impact activity

ASEE Graduate Studies Division

At the end of this message is the ASEE Graduate Studies Division Call for Papers for the 2012 ASEE annual conference. This division offers two Conference Best Paper awards, including one for papers in which the first author is a graduate student. In recent years, this award has gone to teams from the Engineering Education programs at Virginia Tech and Purdue working mostly with TA professional development. If you have similar work ready for conference publication (which can be on a wider range of graduate education issues) I encourage you to submit it to this division. The program chairs from GSD and ERM are interested in cosponsoring some sessions, and you can help make that happen!

The ASEE GRADUATE STUDIES DIVISION (GSD) is seeking papers for the 2012 ASEE annual conference in San Antonio, Texas. The GSD is concerned with the promotion of graduate programs serving a diverse population, and is encouraging all ASEE members to contribute to this goal by contributing papers to the Division, volunteering to organize sessions, and supporting the Division activities. Papers are sought that address problems and issues related to improvement and enhancement of graduate engineering education. Topics of interest include graduate student needs and experiences; professional graduate education relevant to needs of engineering practice; faculty reward system reform relevant to scholarly work addressing engineering practice for technology development, technology leadership, and innovation as a creative activity; graduate student recruitment; enabling diversity in engineering graduate education; mentoring graduate students; innovative graduate programs and methods; and new trends in engineering graduate education.

Authors should submit an abstract of about 400 words. Details for abstract submission via the Monolith submission system can be found on the ASEE website. Authors of accepted abstracts will be invited to prepare a draft paper for peer review for publication in the conference proceedings. All papers to be presented must be accepted for publication (publish-to-present). The Graduate Studies Division sponsors a Best Paper Award as well as a Best Student Paper Award for a paper whose primary author is a graduate student.

For more information, please contact GSD Program Chair Hamid Johari, California State University, Northridge, Department of Mechanical Engineering, hjohari@csun.edu