

---

# *Fall 2010*

# *ASEE Students*

# *Newsletter*

---



## **A Message from the SCC Chair**

Dan Bumblauskas. ([bumblauskasd@missouri.edu](mailto:bumblauskasd@missouri.edu))  
Assistant Teaching Professor, Department of Management  
University of Missouri

Dear Student Constituent Committee Members:

Welcome to the new 2010-2011 academic year and our first ASEE Student Constituent Committee (SCC) newsletter of the season. Everyone is welcome to submit contributions for future newsletters – please send these materials to Geoffrey Herman [[ggherman@illinois.edu](mailto:ggherman@illinois.edu)]. We have an exciting year ahead for the ASEE Student Constituent Committee! We are now one of the fastest growing groups within ASEE and plan to petition for division status this winter. If you have not already visited our webpage, please check it out at <http://students.asee.org>. I also would like all SCC members to encourage their friends who are students or faculty to join the SCC (it is free). You can see if your campus has a local student chapter on our site as well. If you are interested in starting or revitalizing a student chapter, please contact Adam Carberry [[adam.carberry@asu.edu](mailto:adam.carberry@asu.edu)].

If you are already an SCC member, you will soon be receiving a survey to ratify the changes to our by-laws from this summer. You will have 30 days to vote on the by-law changes. Your input is very important as these by-laws will be submitted to ASEE along with our division status application.

As always, there are many engaging conferences and meetings happening over the next year. Many of the ASEE sections are having their annual conferences over the coming months; I just returned from the MW Section conference in Lawrence, Kansas which was held last week. Please consider attending and presenting at your section conference: <http://www.asee.org/conferences-and-events/meetings/section-meetings>.

We need reviewers for papers and posters for the 2011 ASEE Conference in Vancouver (Hint: being a peer reviewer is a great CV booster!); please e-mail Brian Schertz [[schertz2@illinois.edu](mailto:schertz2@illinois.edu)] if you are interested in being a reviewer.

Thanks to those of you who completed our conference event survey. By providing such information, we can provide SCC programs and services at conferences and expos. If you are attending the Frontiers in Education (FIE) annual conference in October and would like to connect with other students, please contact Alexandra Coso [[acoso@gatech.edu](mailto:acoso@gatech.edu)] for details.

I hope everyone has a great fall semester and that I will see many of you in Vancouver!

Dan Bumblauskas  
ASEE SCC Chair  
Assistant Teaching Professor, University of Missouri – Columbia  
Ph D Candidate, Iowa State University  
ALM Candidate, Harvard University  
[bumblauskad@missouri.edu](mailto:bumblauskad@missouri.edu)

## Upcoming Events

---

**Frontiers in Education 2010**  
**Wednesday–Saturday, October 27–30**  
**Marriott Crystal Gateway**  
**Arlington, Virginia**

The Frontiers in Education conference is a premier engineering education conference that is co-sponsored by the ASEE (ERM division) and the IEEE education society. Anyone who is interested in learning about engineering education research and methodologies should check out this conference! Students can register for \$350 up until the conference.

On Thursday night, October 28<sup>th</sup>, there will be the Birds of a Feather: Student Networking Event. Be sure to keep that evening free and enjoy the opportunity to network and relax with other graduate students, post-docs, and new engineering educators.

## Chapter News

---

### New Student Chapter

**City College of New York**  
Michael Cheng ([michael.cheng@macaulay.cuny.edu](mailto:michael.cheng@macaulay.cuny.edu))  
Electrical Engineering

Faculty advisor Yuying Q. Gosser has helped found a new student chapter at the City College of New York. The chapter has elected their officers and has begun holding chapter meetings. Michael Cheng was elected as President.

## In The News

The Tuskegee Newspaper recently published a story praising the work of the Tuskegee University student chapter. The student chapter led by faculty advisor Firas Akasheh ([fakasheh@tuskegee.edu](mailto:fakasheh@tuskegee.edu)) and President Aaron Ragsdale ([aaron.ragsdale@hotmail.com](mailto:aaron.ragsdale@hotmail.com)) has organized an annual K-12 science and engineering outreach program. Check-out the [full story!](#)

## Book Review

---

**Bataille, Gretchen, M. & Betsy E. Brown (2006). *Faculty career paths: Multiple routes to academic success and satisfaction*. Santa Barbara, CA: Greenwood Publishing Group.**

Google Books Preview: <http://books.google.com/books?id=hfMqcyz2YA0C>

Reviewed by Ana T. Torres ([ana.t.torres@gmail.com](mailto:ana.t.torres@gmail.com))  
Doctoral Candidate, Higher Education  
University of South Florida

*Faculty Career Paths* looks at how a wide variety of faculty travel through the academic environment. The book provides its intended audience, administrators and policy makers, “concrete examples of what has worked in responding to faculty needs and what changes need to be made to ensure that hiring and retention practices adapt to the needs of the faculty of the future.” (p.xii)

The book is divided in six chapters covering: demographic changes in the academy, graduate education and postdoctoral training, early-career faculty, non-tenure-track faculty, late-career satisfaction, leadership, developing policy and creating change in a new academic environment. Each chapter outlines recent research on faculty life along with commentary from faculty and administrators addressing career issues on their own campus. A short list of best practices addressing those issues completes each chapter.

This book is a relatively short and easy reading. The authors very concisely and effectively use recent research to describe issues faced by faculty members. The research described is just enough to support the authors' arguments without overwhelming the reader. Commentaries by faculty and administrators interspersed the research and made the reading more engaging.

Some of the suggestions in the policy implications and best practices were rather obvious, but the authors did not shy away from discussing complex or controversial issues. Overall, the book does a good job of challenging conventional assumptions of contemporary faculty life and providing concrete suggestions on how to improve faculty job satisfaction.

Although this book was written for administrators, future faculty members may also benefit from reading it. Gaining insight about factors that influence job satisfaction, as well as programs and policies for faculty support may be useful when interviewing for a

faculty position. Furthermore, it gives the reader a look at what lies ahead in the later stages of academic careers.

## Job Postings

---

### Announcement of Faculty Positions

**POSITION: Engineering Education**

Assistant/Associate Professor, tenure track, nine-month appointment

**STARTING DATE:** August 2011

**SALARY:** Commensurate with qualifications and experience. Excellent fringe benefits.

**PROGRAM:** Utah State University ([www.usu.edu](http://www.usu.edu)) is a premier student-centered land-grant and Carnegie extension university that fosters the principle that academics come first, by cultivating diversity of thought and culture, and by serving the public through learning, discovery, and engagement. The Department of Engineering and Technology Education in the College of Engineering (<http://www.ete.usu.edu>) offers Bachelors and Masters degrees in engineering and technology education and a PhD in engineering education.

The department also houses the National Science Foundation National Center for Engineering and Technology Education ([www.ncete.org](http://www.ncete.org)). The Center is a collaborative network of scholars with backgrounds in technology education, engineering, and related fields. The Center's mission is to build capacity in technology education and to improve the understanding of the learning and teaching of high school students and teachers as they apply engineering design processes to technological problems.

**DESCRIPTION:** Primary responsibilities will be to conduct engineering education research and to teach and develop undergraduate and graduate courses in engineering education. The successful candidate will be required to obtain external funding, and conduct research in engineering education. In addition, the candidate may be asked to advise students and serve on masters and doctoral committees.

**QUALIFICATIONS:**

1. Earned doctorate in STEM education, a Mechanical/Civil/Materials (or similar) Engineering discipline, cognitive science, or educational and psychological research, by August 15, 2011.
2. BS and MS in an ABET accredited engineering discipline.
3. Strong background in educational research.
4. Successful teaching experience in areas related to engineering.
5. Ability to conduct and disseminate research in the areas of engineering education.
6. Ability to write grants to support scholarly activities.
7. Strong interpersonal and communication skills
8. Ability to teach foundational engineering courses, specifically Statics, Dynamics, and/or Strength of Materials.

To be considered at the associate professor level, the following additional qualifications must be met:

1. An established research agenda with a publication record to support the agenda (in the area of engineering education).
2. A record of extramural funding.
3. A record of excellence in research, teaching, and supervising graduate students. Preference will be given to a candidate with a background in engineering education, statistical analysis research, quantitative psychology research, or a closely related field, and/or educational research methods.

**APPLICATION:** The review of applications will begin January 10, 2011, and will remain open until the position is filled. Qualified applicants should apply on-line following the guidelines posted under JOB OPPORTUNITIES that can be accessed at the USU Human Resources website (<http://www.usu.edu/hr>). For further information, please contact:

Dr. Ning Fang, Search Committee Chair  
Department of Engineering and Technology Education  
Utah State University  
6000 Old Main Hill  
Logan, Utah 84322-6000  
e-mail: [ning.fang@usu.edu](mailto:ning.fang@usu.edu)  
Phone: (435) 797-2948

Utah State University is a Carnegie Research Doctoral Extensive University, an affirmative action/equal opportunity employer, and was recently chosen as a National Science Foundation ADVANCE Gender Equity Program recipient. The University is dedicated to recruiting stellar candidates from a diverse pool including women, minorities, veterans and persons with disabilities. USU offers competitive salaries and outstanding medical, retirement and professional benefits (see <http://www.usu.edu/hr> for details).

---

Associate Director of Outreach and Programs, Women in Engineering Program at The Ohio State University

The College of Engineering's Women in Engineering Program seeks qualified candidates to fill the position of Associate Director of Outreach and Programs. Reporting to the Director of the Women in Engineering Program, the Associate Director will lead outreach and grant research/writing activities for the program. Duties will include: development and implementation of innovative WiE K-12 outreach programs including middle and high school resident and non-resident camps and engineering workshops for students, teachers and/or counselors; identification of potential funding sources for Women in Engineering programs and work with College development officers, external funding agencies and corporations to maintain and increase funding; development of procedures to ensure effective and targeted messaging; leading WiE recruitment efforts

in collaboration with college recruitment and diversity staff. Evening and weekend work as well as occasional travel is required.

For more detailed information including qualifications and how to apply, please visit <http://jobs.osu.edu>, and search for requisition #353312. Review of applications will begin on October 5, 2010 and will continue until the position is filled.

To build a diverse workforce Ohio State encourages applications from individuals with disabilities, minorities, veterans, and women. Ohio State is an EEO/AA Employer.

## **Announcement of Postdoc Positions**

Engineering Education at Penn State

Work Unit: College of Engineering

Department: Leonhard Center for the Enhancement of Engineering Education

Job Number: 33007

The Leonhard Center for the Enhancement of Engineering Education at The Pennsylvania State University is accepting applications for a Post-Doctoral Scholar position focused on assessment and evaluation. The Leonhard Center was established in 1991 with an endowment gift from William and Wyllis Leonhard; its mission is to enable enhancements in engineering education that are needed to educate globally competitive engineering undergraduates at Penn State. The work of the Center is guided by the vision of a World-Class Engineer, formulated by the Center's External Advisory Board.

Past projects in which the Leonhard Center invested include the Engineering Leadership Development Minor, the Engineering Entrepreneurship Minor, summer institutes on integration of ethics and global issues into engineering courses, implementation of technology supported learning, and creation of on-line courses such as Business Basics for Engineers, and Globalization, Technology, and Ethics.

A major portion of the responsibilities of the position will revolve around a new, longitudinal study of the experiences of Penn State engineering undergraduates and alumni. The study will be designed during Spring 2011 with data collection starting in the fall. Additional responsibilities will include working on projects funded by the Center as well as faculty initiated research projects. The position will report to the Director of Assessment and Instructional Support within the Leonhard Center. The appointment will be for three years with the opportunity for renewal.

Requirements include a Ph.D. in Educational Psychology, Higher Education, Engineering Education, or related fields, and experience with experimental design, instrument development, qualitative and quantitative data collection and analysis.

Applicants should submit a cover letter and vita describing qualifications to: College of Engineering, Attn: Lindsey Eckley, 201 Hammond Building, University Park, PA 16802 or Lindsey Eckley at [leckley@engr.psu.edu](mailto:leckley@engr.psu.edu). Applications will be reviewed beginning October 31, 2010 and continue until the position is filled.

FURTHER INFORMATION about the Leonhard Center is available at <http://www.engr.psu.edu/leonhardcenter/>

---

## Postdoctoral Research Scientist in Design Cognition through Biologically Inspired Design

Georgia Institute of Technology is seeking to fill a postdoctoral research scientist position in design cognition/computing. This position is part of a 2 year, NSF funded project: “**Biologically Inspired Design: A novel interdisciplinary biology - engineering curriculum**“. This interdisciplinary project is housed in Georgia Tech's Center for Biologically Inspired Design (CBID), involving the Colleges of Science, Engineering, Computing, and Architecture.

**Responsibilities:** The successful applicant’s primary responsibility is to develop, introduce and assess design ideas, methods and computational tools into an interdisciplinary curriculum in biologically inspired design. Candidates should have a strong background in design cognition/computing, and be well versed in topics such as design ideation, conceptual design, functional models, analogical design, design synthesis, collaborative design, and computational design tools and environments. This individual will be a collaborator on our inter-disciplinary research team and will be fully involved in all aspects of research and scholarship.

The post-doctoral associate in education will work closely with Professors Ashok Goel and Jeannette Yen but strong interactions will be developed with CBID's interdisciplinary faculty as a whole. We seek candidates interested not only in design cognition and computational design, but also in design education. We expect that the successful candidate will present their findings in venues (journals, meetings) in design cognition, computational design, engineering design and design education.

**Qualifications:** Ph.D. in any Design-related discipline such as engineering, computing, architecture, or cognitive science. Must have experience with development of computational design tools and environments. Must be fluent in English with a record of scientific publications.

**Start date:** November 1, 2010 (or as soon as possible thereafter).

Interested candidates should send a letter of inquiry and CV to Professor Ashok Goel ([goel@cc.gatech.edu](mailto:goel@cc.gatech.edu)) and Professor Jeannette Yen ([jeannette.yen@biology.gatech.edu](mailto:jeannette.yen@biology.gatech.edu)).