Dear DEED Community,

The intent of this newsletter is to inform the DEED community about upcoming events and related news in DEED, ASEE, and the engineering design community. As always, these newsletters and even more awesome information are available 24 hours a day, 7 days a week, at locations all around the world on our DEED website.

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1) Call for Nominations: Inaugural DEED Outstanding Service Award

The DEED Outstanding Service Award is conferred by the Design in Engineering Education Division (DEED) to recognize members who have provided outstanding service to the division. The award consists of an honorarium and commemorative plaque presented at the DEED Business Meeting at the ASEE Annual Conference.

Nominees should be DEED members in good standing for at least three years who have an exemplary record of service to the division. Possible areas of service include holding officer positions, running workshops, obtaining grants to support DEED, and other activities related to design education. Nominees should not have received the award in the past year.

Nominations should be submitted by emailing a letter to the nominating committee at (<u>asee.deed.officers@gmail.com</u>) no later than February 28, 2017. The committee will then request supporting information, including a list of contributions, short biography, and curriculum vitae from the candidate.

2) Survey of Academic Women's Participation in Professional Organizations

The Society of Women Engineers (SWE) Women in Academia (WIA) Group invites you to participate in a research study about how and why women in academia participate in professional organizations. The findings from this study will be published in a manuscript for ASEE (and possibly WEPAN). One of the goals of SWE WIA is to present at other professional conferences about SWE and WIA. The survey will take about 10 to 15 minutes of your time and can be accessed via the link below. All responses are anonymous and confidential.

https://olin.qualtrics.com/SE/?SID=SV_9MFsZUFm1q8tZVr

3) Call For Papers: Clive L. Dym Mudd Design Workshop X

"DESIGN AND THE FUTURE OF THE ENGINEER OF 2020" HARVEY MUDD COLLEGE, 1-3 JUNE 2017 https://mudddesignworkshop.com

THE VISION To bring together 50-75 engineers, designers, and educators to tackle the future of the Engineer of 2020. The National Academy of Engineering's report The Engineer of 2020: Visions of Engineering in the New Century was published 12 years ago. This year's entering first-year students will graduate in 2020. We have a unique opportunity to reflect on the notion of the Engineer of 2020 and look forward to what the future engineer might be. We will explore the role of design education in forming engineers better able to assume leadership roles in business, government, and nonprofit organizations with their engineering knowledge to address wicked design challenges.

THE MISSION To identify, articulate, and address the educational, cultural, and institutional contributions to successes and opportunities in engineering design education in the attributes and mindset of the Engineer of 2020 in the context of engineering design activities.

THE EXPERIENCE Each session will be initiated by brief position papers from panelists, which will be followed by open discussion. A wrap-up session will collect the most important outputs for improving engineering design education for dissemination to the community. Participants will receive a preliminary proceedings containing near-final manuscripts of presented papers. Those drafts will subsequently be refined and reviewed for publication in a Special Issue of the International Journal of Engineering Education to comprise the archival proceedings of the Clive L. Dym Mudd Design Workshop X.

1/31/17 2 page abstracts submission 4/15/17 Final papers submission

4) Call For Papers: ASME IDETC/CIE Design Education Conference

The Design Education Committee welcomes papers from all areas of engineering design education research related to mechanical and engineering systems and computers and information in engineering, including but not limited to research methods in engineering design education, engineering design and design education assessment, proven best practices in engineering design, the integration of

engineering design with industry, enhancing professional skills in the undergraduate curriculum, capstone and design education in the undergraduate curriculum, design education in the graduate curriculum, classroom experiments with design practices, and fabrication and making in design education. Short papers are invited on innovative approaches to engineering design education.

The 13th International Conference on Design Education (DEC) is part of the ASME 2107 International Design Engineering Technical Conferences (IDETC) and Computers and Information Engineering (CIE) Conference which will take place during August 6-9, 2017 in Cleveland, OH.

2/10/17 - Draft paper submission 4/7/17 - Final paper submission 8/9/17 - Conference in Cleveland, OH

http://www.asme.org/events/idetccie

5) Position Announcement: NSF Division of Undergraduate Education Program Officer rotators

The National Science Foundation's Division of Undergraduate Education (DUE) has a call out for Program Officer rotators. This is in the form of a Dear Colleague Letter (DCL). More details can be found in the link below.

https://www.nsf.gov/pubs/2017/due17001/due17001.jsp?org=DUE

Inquiries in the disciplinary area of engineering can be directed to Olga Pierrakos (OLPIERRA@NSF.GOV).

6) Position Announcement: Iowa State University Post Doc Fellow in Engineering and Design Education

Postdoctoral Research Fellow in Engineering and Design Education: Applications are sought for a postdoctoral research fellow to support an NSF-funded Revolutionizing Engineering Departments (RED) project at Iowa State University. This five-year RED project is aimed at developing novel pedagogical approaches for transforming the current Electrical and Computer Engineering (ECE) department into a more agile, less traditional organization. Cross-functional teams (X-teams) will be formed in order to reshape the core technical ECE curricula to: (a) promote design thinking, systems thinking, professional skills such as leadership, and inclusion; (b) contextualize course concepts; and (c) stimulate creative, socio-technical-minded development of ECE technologies for future smart systems. More detail on the project can be found here: <a href="https://news.engineering.iastate.edu/2016/06/23/iowa-state-university-receives-2-million-national-science-foundation-grant-to-transform-approaches-to-teaching-and-learning-in-electrical-and-computer-engineering/

Responsibilities

The successful candidate will be expected to assist in development of new pedagogical materials while using design thinking as the foundational methodology. Selected core courses in ECE at the sophomore and junior levels will be redesigned. She/he will closely work with engineering, design and education faculty in documenting how educators involved in the X-teams use design thinking to explore techniques to change existing curricula to create new pedagogical solutions. Through analysis of interviews and

observations of educators' practices, and newly created teaching materials, the postdoctoral research fellow will help extract and characterize the strategies that are successful in creating new teaching approaches and assessing student performance from a new perspective. As part of the Postdoctoral Fellowship experience, applicants will receive mentoring for developing research proposals; and participation in career development and mentoring activities will be supported and expected. They will also receive support to develop their personal research aligned with the broad goals of our crossdisciplinary project.

Qualifications

The successful candidate must have a Ph.D. in one of the following disciplines: engineering education, engineering design, learning sciences, learning technology, or a related field.

To Apply

Please submit a single PDF file to Dr. Diane Rover, <u>drover@iastate.edu</u>, including:

- Cover letter
- Detailed curriculum vita
- Journal/conference paper sample
- Names and email addresses of three references

Review of applications will commence immediately and will continue until the position is filled. Full consideration will be given to applications received by Feb. 1, 2017. It is anticipated that the appointment will begin in Fall 2017 (or earlier, if possible).

7) Position Announcement: Olin College Of Engineering faculty position in entrepreneurship and computer science

Olin College of Engineering, located in the greater Boston area in Needham, MA, seeks applications from enthusiastic faculty candidates at all ranks who are passionate about having an impact in the world and educating the next generation of engineering innovators. We have an open search for all areas relevant to our mission and targeted searches in the broadly defined areas of **entrepreneurship and computer science / software engineering / computational science and engineering**. Olin is committed to an inclusive and diverse environment, and we strongly encourage individuals from historically underrepresented communities and women to apply. We also encourage applicants to apply by December 5, 2016, and applications will be considered as they are received. Please see <u>www.olin.edu/search</u> for information on the application process.

8) Position Announcement: Arizona State University tenure track position in engineering education

The Polytechnic School in the Ira A. Fulton Schools of Engineering at Arizona State University seeks applicants for an **open-rank tenure-track/tenured faculty position in engineering education**.

The Polytechnic School, one of six schools in the Ira A. Fulton Schools of Engineering, has a vibrant engineering education research community. We have a growing critical mass of engineering education researchers, and would like to expand our expertise by adding faculty to support our innovative approach to undergraduate education as well as advance our newly established Ph.D. program in Engineering Education Systems and Design.

Specific areas of interest include, but are not limited to:

- Increasing the participation and retention of underrepresented groups
- Global/international context of engineering / engineering education
- The application of learner analytics/data mining to engineering education problems
- Entrepreneurship in engineering education

Candidates with cross-cutting research interests are particularly encouraged to apply. We seek applicants who will contribute to our academic programs, promote transdisciplinary teaching and research, and help the University to achieve its aspirations, including enabling student success, transforming society, valuing entrepreneurship, and conducting use-inspired research. Faculty members in the Fulton Schools of Engineering are expected to develop an internationally recognized and externally funded research program, adopt effective pedagogical practices in the development and delivery of graduate and undergraduate courses, advise both undergraduate and graduate student research and projects, and undertake service activities.

For more information and to apply, please see the full announcement at: https://engineering.asu.edu/hiring/engineering-education-11731/

9) Position Announcement: University Of Idaho tenure-track position in design

The Mechanical Engineering Department at the University of Idaho invites applications for a tenuretrack faculty position at the rank of Assistant or Associate Professor with expertise and experience in design beginning in the fall of 2017. Applicants must have an earned PhD in mechanical engineering or a closely related field, preferably with an emphasis on product design, manufacturing, innovation, and/or design pedagogy. The successful candidate must have potential to develop a strongly funded program through collaboration with regional and national industries, and interdisciplinary efforts with departments within the College of Engineering, the College of Business, and/or the College of Art/Architecture. Vision and leadership among faculty/staff involved in a nationally acclaimed multidisciplinary senior design program is also integral to this position. For more information about this position, please explore the listing at <u>https://uidaho.peopleadmin.com/postings/15865</u> or contact Steve Beyerlein, chair of Mechanical Engineering (sbeyer@uidaho.edu).

10) Submitting to the DEED Listserv

To submit an item to the InDEED newsletter, please prepare a short description (no more than 2 paragraphs) including any relevant URLs (in explicit form, not as hyperlinks), deadlines and contact information.

Putting the words "DEED newsletter" in the subject will help make sure your submission makes it in the email.

Email this information to Reid Bailey, DEED Division Chair - rrbailey@virginia.edu

The newsletter will be distributed around the 15th of each month. Newsletter submissions should be sent no later than the 10th of the month.

11) BONUS: Rockin cool product of the month!

I promise, I receive no kick-backs from this company — but a friend showed me these cool maker kits that <u>Kiwi Crate</u>. I can't help but share. They send a new one every month. Make sweet mechanisms... fiber optics displays.... hydraulics... and more... Forget my kids- - I want a subscription for me! - Reid

Reid Bailey DEED Chair 2016-2017