Dear DEED Members,

Give Thanks for November!

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.

Newsletters are typically sent on the 15th of every month; submissions are welcome.

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1) ASEE 2016 Abstract Review Process

The abstract review process for the 2016 conference is scheduled to be complete. Please endeavor to complete your reviews ASAP if you have not done so. Abstract reviews take just a few minutes.

The DEED Executive Committee has put new criteria in place for submissions.

DEED is now a Present to Publish - AND - a Review to Publish division.

The peer review process depends on an active review community and this change helps keep that process healthy.

This means that to have your work reviewed, you MUST agree to review the work of others.

Refusing review duties or failure to submit reviews is grounds for rejection of work at both the abstract and paper submission stages.

This change was discussed, debated and implemented at the DEED business meeting.

Here are the DEED review guidelines for abstracts and papers:

Abstract Review Guidelines:

Review Criteria

We are aiming for a streamlined abstract review process - all we need is a "Thumbs up" or "Thumbs down" for the abstract. If you feel the abstract would be a better fit for another division, give it a low rating and please indicate in the "notes to chair" section which division you think might be better. The *streamlined* part of the abstract review process means it shouldn't take long to review each assigned abstracts. Mostly, we want to ensure that the abstracts are scholarly work and are appropriate for DEED specifically. There will be plenty of opportunity for detailed review at the paper stage.

At the end of the day, we are looking for

- A) scholarly work
- B) that is DEED-relevant.

If either A or B is not true, a thumbs down is warranted. (ASEE may ask for a rating more so than a binary "accept" or "reject" — if so, rank as you see fit.... putting "accepts" on the high end of the scale and "rejects" at the bottom of the scale).

Draft Review Guidelines:

- A) Please rate the paper according to the five review questions below. For each question, provide a HIGH, MEDIUM, or LOW rating:
- (1) ORIGINALITY: To what extent does the paper present new ideas or an innovative contribution? [H, M, L]
- (2) JUSTIFICATION: To what extent does the paper offer sufficient evidence (data, research, observations, etc.) or reasoning (methodology, theory, philosophy, etc.) to support its claims? [H, M, L]
- (3) CONTEXT: To what extent do the authors place their work in the context of the related literature and similar applied practice examples? [H,M,L]
- (4) IMPACT: To what extent is the content/outcome of this paper applicable to educators in the broader engineering design community such that the paper could have an impact elsewhere? [H, M, L]
- (5) QUALITY OF COMMUNICATION: To what extent is the paper effectively structured, illustrated, and clearly written [H,M,L]
- B) Please provide COMMENTS to accompany your ratings of the review questions. Feel free also to provide other concrete suggestions to help the author(s) improve the paper.
- C) If you think the paper is exceptionally good, please check the box for Best Paper too.

2) 2016 Capstone Design Conference: Call for Papers and Workshops Available

Involved in capstone design? Consider submitting a paper or workshop to the 2016 Capstone Design Conference. The deadline for papers and workshops is January 4, 2016 - submission details are available on the conference website:

www.capstoneconf.org/callforpapers

The conference itself will be held June 6-8, 2016 in Columbus, Ohio, USA. Following in the tradition of past capstone design conferences, it will include dynamic panel discussions, interactive poster presentations, workshops, keynote sessions, and many opportunities for networking. Ultimately, the goal of the Capstone Design Conferences is to provide a forum for the engineering community to share ideas about starting and improving design-based capstone courses. Join the fun!

3) Open Administrative Position - University of Cincinnati

The Department of Engineering Education (DEE) in the College of Engineering and Applied Science (CEAS) at the University of Cincinnati (UC) invites applications for the position of Department Head. The principal responsibility of this position is to provide leadership and management of the department including responsibility for planning, fiscal management, human resources, and departmental communications. The Department Head is expected to advance the research and teaching missions of the department, nurture collaborations across the college and campus, and work to achieve departmental, college, and university strategic goals.

For more details and to submit an application, please visit: https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=5701&company=UCPROD&username

Application must include a cover letter, curriculum vitae, a statement of experience, vision, and leadership and at least three references. References will only be contacted for those candidates who are selected for the short list. Applications will be reviewed on a rolling basis until the position is filled. UC is an affirmative action/equal opportunity institution.

Point of Contact for questions: Kathleen Ossman - ossmanka@ucmail.uc.edu

4) DEED Bylaws changes

The DEED bylaws have been modified to agree with ASEE recommended practice, to reflect the new financial reality at ASEE and to incorporate some recognition of the membership.

The Bylaws were revised by a group of DEED directors (past and present) and voted on by the Executive Committee. These revised bylaws are posted at:

http://deed.asee.org/index.php/bylaws/

for review by the membership. An electronic election for members to accept or reject these new bylaws is planned for December.

Watch your email for a link to a voting site, to be determined.

5) Open Faculty Positions at Arizona State University

The Ira A. Fulton Schools of Engineering at Arizona State University has openings for tenure/tenure track faculty positions to support a broad initiative in advanced manufacturing. Appointments will be at the assistant, associate or full professor rank commensurate with the candidate's experience and accomplishments, beginning August 2016. Areas of interest include, but are not limited to: product design strategies for additive manufacturing systems, modeling of advanced manufacturing systems and processes, non-destructive testing-manufacturing integration, hybrid additive-subtractive manufacturing process integration, automation strategies and technologies for hybrid manufacturing, and scalable manufacturing at the limits of size, temperatures, and material properties. While the faculty appointment may be in any of the six Fulton Schools of Engineering, The Polytechnic School, located at ASU's Polytechnic campus in Mesa, Arizona, is currently the most involved in the search. The Polytechnic School houses the premier additive manufacturing and research center in the Southwest, providing strong support for the advancing ASU's research and development in Advanced Manufacturing. The facility features over \$2M in state-of-the-art polymer, metal, and composite materials 3D printing equipment as well as advanced materials processing and analysis capabilities.

For more information or questions about the positions, please contact the search committee chair, Jennifer Bekki (<u>jennifer.bekki@asu.edu</u>). Review of applications will begin on November 26, 2015.

For more information, see the complete posting online at: http://engineering.asu.edu/hiring/advanced-manufacturing-systems-11362/

6) Purdue Research on Engineering Career Paths

We are working to develop preparatory materials that help engineering undergraduate students learn to write effective resumes and pursue professional engineering opportunities. The first phase of this research is to collect resumes from undergraduate students, young professionals, and mid/late-career professionals in engineering careers. We would appreciate your input as an engineer by completing a very short survey for us, as well as uploading a copy of your professional engineering resume. All of this is done through online survey software.

Purpose of Research: The purpose of this research is to study engineering career paths and resume writing from successful engineers at a variety of career levels (from university student into professional engineering roles).

Specific Procedures to be Used: This research is conducted via an online survey, which is comprised of demographic information and a space for you to upload your current resume into the system.

Confidentiality: The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight. Steps will be taken to insure the confidentiality of all materials. All survey responses will be confidential. If your resume includes your name in the document or filename, these elements will be blinded before data analysis, in order to best protect your identity. All data provided to researchers will be stored in a secure (password protected) database that only the principal and co-investigators on this project will be able to access. Any printed data will be stored in a locked cabinet.

If you are willing to participate in our research, please follow the survey link below to participate. It is estimated that this will take no more than 5 minutes of your time.

https://purdue.qualtrics.com/SE/?SID=SV cXYlxlwZysGSf2J

In addition, if you would be willing to pass this on to your engineering friends and colleagues, we would be grateful for more participants.

Thanks in advance, as we work to better educate and prepare future generations of engineering students.

Contact Information: If you have concerns, you may contact:

Catherine Berdanier (cberdanier@purdue.edu)
Gracemarie Mike (gmike@purdue.edu)
Mary McCall (mccallo@purdue.edu)
Dr. Monica Cox (mfc@purdue.edu)

7) Faculty Position in the First-Year Engineering Program - University of Kentucky

The College of Engineering at the University of Kentucky invites applications for multiple non tenure track lecturer and tenure-track special title series faculty positions with duties oriented primarily towards hands-on first-year engineering education. Appointment to lecturer or special title series faculty positions will be commensurate with applicant qualifications and experience. Applicants will hold a primary appointment in the academic department most closely aligned with their background and the Dean will assign their effort to the First-Year Engineering Program. All appointments are nine-month, renewable with a start date on or before May 16, 2016. In preparation for the fall 2016 launch of the First-Year Engineering curriculum, two months of summer support will be offered and applicants must be available for training during summer 2016. Opportunities to teach and/or participate in research in future summer sessions for additional compensation may be available.

Duties will include teaching 14-16 classroom contact hours per week, office hours, grading, supervision of teaching assistants and development of course materials. Multiple sections of lecture and laboratory courses will be offered each semester. Course topics include student success strategies, computer programming, software applications, hands-on hardware interfacing, teamwork and design projects. Individuals with embedded computer programming and/or engineering design experience are especially encouraged to apply. Experience in industry is also welcome.

Lecturer applicants should hold at least a Master's degree and at least one degree (BS, MS or PhD) in an engineering discipline or computer science. The initial appointment for lecturer faculty will be for one year. Applicants should have strong written and oral communication skills and a commitment to excellence in undergraduate education. Lecturer positions do not have required research responsibility; however interest in engineering education research will be viewed favorably.

To apply, please submit a cover letter, current curriculum vita, statement detailing teaching philosophy, interests, and experience, and contact information for at least three references.

Special Title Series applicants should hold at least a PhD and at least one degree (BS, MS or PhD) in an engineering discipline or computer science. The initial appointment for special title series faculty will be for two years. Teaching in the First-Year Engineering Program will be the majority of the assignment. Applicants should have strong written and oral communication skills, a commitment to excellence in undergraduate education and the motivation to sustain a program of independent scholarship through innovative educational activities, laboratory development, the direction of undergraduate and/or graduate research, and other independent and collaborative research endeavors.

To apply, please submit a cover letter, current curriculum vita, research statement, statement detailing teaching philosophy, interests, and experience, and contact information for at least three references. Review of applications will begin immediately and will continue until all positions are filled. Application documents should be submitted electronically, preferably by January 8, 2016.

To apply for Assistant Professor, Special Title Series, apply to requisition number:

• FE00357 (http:ukjobs.uky.edu/postings/83969).

For Lecturer positions, apply to position number:

- FE00363 Electrical & Computer Engineering (http:ukjobs.uky.edu/postings/84271)
- FE00360 Computer Science (http:<u>ukjobs.uky.edu/postings/84274</u>)
- FE00365 Chemical & Materials Engineering (http:ukjobs.uky.edu/postings/84275)
- FE00362 Civil Engineering (http:ukjobs.uky.edu/postings/84276)
- FE00361 Mining Engineering (http:ukjobs.uky.edu/postings/84278)
- FE00364 Mechanical Engineering (http:ukjobs.uky.edu/postings/84280)

For questions regarding the submittal of application materials, contact UK Human Resources by calling (859) 257-9555, option 2. For more information regarding this opportunity, please contact the Search Committee Chair, Dr. Janet Lumpp, Professor, Director of the First-Year Engineering Program (jklumpp@uky.edu).

8) New program in Sustainable Design Engineering at The University of Prince Edward Island - Faculty Positions Available!

The School of Sustainable Design Engineering at the University of Prince Edward Island is seeking applicants for up to ten tenure-track faculty positions encompassing all academic ranks. UPEI's new four year degree program in Sustainable Design Engineering provides students with an unprecedented opportunity to gain their Bachelor of Science via a client-focused, project-based model.

Design projects, which are integrated into every academic semester of the program, are based on real world problems and external clients. Through these design courses, students are immersed in a realistic engineering environment where they are expected to interact with clients, develop design solutions, and conform to the best practices of the profession.

http://www.upei.ca/hr/competition/36a15

If you have any questions, or would like more detailed information, please contact:

Elizabeth Osgood, P. Eng.
Assistant Professor
School of Sustainable Design Engineering
University of Prince Edward Island
(902) 620-5175
eosgood@upei.ca

9) Put the Design in DEED!

"The scientist merely explores that which exists, while the engineer creates what has never existed before."

- Theodore Von Kármán

Design is central to engineering. Shouldn't DEED be central to ASEE?

DEED members, please reach out to your colleagues and encourage them to join the DEED division!

10) Submitting to the InDEED Newsletter

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.

Email this information to Peter Schmidt, DEED Division Chair - ps125@evansville.edu.

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

Yours inDEED, Peter L. Schmidt, PE, PhD Division Chair, ASEE DEED