## 2021 ASEE Annual Conference Long Beach, CA June 27-30, 2021

## **CALL FOR PAPERS**

The Environmental Engineering Division (EED) of ASEE invites papers for the 2021 Annual Meeting to be held in Long Beach, CA. The EED requires that oral and poster presenters publish their papers in the ASEE conference proceedings. Paper submission is a two-step process: (1) Abstract submission, review, and acceptance; and (2) Paper submission, review, and acceptance. The submission and review process is double blind; *do not include names of authors or institutions within the title or body of the abstract or paper.* Papers and presentations must contain assessment methods and results. Works in progress or papers without assessment may be considered for poster presentations. Abstracts are limited to 500 words and should provide a clear statement of the objectives of the work, its relevance to the environmental engineering community, assessment methods used, and major findings.

The EED invites papers on the following topics. Please note that some of these topics would be selected for a joint session with the following divisions: Civil Engineering Division (CED); Minorities in Engineering Division (MIND); Women in Engineering Division (WIED) or Faculty Development Division (FDD). Authors interested in submitting for a joint session are highly encouraged to refer to those divisions' Call for Papers for other possible topics. If you are submitting and hoping to participate in a joint session with one of the other divisions listed above, please contact the 2020-2021 Program Chair, Dr. Fethiye Ozis at <a href="fethiye.ozis@nau.edu">fethiye.ozis@nau.edu</a> or the 2020-2021 Division Chair, Dr. Michelle Marincel Payne at <a href="marincel@rose-hulman.edu">marincel@rose-hulman.edu</a>.

- Adapting to COVID-19: Approaches, challenges, successes with the impacts and changes to Environmental Engineering education during a global pandemic
- Use of effective pedagogical methods (e.g. active learning, hybrid courses etc.)\*
- Demonstrations of interactive and effective teaching activities in five minutes or less\*^
- Integration of sustainability in courses, across curricula, across disciplines, in collaboration with industry, and in communities
- Innovative uses of current and emerging technologies (e.g. online case studies, light board, social media) in teaching environmental engineering courses
- Learnings from various career paths of environmental engineering faculty and effective resources that support professional development, e.g. trainings, mentorship, industry-academia transitions^
- Innovative development for tenured/tenure-track faculty and professional faculty (adjunct, non-tenure track such as teaching and research faculty)^
- Mentoring, recruitment, retention, leadership and professional development for women or underrepresented faculty and administrators (e.g. work/life balance and dual-career issues) are relevant and timely.
- Improving the experience of marginalized students on engineering design teams, advocacy for gender equity^
- Recruitment and retention of diverse students in environmental engineering^
- Diversifying the term 'diversity' embracing visible and invisible differences to create a more inclusive culture and an inclusive classroom^
- Success of extracurricular student projects/contests in environmental engineering, e.g. P3, EWB, IEDC, etc
- Ability to engage students in environmental lifelong learning
- Development of new, or cross-disciplinary, hybrid, lab or study abroad courses in environmental engineering, e.g. Environmental Biology, Environmental Security, Environmental Public Health

<sup>\*</sup>Sessions may be organized to allow for substantial discussions by limiting presentation time and facilitating round-table or full-room discussion.

<sup>^</sup>Session may be organized as a joint session between Environmental Engineering Division and another division

- Interdisciplinary approaches to addressing The Grand Challenges such as climate change, food-water-energy nexus; UN Sustainable Development Goals (<a href="https://sdgs.un.org/goals">https://sdgs.un.org/goals</a>), National Academy Grand Challenges (<a href="http://www.engineeringchallenges.org/">http://www.engineeringchallenges.org/</a>), Environmental Engineering for the 21st Century (<a href="https://www.nap.edu/read/25121/chapter/1#xi">https://www.nap.edu/read/25121/chapter/1#xi</a>)
- Use of the American Academy of Environmental Engineers and Scientists Body of Knowledge at the classroom and/or curriculum level (http://www.aaees.org/publications/eebodyofknowledge.php);
- Experiences with accreditation and assessment, e.g. ABET, graduate program accreditation, assessment, etc.
- Challenges and insights gained in the transition from ABET a-k to ABET 1-7 (https://www.abet.org/accreditation/accreditation-criteria/accreditation-changes/);
- Benefits of undergraduate environmental engineering research or capstone projects with community and/or industry engagement

The EED invites **panel and/or workshop proposals** on any of the topics described in the call for papers above, or other topics aligned with the paper call. If interested, please contact the 2020-2021 Program Chair, Dr. Fethiye Ozis at <a href="fethiye.ozis@nau.edu">fethiye.ozis@nau.edu</a> or the 2020-2021 Division Chair, Dr. Michelle Marincel Payne at <a href="marincel@rose-hulman.edu">marincel@rose-hulman.edu</a>.

The following criteria will be used by reviewers to evaluate papers, and to determine the EED paper awards (**Best Paper**, **Early Career**, **Best Student Paper**):

- Significance and or importance to environmental engineering education (5 points; 1 = Poor; 3 = Good; 5 = Excellent)
- Potential impact, applicability and reproducibility of the proposed educational tools and or methods (5 points)
- Research quality, organization and structure of content, and scholarly presentation (5 points)
- Quality of assessments of student learning, data processing and statistical methods (5 points)

**The EED Early Career Awardee** is determined by the EED Awards Committee formed by division officers and/or division directors and/or invited external judges as needed.

- Eligibility Criteria: The applicant will be within the first four years of academic experience as a non-tenure and/or tenure-track position, and un-tenured as of August 31, 2020. All years of academic experience count towards the time constraint. The applicant must teach at a four-year University that offers at least one environmental engineering course. Collaboration with senior or tenured faculty members is encouraged as long as the eligible faculty member(s) hold(s) the intellectual merit for the educational research or activity. In addition, the eligible faculty member(s) should be the lead author(s) and submit the manuscript to the division. Single authored papers are also accepted.
- Application Process: To apply, the last line of the abstract must read: "I am an untenured faculty member within the first four years of total academic experience, lead author of the paper, and eligible for the Environmental Engineering Division Early Faculty Paper Award". In addition, potential candidates should contact the program chair, Dr. Fethiye Ozis, <a href="fethiye.ozis@nau.edu">fethiye.ozis@nau.edu</a>, to confirm their tenure-track position status at their institution.

Questions may be addressed to the Environmental Engineering Division 2020-2021 Division Chair, Dr. Michelle Marincel Payne at <a href="marincel@rose-hulman.edu">marincel@rose-hulman.edu</a>, or the 2020-2021 Program Chair, Dr. Fethiye Ozis at <a href="marincel@nau.edu">fethiye.ozis@nau.edu</a>.