

2022 ASEE 129th Annual Conference and Exposition
Minneapolis, MN
June 26-29, 2022

ENVIRONMENTAL ENGINEERING DIVISION CALL FOR PAPERS

The Environmental Engineering Division (EED) of ASEE invites papers for the 2022 Annual Meeting to be held in Minneapolis, MN. All oral and poster presenters are required to publish their papers in the ASEE conference proceedings. Paper publication is a two-step process:

- (Step 1) Abstract submission, review, and acceptance; and
- (Step 2) Paper submission, review, and acceptance.

The submission and the 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:

TEACHING AND ENGAGEMENT

- Integration of sustainability and or resilience in courses, across curricula, across disciplines, in collaboration with industry, and in communities*
- Demonstrations of interactive and effective teaching activities in five minutes or less[^]
- Effects of COVID-19 on education: approaches, challenges, successes with the impacts and changes to Environmental Engineering education during and after a global pandemic.
- Use of effective pedagogical methods (e.g., active learning, hybrid/hyflex courses, flipped classrooms, service-learning, etc.)*
- Innovative uses of current and emerging technologies (e.g., online case studies, light board, social media) in teaching environmental engineering courses
- Development of new, or cross-disciplinary, hybrid, lab, study away, or study abroad courses in environmental engineering, e.g., environmental biology, environmental security, environmental public health, environmental engineering in Island Nations.
- Interdisciplinary approaches to addressing Grand Challenges such as climate change, food-water-energy nexus;
UN Sustainable Development Goals (<https://sdgs.un.org/goals>),
National Academy Grand Challenges (<http://www.engineeringchallenges.org/>),
Environ. Engineering for the 21st Century
(<https://www.nap.edu/read/25121/chapter/1#xi>)

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

[^]Session may be organized to highlight multiple in-class demonstrations by limiting presentation time.

- The experiences, and learning resulting from extracurricular student projects/contests in environmental engineering, e.g., people, prosperity and planet (P3), Engineerings without Borders, etc.
- Benefits of undergraduate environmental engineering research, capstone projects, or case studies with community and/or industry engagement

ASSESSMENT and ABET ACCREDITATION

- Ability to engage students in environmental lifelong learning
- Recruitment and retention of diverse students in environmental engineering
- Use of the American Academy of Environmental Engineers and Scientists Body of Knowledge at the course and/or curriculum level (<http://www.aees.org/publications/eebodyofknowledge.php>);
- Experiences with accreditation and assessment, e.g., ABET, graduate program accreditation, etc.
- Challenges and implications of COVID-19 for ABET accreditation (<https://www.abet.org/accreditation/accreditation-criteria/accreditation-changes/>);

FACULTY/CAREER

- Learnings from various career paths of environmental engineering faculty and effective resources that support professional development, e.g., training, mentorship, industry-academia transition
- Innovative development for tenured/tenure-track faculty and professional faculty (adjunct, non-tenure track such as teaching and research faculty)

Please note that some of the topics in our call may be selected for a joint session.

PANELS OR WORKSHOP PROPOSALS

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.

BEST PAPER AWARDS

Environmental Engineering Division awards a **Best Paper**, **Early Career**, and **Best Student Paper Award** every year. All full paper submissions are eligible (Work in Progress submissions are not eligible). The following criteria will be used by reviewers to evaluate papers, and to determine the EED paper awards on a 5-point scale: (1 = Poor; 3 = Good; 5 = Excellent)

- Significance and or importance to environmental engineering education, (5 points)

- 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 Faculty 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, 2022. 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 Career Faculty Award". In addition, potential candidates should contact the program chair, Dr. David Sanchez, david.sanchez@pitt.edu, to confirm their tenure-track position status at their institution.

Questions may be addressed to the Environmental Engineering Division 2021-2022 Division Chair, Dr. Fethiye Ozis fethiye.ozis@nau.edu or the 2021-2022 Program Chair, Dr. David Sanchez david.sanchez@pitt.edu.

Important Dates:

- Abstract Submission Open – October 11, 2021
- Abstract Submission Due – November 8, 2021