2023 ASEE Annual Conference & Exposition Baltimore, Maryland, June 25-28, 2023

Aerospace Division Call for Papers

The Aerospace Division of ASEE invites full-length and work-in-progress papers for the 130th Annual Conference and Exposition. Aerospace and aviation educators, engineers, technologists, researchers in industry or agencies, and students from across the world are invited to submit current papers on relevant topics in aviation, aeronautical, and aerospace engineering and technology education and pedagogy.

Suggested topics related to aviation or aerospace engineering education include, but are not limited to:

- 1. *Epistemologies*. Research on what constitutes thinking and knowledge within social contexts now and in the future.
 - Professional development of aviation and aerospace engineers and engineering technologists
 - Integration of professional skills into an engineering or engineering technology course
 - Systems engineering in aviation and aerospace
- 2. *Learning Systems and Pedagogy*. Research on the methods, instructional culture, institutional infrastructure, and epistemology of educators.
 - Effective and innovative teaching and projects
 - Student industry and competition experiences
 - o Curriculum development or assessment
 - Program accreditation
 - Teaching strategies and lessons learned for effectively delivering courses and handson activities in remote/online settings
 - Incorporation of hands-on learning experiences inside or outside the classroom
- 3. *Diversity, Equity, and Inclusiveness.* Research on how diverse human talents contribute solutions to the social and global challenges and relevance of our profession
 - K-12 outreach
 - Student attrition, persistence, and resilience
 - Women and under-represented groups in aerospace engineering in both academia and industry
- 4. *Ecosystem*. Research on the emerging boundaries and inclusion of systems in aviation or aerospace.
 - New and emerging systems or categories in aviation and aerospace
 - o Integration of Unmanned Aerial Vehicles, CubeSats, or Nanosats in the curriculum
 - Expanding commercial space industry and how academia could adapt to include new opportunities

Student Papers

The Aerospace Division invites students to submit student-authored papers in all areas related to aerospace engineering and technology education. Turn your thoughts and observations into

reality! Help shape the future of how engineering or technology is perceived and taught!

Requirements for student papers

- Work is mainly conducted by undergraduate or graduate student(s) in collaboration with a faculty advisor. The final paper of each accepted paper will list a **student as the lead author** and a faculty advisor as a co-author.
- Student presenters must register for the annual conference.
- Paper has a significant educational component.

Student Paper Awards

Up to 3 student papers will be recognized by cash awards, certificates, and a one-year student online membership to ASEE and the Aerospace division. Student membership includes free registration to the 2024 ASEE Annual Conference & Exposition. Only the papers presented by a student author(s) or co-author(s) are eligible for student paper awards. The award money is split between student co-authors.

- Superior: \$500 No monetary prize
- Distinguished: \$300 No monetary prize
- Meritorious: \$200 No monetary prize

Membership in the Aerospace division is not required for winning the student paper awards and has no bearing on the scoring. However, membership is encouraged.

Young Investigator Award

The Aerospace Division is investigating the possibility of the Young Investigator Award for early career investigators. More information to follow.

Abstract Submission tips and guidelines

Abstracts with approximately 500 words must be submitted electronically through the ASEE paper submission system. The abstracts should contain enough detail on the topic of discussion, methodologies, preliminary results (if any), and expected outcomes to facilitate an informed review of the abstract. Abstracts and papers will be <u>double-blind peer-reviewed</u> and judged based on the level of innovation, technical merit, demonstrated outcomes, and relevance to advancing aeronautical and aerospace engineering and technology education as appropriate. Special sessions, such as panel discussions, are encouraged but should be discussed directly with the program chair prior to abstract submission. Please refer to the Author's Kit, available on the ASEE Annual Conference website, for additional information.

- If the paper is a "Work-in-Progress" paper, please include that in the title.
- Please remember to remove all identifying information (author names, universities, etc.)

Questions regarding the abstract or paper submissions can be directed to the Aerospace Division Program Chair, Dr. Waterloo Tsutsui, by email at <u>wtsutsui@purdue.edu</u>.

Further details on paper Management, conference, travel, program schedule, and registration can be found at ASEE's 2023 Annual Conference and Exposition website: <u>https://www.asee.org/events/conferences-and-meetings/2023-annual-conference</u>

Important Dates

- Abstract submission open: October 3, 2022
- Abstract submission due: October 31, 2022 November 7, 2022 November 30, 2022