

Dear members of the ASEE BAE Division:

Fall 2022 Newsletter – Contents

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1. Election of Tim Foutz for BAE Division Secretary

The BAE Division is pleased to announce the election of Tim Foutz for the position of Division Secretary. Tim is a professor in the School of Environmental, Civil, Agricultural, and Mechanical Engineering at the University of Georgia. His past research has focused on biomechanical abnormalities of food and companion animals. For over 25 years, he has led professional development efforts to infuse engineering into k-12 course material. His current research focus is adapting standard learning practices for integrating computer programming into the regular elementary school curriculum so that all students learn computer science content, not just those who attend enrichment programs.

2. BAE Division Officers

Tim's election at the 2022 ASEE Conference fills our Division officer roster as follows:

Chair	Dr. Youngmi Kim Associate Professor, University of Wisconsin-River Falls youngmi.kim@uwrf.edu
Awards Chair and Past Chair:	Dr. Heidi A. Diefes-Dux Professor, University of Nebraska-Lincoln heidi.diefes-dux@unl.edu
Program Chair:	Qualla Jo Ketchum Ph.D. Student, Virginia Tech qualla@vt.edu
Secretary:	Tim Foutz Professor, The University of Georgia tfoutz@uga.edu
Division webmaster	Deepak Keshwani Associate Professor, University of Nebraska-Lincoln dkeshwani2@unl.edu

If you would like to get involved with the division, participate on our committees, or lead us in a new adventure, please contact any of your officers or join us at our 2023 ASEE Conference business meeting in Baltimore, MD.

3. 2022 BAE Division Call for Papers

The deadline for ASEE abstracts is October 31, 2022!

The Biological and Agricultural Engineering (BAE) Division of ASEE seeks abstracts for papers to be presented at the [2023 ASEE Annual Conference in Baltimore, Maryland, on June 25–28, 2022](#). Abstract submission **will be accepted until October 31, 2022**. Important deadlines are posted [here](#). See attached Call for Papers for additional information. Have your work published in a peer-reviewed format and support our division's current and future work within the society.

Topics of interest include, but are not limited to:

- Innovative strategies and/or technology to enhance teaching and learning
- Integration of diversity and global issues in the classroom
- Design experiences in the curriculum
- Student recruitment, retention, placement, and first-year experiences
- Service-learning and experiential learning
- Extension engineering education
- Best practices for ABET
- Educational issues relevant to the Food, Energy, and Water Nexus
- New trends in Biological and Agricultural Engineering Education
- Diversity, equity, and inclusion practices in the classroom
- Pedagogical strategies for remote and hybrid teaching and learning

The division accepts abstracts for the following types of papers:

1) Completed Papers highlight investigations into research for improving learning in traditional and non-traditional classroom settings. Content should include a research question or problem statement, a review of relevant literature, methodology, results, and implications. The criterion for a Complete Paper is that it represents work for which available results can be analyzed to yield supported and significant conclusions at the time of draft paper submission.

2) Work in Progress (WIP) Paper: A WIP reports on work that is still in the process of study and/or implementation for which results will not be available by the time of draft paper submission, for studies where the results are as yet inconclusive, and for studies at an early to the intermediate stage for which authors are seeking feedback from the community. The authors retain the copyright for this paper type.

3) Practice Papers highlight teaching approaches, technologies in an instructional context, proposed learning strategies, and assessment practices. Content should include the motivation for conducting the work, background information, approach for determining success, anticipated outcomes, and the future direction of this type of effort.

4) Special Topic or Panel Sessions: The division also encourages proposals for a panel session or other special format technical sessions. The proposed topic may fall under one of the topic areas listed above or maybe something different of interest to the division. One potential special format is a 5-Minute Work-in-Progress Postcard Session in which the authors of WIP papers pitch their work with a two-slide (back and front of a postcard) overview in five minutes or less.

Other possible format ideas can be found at <https://tinyurl.com/ASEE-Conference-Playbook> If you have other ideas for a panel or special format technical session, please contact the program chair.

Abstracts must be submitted electronically through the ASEE paper submission system. **The division highly encourages submissions from members and non-members who have not presented at previous ASEE conferences, particularly for the WIP track.**

The division also encourages proposals for panel or other special format technical sessions. The proposed topic may fall under one of the topic areas listed above or maybe something different of interest to the division. You will be able to find submission deadlines, required formats, and other information via the main ASEE website: www.asee.org.

You do not need to be a member of the BAE division to submit the paper. However, we highly encourage you to join the division as a member. The BAE division membership fee is only \$5/yr added to the ASEE annual membership. Please encourage your colleagues to join the BAE division.

For questions and comments, please contact: Qualla Jo Ketchum, Program Chair, Biological and Agricultural Engineering Division qualla@vt.edu

4. BAE Division Website

The BAE division website has been updated. Be on the lookout for **Award Nomination** announcements including the **Best Diversity, Equity, and Inclusion Paper Awards** as they will be on the website as soon as available. The link for the official BAE website is: <https://sites.asee.org/bae/>

5. Review of BAE Division Activities from the 2022 ASEE Meeting

- At the 2022 ASEE Conference, the BAE Division hosted two engaging technical sessions with six paper presentations. The titles of these papers are:
 - Statewide Agricultural Biosecurity Curriculum for High School Students. Authors: Iftekhar Ibne Basith, Doug Ullrich, Richard Kirby Ford, Ashley Morgan-Olvera, Devyn Charles Matthews, Jacob Brandon
 - Prairie Protector: Systems thinking and STEM-informed decision-making in agroecosystems through game-based learning. Authors: Erin Ingram, Jenny Keshwani, Deepak R Keshwani, Jordan M. Binfield
 - Students' Metacognitive Strategies Revealed Through Reflections on Their Learning of Process Engineering Concepts and Skills. Authors: Anu Singh, Heidi A. Diefes-Dux
 - Surveying Student Interest in the Biological Systems Engineering Major. Authors: Jennifer Mullin, Gail Michelle Bornhorst
 - How (Inter)national Engineering Faculty Members Perceive and Teach Creativity: A Cultural Perspective. Authors: Hao He, Heather Hunt, Suzanne Burgoyne, Joshua Saboorizadeh

- Grid Soil Sampling and Mapping Soil Phosphorus Distribution for an Extended Period on a Production Agricultural Field. Authors: Abhijit Nagchaudhuri, Madhumi Mitra, Travis Ford, Charles Raleigh

- Discussions during the division meeting focused around
 - the Teaching Materials Award and the future of that award. Heidi Diefes-Dux will lead efforts to reimagine the award to ensure it aligns with the division priorities. We are also excited to announce the winners of our division awards for 2021 that were honored at the meeting
 - the division needs to meet the minimum threshold of 125 members (current membership is 95). Strategies for increasing membership included
 - focused on the recruitment of younger members and instructional faculty
 - build technical sessions that department heads can support
- Jenny Keshwani volunteered to be CDEI (Commission on Diversity, Equity, and Inclusion) Delegate from the division
- Deepak Keshwani volunteered to serve in the role of maintaining the division's web presence
- Congratulations to Heidi Diefes-Dux for being recognized as ASEE Fellow
- The treasurer report indicates the division's balance is approximately \$7000 pending final transactions related to the annual meeting.

6. List of Upcoming Section and Zone Meetings

Want to stay connected between annual meetings? For a listing of upcoming Section and Zone Meetings, check here: <https://www.asee.org/conferences-and-events/meetings/section-meetings>