

Letter from Chair - David V.P. Sanchez, Ph.D.



Greetings from Pittsburgh, PA! Congratulations on another academic year completed. Before you get into the full swing of summer plans, I wanted to give you an update on your ASEE-North Central Section.

Spring Conference: Thank you to Matt Cavalli and his team at Western Michigan University for hosting a great conference from March 22-23, 2024. They did a fantastic job! Inspiring talks, VR demos, cool swag, and a fun planning committee. The list of Best Paper and Poster Awards can be found on Page 6 in this Newsletter. A special congratulations goes out to Carmen Cioc (Univ. of Toledo) and Thomas Mahank (Saginaw Valley State Univ.) for the Campus Representatives Award and Nihan Dukhan (Univ. of Detroit Mercy) for the Outstanding Teacher Award.

Elections: The 2024 elections for ASEE-NCS Board positions were managed by our Past-Chair Nicholas Baine at the conference. Carmen Cioc (Univ. of Toledo) was elected Vice-Chair (1-year term). David Sawyers (Ohio Northern Univ.) and Stephany Coffman-Wolph (Ohio Northern Univ.) were both elected as Directors (2-year term). Please reach out to me or feel free to connect with any of our [Board Members](#) as we are here to serve you. They are a wonderful group!

Future Section Conferences: Next Spring our conference will be held at Marshall University in Huntington, WV (see Page 3 for advertisement). Our conferences continue to be exceedingly popular as we added a new host, Kettering University, for 2028! See the complete line-up of ASEE-NCS Conferences on Page 2 of this Newsletter. Would your school want to host the 2029 Section conference? These conferences are a great chance for you to present your scholarship and teaching and a chance for your students to present their work professionally. If you are interested in hosting a conference email me: david.sanchez@pitt.edu.

Get Involved: From a geographical perspective, our section includes Michigan, except the Upper Peninsula, Ohio, Pennsylvania (zip code prefixes 150 through 154, 156, 160 through 165) and West Virginia. The board works hard to include representation from across this geographic region. There are so many ways to get involved, including:

- Nominate yourself or a colleague for the section Teaching Award (there are now 2 of them).
- Submit your papers to our annual section conference
- Sponsor/send your students to the conference to share their work in a professional setting
- Run for a position on the Executive Board (email Nick Baine if you're interested!)

Budget: As ASEE National continues to work through their financial recovery, our most recent financial statement shows that we do not have access to about \$25,000 in our section account. Our section's executive board will ask for ASEE National to make this available as soon as possible at the national conference this June. At the same we would like to say thank you to the section members for your support and engagement because your dues, donations, and the approximately \$1300 profit made from the conference allows our section to continue to sponsor the student, faculty, and campus rep awards.

Thank you for being a part of one of the best sections in ASEE!

List of Events/Deadlines & Table of Contents

Future Events:

- ✓ Summer 2024: ASEE Annual Conference, Portland, OR
- ✓ Spring 2025: ASEE – North Central Sectional Conference
 - Marshall University, Huntington, WV
 - See *Page 3* for more Information
- ✓ Spring 2026: ASEE – North Central Sectional Conference
 - Mt. Union University, Alliance, OH
 - Chair: Chad Korach
- ✓ Spring 2027: ASEE – North Central Section Conference
 - Ohio Northern University, Ada, OH
 - Chairs: Dean Yoder and David Sawyer
- ✓ Spring 2028: ASEE – North Central Section Conference
 - Kettering University, Flint, MI
 - Chair: Diane Peters

Conference Review:

- ✓ Spring 2024: ASEE – North Central Sectional Conference
 - Western Michigan University, Kalamazoo, Michigan
 - See *Pages 4 to 7* for Detailed Coverage

Executive Board Members:

- ✓ Election Results from Spring 2024 conference – *Page 7*
- ✓ Executive Board List and Contact info – *Page 8*

2025E-NCS Outstanding Teaching Award:

- ✓ Now is the time to start thinking about who you would like to nominate.
- ✓ Nomination packages will be due in January or February of 2025



2025 ASEE North Central Section Conference

March 28-29, 2025

Hosted by Marshall University

College of Engineering and Computer Sciences

Huntington, WV

Engineering Appalachia

The ASEE North Central Section (NCS) cordially extends an invitation to authors in the fields of engineering, engineering education, computer science, and engineering technology to submit their workshop proposals, short and full-length papers, as well as student posters for presentation at our upcoming conference. This esteemed gathering, the 2025 ASEE NCS Conference, will be proudly hosted by Marshall University's College of Engineering and Computer Science in beautiful West Virginia, from March 28th to 29th, 2025. Join us in fostering innovation, collaboration, and excellence in education and research within our vibrant community. We eagerly anticipate your participation and contribution to our conference proceedings.

Topics related to the broad conference theme and to the following are encouraged:

- Innovative curricula or teaching techniques.
- Implementation of smart technologies in classrooms.
- Active learning: project-based and hands-on learning activities.
- Incorporating Sustainability into Engineering.
- Senior capstone projects, student research projects, and industry experiences
- Student retention and persistence.
- Expanding Opportunities, Broadening Participation, and Mentoring Talent.
- Remote, Distance, Hybrid learning: methods, technologies, and assessment.
- Community engagement, service learning, K-12 outreach with engineering.
- Global engagement (e.g., study abroad programs, academic partnerships).
- Recruitment and Retention of Engineering students.

Contact: Dave Dampier: dampierd@marshall.edu
Haroon Malik: malikh@marshall.edu



WESTERN MICHIGAN UNIVERSITY
College of Engineering
and Applied Sciences



Conference Review

2024 American Society for Engineering Education (ASEE) North Central Section Conference

Hosted by Western Michigan University's
College of Engineering and Applied Sciences
Kalamazoo, Michigan

Conference Chair: Matthew Cavalli, Ph.D., P.E.

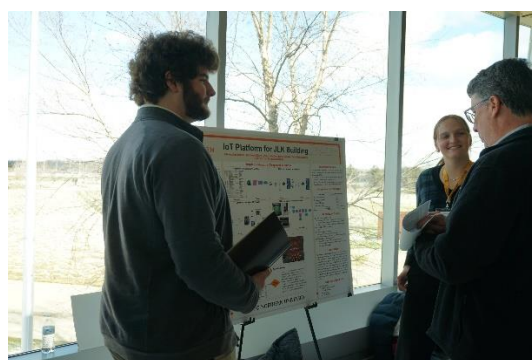
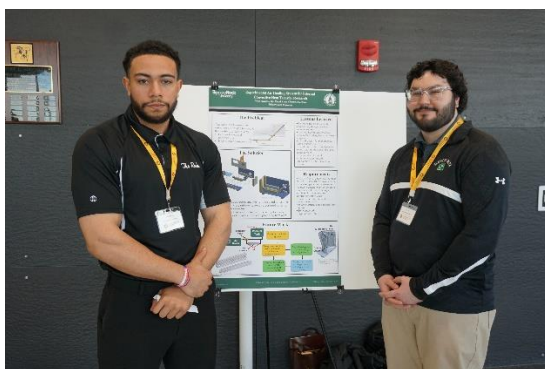
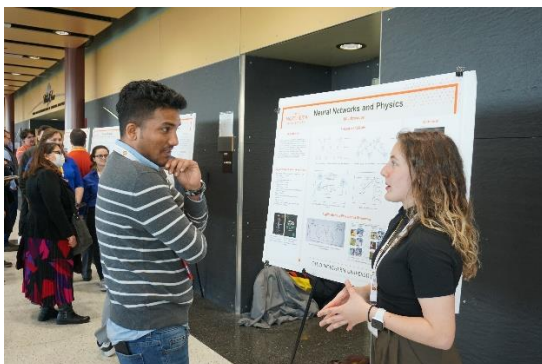


ASEE-NCS Board Meeting



Keynote Speaker: Larry Mallak





2024 ASEE-NCS Awards



Best Student Poster Award

- 1st Place — Internet of Things for the James Lehr Kennedy Building at Ohio Northern University, Mallory Clark, Ohio Northern Univ.
- 2nd Place — LeafLife: A Plant Monitoring System, David Flores, Logan Sherrod, Ahmed Oun, Ohio Northern Univ.
- 3rd Place — Novel Eutectic-Gel Methods for Water Purification, Mert Atilhan, Western Michigan Univ.

Best Student Paper Award

- 1st Place – Quantum and Classical Supervised Learning Study of Epitaxially-Grown ZnO, Andrew Steven Messecar, Steven Durbin, Robert Makin, Western Michigan Univ.
- 2nd Place – A Hands-On Activity on Equilibrium of Rigid Bodies in Statics, S.M. Seyed Ardakani and Joshua Wiseman, Ohio Northern Univ.
- 3rd Place – Development and Validation of an Experimental System for Investigating Oxygen Singlet Sigma State Effects on Premixed Methane-Air Flames, Ghazal Rajabikhorasani and Claudia M Fajardo-Hansford, Western Michigan Univ.

Best Faculty Paper Award

- 1st Place – Development of a 3-Credit Multidisciplinary University Autonomous Vehicles Course Without Prerequisites and Open to Any Major, Nicholas Brown, Johan Fanas Rojas, Alyssa K. Moon, Ali Alhawiti, Pritesh Yashaswi Patil, Parth Kadav, Kira Hamelink, Wendy Swalla and Zachary D. Asher, Western Michigan Univ.
- 2nd Place – Progress in K-12 Computer Science Education: are Engineering Students Being Left Behind?, Catherine Molloseau, Grand Valley State Univ.
- 3rd Place – Sustainability-Focused Project-Based Learning in a Heat Transfer Course, Christopher Gioia, Samantha Bortz, Slippery Rock Univ.



Campus Representatives Award
Carmen Cioc, University of Toledo
Thomas Mahank, Saginaw Valley State Univ.



Outstanding Teaching Award
Nihad Dukhan, University of Detroit Mercy

Newly elected Board Members – Term starting June 26, 2024

- Vice Chair (1 year): Carmen Cioc, University of Toledo (Carmen.Cioc2@utoledo.edu)
- Director (2 years): Stephany Coffman-Wolph, Ohio Northern (s-coffman-wolph@onu.edu)
- Director (2 years): David Sawyers, Ohio Northern (d-sawyers@onu.edu)

ASEE – NCS Board Members at Conference



ASEE NORTH CENTRAL SECTION EXECUTIVE BOARD June 28, 2023 to June 25, 2024

<p style="text-align: center;"><u>Past Chair (2023-2025)</u></p> <p>Nicholas Baine, Ph.D., P.E. Assoc. Prof. School of Engineering Grand Valley State University 227 Kennedy Hall of Engineering Grand Rapids, Michigan 49504 (616) 331-6756 bainen@gvsu.edu</p>	<p style="text-align: center;"><u>Chair (2023-2025)</u></p> <p>David Sanchez, Ph.D. Asst. Prof. Civil & Environmental Engineering Asst. Director Mascaro Center for Sustainable Innovation Swanson School of Engineering University of Pittsburgh Pittsburgh, PA 15261 (412) 624-9793 (office) davidsanchez@pitt.edu</p>	<p style="text-align: center;"><u>Vice Chair (2023-2024)</u></p> <p>Andrew Milks, Ed.D., P.E. Professor College of Engineering and Polymer Science The University of Akron Schrank Hall South 221E Akron, OH 44325-6104 (330) 972-2449 aem36@uakron.edu</p>	<p style="text-align: center;"><u>Secretary</u></p> <p>Andrew Kline, Ph.D. Assoc. Dean Emeritus Western Michigan University (269) 271-5123 andrew.kline@wmich.edu</p>
<p style="text-align: center;"><u>Treasurer</u></p> <p>Gregory Harstine, P.E. Assoc. Prof. of Practice College of Engineering and Polymer Science The University of Akron Akron, OH 44325-6104 (330) 972-6234 gph@uakron.edu</p>	<p style="text-align: center;"><u>Newsletter Editor</u></p> <p>Jeff Kastner, Ph.D. Assoc. Prof. College of Engineering & Applied Science University of Cincinnati Cincinnati, OH 45221 (513) 556-0027 jeffrey.kastner@uc.edu</p>	<p style="text-align: center;"><u>Zone II Chair (2022-2024)</u></p> <p>Charles McIntyre, Ph.D. Program Director, Construction Engineering Management Technology Indiana University Purdue University Indianapolis Indianapolis, IN 46202 chmcinty@iupui.edu</p>	<p style="text-align: center;"><u>Campus Rep Coordinator</u></p> <p>Craig Gunn, Ph.D. Senior Academic Specialist - Curriculum Development Michigan State University Room: 2443 East Lansing, MI 48824 (517) 355-5160 gunn@egr.msu.edu</p>
<p style="text-align: center;"><u>Director (2022-2024)</u></p> <p>Carmen Cioc, Ph.D. Assoc. Prof. Mechanical Engineering Technology The University of Toledo Mail Stop 402 Toledo, OH 43606 (419) 530-3017 Carmen.Cioc@utoledo.edu</p>	<p style="text-align: center;"><u>Director (2022-2024)</u></p> <p>Yogendra Panta, Ph.D., P.E. Assoc. Prof., Mechanical Engineering West Virginia University Institute of Technology Beckley, West Virginia 25801 (304) 929-1661 Yogendra.Panta@mail.wvu.edu</p>	<p style="text-align: center;"><u>Director (2023-2025)</u></p> <p>Lin Zhao, Ph.D. Prof., Electrical and Cyber Engineering Gannon University Office: Zurn 303 Erie, PA, 16541 (814) 871-5854 Zhao001@gannon.edu</p>	<p style="text-align: center;"><u>Director (2023-2025)</u></p> <p>Kimberlyn Gray, Ph.D. Assoc. Prof., Chemical Engineering West Virginia University Institute of Technology Learning Resource Center, 305B Beckley, West Virginia 25801 (304) 929-1652 Kimberlyn.Gray@mail.wvu.edu</p>
<p style="text-align: center;"><u>Best Paper Awards Chair</u></p> <p>Tony Kerzmann Ph.D. Associate Professor Mechanical Engineering and Materials Science University of Pittsburgh 512 Benedum Hall Pittsburgh, PA, 15261 (412) 383-5064 TKerzmann@pitt.edu</p>	<p style="text-align: center;"><u>2024 Program Chair</u></p> <p>Matthew Cavalli, Ph.D., P.E. Associate Dean for Undergraduate Academic Affairs and Professor Western Michigan University Kalamazoo MI 49008-5314 (269) 276-3249 matthew.cavalli@wmich.edu</p>	<p style="text-align: center;"><u>Senior Director</u></p> <p>Betsy M. Aller, Ph.D. Assoc. Prof. Emerita Engineering Design, Manufacturing, and Management Systems Western Michigan University Kalamazoo, MI 49008-5336 (269) 271-0338 betsy.aller@wmich.edu</p>	<p style="text-align: center;"><u>NCS Webmaster</u></p> <p>Wook-Sung Yoo, Ph.D. Director of Research and Weisberg Professor, College of Engineering and Computer Sciences, Marshall University Huntington, WV 25755 Tel: 304-696-5452 yooow@marshall.edu</p>