ASEE AMERICAN SOCIETY FOR ENGINEERING EDUCATION

Mechanics Division Newsletter

Fall 2023 Chair: Geoff Recktenwald

Division Website: https://sites.asee.org/mechanics/ Secretary: Jean C. Batista Abreu

Message from the Chair

On behalf of the Mechanics Division leadership team I would like say it is an honor and a privilege to serve such a great division. This division is an excellent place to meet people who are passionate about mechanics education, pick up new and exciting tools to use in your classroom, and learn more about how to best educate our engineering students. As if that wasn't enough, this division excels at volunteering; from offering to review papers, to moderate sessions, to serve on committees, there is no division at ASEE with a better all-hands-on-deck commitment from our members. So, thank you members, for being part of the mechanics division.

If you are not yet part of this division, don't forget to sign-up at the ASEE website. We keep division fees below the pre-inflation cost of a pumpkin spice latte. Additionally, division members are added to our informative and minimally invasive email list where we provide helpful reminders of ASEE deadlines and opportunities to volunteer.

JOIN US IN PORTLAND
June 23-26, 2024

The ASEE Annual Conference & Exposition will be held at the Oregon Convention Center in Portland, OR. For more information on the conference, visit: https://www.asee.org/events/Conferences-and-Meetings/2024-Annual-Conference

Speaking of deadlines; a word of caution this year. ASEE has informed us that all deadlines this year are firm. During COVID and the Paper Management transition deadlines shifted quite a bit, so it is understandable if you had expected similar fluidity this year. But be forewarned, this year deadlines are firm, so please plan accordingly.

Each year, the Mechanics Division gives several awards to highlight the great work done by members of the mechanics education community. I know that many of you are aware of colleagues who have shown a strong commitment to mechanics education, have made outstanding contributions to mechanics education, or have made significant leadership contributions to the Mechanics Division. I would encourage you to nominate a colleague for one of these awards. Details for nominations are included inside this newsletter. While nominations are due by early 2024, now is the time to start collecting letters of support.

As a reminder, our division accepts works-in-progress papers. The purpose of these papers is to report plans for future assessments or give an overview of preliminary results from ongoing studies. These papers are a great way to get feedback from the Mechanics community. If you

have submitted a WIP paper in the past, I'd strongly encourage you to follow it up with a full paper at the following conference.

The Hands-on-Mechanics session is one of our most popular sessions. The session is designed to showcase the innovative ways our community has developed to add excitement and clarity to their classrooms. If you have a classroom demo that has really been effective this year, contact Chris Venters, (ventersc@ecu.edu) to submit ideas for the session.

Speaking of Chris Venters. I'd like to give our program chair a warm welcome and thank you for all of the work he is doing (and will be doing) this year. I would encourage you to make his job as easy as possible by volunteering to review papers and submitting reviews in a timely manner.

Finally, I would like to thank Jul, Phil and Chris for their help in planning last year's conference.

If you have any comments, questions, or suggestions about the Mechanics Division, please send me a note at gdr@egr.msu.edu.

Our 2024 conference will be in Portland, Oregon. See you there!

Geoff Recktenwald
2023-204 ASEE Mechanics Division Chair
Associate Chair for the Undergraduate Program
Mechanical Engineering
Michigan State University
gdr@msu.edu

Mechanics Division News and Announcements

Job Opportunity: Teaching Faculty Position (Academic Specialist) in Mechanical Engineering, Michigan State University
Contributed by Geoff Recktenwald

The Department of Mechanical Engineering at Michigan State University invites applications for a fixed-term Teaching Specialist position in mechanical engineering with an anticipated start date of January 1, 2024. This position is initially renewable for a minimum of three years, with the possibility of extension based on the Department's teaching needs, fund availability, and performance. The primary duties for this position are teaching and service. While this position is offered on a fixed-term basis, we are actively seeking individuals who aspire to establish a lasting career in teaching and academic service at our institution.

The successful candidate must have earned at least a M.S. degree in mechanical engineering, aerospace engineering, or closely equivalent. The candidate must have the ability to teach mechanical engineering courses, effectively communicate with undergraduate students, and work with graduate teaching assistants. The successful candidate will be responsible for teaching academic-year offerings of mechanical engineering undergraduate courses, laboratories, and assist in the development of laboratory modules as needed. The preferred candidate will have expertise in aerospace engineering, however, candidates with expertise in all mechanical engineering areas will be considered. The anticipated teaching load will be three courses per semester during the academic year.

Applications will be reviewed on a continuing basis until the position is filled. For full consideration, applications should be received before November 1st, 2023. For more information about the position and application requirements please see:
https://careers.msu.edu/en-us/job/516537/specialist-teacherfixed-term

Job Opportunity: Positions available in Department of Mechanical Engineering at the University of South Florida
Contributed by Autar Kaw

The Department of Mechanical Engineering at the University of South Florida invites applications for the following:

- A tenure-track faculty position in Aerospace Engineering. Applicants with a background in aerospace vehicle design, aerospace structures, urban air mobility, avionics, aero- and astrodynamics, orbital mechanics, autonomous path planning, or space navigation are especially encouraged to apply.
- A tenure-track faculty position in Mechanical Engineering. Applicants with a background in renewable energy, advanced manufacturing, robotics, autonomous systems, or data/AI-driven design are especially encouraged to apply.

To apply, please follow this link and select "Careers@USF" https://www.usf.edu/work-at-usf/careers/index.aspx. If you need additional help here is the Applicant Quick Guide https://www.usf.edu/work-at-usf/documents/applicant-quick-guide.pdf.

Assistant Professor Job ID 35065
Associate Professor Job ID 35066
Professor Job ID 35067

Job Opportunity: Positions available at the University of Southern Indiana
Contributed by Julian Davis

The Pott College of Science, Engineering, and Education at the University of Southern Indiana invites applications for three nine-month faculty positions with a start date of August 2024. Please see links below. Jul Davis (julian.ly.davis@usi.edu) is happy to answer questions.

- Mechanical: This position includes classroom and lab teaching assignments in mechanical engineering and technology courses, as well as freshman engineering. It is expected that this faculty member will have a research agenda that leads to scholarly works and the engagement of undergraduate students.
  https://careers.usi.edu/jobs/assistant-or-associate-professor-of-engineering-evansville-indiana-united-states
- Electrical: This position includes classroom and lab teaching assignments in electrical engineering and technology courses, as well as freshman engineering. It is expected that this faculty member will have a research agenda that leads to scholarly works and the engagement of undergraduate students. This faculty member will teach classes in the areas of electrical power and machines, signal processing, and/or electronic circuit design.
  https://careers.usi.edu/jobs/assistant-or-associate-professor-of-engineering-evansville-indiana-united-states-0c709d4c-433b-43a2-b4f4-6e7c1dd830da
- Manufacturing: This position includes classroom and lab teaching assignments in manufacturing engineering technology courses. This faculty member will teach classes in the areas of manufacturing process, computer-aided design, computer-aided manufacturing, automated systems, manufacturing processes and materials, engineering design techniques, and engineering problem-solving. It is expected that tenure-track faculty members will have a research agenda that leads to scholarly works and the engagement of undergraduate students.
  https://careers.usi.edu/jobs/instructor-clinical-assistant-professor-or-assistant-associate-professor-of-engineering-evansville-indiana-united-states

Job Opportunity: Open Rank/Tenure Track Faculty in Mechanical Engineering 2024-2025, Rose-Hulman Institute of Technology
Contributed by Sean Moseley

The Mechanical Engineering Department at Rose-Hulman is searching for inspiring educators who share our passion for teaching undergraduate engineering students. Our mission is "*to provide students with the world's best undergraduate science, engineering, and mathematics education in an environment of individual attention and support.*" If this resonates with you, then we think you'll love what we have to offer.

We welcome applications for tenure-track positions at the Assistant Professor rank to begin fall 2024 and are currently seeking outstanding engineering educators in any area of Mechanical Engineering. We encourage candidates from any area specialty within Mechanical Engineering to apply; experience in teaching and professional development within Thermal/Fluids is strongly desired. Highly qualified candidates may be considered for positions at higher rank commensurate with experience and qualifications. Essential job functions include teaching and advising students; service to the department, Institute, and professional communities; and professional development. For more information about the positions and application requirements, please visit https://jobs.rose-hulman.edu/.

Job Opportunity: Lecturer / Senior Lecturer / Principal Lecturer in Mechanical Engineering, The University of Maine
Contributed by Masoud Rais-Rohani

The Department of Mechanical Engineering at the University of Maine invites applications for a full-time faculty position with an anticipated start date of August 1, 2024 or earlier. Visit https://umaine.edu/mecheng/ for the full position description and application submission.

Resources: Open Educational Resources (OER) for Mechanics
Contributed by Dan Baker and Jacob Moore

Have you ever wanted 100% of your students to have access to the course textbook from the first day of your course until after they have graduated, all free of charge? Open Educational Resources (OER) may be your answer. OER are a high-quality alternative to commercial textbooks, with the opportunities in Engineering Mechanics growing each year. Here are two resources we have written:

Engineering Statics by Daniel Baker and Will Haynes - Engineering Statics is a free, openly licensed textbook used by over 20,000 learners each month. The text covers all the standard Engineering Mechanics: Statics topics and features interactive figures that allow students to test their conceptual knowledge as they read. Additionally, most chapters conclude with a series of algorithmic exercises for students to practice what they have learned.

Mechanics Map by Jacob Moore - The Mechanics Map is another free and openly licensed textbook for engineering statics and dynamics. Used by more than 14,000 learners each month, the resource has written explanations, video lectures, hundreds of worked examples with both written and video solutions, and a full set of homework problems.

Outside of the content that the article's authors have created and used themselves, several other open resources exist. Below are just a few examples of open content you might consider incorporating into your courses.

Mechanics of Materials by David Roylance - This book was written as part of the Massachusetts Institute of Technology Open Courseware Project and has since been brought into LibreTexts, where students, faculty, and outside experts work together to build freely available open education resources (OER). LibreTexts has a convenient remixing feature that allows an instructor to pull content from various books and have it remixed into a cohesive, custom online text.

Engineering at Alberta - Hosted by the University of Alberta, this resource includes content for a number of introductory and advanced mechanics courses, including statics, solid mechanics and FEA, vibrations, and advanced dynamics.

Engineering Mechanics: Statics by Libby Osgood, Gayla Cameron, Emma Christensen, Analiya Benny, and Matthew Hutchison - This textbook is built in the popular Pressbooks system. The book pulls heavily from Mechanics Map discussed earlier but expands upon and adapts the content, bringing it in a different direction as is allowed with some of the Creative Commons licenses.

Applied Fluid Mechanics Lab Manual by Habib Ahmari and Shah Md Imran Kabir - This lab manual provides students with the theory, practical applications, objectives, and laboratory procedure of ten experiments. The manual also includes educational videos showing how students should run each experiment and a workbook for organizing data collected in the lab and preparing result tables and charts.

Hands-On Mechanics – Last but not least, the Mechanics Division hosts a website full of hands-on activities shared by our members that you can bring into your classroom. The site is curated by Devin Berg, longtime webmaster for the division, and the system allows for anyone to upload and share their own materials as well as a system for reviewing content.

These are just some of the resources out there. Please consider using OER to increase student access and reduce student costs. We recommend searching the web, https://oercommons.org/, or https://open.umn.edu/opentextbooks to find OER options for the courses you teach. If you don't find exactly what you are looking for remember that many of the resources allow you to mix and match content or to add to the content yourself, and if you are open to it (pun intended) you might even consider licensing your own materials openly and sharing them with other mechanics educators.

Resources: Phone-based Vibration Measurement Techniques
Contributed by C.J. Riley

The Phone-Based Vibration Measurement website (bit.ly/phonevib) supports engineering laboratory instructors and students in conducting measurements of vibrating objects using contact and non-contacting sensing with mobile devices. The methods presented on the site include:

- Use the accelerometer built into your phone to measure accelerations from 0.0005 to 1 g in magnitude at frequencies between 0.5 and 50 Hz (higher for some phones!).
- Use the LiDAR sensor on iPhone Pro models to measure time varying displacements as small as 0.1 mm at distances of 0.25 to 3 meters.
- Indirectly measure the vibration of ferrous objects by sensing a changing magnetic field.
- Record video and identify the natural period of vibration by including a stopwatch in the video. Simple but effective!
- Use a purpose-built app to "freeze" the motion of a harmonically oscillating object by adjusting the frame rate of video capture.
- Use a purpose-built app to identify the position of features in a video to track with time.

For more information, visit https://sites.google.com/view/phonevibrationmeasurement/home.

Additional News Items

If you have any news items or announcements for the Spring 2024 newsletter, please send them to Jean Batista Abreu (batistajc@etown.edu) by April 5, 2024.

Archival Materials

Do you have any interesting Division materials from past decades? Specific materials might include articles, photographs, Readiness Test results, role of the Mechanics Division in developing the mechanics curriculum, etc. Please contact Devin Berg at (715) 232-1133, bergdev@uwstout.edu.

Call for Award Nominations

Archie Higdon Distinguished Educator Award

The Archie Higdon Distinguished Educator Award is given annually by the Mechanics Division for distinguished and outstanding contributions to engineering mechanics education. The nomination package should include the following:

1. A letter of nomination and no more than four accompanying letters of support which delineate the nominee's contribution to mechanics education,
2. Nominee's curriculum vitae.

The award consists of a plaque to be given during the ASEE Annual Conference at the Mechanics Division Awards Banquet, a $750 cash prize, and registration for the Mechanics Division Banquet for the awardee and a guest.

Ferdinand P. Beer and E. Russell Johnston, Jr., Outstanding New Mechanics Educator Award

The Ferdinand P. Beer and E. Russell Johnston, Jr., Outstanding New Mechanics Educator Award is given annually to up to two individuals (contingent to availability of funds) who have shown a strong commitment to mechanics education. The winners are selected on the basis of their exceptional contributions to mechanics education. Individuals who have no more than five years of academic experience past their first regular academic appointment are eligible. The nomination package should include the following:

1. A letter of nomination which delineates the nominee's contribution to mechanics education and no more than two additional letters of support,
2. A one-page letter from the nominee describing his or her personal philosophy regarding mechanics education,
3. Nominee's curriculum vitae.

The award consists of a plaque to be given during the ASEE Annual Conference at the Mechanics Division Awards Banquet, a $750 cash prize, and registration for the Mechanics Division Banquet at the 2024 Annual Conference for the awardee and a guest.

Mechanics Division James L. Meriam Service Award

The Mechanics Division James L. Meriam Service Award may be given annually to recognize significant service to the Mechanics Division as characterized by notable leadership, significant contributions, and prolonged and dedicated service. Candidates for the award must be members of the Mechanics Division and must have served the Division for a minimum of ten years. No individual may receive the award more than once, and members of the Division's Awards Committee are not eligible for the award until two years after completing their service on that committee. Nominations may be made by all members of the Mechanics Division except for those members serving on the Division's Awards Committee. Each nomination package must include the following:

1. A chronological listing of the candidate's service to the Division,
2. A narrative statement detailing the significant elements of the service.

The award consists of a plaque to be given during the ASEE Annual Conference at the Mechanics Division Awards Banquet, and registration for the Mechanics Division Banquet for the awardee and a guest.

Attendance at the ASEE Annual Conference is required for the awardees. Nominations are due by **January 29th 2024**. Please submit nominations here: https://forms.gle/dK6yNbmmJ7A46Sm96. For additional information, please contact the Awards Committee Chair James Lord (jklord@vt.edu).

2023 ASEE Mechanics Division Annual Business Meeting Minutes (DRAFT)

Note: A final version will be approved at the 2024 Mechanics Division Business Meeting. Please forward any needed corrections via email to batistajc@etown.edu.

Meeting Time: Wednesday, June 28, 2023, 11:00 am – 12:30 pm EST
Location: Calloway, Hilton Baltimore Inner Harbor, Baltimore, MD

Attendees: Jean Batista Abreu, Amie Baisley, Dan Baker, John Burkhardt, Phillip Cornwell, Lance Curtis, Julian L. Davis, Alex De Rosa, Maxine Fontaine, Michael Hennessey, Anna Howard, Jennifer Kadlowec, Steve Kuchnicki, James Lord, Christine Masters, Kevin McMullen, Jacob Moore, Masoud Rais-Rohani, Carisa Ramming, Geoffrey Recktenwald, Sahithya Reddivari, Hadas Ritz, Kristi Shryock, Andrew Sloboda, Chris Venters

Call to Order – 11:03 am EST

1. Welcome/Introductions (Phillip Cornwell – 2022-2023 Mechanics Division Chair)
2. Motion to approve 2023 business meeting minutes – minutes were approved unanimously
3. Membership updates
   - Membership numbers over time per division
4. Conference Updates (Geoff Recktenwald, – 2022-2023 Program Chair)
   - 26 abstracts submitted (down from 39 last year)
   - 23 final papers, the rest were rejected or withdrawn
   - 5 technical sessions, 2 special sessions (Hands-On Mechanics, Awards Banquet)
   - Two moderators and one backup assigned per session
   - New paper management system improvement
   - The challenges of decaying membership across divisions were discussed
5. Report from Division Officers
   a. Treasurer's Report (Sahithya Reddivari)
      - Most up-to-date balance in BASS account: $10,871.87 (as of 03/31/2023)
      - Need to contact Pearson to follow up on funds for award
      - Finances are normal
      - Total revenue YTD FY23: $273.00
      - McGraw Hill Education support: $2,000.00
      - Discussion: Banquet attendance potentially impacted by schedule conflicts
   b. Nominating committee:
      - No updates to report
   c. Awards committee (Christine Masters):
      - Shortage of nominations again (zero nominations for Distinguished Educator Award)
      - The committee requested the Division members to share the award opportunities with their colleagues and to be on the lookout for potential awardees
      - The in-person award banquet was well attended
   d. Membership committee:
      - Committee plans to attract more people and increase visibility and engagement
      - The idea of waiving the membership fee for new members was discussed
   e. Secretary (Jean Batista Abreu):
      - Encouraged members to send contributions for newsletters

6. Elections
    - 2024-2025 Program Chair Elect
        - Nominations: Dan Baker, Anna Howard
        - Dan Baker elected
    - Director (3 vacancies – 4-year terms until 2026-2027)
        - Nominations: Amie Baisley, Jacob Moore, Huihui Qi, Kristi Shryock
        - Amie Baisley, Jacob Moore and Kristi Shryock were elected
    - Treasurer
        - Sahithya Reddivari (reappointed)
    - Secretary
        - Jean Batista Abreu (reappointed)
    - Webmaster
        - Devin Berg (reappointed)
    - Awards committee
        - James Lord (chair), Huihui Qi, Jacob Moore, Hadas Ritz, Alex De Rosa, Christine Masters
    - Membership
        - Jul Davis (chair), Anna Howard, Kristi Shryock, and Lance Curtis
7. Other Discussions:
    a. Ad-hoc committee to seek/maintain sponsorships: Jul Davis, James Lord, Sahithya Reddivari
        - Contact Wiley for banquet and/or award sponsorship
        - Banquet cost (planned for attendance of 40, 30 paid, ~10 sponsored), target $2250.00
        - Emphasize budgetary issues when contacting potential and current sponsors
        - Ask for additional support from McGraw Hill
    b. There might be a need for an Ad-hoc committee to update operations manual
        - Ask officers to help depicting tasks and deadlines for each role
        - Google Site with updated operations manual would be helpful
    c. Hands-on Mechanics
        - Session is popular – Can it be expanded or improved?
        - The name of the session excludes demos that are not physical
8. Leadership transition

Adjourn at 12:33 pm EST

2023 Mechanics Division Awards

Ferdinand P. Beer and E. Russell Johnston, Jr., Outstanding New Mechanics Educator Awards:

- **Kevin McMullen**, Assistant Professor, Department of Civil and Mechanical Engineering, United States Military Academy
- **Andrea Arguelles**, Assistant Professor, Engineering Science and Mechanics Department, The Pennsylvania State University

2022 Best Presentation Award:

Paper: *Work in Progress: Context Matters: A Comparative Study of Results of Common Concept Questions in Statics at Several Diverse Institutions*

- **Christopher Papadopoulos**, University of Puerto Rico, Mayaguez Campus
- **Eric Davishahl**, Whatcom Community College
- **Carisa Ramming**, Oklahoma State University
- **Jean Batista Abreu**, Elizabethtown College
- **William Kitch**, Angelo State University

2023 Best Paper Award:

Paper: *Improving students' learning through Inquiry-Based Learning Activities as pre-training for Mechanics of Materials classes*

- **Huihui Qi**, Teaching Assistant Professor at University of California, San Diego
- **Changkai Chen**, University of California, San Diego
- **Richard Eugene Vallejo Jr**, University of California San Diego
- **Trevor Keoki Oshiro**, University of California San Diego
- **Edward Zhou Yang Yu**, University of California, San Diego
- **Isabella Fiorini**, University of California, San Diego

2023-2024 Mechanics Division Officers and Standing Committees

Chair: Geoffrey Recktenwald
(517) 432-3658, gdr@egr.msu.edu

Program Chair: Chris Venters, East Carolina University
(252) 737-1028, ventersc@ecu.edu

Program Chair Elect: Dan Baker, Colorado State University
(970) 491-0261, dan.baker@colostate.edu

Past Chair: Phillip Cornwell, US Air Force Academy
(719) 333-4396, phil.cornwell@usafa.edu

Directors:

Anna Howard, North Carolina State University (2020-2024)
(919) 513-4019, annahoward@annahoward.com
Andrew Sloboda, Bucknell University (2021-2025)
(570) 577-1861, andrew.sloboda@bucknell.edu
Nicolas Libre, Missouri University of Science and Technology (2022-2026)
(573) 341-7069, libren@mst.edu
Amir Danesh-Yazdi, Rose-Hulman Institute of Technology (2022-2026)
(812) 877-8305, daneshya@rose-hulman.edu
Amie Baisley, University of Florida (2023-2027)
(352) 392-4523, amie.baisley@eng.ufl.edu
Jacob Moore, Penn State Mont Alto (2023-2027)
(717) 749-6209, jmoore@psu.edu
Kristi Shryock, Texas A&M University (2023-2027)
(979) 458-6842, kshryock@tamu.edu

Secretary: Jean Batista Abreu, Elizabethtown College,
(717) 361-4770, batistajc@etown.edu

Treasurer: Sahithya Reddivari, Georgia State University - Perimeter College
(678) 891-3735, sreddivari@gsu.edu

Webmaster: Devin Berg, University of Wisconsin-Stout
(715) 232-1133, bergdev@uwstout.edu

Archivist: Devin Berg, University of Wisconsin-Stout
(715) 232-1133, bergdev@uwstout.edu

Nominating Committee: Phil Cornwell (Chair, phil.cornwell@usafa.edu), Jul Davis (julian.ly.davis@usi.edu), Masoud Rais-Rohani (masoud.raisrohani@maine.edu)

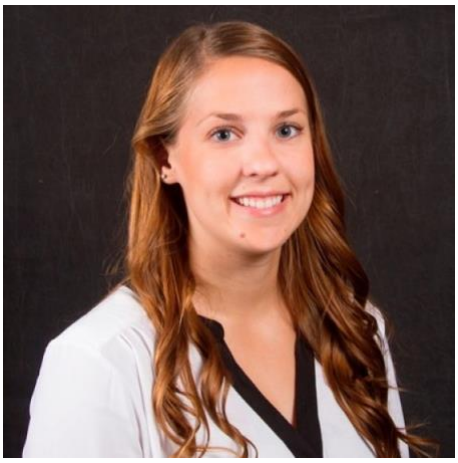
Membership Committee: Jul Davis (Chair, jldavis2@usi.edu), Anna Howard (anna_howard@ncsu.edu), Kristi Shryock (kshryock@tamu.edu), and Lance Curtis (lrcurtis@umd.edu)

Awards Committee: James Lord (Chair, jklord@vt.edu), Huihui Qi (huqi@ucsd.edu), Jacob Moore (jmoore@psu.edu), Hadas Ritz (hr32@cornell.edu), Alex De Rosa (derosa@udel.edu), Christine Masters (cbm100@psu.edu), Chris Papadopoulos (for plaques, christopher.papadopoulos@upr.edu)

Notes: Two Directors are elected at each annual Business Meeting for terms of four years. Directors who have served for at least one year are eligible to be elected as Program Chair Elect (and to serve consecutively as Program Chair and Chair). Secretary and Treasurer are ex-oficio (non-voting) elected at each annual Business Meeting for terms of one year. Webmaster and Archivist are ex-oficio (non-voting) and are elected for terms of one year. The Nominating Committee is specified to consist of the three most recent Past Chairs. The Membership and Awards Committee are appointed to serve for terms of one year.

New Officer Introduction

AMIE BAISLEY, University of Florida - Director (2023 - 2027)



Amie is currently an Instructional Assistant Professor in the Department of Engineering Education in the UF Herbert Wertheim College of Engineering. She received her Ph.D. in Engineering Education from Utah State University and her M.S. in structural engineering and B.S. in civil engineering from Arizona State University.

Dr. Baisley's research interests include engineering student persistence particularly during the first two years, linking engineering education research to the classroom, and the use of alternative pedagogies and assessment strategies. Her teaching goals include creating student-centered, engaged environments that allow students to establish a strong foundation for the fundamentals.

LANCE CURTIS, University of Maryland – Membership Committee (2023 - 2024)

Lance is an educator-in-training aspiring to inspire the next generation of engineers. He is also a mechanical and materials engineer with skills in metallurgical and mechanical failure analysis, product reliability modeling, and process improvement with an MS in Mechanical Engineering from the University of Idaho.

He is currently serving as an Adjunct Professor at Howard Community College while working as Clark Doctoral Fellow - Research Associate in the Center for Risk and Reliability at the University of Maryland. His PhD research focuses on entropy-based failure prediction and its application to corrosion fatigue of welded joints and Miner's Rule.

HUIHUI QI, UC San Diego – Awards Committee (2023 - 2024)

Huihui is an Associate Teaching Professor of Mechanical and Aerospace Engineeing at UC San Diego. Qi focuses on engineering education, especially project-based learning, multi-disciplinary course design, the influence of assessment methods on students' learning outcomes, freshmen engineering education and retention improvement, promoting diversity in engineering, and sustainable engineering education.

Qi served as an Assistant Professor at Grand Valley State University before joining UC San Diego in 2019. She earned a Ph.D. from Rutgers University.

ALEX DE ROSA, University of Delaware – Awards Committee (2023 - 2024)

Alex De Rosa is an Associate Professor in the Department of Mechanical Engineering at the University of Delaware. His research focuses on improving the educational experience through the creation and promotion of new teaching tools and techniques. Alex is particularly interested in the areas of deeper learning and knowledge transfer, where he is working to help students better apply their knowledge and skills in new contexts, including in their future careers.

Alex received his Ph.D. in Mechanical Engineering from The Pennsylvania State University where he studied combustion instabilities in gas turbine engines. His accolades include being awarded the 2022 ASEE Outstanding New Mechanical Engineering Educator Award. Alex's work in the area of spatial skills assessment and training has also been nationally recognized by the ASEE.

Mechanics Division - Opportunities for Involvement

All members and prospective members of the Mechanics Division are invited to the Mechanics Division Annual Business Meeting, held each year in June at the ASEE Annual Conference. One of the primary activities of the division business meeting is to elect new officers and fill available committee positions.

Some of the offices are described below. For a full list of positions, see "2023-24 Mechanics Division Officers and Standing Committees", provided earlier in this newsletter.

Director: A director is a voting member of the Executive Committee. Main duties: attend the Executive and Business Meetings at the Annual Conference, elect the Program Chair Elect, and participate in decision making as issues arise. Directors must also be willing to accept a nomination for Program Chair Elect, which succeeds consecutively to Program Chair, Chair, and Immediate Past Chair. Term: 4 years.

Secretary: Main duties: Attend Executive and Business Meetings at the Annual Conference and record minutes; prepare ballots for elections of officers; prepare and distribute Newsletter (twice per year); assist Chair with ensuring that Division agenda is executed. Term: 1 year.

Treasurer: Main duties: Keep records of accounts; issue checks to award winners; pay and process other items as necessary. Term: 1 year.

Officer Nominations:
You are welcome to submit nominations before or during the 2024 Mechanics Division Annual Business Meeting. Self-nominations and/or multiple nominations are permitted. Nominations may be submitted via email in advance of the meeting to Geoff Recktenwald (gdr@msu.edu). Include a brief statement of the nominee's current/past involvement in the Mechanics Division and nominee's interest in serving in the specific office. If a person is being nominated for more than one position, please state preference.

2024 Annual Division Business Meeting Agenda Items:
If you have any items that you would like included on the agenda for the Annual Division Business Meeting, please contact Division Secretary, Jean Batista Abreu (batistajc@etown.edu) or Division Chair, Geoff Recktenwald (gdr@msu.edu), before the 2024 Annual Business Meeting.