

Physical Acoustics Technical Committee Meeting

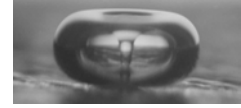
May 9, 2023
 Chair: Joel Mobley
 jmobley@olemiss.edu

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Welcome

- **Everyone** sign in. The sheet is circulating

- Name
- Institution
- E-mail



- **Please indicate ...**

- ... student and/or first time attendee
- ... want to be added to TC email list

- On Zoom use the chat box



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New Attendee Introductions

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New Chair of PA

Chris Kube

- Penn State
- Associate Professor
- Department of Materials Science and Engineering



kube@psu.edu



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Agenda

- Committee Reports
- Announcements
- Future Meetings/Special Sessions
- Technical Council
- Publications



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Committee Reports



- **Medals and Awards**
 - Jay Maynard
- **Standards (ASACOS)**
 - Greg Lyons
- **Web Committee**
 - Aaron Vaughn
- **Membership**
 - Kent Gee



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Membership Items

- **Apply for Full Membership**
 - <https://acousticalsociety.org/wp-content/uploads/2019/04/fullapp.pdf>
 - Point of emphasis in TC meeting
 - The CV and signatures don't matter!
 - "nobody reads them"-Maureen Stone
- **Become an official member of PATC**
 - New names are submitted by TC chair each January
 - 103 currently
- **We can always use New Fellows!**

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Fellowship

- **FACTORS:**
 - Technical contributions to acoustics
 - Participation in Society activities
 - Teaching or dissemination of knowledge
 - Leadership activities in other acoustical societies
 - Standards activities
- Relative importance of these factors will differ from candidate to candidate




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Student Council Report Ferdousi Rawnaque



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Student Council Rep

PHYSICAL ACOUSTICS



Spring 2022 – Fall 2023



Ferdousi Rawnaque
Penn State University

Interested in joining Student Council?





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Student Events

Monday (5/8)
First-Time Attendee/Student Orientation
80 attendees

Student Meet and Greet
100 students attended

Student Informal Outing
40 students attended

Wednesday (5/10)
Student Reception
6:00 – 8:00 PM







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Join SMMFL!

Students Meet Members for Lunch (SMMfL)

Student Outreach for Networking & Integrating Colleagues

SONIC

Student Outreach for Networking and Integrating Colleagues

Make connections as a Newbie!
Help fellow students as a Guide!


Helpful sign-up



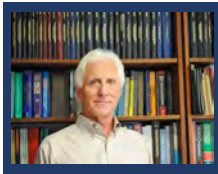
30 students signed up for Chicago!

SONIC pairs first time attendees with experienced students to help guide them through the ASA meeting and help with networking.

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David T. Blackstock
Mentorship Award



Dr. Mark Hamilton
University of Texas Austin
Professor of Physical Acoustics



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Grant and Fellowship Panel







- Thursday 1:30-3:00 pm | Indiana/Iowa
- Special session hosted by Student Council.
- Experts from NIH, ONR, NSF, and ASA will be participating.
- Encourage your students to attend!


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Check out our website: asastudents.org




CONTACT US

 @asastudents
 @ASAStudents
 Acoustical Society of America Students
 asastudentcouncil@gmail.com

 @students_ASA **NEW!**

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Incoming Student Council Rep (2024)

John Case


- *Penn State University*

jac7175@arl.psu.edu




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Announcements





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ASA Vice-President Elect

Tyrone Porter

- *Department Chair, Professor of BME*
- *U. Texas-Austin*





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New Fellows



Tracianne Neilsen

- For applications of machine learning to inverse problems in ocean acoustics



Kevin Haworth

- For contributions to the development of passive cavitation imaging and therapeutic ultrasound methods

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PennState

ONR Symposium on Acoustic Metamaterials 2024

Technical sessions:

- Computational methods
- Elastic and underwater acoustic metamaterials
- Active acoustic metamaterials
- Beyond the benchtop
- New frontiers

20-21 March, 2024
Request registration at sites.psu.edu/metamaterials








Amanda Hanford <ald227@psu.edu>

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Awards



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R. BRUCE LINDSAY AWARD



For contributions to the understanding of ultrasound-induced mechanical bioeffects and their clinical applications



Julianna C. Simon
2023

also elected chair of Biomedical Acoustics TCI!

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Helmholtz-Rayleigh Interdisciplinary Silver Medal in Biomedical Acoustics and Physical Acoustics

For contributions to the application of nonlinear acoustics to medical ultrasound








Vera A. Khokhlova
2023

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Gold Medal



For contributions to theoretical nonlinear acoustics, education, and for service to and leadership of the society.

Mark F. Hamilton
2023

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David T. Blackstock Mentor Award



Mark Hamilton

- Awarded by the ASA Student Council
- For ... being Mark Hamilton



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Future ASA Meetings



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2023-2025

2023	Sydney, Australia	Abstract deadline July 24 th
	<ul style="list-style-type: none"> • 6-10 December (joint with AAS, WESPAC, PRUAC) • Co-Chairs: Marcia Isakson, Ray Kirby (WESPAC) 	
2024	Ottawa, Canada	Student travel awards available Application Deadline May 31 st Notification by July 24 th
	<ul style="list-style-type: none"> • 13-17 May 	
	Fall: Virtual (no dates yet)	
2025	New Orleans, LA (Joint with ICA)	
	<ul style="list-style-type: none"> • 19-23 May • Chair: Mark Hamilton 	





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Virtual Meeting – PATC Feedback

- Dates – week of Nov 20 ideally, 2nd choice 1st week of Dec
- Length of meeting?
- What can you do virtually that you can't do in person?
- Consider this meeting as a blank canvas – get creative – experiment
- What social activities do you want – game night, virtual gym, acoustic trivia,
- Student Council participation – format?
- Electronic Posters?

Google form for comments

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Special Sessions – Chicago Spring 2023

- Acoustic Remote Sensing in Urban Environments (1a/p)
 - Max Dionis, Sandra Collier
- Acoustics Demonstration Extravaganza (2a)
 - Dan Russell
- Interaction of Electromagnetic Waves with Acoustic Waves (2p)
 - Chu Ma, Parag Chitnis
- Advances in Sonochemistry (1p)
 - James Kwan
- Radiation Force and Spectroscopy (3p)**
 - Christopher Mizzi, Robert Lirette
- Acoustic Propagation Effects (4p)**
 - Joel Lonzaga, William Doebler
- Acoustics and Elasticity of Consolidated and Unconsolidated Granular Materials (2a, 3a/p)**
 - John Yorikomo, James Bittner, Richard Weaver
- Acoustic Sensing in Planetary Environments (4a)**
 - Andi Petculescu, Tim Leighton



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General Sessions – Chicago Spring 2023


- General Physical Acoustics I: Time Reversal Technique and Source Characterization (4a)**
 - Brian Anderson, Sarah McComas
- General Physical Acoustics II: Application, Measurements, and Novel Effects (5a)**
 - Greg Lyons, Carl Hart



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Special Sessions – Sydney Fall 2023

- **Acoustical Measurements and Sensors for Challenging Environments**
 - Cristian Pantea, Akita Nagakubo
- **Acoustical Methods for Materials Analytics**
 - Raphael Hermann
- **Multiphase Flow and Acoustics**
 - John Allen, Richard Mannasseh, Joseph Kim
- **Nonlinear acoustics in solids**
 - Chris Kube, Ching-Tai Ng
- **Artificial Intelligence for Metamaterials**
 - Feruza Amirkulova, Chengzhi Shi, David Powell



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Special Sessions – Ottawa Spring 2024

- **Acousto-Optic Sensing**
 - Carl R. Hart, Oleg Sapozhnikov, Yangfan Liu
- **Characterization of Electronic Materials, Components, and Devices**
 - Lauren Katch, Haley Jones
- **Cyber Threats and Acoustical Systems**
 - Kavitha Chandra, Charles Thompson
- **Infrasound**
 - Philip Blom, David Green
- **Meteorological Acoustics**
 - Roger Waxler, Jelle Assink, Natalia Sidorovskaia
- **Nonlinear acoustics in solids**
 - John Cormack, Christopher Kube
- **Resonant ultrasound spectroscopy for characterizing material property and structure**
 - Christopher Kube, Matthew Cherry, Rasheed Adebisi
- **Wind Noise**
 - Greg Lyons, Kirk Alberts




THESE ARE IN THE OFFICIAL LIST AS OF 5/12

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Special Sessions – Ottawa Spring 2024

- **Developments and applications in phononic crystals**
 - Matthew Guild, S. Hales Swift
- **Novel methods and applications in nondestructive evaluation**
 - Luz Sotelo, Matthew Guild, Joseph Turner
- ---
• ---
- **FORM:** <https://forms.gle/MX3i3YA5pVDdwAVy8>



NOT ENTERED AS OF 5/13



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Technical Initiatives

- **Due by (before) 8 am Friday**
- **Contact me if you intend to submit**
- **They do not carry over if previous funds were unused**
- **We have a total of \$1500 we can spend as a TC without further approval**

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SURIEA Students this week

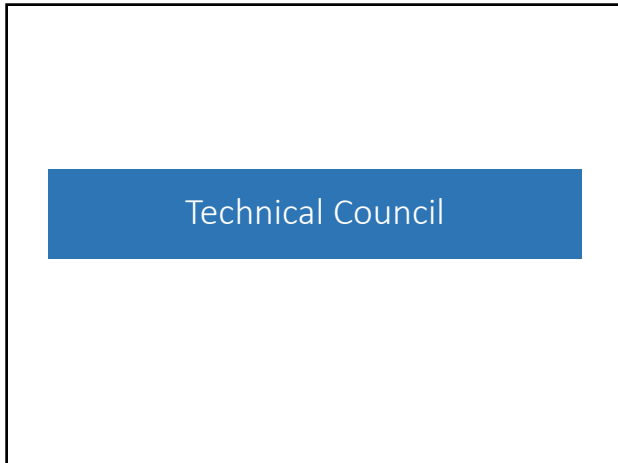
- Hezekiah George
- Grace M. Farbin
 - 5a0a22: A preliminary numerical investigation of convolutional neural Network (CNN) techniques for filtering high-intensity focused ultrasound (HFU) noise in images
 - POSTER: Wed, May 10 @ 1:00pm - 3:00pm (SALON I); TALK: Fri, May 12 @ 7:45 – 8:00 am (NORTHWESTERN/OHIO STATE)
- Stefani Garcia
- Megan Julien
- Juvanely Landa
- Damian Magallan
- Vitalis Wagorne
 - 3a08b1: Adaptive Signal Adjustments in Humpback Whale Songs
 - Wed, May 10 @ 10:30am - 10:45am (GREAT AMERICA 1/2)
- Kai White
 - 2p093: Addressing auditory processing challenges and accessibility in live music settings
 - Tue, May 09 @ 1:00pm - 5:00pm (SALON I)
- Brijonjay Madrigal
 - 4p10: Guidance From the Experts: Applying for Grants and Fellowships (co-chair)
 - Thu, May 11 @ 1:30pm - 3:00pm (INDIANA/IOWA)
- Kirby Parnell
 - 4pAB11: The huaka'i of Hawaiian monk seal *Kelooa*: conservation through sound science
 - Thu, May 11 @ 4:30pm - 4:50pm (GREAT AMERICA 1/2)
- Victoria Sevech
 - 4aPP10: Orthographic information facilitates discrimination of native and foreign-accented speech
 - Thu, May 11 @ 11:25am - 11:40am (INDIANA/IOWA)

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Proposal for a new interdisciplinary technical group on Phononics and Metamaterials

Matt Guild

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Publications


- Iconicity and Sound Symbolism (Deadline: 30 Sept 2023)
- Acoustic Cue-Based Perception and Production of Speech by Humans and Machines (Deadline: 31 Dec 2023)
- Verification and Validation of Source and Propagation Models for Underwater Sound (Deadline: 2 Oct 2023)
- Wave Phenomena in Periodic, Near-Periodic, and Locally Resonant Systems (Deadline: 31 Dec 2023)
- Advances in Soundscape: Emerging Trends and Challenges in Research and Practice (Deadline: 29 Feb 2024)
- Assessing Sediment Heterogeneity on Continental Shelves and Slopes (Deadline: 1 April 2024)

JASA Impact Factor, 2023 projection 2.36

145 Physical Acoustics papers (3rd among sections)

Special Issues drive downloads, IP


JASA-EL will get an impact factor mid-2023



Podcast

ACROSS ACOUSTICS

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POMA

Proceedings of Meetings on Acoustics

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For questions or comments please contact poma@acousticalsociety.org

POMA Student Paper Competition

POMA is holding a society-wide student paper competition for a POMA submission based on a presentation or poster from the Chicago meeting.

\$300

Award Amounts
Up to five student papers will receive an award of USD \$300. Additionally, the student paper winners will be noted on the POMA cover page and their article will be promoted in email and social media campaigns.



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Attendance Form



Full Member Form



Virtual Meeting Feedback



Links

POMA Competition



Ottawa Session Proposals



OTHER BUSINESS?

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