

PATC Meeting Notes (05/09/2023)

Taken by Ferdousi Rawnaque.

Joel Mobley, TC Chair, presiding.

New Chair of PA Chris Kube was introduced to the TC.

He is an associate professor in the Department of Engineering Science and Mechanics at Penn State University.

Email address: [kub@psu.edu](mailto:kube@psu.edu)

Committee Reports**Medals and Awards (2 PATC, 2 BATC)**

- R. Bruce Lindsay Award – Julianna C. Simon
- Helmholtz-Rayleigh Interdisciplinary Silver Medal in BA and PA – Vera A. Khokhlova
- Gold Medal – Mark Hamilton
- David T. Blackstock Mentorship Award – Mark Hamilton

Standards

Greg Lyons

- ASA standards encourages more participation from all members, especially from working groups on the technical contents.
- Standards Policy: standards shall not go more than 10 years without revision review.
- Chairs of working groups need to review standards to follow the policy.
- Semi-technical guide, a 3-page long document, was recommended to confirm the existing standards is adequate.
- Please contact Greg Lyons for more information.

Membership

Kent Gee

- Becoming an active member enables one to vote in the society. Everyone is encouraged to become full members.
- A simple pdf form is available on the ASA website for the membership process.
- The overseas payment process for membership needs to be improved.
- For further information please contact Kent Gee

Fellowships

- Members are highly encouraged to nominate more fellows.
- Nomination should focus on what makes a member involved and stand out in the society, compared to their grants and number of publications.
- Several reasons for getting rejected from the fellowship were discussed.
 - Members who are too early in their careers can often time get rejected being a Fellow. However, this is temporary and their contribution to the society with time will change this decision.
 - Inadequate and short nomination letters can cause rejection decisions.
 - Seconding letters should be separate from the nomination letters and build its own case.

- All nomination letters should not come from the individual's PhD institution.
- For the ease of understanding nomination letter format, previously successful nomination letters will be shared with the members.
- Please contact Kent Gee with any questions **before** submitting the nomination package.

ASA Vice-President Elect (executive council) was declared in the meeting.

Tyrone Porter – He is the Department Chair and Professor of BME at the University of Texas-Austin.

New Fellows

Tracianne Neilsen (official member of PATC)

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

Kevin Haworth (affiliated with PATC)

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

Penn State ONR Symposium on Acoustic Metamaterials

20-21 March 2024

- Registration information will be uploaded in the site soon: sites.psu.edu/metamaterials
- Contact Amanda Hanford for further information.

Awards

- ***R. Bruce Lindsay Award – Julianna C. Simon*** For contributions to the understanding of ultrasound-induced mechanical bioeffects and their clinical applications
- ***Helmholtz-Rayleigh Interdisciplinary Silver Medal in BA and PA – Vera A. Khokhlova*** For contributions to the application of nonlinear acoustics to medical ultrasound
- ***Gold Medal – Mark Hamilton*** For contributions to theoretical nonlinear acoustics, education, and for service to and leadership of the society.
- David T. Blackstock Mentorship Award – Mark Hamilton (Awarded by the ASA Student Council).

Future ASA Meetings:

2023 Fall – Sydney, Australia 6-10 December (joint with AAS, WESPAC, PRUAC)

Abstract Deadline – July 24th, 2023

Co-Chairs: Marcia Isakson, Ray Kirby (WESPAC)

Travel grants are available for students.

2024 Spring - Ottawa, Canada 13-17 May

2024 Fall: Virtual (no dates yet)

2025 New Orleans, LA (Joint with ICA) 19-23 May

Chair: Mark Hamilton

- ICA will not require conference proceeding papers.

- POMA will be running in 2025.

Virtual Meeting –PATC Feedback

- Currently one virtual meeting is going to be held with adequate preparation. Continuation of the virtual meeting will be decided by the successful completion of this event.
- Members are suggested to come up with creative ideas designed for PA virtual meetings. Ideas should be independent from the traditional structures of in-person meetings.

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.



Special Sessions –Chicago Spring 2023

**for upcoming

Acoustic Remote Sensing in Urban Environments (1a/p)

- Max Denis, Sandra Collier

Acoustics Demonstration Extravaganza (2a)

- Dan Russell – **Recording will be uploaded on a website in future.**

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 Yoritomo, James Bittner, Richard Weaver

Acoustic Sensing in Planetary Environments (4a)**

- Andi Petculescu, Tim Leighton

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

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 - Ocean bubbles, Microfluidics and PA

- John Allen, Richard Mannasseh, Joseph Kim

- Australia and Hawaii.
- PA morning session, BA afternoon session.

CHECKING ON TWO THAT WERE DELETED (Chris Kube)

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

New topics were submitted during this meeting week -

- *Cyber threat in ACS systems new topic was submitted*
- *Wind Noise (infrasound)*

Organizers must submit topics before Friday.

•FORM: <https://forms.gle/MX3i3YA5pVDdwAVy8>

FINALIZED ON FRIDAY



Technical Initiatives - Initiative for 2023 needs to be submitted.**Due by (before) 8 am Friday**

- Contact Joel Mobley 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

SURIEA Students this week

- Please attend the talks and posters of the SURIEA students.
- Hezekiah George (2021 cohort)
- Grace M. Farbin
 - 5aBAa2: A preliminary numerical investigation of convolutional neural Network (CNN) techniques for filtering high-intensity focused ultrasound (HIFU) 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 Wagome
 - 3aABb1: Adaptive Signal Adjustments in Humpback Whale Songs
 - Wed, May 10 @ 10:30am - 10:45am (GREAT AMERICA 1/2)
- Kai White
 - 2pPP3: Addressing auditory processing challenges and accessibility in live music settings
 - Tue, May 09 @ 1:00pm - 5:00pm (SALON I)
- Brijonnay Madrigal
 - 4pID: 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 Kekoa: conservation through sound science
 - Thu, May 11 @ 4:35pm - 4:50pm (GREAT AMERICA 1/2)
- Victoria Sevich
 - 4aPP10: Orthographic information facilitates discrimination of native and foreign-accented speech
 - Thu, May 11 @ 11:25am - 11:40am (INDIANA/IOWA)

Proposal for a new interdisciplinary technical group on Phononics and Metamaterials

Matt Guild

- A new group on phononics crystals and metamaterials is proposed. This topic has been here in ASA for over a decade. However, there's a lack of sessions and sessions are not well coordinated.
- This group will tie together several TCs: PA, SP, SAV, EA. However, this is not the formation of a new TC.
- This group aims at effective coordinated outreach, such that one can receive a flyer from their organization containing all necessary information on the sessions they want to attend.

We need ASA members to sign a petition (google doc) that goes to TC commission.

- 1500 USD was suggested to be allocated to bring experts in this field in future.
- Arranging a mini conference on Friday was suggested to bring people to introduce the new interdisciplinary group to them.

A QR code was shared during the meeting to sign the petition.

Publications

- JASA Impact Factor, 2023 projection 2.36
- Members are encouraged to act as editors in Special Issues.

Podcast:

Across Acoustics: ASA publication now has a podcast.

**PROCEEDINGS OF MEETINGS ON ACOUSTICS**

- Publish your work there for free.
- Results from previous ASA presentations can be still published in POMA.

POMA Student Paper Competition

- Up to 5 student papers will receive an award of \$300.
- Winning papers will be mentioned in POMA front page.

TC Meeting in Sydney

- A hybrid PATC meeting (early morning Australia time) is proposed for ASA Sydney meeting.
- In person early morning meeting in Sydney will be evening in the USA.

Student Poster Competition (Sydney and Ottawa)

- BATC and PATC are going to join their student poster competition to compensate for the lack of student attendance at the international meetings.