

Structural Acoustics and Vibration Technical Committee

Open Meeting

177th ASA Meeting in Louisville, Kentucky

14 May 2019

7:30 p.m.

Stopher (3rd floor, The Galt House)

Agenda

1. Call to Order / Official Welcome to Colby Cushing (New Student Council rep to SAVTC)
2. Louisville Meeting Agenda (additions or other modifications)
3. Approval of the 176th ASA Meeting Minutes from Victoria, Canada

Meetings

4. 176th Meeting, Joint ASA/CAA meeting in Victoria, British Columbia, Canada, 5-9 November 2018
Stan Dosso, Chair

Winners of The Best Paper Awards for Students and Young Presenters for SAVTC at the 176th ASA Meeting in Victoria, Canada:

1st Place

Caleb Goates, Brigham Young University, Provo, UT

A quasi-analytical formulation for acoustic radiation modes of simple curved structures

2nd Place

Mark Cops, Boston University, Boston, MA

Finite element modeling of fluid-saturated metallic foams from micro-computed tomography

Thank you to Ben Shafer, with help from other SAVTC folks, for organizing the student and young presenter paper awards in Victoria (6 contestants).

5. 177th Meeting, Louisville, Kentucky, 13-17 May 2019
Pavel Zahorik, Chair
 - a. 70 SAV papers total: 15 invited, 55 contributed (50+% increase over last few meetings!)

- Thank you to the following SAVTC-related Louisville special session organizers:
 Mohammad Afrough, Ben Beck, Hubert Hall, Robert Koch, Elizabeth Magliula,
 Katie Matlack, Christina Naify, James Phillips, Bogdan Popa, Benjamin Shafer,
 Alexey Titovich
 - Technical Program Organizers: Benjamin Shafer and Robert Koch
 - Student and young presenter paper awards: Benjamin Shafer and David Raudales
 - There are **29 (!)** student and young presenter award contestants at this meeting
 - Please consider assisting Ben and David at this meeting in (a) providing your own reviews for student papers you are in the audience for as well as (b) potentially distributing/retrieving paper reviews in a given SAVTC session if Ben or David asks you to.
- b. ASA no longer live-streaming technical sessions (since Victoria and thereafter)
- All talks offered opportunity at Louisville to record presentation slides and audio (authors must give approval during abstract upload stage)
 - ASA contracted company for this task at ~\$20K
 - Recordings made available free to all conference registered attendees
 - Recordings to be made available for others at cost (e.g., ~one-day registration fee)
- c. Women in Acoustics Luncheon
- Held Wednesday, 15 May at 11:45 AM -1:45 PM (Sampson)
 - Open to all attendees, \$30 per ticket (students \$15 per ticket).
- d. Society Luncheon and Lecture
- Sponsored by College of Fellows
 - Held Thursday, 16 May at 12:00 noon – 2:00 PM (Sampson)
 - Program speaker is Andy Cavatorta who will present a lecture titled “Music, Machines, and Meaning.”
 - Open to all attendees, \$30 per ticket.
6. 178th Meeting, San Diego, California, 2 – 6 December 2019
 Peter Gerstoff, Chair
- a. **Final** Special Sessions:
 Finalized in Victoria.
- Acoustic metamaterials: Chairs, Christina Naify and Bogdan Popa.
 - Flow-induced vibration and noise: Chairs, Kuangcheng Wu and Robert Koch
 - Novel methods for energy dissipation in structures: Chairs, Jerry Ginsberg and Greg McDaniel

- Treatment methods and computational analysis of vehicles: Chairs, Ben Shafer and Michael T. Rose
- Computational methods for mid-frequency structural acoustic problems: Chairs, Anthony Bonomo and David Raudales
- Acoustics of 3D-printed materials and structures: Chairs, Alexey Titovich and Stephanie G. Konarski

b. Student and young presenter paper awards: Benjamin Shafer and Jason Smoker and David Raudales ?

c. Technical Program Organizers: Benjamin Shafer and Robert Koch and ??:

- San Diego Abstract Deadline is: 8 July 2019
- Remote TPOM Meeting: 15 August 2019
- TPO Guidelines have been developed and will be sent out to TC TPO's:
 - 'living document'
 - Requesting feedback from TPO's to improve product

7. 179th Meeting, Chicago, Illinois, 11-15 May 2020
 ??, Chair

a. **Finalize** Special Sessions:

Must be finalized in Louisville.

- Acoustic metamaterials: Chairs, Christina Naify and Bogdan Popa
- Non-contact vibration measurement methods: Chairs: Ben Shafer and T.J. Flynn
- Active or tunable structural acoustics: Chair(s), Christina Naify, ...
- Real World Case Studies in structural acoustics and vibration of vehicles: Chairs: Robert Koch and Sue Sung
- Retrospective on fuzzy structures for structural acoustics and vibration: Chairs, Jerry Ginsberg and Kuangcheng Wu
- Historical Session TBD ??: Chair(s), Alexey Titovich?

b. Technical Program Organizers: Benjamin Shafer and Robert Koch and ??

c. Student and young presenter paper awards: Benjamin Shafer and ??

d. ASA School 2020 to be held at ASA Chicago:

- Held the weekend before Chicago meeting (Friday night through Sunday)
- Many costs covered (see ASA 2020 Flyer)
- There is an application process coming soon
- Save the date: 9-10 May 2020

8. 180th Meeting, Cancun, Mexico, 9-13 November 2020
??, Chair

a. **Preliminary** Special Sessions:

SAVTC must set Preliminary Special Sessions in Louisville. Sessions must be finalized in San Diego, May 2019.

- Acoustic metamaterials: Chairs, Christina Naify and Alexey Titovich??
- Wu Session Idea Option 1: Senior SAVTC lecture circuit session
 - For tech transfer to next generation SAVTC SME's
 - On any SAVTC topics of interest to each speaker
- Wu Session Idea Option 2: Senior SAVTC lecture person invited for longer, more major, talk (like a Keynote level talk)
 - For tech transfer to next generation SAVTC SME's
 - Perhaps funded with Tech Init (TC-external/internal)

- XXX Chair(s):
- XXX Chair(s):
- XXX Chair(s):

Previously Brainstormed Special Session Topic Ideas:

- Applications of smart materials for acoustics and vibration
- Site Characterization
- NDE (theoretical) /Civil Infrastructure (application) (Jinying Zhu)
- Digital Image Correlation (3D displacement, transient data gathering,...) (Greg McDaniel)
- History of a specific SAV technical area
- Thermoacoustic technology
- Vibration absorber technology
- Advances in SAV sensing and/or actuation
- Nanotechnology in SAV
- Novel damping treatments
- Real-world case studies
(Potential issues with getting commercial/industry speakers in addition to academia. How to target industry?)
- SAV testing, in some respect
- Ground vibration
- Virtual reality with SAV
- Others ?

b. Technical Program Organizers: Benjamin Shafer and Robert Koch and ??

c. Student and young presenter paper awards: Benjamin Shafer and ??

9. Future meetings:

181st Meeting, potentially Portland (still needs site visit), Spring 2021

182nd Meeting, Sydney, Australia, 6 – 10 December 2021

183rd Meeting, Denver, Colorado, Spring 2022

Reports

10. Topics from Monday's Louisville Technical Council Meeting:

- JASA Editor-In-Chief (EIC) Report:
 - Thesaurus “Keyword” Search Input nearly done
 - Usual request for ‘Special Content’ articles
 - These articles do wonderfully in IF, along with reviews and tutorials
 - New JASA ‘*Reflections*’ coming
 - New monthly feature to be added to JASA for next decade
 - 1-2 page descriptions of “classic” / seminal JASA articles before 2000
 - Needs 5-10 of these per TC – will be considered a publication itself
 - EIC recommends each TC form sub-committee ASAP to identify:
 - 1) Specific worthy classic papers
 - 2) Potential *Reflections* authors for each paper
 - Two new JASA Topic Headings coming:
 - ‘Computational Acoustics’
 - ‘Acoustical Standards & Practice’
- Executive Council Updates Report:
 - Note the ‘Get Involved’ volunteer link on the ASA Membership page
 - Note to all Associate ASA Members: upgrading to Full ASA Member has been dramatically streamlined and is now a quick and painless process!
 - ASA has developed a new ASA Meetings Sexual Harassment Policy:
 - May tell any ASA Leadership person of experienced or observed sexual harassment, or
 - Submit it anonymously using ‘*STOPIT*’ app
 - App may be obtained directly by a link on ASA Louisville site
 - Survey on government relations outreach completed by Vic Sparrow:
 - 1,900 responses to government survey
 - Responses ranged from ‘why?!’ to ‘Definitely Yes’
 - ‘Do something’ is general consensus → details on ‘what’ to come...
 - ASA Technical Council Strategic Plan Summit was held in Feb. 2019
 - Goal of summit was to help set Strategic Plan for next ~3-5 years
 - Output of Summit consisted of dozens of Technical Initiatives
 - Then, following an Executive Council Summit thereafter, four main Strategic Initiatives were developed (which capture most of the Tech Council Summit’s output):
 - 1) “Identification and Promotion of Emerging Scientific / Technical Areas”
 - 2) “Better Engagement of Industry and Practitioners”
 - 3) “Improved Communications and Public Relations”
 - 4) “Member Engagement Outside of Meetings”

- Interested SAVTC members highly encouraged to attend Thursday's 2PM 'Champions Meeting (Wilkinson Room)
 - 1) Task Forces for each of the above initiatives will be coming
 - 2) Get involved!!

11. Report from Student Council: Colby Cushing

(Note: Colby's first ASA meeting as SAVTC Student Council rep!)

12. Report from Medals and Awards Committee: James Phillips

13. Report from Membership Committee: Robert Koch

- Update on EC proposal to split Membership Committee into two Committees:
 - Fellowship and Member Advancement Committee
 - Member Engagement Committee
- Robert Koch looking for next official SAVTC Membership rep once term ends in year or so (must be a Fellow)

14. Report from ASACOS: Robert Koch

- New ASA Standards Manager hired (Ms. Nancy Blair-Deleon, since Apr 2019)
- JASA Jan 2019: "A History of Standards" Article
- ASA Standards promotional video (link on Standards Home site)
- New JASA Heading on "Acoustical Standards and Practice"
- Close Call for the Decibel!
 - Per the Standards Director Louisville Report:

"ISO 80000-8 FDIS - Quantities and units -- Part 8: Acoustics This document was revised by ISO TC 12, and circulated as FDIS with the decibel replaced by the neper (!?!). Objections from ISO TC 43 & TC 43/SC1 and TC 43/SC2, IEC TC-29, CEN, ANSI via the US TAG, and the Norwegian Committee did manage to put a halt to this and rescind this change, reverting the basic unit of acoustic level back to the decibel. Thanks to everyone who took the time to review the document and submit comments. That is what makes this process work."

15. Report from SAVTC Liaison to the Education in Acoustics TC: Matthew Kamrath

16. Report on SAVTC webpage— Ryan Harne is our new volunteer (likely hasn't started work yet).

- Robert Koch submitted a SAVTC Web Maintenance Technical Initiative at Victoria for 2019-20 (\leq \$500 per year for two years)
- Robert Koch received updates/omissions list for SAVTC website from ASA's Elaine Moran

Other SAVTC-Relevant News/Issues/Requests:

17. Status of Robert Koch “TC Chair with/without Navy Affiliation” issue:

- Just for your information only; minor issue that will not affect our TC at all

18. Welcome to the following new members who were included in a new appointment request to ASA (made in early 2019) to become official new SAVTC members for the 2019-2022 term:

- Ryan Harne (harne.3@osu.edu)
- Stephanie Konarski (stephanie.konarski@nrl.navy.mil)
- Bogdan Popa (bipopa@umich.edu)
- Michael Rose (rose.michael@byu.edu)
- Jason Smoker (jason.smoker@navy.mil)

Please see/contact Robert Koch if:

- You wish to become an SAVTC member (highly encouraged!), or
- You are an SAVTC member whose term expires in 2020 and you do not wish to be reappointed as a SAVTC member

19. Request from Panel on Public Policy Chair (Ed Walsh) for SAVTC Rep:

20. Technical Initiatives for 2018-19

- Robert submitted a \$500 per year Technical Initiative at the Victoria meeting to support web maintenance and improvement and content loading for the SAVTC website.
- Others? (e.g., short courses, addendum for upcoming special sessions, external conference development/participation, Development/assembly of SAV software, etc.)

21. New Business

22. Adjourn