# **Structural Acoustics and Vibration Technical Committee**

Open Meeting
169th ASA Meeting in Pittsburgh, Pennsylvania
19 May 2015
7:30 p.m.
Commonwealth 1

#### **Minutes**

1. Call To Order at 7:36 pm by James Phillips

In attendance (29 people): Brian Anderson, Pegah Aslani, Susan Blaeser, Donald Bliss, Matt Calton, Dave Evans, David Feit, Jerry Ginsberg, Hubert Hall, Marshall Hall, Sabih Hayek, Matthew Kamrath (student council), Robert Koch, James McDaniel, Patrick Murray, Christina Naify, James Phillips (chair), Allan Pierce, David Raudales, Daniel Russell, Henry Scarton, Benjamin Shafer, Micah Shepherd, Jason Smoker, Scott Sommerfeldt, Hasson Tavossi, Haldun Unalmis, Mauricio Villa, and Kuangcheng Wu

- 2. Agenda no changes
- 3. Approval of the 168<sup>th</sup> ASA Meeting minutes from Indianapolis, Indiana First and second motion, passed unanimously

## Reports

- 4. Topics from the Technical Council Meeting
  - ASA Strategic Leadership for the Future
    - o Report of Strategic Leadership for the Future Initiative
      - To be available soon
    - o Goals:
      - Awareness of Acoustics
      - Membership Engagement and Diversity
      - Dissemination of Information
      - Financial Stewardship
  - Proposal to drop ASA Secretariat position on ISO Technical Committee 108, Subcommittee 5 (TC-108 SC5) Condition monitoring and diagnostics of machine systems. (Susan Blaeser)
    - o Purpose of maintaining the Secretariat position is for ASA to be the international leader
    - o Not part of ASA mission nor is ASA the international leader
    - o Proposal includes that we maintain secretariat of ISO TC 108 Mechanical vibration, shock and condition monitoring
  - Reminder that all members may download up to 5 free ASA/ANSI standards per year.

- Can now include nationally adopted ISO standards for the reduced price of \$35/each.
- 5. Report from Student Council: Matthew Kamrath
  - Tell James Esplin (jamesesplin.asa@gmail.com), the student council webmaster, about post-doc positions
  - Also, tell James Esplin about other conferences outside of the ASA.
  - Dr. Lily Wang is receiving the Mentor Award on Wednesday at the student reception.
     The next award will be given in Honolulu with applications due by the Salt Lake City meeting.
  - Student activities: New student orientation, student meet & greet, student outing, student reception, jam session
  - The ASA resume help desk is available Tuesday, Wednesday, and Thursday during lunch without appointment.
- 6. Report from Medals and Awards Committee: Sabih Hayek
- 7. Membership Committee: James Phillips for Kai Ming Li
- 8. ASACOS: Robert Koch
  - This information was covered by Susan Blaeser
- 9. SAVTC webpage update Brian Anderson
  - The webpage has been updated (much improved but much more work to be done)

### Meetings

10. 168<sup>th</sup> ASA Meeting, Indianapolis, IN, October 27-31,2014 Ken DeJong, Patricia Davies, Co-chairs

Winners of The Best Paper Awards for Students and Young Presenters for SAVTC at the 167<sup>th</sup> ASA Meeting in Providence

#### 1st Place

Daniel Plotnick, Washington State University

Reversible quasi-holographic line-scan processing for acoustic imaging and feature isolation of transient scattering

#### 2nd Place

Rui Cao, Purdue University

Improved model for coupled structural-acoustic modes of tires

Thank you to Ben Shafer for organizing the student and young presenter paper awards in Indianapolis.

- 11. 169<sup>th</sup> ASA Meeting, Pittsburgh, PA, May 18-22, 2015 Robert Keolian, Matthew Poese, Co-chairs
  - a. 64 SAV papers total: 25 invited, 39 contributed
    - Thank you to the following special session organizers: Piervincenzo Rizzo, Robert Koch, Christina Naify, Michael Haberman, Micah Shepherd, John Fahnline, Kuangcheng Wu, Jeffrey Cipolla, Marcel Remillieux, Daniel Russel
    - Technical Program Organizer: Robert Koch
  - b. Student and young presenter paper awards: Ben Shafer
    - There are 23 student and young presenter award contestants at the this meeting
      - o Help needed to handout & collect judging forms
      - o Micah Shepard, Brain Anderson, and Christina Naify volunteered to help.
  - c. Society Luncheon and Lecture, Thursday, 12:00 2:00 pm, Indiana E
    - Roger B. Dannenberg, Professor of Computer Science, Art, and Music at Carnegie Mellon University
      - o Automating Music Understanding
    - Dan Russell cannot attend, so we need someone else. Jerry Ginsberg volunteered.
       Matt Kamrath will communicate the change with Camilo Perez. (Chair's note:
       Jerry Ginsberg had already volunteered to sit with the student from Physical Acoustics so James Phillips volunteered for SAV)
- 12. 170<sup>th</sup> Meeting, Jacksonville, FL, November 2-6, 2015 Richard Morris, Chair
  - a. **Final** Special Sessions:
    - Nonlinear Techniques for Nondestructive Evaluation: Chair, Brian Anderson
    - Transient Nearfield Acoustical Holography: Chair, Nicolas Valdivia
    - **SAV in Buildings**: Co-chairs, Ben Shafer and James Phillips
    - Standards in SAV: Chair, Ben Shafer
    - Flow-induced Vibration: Chair, Robert Koch
    - Novel treatments in vibration damping: Chair, Ken Cunefare
    - Aircraft interior noise reduction: Chair. Hasson Tayossi
  - b. Student and young presenter paper awards: Benjamin Shafer (Confirmed)
  - c. Technical Program Organizer: Robert Koch
    - Robert Koch explained the new digital TPOM format.
  - d. Need volunteer for "Take a Student to Society Lunch"

- One student paired with representative from each Tech. Comm.
- Students paired with members via raffle at Student Reception on Wednesday evening (6:00 pm 7:30 pm, Commonwealth 2)
  - o Volunteers should attend if possible
- Contact Camilo Perez, camipiri@uw.edu
- Jerry Ginsberg volunteered to take the student to the society lunch in Jacksonville. (Chair's note: volunteers are now pulled from those who sign up during online pre-registration for the meeting, one for each Technical Committee. One person is selected randomly if more than one has volunteered for a particular TC.)
- 13. 171<sup>st</sup> Meeting, Salt Lake City, Utah, May 23-27, 2016 Scott Sommerfeldt, Chair
  - a. Finalize Special Sessions:
    - Wavenumber transform methods: Micah Shepard and Matthew Shaw
    - Active control of structures and their radiation: Ben Shafer
    - Building isolation from seismic and groundborne vibration: Co-Chairs: James Phillips and Hasson Tavossi
    - Real-world instructive case studies in structural acoustics and vibration: Co-Chairs: Robert Koch and Elizabeth Magliula
    - Computation methods in structural acoustics and vibration: Chair: Robert Koch
    - Analysis of vibration based musical instruments: Chair Dan Russell & Brian Anderson (Dan will email James a description tonight)
  - b. TPO: Benjamin Shafer
  - c. Student and young presenter paper awards: Benjamin Shafer
  - d. ASA School 2016 Salt Lake City
    - Dan Russell: The goal of the ASA School is to expose students to technical areas outside their own.
- 14. 172<sup>nd</sup> Meeting, Honolulu, Hawaii, Fall2016 David Adams and Whitlow Au, co-chairs
  - a. **Preliminary** Special Sessions:

To be finalized in Jacksonville and coordinated with ASJ counterpart, including assigning session co-chairs from ASJ

Bruce Howe (Technical Chair for the Honolulu meeting) addressed the committee. We need to coordinate our sessions with the Acoustical Society of Japan. ASJ has

provided a list of proposed sessions. ASA technical committees need to assign ASA co-chairs for the sessions proposed by ASJ. Review of the list indicated that there were no sessions in SAV proposed by ASJ. TC chairs to forward sessions proposed by their TCs to ASJ counterparts (previously identified to TC chairs) so that ASJ can assign co-chairs. (Chair's note: the ASJ counterpart to SAV Chair is the chair of the ASJ Noise & Vibration committee, Prof. Akira Omoto of the Kyushu University.)

- Fluid flow induced vibration and noise Kuangcheng Wu & Bob Koch
- Non-contact vibration excitation and sensing techniques Scott Sommerfeldt & Brian Anderson
- Metamaterials Jeff Cipolla & Christina Naify & Michael Haberman
- Building vibration analysis, measurement, and mitigation James Phillips & Hasson Tayossi
- Session in honor of Allan Pierce Sean Wu & Robert Koch (Chair's note: this session had been proposed at a previous SAV meeting but it had been requested subsequently to postpone until the Honolulu meeting. This session was included with the above sessions when submitted to the Technical Council Chair on Friday. As it is a "named session," it requires approval from the Executive Council who will vote upon it at the Jacksonville meeting in Fall 2015.)
- b. TPO: Benjamin Shafer
- c. Student and young presenter paper awards: Benjamin Shafer
- 15. 173<sup>rd</sup> Meeting/Acoustics 17, Joint ASA/EAA meeting in Boston, MA, Spring 2017 Damian Doria, ASA Chair

Robert Koch -30 acoustical societies will be meeting in Boston, so we want to map out potential sessions

- a. **Tentative Preliminary** Special Sessions:
  - Metamaterials Christina Naify
  - Vibration of sport equipment Dan Russell
  - Novel techniques for non-destructive evaluation Brian Anderson
  - Energy methods in structural acoustics and vibration Don Bliss & Linda Franzoni
  - Ground-borne vibration from transit systems James Phillips

b. The TPOC will consist of the newly elected Technical Committee Chairs plus the TC chairs with terms to 2016 and 2017.

c. Student and young presenter paper awards: Benjamin Shafer

## 16. Future meetings:

174<sup>th</sup> Meeting, New Orleans, Louisiana, December 4-8, 2017 175<sup>th</sup> Meeting, Minneapolis, Minnesota, Spring 2018 176<sup>th</sup> Meeting, Victoria, British Columbia, Fall 2018

177<sup>th</sup> Meeting, Louisville, Kentucky, Spring 2019

180<sup>th</sup> Meeting, Cancun, Mexico, Fall 2020

ICA proposes 2019 to be The International Year of Sound

## 17. Technical Initiatives

• \$1000 approved to pay shipping charges for equipment/materials for "Demonstrations in Structural Acoustics and Vibration" at this meeting (Dan Russell).

#### 18. New Business

- We should learn what other TCs are doing with these funds.
- 19. New Chair of SAVTC for 2015 2018: Robert Koch
- 20. Adjourn at 9:30 p.m.