# **Structural Acoustics and Vibration Technical Committee**

Technical Committee Meeting 166th ASA Meeting in San Francisco, California 3 December 2013 8:00 p.m.

## **Minutes**

### Attendance

James Phillips, Matthew Kamrath, Benjamin M. Shafer, Brian E. Anderson, Christina Naify, David Feit, Jerry H. Ginsberg, Kai Ming Li, Marcel C. Remillieux, Mauro Pierucci, Micah Shepherd, Robert M Koch, Sabih I. Hayek, Sean Wu, Elizabeth Maglivla, Sarah Kaddatz, Matt Allen, Timothy Walsh, Ben Beck, Tony Nash, Jinying Zhu, Zhuzi Chen

#### 1. Call To Order

Christina Naify called the meeting to order at 8:02 pm. Jerry Ginsberg made the motion and Ben Shafer seconded the motion.

- 2. Agenda
- 3. Approval Of the 165<sup>th</sup> ASA Meeting minutes from Montréal, Québec, Canada
  - There was a motion and a second to approve the 165<sup>th</sup> ASA SAV TC minutes.
- 4. Winners of The Best Student Paper Awards at the 165<sup>th</sup> ASA Meeting in Montréal

### 1st Place

Matthew Reynolds, Institute of Sound and Vibration Research, University of Southampton, Southhampton, United Kingdom
Experimental validation of the band-gap and dispersive bulk modulus behaviour of locally resonant acoustic metamaterials

## 2nd Place

Luca Alimonti, Universitè de Sherbrooke, Sherbrooke, Québec, Canada A hybrid modeling approach for vibroacoustic systems with attached sound packages

Thank you to Ben Shafer for organizing the student papers awards in Montréal.

James Phillips arrived and began to run the meeting.

- 5. 166<sup>th</sup> ASA Meeting, San Francisco, California, December 2-6, 2013 James Phillips, Chair; Roger Schwenke, Technical Program Chair
  - a. 45 papers total: 25 invited, 20 contributed

- Thank you to the following special session organizers: Micah Shepherd, Matthew Shaw, Jerry Rouse, Timothy Walsh, James Nelson, Tribikram Kundu, Wolfgang Grill, Anthony Croxford, Ben Shafer, Marcel Remillieux
- Thank you to Ben Shafer, SAVTC TPOM representative
- a. Student paper awards: Ben Shafer
- b. There were 7 young presenter award contestants at the 166<sup>th</sup> ASA Meeting in San Francisco.
- c. Jerry Ginsberg mentioned that there were three parallel SAV sessions on Tuesday morning and that it would be better in the future to have fewer parallel sessions so that the SAV TC members can attend all the SAV sessions.

Note: The following four sessions were chaired or co-chaired by SAV on Tuesday morning:

- 1. 2aEA-Composite Plates
- 2. 2aPAa-Acoustics of Pile Driving
- 3. 2aPAb-Phononic Crystals and Metamaterials
- 4. 2aSA-Vibration from Aeroacoustic Loads

It was suggested that the large number of parallel session happened because the sessions were joint sessions, so the schedules of the other co-chairing TCs need to be taken into account.

It was mentioned that the problem exists because this information is not given to the TPOM representatives.

Chair's Note: James Phillips brought this to the Technical Committee's attention during the Friday morning meeting of the committee. It was agreed that steps will be taken to assure that representatives at future TPOMs will be provided information indicating which Technical Committees are co-sponsoring each special session.

- d. Distinguished Lecture: W. Jeffery Elias, M.D. "The Use of Magnetic Resonance-Guided High Intensity Focused Ultrasound to Treat Essential Tremor", Wednesday, 10:25 a.m., Golden Gate 2/3
  - Video of lecture will be available at a later date
- e. Society Luncheon and Lecture: Carl Haber, Ph.D., Senior Scientist, Lawrence Berkeley National Laboratory
  - Methods developed from instrumentation for particle physics used to reconstruct audio from early mechanical recordings
  - Student Council requesting a volunteer from each TC to take a student with them (students chosen by raffle at Student Reception, Wednesday evening)

- James Phillips volunteered to do this task.
- f. Committee on Archives and History has requested that a volunteer from each TC attend "Oral History Bootcamp," Thursday, 9:30 a.m. to 11:00 a.m., Sutter A/B
  - Participants will learn appropriate techniques to conduct oral history interviews
  - Matthew Kamrath volunteered to do this task. (Matt's notes from the session are attached to these minutes.)
- 6. 167th ASA Meeting, Providence, RI, May 5-9, 2014 (**Abstracts due December 16, 2013**) James Miller, Gopu Potty, Co-Chairs; James Lynch, Technical Program Chair
  - a. **Final** Special Sessions:
    - Acoustic Metamaterials: Christina Naify & Maichael Haberman
    - Acoustics of Cylindrical Shells: Sabih Hayek
    - Acoustics of Sports: Matthew Shaw
    - Environmental Vibration: David Waddington & Calum Sharp
    - Noise and Vibration Associated with Wind Turbine Designs: Kuangcheng Wu
    - Session in Honor of Murray Strasberg: David Feit
    - Undersea Vehicle Noise: Robert Koch
      These special sessions were confirmed.
  - b. TPOM on January 17-18, 2014, Representative: Robert Koch
  - c. Student paper awards: Benjamin Shafer
  - d. ASA School 2014
    - The ASA School 2014 handout was passed around.
- 7. 168<sup>th</sup> ASA Meeting, Indianapolis, IN, October 27-31, 2014 Patricia Davies, Kenneth DeJong, Co-Chairs; Robert Port, Technical Program Chair
  - a. **Finalize** Special Sessions (deadline for changes February 1, 2014, except for memorial sessions which are due end of this week):
    - Vibration reduction in air-handling systems: Ben Shafer
       This session was confirmed and Ben Shafer was given the planning form.
    - Tire noise and vibration: James Phillips
       This session was confirmed and James Phillips was given the planning form.

(Chair's Note: An identical session was proposed by TC Noise during the Technical Council meeting on Friday. TCN will sponsor and organize, SAVTC will cosponsor.)

 Medical instrumentation, equipment, structure-borne noise from MRIs: James Phillips

This session was confirmed and James Phillips was given the planning form.

• Nearfield acoustical holography: Sean Wu

Sean Wu was volunteered to run two sessions at the last meeting. He agreed to run both sessions and was given the planning form

- Vehicle interior cabin noise, Sean Wu
- Possible Session: Computational methods in SAV: Chair-Bob Koch

Possible Session: Lab Facilities For Testing of Mechanical Vibration: Chair-None given (Chair's Note: During the Friday Technical Council meeting, Engineering Acoustics (Chair Roger Richards) agreed to assist SAVTC in finding a Chair for this session to be co-sponsored by EA and SAVTC if a volunteer to chair the session can be found.)

- b. TPOM on May/June ??? 2014, TPOM Representative: ???
  - Ben Shafer volunteered to be the TPOM Representative for the Indianapolis Meeting
- c. Student paper awards: Benjamin Shafer
- 8. 169<sup>th</sup> ASA Meeting, Pittsburgh, PA, May 18-22, 2015 Robert Keolian, Matthew Poese, Co-chairs
  - a. **Plan** Special Sessions:
    - Vibro-Acoustics of Mining Equipment: Chair-Marcel Remillieux
    - Non-Linear Techniques For Non-Destructive Evaluation: Chair-Brian Anderson
    - Time-Domain Methods: Co-Chairs-Micah Shepherd and John Fahnline
    - Blind Sources Localization and Separation: Chair-Sean Wu (co-sponsored with Signal Processing)
  - b. TPOM on January ??? 2015, TPOM Representative: ??? Bob Koch
  - c. Student paper awards: Benjamin Shafer
- 9. Future meetings:

170<sup>th</sup> Meeting, Jacksonville, FL, November 2-6, 2015

171<sup>st</sup> Meeting, Salt Lake City, UT, Spring 2016

172st Meeting, Honolulu, HI, Joint with Acoustical Society of Japan, Fall 2016

## Proposed Joint ASA/EAA meeting in Boston, MA in 2017

- 10. Report from Medals and Awards Committee: Sabih Hayek
  - Sabih Hayek submitted the dossier for an SAVTC member to the M&A Committee for the Gold Medal. The candidate was not awarded the medal this time. S. Hayek will resubmit next year.
- 11. Membership Committee: Kai Ming Li
  - Two SAVTC members to receive ASA Fellow Certificates at San Francisco meeting:
    - Robert Koch & Tribikram Kundu
      - We need more SAV members to apply to be fellows. Letters of recommendations have not been strong enough recently.
      - James Phillips will email a review about what fellowship means and the path to fellowship.
      - Congratulations to new fellows.

#### 12. ASACOS: Robert Koch

- Robert Koch is succeeding Dean Capone.
- SAV was more involved with ASACOS committee.
- We need to put in more proposals to do activities with ASACOS.
- Tony Nash said that the S2 membership is declining. It is free to join S2. He learned much about the standards process and was mailed ISO standards through being a part of S2.
- 13. Report from Student Council: Matthew Kamrath (for Matthew Shaw)
  - a. Students are encouraged to attend the student activities
    - New Student Orientation
    - Student Meet and Greet
    - Monday Night Student Outing
    - Wednesday Night Student Reception
    - Wednesday Night Student Outing (Jam Session)

Check twitter feed/facebook/billboard for updates to the student activites thought the week

- b. Barbara Shinn-Cunningham was awarded the ASA Student Council mentor Award. The next one will be awarded in Pittsburgh, so nominations will be due before the Indianapolis meeting.
- c. Need a volunteer to give an introduction to the SAVTC.
  - James Phillips Volunteered
- d. Need volunteers for the Hands-on Session for high school students
- e. Remember to apply for student travel subsidies

- f. Take advantage of the Lunch with a Member program.
- g. ASA school will happen before the Providence meeting. In order to attend, the applicant must be an author on an abstract at that meeting, and the deadline for abstracts is December 16, 2013.
- 14. SAVTC webpage update Brian Anderson
  We are in the process of unifying the TC websites.

### 15. Topics from the Technical Council Meeting

- Notice to special session planners: do not send "blanket invitations" via social media (listserve, LinkedIn, etc.). Make sure to invite your invited speakers.
- Tentative future articles for Acoustics Today. The ASA is looking for suggested future articles. The "Suggested Future Article for Acoustics Today" form was distributed.
- Signatures will be gathered in Providence to start proposed Technical Specialty Group on Forensic Acoustics (not a full TC but able to organize special sessions)
- Reminder that coupon codes for five free ASA/ANSI standards will be emailed to members in January 2014

#### 16. Technical Initiatives

• There were no technical initiatives.

#### 17. New Business

- Sean Wu said that we should try to honor Allan Pierce with a Society wide session at the Fall 2016 meeting. This event would be similar to the session honoring Leo Beranek for his 90<sup>th</sup> birthday. It would be nice to invite all former students.
- James Phillips will suggest a society wide session honoring Allan Pierce for the Fall of 2016 meeting. This must be done at least 2 years in advance.

(Chair's Note: According to the program for the Fall 2004 meeting in New York, NY, a "Named Session" in honor of Leo Beranek was Chaired by the Technical Committee on Architectural Acoustics and co-sponsored by all of the other technical committees. James Phillips discussed the process for organizing a similar session in honor of Allan Pierce with Peter Dahl, Vice President of ASA and Chair of the Technical Council. A Named Session requires a vote of approval by the Executive Council. Dahl informed Phillips that the session can be proposed during Technical Council at the Fall 2015 Meeting (it need not be brought earlier than that).)

## 18. Adjourn

• There was a 1<sup>st</sup> and 2<sup>nd</sup> motion to adjourn.

166<sup>th</sup> Meeting of the ASA Session 4aID Interdisciplinary: Oral History Bootcamp

The ASA wants to prepare for anniversary meetings of the society by collecting works from distinguished acousticians and oral histories from ASA presidents and gold/silver medal recipients.

The central objective for taking oral histories in this setting is to get information into the permanent record that otherwise would not have been included and to fill out the historical record for future generations. The interviewers are not journalist that try to find a story. Instead, the interviewers are to help the interviewee tell his/her story and to ask questions to fill in important details.

### The general process is

- Interviewer and interviewee make a recording (.mp3 or .wav only please)
- File gets sent to transcribers
- File gets sent back to the interviewer for edits
- File gets sent to interviewee for edits
- Iterate the process until everyone is happy with the final transcript

The AIP provides many services to its member societies to help them with collecting oral histories. For example, the AIP

- Advises its member societies
- Provides training and equipment
- has many transcribers
- has many transcripts online

Interviews are usually a few hours long, and the interviewer needs to be prepared. For example, before the interview the interviewer should

- Consult the Institutional Review Board when necessary
- Give the interviewee time to prepare
- Send the interviewee a list of possible questions
- Go through complete list of publications, old CVs
- Know with whom the interviewee has studied
- Know your equipment before you go to the interview site
- Make sure the background noise is low
- Minimize outside distractions (phone, spouse, children, etc)
- Use two recorders and check that the recorders are working

The Institutional Review Board of an interviewer at a university must be consulted. At almost every university in the United States, an oral history interview will be accepted.

The AIP has many example questions on its website. The questions should try to trigger memories or stories. The general question is "What do you want history to remember about you?" There are also

some practical questions that should be asked like "Who else do you know that should be interviewed?" and "Do you have any papers that should be preserved?" However, some information should be left out. For example, classified work, proprietary knowledge, and too personal of stories should be left out.