# **Structural Acoustics and Vibration Technical Committee**

Technical Committee Meeting 168th ASA Meeting in Indianapolis, Indiana 28 October 2014 8:00 p.m.

### Minutes

- 1. Call To Order by James Phillips at 8:00 pm In attendance (15 total): Brian Anderson, Kenneth Cunefare, David Feit, Sabih Hayek, Matthew Kamrath (Student Council), Robert Koch, Elizabeth Magliula, James McDaniel, James Phillips (Chair), Benjamin Shafer, Micah Shepard, Scott Sommerfeldt, Hasson Tavossi, Sean Wu, and Mike Woodworth
- 2. Agenda
- 3. Approval of the  $167^{th}$  ASA Meeting minutes from Providence, Rhode Island  $1^{st}$  and  $2^{nd}$  motion to pass unanimously approved.
- 4. 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

Aldo Glean, Catholic University of America, Washington D.C. Mass sensing using the time domain response of a functionalized microresonator array

Aldo Glean won 1<sup>st</sup> Place in San Francisco, two 1<sup>st</sup> Places in a row!

### 2nd Place

Andrew Wixom, Boston University, Boston, Massachusetts
Efficient analysis of dynamic coupling between modifications to complex systems

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

There were 19 contestant papers in Providence!

- 5. 168<sup>th</sup> ASA Meeting, Indianapolis, IN, October 27-31, 2014 Patricia Davies, Kenneth DeJong, Co-Chairs; Robert Port, Technical Program Chair
  - a. 27 SAV papers total: 11 invited, 16 contributed
    - Thank you to the following special session organizers: Robert Koch, Benjamin Shafer, Sean Wu
    - Thank you to Ben Shafer, SAVTC TPOM representative

- b. Student and young presenter paper awards: Ben Shafer
  - There are **5** student and young presenter award contestants at the 168<sup>th</sup> ASA Meeting in Indianapolis
- c. Society Luncheon and Lecture, Thursday, 12:00 2:00 pm, Indiana E
  - Larry E. Humes, Distinguished Professor and Department Chair, Department of Speech and Hearing Sciences, Indiana University
  - Understanding the speech-understanding problems of older adults
  - Need a volunteer for "Take a Student to the Society Lunch"
    - o Should attend Student Reception on Wednesday evening if possible
      - 6:45 8:15 pm, Indiana E
    - o Mike Woodworth volunteered
- d. ASA Résumé Help Desk
  - Thank you to Ken Cunefare and Ben Shafer for volunteering for SAVTC
- 6. 169<sup>th</sup> ASA Meeting, Pittsburgh, PA, May 18-22, 2015 Robert Keolian, Matthew Poese, Co-chairs
  - a. Final Special Sessions:
    - Acoustic Metamaterials: Co-Chairs, Michael Haberman and Christina Naify (cosponsored with Physical Acoustics and Engineering Acoustics)
    - Blind Source Localization and Separation for Structural Acoustic Sources: Chair, Sean Wu (co-sponsored with Noise and Signal Processing)
    - **Demonstrations of Structural Acoustics and Vibration**: Chair, Daniel Russell (co-sponsored with Education and Physical Acoustics)
    - Noise Identification and Control in the Mining Industry: Co-Chairs, Marcel Remillieux and Hugo Elias Camargo (co-sponsored with Noise)
    - **Time Domain Methods**: Co-Chairs, John Fahnline and Micah Shepherd (cosponsored with Signal Processin)
    - General Topics in Structural Acoustics and Vibration: Chair, Kuangcheng Wu

All of these sessions have been confirmed.

- b. TPOM on January ??? 2015, TPOM Representative: Robert Koch To be conducted remotely.
- c. Student and young presenter paper awards: Benjamin Shafer (Confirmed)
- 8. 170<sup>th</sup> Meeting, Jacksonville, FL, November 2-6, 2015

### Richard Morris, Chair

# a. Finalize Special Sessions:

- Nonlinear Techniques for Nondestructive Evaluation: Chair, Brian Anderson (cosponsored with Physical Acoustics, Noise, and Engineering Acoustics)
- Transient Nearfield Acoustical Holography: Chair, Nicolas Valdivia
- SAV in Buildings: Co-chairs, Ben Shafer and James Phillips
   Papers on Prediction, Measurement, and control of vibration in buildings
- Standards in SAV: Chair, Ben Shafer
   Review and discussion of current standards in SAV
- Flow-induced Vibration: Chair, Robert Koch
- Ground vibration from drilling/hydraulic fracturing: Chair, Marcel Remillieux
- Novel treatments in vibration damping: Chair, Ken Cunefare
- Noise Reduction in Aircraft: Chair, Hasson Tavossi

All of these sessions have been confirmed except for Transient Nearfield Acoustical Holography, and James Phillips will follow-up with the potential chair via email. (Chair's note: the above session for Transient Nearfield Acoustical Holography has been confirmed with the session organizer.)

- b. Remote TPOM only: Robert Koch
- c. Student and young presenter paper awards: Benjamin Shafer
- 9. 171<sup>st</sup> Meeting, Salt Lake City, Utah, May 23-27, 2016 Scott Sommerfeld, Chair

## a. **Plan** Special Sessions:

- Wave number transform methods: Micah Shepard
- Active Structure control: Ben Shafer
- Building isolation from seismic and ground-borne vibration: Co-Chairs: James Phillips and Hasson Tavossi
  - (Chair's note: the following two sessions were submitted via email by R. Koch after the committee meeting)
- 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

- b. Remote TPOM only: Robert Koch
- c. Student and young presenter paper awards: Benjamin Shafer

### 10. Future meetings:

172<sup>st</sup> Meeting, Honolulu, HI, Joint with Acoustical Society of Japan, Fall 2016

173<sup>rd</sup> Meeting, Joint ASA/EAA meeting in Boston, MA, Spring 2017

174<sup>th</sup> Meeting, TBD

175<sup>th</sup> Meeting, Minneapolis, Minnesota, Spring 2018

### 11. Report from Student Council: Matthew Kamrath

- Monday Student activities
  - New Student Orientation
  - Meet and Greet
- Wednesday Student activities
  - o Graduate Studies Poster Session
  - o Student Reception
  - ASA Jam
- Check out our twitter feed/facebook for updates to student activities throughout the week (@ASAStudents)
- NEW student feedback on website

## 12. Report from Medals and Awards Committee: Sabih Hayek

- Working on nominee for the gold medal
- Not eligible for a silver medal nomination until 2015

## 13. Membership Committee: Kai Ming Li

- New Fellows (to be presented in Indianapolis):
  - o James E. Phillips for contributions to vibration and noise control and for service to the society
  - o Mingsian Bai for contributions to nearfield acoustic holography

#### 14. ASACOS: Robert Koch

- A tension exists between making the standards widely available (e.g. lowering the cost of obtaining standards) and paying for the cost of developing the standards
- ANSI website will let people view the standards online but not print or electronically capture the standards. If people want an electronic/printed version, they would still need to pay for it. The decision intends to give free access while still charging people for the standards.
- Ken Cunefare questions the legality of the decision because online viewing may not qualify as access.

## 15. SAVTC webpage update - Brian Anderson

• Daniel Farrell is updating all of the TC websites

## 16. Topics from the Technical Council Meeting

- ASA and the American Institute of Physics are sponsoring a Congressional Science and Engineering Fellowship for a scientist or engineer to spend a year working in Congress through a program organized by the American Association for the Advancement of Science. The fellowship is available to individuals at all career stages who hold Ph.D.'s in physics or closely-related fields. The benefits include a \$75,000 stipend, relocation expenses, and some reimbursement for health benefits. The application deadline is 15 January 2015. I have a flyer with more details for anyone who might be interested.
- Strategic Leadership
  - o Workshop held at Technical Council meeting in Providence, RI ASA meeting
  - o Results presented in Indianapolis TC meeting on Monday
  - o Interviews of select members to take place
  - o Survey to be sent out (please complete and return)
  - o Retreat of about 60 select members to take place in mid-January 2015
- Proposal before Executive Council to increase Technical Initiative budgets
  - o Will be voted upon on Friday
    - \$4,000 discretionary (approx. double existing), includes paper awards, website development, etc.
    - \$60,000 for additional initiatives amongst all TCs

### 18. Technical Initiatives

• \$1000 approved to pay shipping charges for equipment/materials for "Demonstrations in Structural Acoustics and Vibration" at Pittsburgh meeting in Spring 2015 (Dan Russell).

#### 19. New Business

• Micah Shepard: Limited POMA articles from SAV. Everybody encouraged to contribute.

### 20. Adjourn at 9:00 pm