

Minutes

TECHNICAL COMMITTEE ON ARCHITECTURAL ACOUSTICS (TCAA)

162nd Meeting of the Acoustical Society of America
San Diego, California, USA

Tuesday 1 Nov 2011

7:30 PM

Sunrise

Chair: **Alex Case**

Secretary: **Ken Good**

I. Welcome and Introductions

The meeting was called to order at 7:30pm by Alex Case with 92 attendees, 22 students and 35 added to the roster.

II. Previous Minutes

Minutes from the Seattle meeting were emailed to the TC the previous week. A motion to accept the minutes from the Seattle meeting was made by Bruce Olson and seconded by Ron Freiheit, the motion carried...Seattle minutes accepted.

III. Acknowledgements

Thanks to:

- General Chair: **Michael J. Buckingham**
- Technical Program Chair: **Peter Gerstoft**
- TPOM Representatives: **Roger Schwenke & Michelle C. Viegant**
- Session Chairs: **Peter D'Antonio, Bennett M. Brooks, Alexander U. Case, Bill Dohn, Matthew V. Golden, Kenneth W. Good, Jr., K. Anthony Hoover, Lauren M. Ronsse, Roger W. Schwenke, Gary W. Siebein, Michelle C. Viegant**
- Tutorial Lecture on Green Buildings: **Ralph T. Muehleisen (Lily M. Wang, Chair)**
- All 120! paper presenters.

IV. Congratulations!

- Science Writing Award for Professionals in Acoustics **Diana Deutsch**
- Rossing Prize in Acoustics Education to **Robert C. Coffeen!!!**
- Wallace Clement Sabine Award to **J. Christopher Jaffe!!!!!!**

V. Chair's Report

- Technical Council Items
 - **A Summer Course** is envisioned for students. Two days immediately prior to Kansas City. “The Acoustic Environment” including talks from Architectural Acoustics, Engineering Acoustics, Psychological and Physiological Acoustics, Musical Acoustics, Noise, and Speech Communication. 2 action items:
 - Discussion: **Bill Cavabaugh** moved to report back that TCAA is in support of the idea, 2nd by **Ron Sauro**
 - Vote: Passed
 - The request was made by the Chair for someone to volunteer approximately 2 hours of Architectural Acoustic content. (*Request outstanding*)
 - **Membership.** Joining the ASA is never easier than at this conference. Look for application forms at registration, socials, and elsewhere (it’s in your program book, after pp. 2605). Note: there is a table at each social with forms and 2 full members ready to sign applications for qualifying applicants! Becoming a Student or Associate member is very straightforward. Associate Members should consider becoming full members so that you can vote and hold office and help lead the Society. What’s your membership status? Is it appropriate for you now?
 - **Note on Programs:** Beginning with Kansas City (22-26 Oct 2012), you will receive the program in advance electronically, and they’ll be available in hard copy at the Conference. ASA is not mailing hard copies, which is a darn sensible idea.
 - **Refreshments** in these TC meetings aren’t currently, officially sanctioned by the ASA. They might reduce our productivity. We might like wetting our whistle. Do you think the ASA should make a deliberate effort to provide refreshments at TC meetings? Or is it not a worthwhile use of society funds? I’d like your quick reactions for me to forward to the Technical Council:
 - Discussion: The Initial poll was overwhelmingly all in favor of refreshments provided for the TC meetings ...however....The discussion turned serious and lost favor concerning the financial impact. Non alcoholic alternatives were suggested in discussion, in general support but serious reservations concerning the cost.
- Comments on this meeting
 - Signage and “way finding” is poor.
 - The success of TCAA results in the balance of overlapping sessions and “openness” of topic and presentations. The point was made that some

sessions overlapped due to the volume of papers. The TPOM did a great job in handling this volume and minimizing the overlap. Previous “straw polls” show a favor of overlap vs. paper rejection. TCAA continues to maintain awareness and balance.

- The point was also made that session overlap is intensified by session chairs in AA all requesting Tuesday. If we could fully utilize the balance of the days, there would be less conflict at the TPOM.
- The comment was made that lavalier microphones work best and should be the only option for the future meetings – disagreement: comments favored no microphones, strongly opposed by members sensitive to folks with hearing disabilities.

VI. ASA Committee Reports

1. Medals and Awards (Tim Foulkes)

- Congratulations to **J. Christopher Jaffe** receiving the Wallace Clement Sabine Award
- Medals and Awards Committee is encouraging future nominations

2. Membership (Ron Freiheit)

- No fellows at this meeting see Ron for nominations
- Membership Committee is also encouraging future nominations

3. Standards (Ange Campanella)

- Nothing to report

4. Student Council (Sam Clapp)

- Sam reported on an very active student agenda for the week

5. JASA and JASA-EL Editor (Ning Xiang, Lily Wang, Frank Sgard)

- Very good year with many JASA submittals

6. POMA editor (Ralph T. Muehleisen)

- Please submit to POMA have 12 submissions

7. Public Policy (Ken Roy, Michelle Vigeant)

- Public policy issues discussed – wind turbine effects is being researched and a subcommittee is being lead by **Nancy Timberland**
- Classroom acoustic **Dave Lubman** will be updating on Sound Reinforcement
- Noral Stewart is doing well in including noise requirements in IBC, RT may be accepted for classrooms, Noise in restaurants in being considered.
- Dave – Also considered Acoustics and Human Rights

8. Women in Acoustics (**Erica Ryherd**)
 - Erica reported tickets for the women in acoustics luncheon,
 - The Women in Acoustics website has been update, all are encouraged to check it out
 - Once again the Women in Acoustics hosted an event with local San Diego Girl Scout troop as an outreach
9. Other (Books+, College of Fellows, Education, Regional Chapters, Tutorials,)
 - **Tony Hoover** reminded all of the College of fellows luncheon and Lecture hosted by the college of fellows – note the name change to promote inclusion of non fellows
 - Take a student to lunch – 13 tickets to the Collage of fellows luncheon will be raffled off to the students
 - **Neil Shaw** Book Plus – Looking for old and out of print books to make available – books plus is also looking into a new business model

VII. TCAA Subcommittee Reports

1. Newman Student Award Fund Update (Bill Cavanaugh, Carl Rosenberg)
 - Reported on the subcommittee financials and attendance
 - **Bill Cavanaugh** is promoted, **Carl Rosenberg & Lilly Wang** are co-chair with and **Michelle Vigeant** as secretary
 - Sponsors Newman student award named after **Ted Schultz** \$2k www.newmanfund.org for more details
 - Coordinating with TCED
2. Concert Hall Research Group Update (**Tim Foulkes, Michelle Vigeant**)
 - Periodic summer workshops, considering 2013- 2014 Chicago or Toronto
3. Classroom Acoustics Update (**David Lubman, Lou Sutherland, Bob Coffeen**)
 - Draft of classroom acoustics handout on education was made available This will go to books committee
 - **Paul Schomer** – energy council report in k-12 facilities included language that Classroom acoustics cannot be compromised and 12 .60 referenced as the standard for classrooms.
 - Greenbuilding - **Noral Stewart** , **Amy Costello** and **Dave Lubman** will be representing classrooms acoustics this weekend
4. Acoustic Data Working Group (**Ron Sauro**)

- **Ron Sauro** is assembling a list of material to be tested and order to test. Several months ago a request was sent to the TC asking what materials to include, reply has been “soft”.
 - The WG is looking for one or two priority items to test, please let Ron know your opinion.
5. Joint Subcommittee with Noise on Speech Privacy (**Greg Tocci**)
- No report.
6. TCAA Student Paper Award – Results from Seattle (**Ken Good**)
- Seattle Winners...
 - 1st: **Timothy Hsu** - Psychoacoustic measures and their relationship to patient physiology in an intensive care unit
 - 2nd: **Arun Mahapatra** - Effects of noise on emergency department staff
 - All students should note that online submission of their paper at http://scitation.aip.org/jhtml/asaconfsite/signin_user.jsp and at POMA using <http://poma.peerx-press.org/cgi-bin/main.plex> is required for eligibility in Architectural Acoustics Student Paper Awards.
 - San Diego...
 - 24 Student papers were listed for the TCAA competition in San Diego
 - Thanks to the many members who served as judges and thoughtfully offered their feedback in Seattle and San Diego.
7. Student Design Competitions (**Robert C. Coffeen** and **Andrew N. Miller; Phillip Robinson** and **Dave Woolworth** have volunteered to coordinate the competition for Hong Kong)
- The design for the Hong Kong competition is:
 - A luxury hotel with offices on the first floors and a “bumpin’ nightclub/restaurant” at the penthouse level and nearby/adjacent train line.
 - The Project should be posted soon
8. Subcommittee on Green Building Acoustics (**Ralph Muehleisen**)
<asa-gba-request@acousticsweb.com>
- Ralph is looking for a replacement - Lucky Tsaih is willing to serve.
9. Subcommittee on building performance research and standards guidance (**Ken Roy**)
- Building performance looking for members for restaurant performance and products working group.
10. 25 Years of Worship Spaces (**Erica Ryherd, David Bradley, Michelle Vigeant**)

- Three decades of design...a call for contributions will go out around December 1st

VIII. New Business

- Dave Lubman – AA has fostered classroom acoustics – thank you & great job

VIX. Planning of Future Meetings

Hong Kong, May 14-18, 2012 Technical Program Is Complete (no action required by this committee)

- ASA Architectural Acoustics Co-Chair for organizing the technical program is **Ning Xiang**. Thanks Ning!
- Joint with WESPAC, ASC, and Hong Kong Institute of Acoustics
- The call for papers for Acoustics 2012 Hong Kong is posted online at acoustics2012hk.org where you will also find full information about the meeting.
- **Tom Ho** (General Chair); **Maurice Yeung** (Co-Chair); **KC Lam** (Technical Program Co-Chair).
- ASA co-organizers: **Whit Au** (Co-Chair); **Lisa Zurk** (Technical Program Co-Chair)
- TPOM (2-3 Dec 2011) reps: **Bruce Olson** and **Ken Roy**
- \$200.00 papers for additional papers – TCAA will be during the day Tuesday Afternoon – sessions will be over by 6:00pm
- Total papers may require poster sessions
- Call for papers is out. Abstracts must be submitted online at <http://acoustics2012hk.org/> by Tuesday, 15 Nov 2011. Session Chairs, full speed ahead.
- **Phillip Robinson** and **Dave Woolworth** coordinating the competition for Hong Kong.
- Advance Registration (before 15 Nov 2011):
 - 700 US\$
 - 200 US \$ for second papers or greater
 - 300 US\$ Students
- Grants to pay student registration fees will be offered by the Acoustical Society of China, the Acoustical Society of America (ASA), and the Hong Kong Institute of Acoustics. Applicants should visit the websites of these organizations for information. ASA will provide \$300 grants to pay early

preregistration fees for students from North America only. Applicants are required to be the first author of a paper presented at the meeting, and to be a student at a school in Canada, the United States, or Mexico. To qualify, students should send the following information to asa@aip.org by February 1, 2012: Name, Title of Abstract, email address, and school attended with full address. ASA will provide a check in US dollars for \$300 (USD) to all applicants satisfying the above conditions at the meeting in Hong Kong upon presentation of a current student ID and copy of the paid preregistration. Abstracts and the preregistration fee are due by November 15, 2011.

Hong Kong Special Sessions

- *Acoustics in Concert Halls*, joint with Noise (**Zihou Meng, Jiqing Wang, Ning Xiang**)
- *Development of new design features and fundamental research in concert halls acoustics*. Designs and validations of recently grand-opened venues.
- *Classroom Acoustics in Asia*, joint with Noise and ASA Committee on Standards (**Kenneth Roy, Xiang Yan**)
- *Acoustic and Noise effects in schools and classrooms*. Topics of interest to include architectural design for high performance or 'green' rated schools, relationship of acoustics and student perception and performance, field case studies and research studies on noise and acoustics in schools, studies of teacher/student communications and performance.
- *Development and applications of micro-perforated sound absorbers*, joint with Physical Acoustics, Noise, and Signal Processing (**Christian Nocke, Jonathan Botts**)
- *Theory and new developments of absorbers based on /derived from microperforation, various applications in different fields such as room acoustics, noise abatement or car noise use of micro-perforated structures*.
- *Healthcare acoustics*, joint with Noise (Kenneth Roy, Erica Ryherd, Jerry Li)
- *Acoustic and Noise effects in hospitals and other healthcare facilities*. Topics of interest to include evidence based design (EBD) research or case studies on acoustic conditions in hospitals, staff or patient response, and architectural or noise control treatments.
- *Multifamily dwellings and lightweight structures*, joint with Noise (**Angelo Campanella, Jeffrey Mahn**)
- *Multifamily housing sound isolation developments and noise control issues*.
- *Multiple-microphone measurements and analysis in room acoustics*, joint with Signal Processing in Acoustics (**Boaz Rafaely, Sam Clapp**)

- *Recent developments in multiple-microphone methods involving microphone arrays and spatial-sampling systems, applied to measurements and retrieval of complex spatial data from sound fields in rooms, including measurement systems, signal processing, and experimental investigations.*
 - *Objective and subjective parameters of spatial impression in performing arts spaces, joint with Psychological & Physiological (**Michelle Vigeant, Jin Yong Jeon**)*
 - *Investigations of objective measures and/or subjective studies examining spatial impression, including listener envelopment and apparent source width, in classical music concert venues. Design examples of actual halls that emphasize spatial parameters are also included in this topic.*
 - *Psychoacoustics in Rooms, joint with Psychological & Physiological (**Philip Robinson, Bernhard Seeber**)*
 - Fundamental research and application of masking, speech transmission, spatial hearing, and auditory scene analysis within the context to room-acoustic environments, including but not limited to: source width, envelopment, distance perception, localization, loudness, noise, reverberance, scene analysis, speech intelligibility, and room synthesis.
 - Key Note speakers. There will be 4 across the disciplines for the entire conference. Any Architectural Acoustics suggestions?
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Kansas City, MO, 22-26 Oct 2012, Bob Coffeen, Chair

- **David Lubman** offers a nomination for another Knudsen Distinguished Lecture: **Scott D. Pfeiffer**, of Threshold Acoustics. (TI)

Kansas City Special Sessions.

- *Alternate approaches to room acoustics analysis (**Tim Gulsrud** and **Dave Woolworth**) joint with Signal Processing*
Methods, equipment, and strategies for room acoustics evaluation that challenge or enhance current standard practice for source and receiver directivity, frequency range, and room conditions.
- *Coordination of architectural & sound systems design (**Ken Roy – Joel Lewis**)*
- *Instrumentation (**Eric Reuter & Matthew Golden**) joint with noise AA primary*
- *New concert halls and proscenium theaters (**Bob Coffeen**)*

Tour: the new Kauffman Center for the Performing Arts in Kansas City which opens in September of this year and featuring the acoustical consultant Yasuhisa Toyota of Nagata Acoustics

Session or lecture TBD

- *Classroom Acoustics; Focus on Education Implementation and Accomplishments in Classroom Acoustics* (Joint with TCNoise) (**Lou Sutherland & David Lubman**)
- *Computer Modeling in Buildings and the Environment as an Educational Tool* (Joint with Education) (**Norm Philipp** and **Ron Sauro**)
- *Spatial and binaural evaluations of room-acoustics properties* (**Ning Xiang & TBD**).
- *Acoustics in green buildings* (**Dave Sikes**) joint with Noise
- *Acoustics in healthcare* (**Dave Sikes**) joint with Noise and Standards
- TPOM rep (early-July): **Norm Philip & Yun Jing**
- ASA Jam! Though not strictly a TCAA event (it was born here!), we seek local organizers for the upcoming ASA Jam in Kansas City. Make yourselves known to Tony Hoover (THoover@mchinc.com).

Montreal, Canada, 2-7 June 2013 Joint with ICA and Canadian Acoustical Association; **Michael Stinson** (Chair); **Luc Mongeau** (Technical Program Chair)

- *TPOM Eric Reuter*

Preliminary special sessions:

- *Vibration in music performance* – (**Clemet Abercrombie**)
- *Audio Acoustic* – (**Tony Hoover & Alex Case**)
- *New Materials for Architectural Acoustics* (**Matt Golden**)
- *(fit green in title) Adaptive reuse and retro fit* (**Jesse Ehnert**)
- *Integrated project delivery* (Design build) (**David Kahn**)
- *Senior and hearing impaired room treatments* (**Bonnie Schnitta**)
- *Balancing Risk and innovation in Acoustical Consulting* (**Eric Reuter**)

Future Meetings, no action required:

- 166th San Francisco, CA Fall 2013 (exact dates to be announced)
- 167th Providence, RI (5-9 May 2014) **James H. Miller, Gopu Potty**, Co-Chairs; **James Lynch**, Technical Program Chair

- 168th Indianapolis, IN (27-31 Oct 2014) **Patricia Daves** and **Kenneth DeJong** ,Co-Chairs; **Robert Port**, Technical Program Chair.
- 169th State College, PA (Spring 2015 - proposed)

IX. Technical Initiatives – Reports and Renewals

Notes regarding Technical Initiatives (TI's):

- TI's are meant to inspire and support innovative ideas. Suggestions for appropriate investments in outreach, education, and other ASA activities are strongly encouraged.
- TIs must have accompanying paperwork submitted to your Chair the night of the TCAA meeting!

Proposed TI's

- Website Upgrade/Maintenance. New Webmaster has been found – Thanks **Sean Browne!** We are porting the website to a new server and hope to have it more current soon. (preapproved) \$300
- Travel Funds for Invited Speakers (preapproved) \$1500
- Student Paper Awards (preapproved) \$1000
- Knudsen Lecture for Kansas City (**Scott Pfeiffer**) \$1000
- **Ron Sauro** requested \$1500 funding for materials for Product Data WG motion to approve my **Tony Hoover** motion pass (note: Ron is looking for input for material testing priority)
- \$500 seed money for printing or electronic of the classroom booklet – motion to pass, **Scott Pfeiffer & Bruce Olson**

X. Other New Business

- **Angelo Campanella** noted follow up on Historical acoustics – original inventor of the phone

XI. (9:30 PM) Meeting Adjournment

Motion to adjourn by **Tony Hoover** motion carried

Meeting adjourned 9:01pm