

# AGENDA

## TECHNICAL COMMITTEE ON ARCHITECTURAL ACOUSTICS (TCAA)

162<sup>nd</sup> 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. (7:30 PM) Welcome and Introductions

- Especially to first time attendees and students
- Please mark attendance list and verify your contact information

### II. Previous Minutes

### 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. (7:40 PM) Chair's Report

- Technical Council Items
  - forthcoming
- Comments on this meeting

## **VI. (7:55 PM) ASA Committee Reports**

1. Medals and Awards (**Tim Foulkes**)
2. Membership (**Ron Freiheit**)
3. Standards (**Ange Campanella**)
4. Student Council (**Sam Clapp**)
5. JASA and JASA-EL Editor (**Ning Xiang, Lily Wang, Frank Sgard**)
6. POMA editor (**Ralph T. Muehleisen**)
7. Public Policy (**Ken Roy, Michelle Vigeant**)
8. 25 Years of Worship Spaces (**Erica Ryherd, David Bradley, Michelle Vigeant**)
9. Women in Acoustics (**Erica Ryherd**)
10. Other (Books+, College of Fellows, Education, Regional Chapters, Tutorials,)

## **VII. (8:15 PM) TCAA Subcommittee Reports**

1. Newman Student Award Fund Update (**Bill Cavanaugh, Carl Rosenberg**)
2. Concert Hall Research Group Update (**Tim Foulkes, Michelle Vigeant**)
3. Classroom Acoustics Update (**David Lubman, Lou Sutherland, Bob Coffeen**)
4. Acoustic Data Working Group (**Ron Sauro**)
5. Joint Subcommittee with Noise on Speech Privacy (**Greg Tocci**)
6. TCAA Student Paper Award – Results from Seattle (**Ken Good**)

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](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.

Thanks to the many members who served as judges and thoughtfully offered their feedback in Seattle and San Diego.

7. Student Design Competition (**Robert C. Coffeen and Andrew N. Miller; Phillip Robinson and Dave Woolworth** have volunteered to coordinate the competition for Hong Kong)
8. Subcommittee on Green Building Acoustics (**Ralph Muehleisen**)

<asa-gba-request@acousticsweb.com>

9. Subcommittee on building performance research and standards guidance (**Ken Roy**)
10. PACS# revision Subcommittee (**Ning Xiang, Angelo Campanella, Ralph Muehleisen**)

In the past year, the revision proposal for Architectural Acoustics PCAS# 43.55 has been approached by the TCAA. The proposed revision has been submitted to the Editor-in-Chief. The revision has undergone many iterations, taking into account valuable recommendations by acousticians all over the world. The subcommittee, on behalf of the TCAA, would like to express our high respect and appreciation to many individuals who actively participated in PACS # revision:

Yoichi Ando, Leo Beranek, John Bradley, Bennett Brooks, Trever Cox, Tim Foulkes, Tim Gulsrud, Carl Hopkins, Jin Young Jeon, Jian Kang, Yiu Lam, Jie Pan, Judicaël Picaut, Philip Robinson, Jason Summers, Hideki Tachibana, Vincent Valeau, Michelle Vigeant, Michael Vorlaender, JiQing Wang (CC Wong)

#### **VIII. (8:45 PM) New Business**

#### **VIX. (8:50 PM) 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
  - [www.acoustics2012hk.org](http://www.acoustics2012hk.org)
  - 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 reps: **Bruce Olson** and **Ken Roy**
  - 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\$

- 300 US\$ Students (waived for students contributing papers for which they are the 1<sup>st</sup> or 2<sup>nd</sup> author.)
- 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.

- **Kansas City, MO, Fall 2012** (tentative: Oct 22-26, 2012; **Bob Coffeen**, Chair)

- **David Lubman** offers a nomination for another Knudsen Distinguished Lecture: **Scott D. Pfeiffer**, of Threshold Acoustics. (TI)
- Proposed sessions. We need only 9 (or fewer!) finalized, with organizing chairs completing paper work tonight:
  1. Alternate approaches to room acoustics analysis (**Dave Woolworth**)
  2. 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.
  3. Coordination of architectural & sound systems design (**Ken Roy**)
  4. Instrumentation (**Eric Reuter & Matthew Golden**)
  5. New concert halls and proscenium theaters (**Bob Coffeen**)
  6. 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
  7. Classroom Acoustics; Focus on Education Implementation and Accomplishments in Classroom Acoustics (Joint with TCNoise) (**Lou Sutherland & David Lubman**)
  8. Binaural session (**Ning Xiang**)

9. Computer Modeling in Buildings and the Environment as an Educational Tool (Joint with Education) (**Norm Philipp** and **Ron Sauro**)
10. Spatial and binaural evaluations of room-acoustics properties (**Ning Xiang & TBD**).
  - 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).

- Future Meetings, no action required:

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

#### **IX. (9:05 PM) Technical Initiatives – Reports and Renewals**

- Technical Initiatives are meant to inspire and support innovative ideas. Suggestions for appropriate investments in outreach, education, and other ASA activities are strongly encouraged.
- 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)

#### **X. (9:25 PM) Other New Business**

#### **XI. (9:30 PM) Meeting Adjournment**