

## **2006-2007 Annual Report**

### **ASA Technical Committee on Architectural Acoustics**

The Technical Committee on Architectural Acoustics had a very successful year in 2006-07. At the Fall 2006 meeting in Honolulu, held jointly with Acoustical Society of Japan, TCAA special sessions and their organizers included “Acoustic Design for Green Buildings” (Ken Roy, Tetsuya Sakuma), “Acoustics of Large Indoor and Outdoor Performance Spaces” (Daniel Raichel, Toshiki Hanyu), “Computer Modeling of Room Acoustics” (Lily Wang, Shin-ichi Sakamoto), “Special Session in Honor of Manfred Schroeder on the Occasion of His 80th Birthday” (Ning Xiang, Juergen Schroeter, Akira Omoto), “Psychological Aspects of Sound Environment in Rooms” (John Bradley, Hiroshi Sato), “Recent Development in Acoustical Materials and Structures” (Brandon Tinianov, Kirill Horoshenkov, Kimihiro Sakagami), and “Measurement of Room Acoustics” (Boaz Rafaely, Fumiaki Satoh). David Adams served as the TCAA representative to the Technical Program Organizing Meeting for this conference.

At the Spring 2007 meeting in Salt Lake City, TCAA special sessions and their organizers included “Advancements in Speech Privacy” (Kenneth Good, Jr.), “Effects of Rooms on the Sound of Organs” (Bruce Olson), “In Situ Measurements of Absorption Coefficients (Peter D’Antonio, Christian Nocke), and “Troubleshooting in Room Acoustics (Robin Glosemeyer-Petrone). In addition a workshop covering the logistics on making a TCAA presentation to architects in which participants would receive continuing education credits from the American Institute of Architects was run by Tony Hoover and Bennett Brooks. Other special highlights included the Vern Knudsen Distinguished Lecture given by Emily Thompson, recipient of a 2005 MacArthur Fellowship, and tours of various performing arts facilities in the Salt Lake City area, organized by Tim Leishman. Bruce Olson served as TCAA representative to the Technical Program Organizing Meeting for this conference.

Many of TCAA’s subcommittees were active this year. The *Newman Student Award Fund* awarded 11 medals in 2006 to students who excelled in their study of architectural acoustics. Also two Schultz Grants were awarded in 2007 to Stephen Dance (London South Bank University) and Ralph Muehleisen (Illinois Institute of Technology), supporting their proposals to develop new educational materials on architectural acoustics. More information may be found on the website at [www.newmanfund.org](http://www.newmanfund.org). The *Student Design Competition* at the Salt Lake City meeting received 20 entries this year; many thanks to Bob Coffeen and Byron Harrison for their organizational efforts and to the Wenger Foundation and Newman Student Award Fund for their sponsorship. First honors in the competition was awarded to Andrew Miller, Megan Hunziker, and Matt Pauley from the University of Kansas.

The 3<sup>rd</sup> *Concert Hall Research Group Summer Institute* was held in Aspen, Colorado in August 2006, organized by Bill Dohn. Nearly 60 professional attendees and 13 students participated in a variety of interesting sessions and wonderful concerts at the Aspen Music Festival.

Achieving good classroom acoustics continues to be an important topic that TCAA members are strongly advocating. The National Research Council has endorsed the ANSI standard S12.60-2002 on “Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools” for adoption into proposed green schools. Also the US Green Building Council has drafted a standard for LEED (Leadership in Energy and Environmental Design) school projects; many of our TCAA members have provided input on this document. We are very grateful to David Lubman and Lou Sutherland for their ongoing leadership efforts in this area.

The joint subcommittee with the Technical Committee on Noise concerning *Speech Privacy*, chaired by Greg Tocci and David Sykes, has been very active. They prepared the document “Draft Interim Sound and Vibration Design Guidelines for Hospitals and Healthcare Facilities” for the American Institute of Architects (AIA) and American Hospital Association (AHA), which is now undergoing further review. Also, members of the subcommittee influenced the “Green Guide for Health Care”, which is a joint project of the Center for Maximum Potential Building Systems and Health Care Without Harm, so that the new edition of the guide (version 2.2) includes two points for acoustics. The subcommittee is also participating in ANSI working group S12 WG44 to draft measurement and performance standards regarding speech privacy. More information about this subcommittee’s activities may be found on the website: [www.speechprivacy.org](http://www.speechprivacy.org) .

Our newest subcommittee on Green Building Acoustics is ramping up its activities under the leadership of Ralph Muehleisen. This group can be found at the webpage: <http://groups.google.com/group/asa-gba> .

Work continues on two publications, based on posters presented at ASA meetings. Greg Miller and Robin Glosemeyer Petrone are editing the publication “Another Two Decades of Drama Theaters,” based on posters presented at the Spring 2004 meeting in New York City. Adam Foxwell and Rosemary Su are compiling the publication: “Another Two Decades of Worship Spaces,” based on posters presented at the Spring 2006 meeting in Providence.

This year the TCAA again offered Best Student Paper Awards. Due to the large number of submission, four awards were presented for papers given at the Honolulu meeting; 1<sup>st</sup> prize went to Jonathan Rathsam (University of Nebraska), while three commendation awards were given to Hisaharu Suzuki (Kyushu University), Michelle Vigeant (University of Nebraska) and Genta Yamauchi (Kyushu University). Two winners were selected for papers given at the Salt Lake City meeting: Michelle Vigeant from the University of Nebraska (1<sup>st</sup> prize) and Yun Jing from Rensselaer Polytechnic Institute (2<sup>nd</sup> prize).

Congratulations to TCAA members who became ASA Fellows this year. New Fellows include Sergio Beristain, David Conant, Damian Doria, John Eargle, Anders Christian Gade, and Michael Vorlander. TCAA was especially proud that the 2006 ASA Wallace Clement Sabine Award was presented to William J. Cavanaugh for contributions to the

practical application of architectural acoustics in building design and to education in architectural acoustics.

Many thanks to the following individuals for their hard work this past year in ASA on behalf of TCAA. Red Wetherill is our representative on the Medals and Awards Committee. Greg Tocci serves on the Membership Committee, and George Winzer is TCAA representative to the ASA Committee on Standards. Michelle Vigeant from the University of Nebraska served as our Student Council representative. The Associate Editors in Architectural Acoustics are Mendel Kleiner and Ning Xiang for JASA, Ning Xiang for JASA-Express Letters, and Tony Hoover for Acoustics Today. Finally, thanks to Brandon Tinianov for his service as TCAA Secretary, and best wishes to him as he begins his 2007-2010 term as TCAA chair.

I have enjoyed serving as TCAA chair over the past three years, and am pleased that our technical committee continues to thrive and be energetic. I look forward to continuing my participation in this vibrant community over the years to come!

LILY M. WANG

*Chair*