

5th Joint Meeting: Acoustical Society of America and Acoustical Society of Japan

The 5th Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan will be held Monday through Friday, 28 November–2 December 2016 at the Hilton Hawaiian Village Beach Resort in Honolulu, Hawaii.

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1. HOTEL INFORMATION

The Hilton Hawaiian Village Beach Resort (2005 Kalia Road, Honolulu, Hawaii 96815) is the headquarters hotel where all meeting events will be held.

2. TRANSPORTATION AND TRAVEL

The Honolulu International Airport (<http://hawaii.gov/hnl>), located on the island of Oahu, is served by 27 international and domestic carriers, three interisland airlines, and four

commuter airlines. All major U.S. carriers fly from all major airports in the U.S. to Honolulu. Many Japanese and International carriers have direct flights from Tokyo, Osaka, Sapporo, Nagoya, and Fukuoka to Honolulu.

Airport transportation alternatives include:

Taxi: AMPCO EXPRESS is the managing contractor for the airport's taxi system. Taxis are available at the airport by crossing to the median at Baggage Claim D and G and arranging with a person in a gold-colored shirt with the words TAXI DISPATCHER in black letters on the back. Fare to the hotel is approximately USD \$35-40 one way. For standard-sized baggage there is no charge.

Hele Transportation Services, airport shuttle and taxi: Transportation services all day, every day. Reservations: 1-808-782-1722; Email: hele24hawaii.com; Flat rate: 1 to 3 passengers USD \$24 per vehicle, 4 passengers USD \$32, 5 passengers USD \$38, 6 passengers USD \$44. No charge for standard-sized bags.

Shuttle: Aloha Airport Shuttle, private car service with mini vans. Reservations: 808-538-3355 or toll free: 855-538-3355, call at least 3 days ahead; email: alohaairportshuttle.com Rate: USD \$30 one way, 1-4 passengers.

Car Rental: From Baggage Claim E follow signs to car rental desks for Advantage, Avis, Budget, Hertz, and National. For other rental companies cross to median for rental car shuttle and sites beyond the airport.

Parking: Parking is available at the Hilton Hawaiian Village for USD \$29/day + tax for self-parking and \$36/day + tax for valet parking.

3. STUDENT TRANSPORTATION SUBSIDIES

To encourage student participation, limited funds are available to defray partially the cost of travel expenses of students to attend Acoustical Society meetings. Instructions for applying for travel subsidies are given in the Call for Papers which can be found online at <http://acousticalsociety.org>. The deadline for the present meeting has passed but this information may be useful in the future.

4. MESSAGES FOR ATTENDEES

A message board will be located in the Grand Ballroom Foyer near the ASA registration desk. Check the board during the week as messages may be posted by attendees who do not have cell phone numbers of other attendees.

5. REGISTRATION

Registration is required for all attendees and accompanying persons. Registration badges must be worn in order to participate in technical sessions and other meeting activities.

Registration will open on Sunday, 27 November, 1:00 p.m. in the Coral Foyer (see floor plan on page A13).

Checks or travelers checks in U.S. funds drawn on U.S. banks and Visa, MasterCard and American Express credit cards will be accepted for payment of registration. Meeting attendees who have pre-registered may pick up their badges and registration materials at the pre-registration desk.

The registration fees (in USD) are \$570 for members of the Acoustical Society of America or the Acoustical Society of Japan; \$645 for nonmembers, \$150 for Emeritus members (Emeritus status pre-approved by ASA or ASJ), \$295 for ASA Early Career members (for ASA members within three years of their most recent degrees – proof of date of degree required), \$100 for ASA Student members, \$135 for students who are not members of ASA, \$0 for Nonmember Undergraduate Students, and \$150 for accompanying persons.

One-day registration is available at \$295 for members and \$360 for nonmembers (one-day means attending the meeting on only one day either to present a paper and/or to attend sessions). A nonmember who pays the \$645 nonmember registration fee and simultaneously applies for Associate Membership in the Acoustical Society of America will be given a \$50 discount off their dues payment for 2017 dues.

Invited speakers who are members of the Acoustical Society of America are expected to pay the registration fee, but nonmember invited speakers who participate in the meeting only on the day of their presentation may register without charge. The registration fee for nonmember invited speakers who wish to participate for more than one day is \$115 and includes a one-year Associate Membership in the ASA upon completion of an application form.

Special note to students who pre-registered online: You will also be required to show your student id card when picking-up your registration materials at the meeting.

6. TECHNICAL SESSIONS

The technical program includes 173 sessions with over 2050 abstracts scheduled for presentation during the meeting.

A floor plan of the Hilton Hotel appears on pages A12. Session Chairs have been instructed to adhere strictly to the printed time schedule, both to be fair to all speakers and to permit attendees to schedule moving from one session to another to hear specific papers. If an author is not present to deliver a lecture-style paper, the Session Chairs have been instructed either to call for additional discussion of papers already given or to declare a short recess so that subsequent papers are not given ahead of the designated times.

Several sessions are scheduled in poster format, with the display times indicated in the program schedule.

7. TECHNICAL SESSION DESIGNATIONS

The first character is a number indicating the day the session will be held, as follows:

- 1-Monday, 28 November
- 2-Tuesday, 29 November
- 3-Wednesday, 30 November
- 4-Thursday, 1 December
- 5-Friday, 2 December

The second character is a lower case “a” for a.m., “p” for p.m., or “e” for evening corresponding to the time of day the session will take place. The third and fourth characters are capital letters indicating the primary Technical Committee that organized the session using the following abbreviations or codes:

- AA Architectural Acoustics
- AB Animal Bioacoustics

- AO Acoustical Oceanography
- BA Biomedical Acoustics
- EA Engineering Acoustics
- ED Education in Acoustics
- ID Interdisciplinary
- MU Musical Acoustics
- NS Noise
- PA Physical Acoustics
- PP Psychological and Physiological Acoustics
- SA Structural Acoustics and Vibration
- SC Speech Communication
- SP Signal Processing in Acoustics
- UW Underwater Acoustics

In sessions where the same group is the primary organizer of more than one session scheduled in the same morning or afternoon, a fifth character, either lower-case “a,” “b,” or “c” is used to distinguish the sessions. Each paper within a session is identified by a paper number following the session-designating characters, in conventional manner. As hypothetical examples: paper 2pEA3 would be the third paper in a session on Tuesday afternoon organized by the Engineering Acoustics Technical Committee; 3pSAb5 would be the fifth paper in the second of two sessions on Wednesday afternoon sponsored by the Structural Acoustics and Vibration Technical Committee.

Note that technical sessions are listed both in the calendar and the body of the program in the numerical and alphabetical order of the session designations rather than the order of their starting times. For example, session 3aAA would be listed ahead of session 3aAO even if the latter session begins earlier in the same morning.

8. OPENING PLENARY SESSION

The meeting will begin with an opening plenary session on Monday, 28 November, at 8.00 a.m. in Coral 4/5.

Dr. Hiroshi Hosoi from the ASJ and Nara Medical University will present Cartilage Conduction Hearing—New Sound Conduction Pathway in which he will discuss the discovery of new sound conduction pathways in mammals.

Dr. Peter Narins from the ASA and the University of California Los Angeles, will present Adventures of an Expeditionary Biologist: Neuroethology of Ultrasonic Communication in Amphibians. He will discuss adaptational studies that involve two distantly related organisms: the concave-eared torrent frog (*Odorrana tormota*), calling near fast-flowing mountain streams of Anhui Province, Central China, and the endemic Bornean frog, *Huicavitympanum*, living in a very similar riverine habitat in Sarawak, Malaysia.

9. ROSSING PRIZE IN ACOUSTICS EDUCATION AND ACOUSTICS EDUCATION PRIZE LECTURE

The 2016 Rossing Prize in Acoustics Education will be presented to Brad H. Story, University of Arizona, at the Plenary Session on Thursday, 1 December. Brad Story will present the Acoustics Education Prize Lecture titled “The role of artificial speech in understanding the acoustic characteristics of spoken communication” on Thursday, 1 December, at 4:05 p.m. in Session 4pEDb in South Pacific 4.

10. MEDWIN PRIZE IN ACOUSTICAL OCEANOGRAPHY AND ACOUSTICAL OCEANOGRAPHY PRIZE LECTURE

The 2016 Medwin Prize in Acoustical Oceanography will be presented to Thomas C. Weber, University of New Hampshire, at the Plenary Session on Thursday, 1 December. Thomas Weber will present the Acoustical Oceanography Prize Lecture titled "Acoustic observations and characterization of oceanic methane gas bubbles rising from the seabed" on Tuesday, 29 November, at 4:15 p.m. in Session 2pAOB in Coral 4.

11. EXHIBIT AND EXHIBIT RECEPTION

An instrument and equipment exhibit conveniently located near the registration area and meeting rooms, will be located in the Coral Foyer.

The Exhibit will include computer-based instrumentation, scientific books, sound level meters, sound intensity systems, signal processing systems, devices for noise control and acoustical materials, active noise control systems and other exhibits on acoustics.

The Exhibit will open on Monday with an evening reception with lite snacks and a complimentary drink. Coffee breaks on Tuesday and Wednesday mornings will be held in the exhibit area as well as an afternoon break on Tuesday.

Exhibit hours are Monday, 28 November, 5:30 p.m. to 7:00 p.m., Tuesday, 29 November, 9:00 a.m. to 5:00 p.m., and Wednesday, 30 November, 9:00 a.m. to 12:00 noon.

12. RESUME HELP DESK

Are you interested in applying for graduate school, a postdoctoral opportunity, a research scientist position, a faculty opening, or other position involving acoustics? If you are, please stop by the ASA Resume Help Desk in the Coral Foyer near the ASA registration desk. Members of the ASA experienced in hiring will be available review at your CV, cover letter, and research and teaching statements to provide tips and suggestions to help you most effectively present yourself in today's competitive job market. The ASA Resume Help Desk will be staffed on Tuesday, Wednesday, and Thursday during the lunch hour for walk-up meetings. Appointments during these three lunch hours will also be available via a sign-up sheet.

13. TECHNICAL COMMITTEE OPEN MEETINGS

Technical Committees will hold open meetings on Tuesday and Wednesday. The meetings on Tuesday will be held in the evening after the social. On Wednesday Technical Committee open meetings will be held starting at 7:30 p.m. The schedule and rooms for each Committee meeting are given on page A10.

These are working, collegial meetings. Much of the work of the Society is accomplished by actions that originate and are taken in these meetings including proposals for special sessions, workshops and technical initiatives. All meeting participants are cordially invited to attend these meetings and to participate actively in the discussions.

14. TECHNICAL TOUR

Wednesday, 30 November, 8:30 a.m. to 12 noon – limited to 40 participants – Cost USD\$15

A tour of the Pacific Islands Fisheries Science Center (PIFSC) will be conducted on Wednesday morning with a bus

leaving the Hilton Hawaiian Village at 8:30 a.m. and returning before noon. Inquire at the Registration Desk for availability.

PIFSC of the National Marine Fisheries Service (NMFS) is part of the National Oceanic and Atmospheric Administration (NOAA). The Center administers and conducts scientific research and monitoring programs that support the domestic and international conservation and management of living marine resources across the Pacific Islands Region. Key research focus areas include: coral reef ecosystems; fishery and protected species population assessments; marine mammal and sea turtle ecology; life history studies of fish; monitoring of fisheries activity; economics; human dimensions of resource management; development of by catch reduction technologies; health and disease in protected species; fishery interactions with protected species; ecosystem monitoring and integrated assessment; and impacts of climate change on the environment and ecosystems.

Note: All tour participants must submit the following information: place of birth including country, birth date, and passport number (for non-US citizens). Tour registrants will be sent forms requesting this information after they register. The tour registration fee is USD \$15/person and the tour is limited to 40 participants.

15. PLENARY SESSION AND AWARDS CEREMONY

A plenary session will be held Thursday, 1 December, immediately following the Banquet in Coral 4/5 at approximately 8:15 p.m.

The Rossing Prize in Acoustics Education will be presented to Brad H. Story. The Medwin Prize in Acoustical Oceanography will be presented to Thomas C. Weber. The Trent-Crede Medal will be presented to Earl G. Williams.

Certificates will be presented to Fellows elected at the Salt Lake City meeting of the Society. See page 3353 for a list of fellows.

All attendees are welcome and encouraged to attend. Please join us to honor and congratulate these medalists and other award recipients.

16. ANSI STANDARDS COMMITTEES

Meetings of ANSI Accredited Standards Committees will not be held at the Honolulu meeting.

Meetings of selected advisory working groups are often held in conjunction with Society meetings and are listed in the Schedule of Committee Meetings and Other Events on page A24 or on the standards bulletin board in the registration area, e.g., S12/WG18-Room Criteria.

People interested in attending and in becoming involved in working group activities should contact the ASA Standards Manager for further information about these groups, or about the ASA Standards Program in general, at the following address: Neil Stremmel, ASA Standards Manager, Standards Secretariat, Acoustical Society of America, 1305 Walt Whitman Road, Suite 300, Melville, NY 11747-4300; T.: 631-390-0215; F: 631-923-2875; E: asastds@acousticalsociety.org

17. COFFEE BREAKS

Morning coffee breaks will be held each day from 9:30 a.m. to 10:45 a.m. in the Coral Foyer. Morning breaks on Tuesday

and Wednesday will be held in the Exhibit area. There will also be an afternoon break on Tuesday from 2:30 p.m. to 3:45 p.m. in the Exhibit area.

18. A/V PREVIEW ROOM

MPCC II on the Coral Foyer level will be set up as an A/V preview room for authors' convenience, and will be available on Monday through Friday from 7:00 a.m. to 5:00 p.m.

19. PROCEEDINGS OF MEETINGS ON ACOUSTICS (POMA)

The Honolulu meeting will have a published proceedings, and submission is optional. The proceedings will be a separate volume of the online journal, "Proceedings of Meetings on Acoustics" (POMA). This is an open access journal, so that its articles are available in pdf format for downloading without charge to anyone in the world. Authors who are scheduled to present papers at the meeting are encouraged to prepare a suitable version in pdf format that will appear in POMA. It is not necessary to wait until after the meeting to submit one's paper to POMA. Further information regarding POMA can be found at the site <http://acousticsauthors.org>. Published papers from previous meeting can be seen at the site <http://asadl/poma>.

20. E-MAIL AND INTERNET ZONE

Wi-Fi will be available in all ASA meeting rooms and spaces.

Computers providing e-mail access will be available 7:00 a.m. to 5:00 p.m., Monday to Friday between MPCC I and MPCC II in the Coral Foyer.

Tables with power cords will be set up in the Coral Foyer for attendees to gather and to power-up their electronic devices.

21. SOCIAL

A Social will be held on Tuesday evening, 6:00 p.m. to 7:30 p.m. on the Great Lawn at the Hilton Hawaiian Village.

The ASA hosts these social hours to provide a relaxing setting for meeting attendees to meet and mingle with their friends and colleagues as well as an opportunity for new members and first-time attendees to meet and introduce themselves to others in the field. A second goal of the socials is to provide a sufficient meal so that meeting attendees can attend the open meetings of Technical Committees that begin immediately after the social.

22. BANQUET

A banquet will be held on Thursday evening, 1 December. Banquet festivities will start at 6:00 p.m. in the Hilton Hawaiian Village Waikiki Beach Resort with a no-host social hour in the Coral Foyer. The banquet, starting at 7:00 p.m. in Coral 4/5, features a Chinese dinner. There will be a special presentation on Hawaiian music as part of the entertainment. The awards ceremony will be held during the banquet.

Banquet tickets are available for USD \$40 each (students USD \$25). Tickets are limited and are not included in the registration fee. Tickets may be purchased at the meeting subject to availability until 5:00 p.m. on Tuesday, 29 November.

23. STUDENTS MEET MEMBERS FOR LUNCH

The ASA Education Committee arranges for a student to meet one-on-one with a member of the Acoustical Society over

lunch. The purpose is to make it easier for students to meet and interact with members at ASA Meetings. Each lunch pairing is arranged separately. Students who are interested should contact Dr. David Blackstock, University of Texas at Austin, by email dtb@mail.utexas.edu. Please provide your name, university, department, degree you are seeking (BS, MS, or PhD), research field, acoustical interests, your supervisor's name, days you are free for lunch, and abstract number (or title) of any paper(s) you are presenting. The sign-up deadline is 12 days before the start of the Meeting, but an earlier sign-up is strongly encouraged. Each participant pays for his/her own meal.

24. STUDENT EVENTS: NEW STUDENTS ORIENTATION, MEET AND GREET, STUDENT RECEPTION

Follow the student twitter throughout the meeting @ASAStudents.

A New Students Orientation will be held from 5:00 p.m. to 5:30 p.m. on Monday, 28 November, in the Hibiscus room for all students to learn about the activities and opportunities available for students at the Honolulu meeting. This will be followed by the Student Meet and Greet from 5:30 p.m. to 7:00 p.m. in Rainbow I and II. Refreshments and a cash bar will be available.

The Students' Reception will be held on Wednesday, 30 November, from 6:00 p.m. to 8:00 p.m. in Rainbow I and II. This reception, sponsored by the Acoustical Society of America and supported by the National Council of Acoustical Consultants, will provide an opportunity for students to meet informally with fellow students and other members of the Acoustical Society. All students are encouraged to attend, especially students who are first time attendees or those from smaller universities.

Students will find a sticker in their registration envelopes to place on their name tags identifying them as students. Although wearing the sticker is not mandatory, it will allow for easier networking between students and other meeting attendees.

Students are encouraged to refer to the student guide, also found in their envelopes, for important program and meeting information pertaining only to students attending the ASA meeting.

They are also encouraged to visit the official ASA Student Home Page at <http://asastudentcouncil.org/> to learn more about student involvement in ASA.

25. WOMEN IN ACOUSTICS LUNCHEON

The Women in Acoustics luncheon will be held at 11:45 a.m. on Wednesday, 30 November, in the Rainbow Suite. Those who wish to attend must purchase their tickets in advance by 10:00 a.m. on Tuesday, 30 November. The fee is USD\$30 for non-students and USD\$15 for students.

26. JAM SESSION

You are invited to Irish Rose Saloon on Wednesday night, 30 November, from 8:00 p.m. to midnight for the ASA Jam. (478 Ena Rd., Honolulu, a 5-minute walk from the Hilton.) Bring your axe, horn, sticks, voice, or anything else that makes music. Musicians and non-musicians are all welcome

to attend. A full PA system, backline equipment, guitars, bass, keyboard, and drum set will be provided. All attendees will enjoy live music, a cash bar with snacks, and all-around good times. Don't miss out.

27. ACCOMPANYING PERSONS PROGRAM

Spouses and other visitors are welcome at the Honolulu meeting. The on-site registration fee for accompanying persons is USD\$150. This entitles access to the accompanying persons room, social on Tuesday evening, the Jam Session. Accompanying Persons may also attend the Thursday evening banquet by purchasing a banquet ticket.

A hospitality room for accompanying persons will be open in Rainbow I at the Hilton from 8:00 a.m. to 10:00 a.m. Monday through Friday.

There will be a short program daily lasting for about 1 hour and will include activities such as lei making, hula demonstration and history, and other presentations of general interest.

Breakfast snacks including beverages will be provided.

28. WEATHER

The weather is generally very pleasant in the latter part of November, but cool weather can occur. For the week of the ASA meeting, temperatures are typically in the mid 70-80's during the day, dropping into the lower 60 – 70's at night. Occasional but brief rain showers can occur suddenly so having an umbrella or rain jacket is advisable.

29. TECHNICAL PROGRAM ORGANIZING COMMITTEE

Bruce M. Howe, Hiroshi Saruwatari, Technical Program Cochairs; David P. Knobles, Hiroyuki Hachiya, Acoustical Oceanography; Benjamin Taft, Jennifer Miksis-Olds, Hiroyuki Hachiya, Animal Bioacoustics; Damian J. Doria, Ian B. Hoffman, Hayato Sato, Mari Ueda, Architectural Acoustics; Siddhartha Sikdar, Kang Kim, Shin-ichiro Umemura, Hideyuki Nomura, Yasuhiro Oikawa, Biomedical Acoustics; Andrew Piacsek, Eoin King, Akira Nishimura, Education in Acoustics; Kenneth M. Walsh, Yoshifumi Chisaki, Yasuhiro Oikawa, Mari Ueda, Engineering Acoustics; Andrew C.H. Morrison, Masashi Yamada, Musical Acoustics; James E. Phillips, William J. Murphy, Akira Omoto, Noise; Michael R. Haberman, Hideyuki Nomura, Yasuhiro Oikawa, Physical Acoustics; Christopher A. Brown, Masato Akagi, Psychological and Physiological Acoustics; Brian E. Anderson, Mari Ueda, Yoshifumi Chisaki, Signal Processing in Acoustics; Alexander L. Francis, Melissa Baese-Berk, Tuuli Morrill, Norihide Kitaoka, Masato Akagi, Mari Ueda, Speech Communication; Benjamin M. Shafer, Akira Omoto, Structural Acoustics and Vibration; Todd Hefner, Derek Olson, Hiroyuki Hachiya, Underwater Acoustics; Brent Reichman, Kelly L. Whiteford, Student Council.

30. MEETING ORGANIZING COMMITTEE

ASA Meeting Committee: Whitlow W.L. Au, Chair; David L. Adams, Cochair; Bruce M. Howe, Technical Program Chair; Gary McAuliffe, Audio/Visual; David L. Adams/Robert Badham, Food/Beverage; Benjamin Reeder, Signs; Aude Pacini, Posters; Dorothy Au, Accompanying Persons; Jessica Chen, Student Coordinator; Robert Badham, Meeting Administrator.

ASJ Meeting Committee: Yoshiaki Watanabe, Cochair; Akio Ando, Cochair; Hiroshi Sato, Vice Chair; Hiroshi Saruwatari, Technical Program Chair; Yasuhiro Oikawa, Secretary.

31. PHOTOGRAPHING AND RECORDING

Photographing and recording during regular sessions are not permitted without prior explicit permission of the presenter.

32. ABSTRACT ERRATA

This meeting program is Part 2 of the October 2016 issue of *The Journal of the Acoustical Society of America*. Corrections, for printer's errors only, may be submitted for publication in the Errata section of the *Journal*.

33. GUIDELINES FOR ORAL PRESENTATIONS

Preparation of Visual Aids

See the guidelines for computer projection in section 41 below.

- Allow at least one minute of your talk for each slide (e.g., PowerPoint). No more than 12 slides for a 15-minute talk (with 3 minutes for questions and answers).
- Minimize the number of lines of text on one visual aid. 12 lines of text should be a maximum. Include no more than 2 graphs/plots/figures on a single slide. Generally, too little information is better than too much.
- Presentations should contain simple, legible text that is readable from the back of the room.
- Characters should be at least 0.25 inches (6.5 mm) in height to be legible when projected. A good rule of thumb is that text should be 20 point or larger (including labels in inserted graphics). Anything smaller is difficult to read.
- Make symbols at least 1/3 the height of a capital letter.
- For computer presentations, use all of the available screen area using landscape orientation with very thin margins. If your institutions logo must be included, place it at the bottom of the slide.
- Sans serif fonts (e.g., Arial, Calibri, and Helvetica) are much easier to read than serif fonts (e.g., Times New Roman) especially from afar. Avoid thin fonts (e.g., the horizontal bar of an e may be lost at low resolution thereby registering as a c.)
- Do not use underlining to emphasize text. It makes the text harder to read.
- All axes on figures should be labeled.
- No more than 3–5 major points per slide.
- Consistency across slides is desirable. Use the same background, font, font size, etc. across all slides.
- Use appropriate colors. Avoid complicated backgrounds and do not exceed four colors per slide. Backgrounds that change from dark to light and back again are difficult to read. Keep it simple.
- If using a dark background (dark blue works best), use white or yellow lettering. If you are preparing slides that may be printed to paper, a dark background is not appropriate.
- If using light backgrounds (white, off-white), use dark blue, dark brown or black lettering.
- DVDs should be in standard format.

Presentation

- Organize your talk with introduction, body, and summary or conclusion. Include only ideas, results, and concepts that can be explained adequately in the allotted time. Four elements to include are:
 - Statement of research problem
 - Research methodology
 - Review of results
 - Conclusions
- Generally, no more than 3–5 key points can be covered adequately in a 15-minute talk so keep it concise.
- Rehearse your talk so you can confidently deliver it in the allotted time. Session Chairs have been instructed to adhere to the time schedule and to stop your presentation if you run over.
- An A/V preview room will be available for viewing computer presentations before your session starts. It is advisable to preview your presentation because in most cases you will be asked to load your presentation onto a computer which may have different software or a different configuration from your own computer.
- Arrive early enough so that you can meet the session chair, load your presentation on the computer provided, and familiarize yourself with the microphone, computer slide controls, laser pointer, and other equipment that you will use during your presentation. There will be many presenters loading their materials just prior to the session so it is very important that you check that all multi-media elements (e.g., sounds or videos) play accurately prior to the day of your session.
- Each time you display a visual aid the audience needs time to interpret it. Describe the abscissa, ordinate, units, and the legend for each figure. If the shape of a curve or some other feature is important, tell the audience what they should observe to grasp the point. They won't have time to figure it out for themselves. A popular myth is that a technical audience requires a lot of technical details. Less can be more.
- Turn off your cell phone prior to your talk and put it away from your body. Cell phones can interfere with the speakers and the wireless microphone.

34. SUGGESTIONS FOR EFFECTIVE POSTER PRESENTATIONS

Content

The poster should be centered around two or three key points supported by the title, figures, and text. The poster should be able to “stand alone.” That is, it should be understandable even when you are not present to explain, discuss, and answer questions. This quality is highly desirable since you may not be present the entire time posters are on display, and when you are engaged in discussion with one person, others may want to study the poster without interrupting an ongoing dialogue.

- To meet the “stand alone” criteria, it is suggested that the poster include the following elements, as appropriate:
 - Background
 - Objective, purpose, or goal
 - Hypotheses
 - Methodology
 - Results (including data, figures, or tables)

- Discussion
- Implications and future research
- References and Acknowledgment

Design and layout

- A board approximately 8 ft. wide × 4 ft. high will be provided for the display of each poster. Supplies will be available for attaching the poster to the display board. Each board will be marked with an abstract number.
- Typically posters are arranged from left to right and top to bottom. Numbering sections or placing arrows between sections can help guide the viewer through the poster.
- Centered at the top of the poster, include a section with the abstract number, paper title, and author names and affiliations. An institutional logo may be added. Keep the design relatively simple and uncluttered. Avoid glossy paper.

Lettering and text

- Font size for the title should be large (e.g., 70-point font)
- Font size for the main elements should be large enough to facilitate readability from 2 yards away (e.g., 32 point font). The font size for other elements, such as references, may be smaller (e.g., 20–24 point font).
- Sans serif fonts (e.g., Arial, Calibri, Helvetica) are much easier to read than serif fonts (e.g., Times New Roman).
- Text should be brief and presented in a bullet-point list as much as possible. Long paragraphs are difficult to read in a poster presentation setting.

Visuals

- Graphs, photographs, and schematics should be large enough to see from 2 yards (e.g., 8 × 10 inches).
- Figure captions or bulleted annotation of major findings next to figures are essential. To ensure that all visual elements are “stand alone,” axes should be labeled and all symbols should be explained.
- Tables should be used sparingly and presented in a simplified format.

Presentation

- Prepare a brief oral summary of your poster and short answers to likely questions in advance.
- The presentation should cover the key points of the poster so that the audience can understand the main findings. Further details of the work should be left for discussion after the initial poster presentation.
- It is recommended that authors practice their poster presentation in front of colleagues before the meeting. Authors should request feedback about the oral presentation as well as poster content and layout.

Other suggestions

- You may wish to prepare reduced-size copies of the poster (e.g., 8 1/2 × 11 sheets) to distribute to interested audience members.

35. GUIDELINES FOR USE OF COMPUTER PROJECTION

A PC computer with monaural audio playback capability and projector will be provided in each meeting room on

which all authors who plan to use computer projection should load their presentations. Authors should bring computer presentations on a CD or USB drive to load onto the provided computer and should arrive at the meeting rooms at least 30 minutes before the start of their sessions. Assistance in loading presentations onto the computers will be provided.

Note that only PC format will be supported so authors using Macs must save their presentations for projection in PC format. Also, authors who plan to play audio during their presentations should insure that their sound files are also saved on the CD or USB drive.

Introduction

It is essential that each speaker who plans to use his/her own laptop connect to the computer projection system in the A/V preview room prior to session start time to verify that the presentation will work properly. Technical assistance is available in the A/V preview room at the meeting, but not in session rooms. Presenters whose computers fail to project for any reason will not be granted extra time.

Guidelines

- Set your computer's screen resolution to 1024x768 pixels or to the resolution indicated by the AV technical support. If it looks OK, it will probably look OK to your audience during your presentation.
- Remember that graphics can be animated or quickly toggled among several options: Comparisons between figures may be made temporally rather than spatially.
- Animations often run more slowly on laptops connected to computer video projectors than when not so connected. Test the effectiveness of your animations before your assigned presentation time on a similar projection system (e.g., in the A/V preview room). Avoid real-time calculations in favor of pre-calculation and saving of images.
- If you will use your own laptop instead of the computer provided, connect your laptop to the projector during the question/answer period of the previous speaker. It is good protocol to initiate your slide show (e.g., run PowerPoint) immediately once connected, so the audience doesn't have to wait. If there are any problems, the session chair will endeavor to assist you, but it is your responsibility to ensure that the technical details have been worked out ahead of time.
- During the presentation have your laptop running with main power instead of using battery power to insure that the laptop is running at full CPU speed. This will also guarantee that your laptop does not run out of power during your presentation.

Specific Hardware Configurations

Macintosh

Older Macs require a special adapter to connect the video output port to the standard 15-pin male DIN connector. Make sure you have one with you.

- Hook everything up before powering anything on. (Connect the computer to the RGB input on the projector).
- Turn the projector on and boot up the Macintosh. If this doesn't work immediately, you should make sure that your

monitor resolution is set to 1024x768 for an XGA projector or at least 640x480 for an older VGA projector. (1024x768 will most always work.). You should also make sure that your monitor controls are set to mirroring. If it's an older PowerBook, it may not have video mirroring, but something called simulscan, which is essentially the same.

- Depending upon the vintage of your Mac, you may have to reboot once it is connected to the computer projector or switcher. Hint: you can reboot while connected to the computer projector in the A/V preview room in advance of your presentation, then put your computer to sleep. Macs thus booted will retain the memory of this connection when awakened from sleep.
- Depending upon the vintage of your system software, you may find that the default video mode is a side-by-side configuration of monitor windows (the test for this will be that you see no menus or cursor on your desktop; the cursor will slide from the projected image onto your laptop's screen as it is moved). Go to Control Panels, Monitors, configuration, and drag the larger window onto the smaller one. This produces a mirror-image of the projected image on your laptop's screen.
- Also depending upon your system software, either the Control Panels will automatically detect the video projector's resolution and frame rate, or you will have to set it manually. If it is not set at a commensurable resolution, the projector may not show an image. Experiment ahead of time with resolution and color depth settings in the A/V preview room (please don't waste valuable time adjusting the Control Panel settings during your allotted session time).

PC

- Make sure your computer has the standard female 15-pin DE-15 video output connector. Some computers require an adaptor.
- Once your computer is physically connected, you will need to toggle the video display on. Most PCs use either ALT-F5 or F6, as indicated by a little video monitor icon on the appropriate key. Some systems require more elaborate keystroke combinations to activate this feature. Verify your laptop's compatibility with the projector in the A/V preview room. Likewise, you may have to set your laptop's resolution and color depth via the monitor's Control Panel to match that of the projector, which settings you should verify prior to your session.

Linux

- Most Linux laptops have a function key marked CRT/LCD or two symbols representing computer versus projector. Often that key toggles on and off the VGA output of the computer, but in some cases, doing so will cause the computer to crash. One fix for this is to boot up the BIOS and look for a field marked CRT/LCD (or similar). This field can be set to Both, in which case the signal to the laptop is always presented to the VGA output jack on the back of the computer. Once connected to a computer projector, the signal will appear automatically, without toggling the function key. Once you get it working, don't touch it and it should continue to work, even after reboot.

36. DATES OF FUTURE ASA MEETINGS

For further information on any ASA meeting, or to obtain instructions for the preparation and submission of meeting abstracts, contact the Acoustical Society of America, 1305 Walt Whitman Road, Suite 300, Melville, NY 11747-4300; Telephone: 516-576-2360; Fax: 631-923-2875; E-mail: asa@acousticalsociety.org

173rd Meeting, Boston, Massachusetts, 25–29 June 2017
(The 3rd joint meeting of the Acoustical Society of America and the European Acoustics Association)

174th Meeting, New Orleans, Louisiana, 4–8 December 2017
175th Meeting, Minneapolis, Minnesota, 7–11 May 2018
176th Meeting, Victoria, Canada, 6–9 November 2018
177th Meeting, Louisville, Kentucky, 13–17 May 2019
178th Meeting, TBD, fall 2019
179th Meeting, Chicago, Illinois, 11–15 May 2020
180th Meeting, Cancun, Mexico, fall 2020