

176th Meeting of the Acoustical Society of America and 2018 Acoustics Week in Canada

The 176th meeting of the Acoustical Society of America/2018 Acoustics Week in Canada will be held Monday through Friday, 5-9 November 2018 at the Victoria Conference Centre and the Fairmont Empress Hotel, Victoria, British Columbia, Canada

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1. VICTORIA CONFERENCE CENTRE

The joint 176th Meeting of the Acoustical Society of America and 2018 Acoustics Week in Canada will be held

5-9 November 2018 at the Victoria Conference Centre and the Fairmont Empress Hotel, Victoria, British Columbia, Canada. Technical sessions, committee meetings, and other events will be held at both venues. The Social Hour on Tuesday, 6 November, will be held at the Royal BC Museum, located across from the Fairmont Empress Hotel.

2. HOTEL INFORMATION

The Fairmont Empress Hotel is the headquarters hotel where some meeting events will be held. Blocks of guest rooms at discounted rates have been reserved for meeting participants at the Fairmont Empress and the Victoria Marriott Inner Harbour Hotel.

The cut-off date for reserving rooms at special rates has passed.

Please contact the Fairmont Empress (US or Canada: 800-257-7544/All other countries: 800-441-1414 888-236-2427) or the Victoria Marriott Inner Harbour Hotel (888-236-2427) for information about room availability.

3. TRAVELING TO CANADA

Visit the Government of Canada website for information about the documents you will need to enter Canada (<https://www.canada.ca/en.html>).

4. TRANSPORTATION AND TRAVEL

Victoria International Airport (Airport Code YYJ) is served by 14 international and domestic airlines. See <http://www.victoriaairport.com> for more information. The airport is approximately 15 miles (25 km) from the Victoria Conference Centre and the conference hotels in downtown Victoria.

Ground Transportation

Taxi: Taxi cabs are located curbside immediately outside of the arrivals area of the airport. Taxi rides from the airport to downtown Victoria cost about CAD \$60 and take about 30 minutes. Taxis are required to accept credit card payments.

Airport Shuttle: Shuttle service is available from the airport to hotels in downtown Victoria for CAD \$25 per person one-way or CAD \$44 per person round-trip (2 tickets), departing every 40 minutes until 12:30 a.m. Passengers can purchase tickets at the YYJ Airport Shuttle counter in the arrivals area of the airport. See <https://yyjairportshuttle.com> for more information.

Car Rental: Four car rental agencies serve the airport, with counters located in the arrivals area directly across from the Information desk. See www.victoriaairport.com/car-rentals for more information.

Driving: Victoria, on Vancouver Island, can be accessed by vehicle via BC Ferries from Tsawwassen (south of Vancouver) to Swartz Bay (north of Victoria).

Parking: The cost at the Fairmont Empress Hotel is CAD \$32 per day; the cost at the Marriott Inner Harbour Hotel is CAD \$16 per day.

5. MESSAGES FOR ATTENDEES

A message board will be located in the Prefunction area 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.

6. 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 Monday, 5 November, at 7:30 a.m. in Prefunction 1A (see floor plan on page A11).

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 \$650 for members of the Acoustical Society of America or the Canadian Acoustical Association; \$800 for non-members, \$200 for Emeritus members (Emeritus status pre-approved by ASA), \$375 for ASA Early Career members (for ASA members within three years of their most recent degrees – proof of date of degree required), \$150 for ASA and CAA Student members, \$250 for students who are not members of ASA or CAA, \$25 for Undergraduate Students, and \$200 for accompanying persons.

One-day registration is available at \$375 for members and \$450 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 \$800 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 2019 dues.

Invited speakers who are members of the Acoustical Society of America are expected to pay the Member full-week or one-day registration fees. 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 \$450 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.

7. ACCESSIBILITY

If you have special accessibility requirements, please indicate this below by informing ASA (1305 Walt Whitman Road, Suite 300, Melville, NY 11747-4300; asa@acousticalsociety.org) at a minimum of thirty days in advance of the meeting. Please provide a cell phone number, email address, and detailed information including the nature of the special accessibility so that we may contact you directly.

8. ITINERARY PLANNER, MOBILE APP, WIFI

An Itinerary Planner and a Mobile App are available for this meeting. Please see the information on the Victoria meeting webpage for further information.

9. TECHNICAL SESSIONS

The technical program includes 121 sessions with 1282 abstracts scheduled for presentation during the meeting.

A floor plan of the Victoria Conference Centre and the Fairmont Empress Hotel appears on page A11. 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.

10. TECHNICAL SESSION DESIGNATIONS

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

- 1-Monday, 5 November
- 2-Tuesday, 6 November
- 3-Wednesday, 7 November
- 4-Thursday, 8 November
- 5-Friday, 9 November

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.

11. HOT TOPICS SESSION

The Hot Topics session (3pID) will be held on Wednesday, 7 November, at 1:00 p.m. in the Crystal Ballroom (FE). Papers will be presented on current topics in the fields of Speech Communication, Education in Acoustics, and Animal Bioacoustics

12. TUTORIAL LECTURE ON AN INTRODUCTION TO SOUND IN THE SEA

A tutorial on "Introduction to Sound in the Sea" will be presented by Tom Dakin of Ocean Networks Canada, on Monday, 5 November at 7:00 p.m. in Salon A (VCC). Lecture notes will be available at the meeting in limited supply; only preregistrants will be guaranteed receipt of a set of notes.

The registration fee is USD \$25 (USD \$12 for students with current student IDs).

13. SHORT COURSE ON BIOACOUSTICS AND ECHOACOUSTICS

A short course on Open Science and Related Topics in Hearing Research will be given in two parts: Sunday, 4 November, from 1:00 p.m. to 5:00 p.m. in Rattenbury B (FE) and Monday, 5 November, from 8:30 a.m. to 12:30 p.m. in Colwood 1/2 (VCC).

The objective of the course is to provide scholars with a solid foundation to understand bioacoustics and ecoacoustics, the equipment needed to do acoustic research and monitoring, the software tools, the applications in the different fields, ranging from basic research to environmental monitoring and protection. The course will include topics related to both terrestrial and marine bioacoustics and ecoacoustics, soundscape analysis, noise pollution, digital sound recording and analysis, also considering the importance of the acoustic environment for the human beings.

Onsite registration at the meeting will be on a space-available basis.

14. UNDERGRADUATE RESEARCH EXPOSITION

The 2018 Undergraduate Research Exposition, a poster session sponsored by Education in Acoustics will be held on Wednesday, 7 November, in session 3pEDa, in Prefunction 1B (VCC). This is a forum for undergraduate students to present their research in any area of acoustics and can also include overview papers on undergraduate research programs. It is intended to inspire and foster growth of undergraduate research throughout the Society, to encourage undergraduates to express their knowledge and interest in acoustics, and to foster their participation in the Society.

15. EARLY CAREER SPEED-NETWORKING EVENT

ASA is hosting a speed-networking event for early career participants at the meeting to facilitate professional relationships and collaboration between early career participants and more experienced members of the society. The first half of the event will include multiple short conversations between early career

participants and more senior society members. The second half will be a social in which the participants will be given the opportunity to continue conversations with the more experienced society members as well as interact with other early career participants. The event will be held on Monday, 5 November, from 5:30 p.m. to 7:00 p.m. in the View Royal Room (VCC).

Participant requirements: The speed-networking event is intended for early career acousticians from any subfield of acoustics, who received their last degree within the past ten years. It is not intended for students or those in the process of receiving a degree. Students are encouraged to attend the activities specifically designed for them throughout the week. Please contact Tessa Bent (tbent@indiana.edu) or Dom Bouavichith (dbouavichith@gmail.com) if you have any questions.

16. TECHNICAL COMMITTEE OPEN MEETINGS

Technical Committees will hold open meetings on Tuesday, Wednesday, and Thursday at the Victoria Conference Centre or the Fairmont Empress. The schedule and rooms for each Committee meeting are given on page A18.

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.

17. CANADIAN ACOUSTICAL ASSOCIATION

The Canadian Acoustical Association (CAA) is a nonprofit organization whose goals are to foster communication among people working in all areas of acoustics in Canada, promote the growth and practical application of knowledge in acoustics, and encourage education, research, protection of the environment, and employment in acoustics.

The CAA is a member society of the International Institute of Noise Control Engineering (I-INCE) and the International Commission for Acoustics (ICA), and an affiliate society of the International Institute of Acoustics and Vibration (IIAV). The Acoustical Standards Committee of the CAA also helps coordinate Canadian involvement with standards writing bodies such as ISO, IEC, ASTM, ANSI/ASA, and the Canadian Standards Association (CSA).

Each year, the CAA organizes a national conference under the banner name Acoustics Week in Canada, which is an opportunity for professional, scientific and technical exchange in all areas of acoustics and vibration. This year, it has been our pleasure to collaborate with our ASA colleagues to co-host the meeting in Victoria.

The CAA publishes *Canadian Acoustics*, a quarterly journal of refereed articles, technical notes, case studies, book reviews and news items on acoustics and vibration. A number of prizes, awards and travel grants are also offered annually to high-school, undergraduate and graduate students, postdoctoral fellows and other researchers.

More information about the CAA may be found on the association website at caa-aca.ca

18. ASA PLENARY SESSION AND AWARDS CEREMONY / CAA ANNUAL GENERAL MEETING

The ASA Plenary Session and Awards Ceremony will be held on Wednesday, 7 November, at 3:45 p.m. in Salon A at the Victoria Conference Centre.

This event will begin with a traditional First Nations welcome.

Certificates will be presented to ASA Fellows elected at the Minneapolis meeting. See page 1875 for a list of fellows.

ASA will present the Wallace Clement Sabine Medal to Michael Vorländer.

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

The CAA Annual General Meeting will be held following the plenary session at approximately 4:45 p.m. see page 1875 for the CAA Awards to be presented.

19. ANSI STANDARDS COMMITTEES

Meetings of ANSI Accredited Standards Committees will be not held at the 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 A18 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: 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

20. COFFEE BREAKS

Morning coffee breaks will be held each day from 9:45 a.m. to 10:45 a.m. in the second floor prefunction area at the Victoria Conference Centre.

21. A/V PREVIEW ROOM

The West Coast Room at the Victoria Conference Centre 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.

22. PROCEEDINGS OF MEETINGS ON ACOUSTICS (POMA)

The Victoria 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>.

Authors who are members of the Canadian Acoustical Association are invited to submit 2-page conference proceedings papers that will be published in Canadian Acoustics in December 2018. CAA authors who also submit a paper to POMA should change the POMA paper title to differentiate from the CAA proceedings paper. See the CAA webpage at <https://awc.caa-aca.ca/index.php/AWC/awc18> for details.

23. 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 from 7:00 a.m. to 5:00 p.m., Monday to Friday in Prefunction area on the second floor at the Victoria Conference Centre.

Tables with power cords will also be available for attendees to gather and to power-up their electronic devices.

24. SOCIALS

Two socials with complimentary buffets and cash bars will be held on Tuesday and Thursday, 6 and 8 November, 6:00 p.m. to 7:30 p.m..

The social on Tuesday, 6 November, will be held at the Royal BC Museum across the street from the Empress Hotel. Regularly rated the best museum in Canada, the Royal BC Museum explores the natural and human history of British Columbia including natural history dioramas; recreations of a frontier town, gold mine, saw mill and fishing village; and the stunning First Peoples gallery and Totem Hall.

Please take the opportunity to circulate on the second and third floors of the museum to visit the exhibits (food and drink stations will be distributed throughout the museum).

The social on Thursday, 8 November, will be held in the Crystal Ballroom at the Empress Hotel.

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 the Technical Committees that begin immediately after the socials.

25. SOCIETY LUNCHEON AND LECTURE

The Society Luncheon and Lecture, sponsored by the College of Fellows, will be held Thursday, 8 November, at 12:00 noon in the Crystal Garden at the Victoria Conference Centre. The speaker will be Bryan Gick (PhD, Yale U. '99), Professor and Guggenheim Fellow in the Department of Linguistics at the University of British Columbia, and a Senior Scientist at Haskins Laboratories.

His presentation is titled "If Bodies Could Talk" and will show how a deeper understanding of biological movement can help us to make sense of how sounds are produced for communication.

This luncheon is open to all attendees and their guests. Purchase your tickets at the Registration Desk before 10:00 a.m. on Wednesday, 7 November. The cost is USD \$30.00 per ticket.

26. STUDENT EVENTS: STUDENT ORIENTATION, MEET AND GREET, STUDENT RECEPTION

Follow the student twitter throughout the meeting @ASASStudents.

A Student Orientation will be held on Monday, 5 November, from 5:00 p.m. to 5:30 p.m. in the Rattenbury Room (FE). This will be followed by the Student Meet and Greet from 5:30 p.m. to 7:00 p.m. in the Palm Court (FE) where refreshments and a cash bar will be available.

The Students' Reception will be held on Wednesday, 7 November, from 6:00 p.m. to 8:00 p.m. in the Shaughnessy Ballroom (FE). 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.

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.

27. WOMEN IN ACOUSTICS LUNCHEON

The Women in Acoustics luncheon will be held at 11:30 a.m. on Wednesday, 7 November, in the Bengal Room (FE). Those who wish to attend must purchase their tickets in advance by 10:00 a.m. on Tuesday, 6 November. The fee is USD \$30 for non-students and USD\$ 15 for students.

28. JAM SESSION

You are invited to The Sticky Wicket Pub (919 Douglas St.) on Wednesday night, 7 November, from 8:00 p.m. to midnight for the ASA Jam. The Sticky Wicket Pub is a 3-5 minute walk from the Victoria Conference Centre (walk north (left) on Douglas St. for 2 blocks. The Sticky Wicket will be on the right at the corner of Courtney St. Entrance is on Courtney St.)

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.

29. ACCOMPANYING PERSONS PROGRAM

Spouses and other visitors are welcome at the Victoria meeting. The on-site registration fee for accompanying persons is USD \$200. A hospitality room for accompanying persons will be open in the Palm Court (FE) from 8:00 a.m. to 10:00 a.m. Monday through Friday. This entitles you access to the accompanying persons room, social events on Tuesday and Thursday, the Jam Session, and the Plenary Session on Wednesday afternoon.

The program will include speakers on the history and culture of the city including presentations about the Emily Carr House, Butchart Gardens, Craigdarroch Castle, and St. Ann's Academy National Historic Site. Check back to the meeting website for updated information.

Victoria, the capital of British Columbia, is located on the southern tip of Vancouver Island. Centered on the bustling Inner Harbour, and graced with abundant parkland and gardens, the city is a unique blend of old world charm and new world experiences. Within a short walk of the meeting hotels is a multitude of museums and attractions as well as a broad range of culinary experiences. There are also a number of excellent tours available, including historic and cultural city sights, the world-famous Butchart Gardens, and whale-watching excursions. Tourism Victoria (<https://www.tourismvictoria.com>) and the Victoria Visitors Centre (812 Wharf St) are great resources.

30. WEATHER

Victoria has a Mediterranean climate with mild fall/winter weather. Average high and low temperatures in November are 50° F (10° C) and 43° F (6° C), respectively. Rainfall is common in Victoria in the fall and occurs an average of 15 days in November. Carrying a small folding umbrella may be useful for occasional showers.

31. TECHNICAL PROGRAM ORGANIZING COMMITTEE

Roberto Racca, Chair; David P. Knobles, Acoustical Oceanography; David Mann, Animal Bioacoustics; Ian Hoffman, Shane Kanter, Architectural Acoustics; Siddhartha Sikdar, Kang Kim, Biomedical Acoustics; Benjamin Tucker, Daniel Russell, Education in Acoustics; Michael Haberman, Caleb Sieck, Engineering Acoustics; Whitney Coyle, Peter Rucz, Musical Acoustics; William J. Murphy, Kerrie Standlee, Hales Swift, Noise, Kevin Lee, Physical Acoustics; Anna Diedesch, Psychological and Physiological Acoustics; Kai Gemba, Paul Hursky, Kainan Thomas Wong, Signal Processing in Acoustics; Rajka Smiljanic, Kristin Van Engen, Speech Communication; Benjamin Shafer, Robert A. Koch, Structural Acoustics and Vibration; Jon Collis, Underwater Acoustics; Vahid Naderyan, Student Council.

32. MEETING ORGANIZING COMMITTEE

Stan Dosso, Chair; Roberto Racca, Technical Program Chair; Jorge Quijano, Graham Warner, Student Coordinators; Svein Vagle, Tom Dakin, Signs, Terry Russell, Catering; Sonya Bird, Xavier Mouy, Special Events; Shelley Dosso, Accompanying Persons;

33. PHOTOGRAPHING AND RECORDING

Photographing and recording during regular sessions are not permitted without prior permission from the Acoustical Society.

34. ABSTRACT ERRATA

This meeting program is Part 2 of the September 2018 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*.

35. GUIDELINES FOR ORAL PRESENTATIONS

- Preparation of Visual Aids See the guidelines for computer projection in section 37 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.

- Go to the A/V preview room the day before or as early as possible before your session to submit your presentation file to the AV staff.
- The A/V staff will arrange to upload your file on to the laptop in your session room.
- Arrive early enough so that you can meet the session chair, and familiarize yourself with the microphone, computer slide controls, laser pointer, and other equipment that you will use during your presentation.
- 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.

36. 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.

37. GUIDELINES FOR USE OF COMPUTER PROJECTION

A PC computer with monaural audio playback capability and projector will be provided in each meeting room which will be used by authors who plan to use computer projection for their presentations. Authors should bring computer presentations on a CD or USB drive to load onto the provided computer and go to the A/V preview room the day before the start of their sessions. Assistance in loading presentations onto the computers will be provided in the A/V preview room.

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.

38. 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

177th Meeting, Louisville, Kentucky, 13–17 May 2019

178th Meeting, San Diego, CA, 30 November–4 December 2019

179th Meeting, Chicago, Illinois, 11–15 May 2020

180th Meeting, Cancun, Mexico, fall 2020