

# 181st Meeting of the Acoustical Society of America

The 181st meeting of the Acoustical Society of America will be held Monday through Friday, 29 November-3 December 2021 at the Hyatt Regency Seattle, Seattle, WA, USA.

## SECTION HEADINGS

1. COVID-19 VACCINATION REQUIREMENT FOR ATTENDANCE
2. HOTEL INFORMATION
3. TRANSPORTATION AND TRAVEL
4. REGISTRATION
5. ACCESSIBILITY
6. TECHNICAL SESSIONS
7. TECHNICAL SESSION DESIGNATIONS
8. HOT TOPICS SESSION
9. OTHER SPECIAL EVENTS
10. MEDWINPRIZEINACOUSTICALOCEANOGRAPHY AND ACOUSTICAL OCEANOGRAPHY PRIZE LECTURE
11. TUTORIAL ON SOFTWARE BEST PRACTICES
12. SHORT COURSE ON ULTRASOUND CONTRAST AGENTS
13. TECHNICAL COMMITTEE OPEN MEETINGS
14. EXHIBIT
15. PLENARY SESSION AND AWARDS CEREMONY
16. ANSI STANDARDS COMMITTEES
17. COFFEE BREAKS
18. A/V PREVIEW ROOM
19. PROCEEDINGS OF MEETINGS ON ACOUSTICS (POMA)
20. INTERNET ZONE
21. SOCIALS
22. SOCIETY LUNCHEON AND LECTURE
23. STUDENT EVENTS: NEW STUDENTS/FIRST-TIME ATTENDEE ORIENTATION, MEET AND GREET, STUDENT RECEPTION
24. WOMEN IN ACOUSTICS LUNCHEON
25. JAM SESSION
26. ACCOMPANYING PERSONS PROGRAM
27. WEATHER
28. TECHNICAL PROGRAM ORGANIZING COMMITTEE
29. MEETING ORGANIZING COMMITTEE
30. PHOTOGRAPHING AND RECORDING
31. ABSTRACT ERRATA
32. GUIDELINES FOR ORAL PRESENTATIONS,
33. SUGGESTIONS FOR EFFECTIVE POSTER PRESENTATIONS
34. GUIDELINES FOR USE OF COMPUTER PROJECTION
35. DATES OF FUTURE ASA MEETINGS

### 1. COVID-19 VACCINATION REQUIREMENT FOR ATTENDANCE

All meeting attendees are required to show proof that they are fully vaccinated.

To be fully vaccinated means that you have received the number of required vaccination shots for the type of vaccine that you have received.

### 2. HOTEL INFORMATION

The Hyatt Regency Seattle is the headquarters hotel where all meeting events will be held. The cut-off date for reserving rooms at special rates has passed. Please contact the Hyatt, 808 Howell St., Seattle, WA Hyatt Regency Seattle, 808 Howell Street, Seattle, WA 98101, <https://www.hyatt.com/seattle> for information about room availability.

### 3. TRANSPORTATION AND TRAVEL

Visit <https://www.portseattle.org/sea-tac/ground-transportation> for ground transportation options between the Seattle SeaTac airport and the Hyatt Regency Seattle

### 4. 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, 29 November, at 7:00 a.m. in the 3rd floor foyer (see floor plan on page A9).

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 \$725 for members of the Acoustical Society of America; \$875 for non-members, \$225 for Emeritus members (Emeritus status pre-approved by ASA), \$415 for ASA Early Career members (for ASA members within three years of their most recent degrees – proof of date of degree required), \$175 for ASA Student members, \$250 for students who are not members of ASA, \$25 for Undergraduate Students, and \$225 for accompanying persons.

One-day registration is available at \$415 for members and \$490 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 \$875 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 2022 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 \$390 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.**

### 5. ACCESSIBILITY

If you have special accessibility requirements, please indicate this 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.

## 6. TECHNICAL SESSIONS

The technical program includes 124 sessions with over 1100 abstracts scheduled for presentation during the meeting.

A floor plan of the Hyatt Regency Seattle appears on page A9. 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

### Abstract code examples: 1aAA1, 2pBAb4, 1eID1

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

- 1-Monday, 29 November
- 2-Tuesday, 30 November
- 3-Wednesday, 1 December
- 4-Thursday, 2 December
- 5-Friday, 3 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
- CA Computational 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. HOT TOPICS SESSION

The Hot Topics session (3pID) will be held on Wednesday, 1 December, at 2:00 p.m. in the Quinault Room on the 4th floor. Papers will be presented on COVID-19 topics.

## 9. OTHER SPECIAL EVENTS

The Women in Acoustics Committee is hosting a facilitated round-table discussion session from 2:30 p.m. to 3:30 p.m. on Wednesday, 1 December in the Willapa Room. Discussion topics will include navigating careers in academia, government, and industry; mentoring at all levels; work-life balance; and navigating power differentials. While the discussions in this session will focus on women’s experiences related to these topics, anyone interested in participating in these discussions is welcome to attend.

A workshop on writing a diversity statement will be sponsored by the Member Engagement Committee and the Committee to Improve Racial Diversity and Inclusivity Committee on Tuesday, 30 November, 10:00 a.m. to 12:00 noon in Columbia B. The workshop will provide strategies for developing a diversity statement. In addition to the workshop at the Seattle meeting, we will hold a virtual follow-up meeting where participants will learn about assessing diversity statements and will be encouraged to bring a draft of their statement for peer feedback. Contact Tessa Bent [tbent@iu.edu](mailto:tbent@iu.edu) or Dominique Bouavichith [dbouavichith@gmail.com](mailto:dbouavichith@gmail.com) with questions.

The Member Engagement Committee will sponsor a Business Development Panel on Tuesday, 30 November, 4:00 p.m. to 5:30 p.m. in Columbia B. This panel workshop will discuss business development strategies for acousticians who are seeking funding from organizations, such as government offices or consulting firms, whose processes differs from traditional grant writing. Topics covered will include the importance of networking, mentoring, diplomacy, and how to write a statement of work.

A Wikipedia Editing session will be held on Monday, 29 November, 1:00 p.m. to 3:00 p.m. in Columbia D where attendees will discuss and edit Wikipedia. Participants will learn the basics of Wikipedia and how to edit followed by hands-on editing with guidance and support from the experts.

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

The 2020 and 2021 Medwin Prize in Acoustical Oceanography will be presented at the Seattle meeting during the Plenary Session on Wednesday, 1 December.

Dr. Kelly Benoit-Bird will present the 2020 Acoustical Oceanography Prize Lecture titled “A Sound Resolution to the Food Paradox in the Sea” in session 3pAOa, 1:00 p.m. to

2:00 p.m. and Dr. Ana Širović will present the 2021 Acoustical Oceanography Prize Lecture titled “Understanding Marine Life Through Long-Term Passive Acoustic Time Series” in session 3pAOB, 2:15 p.m. to 3:15 p.m. Both lectures will be held in Elwha B on the 5th floor.

#### **11. TUTORIAL ON SOFTWARE BEST PRACTICES**

Wu-Jung Lee (Applied Physics Lab., University of Washington, Seattle), Fabio Soares Frazao (Dalhousie University, Halifax, NS, Canada), and Valentina Staneva (University of Washington, Seattle) will present a tutorial titled “Software Best Practices” on Monday, 29 November at 7:00 p.m. in Columbia D on the 3rd level.

Software tools play an increasingly important role in modern day acoustics research. Core software best practices and tools that can help make research processes and outcomes more reproducible and at the same time facilitate collaboration will be shared. Coding best practices with emphasis on tests and documentation, which contribute to code that is more reusable and robust to errors and the use of code and data repositories for collaborative research and show open cloud-based platforms suitable for sharing research outcomes will be covered. The tutorial will include presentation, demos and hands-on exercises, so please bring your laptop to the tutorial. The registration fee is USD \$25 (USD \$12 for students with current student IDs).

#### **12. SHORT COURSE ON ULTRASOUND CONTRAST AGENTS**

A short course on Ultrasound Contrast Agents will be given in two parts: Sunday, 28 November, from 1:00 p.m. to 5:00 p.m. and Monday, 29 November, from 8:30 a.m. to 12:30 p.m. in Room 301.

The instructor is Tyrone Porter, Professor of Biomedical Engineering at The University of Texas at Austin.

#### **13. TECHNICAL COMMITTEE OPEN MEETINGS**

Technical Committees will hold open meetings on Tuesday, Wednesday, and Thursday. The schedule and rooms for each Committee meeting are given on page A8.

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. EXHIBIT**

An instrument and equipment exhibition will be located near the registration area and meeting rooms and will open on Monday, 29 November, with an evening reception serving lite snacks and a complimentary drink. Exhibit hours are Monday, 29 November, 5:30 p.m. to 7:00 p.m., Tuesday, 30 November, 9:00 a.m. to 5:00 p.m., and Wednesday, 3 December, 9:00 a.m. to 12:00 noon.

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.

Contact the Exhibit Manager for information about participating in ASA Exhibits: Dan Cooke, Director of Advertising and Exhibit Sales, AIP Publishing, LLC, 1305 Walt Whitman Road, Suite 300, Melville, NY 11747-4300, Tel: 516-576-2629; E-mail: dcooke@aip.org.

#### **15. PLENARY SESSION AND AWARDS CEREMONY**

A plenary session will be held Wednesday, 1 December, at 3:30 p.m. in Columbia C/D.

ASA scholarship recipients and the David T. Blackstock Mentor Award recipients will be introduced. The Medwin Prize in Acoustical Oceanography, the Silver Medal in Animal Bioacoustics, Silver Medal in Biomedical Acoustics, Silver Medal in Psychological and Physiological Acoustics, Silver Medal in Signal Processing in Acoustics, Silver Medal in Speech Communication, and the Pioneers of Underwater Acoustics Medal will be presented, Certificates will be presented to Fellows elected at the Acoustics in Focus meeting. See page A220 for a list of fellows and award recipients.

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 Seattle 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 A8.

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: Nancy Blair-DeLeon, 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 from 9:45 a.m. to 11:00 a.m. near the Exhibit on the 3rd floor. On Tuesday there will be a coffee break near the Exhibit from 2:30 p.m. to 3:30 p.m.

#### **18. A/V PREVIEW ROOM**

Room 508 on the 5th floor will be set up as an A/V preview room for authors' convenience and will be available on Monday through Thursday from 7:00 a.m. to 5:00 p.m. and Friday from 7:00 a.m. to 12:00 noon.

#### **19. PROCEEDINGS OF MEETINGS ON ACOUSTICS (POMA)**

The Seattle 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. INTERNET ZONE

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

Tables with power cords will be set up in the 5th Floor Foyer for attendees to gather and to power-up their electronic devices.

## 21. SOCIALS

Socials will be held on Tuesday and Thursday evenings, 6:00 p.m. to 7:30 p.m. in Columbia C/D.

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 socials

## 22. SOCIETY LUNCHEON AND LECTURE

The Society Luncheon and Lecture, sponsored by the College of Fellows, will be held Thursday, 2 December, at 12:00 noon in Columbia B.

This luncheon is open to all attendees and their guests. Purchase your tickets at the Registration Desk before 10:00 a.m. on Wednesday, 1 December. The cost is USD \$30.00 per ticket.

## 23. STUDENT EVENTS: NEW STUDENTS/ FIRST-TIME ATTENDEE ORIENTATION, MEET AND GREET, STUDENT RECEPTION

Follow the student twitter throughout the meeting @ASASudents,

A New Students/First-Time Attendee Orientation will be held on Monday, 29 November, from 5:00 p.m. to 5:30 p.m. in Elwha A on the 5th Floor. This will be followed by the Student Meet and Greet from 5:30 p.m. to 6:45 p.m. in Columbia B on the 1st floor where refreshments and a cash bar will be available.

The Students' Reception will be held on Wednesday, 1 December, from 6:00 p.m. to 8:00 p.m. in Columbia B. 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.

## 24. WOMEN IN ACOUSTICS LUNCHEON

The Women in Acoustics luncheon will be held at 11:30 a.m. on Wednesday, 1 December, in Columbia B. 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.

## 25. JAM SESSION

You are invited to Columbia C/D on Wednesday night, 1 December, from 8:00 p.m. to midnight for the ASA Jam. 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.

## 26. ACCOMPANYING PERSONS PROGRAM

Spouses and other visitors are welcome at the Seattle meeting. The on-site registration fee for accompanying persons is USD \$225. A hospitality room for accompanying persons will be open in Room 409, 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.

## 27. WEATHER

In most years, Seattle averages a daily maximum temperature for November that's between 50- and 55-degrees Fahrenheit (10 to 13 degrees Celsius). The minimum temperature usually falls between 38 and 43 °F (3 to 6 °C). Seattle can receive 4 to 7 inches (114 to 176 mm) of precipitation in November

## 28. TECHNICAL PROGRAM ORGANIZING COMMITTEE

Aubrey Espana, Technical Program Chair; David Knobles, Acoustical Oceanography; Benjamin Taft, Animal Bioacoustics; Benjamin Bridgewater, David Manley, Architectural Acoustics; Kang Kim, Libertario Demi, Biomedical Acoustics; Jennifer Cooper, Amanda Hanford, Computational Acoustics; Daniel Russell, Education in Acoustics; Michael Haberman, Thomas Blanford, Engineering Acoustics; Chris Elmer, Taffeta Elliott, Musical Acoustics; William Murphy, James Phillips, Hales Swift; Noise; Kevin Lee, Samuel Wallen, Physical Acoustics; Ellen Peng, Virginia Best, Psychological and Physiological Acoustics; John Buck, Kai Gemba, Signal Processing in Acoustics; Christina Zhao, Rajka Smiljanic, Matthew Faytak, Matthew Winn, Speech Communication; Anthony Bonomo, Stephanie Konarski, Structural Acoustics and Vibration; Martin Siderius, Underwater Acoustics; Mallory Morgan, Student Council.

## 29. MEETING ORGANIZING COMMITTEE

Todd Hefner, Chair; Aubrey Espana, Technical Program Chair; Yashwanth Nanda Kumar, Mohamed Ghanem, Room Monitor Coordinators; Alex Douglass, Guangyu Xu, Signs.

## 30. PHOTOGRAPHING AND RECORDING

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

## 31. ABSTRACT ERRATA

This meeting program is Part 2 of the October 2021 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*.

### 32. 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.

### 33. 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.

## 34. 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 ensure 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 ensure 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.

## 35. 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

182nd Meeting, Denver, Colorado, 22-26 May 2022

183rd Meeting, Nashville, Tennessee, 5-9 December 2022

184th Meeting, Chicago Illinois, 8-12 May 2023

185th Meeting, joint with the Australian Acoustical Society, WESPAC, Sydney, Australia, December 2023