

TECHNICAL PROGRAM CALENDAR
176th Meeting of the Acoustical Society of America
and
2018 Acoustics Week Canada

MONDAY MORNING

- 8:00 1aAA **Architectural Acoustics:** Sustainable Acoustics in Social Space and WELL Buildings. Theater (VCC)
- 8:45 1aAB **Animal Bioacoustics:** Fish and Marine Invertebrate Bioacoustics I. Crystal Ballroom (FE)
- 8:00 1aAO **Acoustical Oceanography, Underwater Acoustics, Animal Bioacoustics, and Signal Processing in Acoustics:** Arctic Acoustical Oceanography I. Esquimalt (VCC)
- 8:45 1aBA **Biomedical Acoustics and Physical Acoustics:** State of the Art in Lung Ultrasound: Past, Present, and Future. Sidney (VCC)
- 7:50 1aNS **Noise, Physical Acoustics, Signal Processing in Acoustics, and ASA Committee on Standards:** Supersonic Jet Aeroacoustics I. Salon C (VCC)
- 8:15 1aPAa **Physical Acoustics and Signal Processing in Acoustics:** Acoustic Metamaterials and Super-Resolution Imaging. Rattenbury A/B (FE)
- 9:00 1aPAb **Physical Acoustics, Noise, and ASA Committee on Standards:** Outdoor Sound Propagation I. Salon B (VCC)
- 8:00 1aSAa **Structural Acoustics and Vibration, Physical Acoustics, Underwater Acoustics, and Architectural Acoustics:** Advanced Modeling Techniques for Computational Acoustics. Saanich 1/2 (VCC)
- 10:45 1aSAb **Structural Acoustics and Vibration, Engineering Acoustics, and Signal Processing in Acoustics:** Utilization of High-Speed Cameras to Measure Vibration. Saanich 1/2 (VCC)
- 8:00 1aSP **Signal Processing in Acoustics, Acoustical Oceanography, Architectural Acoustics, Musical Acoustics, Underwater Acoustics, and Noise:** Machine Learning for Acoustic Applications I. Shaughnessy (FE)
- 8:00 1aUW **Underwater Acoustics, Acoustical Oceanography, and Signal Processing in Acoustics:** Variability in Shallow Water Propagation and Reverberation I. Oak Bay 1/2 (VCC)

MONDAY AFTERNOON

- 1:00 1pAA **Architectural Acoustics and ASA Committee on Standards:** Auditorium Acoustics and Architectural Design: Challenges and Solutions I. Theater (VCC)
- 1:00 1pAB **Animal Bioacoustics:** Fish and Marine Invertebrate Bioacoustics II. Crystal Ballroom (FE)
- 1:00 1pAO **Acoustical Oceanography, Underwater Acoustics, Animal Bioacoustics, and Signal Processing in Acoustics:** Arctic Acoustical Oceanography II. Esquimalt (VCC)
- 1:00 1pBA **Biomedical Acoustics and Physical Acoustics:** Therapeutic Ultrasound Transducers. Sidney (VCC)
- 1:00 1pEAa **Engineering Acoustics:** Transducer Characterization. Rattenbury A/B (FE)
- 3:00 1pEAb **Engineering Acoustics:** General Topics in Engineering Acoustics. Rattenbury A/B (FE)
- 1:00 1pNS **Noise, Physical Acoustics, Signal Processing in Acoustics, and ASA Committee on Standards:** Supersonic Jet Aeroacoustics II. Salon B (VCC)
- 3:30 1pPA **Physical Acoustics, Noise, and ASA Committee on Standards:** Outdoor Sound Propagation II. Salon A (VCC)
- 2:00 1pPP **Psychological and Physiological Acoustics:** Understanding Limitations on Auditory Spatial Acuity. Colwood 1/2 (VCC)
- 1:00 1pSA **Structural Acoustics and Vibration, Engineering Acoustics, and Physical Acoustics:** Advances in Thermoacoustics. Saanich 1/2 (VCC)
- 1:00 1pSCa **Speech Communication and Psychological and Physiological Acoustics:** Coupling Phonetics and Psycholinguistics I. Salon A (VCC)
- 3:30 1pSCb **Speech Communication and Psychological and Physiological Acoustics:** Coupling Phonetics and Psycholinguistics II (Poster Session). Upper Pavilion (VCC)
- 1:00 1pSP **Signal Processing in Acoustics, Acoustical Oceanography, Architectural Acoustics, Musical Acoustics, Underwater Acoustics,**

- and Noise: Machine Learning for Acoustic Applications II. Shaughnessy (FE)
- 1:00 1pUWa **Underwater Acoustics:** Noise and the Environment. Salon C (VCC)
- 1:00 1pUWb **Underwater Acoustics, Acoustical Oceanography, and Signal Processing in Acoustics:** Variability in Shallow Water Propagation and Reverberation II. Oak Bay 1/2 (VCC)

MONDAY EVENING

- 7:00 1eID **Interdisciplinary:** Tutorial Lecture on An Introduction to Sound in the Sea. Salon A (VCC)

TUESDAY MORNING

- 8:00 2aAA **Architectural Acoustics:** Architectural Acoustics and Audio: Even Better Than the Real Thing. Theater (VCC)
- 9:00 2aAB **Animal Bioacoustics:** Topics in Animal Bioacoustics: Hearing. Shaughnessy (FE)
- 8:00 2aAO **Acoustical Oceanography, Animal Bioacoustics, Underwater Acoustics, and Signal Processing in Acoustics:** Machine Learning and Data Science Approaches in Ocean Acoustics I. Esquimalt (VCC)
- 8:00 2aBAa **Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics:** Wave Propagation in Complex Media: From Theory to Applications I. Colwood 1/2 (VCC)
- 9:15 2aBAb **Biomedical Acoustics and Physical Acoustics:** Targeted Drug Delivery—Acoustic Radiation Force. Sidney (VCC)
- 9:00 2aMU **Musical Acoustics and Signal Processing in Acoustics:** Modeling Musical Instruments and Effects. Crystal Ballroom (FE)
- 8:00 2aNS **Noise, Physical Acoustics, Structural Acoustics and Vibration, and Architectural Acoustics:** Emerging Technologies for Noise Control. Salon C (VCC)
- 8:15 2aPA **Physical Acoustics and Engineering Acoustics:** Novel Approaches to Acoustic and Elastic Wave Experimentation: Concepts, Hardware, and Novel Processing Methods. Saanich 1/2 (VCC)
- 9:00 2aPP **Psychological and Physiological Acoustics, Speech Communication, and Musical Acoustics:** Music, Speech, and the Brain. Salon B (VCC)

- 9:00 2aSA **Structural Acoustics and Vibration and Physical Acoustics:** Acoustic Metamaterials. Rattenbury A/B (FE)
- 8:15 2aSC **Speech Communication, Biomedical Acoustics, and Signal Processing in Acoustics:** Recent Advances in Experimental, Computational, and Clinical Research in Voice Production and Perception. Salon A (VCC)
- 8:45 2aUW **Underwater Acoustics:** Signals and Systems I. Oak Bay 1/2 (VCC)

TUESDAY AFTERNOON

- 1:00 2pAA **Architectural Acoustics and ASA Committee on Standards:** Auditorium Acoustics and Architectural Design: Challenges and Solutions II. Theater (VCC)
- 1:00 2pAB **Animal Bioacoustics and Signal Processing in Acoustics:** Anything You Can Do I Can Do Better: Bat Versus Dolphin Biosonar. Shaughnessy (FE)
- 1:00 2pAO **Acoustical Oceanography, Animal Bioacoustics, Underwater Acoustics, and Signal Processing in Acoustics:** Machine Learning and Data Science Approaches in Ocean Acoustics II. Esquimalt (VCC)
- 1:00 2pBAa **Biomedical Acoustics and Physical Acoustics:** Shock Waves and Ultrasound for Calculus Fragmentation. Sidney (VCC)
- 1:00 2pBAb **Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics:** Wave Propagation in Complex Media: From Theory to Applications II. Colwood 1/2 (VCC)
- 1:00 2pED **Education in Acoustics:** Measuring Educational Outcomes. Salon A (VCC)
- 1:00 2pID **Interdisciplinary and Women in Acoustics:** Panel Discussion: Mentoring Across Differences. Crystal Ballroom (FE)
- 1:00 2pNS **Noise, Structural Acoustics and Vibration, and Architectural Acoustics:** Noise and Vibration from Fitness Activities. Salon C (VCC)
- 1:00 2pPA **Physical Acoustics, Architectural Acoustics, Noise, Signal Processing in Acoustics, and Underwater Acoustics:** Challenges in Computational Acoustics. Rattenbury A/B (FE)
- 1:00 2pPP **Psychological and Physiological Acoustics and Speech Communication:** Speech Perception in Children with Hearing Impairment. Salon B (VCC)

1:00	2pSA	Structural Acoustics and Vibration: General Topics in Structural Acoustics and Vibration (Poster Session). Upper Pavilion (VCC)			Acoustics: Willis Coupling in Acoustic Metamaterials. Rattenbury A/B (FE)
2:00	2pSC	Speech Communication: Speech Perception (Poster Session). Upper Pavilion (VCC)	8:00	3aPP	Psychological and Physiological Acoustics: Acoustics Bricolage (Poster Session). Upper Pavilion (VCC)
1:00	2pUWa	Underwater Acoustics, Signal Processing in Acoustics, Structural Acoustics and Vibration, and Physical Acoustics: Unmanned Vehicles and Acoustics. Saanich 1/2 (VCC)	8:00	3aSC	Speech Communication, Musical Acoustics, and Psychological and Physiological Acoustics: The Sound of Emotion. Salon A (VCC)
1:30	2pUWb	Underwater Acoustics: Signals and Systems II. Oak Bay 1/2 (VCC)	8:30	3aUWa	Underwater Acoustics, Acoustical Oceanography, Animal Bioacoustics, and Physical Acoustics: Biological Effects on Seabed Geoacoustic Properties. Salon B (VCC)
2:30	2pUWc	Underwater Acoustics: Effects Due to Elasticity and Interfaces. Crystal Ballroom (FE)	9:00	3aUWb	Underwater Acoustics: Topics and Modelling in Underwater Acoustics. Saanich 1/2 (VCC)

WEDNESDAY MORNING

7:55	3aAA	Architectural Acoustics, Noise, ASA Committee on Standards, and Structural Acoustics and Vibration: Advances in the Laboratory Testing of Materials. Theater (VCC)
9:00	3aAB	Animal Bioacoustics, Acoustical Oceanography, and Signal Processing in Acoustics: Passive Acoustic Density Estimation: Recent Advances and Outcomes for Terrestrial and Marine Species I. Shaughnessy (FE)
8:00	3aAO	Acoustical Oceanography, Underwater Acoustics, Animal Bioacoustics, and Signal Processing in Acoustics: Arctic Acoustical Oceanography III. Esquimalt (VCC)
8:15	3aBAa	Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics: Wave Propagation in Complex Media: From Theory to Applications III. Colwood 1/2 (VCC)
9:00	3aBAb	Biomedical Acoustics and Physical Acoustics: Bubble Trouble in Therapeutic Ultrasound I. Sidney (VCC)
8:00	3aED	Education in Acoustics: Hands-On Demonstrations. Oak Bay 1/2 (VCC)
9:45	3aMU	Musical Acoustics, Physical Acoustics, and Structural Acoustics and Vibration: Percussion Instruments. Crystal Ballroom (FE)
8:00	3aNS	Noise, ASA Committee on Standards, and Signal Processing in Acoustics: Technological Challenges in Noise Monitoring. Salon C (VCC)
8:30	3aPA	Physical Acoustics, Structural Acoustics and Vibration, and Signal Processing in

WEDNESDAY AFTERNOON

1:00	3pAA	Architectural Acoustics: Absorption, Diffusion, and Insulation. Theater (VCC)
1:00	3pAB	Animal Bioacoustics, Acoustical Oceanography, and Signal Processing in Acoustics: Passive Acoustic Density Estimation: Recent Advances and Outcomes for Terrestrial and Marine Species II. Shaughnessy (FE)
1:00	3pBAa	Biomedical Acoustics and Physical Acoustics: Bubble Trouble in Therapeutic Ultrasound II. Sidney (VCC)
1:00	3pBAb	Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics: Wave Propagation in Complex Media: From Theory to Applications IV. Colwood 1/2 (VCC)
1:00	3pEA	Engineering Acoustics and Noise: Acoustic Particle Velocity Sensors, Algorithms, and Applications in Air. Esquimalt (VCC)
1:00	3pEDa	Education in Acoustics: Undergraduate Research Exposition (Poster Session). Prefunction 1B
2:30	3pEDb	Education in Acoustics: General Topics In Acoustics Education. Colwood 1/2 (VCC)
1:00	3pID	Interdisciplinary: Hot Topics in Acoustics. Crystal Ballroom (FE)
1:00	3pNS	Noise: Wind Turbine Noise. Salon C (VCC)
1:00	3pPP	Psychological and Physiological Acoustics: Pitch and Sound Localization. Salon B (VCC)
1:00	3pSA	Structural Acoustics and Vibration, Noise, and Signal Processing in Acoustics: History of Computational Methods in

Structural Acoustics and Vibration. Saanich 1/2 (VCC)

1:00 3pSC **Speech Communication:** Second Language Speakers and Listeners (Poster Session). Upper Pavilion (VCC)

1:00 3pSPa **Signal Processing in Acoustics:** General Topics in Signal Processing I (Poster Session). Upper Pavilion (VCC)

1:00 3pSPb **Signal Processing in Acoustics:** Geometric Signal Processing in Acoustics. Rattenbury A/B (FE)

WEDNESDAY EVENING

6:00 3eED **Education in Acoustics and Women in Acoustics:** Listen Up and Get Involved. Oak Bay 1/2 (VCC)

THURSDAY MORNING

7:45 4aAA **Architectural Acoustics, Engineering Acoustics, Signal Processing in Acoustics, and Noise:** Microphone Array Applications in Room Acoustics. Theater (VCC)

8:00 4aAB **Animal Bioacoustics:** Soundscapes, Noise, and Methods in Animal Bioacoustics. Shaughnessy (FE)

9:15 4aBA **Biomedical Acoustics:** Biomedical Acoustics I. Sidney (VCC)

8:55 4aMU **Musical Acoustics:** General Topics in Musical Acoustics. Crystal Ballroom (FE)

8:00 4aNS **Noise, Speech Communication, and Psychological and Physiological Acoustics:** Effects of Noise on Human Performance I. Salon C (VCC)

8:30 4aPA **Physical Acoustics and Biomedical Acoustics:** Interactions of Sound Beams with Objects I. Colwood 1/2 (VCC)

9:15 4aPP **Psychological and Physiological Acoustics:** Acoustics Outreach: Linking Physiology and Behavior for Future Collaborations I. Salon B (VCC)

9:00 4aSC **Speech Communication:** Speech Production (Poster Session). Upper Pavilion (VCC)

8:00 4aSP **Signal Processing in Acoustics, Underwater Acoustics, Engineering Acoustics, and Physical Acoustics:** Detection and Tracking of Mobile Targets I. Rattenbury A/B (FE)

8:30 4aUWa **Underwater Acoustics, Acoustical Oceanography, Signal Processing in Acoustics, and Physical Acoustics:** Sediment Acoustics—Inferences from

Forward Modeling, Direct, and Statistical Inversion Methods I. Oak Bay 1/2 (VCC)

9:00 4aUWb **Underwater Acoustics, Signal Processing in Acoustics, and Structural Acoustics and Vibration:** Acoustic Vector Field Studies I. Saanich 1/2 (VCC)

THURSDAY AFTERNOON

1:15 4pAA **Architectural Acoustics and Noise:** Validation of Modeling and Analysis: Predictions and Outcomes. Theater (VCC)

1:30 4pAB **Animal Bioacoustics and Signal Processing in Acoustics:** Combining Passive and Active Acoustics for Ecological Investigations. Shaughnessy (FE)

1:00 4pAO **Acoustical Oceanography:** Topics in Acoustic Oceanography. Esquimalt (VCC)

1:30 4pBA **Biomedical Acoustics:** Biomedical Acoustics II. Sidney (VCC)

1:30 4pMU **Musical Acoustics, Structural Acoustics and Vibration, and Signal Processing in Acoustics:** Computational and Experimental Investigations of Flow in Musical Instruments. Crystal Ballroom (FE)

1:00 4pNSa **Noise, Speech Communication, and Psychological and Physiological Acoustics:** Effects of Noise on Human Performance II. Salon C (VCC)

2:45 4pNSb **Noise, and Psychological and Physiological Acoustics:** Soundscapes. Salon C (VCC)

1:00 4pPA **Physical Acoustics and Biomedical Acoustics:** Interactions of Sound Beams with Objects II. Colwood 1/2 (VCC)

1:00 4pPP **Psychological and Physiological Acoustics:** Acoustics Outreach: Linking Physiology and Behavior for Future Collaborations II. Salon B (VCC)

1:15 4pSCa **Speech Communication:** Phonetics of Under-Documented Languages I. Salon A (VCC)

3:00 4pSCb **Speech Communication:** Phonetics of Under-Documented Languages II (Poster Session). Upper Pavilion (VCC)

1:00 4pSP **Signal Processing in Acoustics, Underwater Acoustics, Engineering Acoustics, and Physical Acoustics:** Detection and Tracking of Mobile Targets II. Rattenbury A/B (FE)

1:00 4pUWa **Underwater Acoustics, Signal Processing in Acoustics, and Structural Acoustics and Vibration:** Acoustic Vector Field Studies II. Saanich 1/2 (VCC)

1:00 4pUWb **Underwater Acoustics, Acoustical Oceanography, Signal Processing in Acoustics, and Physical Acoustics:** Sediment Acoustics—Inferences from Forward Modeling, Direct, and Statistical Inversion Methods II. Oak Bay 1/2 (VCC)

8:00 5aUW **Underwater Acoustics, Acoustical Oceanography, Signal Processing in Acoustics, and Physical Acoustics:** Sediment Acoustics—Inferences from Forward Modeling, Direct, and Statistical Inversion Methods III. Oak Bay 1/2 (VCC)

FRIDAY MORNING

8:30 5aAA **Architectural Acoustics and Noise:** Session in Memory of Murray Hodgson I. Theater (VCC)

8:45 5aAB **Animal Bioacoustics:** Marine Mammal Bioacoustics I. Shaughnessy (FE)

7:45 5aAOa **Acoustical Oceanography, Underwater Acoustics, and Animal Bioacoustics:** Ocean Observatories: Laboratories for Acoustical Oceanography I. Saanich 1/2 (VCC)

8:00 5aAOB **Acoustical Oceanography and Underwater Acoustics:** Experimental Assessment of Theories of Sound Propagation in Sediments I. Esquimalt (VCC)

9:00 5aPA **Physical Acoustics:** General Topics in Physical Acoustics I. Colwood 1/2 (VCC)

8:30 5aSC **Speech Communication:** Development and Clinical Populations (Poster Session). Upper Pavilion (VCC)

9:00 5aSP **Signal Processing in Acoustics:** General Topics in Signal Processing II. Rattenbury A/B (FE)

FRIDAY AFTERNOON

1:15 5pAA **Architectural Acoustics and Noise:** Session in Memory of Murray Hodgson II. Theater (VCC)

1:00 5pAB **Animal Bioacoustics:** Marine Mammal Bioacoustics II. Shaughnessy (FE)

1:00 5pAOa **Acoustical Oceanography and Underwater Acoustics:** Experimental Assessment of Theories of Sound Propagation in Sediments II. Esquimalt (VCC)

1:00 5pAOB **Acoustical Oceanography, Underwater Acoustics, and Animal Bioacoustics:** Ocean Observatories: Laboratories for Acoustical Oceanography II. Saanich 1/2 (VCC)

1:00 5pPA **Physical Acoustics:** General Topics in Physical Acoustics II. Colwood 1/2 (VCC)

1:00 5pSP **Signal Processing in Acoustics:** General Topics in Signal Processing III. Rattenbury A/B (FE)