

This report covers the activities of the Technical Committee on Underwater Acoustics (TCUW) and its members during the period from July 2018 through June 2019.

The 176th meeting of the Acoustical Society of America/2018 Acoustics Week in Canada was held Monday through Friday, 5-9 November 2018 at the Victoria Conference Centre and the Fairmont Empress Hotel, Victoria, British Columbia, Canada. Stan Dosso served as ASA Meeting Chair and Jon Collis served as TPOM Rep. for the Victoria meeting. TCUW sponsored or co-sponsored the following special sessions: (1) Unmanned Vehicles and Acoustics (chaired by Erin Fischell), (2) Acoustic Vector Field Studies (chaired by Bob Barton & Kevin Smith), (3) Sediment Acoustics – Inferences from forward modeling, direct, and statistical inversion methods (chaired by Charles Holland & Stan Dosso), (4) Biological Effects on Seabed Geoacoustic Properties (chaired by Kevin M. Lee, Megan S. Ballard & Kelly M. Dorgan), and (5) Variability in Shallow Water Propagation and Reverberation (chaired by Todd Hefner & David Dall'Osto). The student paper award winners were Gabriel R. Venagas (First place for “Geoacoustic properties of seagrass-bearing sediments”) and Alexander Scott Douglass (Second place for “Out-of-band beamforming in shallow water with horizontal arrays”).

The 177th meeting of the Acoustical Society of America was held Monday through Friday, 13–17 May 2019 at The Galt House, Louisville, Kentucky, USA. DJ Tang served as TPOM Rep. New fellows were recognized and congratulated: Megan Ballard (For contributions to shallow water propagation and geoacoustic inversion) and Woojae Seong (For contribution to geoacoustic inversion and ocean signal processing). The student paper award winners were Brandon M Lee (First place for “Machine learning methods for estimating probability density functions of transmission loss: robustness to source frequency and depth”) and Matthew Charles Zeh (Second place for “Model-data comparison of sound propagation in a glacierized fjord with a variable ice top-boundary layer”). TCUW sponsored and co-sponsored the following special sessions (lead TC): (1) Understanding animal song (AB, AO, SP, SC); (2) Finite Difference Time Domain method across acoustics (PA, BA, SA, SP, UW); (3) Acoustofluidics (PA, BA, SA, SP, UW); (4) Reconfigurable arrays for adaptive wave guiding (SP, EA, PA, SA, UW); (5) Bayesian inference in acoustic signal processing (SP, AO, NS, UW); (6) Borehole Logging Acoustics (SP, AO, PA, AS, UW); and (7) Random Matrix Theory in Acoustic Signal Processing (SP, NS, UW).

The chair sincerely thanks the many volunteers who make the activities of TCUW possible.