

Combined Acoustical Oceanography and Underwater Acoustics Technical Committees Minutes of the Meeting, Montreal, Canada

These are the minutes from the combined Acoustical Oceanography (AO) and Underwater Acoustics (UW) Technical Committees (TC's) meeting at the 165th Acoustical Society of America (ASA) meeting in Montreal, Canada. The combined TC meeting was held Thursday June 6, 2013 from 7:30 PM until 9:00 PM and was chaired by Martin Siderius the Acoustical Oceanography Technical Committee Chair in consultation with DJ Tang the Chair for the Underwater Acoustics Technical Committee. There were approximately 100 attendees.

- The TC congratulated Philippe Roux, the winner of the 2013 Medwin Prize in Acoustical Oceanography. The Medwin Prize in Acoustical Oceanography was established in the year 2000 by Herman and Eileen Medwin. The Medwin Prize was set up to recognize a person for the effective use of sound in the discovery and understanding of physical and biological parameters and processes in the sea. It announced that Philippe gave the Medwin Prize lecture, "Acoustical tomography in the shallow water ocean: Dream or reality?" on Wednesday June 5, 2013.
- The TC congratulated Tim Leighton for winning the Helmholtz-Rayleigh Interdisciplinary Silver Medal. The award was given to Tim for contributions to biomedical acoustics, physical acoustics and acoustical oceanography.
- AO had some new appointments to announce:
 - Tony Lyons was thanked for many years of service as representative on ASACOS
 - The TC welcomed Gopu Potty as new ASACOS representative
 - The TC thanked Ross Chapman for many years of service on Medals and Awards
 - The TC welcomed Tim Duda as the new representative
 - The TC thanked Ken Foote for his many years of service on the Membership committee
 - The TC welcomed Tim Stanton as new representative.
- The Chair announced that a vote was held for the new Chair of Acoustical Oceanography and Andone Lavery was chosen. She will begin her 3 year term starting after the Montreal meeting.
- The new members of AO for 2013 were briefly presented
- The Chair asked the TCs to thank Rex Andrew for his service on the Montreal TPOM for AO and Jim Lynch for his service on the TPOM for UW
- The Chair asked the TCs to thank the anonymous student paper judges
- The Chair gave a summary of the Discovery of Sound in the Sea Symposium that occurred at the Montreal meeting on Tuesday, June 5. The Chair indicated it was a big success and well attended with excellent lectures presented. Kathy Vigness-Raposa then gave a brief summary of the DOSITS event and thanked both the ASA and the AO/UW TC's for combining the TC committee meetings so that the DOSITS event could take place. Kathy also thanked the ASA and AO/UW TC's for the financial support that was critical for the event.
- Technical Initiatives were reviewed. There was one Technical Initiative previously proposed by Peter Gerstoft for AO. This was to support a guest speaker for the ambient noise special session (AO) in San Francisco. The TC agreed with this initiative. At the TC meeting, John Colosi suggested a Technical Initiative to support travel funds for family members to the Bill Carey

special session in Providence. The TC agreed and AO and UW put forward a \$500 Technical Initiative (each TC) to the Technical Council.

- Medals and Awards were represented by John Perkins for UW and Eric Thorsos (Chair of committee). They announced that the AB Wood Medal had been decided and that UW is eligible for a Silver Medal this year.
- Reminders were next given for the upcoming San Francisco meeting. Jim Lynch was identified as the AO and UW TPOM representative for San Francisco (July 26,27). Notice of the abstract deadline was given. The chair reminded the TC of the two AO special sessions in San Francisco Acoustics for Cabled Observatories and Properties, Trends, and Utilization of Ocean Noise. The Chair reminded the TC that there are four special sessions for UW in San Francisco, Acoustics of Bubbles and Bubble Clouds in the Oceans, Deep Water Acoustics, Sediment Acoustics: Modeling, Measurements, and Inversions, Sound Propagation Through and Scattering by Internal Waves, Spice, and Finestructure in Shallow Water: Past, Present, and Future.
- Future meetings related to AO/UW were announced. These are Underwater Acoustics Measurements 2013, which will be held on the Greek island of Corfu from 23-28 June, 2013. The Pacific Rim Underwater Acoustics Conference, held in Hangzhou, China from 9-11 October 2013. The Waveguide Invariant Workshop, which will take place in Moscow, Russia from 17-21 June, 2013. The IEEE Oceans meeting in September 2013 in San Diego, CA.
- The TCs were asked to approve having ASA cosponsor the WUWNet'13 meeting in Kaohsiung, Taiwan. There was overwhelming agreement to cosponsor and no objections.
- Future ASA meetings were announced for San Francisco, Providence and Indianapolis.
- The next topic was special sessions. The Providence special sessions were supposed to be finalized in at the Montreal meeting and Indianapolis preliminary ideas proposed.
 - A special session will take place to honor Bill Carey. This will be led by Signal Processing and co-sponsored by UW and AO. (A discussion that later occurred at Technical Council led to the possibility that two separate special sessions for Bill Carey will take place in Providence but with SP taking the lead on one and UW taking the lead on the other.)
 - For Providence, one special session was proposed for AO and then agreed upon. "Using acoustics to study fish distributions and behavior" to be organized by Kelley Benoit-Bird and Tim Stanton. The description is: While acoustical methods have been used to study fish for decades, recent technological developments have refocused efforts to adapt tools to study fish in new ways and to improve our understanding of how fish affect acoustic propagation, scattering, and noise. This session will focus on all aspects of these efforts including new tool developments, modeling, field experiments, and behavioral observations, and utilizing passive or active acoustics. We particularly encourage contributions from work examining how the distribution of fish (e.g. schooling, shoaling, or individual fish) affects acoustic signals and how sound may be used to examine these processes.
 - For Providence, one special session was proposed for UW and then agreed upon. "Acoustic vector sensor measurements; basic properties of the intensity vector field and

applications” to be organized by David Dall'Osto. The description had not been developed as of the time of the TC meeting.

- There were no initial ideas for special sessions for AO in Indianapolis.
- For UW, Eric Thorsos suggested a special session related to work on the TREX experiment. From the discussion, it was agreed that UW could propose two special sessions- one on shallow water reverberation and one on shallow water target echoes.
- The Chair then announced that the ASA tutorial committee (Karim Sabra representing UW) had informed him that there had not been a mini-tutorial from UW or AO for about 10 years. The TC was asked to consider topics and speakers and forward those to their TC Chairs to pass along to the committee.
- Student announcements were then given by the UW student representative. The student paper awards were then recognized for the Kansas City meeting. The UW and AO paper contests were combined and a winner selected from each area. One winner was Sean Walstead for the paper, “Reconstructing surface wave profiles from reflected acoustic pulses”, the other was Wu-Jung Lee for the paper, “Estimating numerical density of scatterers in monotype aggregations using the statistics of broadband echoes: Applications to fish echoes.”
- The Chair then gave a summary of the briefing that AO gave to the Executive Council on Monday June 4 on the state of the Acoustical Oceanography Technical Committee.
 - The Chair reviewed the type of work AO has been doing on challenging scientific problems
 - The Chair reviewed the many activities of AO representatives in the ASA
 - The Chair gave some statistics on the membership demographics of AO which indicates that the TC is largely over the age of 55 and has small number of early career and student members
 - The Chair summarized some of the comments received from TC members. These included funding challenges since there appears to be only the Office of Naval Research as a substantial sponsor for AO research funding.
 - Some members indicated that in Europe the funding for AO was worse than in the US
 - There were comments about the difficulty of maintaining students without sufficient funding sources.
 - There were comments about the possibility of having AO focus on one ASA meeting per year rather than two.
 - There were also comments about trying to include users of acoustics in the society rather than just those that consider themselves acousticians.
 - AO is considered multidisciplinary so may have too many homes pulling researchers away from the ASA.
 - AO is narrowly focused making it difficult to have a critical mass of researchers.
 - The Chair next reviewed some of the comments from the Executive Council
 - The problems with AO are similar to those about science in general across the US (e.g., funding and aging demographics).
 - The executive council was curious if other conferences were drawing in AO people.

- There was a suggestion that AO/UW could use an ASA school or a summer school to build excitement and educate students
 - There was a comment that AO may be too dependent on ONR and that the researchers should try to break through in other agencies such as NSF.
- The TC then had a variety of comments and discussion on these topics. It seemed to generally agree that there are some problems with demographics, funding and maybe the structure of ASA meetings.
- As an action item, the TCs agreed to form an ASA sub-committee to develop more data on potential problems and to develop a strategy. There was a sign-up sheet circulated and it was agreed that this would be developed in the coming months with a sub-committee meeting tentatively planned for the San Francisco ASA meeting.
- The meeting was officially adjourned but the chair.