

### **Acoustical Oceanography Annual Report 2013**

The Acoustic Oceanography Technical Committee (AO TC) continued to be very active in 2012-2013. This annual report reviews events from the 164<sup>th</sup> and 165<sup>th</sup> meetings of Acoustical Society of America (ASA) in Kansas City, USA and Montreal, Canada.

At the Kansas City meeting, John Colosi was awarded the 2012 Medwin Prize in Acoustical Oceanography and gave the prize lecture, "The problem of sound propagation through the fluctuation ocean and the interplay between ocean acoustics and physical oceanography". This prize is given 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. John was given the award for work on ocean internal waves as they relate to sound fluctuations in the sea. The 2013 Medwin Prize in Acoustical Oceanography was awarded at the Montreal meeting to Philippe Roux. Philippe gave the Medwin Prize lecture, "Acoustical tomography in the shallow water ocean: Dream or reality?"

The 2013 Helmholtz-Rayleigh Interdisciplinary Silver Medal was awarded to Tim Leighton at the Montreal meeting. The award was given to Tim for contributions to physical acoustics, biomedical ultrasound, sonochemistry, and acoustical oceanography.

A highlight of the Kansas City meeting was the special session honoring Clarence Clay. Clarence Clay passed away in 2011 and was well known in the Acoustical Oceanography community for his many contributions to the field. He received the first ASA Silver Medal in Acoustical Oceanography in 1993. The session was very well attended with an opening talk given by Ivan Tolstoy, which was an excellent tribute. There were also family members at the session and reception that followed.

The Montreal meeting had a special event to celebrate the 10<sup>th</sup> anniversary of Discovery of Sound in the Sea (DOSITS <http://www.dosits.org/>). There was a symposium to commemorate the anniversary that included several excellent lectures describing research activities in Acoustical Oceanography, Animal Bioacoustics and Underwater Acoustics. Presentations were given by Gail Scowcroft from the University of Rhode Island, Dr. Arthur N. Popper from the University of Maryland, Dr. Darlene Ketten from Woods Hole Oceanographic Institute, Dr. Kathleen Vigness-Raposa from Marine Acoustics Inc., Dr. Peter Worcester from Scripps Institution of Oceanography and Dr. James Miller from the Centre for Maritime Research and Experimentation and the University of Rhode Island.

For the Kansas City meeting the student paper contest was combined with the Underwater Acoustics TC. The two best papers at that meeting were, "Reconstructing surface wave profiles from reflected acoustic pulses", by Sean Walstead and, "Estimating numerical density of scatterers in monotype aggregations using the statistics of broadband echoes: Applications to fish echoes." by Wu-Jung Lee. In Montreal there were quite a few student papers presented in Acoustical Oceanography. The first place paper was by Florian Aulanier, "Time-angle ocean acoustic tomography using sensitivity kernels: Numerical and experimental inversion results." The second place paper was by Kevin Jerram, "Observing natural methane seep variability in the northern Gulf of Mexico with an 18-kilohertz split-beam scientific echosounder."

The AO TC also wants to thank several members who have served or will serve on ASA committees: Tony Lyons served on ASACOS and is being replaced by Gopu Potty, Ross Chapman on Medals and Awards and is being replaced by Tim Duda, Ken Foote on the Membership committee and being replaced by Tim Stanton.

Finally, I would like to congratulate Andone Lavery who was elected in the winter of 2013 to be the next Chair of Acoustical Oceanography. Andone is currently an Associate Scientist with tenure in the Department of Applied Ocean Physics & Engineering at the Woods Hole Oceanographic Institution. Andone has been very active in Acoustical Oceanography and the AO TC is fortunate to have someone with her background and enthusiasm as Chair for the next three years. Her term begins after the Montreal meeting.

Martin Siderius, Chair Acoustical Oceanography

AO Website: <http://acosoc.org/TechComm/AOTC/>

List of committee members: <http://acosoc.org/TechComm/AOTC/members.html>