

Acoustical Oceanography Annual Report

Let me start this year's annual report by thanking Jim Miller, the previous Chair of The Acoustical Oceanography (AO) Technical Committee (TC) and Gopu Potty who served as "Vice Chair" for their hard work and dedication to AO. Jim became a member of the Executive Council this year and I was appointed interim AO Chair by the ASA President to complete Jim's term. Subsequently I was elected Chair and will serve a three year term starting in Spring 2010. As the newly elected Chair I will summarize the numerous events at the San Antonio and the Baltimore ASA meetings as well as other AO activities this year.

Among the biggest events was the Silver Medal won by Robert Spindel (Applied Physics Laboratory, University of Washington) in Acoustical Oceanography. This was presented at the Fall 2009 Meeting in San Antonio. The Silver Medal is presented to individuals, without age limitation, for contributions to the advancement of science, engineering, or human welfare through the application of acoustic principles, or through research accomplishment in acoustics. This is only the fourth Silver to be awarded in Acoustical Oceanography. The Silver was awarded for implementation of ocean acoustic tomography and basin scale acoustic thermometry. Jim Lynch wrote the citation and introduced Bob at the award ceremony.

Also at the fall meeting in San Antonio the Walter Munk Award was presented for the first time at an ASA meeting to James (Jim) Lynch (Woods Hole Oceanographic Institution). The Walter Munk Award is given in recognition of distinguished research in oceanography related to sound and the sea and is granted jointly by the Oceanography Society, the Office of Naval Research and the Office of the Oceanographer of the Navy. Jim Miller (University of Rhode Island) nominated Jim for the award and gave the introduction. The Navy was represented by Ellen Livingston and Linwood Vincent from the Office of Naval Research and Jennifer Ramarui represented the Oceanography Society. After the award was presented, Jim Lynch gave the Munk Award lecture "Acoustical oceanography and shallow water acoustics" to a standing room only crowd.

Other honors this year for Acoustical Oceanography include the new fellows to the Acoustical Society. Boris G. Katsnelson was elected at the Portland ASA meeting for contributions to shallow water acoustics. Timothy F. Duda was elected at the Baltimore meeting for contributions to acoustic-internal wave interactions. There were also several others elected fellows with their primary interest in other TC's but include Acoustical Oceanography as their secondary interest area. Those new fellows are: Cathy Ann Clark, David Knobles, David K. Mellinger, Paul Nachtigall and Peter Stein.

Acoustical Oceanography had an impressive turnout of student papers this year. There were best student paper awards given to first and second place at the San Antonio and Baltimore meetings. In San Antonio, the first place student paper award went to Joseph Senne for "Measurement and modeling of high frequency acoustic channels for a moving source in shallow water", second place to Lora Van Uffelen for "Characterization of deep acoustic shadow zone arrivals". For the Baltimore meeting the first place award went to Jorge Quijano for the paper, "Tank experiments for validation of volume scattering models". Second place was awarded to Jit Sarkar for "Inverting for surface displacement fields using directly measured point-to-point sensitivity kernels".

The San Antonio and Baltimore meetings had many excellent sessions in Acoustical Oceanography. Juan Arvelo served as the Technical Program Organizing Meeting (TPOM) representative for AO at the San Antonio meeting and Altan Turgut for the Baltimore meeting and both did excellent work organizing the papers. In San Antonio there were three special sessions and a Hot Topics presentation in Acoustical Oceanography. The first special session was organized and chaired by Thomas Weber and Ralph Stephen on "Acoustic measurements of water column scatterers using multibeam sonar". The second, "Acoustics

and ocean acidity" was organized and chaired by, Tim Duda and Peter Worcester. And, the third was the "Session in honor of Stan Flatté", organized and chaired by John Colosi and Jeff Simmen. The Hot Topics presentation was "Remote sensing with ambient noise" presented by Peter Gerstoft. For the Baltimore meeting there were two special sessions, "Acoustics in Polar Environments", which was organized and chaired by Jennifer Miksis-Olds and Ann Bowles and "Impact of Shallow Water Acoustic Propagation by Linear Internal Waves and Neutrally Buoyant Intrusions", organized and chaired by DJ Tang and David Bradley.

It is also worth mentioning here that at the Baltimore meeting David Bradley made a presentation at the AO TC meeting about the state of research funding in ocean acoustics. He described that in 1998 the ocean acoustics community was successful in restoring stability to ocean acoustics funding at ONR. This was accomplished through a report on the state of funding along with a letters to ONR from the ASA and from the concerned scientists working in ocean acoustics. The funding decline in recent years prompted discussion of a new letter which was drafted by David Bradley and was approved by the ASA Executive Council and was signed by the ASA president and sent to the Chief of Naval Research at the Office of Naval Research. A second letter was drafted by David Bradley which was circulated at the TC meeting and signed by concerned scientists in attendance. At the time of writing this annual report additional signatures were still being collected and the second letter was scheduled to be sent to the Chief of Naval Research in July 2010. More information on the content of the ASA letter to the Office of Naval Research is available in the Underwater Acoustics annual report.

There were some new AO appointments this year. Peter Worcester completed his term on Medals and Awards. Ross Chapman agreed to take over as the new AO representative for Medals and Awards. Tony Lyons has been serving on the ASA Committee on Standards and will continue in that position. Ken Foote will serve another term on the Membership Committee. The Acoustical Oceanography TC would like to thank these individuals for their time and effort in these positions.

Unfortunately, 2010 also brought the passing of one of pioneers of Acoustical Oceanography, Van Holiday. Van was the third recipient of the ASA Silver medal in 2004 for contributions to the study of marine life, from plankton to whales. Among Van's other honors were: the Prix d'Excellence by the International Council for the Exploration of the Sea (ICES) (2008), the Meritorious Public Service Award by the Department of the Navy, Chief of Naval Research (2002), a seat on the editorial board of *Limnology and Oceanography: Methods* (2002), he was honored with the Steinbach Visiting Scholar at Woods Hole Oceanographic Institution (Summer, 1987) and he was a longtime member of the US Delegation to the International Council for the Exploration of the Sea (ICES) (1987). NOAA named a Research Vessel after him, the "R/V D. V. Holliday" and Mount Holliday, a sea mount located in the Bering Sea was named after him. Van will be missed by the Acoustical Oceanography community. A special session honoring Van Holiday is being developed and is scheduled for the San Diego ASA meeting in the fall of 2011.

Martin Siderius, Chair 2009-2010

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

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