From the Editor

D. Keith Wilson

Thoughts on Meetings

Like many members of the Acoustical Society of America (ASA), no doubt, I have been giving much thought lately to the important role of meetings in advancing acoustical science and in supporting successful careers. However, it seems that a variety of factors, from online communication platforms to increasing costs, are undermining our traditional in-person meetings and casting uncertainty on how meetings will be conducted in the future.

Several articles in this issue relate to the topic of meetings. ASA President Michael Vorländer's column recalls the New Orleans meeting in spring 2025, which was held jointly with the International Congress in Acoustics. This meeting allowed us to learn about outstanding acoustical research from around the world, while celebrating our ability to join together in a positive, welcoming atmosphere.

In addition to the President's column, Anna C. Diedesch, Steven M. Lulich, and Andy A. Piacsek contribute a Sound Perspectives essay, "Virtually There: The Scientific Meeting after COVID-19," which examines the recent ASA meeting history and organization, attitudes of the membership towards virtual and hybrid meeting formats, and possible future directions as the ASA navigates evolving technology and supporting the needs of its members. In another Sound Perspectives essay, William A. Yost reflects on the changes he has observed in ASA publications and meetings, and how these might evolve to support the continued excellence of the Society and to communicate to the general public the importance of acoustical science.

My first ASA meeting was in Syracuse in 1989, while I was a PhD student at Penn State. This meeting and others I attended as a student were formative experiences. Of course, learning about recent research, particularly on topics relevant to my thesis, was important. But, in retrospect, even more important to a young scientist was learning about how science is conducted. Progress depends on opportunities for researchers to present, debate, and refine ideas through interactions with colleagues. Meetings are one of the primary events where we become socialized in the way science is conducted as a community, involving cooperation as well as competition among peers. Attending and presenting at ASA meetings quickly became an aspect of research that I enjoyed most.

What do you most like about in-person meetings? Certainly, near the top of most lists would be the opportunity to hear about excellent research, receive feedback on one's own research, connect with familiar colleagues and meet new ones, and travel to new places. One of my favorite things, which I mention somewhat sheepishly, is the opportunity to let my mind wander. It may start when the speaker presents a surprising new result or with a comment relevant to some sticky problem with which I have been grappling. Such reflection can lead to "ah-ha" moments and productive new ideas. In-person meetings help to deflect our modern culture's tendency to seek short-term information fixes over deeper understanding. Similarly helpful can be reading books, journal articles and, well, *Acoustics Today*. Speaking of which, we have many fine articles in this issue that I hope you will find well worth a read…

This Issue

Our first regular article, by Sylvain Cheinet, Abdelkader Hassaini, and Alexandre Cheinet, explores the timely topic of acoustic sensing and data collection with smartphones. Thanks to mass manufacturing, smartphones are equipped with surprisingly proficient yet inexpensive microphones. The ubiquity, ease-of-use, on-board processing power, and networking capability of these devices offer important advantages in many research and noise control applications.

The next article, written by Brian G. Ferguson and Eric L. Ferguson, is an introduction to the cepstrum and its applications, including an informative example from ocean acoustics. Cepstral processing, which builds on conventional spectral processing, can be used to identify important qualities of signals, such as fundamental pitch,

overtones, and texture. Although the cepstrum has found important applications in such areas as speech recognition, there is much potential for broader use.

Our third article and the one featured on the cover, by Oliver Metcalf, describes the challenges and important benefits of performing acoustical measurements in a rainforest. By going beyond traditional processing of signals to extract features and identify species, acoustical techniques hold promise for monitoring rainforest degradation and other changes in this critical habitat. And there are interesting signals both above and below the ground!

Our fourth article, by Walter A. Montano and Gary W. Elko, illuminates the utilization of acoustics in World War II (WWII). During this period, many prominent members of the ASA rapidly developed new technologies that found their way onto the battlefield. These advances ultimately shaped acoustical data measurement and processing during the post-war period. This article shows how the impact of WWII on acoustics extended beyond previously familiar research in underwater sound.

For our fifth article, we are very fortunate to have a contribution from *AT*'s long-time editor, Arthur N. Popper, and coauthor Joseph A. Sisneros, on the localization of sound by fishes. Sound localization is important to many animal species for detecting threats, finding prey and mates, and communicating. Although localization by terrestrial animals is well understood (generally being based on amplitude and phase differences between two ears), aquatic animals appear to employ a variety of mechanisms that remain imperfectly known. The authors provide a history of research in this area and evidence for the hypothesis that some fish sense gradients in the sound field as they swim.

The sixth article, by Kai Siedenburg, explores the fascinating, emerging topics of musical psychoacoustics and auditory analysis of complex acoustic "scenes." The article explores how recent research advances the intriguing hypothesis that music, in essence, achieves its profound emotional impacts by manipulating characteristics of our auditory perception to create acoustic illusions.

In addition to the two Sound Perspectives essays mentioned earlier (by Diedesch et al. and Yost), former ASA President Marcia J. Isakson provides observations from her participation on the National Academies' Ocean Studies Board. The Board formulated priorities and recommendations for basic research, towards the ultimate goal of forecasting ocean processes relevant to human well-being.

With this issue, the staff of *Acoustics Today* proudly welcomes Kathleen J. Vigness-Raposa as the new associate editor. Kathy has a background in animal bioacoustics and underwater acoustics, thus complementing my specialties in outdoor sound propagation and computational acoustics. Some ASA members may know Kathy by her nickname, "Kathy DOSITS," for her work as the co-principal investigator of the ASA-award-winning website, "Discovery of Sound in the Sea" (DOSITS; dosits.org). The DOSITS team has published several *AT* articles, which can be found in this collection (bit.ly/ATC-DOSITS). Kathy is excited to join *AT* and pursue her passion of science communication.

If you have ideas for new articles or essays, or would like to share thoughts about how *AT* might be improved, please reach out to me (keithwilson.asa@gmail.com) or Kathy (Kathy.VignessRaposa@venterra-group.com).