ASMS 2026: Environmental Applications Workshop Report

“Environmental Applications: You Are What You Eat and Breathe”
ASMS Workshop Organized by the Environmental Applications Interest Group
Co-chairs: Erin Baker and Carrie McDonough
Wednesday, June 3, 2026, 5:45 PM
Estimate of Attendance: ~100 people

Summary: Chemicals and environmental changes continue to have profound impacts on human health, ecosystems, and communities worldwide. The 2026 ASMS Environmental Applications Workshop was organized to encourage discussion around emerging environmental challenges, the role of analytical science in addressing these issues, and how scientists can most effectively contribute to environmental solutions. While maintaining the same overall theme as previous years, this year's workshop adopted a new highly interactive format designed to engage attendees directly in conversations about the current state and future direction of environmental science. The workshop began with a brief introduction discussing the importance of understanding environmental exposures and their consequences for both human and ecosystem health. Attendees then divided themselves into small discussion groups of approximately six participants and were asked to respond to a series of Mentimeter questions focused on environmental challenges, scientific priorities, community impacts, and strategies for increasing the influence of environmental research. This "reverse panel" format shifted the focus from experts speaking to the audience to the audience sharing perspectives with one another, providing insights into how environmental scientists currently view major challenges facing the field.

Discussion topics included environmental problems expected to have the greatest impact on local communities over the coming decade, environmental changes participants had personally observed during their lifetimes, environmental issues perceived to be underestimated by the public or policymakers, and research priorities that participants would pursue if given substantial resources. Additional conversations focused on which communities are likely to be most affected by environmental change, where scientists can have the greatest impact through research, policy, technology development, or community engagement, and how environmental research can be communicated more effectively to policymakers and the public. Participants also considered actions individual scientists can take to create meaningful environmental impact and whether additional environmental topics should be incorporated into undergraduate and graduate curricula to better prepare the next generation of scientists.

The small group discussions generated lively conversations and highlighted both shared concerns and diverse perspectives. The format also encouraged participation from attendees at all career stages and created opportunities for networking and idea exchange that are difficult to achieve in traditional lecture-based workshops. Common themes included concerns surrounding climate change, PFAS and other emerging contaminants, environmental justice, public communication of science, sustainability, and the need for interdisciplinary approaches to address increasingly complex environmental challenges. To conclude the workshop, attendees participated in an environmental-themed trivia competition that tested their knowledge of environmental science, contaminants of emerging concern, and environmental history. The trivia session generated enthusiastic participation throughout the room, and prizes were awarded to the top three participants. The combination of collaborative discussion and friendly competition helped create an engaging atmosphere while reinforcing key environmental concepts.

The workshop was well attended and highly interactive with participants contributing thoughtful perspectives on both current environmental challenges and future opportunities for scientific impact. We were pleased by the level of engagement throughout the session and hope that the

discussions sparked new collaborations, research ideas, and approaches for translating environmental science into meaningful societal benefit.

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