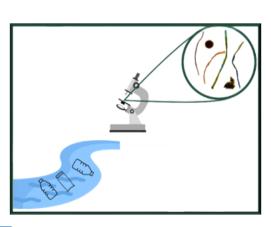
# NEW YORK STATE MICROPLASTICS SUMMIT

June 2024



University at Buffalo The State University of New York

New York State (NYS) Center for Plastics Recycling Research & Innovation – Microplastics Summit



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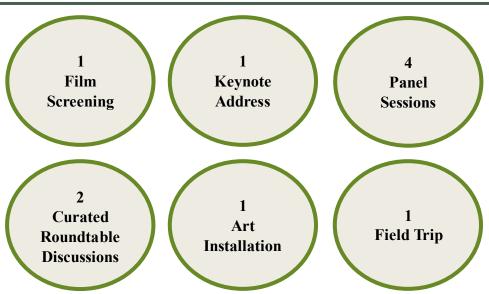
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## 2024 Microplastics Summit At a glance

### Motivation

Plastic pollution is a growing concern, with microplastics recognized as an emerging contaminant affecting the environment, human health, and wildlife. The 2024 New York State (NYS) Microplastics Summit, organized by the NYS Center for Plastics Recycling Research and Innovation and the NYS Department of Environmental Conservation (DEC), aimed to foster collaboration, discuss research, identify policy gaps, and explore solutions. Held at SUNY Buffalo, the Summit addressed the widespread impact of microplastics on New Yorkers and reinforced the DEC's mission to protect natural resources while promoting environmental and public health. Funding for the NYS Microplastics Summit was provided from the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation.



### Attendance

Around 70 Participants:

- 35 Academics
- 10 Government: NYSDEC and Erie County
- 10 Industry professionals
- 10 members of non-profit organizations
- 4 representatives from New York
   <u>Sea Grant</u>
- 2 artists

In addition to New York State attendees, participants from:

- Cleveland, OH
- St. Paul, MN
- Erie, PA
- Princeton, NJ
- San Diego, CA
- Washington, DC
- Littleton, MA
- Windsor & Waterloo, Ontario Canada









### **Summary of the Sessions**

The 2024 NYS Microplastics Summit featured one keynote presentation by *Rachael Zoe Miller* (<u>Rozalia Project</u>) and four technical sessions that included individual presentations and a panel discussion. The event also highlighted two curated roundtable discussions, a microplastics sampling field trip, a film screening ("<u>Ripples of Plastic</u>"), a poster session, and an art installation. Below is a summary of the presentations.

### Session 1: Why do we care?

- Integrating Environmental and Human Health: Lake Ontario Microplastics Center
  - ➤ <u>Dr. Christy Tyler</u>, Rochester Institute of Technology
- Where and How Microplastics Impact Environments
  - Elizabeth Cute, <u>Buffalo Niagara Waterkeeper</u>
- Distribution and Transport of Microplastics and Associated Pollutants in New York Harbor Waters
  - Dr. Beizhan Yan, Columbia University

### Session 2: Sizing up the problem

- Measuring Microplastic Fate in an Experimental Lake
  - > <u>Dr. Matthew Hoffman</u>, Rochester Institute of Technology
- Quantitative Birefringence Microscopy of Microfibers
  - Dr. Wayne Knox, University of Rochester
- PolyGone: Systematic Solutions for Microplastic Pollution
  - Yidian Liu & Nathaniel Banks, PolyGone, Inc.

### **Session 3: What are others doing?**

- Microplastics Policy in California
  - > Dr. Leah Thornton Hampton, Southern California Coastal Water Research Project
- Microplastic Research in Canada
  - Dr. Sushanta Mitra, University of Waterloo

### Session 4: Where do we go from here?

- From Papers to Policies
  - Dr. Sam Mason, Penn State Behrend
- Innovations in Textile Alternatives
  - ➤ Dr. Casey Lardner, <u>Genspace</u> & SUNY FIT
- Tying It All Together
  - Dr. John D. Atkinson, SUNY Buffalo



### **Key Takeaways**

- Standardized Measurement Methods: Reliable, cost-effective sampling and analysis techniques are essential for generating consistent data, informing scientific research and regulatory decisions.
- Advancements in Mitigation Techniques: Innovations in microplastic filtration and treatment should prioritize upstream prevention by minimizing plastic waste at its source (e.g., reduced use of single use plastics and filtering laundry effluents). Microplastics in the environment will be challenging to remove at scale.
- **Policy and Regulation:** Stronger policies must be based on comprehensive research on microplastics' environmental and health impacts, measurement methods, and mitigation advancements, requiring increased funding and <u>interdisciplinary</u> collaboration.
- **Industry Accountability:** Plastic producers and manufacturers must take responsibility for pollution through sustainable material innovation and compliance with stricter regulations.
- Public Education and Awareness: Consumer behavior change, school curriculum integration, and
  public outreach are necessary to drive long-term reductions in microplastic pollution and, more
  broadly, plastic use.
- Collaboration is Key: Researchers, policymakers, and industries must work together to advance measurement techniques, develop mitigation strategies, and promote sustainable alternatives.

