

Microplastics Remediation Technologies/Techniques

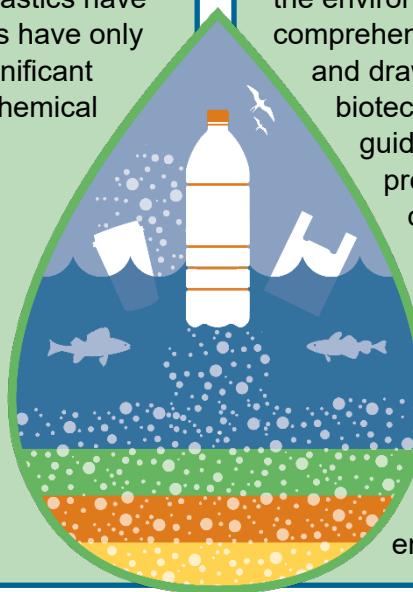
Fact Sheet



In January 2021, ITRC will start a new team to tackle Microplastics remediation technologies! ITRC teams bring together experts from across the country to develop innovative solutions to the most pressing environmental challenges. This team will work on creating resources for regulators and water treatment staff from state and federal agencies, local and municipal governments, and other interested parties. All environmental and public health professionals are encouraged to join!

Why Microplastics?

Microplastics pollution is one of the biggest emerging threats to the global environmental community. Microplastics are small plastic debris less than five millimeters long. Some types of Microplastics are intentionally small and found in various health and beauty products. Other larger plastic debris enters water ecosystems and slowly break up into smaller particles, potentially entering air, soil, and groundwater. Although Microplastics have been around for 50 years, scientists have only recently begun to recognize the significant harm that they cause due to their chemical nature and persistence in the environment. Many impacts from Microplastics are still unknown, but recent studies have shown their significant impacts on freshwater and marine ecosystems and potential presence in air, soil, and groundwater.



ITRC's Microplastics Team

Strategies to prevent Microplastics pollution have primarily been focused on reducing the production and use of non-biodegradable plastic. However, with the wide use of plastic materials, more efforts need to be focused on evaluating the current and emerging technologies used for removing Microplastics from water systems. Varying efforts have been underway to create and study these technologies, but regulators and the environmental community do not have a comprehensive guide that explains the benefits and drawbacks of technological and biotechnological techniques. The ITRC guidance and training resources will provide a useful framework for characterizing the distribution of microplastics in the environment, identifying potential effects on receptors, and evaluating the various available and emerging remediation techniques. ITRC anticipates this will be the go-to resources for state regulators, local and municipal governments, and the environmental community.

The Guidance/Training Will Include:

- An overview of Microplastics in the environment and associated health effects
- A comprehensive evaluation of engineering tools and biotechnological tools
- Case studies on options for cleanup based on the type and size of the plastic

Why Join?

- ⇒ Joining the team allows you to participate in the creation of an innovative guidance document that will be used throughout the nation and worldwide!
- ⇒ You will be able to share your expertise and stay up-to-date on the latest technical and regulatory developments.
- ⇒ ITRC membership gives you access to internal documents and allows you to participate in team meetings and become a future ITRC trainer.
- ⇒ Our community of over 1,300 members and 30,000 contacts allows you to network with your peers and gain exposure in your field.

For more information, please contact the ITRC Team Leaders:

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About ITRC

ITRC is a state-led coalition dedicated to reducing barriers to the use of innovative environmental technologies. ITRC represents over 1,200 individuals, across 50 states, working to produce guidance and training on innovative environmental solutions. Bringing together teams of state, federal, tribal, industry, academic, and stakeholder experts, ITRC broadens and deepens technical knowledge and reduces barriers to expedient regulatory approval. Since 1995, the collective success of this coalition has generated huge benefits to the environment, inspired new technical innovations, and saved hundreds of millions of dollars.

ITRC is a program of the Environmental Research Institute of the States, managed by the Environmental Council of the States. This partnership is based on a commitment to protect and improve human health and the environment across the country.



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