Presidential Symposium: Chemistry and the Future of Plastics

Sponsored by the Committee on Science (ComSci) at the 231th ACS National Meeting

9 AM to noon (Pacific Time) on APRIL 9, 2021

Over the last century, we have learned how to make long-chain synthetic polymers using petroleum and other fossil fuels. These polymeric chains and their patterns make them durable, lightweight, and flexible -- it's what makes them plastic.

Because of the properties of plastics and their potential for diverse applications, plastics have become an essential and ubiquitous part of our



Image credit: recycleandrecoverplastics.org

everyday lives. While the great utility of plastics was anticipated, the problems associated with waste management and plastic debris were not. Today, plastic pollution has become one of the world's most pressing environmental issues, as rapidly increasing production of disposable plastic products overwhelms the world's ability to deal with them.

This symposium will provide a platform to discuss the plastics problem and potential solutions, along with economic, manufacturing, and policy context. The symposium is designed to inform the chemistry community about the larger societal impacts of today's plastics problem and approaches being taken to recycling and creating more sustainable plastics for the future.

Invited presentations will include:

- 1. A general overview of the plastics problem and approaches to solving it;
- 2. Industry approaches to sustainable plastics manufacturing and waste management;
- 3. Green chemistry approaches to designing plastics:
- 4. Tackling the plastic waste problem through chemistry and advances in simulation tools.

Confirmed Speakers are: Gregg Beckham, National Renewable Energy Laboratory; Jeannette Garcia, IBM; Richard Gross, Rensselaer Polytechnic Institute; and Bob Maughon, SABIC.

Panel Discussion Moderator: Dr. Kathryn Peretti, Advanced Manufacturing Office, Department of Energy

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This Presidential Symposium Series also include a symposium *Plastics and the Oceans: Chemistry for the Journey Ahead*, organized by the ACS Environmental Chemistry Division.