## **Emerging Development of Biopolymer Synthesis**

A Webinar Hosted by the Chemical Sciences Roundtable July 19, 2022 12:00 – 1:30 PM EDT

Biopolymers, which include proteins, DNA, RNA, polysaccharides, and other naturally-occurring polymer materials, are critical for the sustainability and advancement of many vital fields, such as manufacturing, pharmaceutical science, and biomedical engineering. Chemical synthesis of biopolymers is of increasing interest and importance as the abundance of natural biopolymers decrease, prove unreliable or unsustainable, difficult to purify from allergens, or experience other complications. Many techniques and chemistries for biopolymer synthesis are emerging to address issues like fossil fuel dependence and environmental remediation, heparin and other drug shortages, and energy transformation and storage. Synthetic approaches also expand the breadth and diversity of chemical compositions and functions. This webinar, hosted by the Chemical Sciences Roundtable, will discuss emerging developments in biopolymer synthesis and their future applications and impacts at the commodity scale.

## AGENDA

12:00 PM	Welcome and Introductions
	Jessica Wolfman,
	Research Associate
12:05 PM	Renewable and Compostable Block Polymers as High-Performance Sustainable
	Elastomers
	Marc Hillmyer
	University of Minnesota
12:25 PM	Nature's Favorite Polymers: Oligonucleotides
	Phil Baran
	Scripps Research
12:45 PM	A Perspective on Synthetic Glycans as a Platform Technology, With a Specific Use-
	Case Involving Microbiome Modulation for Animal Biotech
	Jack Geremia
	DSM Nutritional Products
1:05 PM	Discussion
	Moderated by Nicola Pohl.
	Indiana University
	Chemical Sciences Roundtable Member
1:30 PM	Webinar Concludes