

ACS-GHS July 2022 Seminar Dr. Bridgett Rakestraw



Thursday, July 28th

6:30 - 8:00 pm

via Zoom

Register to receive the meeting link at <https://acsghs.wildapricot.org/event-4839816>

Planting a SEED: Career Journey in Chemistry (25 min)

and

Review of the History of Lubricant Development for Automotive A/C Compressor Systems
(25 min)

Environmental regulation has shifted the refrigeration industry towards more reactive refrigerants such as hydrofluoroolefins (HFO's) to reduce the emission of greenhouse gases and global warming potential (GWP). The primary modification in the automotive air conditioning industry is the incorporation of the HFO, R-1234yf, an unsaturated refrigerant, into these hermetically sealed systems. A comprehensive review of the chemical stability, miscibility and wear performance of lubricants designed for use with R-1234yf will be highlighted.

Biography: Dr. Bridgett Rakestraw is a project lead/formulator in the Strategic Research and Innovation group at CPI Fluid Engineering in Midland, Michigan. She obtained her Ph.D. in Physical Chemistry studying the reactions of the troposphere from the University of Cincinnati and B.S. in Chemistry from Ball State University in Muncie, Indiana. Prior to joining CPI, Bridgett spent 5 years at BASF in Tarrytown, New York as a Scientist developing new additive technologies for automotive and industrial applications. In her current role, Bridgett develops new lubricant formulations for use in low global warming potential for refrigeration and air-conditioning compressor systems.