

# March

# 17

# 2021

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY COLLOQUIUM  
UTAH STATE UNIVERSITY

## From the production line to the human body: What has a chemical gone through?

Modern society has witnessed the manufacturing and commercialization of more than 100,000 synthetic chemicals; 4000+ of them are detectable in environmental samples and 1000+ are constantly present in human bodies.

What happens after commercial chemicals are created in labs and manufactured in plants? What does a chemical go through on its journey from the production line, to various socio-economic activities, environmental media, food chains, and eventually to our bodies? Do these chemicals threaten the health of the ecosystem and humans? Answers to these questions are critical for the sustainable and sound management of commercial chemicals, associated products, and waste. In this talk, Dr. Li Li will introduce the development and application of computational models to track the movement, change, and accumulation of commercial chemicals in a nexus of the human socio-economic system (the anthroposphere), indoor and outdoor environments (the environment), and organisms in food chains and humans (the biosphere). These state-of-the-art computational models integrate interdisciplinary knowledge of environmental chemistry, industrial ecology, and exposure and health sciences. Dr. Li Li will also present case studies to illustrate how computational models enable us to understand and predict how our decisions on chemical production and waste management impact the environment and human health. The talk seeks to inspire academia, industry, and regulatory agencies to explore a path towards the sustainable green chemistry industry.

4-5 PM (MDT) | Zoom

Meeting ID: 853 9744 9709  
Passcode: B+03\*J

Li Li PhD

Assistant Professor in Environmental Health,  
University of Nevada, Reno

