

Decoding and engineering biotic systems for desirable chemistry

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Chemistry Seminar on *engineering approaches on solving chemistry problems*

**Monday
March 10 at
4 pm in 126
Schrenk**

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Abstract: Biotechnology is an essential toolkit for addressing the grand challenges of engineering, including production of clean water, materials, and energy. This presentation will summarize a few biotechnology approaches across these themes. For example, can plants and microbes degrade explosives to prevent environmental contamination? Secondly, can we engineer enzymes to degrade per- and polyfluoroalkyl substances (PFAS)? The latest techniques in data science and molecular biology, combined with established approaches from other disciplines, are central to timely and impactful environmental biotechnology research that solves the grand challenges of engineering.

About the speaker: Bio: Dr. Hunter Schroer is an Assistant Professor of Civil, Architectural and Environmental Engineering at Missouri S&T. Prior to joining Missouri S&T, he served as a research scientist at the University of Iowa and as a consulting engineer at Apex Companies, LLC. He is a licensed Professional Engineer in the state of Colorado and earned a PhD in environmental engineering from the University of Iowa.