## You are cordially invited to attend:

October 9, 2019 12:00 pm - 1:30 pm

115 Erickson Hall Michigan State University Light refreshments provided

CREATE Science Seminar Series presents:

Assistant Professor, Dept. of Chemistry University of Michigan



## "Capturing Student Reasoning About Molecular Structure and Behavior"

**Abstract:** Chemistry is often presented as a disconnected set of ideas. Our group investigates how students make associations and connections between these ideas to describe chemical phenomena and to solve complex chemical problems. Using a variety of methods including evetracking, semi-structured and think-aloud interviews, and textual analysis of student writing, we investigate how students reason about molecular structure and behavior to uncover patterns of reasoning associated with differential performance. I will share findings regarding student reasoning and implications for teaching in general, organic, and physical chemistry.

Bio: Ginger Shultz is an Assistant Professor in the Department of Chemistry at the University of Michigan. Ginger completed her doctorate in polymer chemistry at the University of Oregon and transitioned to education-focused research through a teaching postdoc in Chemistry at the University of Michigan. In 2013 she was named a UM Presidential Postdoctoral Fellow and she was hired as faculty in 2016. Ginger's research is focused on investigating student reasoning in chemistry, how graduate students instructors develop teaching knowledge, and writing-based strategies for learning in STEM.

> This speaker is part of the CREATE Seminar Series. For more information, please visit http://create4stem.msu.edu/seminar-series



