



# Spring 2022 Diversity in Chemistry Mini-Symposium

Department of Chemistry and



## **Professor Stephen Maldonado** **University of Michigan**

Friday, March 4, 2022

Zoom Video Conferencing

11:00AM-12:30PM—Careers in Chemistry

2:00—3:30PM—Panel Session w/ Students

**Host:** Professor Kate Waldie

## ***Growing Inorganic Crystals at Liquid Solution/Liquid Metal Inter-faces: A New Idea for Renewable Energy Technology Materials***

This talk will summarize a new synthetic concept my group has pioneered for the preparation of crystalline inorganic semiconductor and intermetallic compounds. Our approach is to combine elements of electrochemistry and melt crystal growth together to realize a unique process that is capable of producing crystalline compounds without high temperature. Our strategy is called the electrochemical liquid liquid solid (ec-LLS) process and is based off the use of liquid metals. I will first present the context, then describe the concept. and then illustrate different materials we have been able to synthesize by this method.