Event Details:

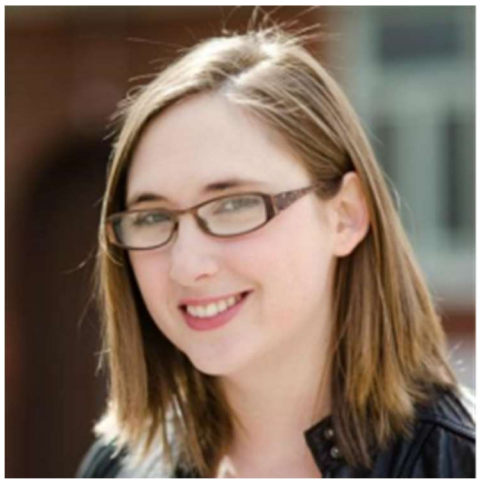
Location: Leikam Brewing - 5812 E Burnside St, Portland, OR 97215

Date: Thursday, April 9th, Time: 6 pm to 9 pm

Speaker: Professor Theresa McCormick, Portland State University

Join us for our monthly lecture series at Leikam Brewing featuring Dr.Theresa McCormick, Professor of Chemistry at Portland State University. This event includes a cocktail hour, catered dinner from a local Portland eatery, and lecture by Dr. McCormick. All ages welcome and encouraged.

Register for a dinner ticket before the event for $25/person ($15 for undergraduate students, high school teachers, unemployed members). $5 added for tickets purchased at the event. To guarantee there is enough food for you, please register at least 48 hours prior to the event.



Lecture Title: Photochemical aerobic oxidation of benzylic alcohols and hydrogen peroxide production

Lecture Summary: Chemists have an important role in developing new materials to meet future energy demands. Hydrogen peroxide is an emerging solar fuel, with applications in fuel cells. This talk will present on the photochemical reactions for hydrogen peroxide production and the role of reactive oxygen species in these reactions. Using oxygen from the air as an oxidant for the two electron oxidation of benzylic alcohols produces the two electron reduction product, hydrogen peroxide. The use of computational and experimental techniques has provided insight into the reaction mechanism and impact of electronic effects on reaction kinetics.

Speaker Bio: Dr. Theresa McCormick is an Associate Professor and Department Chair at Portland State University in the department of chemistry. She received her PhD in Organic Light Emitting Diode (OLED) materials from Queen's University in Kingston, Ontario, Canada in 2008 under the supervision of Dr. Suning Wang. Following her PhD she held an NSERC postdoctoral fellowship at the University of Rochester under the supervision of Dr. Richard Eisenberg, where she studied catalytic systems for proton reduction. Dr. McCormick then held a second postdoc at the University of Toronto under the supervision of Dr. Dwight Seferos, investigating heavy chalcogens in polymers for use in organic photovoltaics. In 2013, she began her independent career at Portland State University studying solar energy conversion reactions.

Her current research uses a combination of computational and experimental techniques to study energy storage reactions. Plants capture solar energy through photosynthesis; the McCormick Lab studies ways to use solar energy to create energy-rich small molecules such as hydrogen gas and hydrogen peroxide.

Looking Ahead: Join us on Thursday, May 14th to hear from Dr. David Stuart, Professor of Chemistry at Portland State University!