

From helium clusters to the next-generation of photolithography: Modeling high energy electronic excitations

Kristi Closser Department of Chemistry California State University, Fresno Date: 11/16/18 Time: 3:00 PM Location: COB1 267 For more information contact: Christine Isborn cisborn@ucmerced.edu

ABSTRACT

In this seminar, I will present two projects involving high energy electronic excitations. The first topic will be on helium cluster excited states and subsequent dynamics, which have some unique characteristics that make them particularly difficult to model computationally. I will also discuss some method developments relevant for cluster excitations more generally. The second topic is the application of quantum chemical methods to study the absorption of extreme ultraviolet (EUV, ~92 eV) light by organic molecules which is directly relevant for developing photoresist materials for the next-generation of photolithography. This segment of the talk will also cover some of the methods required for looking at excitations in

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BIO:

Kristi Closser has been assistant professor at California State University, Fresno since 2017. She earned her B.A. in both chemistry and mathematics from Smith College and her Ph.D. at UC Berkeley in theoretical chemistry. As an undergraduate at Smith college she participated in research in both organic and experimental physical chemistry, but switched to theoretical chemistry in graduate school. Before arriving in Fresno, Dr. Closser also did post-doctoral research at Lawrence Berkeley National Laboratory.

