

2021-2022 POCC Lecture Series

January 27, 2022, 7:30 PM

Virtual reception to start prior to the seminar at 7 PM

Prof. Melanie Sanford

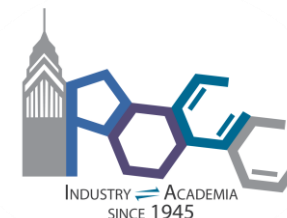
University of Michigan

New Synthetic Methods for C–F Bond Formation:

From Fundamental Science to Applications

Virtual Seminar by Zoom ([LINK](#))

The Philadelphia Organic
Chemist's Club



POCClub.org

**Allan Day Award Lecture,
Sponsored by: Merck**



Abstract: This presentation will describe our group's recent advances in developing metal-mediated/catalyzed methods for introducing fluorine into organic molecules. Our efforts into this area are guided by detailed fundamental studies of stoichiometric organometallic bond-forming reactions. These fundamental studies will be described in detail, and their translation to practical applications (particularly in the context of the synthesis of PET imaging agents) will be discussed.

Bio: Melanie S. Sanford is currently the Moses Gomberg Distinguished University Professor of Chemistry and Arthur F. Thurnau Professor of Chemistry at the University of Michigan, Ann Arbor. She received her B.S. and M.S. degrees at Yale University in 1996 where she carried out undergraduate research in the laboratory of Professor Robert Crabtree. She pursued graduate studies at the California Institute of Technology working with Nobel Prize winner Professor Robert Grubbs. Following postdoctoral work at Princeton University with Professor John Groves, she joined the faculty at the University of Michigan in the summer of 2003 as an Assistant Professor of chemistry. She was promoted to Associate Professor in 2007, to Full Professor in 2010, to Arthur F. Thurnau Professor of Chemistry in 2011, and to Moses Gomberg Professor of Chemistry in 2012. She has won numerous awards, including the American Chemical Society Award in Pure Chemistry, the Sackler Prize, the Blavatnik Award, and a MacArthur Foundation Fellowship. She is a member of the National Academy of Sciences, a Fellow of the American Academy of Arts and Sciences, and a Fellow of the American Chemical Society. She is the author of >200 research publications. Her research focuses on developing new chemical reactions that enable the production of pharmaceuticals, agrochemicals, and fuels in a more efficient and environmentally friendly manner.