TALE OF TWO CAREERS: CATALYSIS IN INDUSTRY VS. ACADEMIA

Industrial Chemistry Seminar Series

Reflections on my transition from academia to industry with an emphasis on how it influenced my approach to innovations in catalysis will be highlighted. Synthetic chemistry innovations that enable the assembly of pharmaceutically relevant molecular scaffolds will be presented. These will include the development of methods for the synthesis of both small molecules and macrocyclic peptide drug candidates leveraging industry-academia partnerships. Applications and impact of a range of industry leading High-Throughput Experimentation (HTE) capabilities including microscale and nano-scale HTE to drive the design and discovery of medicinal drugs will be detailed.



Dr. Dipannita Kalyani

Dr. Kalyani graduated from Bryn Mawr College, PA in 2003 with a B.A. in chemistry and mathematics and M.A. in computational chemistry. She received her Ph.D. in 2008 in organometallic catalysis under the supervision of Prof. Melanie Sanford at The University of Michigan, Ann Arbor. Following her Ph.D., she pursued her postdoctoral work under the guidance of Prof. Scott Denmark at University of Illinois at Urbana champaign in the field of asymmetric catalysis. In 2011, Dr. Kalyani started her independent career as an assistant professor in the chemistry department at St. Olaf College, MN and was granted tenure and promotion to Associate Professor in 2017. At St. Olaf College, Dr. Kalyani established an externally funded research program on organometallic catalysis and mentored ~60 undergraduate researchers. Her research was recognized by several awards including NSF CAREER grant, Cottrell Scholar award, ACS Young Investigator Award and Henry Dreyfus Teacher Scholar award. In 2018, Dr. Kalyani transitioned from academia to Merck & Co., Inc as an Associate Principal Scientist in the High-Throughput Experimentation group in the Discovery Chemistry organization. In her current role, as a Principal Scientist Dr. Kalyani brings her passion for science, drug-discovery, data rich experimentation, academic-industry partnerships and mentorship to accelerate the drug discovery process leveraging a range of microscale and nanoscale HTE techniques.

