Department of Chemistry

2018 Charles F. Hutchison Memorial Lectures

Presents

Professor T. Don Tilley

Department of Chemistry
University of California – Berkeley

"Highly Oxides Metal Centers and Metal-Metal Cooperativity in Oxo Clusters for Water Splitting"
Monday, December 3rd, at 4:00 pm
473 Hutchison Hall

Welcome Reception – First Floor Lounge Area at 5:15 p.m.

"Metal Complexes of Unusual Silicon Ligands in New Chemical Transformations"
Tuesday, December 4th, at 4:00 pm
473 Hutchison Hall

"Metal-Meditated Alkyne Coupling Routes to π-Conjugated Materials: Macrocycles to Carbon Nanostructures"
Wednesday, December 5th, at 12:00 pm
140 Lander Auditorium, Hutchison Hall

T. Don Tilley was born in Norman, Oklahoma, on November 22, 1954. After receiving his B.S. degree in chemistry from the University of Texas in 1977, he went to the University of California at Berkeley where he completed graduate studies in organolanthanide chemistry under the direction of Richard Andersen (Ph.D. 1982). He was then appointed as an NSF-sponsored exchange postdoctoral fellow to work jointly with Bob Grubbs and John Bercaw at the California Institute of Technology (1981-2), and with Luigi Venanzi and Piero Pino at the ETH in Zürich (1982-3). During this period, he developed the chemistry of the (pentamethylcyclopentadienyl)-ruthenium fragment. In 1983 he began his independent research career as an Assistant Professor at the University of California at San Diego. There he was promoted to Associate Professor in 1988, and then to Professor in 1990. Tilley's initial research program at UC San Diego focused on the chemistry of transition metal-silicon systems. In 1994, he accepted appointments as Professor of Chemistry at the University of California at Berkeley and as Faculty Senior Scientist at the Lawrence Berkeley National Laboratory. As a Faculty Senior Scientist at LBNL, Tilley has developed a program based on the molecular design and synthesis of advanced materials. For example, the organic materials chemistry in Tilley's group focuses on use of new metal-mediated synthetic routes to conducting, semi-conducting and optically active systems that feature extended conjugation. In addition, Prof. Tilley's group has developed molecular precursor routes to heterogeneous catalysts for selective chemical transformations. This strategy has been used to produce catalysts with good activities and selectivities for the oxydehydrogenation of propane. A major part of the current research program focuses on solar energy conversion.

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