Eli Lilly Young Investigator Lecture
Organic Division

Transition metal-catalyzed Fluorination

Professor Tobias Ritter
Harvard University

Thursday, May 20, 2010
11:00 a.m.
Room 1315 Chemistry

Aryl fluorides are valuable compounds as pharmaceuticals, agrochemicals, and tracers for positron-emission tomography. Electrophilic and nucleophilic fluorination, as well as the pyrolysis of diazonium tetrafluoroborates, are established methods for the synthesis of fluoroarenes. However, conventional fluorination reactions exhibit a limited substrate scope with respect to the electronic structure of the arene and the functional groups present, and are therefore typically not applicable to late-stage introduction of fluorine into complex functionalized molecules. I will present recent advances of the late-stage synthesis of complex aryl fluoride by transition metal catalysis.