A FRIDAY SYNTHESIS SYMPOSIUM PRESENTATION:
CHARGING AND CHARGE TRANSPORT IN FERROCENE RINGS AND WIRES

Speaker: Michael Stephen Inkpen (Venkataraman group)
When: Friday May 12th, 2017 at 4:30 PM
Where: 209 Havemeyer

Abstract
Studies in single-molecule electronics have predominantly focused on organic components, with data interpreted in terms of theoretical frameworks based on through-molecule tunneling. Though metal-containing components have received less attention, some exhibit intriguing current rectification and transistor-like behavior that imply a charge transfer mechanism that is different from single-step tunneling. Here we prepare a series of linear, single-site metalloocene-based molecular components, and apply solution voltammetry and scanning tunneling microscope-based break junction methods to explore how their single-molecule conductance varies with molecular structure and charge state.