Selective Oxidation of HMF over supported Au and Pt Catalysts

Sara Davis, graduate student, Bob Davis, faculty advisor (UVA)
Co-advisors: Matt Neurock (UVA), Jim Dumesic (UW), Robert Schlogl (FHI)

This work investigates the selective oxidation of 5-hydroxymethylfurfural over gold and platinum catalysts as a function of O₂ pressure, reaction temperature and solution pH. The figure presents results from the oxidation of 0.15M HMF at ambient temperature, 100 psi O₂ and pH = 14.

[Chemical structures and graph showing oxidation of HMF over Pt over time]