Abstract for an Invited Paper
for the MAR06 Meeting of
the American Physical Society

Properties of Organic Molecules at Metal Surfaces
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The adsorption and selfassembly of organic molecules at surfaces has recently been investigated extensively, both because of the fundamental interest and for prospective applications in nanoelectronics and nanophotonics [1, 2]. Moleculemolecule and moleculesubstrate interactions can be tuned by the appropriate choice of substrate material and symmetry. Upon molecular adsorption, surfaces typically do not behave as static templates, but often rearrange dramatically to accommodate different molecular species [3, 4]. This presentation reviews recent experimental work using Scanning Tunneling Microscopy, which is providing new insight into fundamental properties such as molecular diffusion [5, 6] and selfassembly via surface templating [7] and hydrogen bonding driven by co-adsorption [8].