Dynamics and pattern formation of arene molecules on Cu(111)

Daeho Kim

Using Scanning Tunneling Microscope's (STM) robust abilities to image, manipulate, and probe electronic properties of single molecules, arene molecules with various functional groups are investigated. Using the combination of spatial data, in the form of STM images, and their evolution with time, dynamics of various arene molecules are systematically compared and evaluated. Also, self-assembled film characterization studies of arene system will be shown."