

Surface Chemistry: Making Dumb Materials Smart

Emerging technologies such as renewable energy and biomaterials interfaces often require interfaces that are stable and "smart", able to perform specific functions such as facilitating electron transfer, catalyzing reactions, or binding specific molecules/biomolecules. We are designing and applying new surface chemistry to provide ultra-stable interfaces to both bulk and nanoscale materials to provide them with a high degree of functionality. Carbon has been an important playground because of its outstanding stability and because the properties of this single element can be tuned over an enormous range by varying its hybridization and structure, ranging from diamond to graphitic nanofibers. This talk will discuss recent advances and emerging opportunities in the surface chemistry of these materials and in the safe use of nanotechnology.

MATERIALS CHEMISTRY SEMINAR

Professor Bob Hamers
Wisconsin Distinguished Professor

Thursday, October 7th
12:15 p.m. in Room 1315