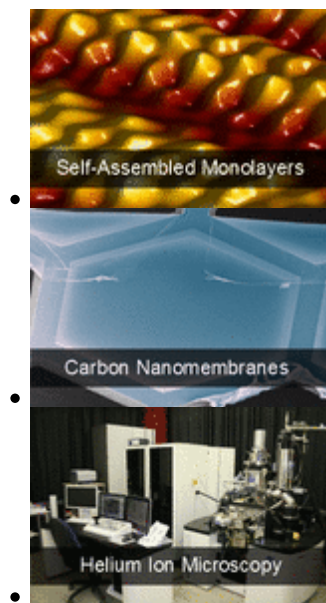


Scientific Interest



The research group Physics of Supramolecular Systems and Surfaces is focused on the fabrication, characterization and application of functional nanomaterials with a emphasis on two-dimensional carbon and graphene.

The group pioneered the fabrication of carbon nanomembranes (CNMs) from cross-linked self-assembled monolayers. The group lays a strong effort on technological applications of CNMs and explores their use for electronics, photonics, biotechnology, and as tailored filter membranes for gas and liquid separation.

Our laboratory uses modern preparative and analytical tools: electron microscopes, photoelectron spectrometers, scanning probes and CVD systems. We also operate the first helium ion microscope (HIM) at a German university. Our HIM is used for high-resolution imaging and nanolithography with a focused He ion beam.