

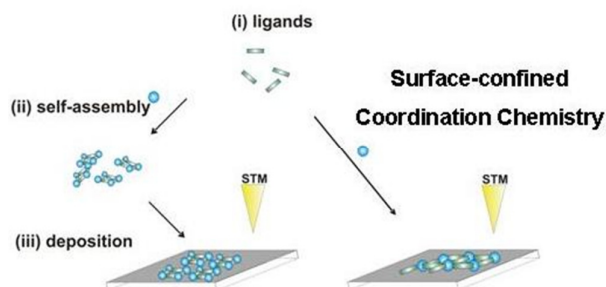
Seminar

Surface-Confined Self-Assembly

Mario Ruben

Karlsruhe Institute of Technology, Germany

Molecular nanostructures have recently attracted interest in view of their potential to host tunable functionalities that might be accessed within the few nanometre regime. We will report on the controlled generation of molecular nanostructures on surfaces by coordinative bond formation and systemic chemistry approaches. The obtained molecular networks are investigated by means of UHV- and solution-based STM-techniques. A combined self-assembly/deposition approach yields a new protocol for the generation of modular metal-ion arrays on surfaces and adverts features of “surface-confined” emergence of complexity. Moreover, the observation of systemic features in large molecular ensembles will be reported. The controlled design of operable surfaces by the principles of surface-assisted assembly is a fascinating combination of new scientific perspectives with the aesthetic beauty of the real time observation of interfaces.



Wednesday, May 18th 2016

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS