Towards Safe Biomimetic Nanotechnology: Inspirations from Nature

Ille C. Gebeshuber
Institute of Applied Physics, Vienna University of Technology
Wien, Austria

Living Nature can give abundant inspiration for the development of safe approaches to nanotechnology, and engineering in general. The keynote will present a conceptual framework regarding materials, structures and processes that are based on biomimetic approaches. The speaker will introduce in detail areas where intense modelling and simulation are needed, e.g., in new ways of bioremediation and phytomining for metallic nanoparticles, in functional micro- and nanostructures and in biomineralisation processes.