

Martin-Luther-Universität Halle-Wittenberg Naturwissenschaftliche Fakultät II Chemie und Physik SFB TR 102



SFB/TRR 102-KOLLOQUIUM

am Donnerstag, dem 10.05.2012, 17.15 Uhr,

Gustav Mie Hörsaal, Theodor – Lieser - Str. 9, 06120 Halle

Es spricht:

Prof. Dr. Ian Manners

Professor of Inorganic & Materials Chemistry School of Chemistry University of BRISTOL, UK

zum Thema:

"Functional Nanomaterials via Crystallization-Driven "Living Self-Assembly"

Although chemical synthesis has evolved to a relatively advanced state, the ability to prepare well-defined self-assembled materials of controlled shape, size, and structural hierarchy is still in its relative infancy and currently remains the virtually exclusive domain of biology. In this talk the development of a promising new route to such materials, termed "crystallization-driven living self-assembly", will be described. This approach was discovered as a result of an investigation of the solution self-assembly behavior of block copolymers with crystalline polyferrocenylsilane metalloblocks in collaborative work with Mitch Winnik in Toronto. It offers an interesting and potentially powerful new route to well-defined micelles and hierarchical materials with controlled dimensions and a variety of potential applications and appears to be extendable to a wide range of different crystalline core-forming blocks, including biorelevant and pi-conjugated materials.