

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



POLYMER- UND SOFT-MATTER-KOLLOQUIUM

am Dienstag, dem 17.01.2012, 17.15 Uhr,

VDP 1.27 Seminarraum Chemie, Von-Danckelmann-Platz 4,
06120 Halle

Es spricht:

Dr. Michael Hacker, Ph.D.
Bereich Pharmazeutische Technologie,
Universität Leipzig

zum Thema:

“Functional macromers for biomedical applications”

Abstract:

The ability to adjust biomaterial properties to the desired application and the corresponding biological environment has become a critical design criterion for diverse biomedical applications. To this end, our research is focused on developing new biomaterials and processing techniques that allow for the controlled adaptation of morphological and physico-chemical properties of the material and devices made thereof.

This presentation will focus on different biodegradable and polyacrylic oligomers as macromers for the fabrication of cross-linked solids and hydrogels, respectively. The latter are designed to be either thermogelling, calcium-ion binding or to contain instantly reactive functionalities for cross-linking of natural polymer such as gelatin.

For these different functional macromers, correlations between structural design and physico-chemical as well as biological properties are presented.