Welcome to a CEBMMS seminar

Location: E/D-house, LTH, E:1406
Date: Tuesday May 27
Time: 14.15

Macroporous, Monolithic and Macromolecular Materials in Microfluidic, Mass Spectrometric Measurements

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Richard Oleschuk is the faculty opponent on Belinda Adlers dissertation:
Strategies for Miniaturized Biomarker Detection, on May 28, in E: 1406

Abstract
Porous materials are immensely useful in chemistry, biochemistry and engineering and are employed to flow fluids by catalysts, sorbent phases and through detectors. “Holes” can be formed in a number of different ways, including particle packing, polymerizations under certain conditions, photolithography and chemical etching or even mechanical pulling. Our group has focused on the use of “holey” materials for the development of analytical techniques and methodologies that are “stingy with sample”. In particular we utilize a combination of capillary and chip-based (continuous flow and droplet) platforms combined with separation methods (i.e. capillary liquid chromatography/electrochromatography) mated with high sensitivity detection techniques (fluorescence and mass spectrometry) for chemical analysis. The seminar will examine the fabrication, characterization, and use of a number of novel materials (e.g. porous polymer monoliths, micro structured optical fibers, polymer micro-tubes and super hydrophobic surfaces) for sample manipulation and chemical analysis.