Ortsverband Freiberg
Die Vorsitzende / Prof. Dr. Carla Vogt
Tel. (03731) 39 3468

GDCh-Kolloquium am 24.1.2024

TU Bergakademie Freiberg, Clemens-Winkler-Bau, Leipziger Straße 29

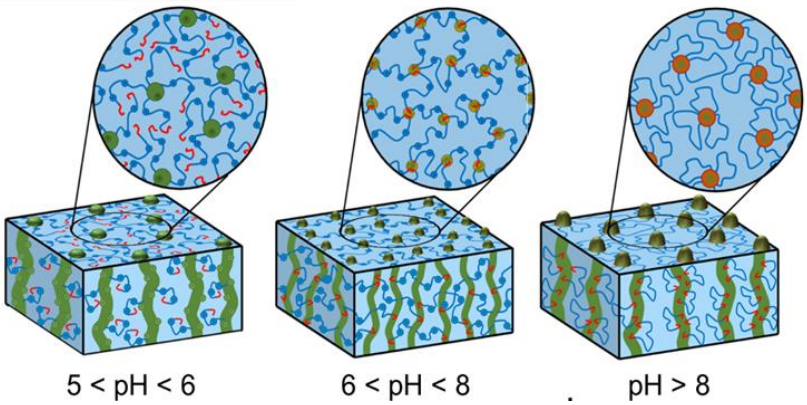
16:15 Uhr, großer Hörsaal HS (WIN-1005)

Prof. Christine M. Papadakis

Soft Matter Physics Group, Physics Department,
TUM School of Natural Sciences, TU Munich

Hydrogels and thin films from block copolymers having thermo- and pH-responsive blocks

Block copolymers with pH- and thermoresponsive blocks show great potential for enhancing the range of properties of hydrogels and thin films. In my talk, I will present the following examples: (i) Hydrogels from a triblock copolymer with thermoresponsive end blocks and a pH-responsive midblock. In this system, both, the stability of the network crosslinks and the bridging by the midblocks can be altered by variation of temperature and pH-value. (ii) Solutions and thin films from a pentablock terpolymer with hydrophobic end blocks and two types of pH-responsive midblocks. It emerges that pH variation strongly alters the miscibility of the blocks, which, together with the block sequence, results in significant variations of the nanostructures and their repeat distances. These findings could be made using small-angle scattering in transmission or in grazing-incidence geometry.



Interessenten sind herzlich willkommen!

Prof. Dr. C. Vogt
Ortsverbandsvorsitzende

GDCh
Gesellschaft Deutscher Chemiker

Prof. Dr. J. Kortus
Fakultätsdekan

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