



GESELLSCHAFT DEUTSCHER CHEMIKER
ORTSVERBAND HANNOVER

Einladung zum GDCh-Colloquium des Ortsverbandes Hannover

Das Colloquium findet um 17h c.t. im Dr.-Oetker-HS (Raum 007, Gebäude 2504) der Leibniz Universität Hannover, Institut für Physikalische Chemie und Elektrochemie, Callinstraße 3a, D-30167 Hannover statt.

22.05.2025 Prof. Dr. Dirk Kuckling

Organische Chemie und Makromolekulare Chemie, Universität Paderborn

Breaking Bonds in Polymer Chemistry

For an effective pharmacotherapy an optimal accumulation of a drug within an affected part of the body is required. Furthermore, a controlled release of the drug at the target site is desired. This can be realized by “intelligent” systems utilizing different triggers like light, pH value or redox properties to release the drug in a controlled fashion. Colloidal drug delivery systems based on novel switchable polymers are investigated allowing an effective drug transport into cells and tissues. On one side, the intracellular pH shift in endolysosomal compartments is used to effectively degrade the polymer and release the drug. On another side, the increased concentration of reductive glutathione (GSH), which especially can be found in tumour cells, is used for the degradation of redox-sensitive polymers. Additionally, light switchable polymers are investigated, that can release the embedded drug from the drug carrier after a short period of irradiation. The final goal is the development of drug delivery systems being able to respond to different stimuli.

Prof. Dr. Jens-Uwe Grabow
Vorsitz OV Hannover

Vor dem Colloquium findet ab ca. 16h c.t. eine ‚Kaffeerunde‘ mit dem Vortragenden in der Bibliothek des PCI statt.