

Polymer Materials in the Transition from Responsiveness to Interactivity and Adaptivity

April 17 to 20, 2016

Program

Sunday, April 17

- 17:00** Arrival
Start of registration
- 19:30** *Supper/Get-together*
Discussions

Monday, April 18

- 8:15** *Breakfast*
- 9:00** Opening
- 9:15** **Christopher Barner-Kowollik** Photochemical macromolecular material design
Karlsruhe, Germany
- 9:45** **Volkmar Stenzel** Self-repairing surfaces via supramolecular interactions -
Bremen, Germany a realistic perspective?
- 10:15** *Break*
- 10:45** **Andrij Pich** Functional microgels as building blocks for interactive materials
Aachen, Germany
- 11:15** **Sjoerd Postma** Enzymatic reaction networks controlling metamorphosis and
Nijmegen, The Netherlands mechanical properties of hydrogels
- 11:45** **Lukas Arens** Desalination of salt water via polyelectrolyte hydrogels and
Karlsruhe, Germany osmotic motors
- 12:15** *Lunch*
- 13:15** **Sergiy Minko** Remote control of soft stimuli-responsive materials
Athens, USA
- 13:45** **Igor Luzinov** Operational nanoscale polymer layers
Clemson, USA
- 14:15** **Marcus Müller** Structure formation in multicomponent polymer systems:
Göttingen, Germany A computer simulation study
- 14:45** *Break*
- 15:15** **Oleg Borisov** Responsive brushes: The impact of polymer architecture
Pau, France
- 15:45** **Karsten Hinrichs** Correlation of IR spectra with thin-film structure at solid water
Berlin, Germany interfaces
- 16:15** **Alexander Revzin** Microsystems for cultivation and analysis of cells
Davis, USA
- 16:45** **Martina Stenzel** Design of functional micelles for enhanced cellular uptake and
Sydney, Australia their movement in cancer spheroids
- 17:15** *Break*
- 17:30** Poster Discussion
- 19:00** *Supper*

Tuesday, April 19

8:15 *Breakfast*

09:00 Peter Fratzl Structure and mechanical response of natural interactive and adaptive materials
Potsdam, Germany

09:30 Jörg Lahann Responsive materials based on multicompartmental particles
Ann Arbor, USA

10:00 Aranzazu del Campo Light-tuning morphology and composition in biomaterials and the consequences for embedded cells
Saarbrücken, Germany

10:30 *Break*

11:00 Leonid Ionov Programmable materials from shape-changing polymers
Athens, USA

11:30 Rudolf Zentel LC-elastomers as responsive and interactive materials
Mainz, Germany

12:00 Marlen Kamperman Silk-inspired protein polymers
Wageningen, The Netherlands

12:30 *Lunch*

13:30 Martin Möller Synthesis of new polymers and self-assembly of polymer systems
Aachen, Germany

14:00 Molly Stevens Design of polymers for biomedical applications
London, UK

14:30 Georg Oenbrink Polymeric drug release systems
Essen, Germany

15:00 *Break*

15:30 Edmondo Benetti Designed polymer assemblies at interfaces: Imitation of nature and synthetic improvisation
Zürich, Switzerland

16:00 Stefan Schmidt Probing specific surface interactions of ligand functionalized hydrogels
Düsseldorf, Germany

17:15 *Sightseeing walk*

19:00 *Dinner* *Historical Restaurant Vincenz Richter*

Wednesday, April 20

8:15 *Breakfast*

09:00 Elena Kramarenko Hysteresis of the viscoelastic properties and the normal force in magnetorheological elastomers
Moscow, Russia

09:30 Katja Loos From metallic gyroid structures to piezoelectric nanoporous networks
Groningen, The Netherlands

10:00 Joris Sprakel Mechanochromic chains as molecular force sensors
Wageningen, The Netherlands

10:30 *Break*

11:00 Andreas Dahlin Macromolecular gates: Polymer brushes on nanopores
Göteborg, Sweden

11:30 Matthias Pauly Oriented self-assembled thin films of anisotropic nanoparticles for (chiral) plasmonics
Strasbourg, France

12:00 Concluding remarks

12:20 *Lunch*