

12TH IPF COLLOQUIUM

Multifunctional Polymeric Materials: From functional nanofillers to bio-inspired materials and smart surfaces

November 10, 2016

INVITATION AND PROGRAM



IPF Colloquia have been held since 1994 to highlight fields the institute is engaged in. Presentations of latest results of IPF researchers and of guests from other institutes and industry are discussed and form the basis for verification of the institute's position in the field, for intensified scientific exchange, and new collaborations.

The 12th IPF Colloquium is featuring some areas in which the IPF has established particularly close connections with research groups abroad through appointment of IPF Fellows. Seven IPF fellows have been appointed since 2014: Sergei Egorov (Charlottesville, VA, Virginia, USA), Leonid Ionov (Atlanta, GA, USA), Hossein Khonakdar (Tehran, Iran), Barbara Klajnert-Maculewicz (Lodz, Poland), Matthias Schubert (Lincoln, NE, USA), Philipp Seib (Strathclyde, UK), and De-Yi Wang (Madrid, Spain). Four of them are going to present their work in this colloquium. In addition, nicely fitting talks of external speakers, further partners, and IPF collaborators are integrated into the program. The sequence of lectures is concluded by the presentation of Eduard Arzt (Saarbrücken) who had been invited for a colloquium by the Ortsverband Dresden of the GDCh, and whose talk, after the initially incidental coincidence of dates, will nicely round up the program of the 12th IPF Colloquium on Multifunctional Polymeric Materials: From functional nanofillers to bio-inspired materials and smart surfaces.

A limited number of posters will add some more interesting contributions to display results and inspire discussion.

PROGRAM

10:15 Brigitte Voit
Opening

Multifunctional polymeric materials through nanofillers and controlling processing

Chair: Gert Heinrich

10:25 **De-Yi Wang** (Madrid, Spain)
Nano fire retardant for polymers: Where we are and where we go

10:55 **Hossein Khonakdar** (Tehran, Iran)
Rheological and morphological correlations in PP/EVA blends containing nanoclay in presence of a halogen-free flame retardant

- 11:25 **Andreas Leuteritz** (Dresden, Germany)
UV-light protection of polyolefines using LDH nanofillers
- 11:50 **René Androsch** (Halle, Germany)
Crystallization of polymers at processing-relevant cooling conditions

12:15 *Lunch break*

Bio-inspired materials and materials for medical applications

Chair: Carsten Werner

- 13:15 **Philipp Seib** (Strathclyde, United Kingdom)
Exploring silk as a nanomedicine
- 13:45 **Thomas Scheibel** (Bayreuth, Germany)
Bio-inspired polymer materials
- 14:15 **Ben Newland** (Dresden, Germany)
Development of injectable materials for cell and drug delivery
- 14:45 **Yixin Zhang** (Dresden, Germany)
Screening of non-covalent interaction: From drug screening to biomaterials discovery

15:10 *Break*

Smart surfaces

Chair: Andreas Fery

- 15:40 **Petra Uhlmann** (Dresden, Germany)
Control of biointeractions using polymer brushes combined with 3D nanostructures
- 16:10 **Matthias Schubert** (Lincoln, USA)
Anisotropic optical contrast microscopy and functionalized nanostructured surfaces: A new imaging modality for small molecule detection and cell-surface interactions
- 16:35 **Alla Synytska** (Dresden, Germany)
Design of bio-inspired functional surfaces using core-shell particles self-assembly
- 17:00 **Eduard Arzt** (Saarbrücken, Germany)
Bio-inspired surfaces - from science to application
- 17:45 *Break*
- 18:00 *Poster discussion*
- 18:30 *Get-together until 21:30*

INFORMATION ON ORGANIZATION

Venue:

Leibniz-Institut für Polymerforschung Dresden e. V., Hohe Str. 6, 01069
Dresden

Registration:

Registration fee: EUR 60 (incl. VAT)

Reduced fee students: EUR 40 (incl. VAT)

Speakers, IPF staff and
members of GDCh-Ortsverband free of charge

To register please send the enclosed form or an e-mail with the requested
data to bendzko@ipfdd.de.

You will get an invoice for payment of the fees.

Posters:

A limited number of posters may be accepted.

Please submit your applications by October 15, 2016 by sending a one-
page abstract to bendzko@ipfdd.de.

For guidelines concerning the abstract format please consult the website.

Organizing Committee:

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(Leibniz Institute of Polymer Research Dresden and
Technische Universität Dresden)

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Further information on www.ipfdd.de/coll12