

CHALLENGES IN AND POTENTIAL OF POLYMER PHYSICS

The aim of this workshop is to discuss current challenges in polymer physics and the potential of polymer physics to advance the understanding of related soft matter systems. Because polymers are long-chain molecules, they can have unique (long-range) responses to external stimuli or cover environments of different physical properties.

We propose to focus on the impact of chain length on the observed phenomena as the golden thread for the discussions which we chose to group around five thematic areas. Aspects of each area shall be illustrated by invited talks (30min) and (invited) flash presentations. The latter may deal with recent or established results, just raise questions or sketch ideas, etc.

During each session ample time will be reserved for discussions and all participants can present their opinions in flash presentations. Discussions are continued during the poster sessions in the evening.



INVITED SPEAKERS

Kari Dalnoki-Veress

McMaster University, Hamilton, Canada

James Forrest

University of Waterloo, Canada

Erwin Frey

Ludwig-Maximilians Universität, Munich, Germany

Richard Jones*

University of Sheffield, UK

Kurt Kremer

Max Planck Institute for Polymer Research, Mainz, Germany

Igor Kulić

Institut Charles Sadron, Strasbourg, France

Roberto Lazzaroni

Université de Mons-Hainaut, Belgium

Alexei Likhtman

University of Reading, UK

Joachim Loos

University of Glasgow, Scotland, UK

Gregory B. McKenna

Texas Tech University, Lubbock, USA

Helmuth Möhwald

Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

Dieter Neher

Universität Potsdam, Germany

Wolfgang Paul

Martin Luther Universität Halle-Wittenberg, Germany

Dieter Richter

Forschungszentrum Jülich, Germany

Ernst Rössler

Universität Bayreuth, Germany

Christoph Schick

Universität Rostock, Germany

Alexander Semenov

Institut Charles Sadron, Strasbourg, France

Alexei Sokolov

University of Tennessee, Knoxville, USA

Jens-Uwe Sommer

Leibniz-Institut für Polymerforschung Dresden, Germany

Ullrich Steiner

University of Cambridge, UK

Additional contributors will be invited for the discussion

* to be confirmed

LOCATION

Vier Jahreszeiten am Schluchsee

Am Riesenbühl,
D-79859 Schluchsee
+ 49 (0) 7656/70-326
www.vjz.de

Duration of the meeting

Beginning: Wednesday 4th May (morning)
End: Friday 6th May (after lunch)

Participation Fee

(including accommodation)
The participation fee is 100,- € for students
and 250,- € for other participants.

Deadline for registration: March 31, 2011

CONTACT

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THEMATIC AREAS

- **Polymers and optoelectronic applications: Prospects, challenges and limitations**
- **Polymers with several regulatory components: Self-assembly, hierarchical structures and non-equilibrium behavior**
- **Polymer dynamics at different scales**
- **Processes and consequences of forcing polymers into confining geometries**
- **Factors controlling the properties between a polymer crystal and the surrounding melt**

For each area a few (hopefully pertinent) questions, which might be taken up in the discussion, are listed on the webpage of the workshop:
www.frias.uni-freiburg.de/stroblworkshop

ORGANIZERS

Günter Reiter (Freiburg, Germany)
Jörg Baschnagel (Strasbourg, France)
Thomas Thurn-Albrecht (Halle, Germany)

In honor of the 70th birthday of Prof. Gert Strobl, we organize this discussion meeting on future directions in polymer physics within the framework of the International Research Training Group (IRTG) „Soft Matter Science: Concepts for the Design of Functional Materials“ and the School of Soft Matter Research of the Freiburg Institute for Advanced Studies (FRIAS).

Further information and registration:
www.frias.uni-freiburg.de/stroblworkshop



Professor
Gert Strobl



A DISCUSSION MEETING CHALLENGES IN AND POTENTIAL OF POLYMER PHYSICS MAY 4 – 6, 2011



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