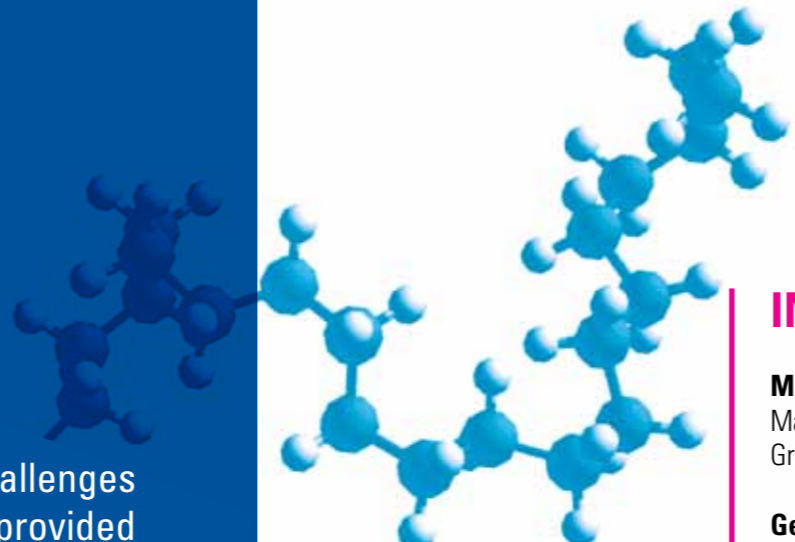


## CHALLENGES AND PROSPECTS OF POLYMER CHEMISTRY

The aim of this workshop is to discuss current challenges in polymer chemistry and the new opportunities provided by tailoring polymer architectures and tuning properties of organic and macromolecular systems. How can polymer design, (nano)structure formation and system integration contribute to solving existing problems of advanced materials and enabling new technologies? How do we define the future role of polymer chemistry and the priorities in polymer synthesis and materials development?

We propose to focus on new approaches and dream polymer products which meet the urgent demands of our society for renewable energy, communication, protection, and sustainable development. The discussions will be fueled by invited lectures and stimulated by (invited) flash presentations. These presentations will give short statements on the limitations and challenges of existing approaches, raise questions or sketch new ideas. All participants are welcome to present their opinion in these flash presentations. Discussions will be continued during the poster sessions.



## INVITED SPEAKERS

### Markus Antonietti

Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Potsdam, Germany

### Gero Decher

Institut Charles Sadron, Strasbourg, France

### Nicolas Giuseppone

Institut Charles Sadron, Strasbourg, France

### Stephan Hecht

Humboldt-Universität, Berlin, Germany

### Gerhard Hörpel

Westfälische Wilhelms-Universität, Münster, Germany

### André Laschewsky

Universität Potsdam, Germany

### Jean-Marie Lehn

Université Louis Pasteur, Strasbourg, France

### Krzysztof Matyjaszewski

Carnegie Mellon University, Pittsburgh, USA

### Iain McCulloch

Imperial College, London, United Kingdom

### Stefan Mecking

Universität Konstanz, Germany

### Martin Möller

Rheinisch-Westfälische Technische Hochschule, Aachen, Germany

### Klaus Müllen

Max Planck Institut für Polymerforschung, Mainz, Germany

### Roeland Nolte

Radboud Universiteit, Nijmegen, The Netherlands

### Jürgen Rühle

Albert-Ludwigs-Universität, Freiburg, Germany

### Hans-Werner Schmidt

Universität Bayreuth, Germany

### Arnold Schneller

BASF SE, Ludwigshafen, Germany

### Mukundan Thelakkat

Universität Bayreuth, Germany

## ORGANIZERS

**Rolf Mülhaupt** (Freiburg, Germany)

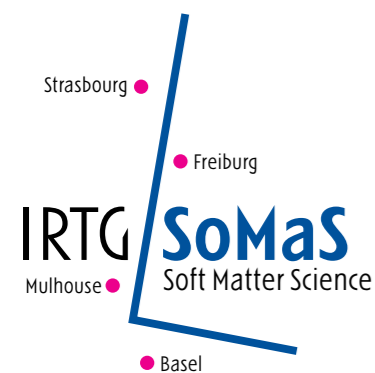
**Paolo Samorì** (Strasbourg, France)

**Hans-Werner Schmidt** (Bayreuth, Germany)

**Günter Reiter** (Freiburg, Germany)

**Jörg Baschnagel** (Strasbourg, France)

This meeting is organized within the framework of our meeting series focusing on discussions about challenges and prospects of soft matter science.



## THEMATIC AREAS

### Electroactive polymers for optoelectronics and energy technologies

Can carbon polymers substitute silicon in electronics and energy harvesting? How to improve polymer solar cells? How to exploit polymer chemistry in energy harvesting and energy storage? How to make polymer batteries?

### Responsive polymers for smart materials and systems

How to improve precision and functional design in polymer synthesis? How to render polymers smart and responsive to changes of their environment? How to design polymers for system integration and applications in micro systems and multifunctional devices?

### Polymers for high resource- and energy effectiveness

What is the future role of polymerization catalysis? Is carbon dioxide the raw materials of the future? Which polymers are needed in industry?

### Supramolecular polymers

How to exploit non-covalent bond formation and supramolecular assemblies in designing functional polymers and systems?

## LOCATION

### Vier Jahreszeiten am Schluchsee

Am Riesenbühl

D-79859 Schluchsee

+ 49 (0) 7656/70-326

[www.vjz.de](http://www.vjz.de)

### Duration of the Meeting

Beginning: Wednesday 2nd May (morning)

End: Friday 4th May (after lunch)

### Participation Fee

(including accommodation): 350,- €

### Deadline for Registration

April 2, 2012

## CONTACT

### Dr. Amandine Henckel

[softmattergraduate@uni-freiburg.de](mailto:softmattergraduate@uni-freiburg.de)

+49 (0) 761 203 977 78

### Further Information and Registration

<http://www.softmattergraduate.uni-freiburg.de/discussionmeeting2012>

**IRTG SoMaS**  
International Research Training Group Soft Matter Science

A DISCUSSION  
MEETING

CHALLENGES  
AND PROSPECTS  
OF POLYMER  
CHEMISTRY

MAY 2-4, 2012

