

► SFB 1176

Molecular Structuring of Soft Matter

The Cooperative Research Centre (SFB) 1176 investigates the design of highly defined macromolecules. The building blocks, i.e. monomers, of macromolecules are arranged along a (one-dimensional) chain. However, their alignment in or on an (inter) phase is also of significant importance. In addition, the spatial placement of the building blocks in networks, resulting in specific material properties, is of significance. The function of the macromolecular materials is primarily determined by their molecular structure and the thereof resulting spatial arrangement and linkages. This molecular structure can be the sequence of the monomers along the chain, the uniformity of the chain-length (i.e. the dispersity) or the degree of branching within the macromolecule. The precise placement of functionalities along the chain can determine and regulate the behavior of the chain in solution – the so-called coiling behavior. Surfaces can consist of repeating units or be decorated with macromolecules, which impart specific function to the surface. In a polymeric network, the complex properties of the resulting material are determined by the length of the single mesh as well as by the sequence of the building blocks of functionalities. The Cooperative Research Centre 1176 has the aim – within the scope of defined and well-founded problems – to synthesize polymeric materials with a so far unmatched degree of structural control in three dimensions. In doing so, the targeted molecular weight, precise control of a defined function as well as control over dispersity will be established. The focus on the molecular structure of soft materials by a dimensional organizing principle – determining the function – opens the possibility to classify the synthetic challenges as well as to transfer the scientific findings from one to the next dimension. www.sfb1176.de

The SFB 1176 includes a Graduate School MGK (German abbreviation of „Modul GraduiertenKolleg“) as an integral part of the Cooperative Research Centre for interdisciplinary education of our students. www.sfb1176.de/graduate-school.php

► DR. HERMANN-SCHNELL STIPENDIUM

The *Dr. Hermann-Schnell-Stiftung* (foundation) awards scholarships to young scientists working in the field of macromolecular chemistry, especially as far as the physico-chemical basics and the chemical analysis is concerned.

► SCHOLARSHIPS

It is planned to offer scholarships to a limited number of students, candidates for doctor, diploma, bachelor, or master degree presenting a scientific contribution (main author of an oral contribution or poster). Please send your application to the GDCh until June 20, 2018, latest. The form can be found at:

www.gdch.de/veranstaltungen/tagungen/stipendien

► SOCIAL PROGRAMME

The official programme will include a get together and a conference dinner. Further information can be found in the second circular.

► SCIENTIFIC PROGRAMME AND LOCAL ORGANISATION

Prof. Dr. Michael A. R. Meier (Conference Chairman)
 Karlsruhe Institute of Technology (KIT)
 Institute of Organic Chemistry
 Materialwissenschaftliches Zentrum MZE
 Straße am Forum 7
 76131 Karlsruhe, Germany
 Phone: +49 721 608-48326
 E-Mail: m.a.r.meier@kit.edu

► INFORMATION AND LOCAL ORGANISATION

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 Karlsruhe Institute of Technology (KIT)
 Sonderforschungsbereich (SFB) 1176
 Wolfgang-Gaede-Str. 1a
 76131 Karlsruhe, Germany
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► GENERAL INFORMATION

Gesellschaft Deutscher Chemiker e.V.
 (German Chemical Society)
 Claudia Birkner – GDCh Event-Team
 P.O. Box 90 09 40
 60444 Frankfurt am Main, Germany
 Phone: +49 69 7917-366
 Email: tg@gdch.de
 Homepage: www.gdch.de/tagungen

Executive director: Professor Dr. Wolfram Koch
 Registered charity no: VR 4453 · Registergericht Frankfurt am Main
 (date: February 1, 2018)



GESELLSCHAFT DEUTSCHER CHEMIKER



Dimensional Control of Polymer Materials – From Synthesis to Function

Biennial Meeting of the GDCh-Division
of Macromolecular Chemistry
together with SFB 1176

September 24 – 27, 2018
Karlsruhe



www.gdch.de/makro2018



INVITATION

This year's conference focus is "Dimensional Control of Polymer Materials – From Synthesis to Function".

The design of polymer materials from highly defined macromolecules is in the focus of the conference. Molecular definition can be one-dimensional, along a chain, two-dimensional, within a surface, or three-dimensional. Noteworthy, the function of macromolecular materials is primarily determined by their molecular structure and the thereof resulting spatial arrangement and linkages. The focus on the molecular structure of soft materials by a dimensional organizing principle – determining the function – opens the possibility to classify the synthetic challenges as well as to transfer the scientific findings from one to the next dimension.

This conference will address developments in functional polymers in all dimensions and aims at bringing together experts from both academia and industry to present and discuss novel ideas, applications, latest breakthroughs, developments, opportunities, and challenges of dimensional control of the macromolecular structure. The scope of the conference covers all aspects of **Dimensional Control of Polymer Materials** with a special focus on the synthesis and characterization of polymers, the structuring of polymers on surfaces and in networks, their resulting functional aspects with applications as smart materials, as well as polymers derived from sustainable sources.

CONFERENCE VENUE

Karlsruhe Institute of Technology (KIT)
Tulla Lecture Hall, Building 11.40
Campus South
Englerstr. 11
76131 Karlsruhe, Germany

AWARDS

Hermann-Staudinger-Preis

Monday evening, September 24, 2018, will be devoted to a special session including the Staudinger award ceremony. Awardee is Prof. Dr. Brigitte Voit, Dresden.

Raimund-Stadler-Preis

Monday evening, September 24, 2018, will be devoted to a special session including the Stadler award ceremony.

POSTGRADUATE WORKSHOP

A postgraduate workshop is planned on Monday, September 24, 2018 from 9:00 – 12:00 a.m.

INVITATION

ORGANISING COMMITTEE

S. Bräse	Karlsruhe/DE
G. Delaître	Karlsruhe /DE
T. Früh	Leverkusen/DE
B. Luy	Karlsruhe/DE
M. Meier	Karlsruhe/DE
P. Roesky	Karlsruhe/DE
U. S. Schubert	Jena/DE
P. Theato	Karlsruhe/DE
D. Voll	Karlsruhe/DE
M. Wilhelm	Karlsruhe/DE

TOPICS

- Sequence Control and Definition
- Structuring on Surfaces
- Defined Polymer Networks
- Polymers and their Application
- Smart Materials
- Sustainable Polymers
- Characterization of Polymers

PLENARY SPEAKERS

Prof. Dr. Joanna Aizenberg	Cambridge/US
Prof. Dr. Eva Harth	Houston/US
Prof. Dr. Kurt Kremer	Mainz/DE
Prof. Dr. Sebastien Perrier	Coventry/GB
Prof. Dr. Mitsuo Sawamoto	Kyoto/JP

KEYNOTE SPEAKERS

Prof. Dr. Anke Blume	Twente/NL
Prof. Dr. Stefan Buchholz	Marl/DE
Prof. Dr. Jeremiah A. Johnson	Cambridge/US
Prof. Dr. Harm-Anton Klok	Lausanne/CH
Prof. Dr. Rachel O'Reilly	Birmingham/GB
Prof. Dr. Regine von Klitzing	Darmstadt/DE
Prof. Dr. Andreas Walther	Freiburg/DE

GENERAL MEETING

The general meeting of the GDCh-Division of Macromolecular Chemistry will take place on Tuesday, September 25, 2018 at the Tulla Lecture Hall.

INVITATION

SUBMISSION OF ORAL CONTRIBUTIONS AND POSTERS

Abstracts can be submitted to the topics online at

www.gdch.de/makro2018

A sample abstract is to be found on this website. No revisions or corrections will be made by the scientific committee.

After a successful transmission, you will receive a reference code for each submitted abstract and a confirmation after the decision of the scientific committee.

The scientific committee reserves the right to accept or reject papers, and to assign them to oral or poster contribution.

DEADLINE

Submission of oral contributions	April 5, 2018
Submission of posters	June 20, 2018

REGISTRATION

Registration will start with the second circular (approx. in May 2018). The registration fees* (incl. coffee breaks, lunches and conference dinner) are as follows:

GDCh-member and member of EuCheMS-member societies from Academia	€ 350,-
GDCh-member and member of EuCheMS-member societies from Industry	€ 400,-
Member, unemployed or retired	€ 150,-
Non-member from Academia	€ 400,-
Non-member from Industry	€ 450,-
Student** (GDCh-member and member of EuCheMS-member societies)	€ 100,-
Student** (Non-member)	€ 150,-
Gold-member (with over 50 years of GDCh membership)	free of charge

* The registration fees are not liable to value added tax (tax exemption additional § 4 Nr. 22a UStG.)

**valid Student-ID required