

Conference Venue:

Kekulé auditorium (L203/6) at the chemistry dept. of the TU Darmstadt, campus *Lichtwiese*, Petersenstraße 21

How to get there:

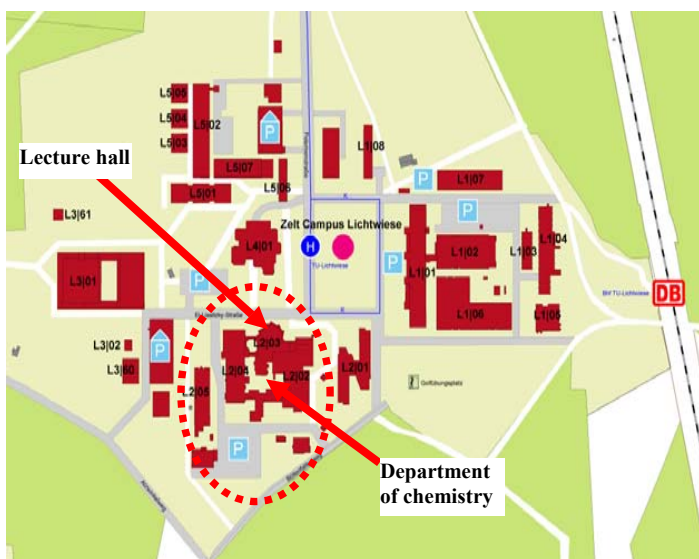
❖ By car:
via A5/A67 from the North/South/West, exit *Darmstadt*
via A3 from the East, change to A661 at *Offenbacher Kreuz* to the South (*Langen*), then change to B3.
In Darmstadt follow the sign *Lichtwiese* or *Vivarium*.

❖ By plane
non-stop bus connection from Frankfurt Airport, terminal 1 and 2 (*Airliner*) to Darmstadt main station.

❖ By train:
Darmstadt main station, take the bus route K to *Lichtwiese* (final stop) or take the train (*Odenwaldbahn*) to station *TU-Lichtwiese*.

Accommodation:

Hotel rooms can be booked via the Touristinfo bureau:
www.darmstadt.de/freizeit/touristinfo



Programme Committee:

F. Müller-Plathe, TU Darmstadt (local organizer)
K. Binder, H.-J. Butt, F. Faupel, R. von Klitzing,
W. Possart, S. Reese, P. Steinmann

Further information, registration:

www.theo.chemie.tu-darmstadt.de/polymer-interfaces

Contact (Conference office):

polymer-interfaces@theo.chemie.tu-darmstadt.de
j.ahluwalia@theo.chemie.tu-darmstadt.de

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Sponsors



DFG SPP1369 Priority Program

Polymer-Solid Contacts:
Interfaces and Interphases

INTERphases
&faces



International Bunsen Discussion Meeting



Polymer Interfaces: Science & Technology

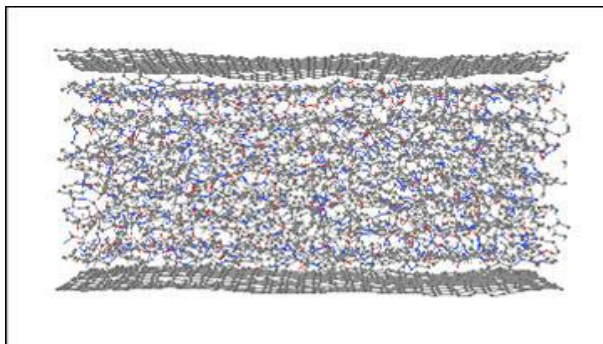
August 30 – September 1, 2009

Technische Universität Darmstadt
Campus Lichtwiese
Chemistry Department
Building L203

Scope of the conference:

In modern material science, composite materials consisting of polymers and solids gained significant interest in recent years. They can be engineered in multiple ways with distinct properties, which lead to new technical applications (e.g. adhesion or coating). However, there is a considerable lack of understanding of both, the scientific background and the molecular behavior of those polymer-solid-composites. This hampers their systematic improvement as well as the design of new materials.

This is especially true for the immediate interface between the solid and the polymer and the so-called interphase of the polymer in the vicinity of the surface. Depending on the particular system or property, this size of the interphase varies from a few nanometers to several micrometers and, thus, is far bigger than comparable regions in typical inorganic materials. Generally spoken, we know very little about the molecular constitution and the local polymer properties and therefore, are unable to predict the macroscopic behavior and finally the applicability of the composite. The situation even worsens when we reach the nano-scale, where dispersed particles become smaller and smaller and polymers completely lose their bulk-properties.



Due to the technical (and economical) importance of composite materials, it is mandatory to investigate this polymer-solid-interface in more detail by means of experiments and theoretical approaches.

To tackle this problem, a DFG priority program (SPP1369 Polymer-solid contacts: interfaces and interphases) has been founded. Its research is closely related to the content of this conference.

Aim of the conference:

The goal of the meeting is a better, fundamental understanding of the interface and interphase. It does not focus on particular material combinations or applications. The conference should bring together scientists and engineers from various fields (chemistry, physics, material science, mechanics) using different methods to characterize, synthesize or simulate composite materials. It should provide a stage where experimentalists can meet theoreticians and scientists from universities can discuss with people from industry.

Invited speakers:

Sun. Aug. 30th: **Plenary lecture**
Ed Kramer (U. of California, Santa Barbara)

Mon. Aug. 31st: **Steve Granick** (U. Illinois at Urbana-Champaign)
Sanat K. Kumar (Columbia U.)
Bela Pukanszky (Budapest)

Tue. Sep. 1st: **Thomas P. Russell** (U. Massachusetts Amherst)
Marie-France Vallat (CNRS at U. Haute-Alsace)
Hatsuo Ishida (Case Western Reserve Univ.)

There will be 15 contributing lectures, a poster session is scheduled on Monday, Aug 31th.

Scientific contributions to the conference will be published in PCCP (Physical Chemistry Chemical Physics) after a normal review process.

Registration:

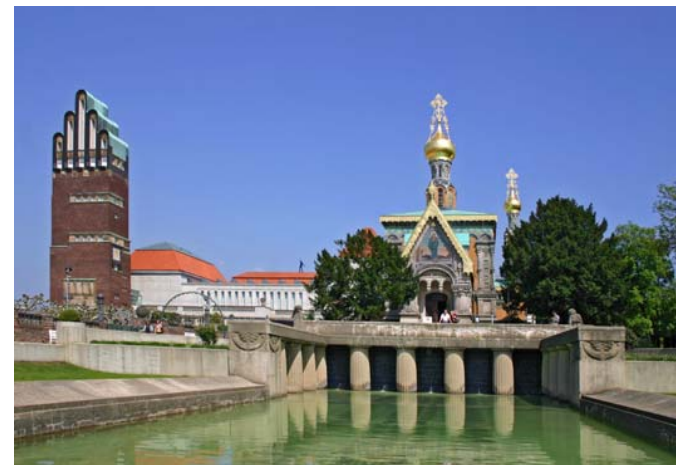
Early registration fee (before Aug. 1st 2009):

participant from universities/ public funded research facilities:	120 EUR
participants from industry:	250 EUR
students:	60 EUR

Late registration (after Aug. 1st 2009) will be charged with an additional fee of 30 EUR.

Registration fee covers coffee/tea/beverages, guided tour at the Mathildenhöhe Darmstadt, and conference dinner, both on Aug 30th.

Registration form is available at
www.theo.chemie.tu-darmstadt.de/polymer-interfaces



Important dates:

Deadline for submitting contributions: June 1, 2009
Notification of acceptance: July 1, 2009

Deadline for publication: November 1, 2009