

Jülich Soft Matter Days 2011

15 – 18 November 2011

Gustav Stresemann Institut, Bonn, Germany

2nd Announcement

Registration



SoftComp
SOFT MATTER COMPOSITES



JÜLICH
FORSCHUNGSZENTRUM

– Introduction –

Soft Matter Science has emerged as an independent and interdisciplinary research field bringing together scientists from condensed matter physics, chemistry and biology. The systems investigated in this field include colloidal dispersions, polymer-solutions, -mixtures and -melts, block copolymers, binary and ternary amphiphilic systems (microemulsions), membranes, vesicles and biological macromolecules. While many of these systems have already been investigated for a long period of time, only recently their common features and interactions have come into focus.

These highly complex materials are characterized by structural units with typical length scales ranging from nanometers to micrometers. The experimental and theoretical investigations as well as the understanding of the properties of these materials poses enormous challenges due to their high complexity, the large number of cooperative degrees of freedom, and the large range of relevant length, time and energy scales.

Therefore, we are organizing an annual workshop, the

Jülich Soft Matter Days

on the physics and chemistry of mesoscopically structured systems. We hope that this workshop will provide a forum to share and discuss the latest advances for all active researchers in this field.

In this meeting taking place in the vicinity of Jülich from 15 to 18 November 2011 we intend to focus on:

- Biosystems
- Colloids
- Polymers
- Self Assembly

Organisers

J.K.G. Dhont, G. Gompper, D. Richter
M. Göcking (Workshop Secretary)

– Front page picture –

The presence of nanoparticles induces a confinement of the chain dynamics in polymer nanocomposites
(courtesy: K. Nusser, Forschungszentrum Jülich, ICS-1, JCNS)

– Contributions –

Oral Presentations

For oral contributions beamer presentation or overhead projection may be used.

The allotted times for the oral presentations include five minutes for discussion.

Media Check

Participants should bring their presentations **two hours** in advance of each session in order to avoid last minute preparation and confusion. For early morning sessions, prepare them the day before. Specialist personnel will help you.

Poster Presentations

One display board (1,20 cm wide x 1,45 cm high) will be provided for each poster. Assistance and mounting materials will be available.

Book of Abstracts

A collation of accepted abstracts will be provided to all participants upon arrival. There will be no conference proceedings.

– Poster Presentation –

An overview of the accepted Posters for the conference is given on our web sites:

www2.fz-juelich.de/iff/jsmd2011/
www.soft-matter.net/

– Getting to the Workshop –

Conference Venue

The Jülich Soft Matter Days will be held at the Gustav-Stresemann-Institut, Bonn, Germany, from 15 to 18 November 2011. It will start on Tuesday, 15 November 2011, with a Welcome Buffet and end on Friday, 18 November 2011, at 14:30 hours.

Participants will be accommodated on-site at the Gustav-Stresemann-Institut, Bonn. All meals and refreshments will be served at the conference site.

The Gustav-Stresemann-Institut is situated in a large, quiet park estate – and yet in the middle of the new federal quarter of Bonn, in the centre of the flourishing conference and service city. You'll find international tourist attractions and cultural facilities within easy reach.



– Getting to the Workshop –

How to reach Bonn and the Gustav-Stresemann-Institut

by car:

Right side of Rhine:

- A3, until motorway-crossing Bonn / Siegburg
- A560, Bonn until motorway-crossing St. Augustin
- A59, Bonn-Bad Godesberg until motorway-crossing Bonn-Ost (42)
- A562 until exit Rheinaue, then turn left;
next traffic light: turn right → Heinemann Straße
- 100 m after next traffic-light: U-turn left, parking
after 100 m on the right

Left side of Rhine:

- A61, until motorway-crossing Meckenheim
- A565, direction Bonn
- Exit Bonn-Poppelsdorf, direction Bad Godesberg (B9)
- At traffic-lights right before Underground-station „Max-Löbner-Straße“: turn left into
Max-Löbner-Straße → until end, then turn left

by rail:

Between Bonn central station and Bonn-Bad Godesberg
trams commute every 7 minutes (tram-number 16 and 63).

From Bonn central-station:

- U-Bahn Line (underground / tram number) 16 or 63,
direction Bad Godesberg
- leave tram at „Max-Löbner-Straße“
- walk down „Max-Löbner-Strasse“ to the end.

From ICE-Station Siegburg / Bonn:

- U / tram-line 66, direction Bonn / Bad Honnef
- leave tram at station „Robert-Schuman-Platz“
- Kurt-Georg-Kiesinger-Allee, turn left to Jean-Monet-Straße, turn left to Heinemann-Straße

by plane:

From airport Cologne / Bonn:

- Bus No. 670 until Hauptbahnhof (Bonn central station)
- From Bonn central-station: take U-Bahn Line (underground/ tram number) 16 or 63, direction Bad Godesberg
- Leave at „Max-Löbner-Straße“
- Walk down „Max-Löbner-Straße“ to the end

– Registration for the Workshop –

Registration and Fee

Registration for the workshop should be sent in by **16 Sept. 2011** (see webpage: www2.fz-juelich.de/iff/jsmd2011/).

Registration fee (incl. 3 nights)	€ 450
Students	€ 225

The fees include accommodation and full board, the book of abstracts and the Conference Dinner.

After registration you will automatically receive the invoice.

Accommodation

Participants will be accommodated on-site at the Gustav-Stresemann-Institut, Bonn. Room sharing may be necessary, due to the restricted number of rooms available.

– Payment –

Bank transfer is preferred.

- **Bank transfer to Sparkasse Düren**
account no: 337709
account holder: Forschungszentrum Jülich
national: banking code: 395 501 10
international: swift code: SDUEDE33XXX
IBAN: DE14 3955 0110 0000 3377 09
– Reference number JSMD and Surname –
- **Credit Card** (please note, there will be 10 € extra fee)
Please use the appropriate form on the webpage:
www2.fz-juelich.de/iff/jsmd2011/

– Cancellation of Participation –

Cancellation	amount due
8 weeks before, until Sept. 17 th	40 % of the conference fee
4 weeks before, until Oct. 14 th	60 % of the conference fee
less than 4 weeks	70 % of the conference fee

All refunds will be made after the Workshop.

– Social Activities –

Social Programme

Tuesday, 15 November 2011, 18:00 to 21:00 hours:

All participants are cordially invited to the Welcome Buffet at the Gustav-Stresemann-Institut, Bonn.

Participants are kindly asked to check-in and pick up the conference material at this time.

Thursday, 17 November 2011, Conference Dinner

– General Information –

Registration Desk

The workshop registration desk will be open on Tuesday, 15 November 2011, from 16:00 to 21:00 h during the Welcome Buffet.

On 16 November 2011, the registration desk will be open from 8:00 h onwards.

From 17 – 18 November 2011, the registration desk will be open from 8:15 h onwards.

We are looking forward to see you in November.

– Scientific Programme –

Tuesday, November 15

18.00 h

-21.00 h Registration / Welcome Buffet

Wednesday, November 16

8.00 h Registration (continued)

8.55 h Opening

Session: Biosystems I

9.00 h C. Marchetti (Syracuse University, USA)

*Collective dynamics of active matter:
From cytoskeleton to migrating cell layers*

9.30 h T. Powers (Brown University, Rhode Island, USA)

Mechanics of swimming microorganisms

10.00 h M. Abkarian (Université Montpellier/CNRS, France)

*Fast elastic egress of malaria parasites from red
blood cells*

10.30 h P. Nassoy (Institut Curie/CNRS, Paris, France)

Growth of cellular spheroids confined in soft capsules

11.00 h Coffee/Tea Break

Session: Colloids I

11.20 h M. Solomon (University of Michigan, USA)

Field-assisted assembly of anisotropic colloids

11.50 h H. Löwen (Universität Düsseldorf, Germany)

*Colloids in external fields: From passive to active
particles*

12.20 h U. Jonas (FORTH, Heraklion, Crete, Greece)

Building hierarchical structures with soft matter

12.50 h B. Frisken (Simon Fraser University, Burnaby, Canada)

Competition between phase separation and crystallization in a colloid-polymer mixture

13.10 h Lunch

Session: Polymers I

- 14.30 h R. Larson (University of Michigan, USA)
Relaxation in entangled polymers with long branches
- 15.00 h A. Khoklov (M.V. Lomonosov Moscow State University, Russian Federation)
Microphase separation for diblock-copolymers: Novel aspects of an old problem
- 15.30 h D. Morse (University of Minnesota, USA)
Correlations in block copolymers: Toward a systematic coarse-grained theory beyond the random phase approximation (RPA)
- 16.00 h K. Saalwächter (Martin-Luther Universität, Halle-Wittenberg, Germany)
NMR-based molecular rheology of entangled polymers in bulk and in nanoscopic confinement
- 16.30 h R. Colby (PennState University, USA)
Designing ionomers for facile ion transport
- 16.50 h Poster session I & Coffee/Tea Break
- 19.00 h Dinner

Thursday, November 17

Session: Self Assembly I

- 8.30 h J. Klein (Weizmann Institute of Science, Rehovot, Israel)
Self-assembly of liposomes in 2D: Exploring the hydration-lubrication paradigm
- 9.00 h F. Bresme (London Imperial College, United Kingdom)
Structure and stability of Newton black films
- 9.30 h J.-B. Fournier (Université Paris/CNRS, France)
Specific and universal effects in membranes
- 10.00 h M. Gradzielski (TU Berlin, Germany)
Interactions between surface modified silica nanoparticles and phospholipid vesicles
- 10.20 h Coffee/Tea Break

Session: Colloids II

- 11.00 h S. Herminghaus (MPI Göttingen, Germany)
Dynamics of active emulsions
- 11.30 h M. Ballauff (HZB Berlin, Germany)
Rheology of concentrated suspensions and the glass transition: Non-stationary experiments
- 12.00 h P. Lang (Forschungszentrum Jülich, Germany)
Near wall dynamics in colloidal suspensions studied by evanescent wave dynamic light scattering
- 12.30 h J. Jose (Universiteit Utrecht, The Netherlands)
Buckling, loading and overloading of monodisperse elastic microcapsules
- 12.50 h W. Richtering (RWTH Aachen, Germany)
Are responsive Mlickering emulsions special?
- 13.10 h Lunch
- 14.30 h Poster session II & Coffee/Tea Break

Session: Biosystems II

- 16.30 h B. Caswell (Brown University, Rhode Island, USA)
Dissipative particle dynamics modeling of blood suspensions flowing in small tubes
- 17.00 h D. Luo (Cornell University, Ithaca, USA)
Engineering DNA as a true polymer for real-world applications
- 17.30 h J. Elgeti (Institut Curie/CNRS, Paris, France)
Tissue simulations
- 18.00 h M. Cieplak (Polish Academy of Science, Warsaw, Poland)
Mechanostability of proteins and virus capsids
- 18.30 h A. Kröger (MPI Mainz, Germany)
Endocytic internalization of nanoparticles into polymeric vesicles
- 19.30 h Conference Dinner

Friday, November 18

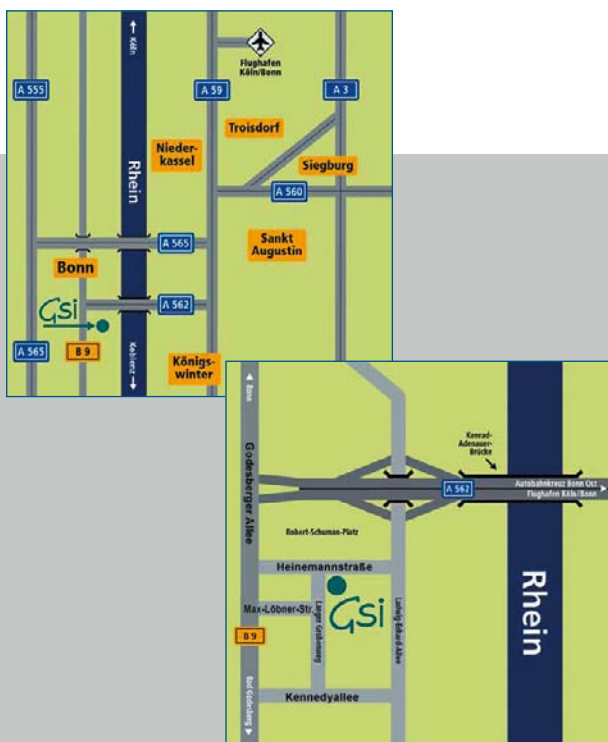
Session: Polymers II

- 8.30 h P. Green (University of Michigan, USA)
Tailoring the structure and properties of chain end-tethered nanoparticles in polymer thin films
- 9.00 h A. Arbe (Universidad del Pais Vasco, San Sebastián, Spain)
Structure and dynamics in concentrated polymer/water mixtures
- 9.30 h K. Nusser (Forschungszentrum Jülich, Germany)
The dynamics of linear polymers in the presence of non-attractive nanoparticles
- 10.00 h F. Tanaka (Kyoto University, Japan)
Cooperative hydration and LCST phase separation of temperature-sensitive water-soluble polymers
- 10.20 h Coffee/Tea Break

Session: Self Assembly II

- 11.00 h S. Sprunt (Kent State University, USA)
Short-range structure and properties of nematic liquid crystals formed by reduced symmetry molecules
- 11.30 h M. Evans (Friedrich-Alexander Universität, Erlangen-Nürnberg, Germany)
From three-dimensional weavings to swollen corneocytes
- 11.50 h M. Cohen Stuart (Wageningen Agricultural University, The Netherlands)
Self-assembly driven by electrostatic attraction
- 12.20 h C. De Michele (Sapienza University of Rome, Italy)
Self-assembly of DNA duplexes into polymer chains: Theory, simulations and experiments
- 12.40 h M. Zeghal (Université Paris Sud/CNRS, France)
Complexes of oppositely charged polyelectrolytes, including DNA
- 13.00 h Closing
- 13.15 h Lunch
- 14.30 h Departure

How to reach Bonn and the Gustav Stresemann Institut:



Address

Forschungszentrum Jülich

Conference Service

52425 Jülich • Germany

phone: +49 2461 61-2292

fax: +49 2461 61-8192

internet: www2.fz-juelich.de/iff/jsmd2011/

e-mail: jsmdays@fz-juelich.de

Important Dates

16 September 2011

Deadline for Registration

15 – 18 November 2011

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