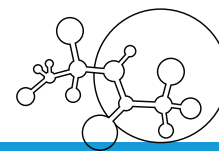


# Program Synopsis

## Black Forest Focus on Soft Matter 5

Saig, May 24-27, 2011



### Tue, May 24

Arrival  
Get Together  
20:00 Welcome Dinner

### Wed, May 25

#### Speaker

#### Title

#### Session 1 - Chair: Jan G. Korvink

09:00 - 09:30 George Whitesides (Cambridge, USA) New types of self-assembly: electrostatic, magnetically levitated, hydrophobic, dynamic, and "other"

09:30 - 09:45  
09:45 - 10:15 Katsuhiko Ariga (Tsukuba, Japan) Interfacial Assemblies for Bridging Macro & Nano: Hand-Operating Nanotechnology

10:15 - 10:30  
10:30 - 11:00 Coffee Break

11:00 - 11:30 Eugenia Kumacheva (Toronto, Canada) Building Polymers from Inorganic Nanoparticles

11:30 - 11:45  
11:45 - 12:15 Tim Liedl (Munich, Germany) Arranging nanoscale components in space with DNA origami

12:15 - 12:30  
12:30 - 14:00 Lunch Break

#### Session 2 - Chair: Eugenia Kumacheva

14:00 - 14:30 Roderich Gross (Sheffield, UK) Self-assembly at the Macroscopic Scale - From Passive Mechanical Parts to Mobile Robots

14:30 - 14:45  
14:45 - 15:15 Tad Hogg (Palo Alto, USA) Robust Self-Assembly Using Highly Designable Structures

15:15 - 15:30  
15:30 - 16:00 Coffee Break

16:00 - 16:30 Heiko Wolf (IBM Zurich, Switzerland) Integration of micro- and nano-scale objects by capillary assembly and adhesive transfer

16:30 - 16:45  
16:45 - 17:15 Sharon Glotzer (Ann Arbor, USA) Self-Assembly and Packing of Tetrahedra and Other Shapes

17:15 - 17:30  
17:30 - 18:30 Free time

18:30 - 20:00 Dinner + Postersession

### Thu, May 26

#### Session 3 - Chair: Miko Elwenspoek

09:00 - 09:30 Mieke Kleijn (Wageningen, The Netherlands) Self-assembly on the mesoscopic scale: molecular interactions and surface forces

09:30 - 09:45  
09:45 - 10:15 Hiro Fujita (Tokyo, Japan) Heterogeneous Process Integration and Self-Assembly

10:15 - 10:30  
10:30 - 11:00 Coffee Break

11:00 - 11:30 José Bico (Paris, France) Playing with surface tension and elasticity for the assembly of small objects

11:30 - 11:45  
11:45 - 12:15 David Gracias (Baltimore, USA) Self-folding materials and devices

12:15 - 12:30  
12:30 - 14:00 Lunch Break

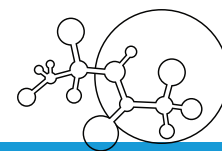
#### Session 4 - Chair: Hiro Fujita

14:00 - 14:30 Andrew Turberfield (Oxford, UK) Controlled transport and reactions using DNA

14:30 - 14:45  
14:45 - 15:15 Paul Chaikin (New York, USA) Self-Replication Without Life

15:15 - 15:30  
15:30 - 16:00 Coffee Break

>> continued on reverse



### Thu, May 26

#### Speaker

#### Title

16:00 - 16:30  
16:30 - 16:45

Oleg Gang  
(Brookhaven Nat. Lab., USA)

Nanoscale systems assembled with DNA: from principles to rational design

16:45 - 17:15  
17:15 - 17:30

Babak Parviz  
(Seattle, USA)

Hybrid live-inanimate self-assembly

17:30 - 18:30

Free time

18:30 - 20:00

Dinner

### Fri, May 27

Session 5 - Chair: Andrew Turberfield

09:00 - 09:30  
09:30 - 09:45

David A. Walker  
(Northwestern Univ., USA)

Electrostatics at the Nanoscale: Nanoions and Supercrystals

09:45 - 10:15  
10:15 - 10:30

Richard Symms  
(London, UK)

Advances in surface tension self-assembly

10:30 - 11:00

Coffee Break

11:00 - 11:30  
11:30 - 11:45

Devarian Thirumalai  
(Univ. Maryland, USA)

Architectural basis of functions of Biological Machines

11:45 - 12:15  
12:15 - 12:30

Luc Jaeger  
(UCSB, USA)

RNA self-assembly in nanobiotechnology

12:30 - 14:00

Lunch Break

Departure