

Speakers and Topics of the Summer School

Among others:

- Prof. Long-Qing Chen: Simulations of solid-solid Transformations
- Laszlo Granasy: Crystal Simulations
- Jeffrey J. Derby: Crystallization
- Greg Rutledge: Molecular Modeling of Crystallization and Semicrystalline Polymers
- Patrick Ilg: Molecular Dynamics Simulations and Coarse Graining
- Prof. Phanikumar: Applications to solidification processing
- Kostas Doulas: Monte Carlo Simulations for Soft Matter Systems
- Alexander Umantsev: Simulation for liquid-solid systems
- Hans Jürgen Seifert: Thermo-dynamic Modeling
- Markus Rauscher: DDFT

Interested? Please join us!

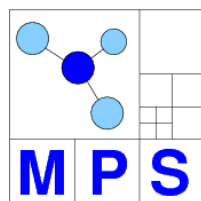
To apply for participation or for further information please contact:

Theresa Dollhopf
Program-Coordination

**Deadline for application:
30.6.2010.**

Phone: +49 921 55-7551
E-Mail: koordination-spp1296@uni-bayreuth.de
theresa.dollhopf@uni-bayreuth.de

Chair of:
Material and Process Simulation
Univ.-Prof. Dr.-Ing. Heike Emmerich
Gottlieb-Keim-Str. 60
D-95448 Bayreuth
Germany



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Priority Program 1296:

**Heterogeneous Nucleation
and
Microstructure Formation:**

**International Summer School
2010**

Bayreuth, 19.-23.07.2010,

Arvena Kongress-Hotel

Outline of the Summer School program 2010

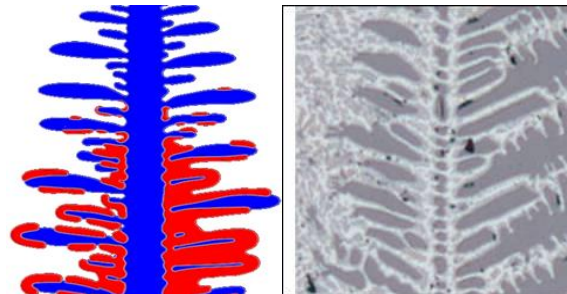
In 2006 the German Research Foundation established the priority program "Heterogeneous Nucleation and Microstructure Formation". The program provides financial support for 20 projects of German Institutes to investigate the foundations of heterogeneous nucleation in a system- and scale-bridging manner, following the outline given in the flyer.

To stimulate the interdisciplinary work between the groups and to attach this work to the international community, there is additional support available for summer schools, workshops and conference organization.

Therefore, if our outline reaches you as one of the international experts in this field, we would like to invite you to contact us for the organization of joint international events or to simply invite you to our national ones.

With this flyer we in particular invite you to our international summer school taking place 19.-23.7.2010 in the Arvena Kongress-Hotel, Bayreuth.

The goal of the DFG Priority Program 1296 is to attain a fundamental understanding of the basic mechanisms underlying heterogeneous nucleation as well as the subsequent development of the nucleus into a specific heterogeneous micro-structure. In particular, a system and method-spanning scientific approach is intended to contribute to a detailed, multi-scale understanding of these mechanisms, which is intended to be applied successively and system independently on different kinds of material systems.



Summer School 2010

The 2010 international Summer School of the Priority Program 1296 will provide an overview over the forefront theoretical and experimental tools to tackle the above open scientific issues. These include molecular and thermodynamic simulation methods, phase-field and phase-field crystal methods as well as corrupting experimental techniques.

The Summer School provides a didactic overview over these techniques with special focus on nucleation problems.

Outreach topics to be presented include among others:

- Nucleation energies in solid-solid transformation
- Nucleation in polymers
- New application of phase-field crystal modeling for nucleation