

International Workshop on  
**Polymorphism in Condensed Matter**

November 13 - 17, 2006

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A classical model system for polymorphic materials are pure metallic melts. As another model system of condensed matter with polymorphic character colloidal suspensions were established recently. For both model systems recent research activities are concerned with understanding the precise nucleation kinetics and the structure- and phase dynamics connected to this. From an experimental point of view the parameters which quantify the nucleation and growth kinetics can be measured more easily in colloids than in metallic melts. This concerns among others the nucleation rate, the interface energies as well as the kinetic and capillar anisotropies of an interface between coexisting phases. For this reason colloids are important model systems to investigate the above problems in multi-phase materials with the hope to thereby gain further insight in corresponding processes in metallic material systems, as well. From a theoretical point of view the work on a detailed understanding of the nucleation kinetics of multi-component metallic systems as well as of colloids leads to the question how sustainable multi-scale descriptions of such structure-formation processes based on the interplay between phase separation and nucleation/crystallisation in multi-phase systems may be obtained.

Therefore the aim of this workshop is to bring together scientists working with different methods on the above question in both fields, colloids as well as metallurgy, with the goal to achieve meaningful advances resulting in a more detailed understanding of heterogenous nucleation and successive growth kinetics in general.

*Invited speakers:*

M. Allen (Warwick)  
 J. van der Eerden (Utrecht)  
 L. Gránásy (Budapest)  
 A. Karma (Boston)  
 G. Maret (Konstanz)  
 H. Müller-Krumbhaar (Jülich)  
 P. Schall (Amsterdam)  
 F. Spaepen (Harvard)  
 A.A. Wheeler (Southampton)

J. Eckert (Darmstadt)  
 P. Galenko (Köln)  
 D. Holland-Moritz (Köln)  
 P. Leiderer (Konstanz)  
 R. Mathiesen (Trondheim)  
 J. Neugebauer (Düsseldorf)  
 T. Schilling (Mainz)  
 D. Weitz (Harvard)

D. Frenkel (Amsterdam)  
 L. Greer (Cambridge)  
 J. Horbach (Mainz)  
 H. Löwen (Düsseldorf)  
 A. Meyer\* (München)  
 M. Plapp\* (Paris)  
 L. Schultz\* (Dresden)  
 M. Wuttig (Aachen)

\* (to be confirmed)

Applications for participation and poster contributions are welcome and should be made by using the application form on the workshop web page (see web page below). The number of attendees is limited. The registration fee for the workshop is €100. Costs for the accommodation and meals will be covered by the Max Planck Institute. In exceptional cases, funding is available to partially cover travel expenses, provided by the DGKK. For this contact has to be directed to the DGKK chairman Prof. Dr. Wolf Aßmus at Frankfurt University directly.

Aside the workshop, on Monday 13th November, 12.30 am - 4.00 pm, the kick-off meeting of the newly founded DFG priority program 1296 "Nucleation and growth kinetics in colloids and metals - Steps towards a scale- and system-bridging understanding" will take place. For further information please see the web page below.

**Deadline for applications for both events is September 30, 2006.**



For further information please contact:  
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