

SKM-Symposium Heterogenous Nucleation and Microstructure Formation: Steps towards a System- and Scale-bridging Understanding (SKM-SYMF)

jointly organized by
the Metal and Material Physics Division (MM),
the Dynamics and Statistical Physics Division (DY),
the Thin Films Division (DS),
the Chemical and Polymer Physics Division (CPP), and
the Surface Science Division (O)

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During the past decades materials research was accompanied by great efforts to control materials structures at successively smaller scales. Despite this tremendous efforts, the primary steps of this structure forming process, i.e. the heterogeneous nucleation event and initial microstructure formation, are still hardly understood. In this symposium fundamental interdisciplinary contributions, which will close the above gap by research of simple types of model systems for heterogeneous crystalline structures, i.e. metallic alloys, colloids and polymers, shall be brought together to create a new synergetic understanding.

Overview of Invited Talks and Sessions

(lecture room TRE Ma)

Invited Talks

SKM-SYMF 1.1	Thu	14:30–15:00	TRE Ma	Visualizing the structural solid-liquid transition with colloidal suspensions — ●PETER SCHALL
SKM-SYMF 1.2	Thu	15:00–15:30	TRE Ma	Crystallization process in suspensions of hard spheres — ●TANJA SCHILLING, HANS-JOACHIM SCHOEPE, MARTIN OETTEL, GEORGE OPLETAL, IAN SNOOK
SKM-SYMF 1.3	Thu	15:30–16:00	TRE Ma	Homogeneous bulk, surface, and edge nucleation in crystalline nanodroplets — ●KARI DALNOKI-VERESS, JESSICA CARVALHO
SKM-SYMF 1.4	Thu	16:00–16:30	TRE Ma	Polymer Crystallization: Ordered Structures in Complex Systems — ●JENS-UWE SOMMER
SKM-SYMF 1.5	Thu	16:30–17:00	TRE Ma	Phase formation and microstructure development in multi-component alloys — ●JÜRGEN ECKERT

Sessions

SKM-SYMF 1.1–1.5	Thu	14:30–17:00	TRE Ma	Heterogenous Nucleation and Microstructure Formation: Steps towards a System- and Scale-bridging Understanding
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