



1st Announcement

Bio-inspired Materials

International School and Conference on Biological Materials Science



20 - 23 March 2012

Kongresshotel Potsdam Germany

Deutsche Gesellschaft für Materialkunde e.V. - DGM

DGM

Scope

Biological materials science is developing rapidly as a new field at the interface between materials science



and biology. The reasons are quite diverse: On the one hand, the advances in regenerative medicine generate an ever growing

need for new types of biomaterials with specific and well-defined interactions with the biological hostorganism. On the other hand, recent advances in materials characterization and fabrication technologies have prompted scientists to ask how one can reformulate the structure of natural materials, taking advantage of the long-tried course of evolution and natural-selection, and utilizing this in bio-inspired designs for engineering applications. This approach leads to new classes of advanced, often hierarchically structured materials, with unusual combinations of properties and capabilities to self-assemble, self repair and/or evolve. Because material properties can be critical for the biological function of molecules, tissues and organs, materials science approaches also contribute to some areas of biology. These different facets constitute the vast and growing field of biological materials science.

The International School and Conference on Biological Materials Science aims at bringing together scientists from different backgrounds all interested in understanding the structural origin of the materials properties of living tissues and on using their construction principles for the synthesis of bio-inspired materials in a variety of applications of engineering and medicine.

The conference will host several invited keynote lectures, oral as well as poster contributions. The conference will be preceded by a summer school on the same topic, intended to introduce young scientists to this emerging field.

Peter Fratzl

Chairman of the Conference, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

Call for Papers

Authors are invited to submit abstracts for posters and contributed lectures through the conference website

www.dgm.de/bio-inspired.
The deadline for abstract submission is 30. 11. 2011.

Summer School

The first two days (Beginning: March 18 evening, end: March 20 afternoon) are devoted to a Summer School (Nachwuchsakademie sponsored by SPP1420) where young participants can present drafts for one-year projects within the SPP. There will be scientific lectures as well as lectures more related to the mentoring of young scientists wanting to submit project applications in the area of biological materials sciences. For further information about SPP1420 and the summer school, see

spp1420.mpikg.mpg.de

Programme Committee

- P. Fratzl, Chairman of the Conference, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany
- **A. Bührig-Polaczek**, RWTH Aachen, Germany
- **C. Fleck**, Technical University Berlin, Germany
- **S.N. Gorb**, Christian-Albrechts-University of Kiel, Germany
- **P. Greil**, University of Erlangen-Nürnberg, Germany
- **D. Raabe**, Max-Planck Institute for Iron Research, Germany
- **T. Speck**, Botanic Garden of the University of Freiburg, Germany
- **P. Zaslansky**, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

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- **E. Zolotoyabko**, Technion, Israel Institute of Technology

General Information

Location

The symposium will take place at Kongresshotel Potsdam
Am Luftschiffhafen 1,
14471 Potsdam,
Germany

Further information on the Kongresshotel Potsdam: www.kongresshotelpotsdam.com/en/home.html

Conference and Exhibition Secretariat Deutsche Gesellschaft

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Conference Fee

PHD Students

(< 35 years): EUR 250,-University: EUR 550,-Industry: EUR 850,-

Conference fee for DGM members:

PHD Students

(< 35 years): EUR 225,-University: EUR 500,-Industry: EUR 765,-

The conference fee includes admittance to the Scientific Programme, coffee breaks, Welcome Reception and Conference Dinner.

Key Dates and Deadlines:

Submission of Abstracts 30 Nov 2011 Notice to Authors Jan 2012 Preliminary Programme Feb 2012