## The 139<sup>th</sup> iCeMS SEMINAR

## Wed 03 July 2013 11:00-12:30

## Biomaterial based polarization of macrophage response: can biomaterial 3D-design stimulate healing?

Lecturer:

## Prof. Dr. Jürgen Groll

University of Würzburg, Germany

Venue: 2nd Floor Seminar Room (#A207) iCeMS Main Building (#70), Kyoto University

The fate of any type and geometry of biomaterial in the human body is strongly correlated to the innate immune reaction it provokes. We have thus over the last years evaluated the role of surface chemistry, size and shape (in case of nanoparticles) or morphology (in case of macroscopic fibrous scaffolds) on the activation and polarization of primary human peripheral blood phagocytes, especially monocytes and macrophages derived thereof. This lecture will summarize our results and recent research activities towards biomaterials and scaffold design with immunomodulatory effects.







