



The ICAMS Seminar presents

**Dr.-Ing. Ulrich Prah**

RWTH Aachen

Department of Ferrous Metallurgy, Institut für Eisenhüttenkunde

Monday, 27th of April, 4 p.m.  
ICAMS Seminar room UHW 11/1102

## **AixViPMaP® - Development of a Platform for Integrative Modelling of Materials Processing**

In many applications the functionality of a product is based on the materials properties. As the materials properties are the results of many process steps, the design, the optimisation and the control of processes and process chains is crucial for the optimal fabrication of materials and products. Modern numerical tools and computational approaches gain increasing importance in industrial production. Besides the further development of models for special problems an increasing need has been documented for the design of common interfaces and data structures in order to assure an applicable use of model chains for engineering problems. Within the Aachen Cluster of Excellence Integrative Production Technology for High-Wage Countries the project AixViPMaP® is performed, where a virtual platform for the multiscale and process-overlapping modelling of materials during production, treatment and application will be developed. The platform design and first examples for the grid based simulation of process chains will be presented.