

16th Seminar “Computer Modeling in Microwave Power Engineering” Multiphysics Models & Material Properties

May 12–13, 2014
Karlsruhe, Germany



This forum will be carried out as the next (16th) event in the series of seminar/workshops “Computer Modeling in Microwave Power Engineering” organized annually by the **Industrial Microwave Modeling Group (IMMG)** of the **Worcester Polytechnic Institute (WPI)**, Worcester, MA, USA. In 2014, it will be co-organized by the **Institute for Pulsed Power and Microwave Technology (IHM)**, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

Technical Topics

Aiming to illuminate some modern trends in the development evolution of **computational technologies applicable to a variety of scenarios in microwave power engineering**, contributions to the topics related (but not limited) to the following are invited:

- Advances in development of electromagnetic-thermal models of systems and processes of microwave power engineering
- Models coupling electromagnetic phenomenon with other than thermal components of microwave heating
- Methodology, strategy, concepts of modeling of microwave processing of materials
- Determination of electromagnetic and thermal material parameters (including temperature- and density-dependent characteristics)
- Microwave imaging of materials; non-destructive evaluation & non-destructive testing
- Virtual experimentation in research, physical prototyping, and industrial applications
- Material properties of particulate materials – ceramic, metal, and composite powders.

Important Dates

Submission of titles and abstracts: **March 10, 2014**
Notification of acceptance: **March 28, 2014**
Submission of papers: **April 11, 2014**
Preliminary program: **April 21, 2014**
Seminar: **May 12-13, 2014**

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In Cooperation with: **Society for Industrial and Applied Mathematics (SIAM)**



Venue

The Seminar will be held in the facilities of the KIT, one of the largest academic institutions worldwide, pursuing two missions – of a university with tasks in research and teaching and of a large-scale research institution of the national Helmholtz Association. The IHM, one of the KIT's institutes, conducts basic and applied research in the field of high-power microwave technologies in a wide frequency and power range.

Seminar Structure

Technical sessions will take place on Monday, May 12, in the afternoon and the whole day of Tuesday, May 13. Monday morning will be occupied by the visit to the research and industrial facilities in the KIT and in the area.

The Seminar Gala Dinner is planned for the evening of Monday, May 12.



Endorsed and sponsored by: **Association for Microwave Power in Europe for Research and Education (AMPERE)**



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