

17th Seminar “Computer Modeling in Microwave Power Engineering” Methods & Models for Microwave Processing of Materials

March 11–12, 2015

Bled, Slovenia



This forum will be carried out as the next (17th) 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 2015, it will be co-organized by the **Laboratory for Simulations of Materials and Processes, Institute of Metals and Technology (IMT)**, Ljubljana, Slovenia

Technical Topics

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

- ❑ Electromagnetic and multiphysics models of systems and processes of microwave power engineering
- ❑ Methodology, strategy, concepts of modeling of microwave processing of materials
- ❑ Virtual experimentation in research, physical prototyping, and industrial applications
- ❑ Determination of electromagnetic and thermal material parameters
- ❑ Composite materials, metamaterials and nanomaterials in microwave power engineering
- ❑ Modeling-based microwave imaging of materials; non-destructive evaluation and testing
- ❑ Analytical and numerical methods for inverse electromagnetic scattering

Important Dates

Submission of titles and abstracts: **January 9, 2015**
Notification of acceptance: **January 23, 2015**
Submission of papers: **February 4, 2015**
Preliminary program: **February 23, 2015**
Seminar: **March 11-12, 2015**

Seminar Chair: **Vadim Yakovlev** (vadim@wpi.edu)
Worcester Polytechnic Institute, Worcester, MA, USA
Seminar Vice-Chair: **Božidar Šarler** (bozidar.sarler@imt.si)
Institute of Metals and Technology, Ljubljana, Slovenia

Seminar Secretaries: **Erin Kiley** (emkiley@wpi.edu)
Worcester Polytechnic Institute, Worcester, MA, USA
Vesna Nahtigal (martina.huber@kit.edu)
Institute of Metals and Technology, Ljubljana, Slovenia

Organizing & Program Committee: **Didier Bouvard**, INP-Grenoble, France
José Catalá-Civera, Polytechnic Univ. of Valencia, Spain
Cristina Leonelli, Univ. of Modena & Reggio Emilia, Italy
Marilena Radoiu, SAIREM, France
Yury Shestopalov, University of Gävle, Sweden
Sébastien Vaucher, EMPA, Switzerland
Paolo Veronesi, Univ. of Modena & Reggio Emilia, Italy
Suzanne Weekes, Worcester Polytechnic Inst., USA
Monika Willert-Porada, University of Bayreuth, Germany

Local Organization & the Venue

Institute of Metal and Technology, a leading Slovenian research institution, is active in a variety of areas in basic and applied research as well as developmental and infrastructural activities. The Institute is focused on environmental protection, monitoring the environmental processes and development of new, clean energies.

Laboratory for Simulation of Materials and Processes is involved in the developments for numerical modeling of materials and processes and the use of emerging knowledge in improvement of production processes and products.

The Seminar will be held in **Hotel Lovec** in Bled, an Alpine town on the bank of Lake Bled in northwestern Slovenia, a popular tourist destination known to be scenic and refreshing in all seasons.

Seminar Structure

Technical sessions will take place on Wednesday, March 11, in the afternoon and the whole day of Thursday, March 12. Wednesday morning will be occupied by an excursion to a Slovenian industrial site operational in the related technical area.



In cooperation with:

Society for Industrial and Applied Mathematics (SIAM)



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

