

**ic-rmm2**

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## **2<sup>ND</sup> INTERNATIONAL CONFERENCE ON RHEOLOGY AND MODELING OF MATERIALS**

October 5-9, 2015/ Miskolc-Lillafüred, Hungary

**Organized by** the International Scientific Advisory Board (**ISAB**),  
International Organizing Committee (**IOC**) and  
Session Chairs



**ic-rmm2**



## Abstract

Understanding the rheological properties of materials and their rheological behaviors during their manufacturing processes and in their applications in many cases can help to increase the efficiency and competitiveness not only of the finished goods and products but the organizations and societies also. The more scientific supported and prepared organizations develop more competitive products with better thermal, mechanical, physical, chemical and biological properties and the leading companies apply more competitive equipment and technology processes.

The aims of the **2<sup>nd</sup> International Conference on Rheology and Modeling of Materials (ic-rmm2)** and the parallel organized symposiums of the **1<sup>st</sup> International Symposium on Powder Injection Molding (is-pim1)** and the **1<sup>st</sup> International Symposium on Rheology and Fracture of Solids (is-rfs1)** are the followings:

- Promote new methods and results of scientific research in the fields of modeling and measurements of rheological properties and behavior of materials under processing and applications;
- Change information between the theoretical and applied sciences as well as technical and technological implantations.
- Promote the communication and collaboration between the scientists, researchers and engineers of different disciplines, different nations, countries and continents.

The international conference **ic-rmm2** and symposiums of **is-pim1** and **is-rfs1** provide a platform among the leading international scientists, researchers, PhD students and engineers for discussing recent achievements in measurement, modeling and application of rheology in materials technology and materials science of liquids, melts, solids, crystals and amorphous structures. Among the major fields of interest are the influence of materials structures, mechanical stresses, temperatures, deformation speeds and shear rates on rheological and physical properties, phase transformation of foams, foods, polymers, plastics and other competitive materials like ceramics, nanomaterials, medical- and biomaterials, cosmetics, coatings, light metals, alloys, glasses, films, composites, hetero-modulus, hetero-viscous, hetero-plastic complex materials, petrochemicals and hybrid materials.

Multidisciplinary applications of rheology and rheological modeling in material science and technology encountered in sectors like alloys, ceramics, glasses, thin films, polymers, clays, construction materials, energy, aerospace, automotive and marine industry. Rheology in food, chemistry, medicine, biosciences and environmental sciences are of particular interests.

In accordance to the program of the conference **ic-rmm2** and symposiums **is-pim1** and **is-rfs1** we have received more than **250** inquires and registrations from different organizations. Finally more than **240** abstracts were accepted for presentation. From them **12** were PLENARY lectures and **112** ORAL presentation. Researchers from **41** countries of Asia, Europe, Africa, North and South America arrived to Miskolc-Lillafüred (**Hungary**) and participated in the events of the conference. Including co-authors, the research work of more than **700** scientists were presented in the SESSIONS and SYMPOSIUMS of **ic-rmm2** conference.

Prof. Dr. László A. Gömze  
*chair, ic-rmm2*

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## SESSIONS AND SYMPOSIUMS

1. Rheology and Modeling of Clays, Minerals, Rocks and Soils
2. Rheology and Modeling of Polymers
3. Rheology of Foods and Dairies
4. Avalanche Dynamics in Rheology and Phase Transitions
5. Experimental Study and Modeling of Complex Flows
6. Rheology and Modeling of Petrochemical Materials and Asphalt Pavements
7. Multiscale Mechanics of Materials
8. Rheological Fluid Mechanics
9. Rheology and Modeling of Biological Systems
10. Rheology and Modeling of Construction Materials, Mortars and Concretes
11. Rheology of Emulsions, Suspensions and Foams
12. Rheology of Ferrofluids and Magneto-rheological Materials
13. Rheology and Modeling of Fluid Interfaces
14. Rheology of Melted Metals and Glasses
15. Rheology of Nanofluids
16. Rheology of Drugs and Cosmetic Materials
17. Rheology Measureme Methods, Equipments and Errors
18. Rheology of Carbon Structures (RCS)
19. Rheology and Modeling of Hetero-modulus, Hetero-viscous Complex Materials and Composites

**is-pim1** The 1st International Symposium on Powder Injection Molding

**is-rfs1** The 1st International Symposium on Rheology and Fracture of Solids

Some of the presented works of the **ic-rmm2** conference were selected by the Editorial Board of scientific journal **Építőanyag-JSBCM** and were published in it as the followings:

R. Bansil, J. Hardcastle and M.Constantino 2015 *Építőanyag-JSBCM* **67** 150

<http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.25>

Y. Wang, D.A. Lakho and D.Yao 2015 *Építőanyag-JSBCM* **67** 132

<http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.21>

S.O. Umerova, I.O.Dulina and A.V. Ragulya 2015 *Építőanyag-JSBCM* **67** 119

<http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.19>

A. Slobodov, A. Uspenskiy, R. Ralys and D. Kremnev 2015 *Építőanyag-JSBCM* **67** 159

<http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.27>

S.N. Kulkov, S.P. Buyakova, M. Chatzinikolaidou and I. Kocserha 2015 *Építőanyag-JSBCM*

**67** 155 <http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.26>

A. Slobodov, A. Uspenskiy, S. Yavshits and A. Mischenko 2015 *Építőanyag-JSBCM* **67** 164

<http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.28>

L.A. Gömze, L.N. Gömze, S.N. Kulkov, I. Shabalin, I. Gotman, F. Pedraza, G. Lecomte,

T. Mayorova, E. Kurovics and A. Hamza 2015 *Építőanyag-JSBCM* **67** 143

<http://dx.doi.org/10.14382/epitoanyag-jsbcm.2015.24>

H. Hornahad, E.A.B.Koenders, K. van Breugel 2015 *Építőanyag-JSBCM* **67** 135

## ACKNOWLEDGEMENT

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**Journals:** Academic Journals

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