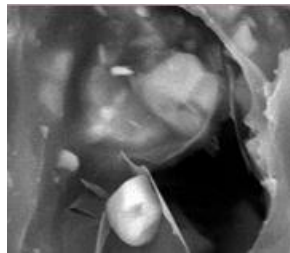


ic-rmm2 CONFERENCE DETAILED PROGRAM

**2nd International Conference on
Rheology and Modelling of Materials**

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

CONFERENCE PROGRAM



ic-rmm2

ic-rmm2 CONFERENCE DETAILED PROGRAM

SESSIONS

- 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 Molten 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**
- 19. Rheology and Modeling of Hetero-modulus, Hetero-viscous Complex
Materials and Composites**

SYMPOSIUMS

- is-pim1 - The 1st International Symposium on Powder Injection Molding**
- is-rfs1 – The 1st International Symposium on Rheology and Fracture
of Solids**

ic-rmm2 CONFERENCE DETAILED PROGRAM

October 5. Monday	HUNYADI JÁNOS HALL
14:00 - 14:40	CONFERENCE OPENING
14:40 - 16:00	PLENARY I. and Exhibitors
16:00 - 16:30	POSTER SESSION I. and COFFEE BREAK
16:30 - 19:00	PLENARY LECTURES II. and KEYNOTE LECTURES I. and SHORT ORALS I.
19:00 -	WELCOME RECEPTION

October 6. Tuesday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 - 10:30	KEYNOTE LECTURES II.	
10:30 - 10:50	COFFEE BREAK	
10:50 - 12:30	SESSION 11 and <i>is-pim1</i>	SESSION 12
12:30 - 14:00	BUFFET LUNCH	
14:00 -19:00	SOCIAL PROGRAM I.	

October 7. Wednesday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 - 10:30	KEYNOTE LECTURES III.	
10:30 - 10:50	COFFEE BREAK	
10:50 - 12:30	SESSION 1	SESSION 2
12:30 - 14:00	BUFFET LUNCH	
14:00 -20:30	SOCIAL PROGRAM II.	

ic-rmm2 CONFERENCE DETAILED PROGRAM

October 8. Thursday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 – 10:30	KEYNOTE LECTURES IV.	
10:30 – 10:50	POSTER SESSION II. and COFFEE BREAK	
10:50 – 12:30	SESSION 5	SESSION 2
12:30 – 14:00	BUFFET LUNCH	
14:00 -16:00	SESSION 6 and 10	SESSION 1and <i>is-rfs1</i>
16:00 -16:30	POSTER SESSION III. and COFFEE BREAK	
16:30 -18:30	SESSION 3, 9 and 17	SESSION 14 and 19
20:00 -22:30	CONFERENCE DINNER	

October 9. Friday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 – 9:30	KEYNOTE LECTURES V.	
9:30 – 10:40	SHORT ORALS II.	
10:40 – 11:00	COFFEE BREAK	
11:00 – 13:00	SESSION 7 and 8	
13:00 – 13:30	CONFERENCE CLOSING	

ic-rmm2 CONFERENCE DETAILED PROGRAM– October 5. Monday

11:00 – 12:30 **ic-rmm2 Conference Board Meeting (Renesansz Hall)**
Prof. Dr. Laszlo A. GÖMZE, chair of **ic-rmm2** Conference

OPENING CEREMONY AND PLENARY LECTURES I. **Chair:** Prof. Dr. Sergei N. KULKOV, Tomsk State University (Russia)

14:00 – 14:05 **ic-rmm2 Conference Opening**
Prof. Dr. Sergei N. KULKOV (Russia)

14:05 – 14:15 **Welcome Address**
Prof. Dr. Igor EMRI – president of ICR, The International Committee on Rheology

14:15 – 14:30 **Építőanyag - Journal of Silicate Based and Composite Materials Welcomes the Participants of ic-rmm2 Conference**
Dr. Adorján BOROSNYÓI – Editor in Chief (Hungary)

14:30 – 14:40 **Welcome and General Information**
Prof. Dr. László A. GÖMZE – University of Miskolc (Hungary), - chair of **ic-rmm2** Conference

14:40 – 15:20 **PLENARY LECTURE – 1ST**
Effect of Pressure and Temperature on Behaviour of Solid-Polymers. Current Status and Prospectives.
Prof. Dr. Igor EMRI – University of Ljubljana (Slovenia)

15:20 – 16:00 **PLENARY LECTURE – 2ND**
Specific mechanisms of the self-assembly of carbon nanostructures in solutions as the basis for the understanding their rheological properties.
Prof. Dr. Vasily LEBEDEV - Petersburg Nuclear Physics Institute (Russia)

16:00 – 16:30 **POSTER SESSION I. and COFFEE BREAK**

ic-rmm2 CONFERENCE DETAILED PROGRAM– October 5. Monday

POSTER SESSION I. Chair: Prof. Dr. László A. GÖMZE, University of Miskolc (Hungary)	
1.	Clay-cement suspensions- rheological and functional properties Łukasz Wójcik, Piotr Izak and Daniel Słowikowski
2.	Hardening Kinetics Investigation of Alkali-activated Binder by Small Amplitude Oscillatory Rheometry David Rieger, Lucie Kullová, Marcela Čekalová and Tomáš Kovářík
3.	Rheological characterization of geopolymer binder modified by organic resins Marcela Čekalová, David Rieger, Tomáš Kovářík
4.	Effect of Magnetic Field on the Rheological Properties of Cellulose Ether and its Derivatives Soliman T.S., Galyas A.G., Rusinova E.V. and Vshivkov S.A
5.	Rheological properties of recycled polyethylene and compositions based on it with rubber crumb that contain additives of ethylene vinyl acetate copolymers Volodymyr Myshak, Olena Siryk, Vita Semynog
6.	Rheological properties of poly(vinyl alcohol) (PVA) derived composite membranes for fuel cells Tomáš Remiš
7.	Rheological characterization of carboxymethylcellulose solutions: effect of concentration, shear rate and temperature Khaled Benyounes, Abdelbaki Benmounah and Abderrahmane Mellak
8.	Thermo-rheological behavior of nanocomposites based on self-healing polymeric matrix Panagiotis Georgiopoulos, Angelos Christopoulos, Evagelia Kontou and Anastasia Meristoudi
9.	Evaluation of thermal degradation of polymer based electronic materials by non-destructive testing Peyman Rafiee, Golta Khatibi, Martin Lederer, Michael Zehetbauer and Rainer Pelzer
10.	Modification of Rheological Properties of Screen Printing Ceramic Paints Containing Gold Piotr Izak, Agata Stempkowska, Joanna Mastalska Popławska and Jerzy Lis
11.	Effect of New Polymeric Additives on the Rheological Properties of Shear Thickening Fluids. Malgorzata Gluszek, Agnieszka Antosik, Radoslaw Zurowski and Mikolaj Szafran
12.	Core-shell Magnetic Biocompatible Particles and Their Magnetorheological Performance Tomas Plachy, Patrik Rohrer, Vladimir Pavlinek
13.	Dynamic characterization of Magnetorheological damper and Experimental Numerical Model Adjustment Said Boukerroum
14.	Luminescent method of assessing the structural modifications of polymer matrices Jaroslav Karitsky, Svetlana Karitskaya
15.	Mechanically Activated Fly Ash as a High Performance Binder for Civil Engineering David Rieger, Lucie Kullová, Marcela Čekalová, Pavel Novotný and Michal Pola
16.	The impact of zeolite additives on the rheological properties of modified cement-based pastes Gintautas Skripkiūnas, Mindaugas Macijauskas and Giedrius Girskas
17.	Viscoelastic behavior of Asphalt modified by grafted tri-block copolymers: predictions of fractional rheological model María A. Vargas and Octavio Manero
18.	Tunneling of superradiant photons through brain microtubules modeled as metamaterials Luigi Maxmilian Caligiuri
19.	Design and application of acoustic metamaterials for the control and optimization of sound field inside closed environments Luigi Maxmilian Caligiuri

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 6. Tuesday

October 6. Tuesday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 – 10:30	KEYNOTE LECTURES II.	
10:30 – 10:50	COFFEE BREAK	
10:50 – 12:30	SESSION 11 and is-pim1	SESSION 12
12:30 – 14:00	BUFFET LUNCH	
14:00 -19:00	SOCIAL PROGRAM I.	

HUNYADI JANOS HALL	
KEYNOTE LECTURES II. Chair: Prof. Dr. László A. GÖMZE, University of Miskolc (Hungary)	
8:30 - 9:00	Thermal treatment of anaerobic digested sludge: Kinetic similarity of sludge rheology and organic matter solubilisation Nicky Eshtiaghi, Ehsan Farno, Jean Christophe Baudez and Raj Parthasarathy - RMIT University, Australia
9:00 - 9:30	Multiscale, Multiphysics Computational Chemistry Method based on Ultra-Accelerated Quantum Chemical Molecular Dynamics for Possible Rheological Applications Akira Miyamoto, Patrick Bonnaud, Ryuji Miura, Ai Suzuki, Naoto Miyamoto, Nozomu Hatakeyma, Sumio Kozawa and Mark C. Williams - Tohoku University, Japan
9:30 - 10:00	Rheology in clay-based materials processing Gisèle Laure Lecomte - CEC - ENSCI, France
10:00 - 10:30	Shear thickening fluids – designing, properties and applications Mikolaj Szafran, Agnieszka Antosik, Malgorzata Gluszek, Radoslaw Zurowski - Warsaw University of Technology, Poland
10:30 – 10:50	COFFEE BREAK
ORAL PRESENTATIONS SESSION 11 and is-pim1 Chair: Prof. Dr. Dennis A. SIGINER, Botswana International University of Science and Technology (Botswana)	
10:50 - 11:10	Fibre materials formed with aqueous foam as the carrier phase Ahmad M. Al-Qararah, Axel Ekman, Tuomo Hjelt, Jukka A. Ketoja, Harri Kiiskinen, Antti Koponen and Jussi Timon
11:10 - 11:30	Material data for numerical simulation of powder in jecton molding Ivica Duretek and Clemens Holzer
11:30 - 11:50	Rheological Study Of Copper and Copper-Graphene Feedstock for Powder Injection Molding Natasha Emira Azman, Muhammad Rafi Raza, Norhamidi Muhamad, Majid Niaz Akhtar and Abu Bakar Sulong
11:50 - 12:10	Temperature Dependence of Rheological Characteristics of Polidocanol Foam in Conditions of Continious Shear Deformation Evgenia Korobko, Svetlana Vilanskaya, Aleksangor Baeshko, Nikita Shestak

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 6. Tuesday

BEATRIX HALL

ORAL PRESENTATIONS

SESSION 12

Chair: Prof.Dr. Sergei KULKOV,

Institute of strength physics and materials science SB RAS (Russia)

10:50 - 11:10	Simulation of interaction of electromagnetic radiation with the surface of solid with regular self-similar forms Gennadi Lukyanov, Alexander Kopyltsov, Victor Tupik and Vladimir Margolin
11:10 - 11:30	On the Mechanical Loss in Ferroelastic Shape Memory Alloys Yumei Zhou, Dezhen Xue, Xiangdong Ding and Jun Sun
11:30 - 11:50	On the modelling of rheological behavior of MRFs as Robertson–Stiff fluids Martin Cvek, Miroslav Mrlik, Vladimir Pavlinek
11:50 - 12:10	The effect of dipolar interaction on viscoelastic properties Noor Jahan, Komal Jain, and R.P.Pant
12:10 - 12:30	Induced size effect on tribological properties of ferroluid Mahesh Chand, Sandeep Kumar, Noor Jahan, Dhruv Bakshi and R. P. Pant

12:30-14:00

LUNCH

14:00-19:00

SOCIAL PROGRAM I. and Free Program

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 7. Wednesday

October 7. Wednesday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 – 10:30	KEYNOTE LECTURES III.	
10:30 – 10:50	COFFEE BREAK	
10:50 – 12:30	SESSION 1	SESSION 2
12:30 – 14:00	BUFFET LUNCH	
14:00 -19:30	SOCIAL PROGRAM II.	

HUNYADI JANOS HALL	
KEYNOTE LECTURES III. Chair: Prof. Dr. Vasily Lebedev, Petersburg Nuclear Physics Institute (Russia)	
8:30 - 9:00	How Helicobacter Pylori moves across mucus gels: influence of bacteria on mucus rheology and conversely how rheology impacts swimming Rama Bansil, Joseph Hardcastle, Maira Constantino, Laura Martinez and Nina Salama - Boston University, USA
9:00 - 9:30	New Developments in fluids dynamics: The Solid-like Nature of Melts & Liquids Laurence Noirez - Laboratoire Leon Brillouin (CEA-CNRS), France
9:30 - 10:00	Heterogeneous stick-slip friction in polymer gels Tetsuo Yamaguchi - Kyushu University, Japan
10:00 - 10:30	Rheological basis of development materials with extreme dynamic strength László A. Gömze - IGRÉX Engineering Service Ltd, Hungary
10:30 – 10:50	COFFEE BREAK
ORAL PRESENTATIONS SESSION 1 Chair: Dr. Emad Mohamed M. Ewais, Central Metallurgical RD Institute (Egypt)	
10:50 - 11:10	How far are rheological parameters from amplitude sweep tests predictable using common physicochemical soil properties? Nina Stoppe, Rainer Horn
11:10 - 11:30	Processing of ceramics and refractories: Rheology as a good systematic approach in the improvement the quality and the cost of the products Emad Mohamed M. Ewais
11:30 - 11:50	Rheological study of rod-like pigment particles and plate-like organo-clay particles in a nonpolar solvent Péter Salamon, Yong Geng, Alexey Eremin, Ralf Stannarius and Ranjini Bandyopadhyay, Susanne Klein and Tamás Börzsönyi
11:50 - 12:10	Enzymatic Generation of Oil Displacing Compositions under Conditions of Low Temperature Viscous Oil Reservoirs L. K. Altunina and L. I. Svarovskaya

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 7. Wednesday

BEATRIX HALL

ORAL PRESENTATIONS

SESSION 2

**Chair: Prof. Dr. Tetsuo Yamaguchi,
Kyushu University (Japan)**

10:50 - 11:10	Rheological Characterisation of the Flow Behaviour of Wood Plastic Composites in Consideration of Different Volume Fractions of Wood Nico Laufer, Harald Hansmann and Michael Koch
11:10 - 11:30	Filling behaviour of wood plastic composites Ivica Duretek, Thomas Lucyshyn and Clemens Holzer
11:30 - 11:50	Synergistic effects by combination of carbon and ceramic nanofillers in epoxy matrix Ursula Windberger, Tilman Gruenewald, Josef Wendrinsky, Harald Rennhofer, Hans-Georg Wulz and Helga Lichtenegger
11:50 - 12:10	Isothermal Rotational Rheometer Testing of Epoxy Molding Compounds Tamás Deák

12:30-14:00

LUNCH

14:00-19:30

SOCIAL PROGRAM II. and Free Program

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 8. Thursday

October 8. Thursday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 – 10:30	KEYNOTE LECTURES IV.	
10:30 – 10:50	POSTER SESSION II. and COFFEE BREAK	
10:50 – 12:30	SESSION 5	SESSION 2
12:30 – 14:00	BUFFET LUNCH	
14:00 -16:00	SESSION 6 and 10	SESSION 1 and is-rfs1
16:00 -16:30	POSTER SESSION III. and COFFEE BREAK	
16:30 -18:30	SESSION 3, 9 and 17	SESSION 14 and 19
18:30 -20:00	CONFERENCE DINNER	

HUNYADI JANOS HALL	
<p align="center">KEYNOTE LECTURES IV. Chair: Prof. Dr. László A. GÖMZE, University of Miskolc (Hungary)</p>	
8:30 - 9:00	<p>Rheological aspects of underground fluid dynamics and mass exchange processes M. Khranchenkov and E. Khranchenkov - Kazan Federal University, Russia</p>
9:00 - 9:30	<p>Generalities in two phase flows: Similarities and differences between dense suspensions and fluidized beds Denis Schütz, Elke Riedl and Richard Romirer - ANTON PAAR GmbH, Austria</p>
9:30 - 10:00	<p>Effect of Additives on the Rheological Properties of Fast Curing Epoxy Resins Youjiang Wang, Dildar Ali Lakho and Donggang Yao - Georgia Institute of Technology, USA</p>
10:00 - 10:30	<p>Possibilities and Problems of Thermodynamic Modeling of Rheological Properties for Complex Substances and Materials of Different Nature Alexander Slobodov, Andrey Uspenskiy, Ricardas Ralys and Mikhail Radin - ITMO University, Russia</p>
10:30 – 10:50	<p>POSTER SESSION II. and COFFEE BREAK</p>

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 8. Thursday

POSTER SESSION II. Chair: Prof. Dr. Akira Miyamoto, Tohoku University (Japan)	
1.	The Importance of Viscosity Measurements for High Temperature Processes Tobias Dubberstein, Markus Schürmann and Hans-Peter Heller
2.	Rheological properties of sodium/calcium alginate hydrogels J. Mastalska-Popławska, A. Lis, P. Izak and J. Laska
3.	Temperature Dependence of the Rheological Characteristics of Polydocanol Foam in Conditions of Continuous Shear Deformation Evguenia Korobko, Svetlana Vilanskaya, Aleksander Baeshko and Nikita Shestak
4.	Hard Coatings Characterization Based on Chromium Nitrides: Applications for Wood Machining Bachir Chemani, Hamid Aknouche, Abdelatif Zerizer and Remy Marchal
5.	Microstructure and mechanical behavior of TIG bimetallic joints. M.F. Benlamnour, M.Gousmine, N. Bensaid, and A. Boutaghane
6.	Effect of powder addition and welding process on microstructure and mechanical properties of Ferritic Stainless Steel welds Nabil Bensaid, Riad BADJI, Nacer TALA IGHIL, Mohamed HADJI and Mohamed Farid Benlamnour
7.	Effect of welding process and filler metal on microstructure and mechanical behavior of dissimilar stainless steel welds Nabil Bensaid, Amar Boutaghane and Mohamed Farid Benlamnour

HUNYADI JANOS HALL

ORAL PRESENTATIONS SESSION 5 Chair: Dr. Laurence Noirez, Laboratoire Leon Brillouin (CEA-CNRS) (France)	
10:50 - 11:10	Abnormal Theormorheological Dependence of Heavy Oil Larissa Strelets, Andrej Bogoslovskij
11:10 - 11:30	Research of the process of nanoscale films growth by diffusion-limited aggregation and molecular dynamics methods Viktor Tupik, Gennadi Lukyanov, Vladimir Margolin and Chu Trong Su
11:30 - 11:50	How do biomaterials and granular materials move in a horizontal drum under varying process conditions? Karl Flowers, Stefan Kaczmarczyk, Anne Lama, Alireza Sadeghi and John Steele
11:50 - 12:10	Analysis of the Angle of Maximal Stability and Regime Transitions in Different Granular Proportions of Biphasic Granular Mixtures Joel T. Maquiling and Shane Marie A. Visaga
12:10 - 12:30	Replication of some properties of nanoscale films produced by magnetron sputtering. Viktor Tupik, Gennadi. Lukyanov and Vladimir Margolin

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 8. Thursday

BEATRIX HALL

ORAL PRESENTATIONS

SESSION 2

**Chair: Dr. Ivica Duretek,
Montanuniversitaet Leoben (Austria)**

10:50 - 11:10	Rheology of Polymer-layered Silicate Nanocomposites in Steady-Shear Flows: A Dissipative Particle Dynamics Study Ali Gooneie, Stephan Schuschnigg and Clemens Holzer
11:10 - 11:30	Study about the dynamic percolation of CNTs-epoxy composites Juan Carlos Fernandez-Toribio, Alfonso Monreal, Juan Pedro Fernandez-Blázquez and Juan Jose Vilatela
11:30 - 11:50	In situ monitoring of carbosilane polymerization using rheology coupled with infrared spectrometry Romain Lucas, Fabien Bouzat, Guillaume Darsy, and Sylvie Foucaud
11:50 - 12:10	Time Dependent Properties of Different Polyamides Karoly Belina and Szabolcs Szemerey
12:10 - 12:30	Rheological properties of silicon oils used in torsion dampers K. Belina, L. Halász , A. Bata and P. Ailer

12:40-14:00

LUNCH

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 8. Thursday

HUNYADI JANOS HALL

ORAL PRESENTATIONS
SESSION 6 and 10
Chair: Prof. Dr. Alexander Slobodov,
ITMO University(Russia)

14:00 - 14:20	The effect of Viatop FEP Plus on the stiffness and low temperature behaviour of hot mixes asphalt Csaba Tóth and Zoltán Soós
14:20 - 14:40	Microstructural and rheological analysis of fillers and asphalt mastics Róbert Géber, László A. Gömze
14:40 - 15:00	Towards the Development of Self - Compacting No - Slump Concrete Mixtures Hooman Hoornahad, Eduard A. B. Koenders and Klaas van Breugel
15:00 - 15:20	Development of Thermodynamic Databases for Rheology and Modeling of Functional Materials Alexander Slobodov, Alexander Uspenskiy, Vladimir Sibirtsev and Alexander Sochagin
15:20 - 15:40	Wettability of Particles and Its Effect on Liquid Bridges in Wet Granular Materials Hooman Hoornahad, Eduard A. B. Koenders and Klaas van Breugel

BEATRIX HALL

ORAL PRESENTATIONS
SESSION 1 and is-rfs1
Chair: Prof. Dr. Pavel MAKAROV,
Institute of strength physics and materials science SB RAS (Russia)

14:00 - 14:20	On the relation between the energy of a distorted crystal lattice and the bending modulus of strain gradient elasticity Martin Lederer and Golta Khatibi
14:20 - 14:40	Dislocation Dynamics in Plastic Bending Deformation of Silicon Ichiro Yonenaga
14:40 - 15:00	Two Parameter Fracture Mechanics to Describe the Beneficial Effect of a Pipe Repairing M. Hadj Meliani, T.Nateche, O. Beloudroua, Z.Azari, G.Pluinage and Y.G. Matvienko
15:00 - 15:20	Simulation of damage accumulation and multiscale fracture in rock mass surrounding excavations during mining Eremin M.O. and Makarov P.V.
15:20 - 15:40	Bifurcation Sequence Mailybi K. Aldabergenov and Gulshat T. Balakaeva
15:40 - 16:00	Biocatalysis of Oil Displacing Compositions under Conditions of Low Temperature Oil Reservoirs L. I. Svarovskaya and L. K. Altunina

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 8. Thursday

16:00 – 16:30

POSTER SESSION III. AND COFFEE BREAK

POSTER SESSION III. Chair: Dr.Nicky ESTHIAGHI, RMIT University (Australia)	
1.	Determination of The Flow Properties of Starch Powder with Different Origins Vildan Gürmeriç, Duygu Aslan and Mahmut Doğan
2.	Rheological characterization of modified foodstuffs with food grade thickening agents Inés Reyes-Ocampo, Juan Pablo Aguayo, Gabriel Ascanio and Ma. Soledad Córdova Aguilar
3.	Model of the relationship between local mechanical properties of individual microstructure components in steel sheets based on depth sensing indentation measurement Peter Burik and Ladislav Pešek
4.	Tribological and mechanical behavior of WC-Ni hardfacing using Ni-Cr as interlayer Cheniti Billel, Yahmi Youcef, Miroud Djamel, Maamache Bouzide, Allou Djilali, Daoud Ismail and Badi Ridha
5.	Producing of Premixes for Synthesis of Wear-Resistant Composite Materials Yury Kontsevoi, Anna Meilakh and Eduard Pastukhov
6.	Rheological Behavior and Thickness of Edible Films Formed by Spin Coating Method Fernando Osorio, Olivier Skurtys and Dania Battista
7.	Rheological behaviour of egg white and egg yolk from different poultry specimen Vojtěch Kumbár, Šárka Nedomová, Jiří Votava and Jaroslav Buchar
8.	Structural-mechanical properties of taiga boggy-podzolic soils of the European North-East of Russia Yurii Kholopov, Elena Lapteva and Dolgor Khaidapova
9.	Rheological Properties of Recycled PE Karoly Belina and Attila Bata

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 8. Thursday

HUNYADI JANOS HALL

ORAL PRESENTATIONS

SESSION 3, 9 and 17

**Chair: Prof. Dr. Mikolaj SZAFRAN,
Warsaw University of Technology (Poland)**

16:30 - 16:50	Calibration problems with the viscosity measurement of liquid metallurgical slags Hans-Peter Heller, Markus Schürmann, Kerstin Scholl, Nicole Haustein, Bernd Lychatz
16:50 - 17:10	Forensic Assessment on Ground Instability using Electrical Resistivity Imaging (ERI) Mohd Hazreek Zainal Abidin, Saiful Azhar Ahmad Tajudin, Aziman Madun, Syed Ahmad Fauzan Syed Mohd, Muhammad Ikhwan Juhari and Nor'Aishah Md Ali
17:10 - 17:30	Mesoscopic Rheological Model for Polymeric Media Flows Grigory Pyshnograi, Konstantin Koshelev, Alexander Kuznetsov, Darina Merzlikina, Ivan Pyshnograi, Mikhail Tolstykh
17:30 - 17:50	Measurement of whole blood of different mammalian species in the oscillating shear field: influence of erythrocyte aggregation Ursula Windberger, Christina Pöschl, Sarah Peter and Bruno K. Podesser
17:50 - 18:10	Evaluating the feasibility of wax-based oleogel to replace palm oil in microstructural network formation for nutritional hazelnut filling Chi Diem Doan, Ashok R. Patel, Nathalie De Clercq, Davy Van de Walle, Claudia Delbaere and Koen Dewettinck
18:10 - 18:30	Rheological Interactions between Food Starch and Biopolymers Duygu Aslan, Vildan Gurmeric and Mahmut Dogan

BEATRIX HALL

ORAL PRESENTATIONS

Session 14 and 19

**Chair: Dr. Maxim KHRAMCHENKOV,
Kazan Federal University (Russia)**

16:30 - 16:50	Soft Glassy Materials in Everyday Use: Can Rheology Help Us Understand Them ? Suraj Deshmukh, Hui Shao, Dan Wu, Selvanathan Arumugam, Mark Reisinger and Ray Boucher
16:50 - 17:10	Viscosity and crystallization of the chloroantimonite glasses Messaoud Legouera, Mostafa Iezid, Petr Kostka, Feyala Rahal, Djamel Yezli, Faissal Goumeidane and Marcel Poulain
17:10 - 17:30	Physical Aging in Strain glass Dezhen Xue, Yumei Zhou, Xiangdong Ding, Xiaobing Ren and Jun Sun
17:30 - 17:50	Effect of Silicate Module of Water Glass on Rheological Parameters of Poly(Sodium acrylate) / Sodium Silicate Hydrogels Joanna Mastalska Popławska and Piotr Izak
17:50 - 18:10	Experimental Investigation of Mechanical and Thermal Properties of Silica Nanoparticle-Reinforced Poly(acrylamide) Nanocomposite Hydrogels Josergio Zaragoza, James Thomin, Prashanth Asuri

18:10 - 20:00

BREAK

20:00 - 22:30

CONFERENCE DINNER

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 9. Friday

October 9.Friday	HUNYADI JÁNOS HALL	BEATRIX HALL
8:30 – 9:30	KEYNOTE LECTURES V.	
9:30 – 10:40	SHORT ORALS II.	
10:40 – 11:00	COFFEE BREAK	
11:00 – 13:00	SESSION 7 and 8	
13:00 –	CONFERENCE CLOSING	

HUNYADI JANOS HALL	
KEYNOTE LECTURES V. Chair: Prof. Dr. Sergey KULKOV, Tomsk State University (Russia)	
8:30 - 9:00	Evolutionary concept and mathematical model of stress-strain state evolution of loaded solids and media Makarov P.V. and Eremin M.O. - Institute of strength physics and materials science SB RAS, Russia
9:00 - 9:30	Extensional flow through the pharyngeal duct Gabriel Ascanio, Martha Preciado, Martín Salinas, William Vicente, Edmundo Brito-de la Fuente and Crispulo Gallegos - Universidad Nacional Autonoma de Mexico, Mexico

SHORT ORAL PRESENTATIONS II. Prof. Dr. Youjiang Wang, Georgia Institute of Technology (USA)	
9:30 - 9:35	Mixing enhancement for more realistic rheometry of complex fluids G. Giancontieri, D. Lo Presti, D.M. Hargreaves
9:35 - 9:40	Detection of Gelation Point by Vibration Visosimetry Method Ivan Kozhevnikov, Larissa Strelets
9:40 - 9:45	Fluid molding in the technology of carbon adsorbents Victor Mukhin, Vasily Gurianov
9:45 - 9:50	Rheological Behavior of Concentrated Silica Nanoparticle Suspension Containing Multi-Walled Carbon Nanotubes Mahdi Hasanzadeh, Vahid Mottaghitalab and Mohammad Rezaie
9:50 - 9:55	InGaAsP Laser Diode investigation for telecommunication and environmental control Abdallah Ouerdane
9:55 - 10:00	The model of fragmentation of metallic fluid stream by means of high-speed energy utilities Prykhodko Maryna, Sanin Anatoly and Ledniansky Aleksander
10:00 - 10:05	Rheological properties of graham bread dough from zinc biofortificated wheat Valentina Pavlova, Marija Menkinoska, Ljubinka Caneva, Tatjana Blazevska, Maria Papageorgiou, Raphaelidis Stylianos
10:05 - 10:10	Dynamical heterogeneity in terms of gauge theory of glass transition Mikhail Vasin
10:10 - 10:15	Statistical behavior of plasticity and phase transformation under shock compression: A molecular dynamics study H. Zong, X. Ding, L. Gao, E.K.H. Salje

ic-rmm2 CONFERENCE DETAILED PROGRAM – October 9. Friday

10:15 - 10:20	High Energy Rate Forming Induced Phase Transition in Austenitic Steel Tünde Kovács-Coskun
10:20 - 10:25	Controlled pus rheology and "solvents pus" as a new group of medicines for the treatment of purulent diseases Aleksandr Urakov, Natalia Urakova, Aleksey Reshetnikov, Maxim Kopylov and Leisan Chernova
10:25 - 10:30	Characterization of the brain tissue from oscillatory shear tests Boudjema F, Khelidj B. and Lounis M
10:30 - 10:35	Effect of mechanical treatment on properties of Al-P-O zeolites Aleksander Buzimov, Sergei Kulkov, Wilhelm Eckl and Sandra Pappert
10:35 - 10:40	On the Inhibition of Structural Transformations in Dilatant Nanodispersed Inks by Adding a Dispersant Roman Kyrpal, Andrey Ragulya

10:40 – 11:00

COFFEE BREAK

HUNYADI JANOS HALL

ORAL PRESENTATIONS

SESSION 7 and 8

Chair: Prof. Dr. Blaise NSOM,
Université de Bretagne Occidentale (France)

11:00 - 11:20	Investigation of the stress distribution around a mode 1 crack with a novel strain gradient theory Martin Lederer and Golta Khatibi
11:20 - 11:40	Durability of electric arc furnace slag geopolymers exposed to magnesium sulphate solution Hisman Khater
11:40 - 12:00	Modeling of powder consolidation using electro heating assisted mechanical loading Anna Knyazeva, Svetlana Sorokova
12:00 - 12:20	Modelling the large amplitude oscillatory shear response with weak strain overshoot of complex fluids Martin Boisly, Markus Kästner, Jörg Brummund and Volker Ulbricht
12:20 - 12:40	Mechanical Properties of Al₂O₃-ZrO₂ Nanocomposites Fabricated by Gelcasting Shahab Arvandi
12:40 - 13:00	Effect of slope change on the dynamics of pseudoplastic mass movements beneath a static volume of water Dhafar Ibrahim Ahmed, B. Nsom and N. Latrache

13:00 – 13:30

CONFERENCE CLOSING

Prof. Blaise NSOM, Prof. Sergei N. KULKOV, Prof. Youjiang WANG, Prof. László A GÖMZE