

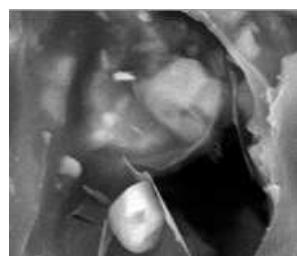
## **ic-rmm1 CONFERENCE - DETAILED PROGRAM**

### **1<sup>st</sup> International Conference on Rheology and Modelling of Materials**

Miskolc-Lillafüred, Hungary

October 7-11, 2013

## **CONFERENCE PROGRAM**



**ic-rmm1**

# **ic-rmm1 CONFERENCE - DETAILED PROGRAM**

- Session 1: Applied Rheology and Modeling of Clays, Minerals and Rocks
- Session 2: Applied Rheology of Polymer Melts
- Session 3: Applied Rheology and Material Structure of Foods
- Session 4: Avalanche Dynamics in Rheology and Phase Transitions
- Session 5: Experimental Study and Modeling of Complex Flows
- Session 7: Multiscale Mechanics of Materials
- Session 8: Rheological Fluid Mechanics
- Session 9: Rheology and Modeling of Hetero-modulus Hetero-viscous Complex Materials
- Session 12: Rheology of Biological Systems
- Session 13: Rheology of Construction Materials and Concretes
- Session 14: Rheology of Emulsions, Suspensions and Foams
- Session 15: Rheology of Ferrofluids and Magneto-rheological Materials
- Session 16: Rheology of Fluid Interfaces and Modeling
- Session 17: Rheology of Melted Metals and Glasses
- Session 18: Rheology of Nanofluids
- Session 19: Rheometric Measurement - Methods, Equipments and Errors
- Session 21: Rheology of Drug and Cosmetic Materials

# ic-rmm1 CONFERENCE - DETAILED PROGRAM

October 7. Monday	HUNYADI JÁNOS HALL
13:30 – 14:50	CONFERENCE OPENING
15:00 – 15:40	PLENARY 1
15:40 – 16:00	COFFEE BREAK
16:00 – 18:40	PLENARY 2, 3, 4 and 5
19:00 -19:20	WELCOME RECEPTION

October 8. Tuesday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 – 10:20	PLENARY and 7	
10:20 – 10:55	SHORT ORALS I.	
10:55 – 11:20	COFFEE BREAK + POSTERS	
11:20 – 13:00	SESSION 4 and 17	SESSION 19
13:00 – 14:00	BUFFET LUNCH	
	SOCIAL and FREE PROGRAM	

October 9. Wednesday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 – 10:20	PLENARY 8 and 9	
10:20 – 10:40	COFFEE BREAK	
10:40 – 12:20	SESSION 3, 18 and 21	SESSION 5 and 8
12:20 – 13:00	BUFFET LUNCH	
13:00 – 19:00	SOCIAL and FREE PROGRAM	

# ic-rmm1 CONFERENCE - DETAILED PROGRAM

October 10. Thursday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 - 10:20	PLENARY 10 and 11	
10:20 - 10:50	SHORT ORALS II.	
10:50 - 11:20	COFFEE BREAK + POSTERS II.	
11:20 - 13:00	SESSION 1	SESSION 14
13:00 - 14:00	BUFFET LUNCH	
14:00- 16:00	SESSION 2 and 13	SESSION 7
16:00 - 16:20	COFFEE BREAK	
16:20 - 18:00	SESSION 8	SESSION 15
19:00 -	ic-rmm1 CONFERENCE DINNER	

October 11. Friday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 - 10:20	PLENARY 12 and 13	
10:20 - 11:10	SHORT ORALS III.	
11:10 - 11:40	COFFEE BREAK	
11:40 - 13:00	SESSION 14	SESSION 12



# **ic-rmm1 CONFERENCE - DETAILED PROGRAM - MONDAY**

**October 7, 2013 – Monday**

## **HUNYADI JÁNOS HALL**

### **OPENING CEREMONY**

**Chair:** Prof Dr Sergei N. KULKOV, Institute of Strength Physics SB RAS (Russia)

<b>13:30 – 13:35</b>	<b>ic-rmm1 Opening</b> Prof Dr Sergei N. KULKOV (Russia)
<b>13:35 – 14:05</b>	<b>Welcome Address</b> Prof Dr Igor EMRI - President of the International Society of Rheology
<b>14:05 – 14:20</b>	<b>Journal Építőanyag Welcomes the Participants of ic-rmm1 Conference</b> Dr Adorján BOROSNYÓI – editor in chief (Hungary)
<b>14:20 – 14:30</b>	<b>Welcome and General Informations</b> Prof Dr László A GÖMZE – chair of ic-rmm1 Conference (Hungary)
<b>14:30 – 14:45</b>	<b>The Anton Paar Hungary Ltd</b> Dr Péter KÁRPÁTI (Hungary)
<b>14:45 – 15:00</b>	<b>The Particle Characterisation Ltd</b> Mr Péter Winkler (Hungary)
<b>15:00 – 15:40</b>	<b>PLENARY LECTURE – 1<sup>ST</sup></b> <b>Preparation of Functional Composite Materials Based on Chemically Derived Graphene using Solution Process</b> Prof Dr O Ok PARK, KAIST (Republic of Korea)
<b>15:40 – 16:00</b>	<b>COFFEE BREAK</b>
	<b>PLENARY LECTURES I</b>
	<b>Chair:</b> Prof Dr Gerald G. FULLER, Stanford University (USA)
<b>16:00 – 16:40</b>	<b>PLENARY LECTURE – 2<sup>ND</sup></b> <b>Intriguing Nonlinear Instability Dynamics in Film Blowing Process</b> Prof Dr Jae chun HYUN, Korea University (Republic of Korea)
<b>16:40 – 17:20</b>	<b>PLENARY LECTURE – 3<sup>RD</sup></b> <b>Modeling the Statistical Properties of Acoustic Emission During the Compression of a Porous Material</b> Dr Xavier ILLA, Universitat de Barcelona (Spain)
<b>17:20 – 18:00</b>	<b>PLENARY LECTURE – 4<sup>TH</sup></b> <b>Consideration on the Interpretation of a Contact Angle on a Real Surface from Detailed Derivations of Young's equation, Cassie-Baxter equation and Wenzel equation</b> Prof Dr Do Hyun KIM, KAIST (Republic of Korea)
<b>18:00 – 18:40</b>	<b>PLENARY LECTURE – 5<sup>TH</sup></b> <b>A Simple Model for Plastic Deformation and the Statistics of Slip Avalanches (Serrations in the Stress Strain Curves)</b> Prof Dr Karin DAHMEN, University of Illinois at Urbana-Champaign (USA)

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - TUESDAY

October 8. Tuesday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 - 10:20	PLENARY 6 and 7	
10:20 - 10:50	SHORT ORALS I.	
10:55 - 11:20	COFFEE BREAK + POSTERS	
11:20 - 13:00	SESSION 4 and 17	SESSION 19
13:00 - 14:00	BUFFET LUNCH	
	SOCIAL and FREE PROGRAM	

## HUNYADI JANOS HALL

### PLENARY LECTURES

*Chair: Prof.Dr. Ekhard SALJE*  
*University of Cambridge (UK)*

### PLENARY LECTURE 6

9:00 - 9:40	Dynamics of Soft, Biological Interfaces Prof. Dr. Gerald G. FULLER - Stanford University (USA)
-------------	---

### PLENARY LECTURE 7

9:40 - 10:20	Selection of appropriate polyoxymethylene based binder for powder injection moulding feedstock material Prof. Dr. Igor EMRI - University of Ljubljana (Slovenia)
--------------	---

## SHORT ORALS I.

10:20 - 10:25	[P 05] Mathematical characterization of the values of rheologic variables during the networking reaction of rubber mixtures based on SBR Emil Seliga, Ondrej Bošák, Soňa Rusnáková, Stanislav Minárik
10:25 - 10:30	[P 09] Effects of Ripening on Rheological Properties of Avocado Pulp ( <i>Persea americana</i> mill. cv. Hass) Fernando Osorio
10:30 - 10:35	[P 12] Metallurgical processes to extract gold from ores and concentrates in the aquatic environment Golovchenko N.Yu., Aknazarov S.Kh., Zhapekova A.O., Golovchenko O.Yu
10:35 - 10:40	[P 31] Rheological behavior of screen printing pastes based on Barium Titanate nanopowder Iryna Dulina, Saide Umerova, Andrey Ragulya
10:40 - 10:45	[P 33] Rheology Characteristics of Ceramic Inkjet Inks Based on Barium Titanate Nanopowder Roman Kyrpal, Artem Nikulin, Iryna Dulina, Sergey Ivanchenko, Andrey Ragulya
10:45 - 10:50	[P 34] Improved OCT Velocimetry of Hard Sphere Colloidal Suspensions Alex Malm, Thomas Waigh
10:50 - 10:55	[P 43] Unitester Ltd. Eva F. Lauer

## COFFEE BREAK + POSTERS

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - TUESDAY

## POSTER SESSION I.

[P 01]	<b>Rheological properties of the drilling muds.</b> Gulzhan Kudaikulova
[P 06]	<b>The rheological properties of Psyllium gum in protein based solution</b> Narjes Kazemi Ghahfarokhi , Mohammad Hojjatoleslamy, Javad Keramat, Amir Shakerian
[P 07]	<b>Rheological parameters' of dough with inulin addition and effect on bread quality</b> Tatiana Bojňanská, Marian Tokár, Alena Vollmannová
[P 11]	<b>Influence of strongly anisotropic materials crystal structure anisotropy on a structure and property of their basis ceramics, synthesized in the solar furnace.</b> Gulamova D.D., Riskiev T., Bobokulov S., Turdiev D., Uskenbaev D., Shevchenko V.P.
[P 15]	<b>Experimental investigation of shock wave processes in solid and liquid paraffin and docosane.</b> Vasily. A. Sosikov, A. V. Utkin
[P 18]	<b>Colloidal Behavior of Aqueous Montmorillonite Suspensions in the Presence of Nonionic Polymer</b> Mourad Gareche, Nadjet Azri, Leila Saoudi, Ahmed Allal, Noureddine Zeraibi
[P 19]	<b>Rheological characterization of polyanionic cellulose(PAC) solutions</b> Khaled BENYOUNES
[P 23]	<b>Study of rheological properties of cement mortar mixture with calcined clay</b> Nasser Chelouah, Fatiha Souidi
[P 28]	<b>Magnetorheological fluids with two-component dispersed phase</b> Evguenia Korobko, Zoya Novikova, Mikalai Zhurauski
[P 29]	<b>Rheological properties of the BaTiO<sub>3</sub> nanopowder slips for tape casting</b> Sergey Ivanchenko, Artem Nikulin, Iryna Dulina, Roman Kyral, Andrey Ragulya
[P 32]	<b>Polymer Nanostructure Fabricated by using Nanoimprint for OLED Applications</b> Sohee Jeon, Young Seok Song, Jun-Ho Jeong, Jae Ryoun Youn
[P 36]	<b>Rheology and Structure of Poloxamer 407 (Pluronic F127)</b> Ki-won Song, Eun-Kyoung Park
[P 37]	<b>Rheology and physical-chemical characteristics of the solutions of the medicines</b> Aleksandr Urakov, Natalia Urakova

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - TUESDAY

## HUNYADI JANOS HALL

### ORAL PRESENTATIONS

#### SESSION 4 AND SESSION 17

##### Avalanche Dynamics in Rheology and Phase Transitions

##### Rheology of Melted Metals and Glasses

*Chair: Prof.Dr. Ekhard SALJE - University of Cambridge (UK)*

11:20 - 11:40	<b>Twinning in Strained Ferroelastics: Microstructure and Statistics</b> Xiangdong Ding, T. Lookman, A. Saxena, J. Sun, E.K.H. Salje
11:40 - 12:00	<b>On the Mechanical Loss in Ferroelastic Shape Memory Alloys</b> Yumei Zhou, Xiangdong Ding, Jun Sun, Jinyu Zhang
12:00 - 12:20	<b>Friction in ferroelastic and martensitic materials</b> Ekhard K. H. Salje
12:20 - 12:40	<b>Avalanches in shock induced plastic deformation and phase transition: A molecular dynamics study</b> Hongxiang Zong, X. Ding, T. Lookman, G. Liu, E.K.H. Salje, J. Sun
12:40 - 13:00	<b>A novel viscosity model and database for molten slags</b> Guixuan Wu, Elena Yazhenskikh, Klaus Hack, Erwin Wosch, and Michael Müller

## BEATRIX HALL

### ORAL PRESENTATIONS

#### SESSION 19

##### Rheometric Measurement - Methods, Equipments and Errors

*Chair: Dr. Oktay AKTAS - University of Cambridge (UK)*

11:20 - 11:40	<b>Study of shape memory alloys and the phase transition by DMTA and DSC measurements</b> Dávid Kis, Zsolt Dugár, Pál Hansághy, Gábor Béres
11:40 - 12:00	<b>Rheological Properties of Adding Inulin in WPC Solution in Different Physicochemical Properties</b> Mandana Alipour, Mohammad Hojjatoleslamy,Mohammad Ali Shariaty
12:00 - 12:20	<b>Rheokinetics dependencies of gel-forming compositions</b> Andrey Bogoslovskey
12:20 - 12:40	<b>Examination of primer- and second-rate thermodynamic realignments of metals and metal-alloys, with application of DMTA equipment</b> Béres Gábor, Dugár Zsolt, Kis Dávid,Barkóczy Péter, Hansághy Pál
12:40 - 13:00	<b>Friction and phase transitions in ferroelectric device materials observed by Resonant Piezoelectric Spectroscopy</b> Oktay Aktas, Michael A. Carpenter, Sam Crossley, Ekhard K. H. Salje

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - WEDNESDAY

October 9. Wednesday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 – 10:20	PLENARY 8 and 9	
10:20 – 10:40	COFFEE BREAK	
10:40 – 12:20	SESSION 3, 18 and 21	SESSION 5
12:20 – 13:00	BUFFET LUNCH	
13:00 – 19:00	SOCIAL and FREE PROGRAM	

## HUNYADI JANOS HALL

### PLENARY LECTURES

*Chair: Prof. Dr. Dennis A. SINGER  
Universidad de Santiago de Chile (Chile)*

### PLENARY LECTURE 8

9:00 - 9:40	Optical coherence tomography velocimetry studies of complex fluids Dr. Thomas A. WAIGH - University of Manchester (UK)
-------------	---

### PLENARY LECTURE 9

9:40 - 10:20	The Rheological basis of Bubble formation in cereal products Prof. Dr. Josef L. KOKINI - University of Illinois (USA)
--------------	--

## COFFEE BREAK

## ORAL PRESENTATIONS

### SESSION 3, 18 and 21

**Applied Rheology and Material Structure of Foods**  
**Rheology of Nanofluids**  
**Rheology of Drug and Cosmetic Materials**  
*Chair: Dr Thomas A. WAIGH - University of Manchester (UK)*

10:40 - 11:00	Rheological modeling of olive oil/policosanol organogels Francesca R. Lupi, Domenico Gabriele, Valeria Greco, Noemi Baldino, Lucia Seta and Bruno de Cindio
11:00 - 11:20	Effect of different hydrocolloids on rheological properties of model system jam: Simplex Lattice Mixture Design Approach to optimize the hydrocolloid levels Mahmut DOGAN
11:20 - 11:40	Comparative Study of rheological behavior of montmorillonite and kaolinite: Application to the dermo cosmetics Orléans Ngomo, Jean B. Tchatcheueng , Richard Kamga, Joseph Sieliechi
11:40 - 12:00	Rheological Properties of Silica Based Shear Thickening Fluids (STFs) Sema Yıldız, Oylum Colpankan, Fikret Şenel, Pınar Erbil, Metin Tanoglu

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - WEDNESDAY

## BEATRIX HALL

### ORAL PRESENTATIONS

#### SESSION 5 and 8

#### Experimental Study and Modeling of Complex Flows Rheological Fluid Mechanics

*Chair: Prof. Dr. Jae Chun HYUN - Korea University (Republic of Korea)*

10:40 - 11:00	<b>Thixotropic and Shear Banding Flow Effects in a Continous Squeeze Flow of a Structured Fluid</b> Edtson Emilio Herrera Valencia
11:00 - 11:20	<b>Operability Coating Windows in Slot Die Coating Processes</b> Hyun Wook Jung, Si Hyung Lee, Won-Gi Ahn, Jae Chun Hyun
11:20 - 11:40	<b>Dynamic Analysis of Marine Drilling Riser for Deepwater Environment</b> Nam-Sub Woo, Young-Ju Kim, Jae-Ki Kwon, Sang-Shik Kim, Sang-Woong Yun, Byung-Woo
11:40 - 12:00	<b>An Experimental Study on the Cuttings Transport in Inclined Slim-Hole Annulus</b> Young-Ju Kim, Nam-Sub Woo, Sang-Mok Han
12:00 - 12:20	<b>Drag reduction of nata de coco suspensions in circular pipe flow</b> Jun Warashina, Satoshi Ogata

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - THURSDAY

October 10. Thursday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 - 10:20	PLENARY 10 and 11	
10:20 - 10:50	SHORT ORALS II.	
10:55 - 11:20	COFFEE BREAK + POSTRES II.	
11:20 - 13:00	SESSION 1	SESSION 14
13:00 - 14:00	BUFFET LUNCH	
14:00 - 16:00	SESSION 2 and 13	SESSION 7
16:00 - 16:20	COFFEE BREAK	
16:20 - 18:20	SESSION 8	SESSION 15
19:00 -	ic-rmm1 CONFERENCE DINNER	

## HUNYADI JANOS HALL

### PLENARY LECTURES

*Chair: Prof. Dr. Jae Chun HYUN  
Korea University (Republic of Korea)*

### PLENARY LECTURE 9

9:00 - 9:40	<b>Deformation, orientation and bursting of microcapsules in simple shear flow: Wrinkling processes, tumbling and swinging motions</b> Prof. Dr. Heinz REHAGE - TU Dortmund (Germany)
-------------	--

### PLENARY LECTURE 10

9:40 - 10:20	<b>Heat Transfer Asymptote in Laminar Tube Flow of Non-linear Viscoelastic Fluids</b> Prof. Dr. Dennis A. SGINER - Universidad de Santiago de Chile (Chile)
--------------	--

## SHORT ORALS II.

10:20 - 10:25	<b>[P 02] Modeling of mechanical properties of materials obtained via alkaline activation of illite-based clays of Latvia</b> Ingunda Sperberga, Maris Rundans, Andris Cimmers, Linda Krage1, Inese Sidraba
10:25 - 10:30	<b>[P 10] Rheological Characterization of Polyoxethylene (POE) and Carboxymethyl Cellulose (CMC) Suspensions with Added Solids</b> Fernando A. Osorio, Alfredo Mora, Olivier Skurtyys
10:30 - 10:35	<b>[P 22] Effect of high pressure processing on rheological properties and pectinmethyl esterase activity of Aloe vera (Aloe barbadensis miller) juice</b> Nishant R Swami Hulle, P Srinivasa Rao
10:35 - 10:40	<b>[P 24] Mineral admixture influence on thixotropic behaviour of light cement</b> M.Khodja-Saber; A. Mellak; A.Benmounah; T.Sidane , M.Khodja
10:40 - 10:45	<b>[P 26] Low temperature dolomitceramics with glass waste additive</b> Linda Krage, Inese Sidraba, Lauma Lindina, Laimons Bidermanis, Inta Barbane
10:45 - 10:50	<b>[P 27] Rheological Characterization of Cement Oil Suspensions</b> Abderrahmane MELLAK
10:50 - 10:55	<b>[P 14] Modeling strain and dielectric hysteretic type dependences in polycrystalline ferroelectrics by methods of two-level continuum</b> Alexander Skaliukh

## COFFEE BREAK + POSTRES II

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - THURSDAY

## POSTRES SESSION II.

[P 40]	<b>System Li,Na,K,Rb,Cs,La,Pu  F for the Generation IV Nuclear Technology: T-x-y Diagrams</b> Vasily Lutsyk, Anna Zelenaya, Marina Lamueva
[P 41]	<b>Data Correction for Lead-Free Solders</b> Vasily Lutsyk, Vera Vorob'eva, Svetlana Shodorova
[P 42]	<b>3D Diagrams for "Immiscibility Gap Technology"</b> Vasily Lutsyk, Anna Zelenaya
[P 38]	<b>Optical microrheology measurements for determination of sol-gel transitions of chitosan hydrogels</b> Piotr Domagalski, Magdalena Orczykowska, Piotr Owczarz, Marek Dziubinski
[P 44]	<b>An olive oil/policosanol organogel for Ferulic Acid controlled delivery</b> Francesca R. Lupi, Domenico Gabriele, Valeria Greco, Noemi Baldino, Pavle Mijovic, Francesco Puoci, Ortensia I. Parisi

## HUNYADI JANOS HALL

### ORAL PRESENTATIONS

#### SESSION 1

#### Applied Rheology and Modeling of Clays, Minerals and Rocks

*Chair: Prof. Dr. László A. GÖMZE – University of Miskolc (Hungary)*

11:20 - 11:40	<b>Seismic Based Rheological Parameters Provide Detailed Lithological and Structural Subsurface Images In Mining Exploration</b> Zoltán Hajnal, Ernő Takács, Bhaskar Pandit
11:40 - 12:00	<b>Rheological properties and stability of Latvian illite clay-glycerol suspensions</b> Inga Dusenkova, Juris Malers, Liga Berzina-Cimdina
12:00 - 12:20	<b>Rheological investigations of tailings of kimberlite ore dressing and numerical simulation of its behavior in PLAXIS</b> Alexey Korshunov, Alexander Nevzorov
12:20 - 12:40	<b>New Approach for Development of Rheological Relations for Saturated Porous Media</b> Maxim G. Khramchenkov, Eduard M. Khramchenkov
12:40 - 13:00	<b>Rheological Behavior of Clay-Additive Compounds</b> István Kocserha, László A. Gömze

### BUFFET LUNCH

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - THURSDAY

## HUNYADI JANOS HALL

### ORAL PRESENTATIONS

#### SESSION 2 AND 13

##### Applied Rheology of Polymer Melts

##### Rheology of Construction Materials and Concretes

*Chair: Dr. Ivica DURETEK- Montanuniversitaet Leoben (Austria)*

14:00 - 14:20	<b>Rheological properties of wood polymer composites and their role in extrusion</b> I. Duretek, S. Schuschnigg, A. Gooneie, G.R. Langecker, C. Holzer
14:20 - 14:40	<b>Numerical Simulation of Axial Crushes of Multiple Corners Square Composites Cotton Fiber Reinforced Propylene</b> Azrol Jailani, Akbar Othman
14:40 - 15:00	<b>Investigate of the possibility of TEKCAST method application for Polymeric Materials Casting</b> Harold Mäsiar, Igor Barényi, Ondrej Híreš, Peter Liptak
15:00 - 15:20	<b>Correlation between Rheotens Measurements and Reinforcement of Polymer Nanocomposites in the Injection Molding Compounder</b> Markus G. Battisti, I. Duretek, W. Friesenbichler, P. Guttmann, G. Pinter
15:20 - 15:40	<b>A Primary Study on the Creep Properties of Eucalypts</b> Ying-she Luo, Biao Deng, Xian-jun Li, Yuan-rong Ma
15:40 - 16:00	<b>Influence of mineral aggregates to the rheological properties of concrete mixture</b> Albertas Klovas

### COFFEE BREAK

## HUNYADI JANOS HALL

### ORAL PRESENTATIONS

#### SESSION 8

##### Rheological Fluid Mechanics

*Chair: Prof. Dr. Dennis A. SIGINER - Universidad de Santiago de Chile (Chile)*

16:20 - 16:40	<b>Simulation of the variation in temperature in a material without and with default</b> Kaddour Gherfi, Mohamed Chaour, Sofiane Boulkroune
16:40 - 17:00	<b>Numerical study of secondary flows of FENE rheological models in curved ducts</b> Joana M. Malheiro, Paulo J. Oliveira , Fernando T. Pinho
17:00 - 17:20	<b>A new numerical framework to simulate viscoelastic free-surface flows with the finite-volume method</b> Raphaël Comminal, Jon Spangenberg, Jesper Hattel
17:20 - 17:40	<b>Inverse Design and Optimization of Magnetorheological Dampers and Resonance Modelling and Control</b> Dennis A. Siginer, Mario F. Letelier

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - THURSDAY

BEATRIX HALL	
ORAL PRESENTATIONS	
SESSION 14	
<b>Rheology of Emulsions, Suspensions and Foams</b>	
<i>Chair: Prof. Dr. Dr. Gisèle LECOMTER - ENSCI - Limoges (France)</i>	
11:20 - 11:40	<b>The Effect of Fructose on Rheological Behavior of Alumina Dispersions</b> Ozlem Caglar Duvarci, Muhsin Çiftcioglu
11:40 - 12:00	<b>Rheology &amp; Thermal Stability of Ethoxylated Surfactants and their interaction with Polymers used for Enhanced Oil Recovery.</b> Izhar Ahmed Malik, Usamah A. Al-Mubeiyedh, Ibn Al-Waleed, Abdullah Sultan
12:00 - 12:20	<b>Rheological Properties of Liquid and Particle Stabilised Liquid Foam</b> Aycan Özlem Özarmut, Holger Steeb
12:20 - 12:40	<b>Rheological behavior of Pickering emulsions stabilized by phyllosilicates</b> David Kpogbémabou, Gisèle Lecomte-Nana, Anne Aimable, Marguerite Bienia
12:40 - 13:00	<b>Influence of the nature and the amount of surfactant on the rheological behavior of model phyllosilicate suspensions</b> Nadia Houta, Gisèle-Laure Lecomte-Nana, Nicolas Tessier-Doyen, Claire Peyratout

## BUFFET LUNCH

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - THURSDAY

## BEATRIX HALL

### ORAL PRESENTATIONS

#### SESSION 7

##### Multiscale Mechanics of Materials

*Chair: Dr. Markus HÜTTER - Eindhoven University of Technology (The Netherland)*

14:00 - 14:20	<b>Structure, phase content and mechanical properties of aluminum with hard particles after shock-wave compaction</b> Kulkov S., Vorozhtsov S
14:20 - 14:40	<b>Plasticity in polymer glasses: from mesoscopic dynamics to macroscopic response</b> Lambert C.A. van Breemen, Markus Hütter
14:40 - 15:00	<b>Numerical Simulation of Dynamic Loading to Thin-Walled Corrugation Tube Aluminum 6061-T6 Alloy</b> Akbar Othman, Azrol Jailani
15:00 - 15:20	<b>Multiscale modelling heat transfer in two-phase composites</b> Tomasz Sadowski, Przemysław Golewski
15:20 - 15:40	<b>FEM Simulation of the Size- and Constraining Effect in Lead-Free Solder Joints in the Framework of Strain Gradient Elasticity</b> Martin Lederer, Julien Magnien, Golta Khatibi, Brigitte Weiss
15:40 - 16:00	<b>Fluctuation-based flow-rule for viscoplastic flow and rate-dependent strain hardening of solid polymers</b> Markus Hütter, Theo A. Tervoort

#### COFFEE BREAK

#### SESSION 15

##### Multiscale Mechanics of Materials

*Chair: Prof. Dr. Sergei KULKOV - Institute of Strength Physics SB RAS (Russia)*

16:20 - 16:40	<b>Modelling of a magnetorheological fluid under shear deformation</b> Martin Boisly, Markus Kästner, Jörg Brummund, Volker Ulbricht
16:40 - 17:00	<b>Mechanical Loss in Multiferroic Materials at High Frequencies: Friction and the Evolution of Ferroelastic Microstructures</b> Z. Zhao, X. Ding, J. Sun, T. Lookman, L. Gao, E.K.H. Salje,
17:00 - 17:20	<b>Magnetorheology of the carbonyl iron/ZnO rod-like microparticle suspensions</b> Miroslav Mrálek, Michal Machovský, Vladimír Pavlánek, Ivo Kuřítko
17:20 - 17:40	<b>Determination of the liquid steel viscosity curves using a high temperature rheometer</b> Marta Korolczuk-Hejnák, Piotr Migas
17:40 - 18:00	<b>Rheology of novel magnetic fiber suspensions</b> Modesto T. López-López, Laura Rodríguez-Arco, Juan D.G. Durán, Pavel Kuzhir, Andrey Zubarev

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - FRIDAY

October 11. Friday	HUNYADI JÁNOS HALL	BEATRIX HALL
9:00 - 10:20	<b>PLENARY 11 and 12</b>	
10:20 - 11:10	<b>SHORT ORALS III.</b>	
11:10 - 11:40	<b>COFFEE BREAK.</b>	
11:40 - 13:00	<b>SESSION 14</b>	<b>SESSION 12</b>

## HUNYADI JANOS HALL

### PLENARY LECTURES

*Chair: Prof. Dr. Segrei N. KULKOV*

*Institute of Strength Physics SB RAS (Russia)*

### PLENARY LECTURE 12

9:00 - 9:40	<b>Statement and Resolution of Generalized Orr-Sommerfeld Equation</b> Prof. Dr. Blaise NSOM - Université de Bretagne Occidentale (France)
-------------	---

### PLENARY LECTURE 13

9:40 - 10:20	<b>Rheological Bases of Development Materials with Extreme Dynamic Strengths</b> Prof. Dr. László A. GÖMZE - University of Miskolc (Hungary)
--------------	---

## SHORT ORALS III.

10:20 - 10:25	<b>[P 03] Influence of grinding times on rheological and compacting properties of alumina and calcium-phosphate powder mixtures</b> Viktória Veréb, László A. Gömze
10:25 - 10:30	<b>[P 04] Monitoring of vulcanization process using measurement of electrical properties during linear increasing temperature</b> Emil Seliga, Ondrej Bošák, Pavel Koštial, Zdeněk Dvořák, Marián Kubliha, Stanislav Minárik, Vladimír Labaš
10:30 - 10:35	<b>[P 08] Preliminary observations on the effects of milk fortification with conjugated linoleic acid in yogurt preparation</b> Salamon Rozália Veronika, Albert István, András Csaba Dezső, Csapó János, Constanța Ibănescu
10:35 - 10:40	<b>[P 13] Theoretical and experimental studies of bending deformation in fivefold twinned silver nanowires</b> Jakob Jögi, Leonid Dorogin, Sergei Vlassov, Boris Polyakov, Ilmar Kink, Alexey Romanov, Jaan Kalda, Ants Lõhmus
10:40 - 10:45	<b>[P 17] Rheological Model for Slipping Phenomena in Polymeric Fluids and her Application for Flows in a Channel with a Square Cross-section</b> Ivan Pyshnograï
10:45 - 10:50	<b>[P20] Investigation of aluminium-steel joints formed by explosion welding process</b> Tunde Kovacs-Coskun, Balint Volgyi, Istvan Sikari-Nagl
10:50 - 10:55	<b>[P 21] Rheological regional properties of brain tissue studied under cyclics creep/recovery shear stresses</b> Boudjemaa Fatiha, Lounis Mourad, Bessai Naima, Khelidj Benyoucef
10:55 - 11:00	<b>[P 24] Natural materials to enhance rheological and mechanical properties of light cement for oil wells</b> M.Khodja-Saber; A. Mellak; T Bouziani; T.Sidane, M.Khodja

# ic-rmm1 CONFERENCE - DETAILED PROGRAM - FRIDAY

11:00 - 11:05	[P 35] The influence of selected excipients on the rheological behaviour of chitosan based ocular pharmaceutical systems. Lívia Budai, Enikő Szabadi, Mária Hajdú, Marianna Budai, Imre Klebovich, István Antal
11:05 - 11:10	[P 39] Investigation of rheological properties of porcelain suspensions Kincső Galatea Nagy, László A. Gömze

## COFFEE BREAK

### HUNYADI JANOS HALL

#### ORAL PRESENTATIONS

#### SESSION 14

#### Rheology of Emulsions, Suspensions and Foams

*Chair: Dr. Ozlem Caglar DUVARCI – Izmir Institute of Technology (Turkey)*

11:40 - 12:00	A Rheological Approach to Estimate floc Structure in Concentrated and Flocculated Suspensions. Suguru GOTOH, Masanobu ANDO, Toyoharu NAWA
12:00 - 12:20	Qualification methods of Al2O3 injection molding raw material Adam Egesz, Laszlo A. Gomze
12:20 - 12:40	Mineral admixture influence on thixotropic behaviour of light cement M.Khodja-Saber; A. Mellak; A.Benmounah; T.Sidane , M.Khodja
12:40 - 13:00	Flow of High Internal Phase Ratio Emulsions (HIPRE) through Converging Nozzles Kaan Kostak, Sümer Peker, Ilgar Gündüz, Ekrem Yorgancioğlu

### BEATRIX HALL

#### ORAL PRESENTATIONS

#### SESSION 12

#### Rheology of Biological Systems

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

11:40 - 12:00	Rheology of Fresh Blood Berrin İkizler, Sümer Peker, Banu Yener, Alp Alparslan, Şerife Helvacı
12:00 - 12:20	Rheology and Porosity Effect on the Proliferation of Pre-osteoblasts on Zirconia Ceramics Sergey Kulkov, Ales Buyakov, Svetlana Buyakova, Chrystalleni Hadjicharalambous, Maria Chatzinikolaidou
12:20 - 12:40	Numerical Simulation of Rheological, Chemical and Hydromechanical Processes of Thrombolysis Maxim G. Khramchenkov, Eduard M. Khramchenkov

# ic-rmm1 CONFERENCE



## The rheometry revolution: TwinDrive™

Anton Paar introduces MCR 702, the world's first TwinDrive™ rheometer.

One single rheometer with two perfectly balanced EC motor drives, covering all rheological applications.



Anton Paar® GmbH  
[info@anton-paar.com](mailto:info@anton-paar.com)  
[www.anton-paar.com](http://www.anton-paar.com)