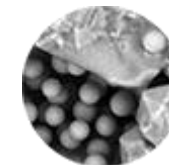


ic-rmm4

CONFERENCE PROGRAM



ec-siliconf1

October 6th Sunday

16:00-18:00

REGISTRATION

October 7th Monday

8:00 – 18:00

REGISTRATION

14:30 – 15:30

BOARD MEETING OF IC-RMM4 *in the ANJOU HALL*

HUNYADI JANOS HALL

16:25 – 18:00

OPENING WITH PLENARY LECTURES – chair: Prof. Sergei N. KULKOV (Russian Federation)

16:25 – 16:30	Prof. Dr. Sergei N. KULKOV	Conference Opening	
16:30 – 16:40	Mrs. Emese KUROVICS	General Information	
16:40 – 17:20	Academician Prof. Valerii KULICHKHIN	Rheology of Polymer Solutions and Their Processing to Fibers and Films	PLENARY – 1ST
17:20 – 18:00	Prof. Dr. László A. GÖMZE et all	Role of SiO ₂ , Si ₃ N ₄ and Rheology in Development of Self-healing Ceramic Based Armor Shell Composites with Extreme Dynamic Strengths	PLENARY – 2ND
18:00	WELCOME RECEPTION Prof. Dr. László A. GÖMZE chair of ic-rmm4 and ec-siliconf1 Conferences (Hungary)		

CONFERENCE PROGRAM

October 8th Tuesday

HUNYADI JANOS HALL

PLENARIES AND KEYNOTE 1 – chair: Academician Prof. Valery KULICHIKHIN (Russia)

8:30 – 9:10	Shi-Qing WANG	Melt Rheology as Foundation for Mechanics of Polymers in both Liquid and Solid States	PLENARY – 3RD
9:10 – 9:50	Ulrich A. HANDGE et all	Rheological Properties of Polymer Solutions and Melts for Membrane Fabrication	PLENARY – 4TH
9:50 – 10:20	Arkadii ARINSTEIN	The Self-Ordering in a Mixture of Two Oppositely Charged Polyelectrolytes	KEYNOTE

10:20 – 10:25

Conference Photo on the Terrace

10:25 – 10:50

Coffee Break and POSTER SESSION 1.

POSTER SESSION 1. - chair: Ac. Prof. Valery KULICHIKHIN (Russia), co-chairs: S. Q. Wang (USA), U. A. Handge (Germany) and A. Arinstein (Israel)

P1	Gebresas ALULA et all	Development and Characterization of Hybrid Biodegradable Polymer Composites	P11	Valerii V. KARAKULOV et all	About Mechanical Behaviour of Metal Matrix Composites Under Shock Wave Loading
P2	Pavel BAZANT et all	The Morphology and Amount Influence of Mineral Flame Retardant Microparticles on Visco-elastic and Flame Retardancy Properties of Propylene-Based Elastomer	P12	Anna KNYAZEVA	Elastic and Viscous Stresses During Composite Synthesis Under Quasi Static External Loading
			P13	Krisztina ROMÁN et all	Rheological Characterization of PVC Corncob Composites. Effect of Molecule Weight of PVC
P3	Bendoukha MOHAMMED et all	Biomechanical and Radiographic Analysis of Adjacent Segment Level Following Hybrid Dynamic Stabilization Topping off Fusion of the Lumbar Spine	P14	Roman KOLARIK et all	Rheology and Modeling of PET-Titanium Dioxide Polymer Systems
P4	Mark C. DIZON et all	Evolution of Average Degree of Polymerization and Molar Mass of Milk Proteins During Enzymatic Hydrolysis by Proteases	P15	E. KOROBKO et all	Effect of Modification by Double Doping of Titanium Dioxide Particles on the Rheology of Dielectric Suspensions
P5	Pavlina HOLCAPKOVA et all	Characterization of Polypropylene Nonwovens Extruded through Spinneret Capillaries during Technology Meltblown	P16	Tunde Anna KOVACS	Experimental Study of the Ultrasonic Welding Effected Metal Joint Microstructure
P6	Ladislav FOJTI et all	The Effect of Mold Construction on Quality of Plastic Part Produced by Vacuum Thermoforming	P17	Emese KUROVICS et all	Influence of Compacting Times and Pressures on Rheological Properties of Kaolin and Sawdust Powder Mixtures
P7	Tibor HORVÁTH et all	Molar Mass Determination of Polylactic Acid Alternatives by Capillary Viscometry Method	P18	Erika KUTALKOVA et all	Electrorheological Fluid Based on Cellulose Particles: Optimization of Measuring Procedure

CONFERENCE PROGRAM**October 8th Tuesday**

P8	Ali I.AL-MOSAWI et all	Effect of PVC Additives on the Electrical Resistivity of NBR	P19	Joanna MASTALSKA-POPLAWSKA et all	Rheological Parameters of Polymer-Silicate Gels
P9	Marketa ILCIKOVA et all	PMMA/SAN Blends with Graphene Oxide Polymer Hybrids – Investigation of Compatibility by Melt Rheology	P20	Robert MOUCKA et all	Magnetorheological Elastomers as an Effective Electromagnetic Radiation Shielding Materials
P10	Piotr IZAK et all	Some Aspects of Ceramic Granulated Powder Die Compaction	P28	Jeong-Ho CHANG	Controlled Release Formulation of Spherical Silica Hybrid Liposome Particles for Cosmetic Applications

MORNING SESSION 1 – chair: Prof. Dr. Arkadii ARINSTEIN (Israel)

10:50 – 11:10	Mohsen MHADHBI et all	Microstructural Changes of Nanocrystalline NbC _{0.93} Powders Prepared by High-Energy Ball Milling
11:10 – 11:30	Ivica DURETEK et all	The Influence of Pressure Dependent Viscosity on the Powder Injection Molding Process Simulation
11:30 – 11:50	Nikita M. KUZNETSOV et all	Unexpected Rheological Behavior of Detonation Nanodiamond Hydrosols
11:50 – 12:10	Meltem TEZCAN et all	Rheological Properties of Bentonite Based Drilling Fluid under the Small and Large Amplitude Oscillatory Shear
12:10 – 12:30	Tomáš REMIŠ et all	Preparation and Characterization of PVA Membranes with Nanodiamonds

12:30 – 14:00

LUNCH**RENESANSZ HALL****MORNING SESSION 2 – chair: Prof. Paul D. LICKISS (United Kingdom)**

10:50 – 11:10	Tomáš KŘENEK et all	Solid-State Reactions in Mixed Micron-Sized Silicon Monoxide and Titanium Monoxide: Nanostructured Composites with Visible Light Absorption
11:10 – 11:30	Trygve Storm AARNÆS et all	Effect of H ₂ on SiO and SiC Formation
11:30 – 11:50	Kalim DESHMUKH et all	Evaluation of Microstructural and Thermal Properties of Sol-Gel Derived Silica-Titania Based Porous Glasses
11:50 – 12:10	Sofiya AYDINYAN et all	Selective Laser Melting of Silicon Based Ceramics
12:10 – 12:30	Yijin CHEN et all	Study on SiC Particulate-Reinforced Aluminum Matrix Composites

12:30 – 14:00

LUNCH

CONFERENCE PROGRAM

October 8th Tuesday

HUNYADI JANOS HALL

KEYNOTES – chair: Prof. Dr. Shi-Qing WANG (United States)

14:00 – 14:30	Dominique COLLIN	On the Interest of Piezorheology to Reveal the Mechanical Properties of Soft Solids	KEYNOTE
14:30 – 15:00	Sergei KULKOV	Porous Ceramics as Mechanical Metamaterial: Structure, Properties and Fractal Characteristics	KEYNOTE
15:00 – 15:30	Linan QIAO et all	A New Formulation of the Time-Temperature Equivalent Principle for the Description of Thermo-rheologically Complex Behaviour	KEYNOTE
15:30 – 16:00	Alexander SLOBODOV et all	Formation of Phase-Chemical Composition at Synthesis of Materials is a Basis of their Rheological Properties	KEYNOTE

16:00 – 17:00

Open discussions with coffee and snacks

RENESANSZ HALL

KEYNOTES AND ORALS – chair: Prof. Dr. László A. GÖMZE (Hungary)

14:00 – 14:30	Tsutomu S. IWAYAM et all	Optical properties of Si nanocrystals in SiO ₂ matrix synthesized by reactive pulsed laser deposition	KEYNOTE
14:30 – 15:00	Paul D. LICKISS et all	Silicon-Containing Linkers for Construction of Metal-Organic Frameworks	KEYNOTE
15:00 – 15:20	Tomáš KOVÁŘÍK et all	Hierarchically Porous Aluminosilicate Substrates Based on Geopolymer Materials	
15:20 – 15:40	Panlekha MANPETCH et all	Synthesis of Graphene Oxide (GO) – Silica (SiO ₂) Compositated with Titania (TiO ₂) for Textile Wastewater Treatment	
15:40 – 16:00	Kanokon NUILEK et all	Effect of Activation and Exfoliation on the Formation of Carbon Nanosheets Derived from Natural Materials	

16:00 – 17:00

Open discussions with coffee and snacks

17:00 – 18:00

BOARD MEETING OF EC-SILICONF1 in the ANJOU HALL

CONFERENCE PROGRAM

October 9th Wednesday

HUNYADI JANOS HALL

PLENARIES WITH SHORT ORALS – chair: Prof. Dr. Alexander SLOBODOV (Russia)

8:30 – 9:10	Vladimir Ya SHEVCHENKO	On the Synthesis Interconnected Regular Turing Structures with the Topology of Triply Periodic Surfaces of Minimal Energy	PLENARY – 5 TH
9:10 – 9:50	Mario MINALE	Flow of non-Newtonian fluids through and over a porous medium: A rheological approach	PLENARY – 6 TH
9:50 – 9:56	Rosaria D'AMATO et all	Synthesis by Laser Pyrolysis of Si Quantum Dots as Active Materials for LED	SO-1 (P21)
9:56 – 10:02	Hassanen JABER et all	Preparation and Synthesis of Hydroxyapatite Bio-Ceramic from Bovine bone by Thermal Heat Treatment	SO-2 (P22)
10:02 – 10:08	Emese KUROVICS et all	Examination of Mullite Ceramic Specimens Made by Conventional Casting Method from Kaolin and Sawdust	SO-3 (P23)
10:08 – 10:14	Yuri V. PERSHIN et all	Silicon Containing Cu-C Mesoscopic Composite and the Application for the Improving of Epoxy High Filled Compound	SO-4 (P24)
10:14 – 10:20	Bella UDVARDI et all	Production of Lightweight Geopolymer Concrete	SO-5 (P25)

10:20 – 10:25

Conference Photo

10:25 – 10:50

Coffee Break and POSTER SESSION 2

POSTER SESSION 2 - chair: Prof. T. Iwayama (Japan), co-chairs: V. Ya Shevchenko (Russia), P. Lickliss (United Kingdom) and A. Slobodov (Russia)

P26	Mohamed M. M. ABDELFATTAH	The Effect of Additives Materials on Phases and Properties of Lightweight Expanded Clay Aggregates	P32	Zdzisław PYTEL	The Influence of Molding Wastes on the Quality of Autoclaved Sand-Lime Materials
P27	A PETRIK et all	Case Study of Failure Investigation Procedure of CMOS Imager Modules in Automotive Electronics Unit	P33	Mohammed TIHTIH et all	Effect of Bismuth on the Structural and Optical Properties of the Sol Gel Processed Barium Titanate
P29	Ali I. AL-MOSAWI et all	Elimination of Plasticized Poly(vinyl Chloride) Degradability by Using Nanocement: A novel study	P34	Tatyana TSYGANOVA et all	The Content of the Adsorption Centers of High-Silica Porous Glasses
P30	Dongsheng LI	Tunable Photoluminescence Controlled by Interface Defects Between Boron-Doped Nanocrystal Silicon and Silicon Oxide	P35	Lukáš VÁLA et all	Laser Ablation of Silicon Monoxide and Titanium Monoxide in Liquids: Formation of Mixed Catalytic Colloidal Dispersion with Catalytic Activity
P31	Ludmila MAHNICKA-GOREMIKINA et all	Usage of the Amorphous Silica for the Mullite Ceramic Preparation	P36	Emese Kurovics et all	Role of micro silica on rheological properties of fresh concrete

CONFERENCE PROGRAM

October 9th Wednesday

HUNYADI JANOS HALL

MORNING SESSION 3 – chair: Prof. Dr. Mônica NACCACHE (Brasil)

10:50 – 11:10	Miroslav MRLÍK et all	Rheological Properties of PVDF-GO Composites and Their Vibration Sensing Capability
11:10 – 11:30	Patcharapon SOMDEE et all	Investigation Rubber Elasticity and Mechanical Properties of Polyurethane Elastomers with Different Silicon Carbide Content
11:30 – 11:50	Alexander A. PETUNIN et all	The Dependence of Actual Laser Cutting Speed on CNC Sheet Equipment on Number of NC Program Commands for Metal Grades 1.0114 and AWAIMg3
11:50 – 12:10	Aleksandr URAKOV et all	Effect of Addition of Hydrogen Peroxide Solution with Sodium Bicarbonate on Rheological Behavior of Blood Clot

12:10 – 13:00

LUNCH

RENESANSZ HALL

MORNING SESSION 4 – chair: Prof. Tsutomu IWAYAMA (Japan)

10:50 – 11:10	Meriem SASSI et all	Characterization of Glass Foams Produced from Waste CRT Glass and Aluminium Dross
11:10 – 11:30	Karin Fjeldstad JUSNES et all	The Effect of Cristobalite Formation on Disintegration of Quartz
11:30 – 11:50	Jian Meng JIAO et all	The Use of Silicon-Boron Alloys in Latent Heat Thermal Energy Storage System
11:50 – 12:10	Partha GOSWAMI	The Effects of Magnetic Silica Nanoparticle Addition on Dynamic Spin Susceptibility of Topological Kondo Insulator

12:10 – 13:00

LUNCH

13:00 – 20:00

CULTURAL PROGRAM

CASTLE TOUR IN TOKAJ WINE REGION

CONFERENCE PROGRAM**October 10th Thursday****HUNYADI JANOS HALL****PLENARIES AND KEYNOTE 2 – chair: Prof. Dr. Michal SEDLACIK (Czech Republic)**

8:30 – 9:10	Maria Teresa CIDADE et all	Rheology of Hydraulic Lime Grouts for Conservation of Stone Masonry	PLENARY – 6TH
9:10 – 9:50	Mônica F. NACCACHE	Yield Stress Fluids in the Oil Industry	PLENARY -7TH
9:50 – 10:20	Alexander SLOBODOV et all	Thermodynamic Modeling and Calculation of Phase-Chemical Transformations at Ceramic Materials Synthesis and Operation	KEYNOTE

10:20 – 10:25

Conference Photo on the Terrace

10:25 – 10:50

Coffee Break and POSTER SESSION 3**POSTER SESSSION 3 - chair: S. N. Kulkov (Russia), co-chairs: M. T. Cidade (Portugal), M. F. Naccache (Brasil), A. Mamedov (Turkey)**

P37	Jüri OLT et all	Comparison Between Finite Element Analysis and Rheological Models for Chip Formation	P41	Albina ZHARMUKHAMBETOVA et all	Ductile Failure Viewed as a Final Stage of the Autowave Process of Plastic Flow Localization
P38	Michal SEDLACIK et all	Effect of Percolation Threshold on the Piezo-Resistive Behavior of Magnetorheological Elastomers	P41	T ŽIŽLAVSKÝ et all	Rheology of Natural Hydraulic Lime Pastes Modified by Non-Traditional Biopolymeric Admixtures
P39	M VYŠVAŘIL et all	Fresh State Properties of Lime Mortars with Foam Glass Dust	P43	Sergeenko Sergey NIKOLAEVICH	Rheological Equation of Hot Compaction of Powder Steel 110G13
P40	Łukasz WÓJCIK et all	Clay-Cement Suspensions – Rheological Characteristics	P55	Pavlina HOLCAPKOVA et all	Characterization of Polypropylene Nonwovens Extruded through Spinneret Capillaries during Technology Meltblown

ORALS AND SHORT ORALS – chair: Prof. Dr. Maria T. CIDADE (Portugal)

10:50 – 11:10	Mahmood Hasan ALHAFADHI et all	Numerical Simulation Prediction and Validation 2-D Model Weld Pipe Using Hardness Test Measurement	
11:10 – 11:30	Prashanth THIRUNAVUKKARASU et all	Design of a Transparent Counter-Rotating Eccentric Couette Cell to Study the Flow of Viscous Fluids	
11:30 – 11:36	Wissam Qassim AL-SALIH	Using Crumb Rubber Waste to Improve the Bituminous Mixes: Experimental Investigation of Rutting Behaviour for Flexible Asphalt Mix for Road Construction	SO-6 (P44)
11:36 – 11:42	Ales S. BUYAKOV et all	Structure and Percolation Thresholds in Magnesia Stabilized ZrO ₂ -MgO Porous Composite	SO-7 (P45)
11:42 – 11:48	Seoyoung CHO et all	Application of the Ramberg-Osgood Model in Asphalt Technology	SO-8 (P46)

CONFERENCE PROGRAM**October 10th Thursday**

11:48 – 11:54	Elena DEDOVA et all	Effect of Addition on Defects Self-Healing in High-Temperature Ceramic Based on ZrB ₂	SO-9 (P47)
11:54– 12:00	Anna LIPOVKA et all	The Effect of Carbon Nanotubes on the Mechanical Properties and Degradation of Polymer Rubber	SO-10 (P48)
12:00 – 12:06	Valentina A. MIKUSHINA et all	Numerical Study of the Mechanical Behavior of Porous Ceramics at Different Scale Levels	SO-11 (P49)
12:06 – 12:12	Alexandru POPA et all	Design and Analysis of FDM 3D Printed Samples to Control Material Anisotropy	SO-12 (P50)
12:12 – 12:18	Yuliya A RIKUN	Mechanical Behavior of the Spine Segment	SO-13 (P51)
12:18 – 12:24	Tomas SEDLACEK et all	Rheology as a Tool for PLA Melt Spinnability Evaluation	SO-14 (P52)
12:24 – 12:30	Kinga TAMÁSI et all	Effects of Natural-Based Plasticizers in Rubber Mixtures	SO-15 (P53)
12:30 – 12:36	Jamal Eldin F. M. IBRAHIM et all	Investigation of the Rheological Properties of Complex Zeolite-Alumina Mixtures	SO-16 (P54)

12:36 – 14:00

LUNCH**KEYNOTES AND ORALS - chair: Prof. Dr. László A. GÖMZE (Hungary)**

14:00 – 14:20	Bartłomiej A. GAWEŁ	Water and Hydroxyls Groups in High Purity Quartz Sand	
14:20 – 14:40	Judit SVIDRÓ et all	The Role of Purity Level in Foundry Silica Sand on its Thermal Properties	
14:40 – 15:00	Jamal Eldin F. M. IBRAHIM et all.	Preparation and Investigation of Alumina-Zeolite- Composite Materials	
15:00 – 15:30	Nadia El KISSI et all	Melt Compounding of Cellulose Based Polymer Nanocomposites: main issues to overcome	KEYNOTE
15:30 – 16:00	Alexandr URAKOV	Known Drugs as Factors of Rheology of Liquid, Thick and Dried Blood	KEYNOTE

16:00 – 16:30

Coffee Break

16:30 – 17:10

CLOSING CEREMONY**Awards of Best Poster and Awards of Best Short Oral**

18:30

CONFERENCE DINNER