



Tomas Bata University in Zlín
Faculty of Technology



NOVEL TRENDS IN RHEOLOGY VIII PROGRAMME

July 30, 2019

Time	Event	Presentation Title
7:00-8:20	Registration	
8:20-8:30	Welcome	
(Chairman: José Covas)		APPLIED RHEOLOGY I
8:30-9:00	Helmut Münstedt <i>Friedrich-Alexander University Erlangen-Nürnberg, Germany</i>	Elastic Behavior and Processing of Polymer Melts
9:00-9:30	Martin Zatloukal <i>Tomas Bata University in Zlin, Czech Republic</i>	Influence of Long Chain Branching on Fiber Diameter Distribution for Polypropylene Nonwovens Produced by Melt Blown Process
9:30-10:00	Coffee break & Exhibition	
(Chairman: Helmut Münstedt)		APPLIED RHEOLOGY II
10:00-10:30	Masayuki Yamaguchi <i>Japan Advanced Institute of Science and Technology, Japan</i>	Strain-Hardening Behavior in Elongational Viscosity of Polyolefin Blends
10:30-11:00	Masayuki Yamaguchi <i>Japan Advanced Institute of Science and Technology, Japan</i>	Effect of Flow Field on Structure and Properties for Polycarbonate Blends
11:00-11:30	José Covas <i>University of Minho, Portugal</i>	In-Process Rheological Measurements During the Manufacture of Multiphase Polymer Systems
11:30-12:00	Dietmar Auhl <i>Berlin Institute of Technology (TU Berlin), Germany</i>	3D-Printing Quality in Relation to Melt Flow and Fusion Behavior of Polymer Materials
12:00-13:30	Lunch & Exhibition	
(Chairman: Paula Marie Wood-Adams)		NOVEL RHEOLOGICAL TECHNIQUES I
13:30-14:00	Vitor Barroso <i>Borealis Polyolefine GmbH, Austria</i>	Rheological Methods for the Characterization of Viscoelasticity in Industrial Polymers
14:00-14:30	Frederik Desplentere <i>KU Leuven, Belgium</i>	Advanced Rheological Characterisation for Thermal Sensitive Materials Using Shear Heating Device
14:30-15:00	Coffee break & Exhibition	
(Chairman: Donggang Yao)		NOVEL RHEOLOGICAL TECHNIQUES II
15:00-15:30	Alan Jeffrey Giacomini <i>Queen's University, Canada</i>	Continuum Mechanics of Shear Stress Growth
15:30-16:00	Paula Marie Wood-Adams <i>Concordia University, Canada</i>	Interdiffusion Dynamics at the Interface between two Polystyrenes with Different Molecular Weight Probed by a Rheological Tool
18:30	Conference dinner	

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Conference programme:

<http://noveltrends8.ft.utb.cz/programme.html>



July 31, 2019

(Chairman: Jeffrey Giacomini)		CONSTITUTIVE EQUATIONS
8:00-8:30	Vít Průša <i>Charles University in Prague, Czech Republic</i>	On Diffusive Variants of Some Classical Viscoelastic Rate-Type Models
8:30-9:00	Donggang Yao <i>School of Materials Science & Engineering, Georgia Institute of Technology, Atlanta, Georgia, USA</i>	A Framework for Nonlinear Viscoelasticity on the Basis of Logarithmic Strain and Projected Velocity Gradient
9:00-10:30	Coffee break & Poster section & Exhibition	
	Riho Nishikawa <i>Japan Advanced Institute of Science and Technology, Japan</i>	Effect of Carbon Nanotube Addition on Molecular Orientation of Polyethylene
	Riza Saari <i>Japan Advanced Institute of Science and Technology, Japan</i>	Effect of Metal Salt Incorporation on Structure and Properties for Poly(Vinyl Alcohol)
	Jiri Smilek <i>Brno University of Technology, Czech Republic</i>	Study on Viscoelastic Properties of Phase-Separated Hydrogels by Time-Temperature Superposition Principle
	Dusan Kimmer <i>SPUR a.s., Czech Republic</i>	Nanostructures for Air Filtration. Filtration Properties in Range of Maximum Penetrating Particle Sizes
	Petra Peer <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	Electrospinning of Poly(ethylene oxide) Solutions - Quantitative Relations between Mean Nanofibre Diameter, Concentration, Molecular Weight, and Viscosity
	Jana Zelenkova <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	Approximate Functions Relating Specific Viscosity of PEO in DMSO vs. Concentration Respecting Intrinsic Viscosity for Low Concentrations
	Petr Filip <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	Wall Slip of Highly Filled Powder Injection Moulding Compounds in Dependence on Capillary Die Geometry
	Patrik Macúrik <i>Slovak University of Technology, Slovak Republic</i>	Measuring Techniques of Rheological Properties of Rubber Blends from Industry
	Martina Nevoralová <i>Institute of Macromolecular Chemistry ASCR, Czech Republic</i>	Rheological Characterization of Starch-based Biodegradable Polymer Blends
	Jan Musil <i>Tomas Bata University in Zlin, Czech Republic</i>	Historical Notes on Flow Visualization in Polymer Melt Processing
	Jiri Drabek <i>Tomas Bata University in Zlin, Czech Republic</i>	Effect of Molecular Weight and Extensional Rheology on Melt Blown Process Stability for Linear Isotactic Polypropylenes
	Tomas Barborik <i>Tomas Bata University in Zlin, Czech Republic</i>	The Effect of Heat Transfer Coefficient on Crystalline Phase Development During Production of Casted Film
	Mehmet Ayas <i>Czech Technical University in Prague, Czech Republic</i>	Mixing of a Viscoplastic Fluid in an In-Line Mixer
	Josef Jůza <i>Institute of Macromolecular Chemistry ASCR, Czech Republic</i>	Surface Tension Measurement: Attempt to Combine Pendant Drop and Deformed Drop Retraction Methods
	Milan Krcalík <i>Johannes Kepler University Linz, Austria</i>	Different Approaches for Calculation of Cumulative Storage Factor as Novel Parameter for Analysis of Reinforcement in Complex Polymer Nanocomposites
(Chairman: Roland Kádár)		INTRODUCTION OF NOVEL RHEOLOGICAL TOOLS
10:30-11:00	Lukas Schwab <i>Waters GmbH, TA Instruments, Germany</i>	Combined rheo-Raman Analysis: Correlating Viscoelastic Behavior with Chemical Structure
11:00-11:30	Ansgar Frendel <i>Thermo Fisher Scientific, Germany</i>	Processing Studies on Rubber Mixtures with Different Types of Carbon Black by Extrusion with Torque Rheometer Method
11:30-12:00	Michal Bartík <i>Anton Paar, Czech Republic</i>	The New Anton Paar MCR 702 MultiDrive - the Versatile Platform for Rheology and Dynamic Mechanical Analysis (DMA)
12:00-13:30	Lunch & Exhibition	
(Chairman: Frederik Desplentere)		RHEOLOGY OF POLYMER BLENDS AND COMPOSITES
13:30-14:00	Roland Kádár <i>Chalmers University of Technology, Sweden</i>	Evidence of Percolated Network at the Linear - Nonlinear Transition in Oscillatory Shear
14:00-14:30	Zdeněk Starý <i>Institute of Macromolecular Chemistry ASCR, Czech Republic</i>	Rheology and Structure of Immiscible Polymer Blends Filled with Carbon Black
14:30-15:00	Refreshment & End of the conference	

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