



NOVEL TRENDS IN RHEOLOGY VI PROGRAMME

July 28, 2015

Time	Event	Presentation Title
7:00-8:20	Registration	
8:20-8:30	Welcome	
(Chairman: Yong Woo Inn)		FLOW INSTABILITIES I
8:30-9:00	Helmut Münstedt <i>Friedrich-Alexander University Erlangen-Nürnberg, Germany</i>	Investigations of Slip in Capillary Flow by Laser-Doppler Velocimetry and Their Relations to Melt Fracture
9:00-9:30	Savvas George Hatzikiriakos <i>The University of British Columbia, Canada</i>	Biodegradable Polymers: Wall Slip, Melt Fracture, and Processing Aids
9:30-10:00	Coffee break & Exhibition	
(Chairman: Savvas George Hatzikiriakos)		FLOW INSTABILITIES II
10:00-10:30	Yong Woo Inn <i>Chevron Phillips Chemical Company LP, USA</i>	Melt Fracture, Wall Slip, and Flow-Induced Fractionation of Bimodal Polyethylenes
10:30-11:00	Martin Zatloukal <i>Tomas Bata University in Zlín, Czech Republic</i>	Die Drool Phenomenon in Plastics Processing
11:00-11:30	Paula Marie Wood-Adams <i>Concordia University, Canada</i>	Slip of Polydisperse Polymers: Molecular Weight Distribution Above and Below the Plane of Slip
11:30-12:00	John Robert Dorgan <i>Colorado School of Mines, USA</i>	Flow Induced Migration in Polymer Melts – Theory and Simulation
12:00-13:30	Lunch & Exhibition	
(Chairman: Alan Jeffrey Giacomin)		DEGRADATION AND STABILITY
13:30-14:00	Manfred Hermann Wagner Victor Hugo Rolón-Garrido <i>Berlin Institute of Technology (TU Berlin), Germany</i>	Rheological Characterization of Thermal, Thermo-Oxidative and Photo-Oxidative Degradation of LDPE
14:00-14:30	Ana Vera Machado <i>University of Minho, Portugal</i>	Effect of Shear Rate on Ethylene/Propylene Copolymers Degradation
14:30-15:00	Coffee break & Exhibition	
(Chairman: Manfred Hermann Wagner)		DEGRADATION AND FLOW INSTABILITIES
15:00-15:30	Alan Jeffrey Giacomin <i>Queen's University, Canada</i>	Die Drool and Polymer Degradation
15:30-16:00	Olga Sousa Carneiro <i>University of Minho, Portugal</i>	Weld Lines in Extrusion: Understanding the Role of the Flow Conditions
18:30	Conference dinner	

Partners



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(Chairman: Vít Průša)		CONSTITUTIVE EQUATIONS
8:00-8:30	Manfred Hermann Wagner <i>Berlin Institute of Technology (TU Berlin), Germany</i>	A Unifying Model for Elongational Flow of Polymer Melts and Solutions Based on the Interchain Tube Pressure Concept
8:30-9:00	Radek Pivokonsky <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	Applicability of the Modified XPP Model to a Description of Flow Behaviour of Polymeric Materials
9:00-9:30	João Miguel Nóbrega <i>University of Minho, Portugal</i>	Implementation of Integral Viscoelastic Constitutive Models in OpenFOAM® Computational Library
9:30-10:30	Coffee break & Poster section & Exhibition	
	Vít Průša <i>Charles University in Prague, Czech Republic</i>	Perspectives on Using Implicit Type Constitutive Relations in the Modelling of the Behaviour of Non-Newtonian Fluids
	Jiri Drabek <i>Tomas Bata University in Zlín, Czech Republic</i>	Investigation of Thermal Degradation of Branched Polypropylene via Rheology
	Pavol Alexy <i>Slovak University of Technology, Slovak Republic</i>	Oscillation Rheometry – Method for Processing Stability Testing of High Sensitive Polymers
	Esmaeil Narimissa <i>Berlin Institute of Technology (TU Berlin), Germany</i>	Comparison between Extensional Rheological Properties of Low Density Polyethylene Melt in SER and RME Rheometric Systems
	Tomas Barborik <i>Tomas Bata University in Zlín, Czech Republic</i>	Effect of Viscoelastic Stress State at Die Exit on Extrusion Film Casting Process: Theoretical Study
	Milan Krcalík <i>Johannes Kepler University Linz, Austria</i>	Rheology of Multiphase Polymer Systems using Novel „Melt Rigidity” Evaluation Approach
	Eva Hnatkova <i>Tomas Bata University in Zlín, Czech Republic</i>	Rheological Investigation of Highly Filled Polymers: Effect of Molecular Weight
	Evgeny Karpushkin <i>Lomonosov Moscow State University, Russia</i>	Shear-Induced Structure Evolution of Carbon Nanotubes Dispersions in Polyacrylonitrile–Dimethylsulfoxide Solution
	Petra Peer <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	Comparison of Electrorheological Characteristics Obtained in Two Geometrical Arrangements: Parallel Plates and Concentric Cylinders
	Jan Skočilas <i>Czech Technical University in Prague, Czech Republic</i>	Squeezing Flow of Collagen Solution – Mathematical Model of Shear and Elastic Behavior
	Rushita Shah <i>Tomas Bata University in Zlín, Czech Republic</i>	Preparation of Bacterial Cellulose Based Hydrogels and Their Viscoelastic Behavior
	Dusan Kimmer <i>SPUR a.s., Czech Republic</i>	The Effect of Combination Electrospun and Meltblown Filtration Materials on Their Filtration Efficiency
(Chairman: Paula Marie Wood-Adams)		INTRODUCTION OF NOVEL RHEOLOGICAL TOOLS
10:30-11:00	Jan Philip Plog <i>Thermo Fisher Scientific, Germany</i>	Following Curing Reactions with Rheometry and Simultaneous FTIR-Spectroscopy
11:00-11:30	Michael Schopferer <i>TA Instruments, USA</i>	Orthogonal Superposition (OSP) Rheology as a Tool to Study Structures in Complex Fluids
11:30-12:00	Loredana Mirela Völker-Pop <i>Anton Paar Germany GmbH, Germany</i>	Novel Technologies for Rheological Investigations
12:00-13:30	Lunch & Exhibition	
(Chairman: Helmut Münstedt)		ELONGATIONAL RHEOLOGY
13:30-14:00	Teodor Burghilea <i>Universite de Nantes, France</i>	Necking Failure and Physical Rupture of a Molten Low Density Polyethylene (LDPE) Sample Undergoing Uniaxial Extension
14:00-14:30	Zdeněk Starý <i>Friedrich-Alexander University Erlangen-Nürnberg, Germany</i>	Electrical Conductivity and Rheology of Carbon Black Composites under Elongation
14:30-15:00	Refreshment & Exhibition	
(Chairman: João Miguel Nóbrega)		FLOW MODELING
15:00-15:30	Ivo Nezbeda <i>J. E. Purkinje University, Czech Republic</i>	Application of Computer Simulations: Molecular Insight into Electrospinning
15:30-16:00	Wannes Sambaer <i>Tomas Bata University in Zlín, Czech Republic</i>	3D modeling of Polyurethane Electrospun Nanofiber Membrane Clogging During Air Filtration
16:00	End of the conference	

Partners

