Tomas Bata University in Zlín
Faculty of Technology

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 *Friedrich-Alexander University Erlangen-Nürnberg, Germany*	Investigations of Slip in Capillary Flow by Laser-Doppler Velocimetry and Their Relations to Melt Fracture
9:00-9:30	Savvas George Hatzikiriakos *The University of British Columbia, Canada*	Biodegradable Polymers: Wall Slip, Melt Fracture, and Processing Aids
9:30-10:00	Cofee break & Exhibition	
	(Chairman: Savvas George Hatzikiriakos)	FLOW INSTABILITIES II
10:00-10:30	Yong Woo Inn *Chevron Phillips Chemical Company LP, USA*	Melt Fracture, Wall Slip, and Flow-Induced Fractionation of Bimodal Polyethylenes
10:30-11:00	Martin Zatloukal *Tomas Bata University in Zlín, Czech Republic*	Die Drool Phenomenon in Plastics Processing
11:00-11:30	Paula Marie Wood-Adams *Concordia University, Canada*	Slip of Polydisperse Polymers: Molecular Weight Distribution Above and Below the Plane of Slip
11:30-12:00	John Robert Dorgan *Colorado School of Mines, USA*	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 Víctor Hugo Rolón-Garrido *Berlin Institute of Technology (TU Berlin), Germany*	Rheological Characterization of Thermal, Thermo-Oxidative and Photo-Oxidative Degradation of LDPE
14:00-14:30	Ana Vera Machado *University of Minho, Portugal*	Effect of Shear Rate on Ethylene/Propylene Copolymers Degradation
14:30-15:00	Cofee break & Exhibition	
	(Chairman: Manfred Hermann Wagner)	DEGRADATION AND FLOW INSTABILITIES
15:00-15:30	Alan Jeffrey Giacomin *Queen's University, Canada*	Die Drool and Polymer Degradation
15:30-16:00	Olga Sousa Carneiro *University of Minho, Portugal*	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 *Berlin Institute of Technology (TU Berlin), Germany*	A Unifying Model for Elongational Flow of Polymer Melts and Solutions Based on the Interchain Tube Pressure Concept
8:30-9:00	Radek Pivokonsky *Institute of Hydrodynamics ASCR, Czech Republic*	Applicability of the Modified XPP Model to a Description of Flow Behaviour of Polymeric Materials
9:00-9:30	João Miguel Nóbrega *University of Minho, Portugal*	Implementation of Integral Viscoelastic Constitutive Models in OpenFOAM® Computational Library
9:30-10:30	Cofee break & Poster section & Exhibition	
	Vít Průša *Charles University in Prague, Czech Republic*	Perspectives on Using Implicit Type Constitutive Relations in the Modelling of the Behaviour of Non-Newtonian Fluids
	Jiri Drabek *Tomas Bata University in Zlín, Czech Republic*	Investigation of Thermal Degradation of Branched Polypropylene via Rheology
	Pavol Alexy *Slovak University of Technology, Slovak Republic*	Oscillation Rheometry – Method for Processing Stability Testing of High Sensitive Polymers
	Esmaeil Narimissa *Berlin Institute of Technology (TU Berlin), Germany*	Comparison between Extensional Rheological Properties of Low Density Polyethylene Melt in SER and RME Rheometric Systems
	Tomas Barborik *Tomas Bata University in Zlín, Czech Republic*	Effect of Viscoelastic Stress State at Die Exit on Extrusion Film Casting Process: Theoretical Study
	Milan Kracalik *Johannes Kepler University Linz, Austria*	Rheology of Multiphase Polymer Systems using Novel „Melt Rigidity" Evaluation Approach
	Eva Hnatkova *Tomas Bata University in Zlín, Czech Republic*	Rheological Investigation of Highly Filled Polymers: Effect of Molecular Weight
	Evgeny Karpushkin *Lomonosov Moscow State University, Russia*	Shear-Induced Structure Evolution of Carbon Nanotubes Dispersions in Polyacrylonitrile–Dimethylsulfoxide Solution
	Petra Peer *Institute of Hydrodynamics ASCR, Czech Republic*	Comparison of Electrorheological Characteristics Obtained in Two Geometrical Arrangements: Parallel Plates and Concentric Cylinders
	Jan Skočilas *Czech Technical University in Prague, Czech Republic*	Squeezing Flow of Collagen Solution – Mathematical Model of Shear and Elastic Behavior
	Rushita Shah *Tomas Bata University in Zlín, Czech Republic*	Preparation of Bacterial Cellulose Based Hydrogels and Their Viscoelastic Behavior
	Dusan Kimmer *SPUR a.s., Czech Republic*	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 *Thermo Fisher Scientific, Germany*	Following Curing Reactions with Rheometry and Simultaneous FTIR-Spectroscopy
11:00-11:30	Michael Schopferer *TA Instruments, USA*	Orthogonal Superposition (OSP) Rheology as a Tool to Study Structures in Complex Fluids
11:30-12:00	Loredana Mirela Völker-Pop *Anton Paar Germany GmbH, Germany*	Novel Technologies for Rheological Investigations
12:00-13:30	Lunch & Exhibition	
	(Chairman: Helmut Münstedt)	ELONGATIONAL RHEOLOGY
13:30-14:00	Teodor Burghelea *Universite de Nantes, France*	Necking Failure and Physical Rupture of a Molten Low Density Polyethylene (LDPE) Sample Undergoing Uniaxial Extension
14:00-14:30	Zdeněk Starý *Friedrich-Alexander University Erlangen-Nürnberg, Germany*	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 *J. E. Purkinje University, Czech Republic*	Application of Computer Simulations: Molecular Insight into Electrospinning
15:30-16:00	Wannes Sambaer *Tomas Bata University in Zlín, Czech Republic*	3D modeling of Polyurethane Electrospun Nanofiber Membrane Clogging During Air Filtration
16:00	End of the conference	

Partners

Anton Paar

CYTEK

TA Instruments

Thermo SCIENTIFIC

pragolab