



## NOVEL TRENDS IN RHEOLOGY IV PROGRAMME

**July 27, 2011**

Time	Event	Presentation Title
7:00-8:20	Registration	
8:20-8:30	Welcome	
(Chairmen: Helmut Münstedt)		NON-NEWTONIAN FLUID MECHANICS
8:30-9:00	Manfred H. Wagner <i>TU Berlin, Germany</i>	Probing Nonlinear Viscoelasticity of Polymer Melts by Medium Amplitude Oscillatory Shear (MAOS)
9:00-9:30	Jan Musil <i>Tomas Bata University in Zlin, Czech Republic</i>	Experimental Investigation of Die Drool and Slip-stick Phenomena during HDPE Polymer Melt Extrusion
9:30-10:00	Coffee break & Exhibition	
(Chairmen: Víctor Hugo Rolón-Garrido)		NOVEL RHEOLOGICAL TECHNIQUES
10:00-10:30	Ondřej Wein <i>ICPF ASCR, Czech Republic</i>	AWS Viscometry – Principles and Applications
10:30-11:00	João Miguel Nóbrega <i>University of Minho, Portugal</i>	On-line Rheometry: A Tool to Monitor Polymer Nanocomposites Production
11:00-11:30	Martin Zatloukal <i>Tomas Bata University in Zlin, Czech Republic</i>	Planar Extensional Viscosity Measurements for LDPE Polymer Melt by Using Novel Orifice Die Design and Cogswell Model
11:30-13:00	Lunch & Exhibition	
(Chairmen: João Miguel Nóbrega)		RHEOLOGY OF POLYMERS, COMPOSITES AND BLENDS
13:00-13:30	Víctor Hugo Rolón-Garrido <i>TU Berlin, Germany</i>	Increase of Long-chain Branching by Thermo-oxidative Treatment of LDPE
13:30-14:00	Zdeněk Starý <i>FAU Erlangen-Nuremberg, Germany</i>	Behavior of Conductive Particle Networks in Polymer Melts under Deformation
14:00-14:30	Ana Vera Machado <i>University of Minho, Portugal</i>	Phase Inversion of EPDM/PP Blends: Effect of Viscosity Ratio
14:30-15:00	Coffee break & Exhibition	
(Chairmen: Petr Filip)		NON-NEWTONIAN FLUID MECHANICS
15:00-15:30	Jiri Vlcek <i>Compuplast International, Inc., Czech Republic</i>	Interfacial Instabilities in a Two Layer Coextrusion during Cable Coating
15:30-16:00	Pavel Kubik <i>Tomas Bata University in Zlin, Czech Republic</i>	An Evaluation of Mixing Quality of Three Different Types of Mixing Elements
18:30	Conference dinner	

### Partners:



**July 28, 2011**

(Chairmen: Manfred H. Wagner)		NON-NEWTONIAN FLUID MECHANICS
8:00-8:30	Helmut Münstedt <i>Friedrich-Alexander-University Erlangen-Nürnberg, Germany</i>	Elastic Properties of Polymer Melts Filled with Nanoparticles
8:30-9:00	Milan Kracalik <i>Montanuniversitaet Leoben, Austria</i>	Extensional Rheology as Effective Tool for Characterization of Polymer Nanocomposites
9:00-9:30	Petr Filip <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	Invariance of Elongational Viscosity Measurements Using SER Universal Testing Platform with Respect to Rectangular Shapes of Polymer Samples
9:30-10:30	Cofee break & Poster section & Exhibition	
	Alexander Kharlamov <i>Institute of Hydrodynamics ASCR, Czech Republic</i>	On the Approximation of the Generalised Stretch Function
	Jan Musil <i>Tomas Bata University in Zlin, Czech Republic</i>	Investigation of Vortex Development during Polymer Melt Flows by Flow Birefringence
	Pongprapat Piyamanocha <i>Tomas Bata University in Zlin, Czech Republic</i>	On Pressure Affected Shear Viscosity of Poly(Lactic) Acid
	Hossein Ali Khonakdar <i>Leibniz Institute of Polymer Research Dresden,Germany</i>	Partial Restoring of Thermorheological Simplicity and Terminal Dynamics Behavior of PEO/PMMA in the Presence of Nanoparticles
	Petr Slobodian <i>Tomas Bata University in Zlin, Czech Republic</i>	Stress-strain Hysteresis of a Carbon Nanotube Network as Polymer Nanocomposite Filler under Cyclic Deformation
	Aleš Obr <i>SILON s.r.o, Czech Republic</i>	Effect of Fluoropolymer Antidripping Agent on Rheological Behavior of LLDPE
	Niladri Roy <i>Tomas Bata University in Zlin, Czech Republic</i>	Effect of Strain on Viscoelastic Behavior of PVP-CMC Based Medicated Hydrogels
	Lenka Jelínková <i>Tomas Bata University in Zlin, Czech Republic</i>	Viscoelastic Properties and Morphology of Mumio-based Medicated Hydrogels
	Shawqi Almajdalawi <i>Tomas Bata University in Zlin, Czech Republic</i>	Electrorheological Properties of Suspensions of Polypyrrole Ribbon Particles in Silicone Oil
	Michal Sedlacik <i>Tomas Bata University in Zlin, Czech Republic</i>	Core-shell Structured Polypyrrole-coated Magnetic Carbonyl Iron Microparticles and their Magnetorheology
	Frederik Desplentere <i>KHBO University College, Belgium</i>	Linear Elastic Behaviour of Complex Polyurethane Foams
	Vladimír Pavlínek <i>Tomas Bata University in Zlin, Czech Republic</i>	The Effect of PVAc Solution Viscosity on Diameter of PVAc Nanofibres Prepared by Technology of Electrospinning
(Chairmen: Zdeněk Starý)		INTRODUCTION OF NOVEL RHEOLOGICAL TOOLS
10:30-11:00	Torsten Remmler <i>Malvern Instruments GmbH, Germany</i>	Analytical Instrumentation from Malvern Instruments to Analyse Polymer Samples
11:00-11:30	Bernd Jakob <i>Thermo Fisher Scientific, Germany</i>	Advances in Small Scale Processing Equipment for Polymers and Additives
11:30-13:00	Lunch & Exhibition	
(Chairmen: Jiri Vlcek)		NON-NEWTONIAN FLUID MECHANICS
13:00-13:30	Alexander Vikhansky <i>University of London, UK</i>	Modelling of Polymer Flows by Lattice-Boltzmann Method
13:30-14:00	Roman Kolarik <i>Tomas Bata University in Zlin, Czech Republic</i>	Variational Principle Based Stability Analysis of Non-isothermal Film Blowing Process for Non-Newtonian Fluids
14:00-14:30	Ivan Machač <i>University of Pardubice, Czech Republic</i>	Flow of Viscoelastic Polymer Solutions through Filter Screens
14:30-15:00	Refreshment & Exhibition	
(Chairmen: Martin Zatoukal)		APPLIED RHEOLOGY FOR POLYMER NANOFIBERS
15:00-15:30	Dusan Kimmer <i>SPUR a.s., Czech Republic</i>	Morphology of Nano and Micro Fiber Structures in Ultrafine Particles Filtration
15:30-16:00	Wannes Sambaer <i>Tomas Bata University in Zlin, Czech Republic</i>	3D Air Filtration Modeling for Nanofiber Based Filters in the Ultrafine Particle Size Range
16:00	End of the conference	

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