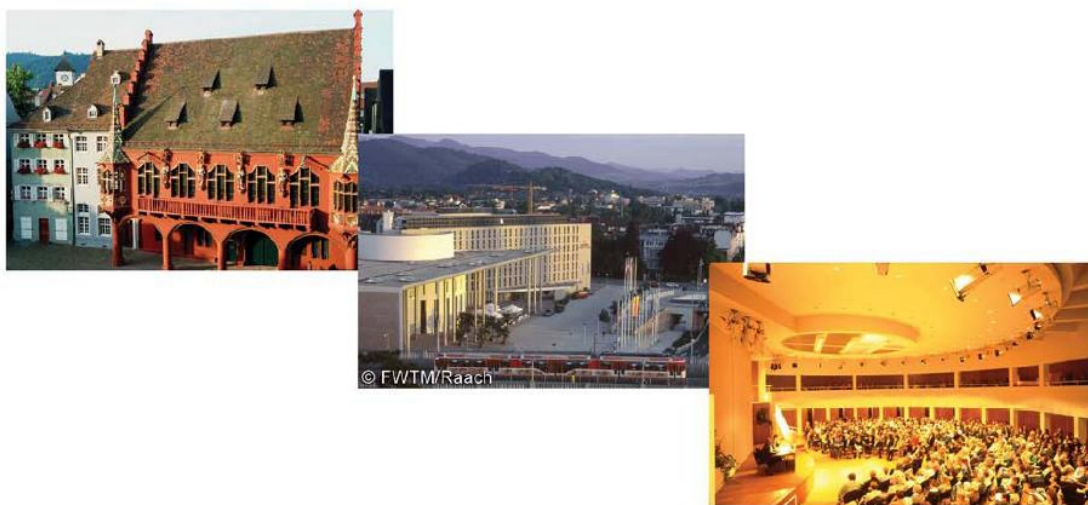


11th International Seminar on Elastomers



Freiburg, Germany, September, 23 - 27, 2007

Scientific Program



Deutsches Institut für Kautschuktechnologie e. V.

Eupener Straße 33, 30519 Hannover, Germany

Phone: ++49 (0) 511 / 84 20 1-0

Fax: ++49 (0) 511 / 8386826

Email: info@DIKautschuk.de

Internet: www.DIKautschuk.de

Monday, September 24, 2007

8.30	T. Nishi, Tokyo Institute of Technology <i>"New results on structure and properties of elastomers obtained by polymer nanotechnology"</i>	
9.05	C. Wrana, Lanxess Deutschland GmbH <i>"Evaluation of the molecular mass distribution of elastomers from dynamic-mechanical data - Potential and limitations"</i>	
9.40	J.L. Leblanc, Université P. & M. Curie <i>"Extrinsic vs. Intrinsic Non-Linear Viscoelastic behavior of uncured rubber materials"</i>	
10.15 - 10.45	Coffee Break	
	Session A	Session B
	Thermoplastic Elastomers	Mixing, Extrusion, Calendaring
10.45	M. van Duin, DSM Elastomers <i>"Novel EPDM products for peroxide cure applications"</i>	F. Bacchelli, Centro Ricerche Elastomeri - Polimeri Europa <i>"Rheological implications of the reduction in viscosity of SBR copolymers during mixing"</i>
11.05	H. Nakahama, Mitsui Chemicals Inc. <i>"Olefinic TPVs having excellent rubber elasticity for automotive seals"</i>	H. Köppen, Institut für Kunststoffverarbeitung Aachen <i>"Continuous compounding of silica compounds in a twin-screw extruder"</i>
11.25	H. Hasegawa, Kyoto University <i>"Complex phases in diblock copolymer systems"</i>	J. Frydel, DIK <i>"Influence of Maximum NIP Pressure on the Occurrence of Gas Entrapments During Calendaring of Rubber Sheets"</i>
	Surface Treatment	Barrier Properties
11.45	W. Dierkes, University of Twente <i>"Compatibilization of immiscible elastomer-filler combinations by plasma polymerization"</i>	S. Bistac, Team Interfaces sous Contraintes, UHA <i>"Sliding Friction of Model Elastomers: The Complex Role of Interface"</i>
12.05	V. Roucoules, ICSI - Université de Haute-Alsace <i>"Thin polymer plasma acting as a coupling agent in metal/elastomer joints"</i>	S. Varghese, Rubber Research Institute of India <i>"Effect of Clay Type on the mechanical and barrier properties of NR-Nanocomposites"</i>
12.30 - 13.30	Lunch	
	Functional Polymers	FEM-Simulations
13.30	S. Asai, Tokyo Institute of Technology <i>"The effect of CO₂ Treatment on the structure and properties of Poly(L-lactide)"</i>	K. Akutagawa, Bridgestone <i>"Mesoscopic Mechanical Analysis of filled elastomer with 3D-Finite Element analysis"</i>
13.50	K. Endo, Osaka City University <i>"Polymerization of cyclic disulfides and formation of network structure containing polycatenane"</i>	J. Gómez, Instituto Tecnológico de Aragón <i>"F.E. Simulation of the hysteretic behavior of an industrial rubber under rotation loads"</i>
14.10	J.F. Pilard, Université Le Mans <i>"Polyisoprene as a useful substrate dedicated to new polymers development; from Natural Rubber to biologically active coatings"</i>	A. Lion, Universität der Bundeswehr <i>"Experimental investigation and constitutive modeling of high damping rubber"</i>
14.30	M. Furukawa, Nagasaki University <i>"Properties of polycarbonate (PC) glycols with different alkyl chains and polyurethanes incorporating PC glycols"</i>	U. Nackenhorst, Universität Hannover <i>"Finite Element simulation of tires - Challenges for the constitutive modeling of rubber"</i>
14.50	S. Thiele, Dow Olefinverbund GmbH <i>"Novel functionalized SBR for silica containing tires"</i>	T. Schardt, Freudenberg Forschungsdienste KG <i>"Chemiluminescence Method in the Development of Rubbers - Ageing Resistance of Elastomeric Materials"</i>
15.10-15.40	Coffee Break	

to be continued...

Monday, September 24, 2007 (2)

	Session A	Session B
	Natural Rubber	Ageing
15.40	S. Poompradub, Chulalongkorn University <i>"Synthesis of silica in natural rubber solution via sol-gel reaction"</i>	H. Magg, Lanxess Deutschland GmbH <i>"Aerobic and anaerobic ageing of heat resistant elastomer materials based on Ethylene-Acrylonitrile Copolymers and Ethylene-Vinylacetate-Copolymers"</i>
16.00	S. Toki, State University of New York <i>"Strain induced crystallization and tensile strength in carbon black filled natural rubber compounds by synchrotron X-ray studies"</i>	D. M. Bielinski <i>"Application of microindentation to study ageing of rubber"</i>
	Natural Rubber	Fatigue and Lifetime
16.20	M. Martins, Embrapa Instrumentação Agropecuária <i>"Elemental analysis and protein quantification of raw NR of brazilian IAC Series 400 Clones"</i>	Th. Früh, Rhein Chemie Rheinau GmbH <i>"Improvement of dynamic fatigue resistance of elastomeric parts by very fine dispersable chemicals"</i>
16.40	N. Hinchiranan, Chulalongkorn University <i>"Combination of hydrogenation and isomerization of NR using palladium catalyst"</i>	J. Hanley, Dublin Institute of Technology <i>"The effect of oil swelling on the fatigue life of elastomers subjected to multiaxial fatigue using bubble inflation"</i>
17.00	J. Samran-Ruamcharoen, Prince of Songkla University <i>"Bentonite as a reinforcing and compatibilizing filler for NR and polysterene blends"</i>	M. Santoso, DIK <i>"The Impact of Chain Oxidation on Stress Relaxation of Elastomers and Lifetime Prediction"</i>

Tuesday, September 25, 2007

8.30	P. Phinyocheep, Mahidol University, Thailand <i>"Toughening of Polyethyleneterephthalate using Natural Rubber and Natural Rubber grafted Maleic Anhydrid"</i>
9.05	R. Hjelm, Los Alamos National Laboratories <i>"The Complex Domain Structure and Composition of a Thermoplastic, Polyurethane"</i>
9.40	D. Goeritz, Universität Regensburg <i>"Temperature Dependence of Dynamic Mechanical Properties of filled Elastomers"</i>
10.15 - 10.45	Coffee Break
	New Fillers and Reinforcement
10.45	J. Stehr, Lehmann & Voss & Co. KG <i>"Investigation of the effects of Poly(α-olefin) - plasticizers on Elastomer Properties"</i>
11.05	P. Lugez, MLPC International <i>"Alternative to the OTOS curing agent in NR compounds"</i>
11.25	D. D. Navaja, MAPUA Institute of Technology <i>"Hybrid Formation and Properties of Rubber-Silicate Nanocomposites"</i>
11.45	E. Peregi, Ciba Specialty Chemicals <i>"Novel Coupling Agent for Silica Filled Rubber Compounds with Improved Processibility"</i>
12.05	J. Fritzsche, DIK <i>"Effects of reinforcing fillers on relaxation processes in nanocomposites"</i>
12.25	J. Fröhlich, Degussa GmbH <i>"Influence of soft carbon blacks on electrical properties, microwave absorption and surface quality of filled rubber compounds"</i>
12.45	Lunch
14.00	Excursion to Black Forest (facultative) Trip through the Black Forest visiting places like Schauinsland, Feldberg, Todtnau, Schonach, Schluchsee, Titisee, Bärenthal, Höllental.

Wednesday, September 26, 2007

8.30	R. Engehausen, Lanxess Deutschland GmbH <i>"Research in the synthetic rubber industry, a quality producers perspective"</i>
9.05	K. Ito, University of Tokyo <i>"Novel Cross-linking concept of polymer network: Slide-ring materials"</i>
9.40	I. Hudec, Slovak University of Technology <i>"Surface Treatment of Reinforcing Materials by plasma"</i>
10.15 - 10.45	Coffee Break
	Dynamic Properties
10.45	J.L. Valentin, Martin-Luther-Universität Halle Wittenberg <i>"Variation of Natural Rubber Network Structure with the vulcanization system; a study by 1H-multiple-quantum-NMR"</i>
11.05	C. Russi G. Furtado, Universidade do Estado do Rio de Janeiro <i>"Evaluation of the viscoelastic behavior of SBR and NR gum elastomers with closed cavity harmonic torsional rheometers"</i>
11.25	M. Wilhelm, Universität Karlsruhe <i>"Combination of NMR relaxometry and mechanical testing during vulcanization"</i>
11.45	C. Oprisoni, DIK <i>"High Frequency Investigation of Elastomer Properties Using Ultrasonic Spectrometry"</i>
12.05	G. J. Schneider, Forschungszentrum Jülich <i>"Dependence of the mechanical properties on the morphology of fillers"</i>
12.30 - 13.30	Lunch
	Interfacial Phenomena in Elastomers
13.30	A. Vidal, Institut de Chimie des Surfaces et Interfaces, UHA <i>"Structural Study of PDMS bimodal network by SANS. The origin of auto reinforcement"</i>
13.50	B. Haidar, Institut de Chimie des Surfaces et Interfaces, UHA <i>"Elastomer chain conformations on sphere, tube and lamellar nano particles; Form factor effects"</i>
14.10	S. Kawahara, Nagaoka University of Technology <i>"Viscoelastic Properties of Natural Rubber with Nano-matrix Structure"</i>
14.30	W. Kuhn, IIC Innovative Imaging Corp. KG <i>"Characterization of Elastomer Networks by NMR Parameters"</i>
14.50	M. Jacobi, Universidade Federal do Rio Grande do Sul (UFRGS) <i>"Functionalization as an Alternative Possibility to new Materials"</i>
15.10 - 15.40	Coffee Break
	Different Aspects of Rubber
15.40	S. Prakanrat, Mahidol University Thailand <i>"Surface grafting of polystyrene on Natural Rubber as studying by Raman Spectroscopy"</i>
16.00	K. Suchiva, Mahidol University Thailand <i>"Effect of moisture content on modifying efficiency of surface-modifying agents in silica-filled natural rubber"</i>
16.20	Poster Presentations (Short oral presentation of all posters, about 2 - 3 minutes per poster)
18.00	Poster Session

Thursday, September 27, 2007

8.30	A. Halasa, Goodyear Tire & Rubber Co. <i>"Trans-polybutadiene and trans-styrene/butadiene elastomers - A potential partial replacement for natural rubber"</i>
9.05	C. Recker, Continental AG <i>"Tire Today - Commodity or High Tech"</i>
9.40	James L. White, University of Akron, Ohio <i>"The Influence of Particulate Fillers on the Rheological and Processing Characteristics of Elastomers and Factors in their Mixing"</i>
10.15 - 10.45	Coffee Break
	Elastomer Composites
10.45	P. Alexy, Slovak University of Technology <i>"Application of lignins in rubber blends"</i>
11.05	G. Thielen, Goodyear Technical Center Luxembourg <i>"Hydroxy and Nitrile functionalized emulsion SBR's in silica compounds"</i>
11.25	M. Ito, Tokyo University of Science <i>"Phase control of rubber blends by silica"</i>
11.45	S. Borros, Universitat Ramon Llull, Barcelona <i>"Reaction stage modeling (RSM) study on the DPDS effect in monosulfidic and disulfidic crosslinks under microwave heating"</i>
12.05	O. Patarapaiboolchai, Prince of Songkla University <i>"Effect of promoters on natural rubber to metal bonding"</i>
12.25	K. Brandt, DIK <i>"Preparation and Properties of new Cellulose-Elastomer-Nanocomposites"</i>
12.45	Closing lecture <i>W. Braubach, Lanxess Deutschland GmbH</i>
13.30	End of the seminar