

9th Fall Rubber Colloquium



Novotel Hannover, November, 3th - 5th 2010

Preliminary Scientific Program

11.00	Opening ceremony	
11.40	Plenary lecture: S. Kawahara , Nagaoka University of Technology <i>Proton exchange membrane with nanomatrix channel prepared by sulfonation of natural rubber grafted with polystyrene</i>	
12.30	Lunch	
	Session A Reinforcement	Session B Simulation and Modelling
13.30	J. W. M. Noordermeer , University of Twente (Enschede, NL) <i>Reinforcement of tire tread rubbers with short Aramid fibers</i>	T. Paul , Zins Ziegler-Instruments GmbH (Mönchengladbach, DE) <i>Reale Belastungsszenarien und deren Simulation im Bezug zu Materialabrieb und Verschleiß</i>
14.00	T. Tada , Sumitomo Rubber Industries Ltd. (Kobe, JP) <i>Assessment of separability of strain and time effects in viscoelasticity of filled elastomers</i>	A. Lion , Inst. f. Mech., Univ. der Bundeswehr (Neubiberg, DE) <i>Ein Materialmodell zur Beschreibung des Glasübergangs von Polymerwerkstoffen</i>
14.30	N. Rennar , FH Würzburg-Schweinfurt (Würzburg, DE) <i>Heat build-up and ultimate mechanical properties of elastomers filled with conventional and innovative fillers</i>	M. Freund , Technische Universität Chemnitz (DE) <i>Verallgemeinerung eines physikalisch basierten Elastomer-Stoffgesetzes für die Finite-Elemente-Methode</i>
15.00	H. Kahraman , LFK, RWTH University (Aachen, DE) <i>Füllstoffeinfluss auf den richtungsabhängigen Mullins-Effekt bei rußgefüllten Elastomeren</i>	N. Vennemann , Fachhochschule Osnabrück (DE) <i>Experimentelle Untersuchungen und Entwicklung eines Modells zur Beschreibung der thermoelastischen Eigenschaften rußgefüllter SBR-Vulkanisate</i>
15.30	Coffee break	
	Processing	New Materials
16.00	T. Thust , DIK (Hannover, DE) <i>Adhesive strength of injection moulded thermoplastic/rubber composite parts: influence of process parameters and material properties</i>	S. Thiele , Styron Deutschland GmbH (Merseburg, DE) <i>Modified synthetic rubber for Silica and Carbon Black containing tires</i>
16.30	W. May , CT Datentechnik GmbH (Nienburg, DE) <i>Prozessbeurteilung in der Kautschukaufbereitung mittels Analyse von Körperschall und Drehmoment</i>	I. Mora-Barrantes , Inst. Polym. Sci. Technol. (Madrid, ES) <i>Formation of covalent networks in ionic elastomers to improve their properties</i>
17.00	H. Köppen , IKV - RWTH (Aachen, DE) <i>Change of material properties of TPV during production in internal mixers</i>	K. Kulbaba , Lanxess AG (Leverkusen, DE) <i>Introducing a new ultra low viscosity Therban (HNBR)</i>
17.30	R. Engehausen , Lanxess Deutschland GmbH (Leverkusen, DE) <i>Qualitätsmanagement in Japan - Was sind die Besonderheiten?</i>	A. Halasa , University of Akron (US) <i>Applications of anionic polymerization to the conceptual performance tires</i>
18.00	Poster Session	

Thursday, November 4, 2010

	Session A Nanocomposites	Session B Aging and Resistance
09.00	G. Heinrich , Leibniz-Inst. für Polymerforschung (Dresden, DE) <i>Development of advanced elastomeric composites using ionic liquid modified Multiwalled Carbon Nanotubes</i>	K. Zoumis , Unimatec Chem. Eur. GmbH & Co. (Weinheim, DE) <i>FTIR-Thunderdome Thermooxidation studies of high temperature acrylate elastomers</i>
09.30	J. Kruzalák , Slovak University of Technology (Bratislava, SK) <i>Elastomeric materials with magnetic fillers - properties and network</i>	C. Bergmann , Hansen&Rosenthal (Hamburg, DE) <i>Modern lubricants and their influence on high performance FKM materials</i>
10.00	R. Kazakeviciute-Makovska , Ruhr-Universität Bochum (DE) <i>Interrelation between strain and stress recovery in shape memory polymer nanocomposites</i>	C. Welzel , DIK (Hannover, DE) <i>Thermal-oxidative Aging of NBR-HNBR</i>
10.30	Coffee break	
	Compounding and Mixing	Reinforcement
11.00	S. Mehdi , Kavir Tire Co. (Birjand, IR) <i>RSM approach for studying the effect of sulphur curing agent and filler level on the failure properties of SBR/BR based tire tread compound</i>	R. Friehmelt , Evonik Degussa GmbH (Köln, DE) <i>Ultra high structure softblack - excellent rubber reinforcement and dynamic stiffness at low filler level</i>
11.30	O. Chaikumpollert , Nagaoka University of Technology (JP) <i>A novel method to prepare protein free Natural Rubber and its characterization</i>	J. Fritzsche , Continental Reifen GmbH (Hannover, DE) <i>Influence of mechanical aging on the filler network structure monitored by dielectric relaxation spectroscopy</i>
12.00	Lunch	
	Compounding and Mixing	New Materials
13.30	E. Hamann , Styron Deutschland GmbH (Schkopau, DE) <i>Effect of styrene and vinyl content of styrene butadiene rubber on dispersion and distribution of carbon black in SSBR/NR blends</i>	V. Börger , Schill+Seilacher "Struktol" GmbH (Hamburg, DE) <i>Parallel improvement of processing and physical properties in peroxide cured Elastomers by the use of reactive silicone based additives</i>
14.00	A. Roos , Lanxess Deutschland GmbH (Leverkusen, DE) <i>Halogen Free Flame Retardant (HFFR) compounding with EVM and EVM/HNBR</i>	L. Klafke de Azeredo , DIK (Hannover, DE) <i>High performance nanoclay composites by Continuous Dynamic Latex Compounding</i>
14.30	W. Dierkes , University Twente (Enschede, NL) <i>A key to enhanced compatibility and dispersion in rubber blends</i>	M. Jones , Zeon Chemicals L.P. (Louisville, US) <i>Innovation in HNBR Elastomers - Improvements in processing & performance</i>
15.00	S. Ilisch , Martin-Luther-Universität Halle-Wittenberg (DE) <i>Influencing factors on dispersion and distribution of Silica in SSBR/NR blends</i>	T. Steinke , DIK (Hannover, DE) <i>Functional Magnetic Elastomers and their application</i>
15.30	Coffee break	
	Processing	Simulation and Modelling
16.00	K. Opdenwinkel , IKV - RWTH (Aachen, DE) <i>Spritzgießen physikalisch geschäumter Elastomerformteile</i>	T. Alshuth , DIK (Hannover, DE) <i>Lebensdauerrelevante Belastungsprozesse und Materialstrukturen bei Elastomeren</i>
16.30	I. Hudec , Slovak University of Technology (Bratislava, SK) <i>Surface modification of textile reinforcing materials by plasma</i>	J. M. Bielsa , Instituto Tecnológico de Aragón (Zaragoza, ES) <i>Development of numerical models for the FE dynamic analysis of rubber components</i>
17.00	R. Kleeschulte , Universität Paderborn (DE) <i>Development of alternative process technology for multi-component injection moulding</i>	D. Juhre , DIK (Hannover, DE) <i>Characterization of reinforcement of elastomers through appropriate measures of stress softening extent</i>
17.30	G. Nijman , Apollo Vredestein B. V. (Enschede, NL) <i>Die Zusammenhang zwischen der Mikrodispersion einer kieselensäurehaltigen Mischung und deren rheologischen Eigenschaften</i>	T. Brüger , Vibracoustic GmbH & Co. (Hamburg, DE) <i>Äquitriaxialer Zug: Diskussion der Bewertung dieses speziellen Beanspruchungszustandes im Inneren von Elastomerartikeln</i>
19.00	Social Event	

	Session A Elastomer Physics	Session B Characterization
09.00	F. Bacchelli , Polimeri Europa (Ravenna, IT) <i>Bridging the gap between raw polymer viscoelasticity and post-cure properties of rubber compounds</i>	I. Morozov , Leibniz-Institut für Polymerforschung (Dresden, DE) <i>Characterization of filled rubber compounds by AFM</i>
09.30	G. Thielen , Goodyear Innovation Center (Luxembourg, LU) <i>High Tg rubber blend inclusions</i>	M. Jaunich , BAM (Berlin, DE) <i>Low temperature properties of rubber seals</i>
10.00	C. Robertson , Bridgestone Americas, (Akron, US) <i>Further consideration of viscoelastic two glass transition behavior of nanoparticle-filled polymers</i>	R. Stoczek , Technische Universität Chemnitz (DE) <i>Untersuchungen zum Einfluss der Kerbeinbringung auf die Rissausbreitung in Elastomeren Werkstoffen unter dynamischer Beanspruchung</i>

10.30 Coffee break

	Vulcanisation/Crosslinking	Characterization
11.00	M. Säwe , Rhein Chemie Rheinau GmbH (Mannheim, DE) <i>Ersatz von kritischen Chemikalien in Gummimischungen - Guanidine</i>	J. L. Valentín , Inst. Polym. Sci. Technol. (Madrid, ES) <i>Application of low field NMR spectroscopy to rubber science and technology</i>
11.30	S. Borrós , GEMAT (Barcelona, ES) <i>Discussion on the different mechanisms of rubber vulcanisation activated by ZnO and MgO</i>	E. Danieli , ITMC - RWTH (Aachen, DE) <i>Rubber testing by desktop NMR Imaging and Spectroscopy</i>
12.00	M. van Duin , DSM Research (BC Geleen, NL) <i>Keltan ACE high-VNB-EPDM: a radical breakthrough in peroxide curing of EPDM</i>	B. Wennehorst , Leibniz Universität Hannover (DE) <i>Investigations into the tribological characteristics of radial lip seals - results of LIF and friction measurements</i>

12.30 Lunch

	Reinforcement	Simulation and Modelling
14.00	M. Gerspacher , Lye (FR) <i>Flocculation of Carbon Black in rubber compounds: It's negative effects</i>	H. Baaser , Freudenberg Forschungsdienste KG (Weinheim, DE) <i>Über die Dissipation in viskoelastischen Werkstoffmodellen</i>
14.30	B. Haidar , Institut de Science des Matériaux de Mulhouse (FR) <i>What do we expect from a silanized filler polymer interface?</i>	J. Kroll , Lanxess (Leverkusen, DE) <i>Eine alternative phänomenologische Beschreibung viskoelastischen Elastomerverhaltens bei finiten Deformationen: Modellbildung und FE-Implementierung</i>
15.00	E. Peuvrel-Disdier , CEMEF, Sophia Antipolis (FR) <i>Characterization of dispersion mechanisms of agglomerated fillers in an elastomer matrix under shear by in-situ observations</i>	M. Thornagel , Sigma Engineering GmbH (Aachen, DE) <i>Process simulation of rubber injection moulding - effects of inserts on the heat flux and the article quality</i>
15.30	T. Horst , Institute of Polymer Research (Dresden, DE) <i>Fracture surface statistics of filled rubber</i>	R. Dargazany , Depart. of Cont. Mech., RWTH (Aachen, DE) <i>Micro-meso scale transition approach for aggregated Carbon Blacks</i>
16.00	Closing remarks : U. Giese	