

Friday - October 28, 2016

	Session A Room E, AIM Bldg, 3F	Session B Room F, AIM Bldg, 3F	Session C Room G, AIM Bldg, 3F
	G3: Blends and TPE (Rubber Blend)	G6: Rheology / Emulsion	G11: Fatigue and Fracture
8:30	<p>Chair: Masami Okamoto A-24 [INVITED] (8:30-9:05) Mechanism of Rubber Elasticity of PP/EPDM Thermoplastic Vulcanizate Toshiaki Ougizawa <i>Tokyo Institute of Technology, Japan</i></p> <p>A-25 [INVITED] (9:05-9:40) Morphology and Strain-Induced Crystallization Behavior of Natural Rubber/Polyolefine Blends Hiromu Saito <i>Tokyo University of Agriculture and Technology, Japan</i></p> <p>A-26 (9:40-10:00) Development of New TPEE (Thermoplastic Polyether Ester Elastomer) Material for Glass Run Channel Joon chul Park <i>Hyundai Motor Company, Korea</i></p>	<p>Chair: Masayuki Yamaguchi B-25 (8:30-8:50) Mullins' Effect of Filled Elastomers Studied by Biaxial Deformation Tam Thanh Mai <i>Kyoto Institute of Technology, Japan</i></p> <p>B-26 (8:50-9:10) Rheological Properties of Hydrogenated Natural Rubber Korn Taksapattanukul <i>Prince of Songkla University, Thailand</i></p> <p>B-27 (9:10-9:30) Rheological Behavior of Aqueous Micellar Solution of Fluorinated Gemini Surfactant Seiya Sugawara <i>The University of Tokyo, Japan</i></p> <p>B-28 (9:30-9:50) Nonlinear Stress-Strain Behavior of Elastomer Foams Investigated under Various Types of Deformation Kenji Urayama <i>Kyoto Institute of Technology, Japan</i></p> <p>B-29 (9:50-10:10) Influences of Viscosities on Crack Propagation of Rubber Toshiaki Nishi <i>ASICS Corporation, Japan</i></p>	<p>Chair: Masatoshi Tosaka C-26 (8:30-8:50) Evolution of Filler-Filler-Polymer Interaction Induced by Tension Fatigue Zhang Ping <i>Qingdao University of Science and Technology, China</i></p> <p>C-27 (8:50-9:10) Fatigue of Carbon-Fibre Reinforced HNBR Composites Yinpeng Tao <i>Queen Mary University of London, UK</i></p> <p>C-28 (9:10-9:30) Fatigue Properties of Graphene Oxide/SBR Composite Shipeng Wen <i>Beijing University of Chemical Technology, China</i></p> <p>C-29 (9:30-9:50) Visualization of the Internal Fracture Around the Crack Tip of Tough Double Network Hydrogels Takahiro Matsuda <i>Hokkaido University, Japan</i></p> <p>C-30 (9:50-10:10) Withdrawn</p>
10:30	<p>Chair: Hiromu Saito A-27 (10:30-10:50) Studies on Structural Deformation upon Uniaxial Stretching of an SEBS Triblock Copolymer Film Forming Spherical Microdomains Shogo Tomita <i>Kyoto Institute of Technology, Japan</i></p> <p>A-28 (10:50-11:10) Facile Analysis of Grain Size by Atomic-Force Microscopy and Its Evolution on the Free Surface of a Sphere-Forming SEBS Triblock Copolymer Film Rasha Ahmed Hanaty Bayomi <i>Kyoto Institute of Technology, Japan</i></p> <p>A-29 (11:10-11:30) Extended Adam-Gibbs Approach to Describe the Segmental Dynamics of Cross-Linked Miscible Rubber Blends Gustavo A. Schwartz <i>Centro de Física de Materiales (CSIC-UPV/EHU), Spain/Donostia International Physics Center, Spain</i></p> <p>A-30 (11:30-11:50) Material Design of All Season Tire Masayuki Yamaguchi <i>Japan Advanced Institute of Science and Technology, Japan</i></p> <p>A-31 (11:50-12:10) Dynamical and Structural Study of Non-miscible Rubber Blends Silvina Cerveny <i>Centro de Física de Materiales (CFM, CSIC-UPV/EHU), Spain/Donostia International Physics Center, Spain</i></p>	<p>Chair: Hiromu Saito B-30 (10:30-10:50) Analysis of Crack Tip Profiles for the Velocity Transition in Crack Growth of Filled Elastomers Yoshihiro Morishita <i>Bridgestone Corporation, Japan/Kyoto Institute of Technology, Japan</i></p> <p>B-31 [INVITED] (10:50-11:25) Chemical Degradation of Elastomers During Abrasion James JC Busfield <i>Queen Mary University of London, UK</i></p> <p>B-32 (11:25-11:45) A New Device for Measuring Shear Viscosity of Rubbers on a Rubber Injection Molding Machine Michael Fasching <i>Polymer Competence Center Leoben GmbH, Austria</i></p>	<p>Chair: Yukinobu Kawamura C-31 (10:30-10:50) Spatial Distribution of Strain-Induced Structures around Crack Tip of Crosslinked Natural Rubber Masatoshi Tosaka <i>Kyoto University, Japan</i></p> <p>C-32 (10:50-11:10) Novel Approach for Evaluation of Intrinsic Strength of Rubber Ondřej Kratina <i>Tomas Bata University in Zlín, Czech Republic</i></p> <p>C-33 (11:10-11:30) The Application of Fracture Mechanic Approaches to Void Inflation within Elastomeric Seals Richard J Windslow <i>Queen Mary University of London, UK</i></p> <p>C-34 (11:30-11:50) Cavitation in Unfilled EPDM Exposed to High-Pressure Hydrogen: Time-Resolved Characterization of Damage Morphology and Modelling at the Cavity Scale Sylvie Castagnet <i>Institut Pprime, CNRS, ISAE-ENSMA, Université de Poitiers, France</i></p> <p>C-35 (11:50-12:10) The Effect of High-Pressure Hydrogen Exposure Cycling on Damage Shape Evolution in Transparent EPDM Hiroaki Ono <i>Kyushu University, Japan</i></p>
		G1: Polymer Synthesis	G6: Adhesion
13:20	<p>Chair: Toshiaki Ougizawa A-32 (13:20-13:40) Study on the Heat Resistance Properties of EPDM/VMQ Blend Huang Qiang <i>Cheng Du Gui Bao Science & Technology Co., Ltd., China</i></p> <p>A-33 (13:40-14:00) Properties of Polythiophene Based Thermoplastic Elastomer Jian Shen <i>Kobe University, Japan</i></p> <p>S5: Elastomers for Medical and Human Care</p> <p>Chair: Toshiaki Ougizawa A-34 (14:00-14:20) Cytotoxicity and New Opportunities for Anticancer Activity of Natural Rubber Latex Masami Okamoto <i>Toyota Technological Institute, Japan</i></p> <p>A-35 (14:20-14:40) Fabrication of Nanocomposites Composed of Natural Rubber Latex and Bone Tissue Derived from MC3T3-E1 Mouse Preosteoblast Cells Mitsuru Fujiyua <i>Toyota Technological Institute, Japan</i></p> <p>A-36 (14:40-15:00) Improvement in Molecular Separation by using Ultrafiltration Membrane Blended with Polymer Colloid Junji Watanabe <i>Konan University, Japan</i></p>	<p>Chair: Yue Dongmei B-33 [INVITED] (13:20-13:55) Light Triggered Shape Memory Melamine-based Benzoxazine Hybridized Silver Nanoparticles Suwabun Chirachanchai <i>The Petroleum and Petrochemical College, Chulalongkorn University, Thailand</i></p> <p>B-34 (13:55-14:15) Synthesis and Elastomeric Properties of Polyurethanes Crosslinked by Polyrotaxanes Hiroto Murakami <i>Nagasaki University, Japan</i></p> <p>B-35 (14:15-14:35) Stronger, Faster, Higher – the Next Generation NORDEL™ EPDM – Development via State-of-the-Art Catalyst and Process Technology – Tao Han <i>Dow Chemical (China) Invest. Co. Ltd., China</i></p> <p>B-36 (14:35-14:55) Next-Generation Isoprene Rubber Synthesized by Gd-Catalyst System Kaita Shojiro <i>Bridgestone Corporation, Japan</i></p> <p>B-37 (14:55-15:15) Synthesis and Application of Trans-1,4- Polydiene Rubbers Aihua He <i>Qingdao University of Science and Technology, China</i></p>	<p>Chair: Ken Kojo C-36 (13:20-13:40) Impact of Carbon Black on Durability of Vulcanized Rubbers Mahmoud Kardan <i>Vernay, USA</i></p> <p>C-37 (13:40-14:00) Photoelectron Spectroscopy Investigation of Rubber-Brass Interface Kenichi Ozawa <i>Tokyo Institute of Technology, Japan</i></p> <p>C-38 (14:00-14:20) Study on Adhesion of Natural Rubber and Carbon Steel Plate Composites Katsuya Miura <i>Iwate University, Japan</i></p> <p>C-39 (14:20-14:40) Research into Interface Adhesion between Polyamide6 (PA6) and Hydrogenated Acrylonitrile Butadiene Rubber (HNBR) Riku Sato <i>Iwate University of Engineering, Japan</i></p> <p>C-40 (14:40-15:00) Synthesis and Application of Rosin Modified Resorcinol-Formaldehyde Resin Zhao Yanchao <i>Functional Materials (Shanghai) R&D Center, China</i></p>
15:50		<p>Chair: Suwabun Chirachanchai B-38 (15:50-16:10) Synthesis of Stereoblock Polydienes using Nd-Based Catalyst Ryo Tanaka <i>Hiroshima University, Japan</i></p> <p>B-39 (16:10-16:30) One Step Conversion of Ethanol and Sugar Alcohols into 1,3-Butadiene using MgO-SiO2 Catalysts Misao Hiza <i>The Yokohama Rubber Co., Ltd., Japan</i></p>	

Friday - October 28, 2016

Session D Room 311-313, AIM Bldg. 3F	Session E Room 314-315, AIM Bldg. 3F
S6: Elastomers for Environment and Sustainability and S4: Soft Materials in Automobile Industry	G7: Structure, Property and Characterization
Chair: Misao Hiza	Chair: Mikihiro Takenaka
D-30 (INVITED) (8:30-9:05) Sustainability in Rubber Industry Koichi Morita <i>Bridgestone Corporation, Japan</i>	E-28 (INVITED) (8:30-9:05) A Constitutive Tube Model of Rubber Elasticity: The Path from Polymer Network to the Rubber Component Gert Heinrich <i>Leibniz-Institut für Polymerforschung Dresden e. V., Hohe Strasse 6, D-01069 Dresden, Germany</i>
D-31 (9:05-9:25) Tyre Sustainability through Novel Bio-Sourced Plasticizers Fabio Bacchelli <i>Versalis, Business Unit Elastomers, Italy</i>	E-29 (9:05-9:25) Nonlinear Viscoelastic Responses of Carbon Black-Filled SBR Vulcanizates under Uniaxial Cyclic Large Deformation Junichiro Yamabe <i>Kyushu University, Japan</i>
D-32 (9:25-9:45) Design and Preparation of Bio-Based Elastomers Aiming at Green Tires Runguo Wang <i>Beijing University of Chemical Technology, China</i>	E-30 (9:25-9:45) Nonlinear Viscoelastic Material Model for Filled SBR Vulcanizates and Its Implementation into ABAQUS Masaki Fujikawa <i>University of the Ryukyus, Japan</i>
D-33 (9:45-10:05) Synthesis, Properties and Engineering Application of Organic-Sulphur Copolymers M. Siciński <i>Institute of Polymer and Dye Technology, Lodz University of Technology, Poland</i>	E-31 (9:45-10:05) Study on Constitutive Equation of NBR Fumiko Kawashima <i>Kumamoto University, Japan</i>
Chair: Koichi Morita	Chair: Gert Heinrich
D-34 (10:30-10:50) Development of High-Quality EPDM Products with Enhanced Sustainability Niels van der Aar <i>ARLANXEO Performance Elastomers, Keltan Technical Services & Application Development, P.O. Box 185, 6160AD Geleen, The Netherlands</i>	E-32 (10:30-10:50) Performance and Validity Evaluation of Various Hyperelastic Constitutive Models for Carbon-Black Filled SBR Naruto Maeda <i>University of the Ryukyus, Japan</i>
D-35 (10:50-11:10) High Pressure Hydrogen Property of NBR Filled with Carbon Black Hirotada Fujiwara <i>Kyushu University, Japan</i>	E-33 (10:50-11:10) Effect of Chemical Structure of Co-Agents on Chain Stiffness of the Silicone Elastomers and Their Mechanical and Relaxation Behaviors Murat Şen <i>Hacettepe University, Turkey</i>
D-36 (INVITED) (11:10-11:45) Automotive technology trends and the impact on the Plastic and Elastomers Nozomu Shigemitsu <i>TOYOTA MOTOR CORPORATION, Japan</i>	E-34 (11:10-11:30) Development of a New Ziegler Natta Catalyst System in Slurry Process to Obtain New EP (D) M Grades Riccardo Scarpante <i>Versalis - Business Unit Elastomers, Italy</i>
D-37 (11:45-12:05) A New Viscoelastic Constitutive Model for Medium Strain and Strain Rates for High Load Suspension Francesca Carleo <i>Queen Mary University of London, UK</i>	E-35 (11:30-11:50) Evaluating EPDM for Dynamic Applications Bağdagül Karaağaç <i>Kocaeli University, Turkey</i>
G5: Vulcanization	
Chair: Anke Blume	Chair: Dong Wang & Ken Nakajima
D-38 (INVITED) (13:20-13:55) Zinc Oxide: An Origin of the Heterogeneous Structure in an Accelerated Vulcanizates Yuko Ikeda <i>Kyoto Institute of Technology, Japan</i>	E-37 (13:20-13:40) Visualization of the Inlet Flow Behavior for Different Rubber Compounds using Various Die Geometries Fl. Kerschbaumer <i>Polymer Competence Center Leoben, Austria</i>
D-39 (13:55-14:15) Detailed Study of Vulcanization Process Drives Development of Vulcanization Aids: DSC Study of Vulcanization of Several New Vulcanizing Agents Dong Dong <i>Beijing Red Avenue Innova Co., Ltd. China</i>	E-38 (13:40-14:00) Latex-State NMR Spectroscopy for Characterization of Epoxidized Deproteinized Natural Rubber Kiewwain Sae-heng <i>Nagaoka University of Technology, Japan</i>
D-40 (14:15-14:35) Characterization of Sulfidic Linkages during Vulcanization of Isoprene Rubber Yuta Sakaki <i>Kyoto Institute of Technology, Japan</i>	E-39 (14:00-14:20) Microstructure and Dynamic Mechanical Properties of Magneto-Rheological Elastomer Based on Ethylene/Acrylic Elastomer Prepared by Different Manufacturing Methods Tianming Gao <i>The University of Suwon, Korea</i>
D-41 (14:35-14:55) High-Stiffness Rubber Materials for Thin-Lightweight Akishige Seo <i>Toyoda Gosei Co., Ltd. Japan</i>	E-40 (14:20-14:40) New Understanding on Phase Structure of Thermoplastic Vulcanizates (TPV) and Its Formation Mechanism during Dynamic Vulcanization Ming Tian <i>Beijing University of Chemical Technology, China</i>
D-42 (14:55-15:15) Influence of Coagent/Peroxide Systems on the Crosslinking of Special-Purpose Types of Rubber with Optimized Physical Properties Kevin Krause <i>German Institute of Rubber Technology, Germany</i>	E-41 (14:40-15:00) Friction and Wear Properties of Thermoplastic Elastomers Yoshitaka Uchiyama <i>Kanazawa University, Japan</i>
Chair: Yuko Ikeda	E-42 (15:00-15:20) Creating a Model for Novel Polymer Developments Based on Solubility Parameters S. Lieber <i>ARLANXEO Deutschland GmbH, Alte Heerstrasse 2, 41540 Dormagen, Germany</i>
D-43 (INVITED) (15:50-16:25) Real Time Observations on Rubber Friction and Fracture Naoya Amino <i>The Yokohama Rubber Co., Ltd., Japan</i>	E-43 (15:20-15:40) Simultaneous One-Pot Reduction and Modification of Graphene Oxide and Its Influence on the Properties of Nitrile-Butadiene Rubber Nanocomposites Yinhang Zhang <i>Korea University of Technology and Education, Korea</i>
D-44 (16:25-16:45) Influence of the Crosslink Density and Sulfur-Length on In-Rubber Properties of Passenger Car Tire Treads Anke Blume <i>University of Twente, the Netherlands</i>	
D-45 (16:45-17:05) Rubber Magnets Based on Strontium Ferrite Cured with Mixed Sulfur/Peroxide Curing Systems Ján Kruželák <i>Slovak University of Technology, Slovakia</i>	
<div style="border: 1px solid black; border-radius: 15px; padding: 10px; display: inline-block;"> Closing Ceremony & Award Ceremony 17:05-17:30 </div>	