



Poster Presentation

December 1st, 2025 (16:40 - 17:30)

Poster Session I

Session I: Natural Rubber, Bio-based Rubbers and Rubber Chemicals

S1T6-P-01	<p>Design and Molecular Dynamics Simulation of Biomass Ion-Conductive Elastomer</p> <p><i>Jiajun Qu</i></p> <p>Beijing University of Chemical Technology, China</p>
S1T6-P-02	<p>Wide-Angle X-Ray Diffraction Studies on Thermal Melting Behavior of Crystallites Formed by Planar Elongation of Vulcanized Natural Rubber</p> <p><i>Shoei Okamoto</i></p> <p>Kyoto Institute of Technology, Japan</p>
S1T6-P-03	<p>Strain-Induced Crystallization of Carbon Black-Reinforced Vulcanized Natural Rubber by Biaxial Elongation</p> <p><i>Hiroto Okumura</i></p> <p>Kyoto Institute of Technology, Japan</p>
S1T6-P-04	<p>Study on Melting Behavior of Crystallites in Carbon Black-Filled Vulcanized Natural Rubber Upon High-Speed Shrinkage from Its Highly Elongated State</p> <p><i>Maho Nakada</i></p> <p>Kyoto Institute of Technology, Japan</p>
S1T6-P-05	<p>Natural-Rubber-Based Adhesives for Housefly (<i>Musca domestica</i>) Control</p> <p><i>Kannika Hatthapanit</i></p> <p>National Metal and Materials Technology Center, Thailand</p>
S1T6-P-06	<p>In Situ Silica Reinforced Natural Rubber: A Novel Approach for Enhanced Performance and Application</p> <p><i>Suriyakamon Montha</i></p> <p>MTEC, National Science and Technology Development Agency, Thailand</p>
S1T6-P-07	<p>Application of Ozone Treatment to Reduce Foul Odor in Cup Lump Rubber Production</p> <p><i>Chaveewan Kongkaew</i></p> <p>National Metal and Materials Technology Center, Thailand</p>
S1T6-P-08	<p>Changes in Nanostructural Changes During Tearing of Elastomeric Poly(butylene succinate)/poly(butylene succinate adipate) Blend Films</p> <p><i>Kazuki Imai</i></p> <p>Kyoto Institute of Technology, Japan</p>
S1T6-P-09	<p>Effect of Chitosan Bio-Based Filler on the Mechanical Reinforcement of ENR Composites</p> <p><i>Ploypailin Juntosree</i></p> <p>Kasetsart University, Thailand</p>
S1T6-P-10	<p>Identification and Reduction of Residual Allergenic Rubber Proteins in Natural Rubber Latex Gloves via Alkaline and Surfactant Treatments</p> <p><i>Pimnaraporn Porncharukit</i></p> <p>Mahidol University, Thailand</p>

S1T6-P-11	<p>Influence of Bio-Based Epoxidized Natural Rubber as a Compatibilizer on Thermoplastic Polyurethane/Natural Rubber Blends for 3D Printing Applications</p> <p><i>Torfan Srisuwanno</i></p> <p>King Mongkut's University of Technology Thonburi, Thailand</p>
S1T6-P-12	<p>Development of Natural Rubber Insulating Gloves: Influence of Latex Centrifugation and Leaching on Mechanical and Electrical Properties</p> <p><i>Promsak Sa-nguanthammarong</i></p> <p>National Metal and Materials Technology Center (MTEC), Thailand</p>
S1T6-P-13	<p>Evaluation of a Non-Traditional Preservative System for Enhancing Natural Rubber Latex Stability</p> <p><i>Maneephan Sukkho</i></p> <p>Mahidol University, Thailand</p>
S1T6-P-14	<p>Study on the Impact of Purified Natural Rubber Latex and Accelerators on Rubber Allergens in Natural Rubber Gloves</p> <p><i>Pitchaya Theedee</i></p> <p>Mahidol University, Thailand</p>
S1T6-P-15	<p>Optimized UVA-Irradiation Silane-Grafting onto Saponified Skim Rubber for Enhanced Silica-Natural Rubber Compatibility</p> <p><i>Areeya Anuwatprakit</i></p> <p>Mahidol University, Thailand</p>
S1T6-P-16	<p>Strain-Induced Crystallization Behaviors of Natural Rubber with Additional Lipids</p> <p><i>Tomoaki Nakatsuka</i></p> <p>Kyoto University, Japan</p>

Session III: Advanced Rubber Materials and Novel Applications

S3T3-P-01	<p>Preparation and Properties of In-situ Hydrogenated Nitrile Butadiene Rubber Latex</p> <p><i>Zhiwei Yang</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T3-P-02	<p>Surface modification of UHMWPE fibers to enhance their interfacial adhesion with rubber</p> <p><i>Wencai Wang</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T3-P-03	<p>Controllable Modification of Rubber Achieved Through Bio-based Inverse Vulcanized Compounds</p> <p><i>Long Li</i></p> <p>Shenyang university, China</p>
S3T3-P-04	<p>UiO-66-NH₂ for the Recovery of Catalyst in Hydrogenation Nitrile Butadiene Rubber and Its Repeated Hydrogenation</p> <p><i>Hui Jiao</i></p> <p>Beijing University of Chemical Technology, China</p>

S3T3-P-05	<p>Effects of Carbon Nanotube Size on Properties of Eucommia Ulmoides Gum Composite Materials: a Molecular Dynamics Study</p> <p><i>Wenchi Han</i></p> <p>Shenyang University of Chemical Technology, China</p>
S3T3-P-06	<p>Analysis of Internal Damage for CNT-Based Soft Nanocomposites</p> <p><i>Keni Ma</i></p> <p>Kyoto University, Japan</p>
S3T3-P-07	<p>Study on the Structural Control of Natural Rubber with Nanomatrix Structure and Its Vulcanization</p> <p><i>Yuanbing Zhou</i></p> <p>Hainan University, China</p>
S3T3-P-08	<p>Enhancing the Mechanical Properties of Uncrosslinked Epoxidized Natural Rubber through Non-Covalent Interactions</p> <p><i>Muthita Phetpradab</i></p> <p>Kasetsart University, Thailand</p>
S3T3-P-09	<p>A Mechanical Property and Thermal Stability of Natural Rubber Composite Reinforced with Multi-Walled Carbon Nanotubes/Carbon Black or Biochar</p> <p><i>Punyarat Jantachum</i></p> <p>Udon Thani Rajabhat University, Thailand</p>
S3T3-P-10	<p>Optimizing NR/EPDM/EVA Rubber Foam Formulations for Sustainable Ceiling Board Application</p> <p><i>Natyada Jantawong</i></p> <p>Chulalongkorn University, Thailand</p>
S3T3-P-11	<p>A Novel Approach to Using Waste Rubber as a Subsoil Amendment for Improving Soil Quality and Mitigating Hardpan Formation</p> <p><i>Sirichai Pattanawanidchai</i></p> <p>National Metal and Materials Technology Center, Thailand</p>
S3T3-P-12	<p>Development of Natural Rubber and Polycaprolactone Blends as Access Hole-Filling Materials for Dental Implant Applications</p> <p><i>Panjaborn Wongwithhayakool</i></p> <p>Thammasat University, Thailand</p>
S3T3-P-13	<p>Development of FIR-emitting Knee Supporter from Macca–Natural Rubber Composite for Osteoarthritis Relief</p> <p><i>Varatnane Yaoprukse</i></p> <p>Mahidol University, Thailand</p>
S3T5-P-01	<p>Manipulating the Properties of Polymer Vitriimer Nanocomposites by Designing Dual Dynamic Covalent Bonds</p> <p><i>Zhenyuan Li</i></p> <p>Beijing University of Chemical Technology, China</p>

S3T5-P-02	<p>Accelerated Prediction of Glass Transition Temperature in SSBR via Integrated Molecular Dynamics Simulation and Machine Learning Framework</p> <p><i>Siqi Zhan</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T5-P-03	<p>Preparation of DES-containing Polyurethane Elastomer and Its Moisture-dependent Electrical Conductivity</p> <p><i>Shogo Taketa</i></p> <p>Nagasaki University, Japan</p>
S3T5-P-04	<p>A Facile Method in Fabricating Flexible Composite Elastomer with Large-Size Segregated Structures for Electromagnetic Interference Shielding</p> <p><i>Liang He</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T5-P-05	<p>Highly Conductive Ag/pCF/MVQ Composite Rubber for Efficient Electromagnetic Interference Shielding</p> <p><i>Yang Chen</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T5-P-06	<p>Texture Evolution and Mechanical Response of Cholesteric Liquid Crystal Elastomers with a Lying Helix Structure</p> <p><i>Koudai Tanino</i></p> <p>Kyoto University, Japan</p>
S3T5-P-07	<p>Simulation of Rubber Acoustic Coatings under Deep-Sea Pressure Based on Strain-Dependent Viscoelastic Properties</p> <p><i>Liu Yue</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T5-P-08	<p>Influence of Vacancy Defect on Stretching Behavior of Liquid Crystal Elastomer Membrane</p> <p><i>Takumi Kato</i></p> <p>Kyoto University, Japan</p>
S3T5-P-09	<p>Bio-Based Polyurethane/Tannic Acid Composites with Adjustable Damping Property Enabled by Constructing Multiple Sacrificial Networks</p> <p><i>Dexian Yin</i></p> <p>Beijing University of Chemical Technology, China</p>
S3T5-P-10	<p>Changes in Nano Structure upon Uniaxial Stretching of Polyurethane Liquid-Crystalline Elastomers as Analyzed by Small-Angle X-ray Scattering</p> <p><i>Yume Sugino</i></p> <p>Kyoto Institute of Technology, Japan</p>
S3T5-P-11	<p>A Novel Properties of Rubber Formulated with 1,2-Polybutadiene Derivatives</p> <p><i>Hokuto Ohura</i></p> <p>NIPPON SODA CO., LTD., Japan</p>

S3T5-P-12	<p>Mechanically Robust and Moisture-Resistant Poly(thioether-thiourea) Elastomers with Glassy-State Self-Healing Capability</p> <p><i>Haitao Wu</i></p> <p>Sichuan University, China</p>
S3T5-P-13	<p>Self-Healing and Impact-Resistant Elastomer Based on a Novel Tetraoxadiborolane Dynamic Bonds</p> <p><i>Shiyu Gu</i></p> <p>Sichuan University, China</p>
S3T5-P-14	<p>UV-A Functionalization of Low Molecular-Weight Natural Rubber Latex Using TiO₂-Coated Hollow-Glass Beads as Photocatalyst</p> <p><i>Kanokporn Wongnukoon</i></p> <p>Mahidol University, Thailand</p>
S3T5-P-15	<p>Preparation and Characterization of Hydroxylated Natural Rubber via Epoxidation and Alkaline Ring-Opening</p> <p><i>Thanita Suakamram</i></p> <p>Mahidol University, Thailand</p>

December 2nd, 2025 (16:35 - 17:30)

Poster Session II

Session II: Advancements in Sustainable Rubber Technology

S2T1-P-01	<p>Preparation of High Performance Rubber Nanocomposites by Complex Coupling Agent System</p> <p><i>Dengfeng Shi</i></p> <p>Beijing University of Chemical Technology, China</p>
S2T1-P-02	<p>A Synergistic Enhancement of Bio-Based <i>Eucommia Ulmoides</i> Gum Nanocomposites through Epoxidized Natural Rubber and Silane Coupling Agent Integration: Advancements in High-Performance Engineering Tires</p> <p><i>Zhi Chen</i></p> <p>Beijing University of Chemical Technology, China</p>
S2T1-P-03	<p>Synthesis and Application of Novel Green Coupling Agents in Silica/Natural Rubber Composites</p> <p><i>Shuaiqi Li</i></p> <p>Beijing University of Chemical Technology, China</p>
S2T1-P-04	<p>Eco-Tread: The Compounds from Rice Husk Silica and Deproteinized Natural Rubber</p> <p><i>Tran Dai Luat</i></p> <p>Hanoi University of Science and Technology, Viet Nam</p>
S2T1-P-05	<p>Role of Lipase Enzyme in Controlling Storage Hardening and Mechanical Properties of Natural Rubber</p> <p><i>Kattareen Boonchuay</i></p> <p>Mahidol University, Thailand</p>

S2T1-P-06	<p>Sustainable Vulcanization of Natural Rubber Latex Using Electron Beam</p> <p><i>Suthathip Sichumphuang</i></p> <p>National Metal and Materials Technology Center, Thailand</p>
S2T1-P-07	<p>Comparative Evaluation of Natural Rubber Composites Reinforced with Macadamia Carbon and Carbon Black</p> <p><i>Patcharapron Pimput</i></p> <p>Mahidol University, Thailand</p>
S2T1-P-08	<p>Sustainable Rubber Compounding: Application of Silane-Grafted Palm Oil in Silica-Filled SBR/BR Blends</p> <p><i>Chesidi Hayichelaeh</i></p> <p>Chulalongkorn University, Thailand</p>
S2T1-P-09	<p>Cure Characteristics of NR Compounds with Sulfur Sludge from Biogas -Wastewater Treatment in Palm Oil Industry</p> <p><i>Prachid Saramolee</i></p> <p>Walailak University, Thailand</p>
S2T1-P-10	<p>Feasibility Study of Tamarind Shell Powder as a Bio-Based Secondary Accelerator for Rubber Flooring</p> <p><i>Weenusarin Intiya</i></p> <p>National Science and Technology Development Agency (NSTDA), Thailand</p>
S2T1-P-11	<p>Rubber Composites Reinforced with Carbon Black and Calcium Lignosulfonate</p> <p><i>Ivan Hudec</i></p> <p>Slovak University of Technology in Bratislava, Slovakia</p>
S2T1-P-12	<p>Rubber Composites Based on Devulcanized Tire Crumb and Lignin as A Stabilizer</p> <p><i>Ján Kruželák</i></p> <p>Slovak University of Technology in Bratislava, Slovakia</p>
S2T2-P-01	<p>Mediating Carbon Black-Natural Rubber Interface by Thioamide-Functionalized Polysulfide for Energy-Saving Composites</p> <p><i>Ruoyan Huang</i></p> <p>South China University of Technology, China</p>
S2T2-P-02	<p>Characterization of Polyisoprene Blended with Urethane Compounds</p> <p><i>Takashi Kakubo</i></p> <p>The Yokohama Rubber Co., Ltd., Japan</p>
S2T2-P-03	<p>Facile and Efficient Preparation of Functionalized Diene-Elastomers via Dynamic Covalent Polymerization</p> <p><i>Xinglong An</i></p> <p>South China University of Technology, China</p>
S2T2-P-04	<p>Development of Phosphorylated Cellulose Nanofibers/Natural Rubber Composites</p> <p><i>Ryotaro Takayama</i></p> <p>Oji Holdings Corporation, Japan</p>

S2T2-P-05	<p>Study on the Effect of Compatibilizer Content on the Mechanical Properties of NR/BR/NBR Blends</p> <p><i>Kanokporn Sarikanon</i></p> <p>Kasetsart University, Thailand</p>
S2T2-P-06	<p>Influence of Balanced Ratios between Mica and Carbon Black on Rheological and Mechanical Behaviors of Elastomeric Materials</p> <p><i>Keon-Soo Jang</i></p> <p>University of Suwon, South Korea</p>
S2T2-P-07	<p>Fatigue Properties of Rubber Composites with Different Glass Transition Temperatures</p> <p><i>Jiaye Li</i></p> <p>Beijing University of Chemical Technology, China</p>
S2T2-P-08	<p>Development of Tire Tread Formulations for Military Light-Truck Tires</p> <p><i>Pairote Jittham</i></p> <p>National Metal and Materials Technology Center, Thailand</p>
S2T2-P-09	<p>Enhancing Mechanical and Antibacterial Properties of Natural Rubber/Tire Waste Blends through Dual-Phase Processing Techniques</p> <p><i>Napasorn Kingkohyao</i></p> <p>King Mongkut's University of Technology Thonburi, Thailand</p>
S2T2-P-10	<p>Durazone D37 as a Potential Alternative to 6PPD: Balancing Ozone Resistance and Dynamic Performance</p> <p><i>Chutima Saeheng</i></p> <p>National Metal and Materials Technology Center (MTEC), NSTDA, Thailand</p>
S2T2-P-11	<p>Effect of Carbon Black and Barium Titanate Hybrid Filler on the Change of Electrical Signal in Epoxidized Natural Rubber Composites</p> <p><i>Lyhav Boeurn</i></p> <p>King Mongkut's University of Technology Thonburi, Thailand</p>
S2T2-P-12	<p>Predicting the Glass Transition Temperature of Polymer Based on Generative Adversarial Networks and Automated Machine Learning</p> <p><i>Zhanjie Liu</i></p> <p>Beijing University of Chemical Technology, China</p>
S2T4-P-01	<p>Deproteinization Process of Natural Rubber Latex by Membrane Filtration</p> <p><i>Yoko Aoyama</i></p> <p>KOSEN-King Mongkut's Institute of Technology Ladkrabang, Thailand</p>
S2T8-P-01	<p>Short-term Surface Nanostructure Change of Biodegradable Polyester Thin Films by Seawater Immersion Treatments</p> <p><i>Nana Tsuji</i></p> <p>Kyoto Institute of Technology, Japan</p>
S2T8-P-02	<p>Effect of Seawater Pressure on the Nanostructure Changes in Poly(l-lactic acid) Homopolymer and Poly(d, l-lactic acid) Blend Thin Films</p> <p><i>Khanh-Van Thi Khuat</i></p> <p>Kyoto Institute of Technology, Japan</p>

S2T8-P-03	<p>Effects of Proteins and Purification in Peroxide-Prevulcanized Natural Rubber Latex for Medical Devices</p> <p><i>Thitipan Watcharakan</i></p> <p>Mahidol University, Thailand</p>
S2T9-P-01	<p>A Sustainable Approach to Viscosity Control and Recycling of Over-matured Prevulcanized Latex in the Elastic Thread Industry</p> <p><i>Nuorn Choothong</i></p> <p>Rajamangala University of Technology Rattanakosin, Thailand</p>
S2T9-P-02	<p>Effective Degradation of Waste Tyre Rubber Using a Specific Treatment Process: A Chemi-Biological Method</p> <p><i>Pritish Raj Shukla</i></p> <p>Birla Institute of Technology and Science- Pilani, K.K. Birla Goa Campus, India</p>
S2T9-P-03	<p>Flame-Retardant Performance of Epichlorohydrin-Modified Reclaimed Tire Rubber</p> <p><i>Selly Mitra Mailanda</i></p> <p>Chulalongkorn University, Thailand</p>

Session IV: Progress in Rubber Characterisation

S4T7-P-01	<p>Development of an Integrated Design, Analysis and Evaluation System for Rubber Components</p> <p><i>Changsu Woo</i></p> <p>Korea Institute of Machinery & Materials, Republic of Korea</p>
S4T7-P-02	<p>Spatiotemporal Internal-Damage Distribution During Nonuniform Deformations in Filled Elastomers</p> <p><i>Yuki Tokudome</i></p> <p>Kyoto University, Japan</p>
S4T7-P-03	<p>AFM Nanomechanics of Vulcanized Rubber Containing Silica and Petroleum Resin</p> <p><i>Makiko Ito</i></p> <p>Institute of Science Tokyo, Japan</p>
S4T7-P-04	<p>Mixed-Mode Crack Propagation Criterion in Elastomers</p> <p><i>Tomoki Mishima</i></p> <p>Kyoto University, Japan</p>
S4T7-P-05	<p>Thermal Analysis of the Mullins Effect in Filler Reinforced Elastomers</p> <p><i>Koshi Shimazaki</i></p> <p>Kyoto University, Japan</p>
S4T7-P-06	<p>A Melt Crystallization and Dewetting Kinetics of Marine-Degradable Polyesters in Thin Films</p> <p><i>Ryu Miyajima</i></p> <p>Kyoto Institute of Technology, Japan</p>

S4T7-P-07	<p>A Resazurin Reduction Test for Rapid Evaluation of Natural Rubber Latex Putrefaction</p> <p><i>Preeyawis Na Ubol</i></p> <p>The National Science and Technology Development Agency (NSTDA), Thailand</p>
S4T7-P-08	<p>Establishment of a Library Database of Some Compounding Ingredients Using a Py-GC/MS Technique</p> <p><i>Prin Tumwised</i></p> <p>Mahidol University, Thailand</p>