Session Topics:	Characterisation and testing of materials & products Chairs: Jorge Lacayo Pineda, Ulrich Giese, Toshio Tada, Erick Sharp	Material Developments Chairs: Kannika Sahakaro, Anke Blume, Ramakrishnan S	Sustainability Chairs: Martyn Bennett, Ulrich Giese	Modelling Chairs: Keizo Akutagawa, Toshio Tada	Smart Materials Chairs: Leif Kari, Khai Nguyen	Elastomer Product Innovations Chairs: Abilash Nair, Izaak Watson	Material Processing Chairs: Abilash Nair, Lewis Tunnicliffe, Izaak Watson
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9/5/2023							
9/5/2023	John McIntyre Conference Centre				South Hall Complex		
	Pentland	Prestonfield	St Trinneans	South Hall	Kirkland		
09:00 - 17:00	Poster Board Setup			Shell Scheme Setup			
19:00 - 22:00	Welcome Reception & Poster Pitch Session						

10/5/2023 John McIntyre Conference Centre South Hall Complex							
Capacity 08:00 - 08:30	Pentland East	Pentland West Registra	Prestonfield	St Trinneans 50	South Hall Kirkland 300 Morning Coffee		
08:30 - 08:45	Welcome Address & General Pres	sentation: James Busfield					
08:45 - 09:15	Plenary Session 1: L Advanced Elastomer Nanocomposites Aiming At Carb						
09:15 - 10:00 10:00-10:45	Plenary Session 2: Pentland Dividing into Pen				Refreshments & Networking		
	Jorge Lacayo-Pineda	<u>Christoph Gögelein</u>	Mokarram Hossain	<u>Chaoying Wan</u>			
10:45 - 11:10	Evaluating rCB Capabilities for Rubber Reinforcement (6)	Strain-Induced Crystallization Of HNBR (2)	On the influence of time-dependent behaviour of elastomeric wave energy harvesting membranes (9)	VAT Photopolymerisation 3D printing of elastomer vitrimers (13)			
11:10 - 11:35	<u>Vishal Patil</u> UPM BioMotionTM Renewable Functional Fillers (RFF) for a Lighter and more Sustainable Future	<u>William Mars</u> Virtual qualification of elastomeric engine mount with recorded multi-channel road	Laurent Guy How Silane could react on the Silica surface and the water role ? - Computer modeling as an	Anke Blume Comparison of the reactivity of mercaptosilane and sulfursilane in a model			
	(8) Yusuf Guner	load input (3) Judith Hirsch	advanced tool to link with our experiments (15) Fanzhu Li	study (45) Priyanka Sekar			
11:35 - 12:00		Identification of test parameter to evaluate the wear of rubber in aged chassis bushes (42)	A comparative study of hyperelastic constitutive models and thermo-mechanical coupling analysis for an edge-cracked rubber specimen (19)	Understanding the raspberry-like Filler Cluster Formation of Bis-(triethoxypropyl) tetrasulfide modified Hydrothermally treated			
		(+2) <u>Katsuhiko Tsunoda</u>	Tor an edge-cracked rubber specimen (17)	lignin in an SSBR/BR rubber matrix (48)			
12:00 - 12:25	<u>Cristian Oprisoni</u> Sustainable Solutions for the Rubber Industry (12)	New insight of the effect of micro/macro structure for SIC and related strength on poly isoprene rubber (46)					
12:25 - 13:35			Fernando Martin-Salamanca		Lunch & Networking		
13:35 - 14:00			Low field, time domain NMR and mechanical properties as a combination of experimental techniques to achieve a unified physical	<u>Marie Yrieix</u> Thermo-oxidation, ozonation and fatigue degradation of rubbers: how to replace			
			framework to characterize rubber compounds (20) <u>Noah Mentges</u>	6PPD? (53)			
14:00 - 14:25	Natalia Gajos Solvay Precipitated Silica: Sustainable Solutions To Improve Tire Rubber Performances To Reduce	Seiichi Kawahara Analyses of Crosslinking Junction, Strain- induced Crystallization and Mechanical	Modelling the effects of process induced phase morphology on the mechanical response of	Xiao Hu Damping properties of Butyl rubber vitrimers			
	Environmental Footprint And Increase Circularity (34)	Properties of Vulcanized Natural Rubber (51)	thermoplastic vulcanisates under quasi-static loading using representative volume elements (29)	(65)			
14:25 - 14:50	Zenen Zepeda Rodríguez Structural Characterization Of Thermo- Mach anizal Danadamizad Bub han Frame Fred Of	Thomas Rauschmann Steady shear viscosity measurements of	Lena Tarrach Model-Based Approach to Reinforcement by Filler	Ulrich Giese Role and mechanisms of coagents in peroxide			
		filled rubber compounds using new enhanced RPA technology (68) <u>Jens Meier</u>	and Rupture in Strain-Crystallizing Elastomer Networks (37)	crosslinking optimizing the properties (80)			
14:50 - 15:15	David Kiroski Experimental Approach to Quantify the Energy Aspects of Mixing (54)	Pressure dependent viscosity of an EPDM/CB compound and relevance for injection molding (71)	<u>Nico Stortini</u> Predicting crack speed propagation in elastomeric membranes (38)	Fracture path modelling of hyperelastic porous structures inspired by mussel plaques (94)			
15:15 - 16:00	Kamyar Alavi	Andrej Lang	<u>Aaron Duncan</u>	Daigo Matsuoka	Refreshments & Networking		
16:00 - 16:25	Sustainability In Rubber Compounds:Nynas Conventional And Biobased Rubber Plasticisers (59)	Abrasion Characteristics of Elastomer Materials based on Tyre Tread Compounds (77)	Versatile New Model to Predict Ageing in Rubber Composites (61)	Introduction to Asahi Kasei's next-rubber SEBB (107)			
16:25 - 16:50	Jukka Koskinen	Vasileios Koutsos	Merve Pehlivan Experimental Investigation And Modelling Of	Luca Giannini Exploration of novel S-free Curatives for tyre			
16:50 - 17:00	Effect Of Lignin Dispersion To Abrasion Rate In Polybutadiene Rubber (78)	ຮັ Rubber adhesion and friction: nanoscale mechanisms (83)	Adhesion Between Textile Cords And Rubber Compounds (87) Close of Day 1 Sessions	compounds: Thermally Activable Bistetrazoles (113)			
	Pentland East	Pentland West	Prestonfield	St Trinneans	South Hall Kirkland		
11/5/2023	Pentland East	John McIntyre Con Pentland West	11/5/2023 Iference Centre Prestonfield	St Trinneans	South Hall Complex South Hall Kirkland		
08:15 - 09:00	<u>Stefan Frosch</u>	<u>Manar Ramram</u>	<u>Akihiro Matsuda</u>	e <u>Lewis Tunnicliffe</u>	Morning Coffee		
09:00 - 09:25	Sulfur Migration In Recycled Ground Rubber Containing Compounds And Its Impact On Dynamic-Mechanical Properties (95)	Silicone rubber gaskets for application under steam and high temperature environment: characterization of chemical structure and ageing study under critical	Voxel-Based Finite Element Analysis of Polymer Foam with Micro-CT data (106)	The Influence of Carbon Black on Electrical Properties of Rubber and Compound Development Approaches for High Resistivity			
 							
1	99 95 95 95 95 95 95 95 95 95 95 95 95 9	conditions (88) Ben Murphy	Juan Itriago	Applications (116) Eric Euchler			
09:25 - 09:50			Juan Itriago Coupled vulcanization and cellularization modeling for rubber foam injection molding (126)				
	A Biobasedjanus Molecule As Universal Coupling Agent In Rubber Compounds (111) <u>Subhradeep Mandal</u>	Ben Murphy Study of elastomer blend dynamics for improved tire performance (85) Evangelos Koliolios	Coupled vulcanization and cellularization modeling for rubber foam injection molding (126) Jonathan Hodges	Eric Euchler Mechanical characterization of imidazole- modified elastomers with self-healing			
09:25 - 09:50 09:50 - 10:15	A Biobasedjanus Molecule As Universal Coupling Agent In Rubber Compounds (111)	Chich Giese Ben Murphy Study of elastomer blend dynamics for improved tire performance (85)	Coupled vulcanization and cellularization modeling for rubber foam injection molding (126)	Eric Euchler Mechanical characterization of imidazole- modified elastomers with self-healing capabilities (117)			
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Session Topics:	Characterisation and testing of materials & products Chairs: Jorge Lacayo Pineda, Ulrich Giese, Toshio Tada, Erick Sharp	Material Developments Chairs: Kannika Sahakaro, Anke Blume, Ramakrishnan S	Sustainability Chairs: Martyn Bennett, Ulrich Giese	Modelling Chairs: Keizo Akutagawa, Toshio Tada	Smart Materials Chairs: Leif Kari, Khai Nguyen	Elastomer Product Innovations Chairs: Abilash Nair, Izaak Watson	Material Processing Chairs: Abilash Nair, Lewis Tunnicliffe, Izaak Watson