

Monday 20				
Mon 9:00	Opening Ceremony (Room Bolívar - Essentia) Conference Chair: Jorge Alberto Medina Perilla; President of PPS: Sadhan Jana; President of Acoplasticos: Daniel Mitchell			
Mon 9:30	Plenary: Nanostructure Control in 3D Printing through Polymerization Self-Assembly Process Cynthia Boyer (University of New South Wales, Australia)			
Mon 10:10	Session Chair: Tim A. Osswald, University Wiscconsin Madison, USA			
Mon 10:10	Industrial Keynote			
Mon 10:40	Coffee Break			
	Room Bolívar - Essentia	Room Cartagena - Daabon	Room Kalamary I - CAS	Room Guacamayo - Plastiilene
Morning session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Rios de Anda Agustín, Université Paris Est Créteil, France	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Hail Sakrit, University of Calgary, Canada	INJECTION MOLDING Session Chair: Roberto Pantani, University of Salerno, Italy	MORPHOLOGY & STRUCTURAL DEVELOPMENT Session Chair: Nino Grizzuti, University of Naples Federico II, Italy
Mon 11:00	Distinguished Keynote: Bioplastics, Biocomposites, Bioprocessing and Biodegradability: Current Scenario and Future Vision Amar K. Mohanty (School of Engineering & Department of Plant Agriculture, University of Guelph, Canada)	Keynote: Recipe Development and Cast Film Extrusion of PVDF/Carbon Nanotube/Carbon Black Composites for the Application in Bipolar Batteries Pötschke Petra (Pötschke Petra, Germany), Krause Beate, Kunz Karina, Kühnert Ines	Keynote: Co-injection and foam injection molding as enablers for sustainability Ruckeläschel Holger (Neue Materialien Bayreuth GmbH, Germany)	Keynote: Study on the regulation of porous structure of ultra-thin ultra-high molecule weight polyethylene separation membranes through biaxial stretching Wu Hong (Sichuan University, China), Guo Yuhang
Mon 11:30	Chlorella Microalgae as a Biomass Filler to Fabricate Eco-friendly Composite Hong Jaung Sook (Seoul National University, South Korea); Kim JaeHyun; Ahn Kyung Hyun	Femtosecond Laser Engineering of Polymers: Transforming the Microfluidic Medical Device Industry Bishayee Chayan (Micronit B.V., Netherlands)	Investigating the post-aging adhesive properties in multicomponent injection molded made of liquid silicone rubber (LSR) and acrylonitrile-butadiene-styrene (ABS) for medical device applications Giesen Ralf-Ulrich (Kassel University, Germany), Nikousaleh Mohammad Ali, Heim Hans-Peter	Powerful analytical methods in polymer science: Confocal Raman spectroscopy and X-ray diffraction Parrot Edith (Empa, Switzerland)
Mon 11:50	Melt-processing of PHB/starch and PHB/TPS blends for nutrient carrier Felix Roselena (UFSCar, Brazil); Taniguchi Luana; Godoy Gabriela; Souza Claudine	Development of multifunctional nanogels for antibacterial photothermal therapy. Molina Maria (UNRC-CONICET, Argentina); Velzi Ignacio; Yslas Edith Ines	Microstructural and Mechanical Properties of Weld Lines in Injection-Moulded Short Glass Fibre-Reinforced Polyamide 6 Bullef Bart (KU Leuven, Belgium), Mokarizadehghahshirazi Majid, Lomov Stepan V., Desplentere Frederik	Flow-induced crystallization in micro-injection molding - Experiments and simulation with POM-H Fischer Matthias (Leibniz-Institut für Polymerforschung Dresden, Germany), Saad Sandra, Cruz Camilo, Kuehnert Ines
Mon 12:10	Wine by-products as sustainable polymer stabilizers - impact of annual variations on stabilization efficiency Hilte Benedikt Theodor (Institute for Circular Economy of BioPolymers at Hof University, Germany); Schubel Lea; Rennert Mirko	Morphology Evolution Under a Controlled Flow of Polystyrene/Polypropylene/Few Layers Graphene Nanocomposites Strugova Daria (École de technologie supérieure, Canada); Essadokuy Hind, Helal Emma, Gutierrez Giovanna, Moghianin Nima, David Eric, Demarquette Nicole R.	Injection moulding of multi-material TPU-ABS locally resonant metamaterials to combine vibration stopbands by increased damping capacity Stiebers Kristof (KU Leuven, Campus Diepenbeek, Department of Mechanical Engineering, Belgium), Govaerts Sean, Claeys Claus, Van Belle Lucas, Deckers Elke	Polymeric Microwave Patch Resonator based on Doped PEDOT:PSS Dordani Haghighi Marziab (University of British Columbia, Canada), Arjmand Mohammad, Zarifi Mohammad H.
Mon 12:30	Biopolymer composites for plant nutrition in aquatic environments Duarte Fernando Moura (University of Minho, Portugal); Machado Ana Catarina; Castro Maria Cidália; Carneiro Liliana	Design of PLA-based nanocomposites with high barrier properties Julian Aurora (Université Claude Bernard Lyon 1, CNRS, France), Hascoët Nicolas, Boumor-Legard Veronique, Gouami Fabrice, Zinet Matthieu, Chinesta Francisco, Espuche Eliane	Design of an injection mold with local displacement of heating coatings for warpage compensation Zimmermann Christoph (Institute for Plastic Processing, Germany), Hopmann Christian, Fritsche Daniel Colin, Bobzin Kirstin, Heinemann Hendrik, Erick Marvin, Lohrey Nicole	Tailoring Morphology of Polymer Composites from Multilayer Film Waste Flevoay Katerina (Chair of Materials Science and Testing of Plastics, Montanuniversität Leoben, Austria)
Lunch	Lunch			
Mon 14:20	Plenary: Towards a Circular Economy: Recycling Thermoset Waste Via Dynamic Chemistry (Room Bolívar - Essentia)			
Mon 15:00	Ica Manas Zlotowski (Case Western Reserve University, Department of Macromolecular Science and Engineering, USA), Session Chair: Sierra Avila Cesar Augusto, Universidad Nacional de Colombia, Colombia			
Break	Break			
Afternoon session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Petrusch Julius, Leibniz-Institut für Polymerforschung Dresden, Germany	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Ica Manas, Case Western Reserve University, USA	INJECTION MOLDING Session Chair: Ana Vera Machado, University of Minho, Portugal	MORPHOLOGY & STRUCTURAL DEVELOPMENT Session Chair: Hong Wu, Sichuan University, China
Mon 15:10	Keynote: A Novel Foaming Technique to Develop Solvent-Free Functional open-cell PLA Scaffolds for Bone Tissue Regeneration Miguel Freij (University of Minho, Portugal); Osman Mada Abubaker; Rouabhia Mahmoud; Virgilio Nick	Keynote: Smart Hybrids with Multi-scale Architecture and Surface Engineering Enabled by Nanocoatings Sun Luyi (University of Connecticut, USA)	Keynote: Modeling of polymer processing of thermoplastic polymers: application to the injection molding process Pantani Roberto (Department of Industrial Engineering of the University of Salerno, Italy), Titomanlio Giuseppe, Liparoti Sara, Speranza Vito	Keynote: Correlative studies of temperature-controlled structures and morphologies in polylactic acid Boldt Regine (Leibniz-Institut für Polymerforschung Dresden, Germany), Meinig Laura, Euchler Eric, Sambale Anna Katharina, Uhlig Kai, Schwartzkopf Matthias, Stommel Markus
Mon 15:40	Development of Biodegradable Composite from Plantain Starch Reinforced with Plant Fiber for Potential Use in the Packaging Industry for Potential Use in the Packaging Industry Leyton Conao Alexander (Universidad Tecnológica de Bolívar, Colombia); Arias Tapia Mary; Porras Alicia	Effect of Temperature on the Tensile Behavior of Polyamide 1010 Nanocomposites Reinforced by Different Two-dimensional Materials Pinto Gabriel Matheus (École de technologie supérieure, Canada), Helal Emma, Ribeiro Helio, David Eric, Demarquette Nicole Raymonde, Fehine Guilhermino José Macedo	Development and Performance Testing of a Novel Active Vacuum Venting System for Sustainable Injection Molding Mitsud Sarah (University of Malta, Malta), Rochman Arif, Refalo Paul	Effect of Blending and Processing Parameters on Tenter-Frame Biaxial Orientation of Polyethylene Squillante Iaria (University Of Groningen, Netherlands), Portale Giuseppe
Mon 16:00	Influence of Additive Manufacturing Techniques and Polymer Blends in Chondrogenesis: A Study of Multilayer Scaffolds based on PLA-CMC in Human Mesenchymal Stem Cells Sánchez Vega Giovanni Alfredo (Instituto Potosino de Investigación Científica y Tecnológica A.C., México); Alcántara Quintanilla Luz Eugenia; Escobar Barrios Vladimir Alonso	Improving SWCNT dispersion in aprotic solvent via ordered non-covalent polymer wrapping and co-solvents Arias-Monje Pedro J. (University of Texas Permian Basin, USA); Kumar Satish	Exploring Processability of Polyoxymethylene /Carbon Black Composites Through Low-Pressure Injection Moulding Sadaf Mahruki (University of Ljubljana, Slovenia), Šobak Matic, Perše Lidija Stemenik	The Development of Polycarbonate Properties via In-situ Nanofibrillation Method Using Elastomer Nanofibril Network Akrami Hamidreza (University of Toronto, Canada), Zaoui Aniss, Park Chul B.
Mon 16:20	Supramolecular, reversible, and biodegradable polymers between carboxymethylcellulose and N-nitrophenylmaleimide isomers Giraldo Salinas Nivred Camilla (Universidad Tecnológica de Pereira, GIFES, Colombia); Vasquez G. Jefferson; Montoya G. Maribel; Cortes H. Hector Fabio	Effect of graphene particle size on the electrical conductivity and the morphology of immiscible polymer blends Helal Emma (École de technologie supérieure, Canada), Genoyer Julie, Swain Mitasha, Demarquette Nicole Raymonde	Material selection for injection moulding hollow microneedles Evens Tim (KU Leuven, Belgium), Vanwersch Pol, Castagne Sylvie, Van Bael Albert	Shear-induced crystal nucleation of poly (l-lactic acid) Du Mengou (Martin-Luther-Universität Halle-Wittenberg, Germany), Jarjavayyanont Katalae, Boldt Regine, Tariq Muhammad, Fischer Matthias, Spörer Yvonne, Kühnert Ines, Androsch René
Coffee Break	Coffee Break			
	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Chejne Janna Farid, Universidad Nacional de Colombia, Colombia	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Luyi Sun, University of Connecticut, USA	INJECTION MOLDING Session Chair: Franco Costa, Autodesk, Australia	MORPHOLOGY & STRUCTURAL DEVELOPMENT Session Chair: Roberto Pantani, University of Salerno, Italy
Mon 17:00	Biodegradable polymer nanocomposites based on two-dimensional fillers: Strategies of processing Fechine Guilhermino (Mackenzie Presbyterian University, Brazil); Souza Patricia; Braga Natálio; Silva Giovanna; Siqueira Danilo	Strong, tough, and transparent poly(methyl methacrylate) composites incorporating thermoplastic polyester/polyamide/polyurethane elastomer nanofibrils Bahman Saadman Sakib (Department of Mechanical and Industrial Engineering, University of Toronto, Canada), Mahmud Mayesta Binie, Salehi Animeshdi, Lee Patrick C, Park Chul B	Development and validation of an injection moulding production cell to facilitate individual product traceability Moors Jorij (KU Leuven & Flanders Make@KU Leuven, Belgium), Evens Tim, Deckers Elke	Application relevant material characterization on film hinges Kuehnert Ines (Leibniz-Institut fuer Polymerforschung Dresden, Germany), Spörer Yvonne
Mon 17:20	Investigation of pine hardwood extract as antimicrobial additive in biodegradable polymers Biemer Michael (Plastics Technology Group, Faculty of Mechanical Engineering, Technische Universität München, Germany); Bruchmüller M.; Puch F.	Bio-Nanocoatings based on castor oil enhanced with nanomaterials as corrosion reducers in injection well pipes. Cortés Farid (National University of Colombia, Antioquia, Colombia), Quintero Juan Diego, Vilada Yurany Andrea, Inciarte Helan Clara, Herrera Claudia Lorena, Rios Luis Alberto, Franco Camilo Andrés	Investigations on injection mould inserts with reduced thermal masses using additive manufacturing Erlauf Milan (Institute of Precision Engineering - IPEF, University of Stuttgart, Germany), Käß Mertz, Wenz Martin, Khoury Gibran, Gundelsweiler Bernd, Weihe Stefan	In situ growth of ZIF-67 at PVDF nanofibers: influence of solvents on particle morphology Melo Guilherme (Department of Chemical and Petroleum Engineering, University of Calgary, Canada), Yuxin Liu, Sundararaj U.
Mon 17:40	Synthesis of bio-composites using newly designed hybrid filler (cellulose/LDI) and polylactic acid (PLA) Nassem Said (Leibniz Institute of Polymer Research Dresden, Germany); Heckel Sandra; Zahel Martin; Leuteritz Andreas	Cellulose Aerogels: A Sustainable and Versatile Alternative to Traditional Thermal Insulation for Buildings and Automobiles Pradip K. Mall (Dept. of Polymer & Process Engineering, IIT Roorkee, Saharanpur Campus, India), Shakshi Bhardwaj		
Mon 18:00	POSTER SESSION			

Monday 20				
Mon 9:00	Opening Ceremony (Room Bolívar - Essentia)			
Mon 9:30	Conference Chair: Jorge Alberto Medina Perilla; President of PPS: Sadhan Jana; President of Acoplasticos: Daniel Mitchell			
Mon 9:30	Plenary: Nanostructure Control in 3D Printing through Polymerization Self-Assembly Process			
Mon 10:10	Cynthia Boyar (University of New South Wales, Australia) Session Chair: Tim A. Osswald, University Wiscconsin Madison, USA			
Mon 10:10	Industrial Keynote			
Mon 10:40	Room Kalamary II - Anton Paar	Room Bolívar - Xptore	Room - NETZSCH	Room Bolívar - TA Instruments
Morning session	POLYMER COMPOSITES Session Chair: Johan Verbeek, University of Auckland, New Zealand	POLYMER BLENDS & ALLOYS Session Chair: Clemens Holzer, Montanuniversität Leoben, Austria	RUBBER & ELASTOMERS Session Chair: Gehling Tobias, Polymer Competence Center Leoben, Austria	POLYMERS IN THE SUSTAINABLE DEVELOPMENT GOALS OF THE UNITED NATIONS Session Chair: Aminul Islam, Technical University of Denmark, Denmark
Mon 11:00	Keynote: Formulation of highly electro-conductive thermoplastic composites using PEDOT based fillers with controlled shape factor Parpaite Thibault (Charles Sadron Institut ICS, France), KARST Adèle, BOUQUÉY Michel, SOULESTIN Jérémie, SAMUEL Cédric	Distinguished Keynote: Compatibilization Polymer Blends by Electron Beam Irradiation Karin Shmueli (Shenkar College of Engineering, Design and Art, Israel)	Keynote: Conductive elastomers nanocomposites for IP2C soft sensors Barbosa Rafael (Federal University of Sao Carlos, Graduate Program in Materials Science and Engineering(Brazil), Saccardo Matheus Colovati, Blanco Guilherme Eduardo de Oliveira, Gonçalves Roger, Cruz Sandra Andrea, Scuracchio Carlos Henrique	Keynote: Virgin and degraded polyamide microplastics as vectors of contaminants in aquatic systems De Paoli Marco Aurelio (Unicamp, Brazil), Dias Mariana A, Montagner Cassiana
Mon 11:30	Study of the viscoelasticity of conductive composite polymers for electronic applications Aiss Pinar Ana Isabel (Universidad da Coruña, Spain), Abad María J, González-Rodríguez Victoria, Arias Gorosti ISABEL, Lago-Rivera Silvia	Enhancing Toughness and Interfacial Compatibility in PLA/PBAT/Joncryl Blends through Two-Step Blending Salehyan Reza (Edinburgh Napier University, United Kingdom)	Improvement of an alternative method for the correction of wall slip effects in rheological studies of filled rubber compounds Kleinschmidt Dennis (Ferdinand-Born University, Germany), Brünning Florian, Petzke Jonas	WPC from Uruguayan industrial waste - A first approximation Balmonte Pablo (Instituto de Ensayo de Materiales, Facultad de Ingeniería, UdelaR, Uruguay), Raimonda Camila, Mosca Daniel, Ibañez Claudia Marcela
Mon 11:50	High performance recycled CFRP composites based on reused carbon fabrics through mild solvolysis route Baltout Wael (UCLouvain, Belgium)	Study of a new 3D printing composite for microwave absorption applications Vilte Julien (UBO, France), Le Saos-Kauten Amaud, Roqefort Philippe, Aubry Thierry, Laur Vincent, Chevalier Alexis Maalouf Azar	Experimental and numerical study about the static mechanical behavior of flexible-TPU honeycomb wheel manufactured by additive manufacturing and simulated as hyper-elastic material Morales Arias Juan Pablo (Universidad Cooperativa de Colombia, Colombia), Torrente Prato Gabriel Jesus	Effect of UV-C light on Oxygen Scavenging Kinetics of Green and Biodegradable Composite Films for Active Food Packaging Dakuri Balamkanti (Polymer & Process Engineering, Indian Institute of Technology Roorkee, Saharanpur Campus, India), Konala Akhila, Kirtiraj K, Galkwad, Pradip K, Maji
Mon 12:10	Effect of Pigments on Laser Beam Transmission in Diode Laser Transmission Welding of Poly(propylene) Tomney David (Atlantic Technological University, Ireland)	Study of HDPE/PET/E-GMA blends: toughening, rigidity, thermal and morphology behavior Cospina Silvio Alberto (Instituto de capacitación e investigación del plástico y del caucho, ICIPC, Colombia), Florez Laura Fernanda, Lopez Betty Lucy, Feregrino Ciro	Processing of Thermoplastic Elastomers (PE) by in-situ Ground Tire Rubber (GTR) vulcanization using waste ethylene-vinyl-acetate (wEVA), recycled high-density polyethylene (HDPE) and dicumyl peroxide (DCP) Santana Luis Jose Antonio (ESPOL-Facultad de Ingeniería en Mecánica y Ciencias de la Producción, Ecuador), Regal Cedeño Andrés, Lazo Miriam, Adrian Estephan, Vera Juan	Ethylene Vinyl Alcohol (EVOH) for sustainable food production—Case Scenarios Maya Diana G. (Kuraray America Inc, USA), Chow Edgard A.
Mon 12:30	Fabrication and Characterization of Composite Semiconductor Films Based On Polypyrrole As Matrix And Copper Phthalocyanine Green As Reinforcement. Hernández Joaquín Andrés (Universidad Anáhuac México, Mexico), Sánchez María Elena	Towards the design of stretchable encapsulants for self-healing liquid metal-based electronics using blended Diels-Alder networks Sahraee Azar Amir, Fatemeh (Vrije Universiteit Brussel, Belgium), Terry Seppe, Sangma Rathu Nengminza, Krack Maximilian, Sewlikar Parth Vinaykrab, Deferme Wim, Vandenberght Bram, Van Assche Guy, Brancart Joost	Eco-Friendly Natural Rubber-Composites for the Footwear Industry Barera Giovanni (Instituto Tecnológico Metropolitano, Brazil), Santos Renivaldo Jose, Camargo Flavio C, Gutierrez Carlos Mario, Jaramillo Jaime Alberto, Sanchez Juan Camilo, Palm Leonardo Lantaro, Hiranobe Carlos T	A review on the presence of microplastics in drinking water distribution networks Crisolito Sara (Universidad de los Andes, Colombia), Saldarriaga Juan
Lunch	Plenary: Towards a Circular Economy: Recycling Thermoset Waste Via Dynamic Chemistry (Room Bolívar)			
Mon 14:20	Ica Manas Zloczower (Case Western Reserve University, Department of Macromolecular Science and Engineering, USA)			
Mon 15:00	Session Chair: Sierra Avila Cesar Augusto, Universidad Nacional de Colombia, Colombia			
Break				
Afternoon session	POLYMER COMPOSITES Session Chair: Junwei Gu, Northwestern Polytechnical University, China	POLYMER BLENDS & ALLOYS Session Chair: Jairo Ernesto Perilla Perilla, Universidad Nacional de Colombia, Colombia	RUBBER & ELASTOMERS Session Chair: Robert Eberlein, ZHAW, Switzerland	POLYMERS IN THE SUSTAINABLE DEVELOPMENT GOALS OF THE UNITED NATIONS Session Chair: Pablo Raimonda, Universidad de la Republica Uruguay
Mon 15:10	Keynote: Braided Composite System With Haptic Feedback for Teleoperation Mead Joey (University of Massachusetts Lowell, USA), Diaz Armas Nathalia, Thakur Shilpa, Onal Cagdas, Rao Prapat, Zhang Jinde	Keynote: Impact of stratification on mechanical properties of SAN/PC and ABS/PC multilayered films Solligoub Cyrille (Ecole nationale supérieure d'arts et métiers, France)	Keynote: Correlation between Manufacturing Conditions, Crosslink Density and Fatigue Behavior in Nitrile Butadiene Rubber Gehling Tobias (Polymer Competence Center Leoben, Austria)	Keynote: Meeting the Challenge of Microplastics Pollution: Formation Pathways and Impact on Living Organisms Bikiaris Dimitrios N. (Aristotle University of Thessaloniki, Greece), Ainali Nina Maria, Lambropoulou Dimitroula
Mon 15:40	Investigation of optical fiber properties and fiber segment interferometry in composite applications Mohammadkarami Shiva (TU Imenau University, Germany)	Effect of Steady Shear on Electrically Conductive co-Continuous Morphology Blends Demarquette Nicole (École de Technologie Supérieure de Montreal, Canada), Strugova Daria, Essadokuy Hind, Helal Emma, David Eric	Recycling of Multi-component parts with Thermoplastic Elastomers Ayvandoño Viviana (ALLOD Werkstoff GmbH & Co.KG, Germany)	Towards sustainability in cosmetic packaging industry Veiga Rodrigues Pedro (Institute for Polymers and Composites, University of Minho, Portugal), Machado Ana Vera
Mon 16:00	Characterization of local electrical properties of carbon fiber reinforced thermoplastic composites using a potential field method in terms of fiber orientation influenced by injection molding Schlink André (Institute of Material Engineering, Polymer Engineering, University of Kassel, Germany), Hartung Michael, Eckel Elisabeth, Wiegel Klara, Helm Hans-Peter, Ayeb Mohamed	High-Performance Thermoplastic PEEK-based Hybrid Systems for the Lunar Environment Lassus Arthur (CREPEC, Department of Chemical Engineering, Polytechnique Montreal), Theriault Daniel, Favis Basile D, Virgilio Nick	Acidic-Stabilized Natural Rubber Latex: Characterization & Processes Arroyave Miranda Hector Andres (University of Wisconsin, USA)	Mercury Contamination and PVC Production: Global Impact, Initiatives, and Sustainable Solutions García M Angela M (Escuela Tecnológica Instituto Técnico Central, Colombia), Medina P Jorge A
Mon 16:20	Influence of carbon nanotube deposition onto Jute Fibre in dynamic mechanic properties of epoxy composites Becker Daniela (UDESC, Brazil), Iwasaki Kelvin M. K., De Medeiros Ricardo, Fontana Luis C	Fabrication of core-shell polymer particles for controlled release in agricultural applications Alvarez Monica (Universidad Eafit, Colombia)		From Challenge to Solution: Sustainability Trends Shaping the Plastic Industry Montoya Juliana (Society of Plastics Engineers SPE, USA)
Coffee Break				
	POLYMER COMPOSITES Session Chair: Mead Joey, University of Massachusetts, USA	POLYMER BLENDS & ALLOYS Session Chair: Hernandez Charkap Yvan David, Rochester Institute of Technology, USA		
Mon 17:00	Influence of the Processing Temperature in the Calendaring Process of Staple Fiber Yarns on the Degree of Consolidation and the Thermal Properties Detzel Martin (Leibniz-Institut für Verbundwerkstoffe GmbH, Germany), Mitschang Peter, Breuer Ulf	Rheological and Mechanical Characterization of Enhanced PLA/PBAT Blends through Compatibilization Mohammadi Mojtaba (Department of Chemical Engineering, Polytechnique Montreal, Canada), Carreau Pierre J.		
Mon 17:20	Next-generation of super-tough PP composites modified with in-situ fibrillated crosslinked rubber phase: sulfur-vulcanized ethylene-propylene-diene-monomer (EPDM) and silane-crosslinked ethylene-butene-rubber (EBR) Salehi Armanesh (University of Toronto, Canada), Khairmandeghani Mohammad, Rahman Saadman Sakib, Reza Rahmati, Maryam Farnandi, Park Chul B	The influence of blending process and formula on the properties of PP/PA6 Ma Xianping (Beijing University of Chemical Technology, China), Lu Hanzhe, Liao Wenquan (1), Xue Rui, Huang Jingyi, Shi Qiang		
Mon 17:40	Hybrid Twin for manufacturing thermoplastic composite wound parts BARASINSKI Anais (UPPA, France), GHNATIOS Chady			
Mon 18:00	POSTER SESSION			

Tuesday 21				
Tue 8:30 Tue 9:10	Plenary: Environmentally Safe Preservation, Stabilization and Processing of Natural Rubber Latex in an Acid Environment (Room Bolívar) Tim A. Osswald (University of Wisconsin Madison, USA) Session Chair: Jairo Ernesto Perilla, Universidad Nacional de Colombia, Colombia			
Tue 9:10 Tue 9:40	Industrial Keynote			
Break	Room Bolívar - Orbia	Room Cartagena - Daabon	Room Kalamary I - CAS	Room Guacamayo - PlastiTene
Morning session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Marcelo Villar, Universidad Nacional del Sur, Argentina	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Uttandaram Sundararaj, University of Calgary, Canada	CIRCULAR ECONOMY OF POLYMERS Session Chair: Rudinei Florio, Maastricht University, Netherlands	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Patil Dhanush, Arizona State University, USA
Tue 9:50	Keynote: Fabrication and characterization of Biobased Polyurethanes, from Cradle to Cradle Averous Luc (University of Strasbourg, France)	Keynote: Towards versatility of POSS nanoparticles in thermoplastic compounds Ozkan Guray (Xplore Instruments BV, Turkey); Kodal Mehmet	Keynote: Bart Van Hooft (Universidad de los Andes, Colombia)	Keynote: How polymer-based pharmaceutical additive manufacturing can heal millions of patients via personalized medicine Speerk Martin (Research Center Pharmaceutical Engineering GmbH, Austria); Eder Simone, Brandi Bianca
Tue 10:20	Reactive extrusion of lignocellulosic biomass to produce biopolymer-monomers using high energy radiation and catalytic acids Zenz Vitus (Technical University Rosenheim, Germany); Widera Karolin; List Manuela; Muscat Dirk; Strübbe Nicole	Process transfer of PECVD gas barrier coatings between PE-HD and PP hollow bodies Alizadeh Phillipa (IKV - Institute for Plastics Processing, Germany); Oberle Kevin, Dahlmann Rainer	Enhancing chemical recycling of PET waste using a biopolymer-based heterogeneous catalyst Ponce Sebastián (Universidad San Francisco de Quito, Ecuador)	Screw-based Material Extrusion Additive Manufacturing of Inflatablees Using Ultra Soft Thermoplastic Elastomer Curmi Albert (University of Malta, Malta); Rochman Arif
Coffe Break				
Afternoon session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Jorge Alberto Medina Perilla, Universidad de los Andes, Colombia	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Cakmak Miko, Purdue University, USA	CIRCULAR ECONOMY OF POLYMERS Session Chair: Corella Elena, Dayrize BV, Netherlands	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Hesheng Xia, Sichuan University, China
Tue 11:00	Synthesis of PLA-PEG-PLA triblock copolymer microparticles using microfluidics technique as potential drug delivery systems Bikiaris Nikos (Aristotle University of Thessaloniki, Greece); Barmalexis Panagiotis	Layered double hydroxide - a versatile structure for designing function integrated materials Leuteritz Andreas (Leibniz-Institut fuer Polymerforschung Dresden, Germany)	Effect of Jatropa Curcas Oil on Thermoheological Proprieties of Asphalt Binder Modified with recycled HDPE Muambo Herminio Francisco (Eduardo Mondlane University, Mozambique); Tamele Jr Lucas Filipe, Manhique Arao Joao, Machecha Afonso Daniel, Muambo Herminio Francisco	Multifunctional 3D-Printed Cellulosic Constructs via a Sequential Cold Chemical Vapor Polymerization Technique Aminl Majed (University of British Columbia, Canada)
Tue 11:20	Influence of irradiation processing in the melt on stereo complex formation and physical crosslinking of blends from PLLA and PDLA Krieg David (Institute for the Circular Economy of Biopolymers at Hof University, Germany); Müller Michael Thomas; Boldt Regine; Nase Michael; Stormel Markus	Bio-inspired Hierarchical Hybrid Composites for High-Performance Structural Applications Lee Patrick C. (University of Toronto, Canada); Aguiar Rafaela, Sansone Nello D., Cheung Nichole, Tuccitto Anthony V.	Targeting recyclability in cross-linked bio-based polyurethanes through thermoreversible bonds Restrepo Montoya Ana Cristina (University of the Basque Country, Spain); Larraza Itzaskun, Gonzalez Kizkitza, Saralegi Ainara, Eceiza Arantxa	3D printability criteria for the elaboration of microwaves absorbers Le Saos-Kauten Arnaud (UBO - IRDL UMR CNRS 6027, France); Laur Vincent ; Chevalier Alexis, Maalouf Azar, Ville Julien, Roquefort Philippe, Aubry Thierry
Tue 11:40	Photoactive films made from alginate and chlorophyllin Arbolada-Murillo Alejandra (Universidad del Quindío, Colombia)	Tri-layered Hybrid Composites for Structural Thermal Management Applications Sansone Nello D. (Sansone Nello D., Canada); Aguiar Rafaela, Cheung Nichole, Tuccitto Anthony V., Lee Patrick C.	Extrusion Pretreatment of Polyesters for Efficient Recycling Via Enzymatic Deconstruction Sobkowicz Margaret L. (UMass Lowell, USA); Patel Akanksha, Chang Allen, Xie Dongming, Wong Hsi-Wu	Material Extrusion Additive Manufacturing of Poly(lactic Acid)/Lignin Biocomposites Ameli Amir (UMass Lowell, USA); Alshammari Shaltal
Tue 12:00	New Amorphous Ingeo Polylactide Grade with Enhanced Hydrolysis, Biodegradation and Improved Performance in Reactive Extrusion Process Hossainy Nemat (NatureWorks LLC, USA); Randall Jed; Schroeder Joe; Valentine Jim	Development of viscoelastic surfactant solutions improved with silica nanoparticles for applications in Enhanced Oil Recovery Giraldó Lady J. (Universidad Nacional de Colombia, Antioquia, Colombia); Villada Yurany, Franco Camilo, Cortés Farid B.	Investigation of the impact of single and double filtration systems on post-consumer PE-LD film waste Lanwieser Johanna (Competence Center CHASE GmbH, Austria); Fischer Joerg	Additive manufacturing of dynamic covalent polymer networks into self-healing soft robotic grippers Brancart Joost (Vrije Universiteit Brussel, Belgium); Furia Francesca, Steenackers Niklas, Roels Ellen
Tue 12:20	Processability study of thermoplastic starch/poly(butylene succinate) blends in a reactive extrusion Vargas Rojas Manuela (Universidad de los Andes, Colombia); Salcedo-Galan Felipe; Medina-Perilla Jorge Alberto	Electrospun polycaprolactone scaffolds for nerve guidance conduits Toledo Anna Lecticia (Institute of Macromolecules Professor Eloisa Mano, Brazil); Prins Caio Andrade, Pestana Fernanda, Martinez Ana Maria, Dias Marcos Lopes	Insights on the recycling of expanded and extruded polystyrene foams (EPS and XPS) Lucas Alessandra de Almeida (Universidade Federal de Sao Carlos, Brazil); Pereira Jessica Claro, Caetano Jorge Baes, Salvo Laís Cassiano, Torrezan Talyta	Fully bio-based short fibre composites for material extrusion additive manufacturing Gonzalez-Gutierrez Joaquin (Luxembourg Institute of Science and Technology, Luxembourg); Naik Mahesh Anil, Huber Tim, Westermann Stephan
Lunch				
Tue 14:20 Tue 15:00	Plenary: Tailoring the Structure and Properties of Isodimorphic Random Copolymers by Varying Chemical Structure and Composition (Room Bolívar) Alejandro J. Müller (Faculty of Chemistry, UPV/EHU, Spain) Session Chair: Amar Mohanty			
Break				
Morning session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Manjuri Misra, University of Guelph, Canada	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Shmuel Kenig, Shenkar College of Engineering, Design and Art, Israel	CIRCULAR ECONOMY OF POLYMERS Session Chair: Hathaikarn Manuspiya, Chulalongkorn University, Thailand	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Nyireth Alicia Porras, Universidad de los Andes, Colombia
Tue 15:10	Keynote: Evaluation of Polyhydroxyalkanoates machine learning-generated compounds for medical devices applications Delaunay Yohann (NovoNordisk & Technical University of Denmark, Denmark); Islam Aminul; Bagelund Jesper; Zhang Yang	Keynote: Graphitized GNP: A New Carbon Material with Excellent Electrical Conductivity and Outstanding EMI Shielding Hait Sakrit (University of Calgary, Canada); Ali Mohammed, Rasouli Maryam, Sundararaj Uttandaraman	Keynote: Unlocking the Potential of Recycled Polypropylene in Food Packaging Krenpl Nina (Montanuniversitaet Leoben, Austria); Holzer Clemens, Pinter Elisabeth, Archodoulaki Vasiliki-Maria, Bichler Lorenz	Keynote: Eliminating non-negativity constraint from Tomographic Volumetric 3D Printing by a novel binary photoinhibitory system Islam Aminul (Technical University of Denmark, Denmark)
Tue 15:40	Transforming Agriculture: Advancements in Compost-Biopolymers Composites for Enhanced Sustainability Ortega Santiago Yina Paola (Universidad Popular del Cesar Seccional Aguachica, Colombia); Salcedo Galan Felipe	Influence of Thermomechanical Conditions in Twin-Screw Extrusion and Injection Molding on the Morphology of Crystalline Nanocellulose and Polypropylene Composites. Carvalho Benjamin de Melo (State University of Ponta Grossa, Brazil); Ribeiro Kairin Cristine, Covas José António Colaço Gomes	Navigating Recycling Technologies in Circular Product Development Kakatkar Rucha (Maastricht University, Netherlands); Soliman Maria, Florio Rudinei, Ragaert Kim	Strategies for the improvement of polyolefin printability Chinellato Anne Cristina (UFABC, Brazil); Matheus Ricardo, Vidotti Suel Eric
Tue 16:00	Efficient Design of Water-Based Drilling Fluids (WBMs) for Shale Formations of Argentina: Study of New Polymeric Additives. Estano Diana (INTEC-UNIVERSIDAD NACIONAL DE COLOMBIA, Colombia); Villada Yurany Andrea; Taverna María Eugenia; Casis Natalia; CORTES FARD	Influence of coating structure of an SiOx barrier coating on a PET substrate on water vapor permeation activation energy Franke Jonas (Institute for Plastics Processing, RWTH Aachen University, Germany); Liedtke Maciej Oskar, Dahmen Pascal, Butterling Maik, Attallah Ahmed Gamal, Dahlmann Rainer	From PP Waste to High-Quality Products – Decontamination of the Material Throughout the Entire Recycling Process Chain Using State-of-the-Art Technologies Czaker Sandra (Johannes Kepler University, Austria); Mager Moritz, Akbars Mohamad Hassan, Fischer Joerg	Impact of Processing Parameters on the Mechanical and Self-Heating Behavior of a 3D Printable Thermoplastic/Thermoset Polymer Blend Lewis Christopher L. (Rochester Institute of Technology, USA); Mei Vincent, Schimmelpfennig Kory, Colvin Stone, Caravaca Elbert
Tue 16:20 Tue 18:10	SAN FELIPE CASTLE TOUR			
Tue 16:20 Tue 18:10	UNIANDÉS SEDE CARIBE POSTER SESSION			

Tuesday 21				
Tue 8:30 Tue 9:10	Plenary: Environmentally Safe Preservation, Stabilization and Processing of Natural Rubber Latex in an Acid Environment (Room Bolívar) Tim A. Osswald (University of Wisconsin Madison, USA) Session Chair: Jairo Ernesto Perilla, Universidad Nacional de Colombia, Colombia			
Tue 9:10 Tue 9:40	Industrial Keynote			
Break	Room Kalamary II - Anton Paar	Room Bolívar - Xplore	Room - NETZSCH	Room Bolívar - TA Instruments
Morning session	POLYMER COMPOSITES Session Chair: Raquez Jean Marie, University of Mons, Belgium	FIBERS & FILMS Session Chair: Ines Kühnert, Leibniz-Institut fuer Polymerforschung Dresden, Germany	MECHANICAL PROPERTIES & FRACTURE Session Chair: Alejandro J. Müller, University of the Basque Country UPV-EHU, Spain	DEGRADATION, BIODEGRADATION & COMPOSTING Session Chair: Bikiaris Dimitrios N, Aristotle University of Thessaloniki, Greece
Tue 9:50	Keynote: Functionally Graded Materials: Innovative Multilayer composites based on Poly(D,L Lactide)/Bioactive Fillers fabricated by 3D Direct Pellet Printing multi Extrusion process Lammawar Khalid (INSA Lyon, France), Lacambra Andreu Xavier, Chenal Jean Marc, Maazouz Abderrahim	Keynote: Interdiffusion of PLLA and PDLA to form fibers consisting of highly oriented stereocomplex crystals Kikutani Takeshi (School of Materials and Chemical Technology, Tokyo Institute of Technology, Japan)	Distinguished Keynote: Non-Linear Fracture Mechanical Response of Polymers Frontini Patricia Maria (CONICET, INTEMA, University of Mar del Plata - Mar del Plata, Argentina)	Distinguished Keynote: State of the Art and the Vision of the Future of Polymer Degradation Fayolle Bruno (Processes and Engineering in Mechanics and Materials, ENSAM, France)
Tue 10:20	High performance sustainable biopolymers and their composites based on CNCs. Structure- rheology- forming and properties relationships. Maazouz Abderrahim (INSA Lyon, France), QIAO HU, lammawar khalid	DEVELOPMENT OF ANTIMICROBIAL FILMS FOR FOOD PACKAGING USING MELT COMPOUNDING TECHNIQUE Arii Abdallah (Polytechnique montreal, Canada), Darvish Mahdi	Electrolyte Resistance of Amine Based Epoxy 's used for Lithium-Ion Battery Cell Housings Bayer Moritz (University of Duisburg, Germany), Emrich Niclas, Schiffers Reinhard	Modelling Hydrolytic, Thermal, and Mechanical Degradation of PLA During Single-Screw Extrusion Veltheke Ineke (KU Leuven, Belgium)
Coffe Break				
Afternoon session	POLYMER COMPOSITES Session Chair: Abderrahim Maazouz, INSA Lyon, France	FIBERS & FILMS Session Chair: Rudolf Hufenus, Empa, Switzerland	MECHANICAL PROPERTIES & FRACTURE Session Chair: Gary E. Wnek, Case Western Reserve University, USA	DEGRADATION, BIODEGRADATION & COMPOSTING Session Chair: Juan Carlos Cruz, Universidad de los Andes, Colombia
Tue 11:00	Double-layered wood-plastic composites made of recycled polyethylene and capirona wood particles recovered from scrap processed by rotational molding Acosta-Sulicahuamán Julio (Pontificia Universidad Católica del Peru, Peru), rmbasplata-Seguin Adan, Millán-Cayulero Remo, Quispe-Dominguez Roger, Berrios-Sárcena David	Rapid polymer grafting techniques under real continuous coating process conditions Deussen Oliver (Institute for Textile Engineering of RWTH Aachen University, Germany), Glaubke Marie Isabel, Person Denise, Schumacher Timo, Gries Thomas	Adding Silicon Carbide Particles to Improve the Tribological Properties of Poly(phenylene sulfide)/Polytetrafluoroethylene/Carbon Fiber Composites Zhou Shengtao (Polymer Research Institute of Sichuan University, China)	Upgrading recycled/oxidized ABS by multilayer coextrusion of PC/ABS blend Fayolle Bruno (PIMM, France)
Tue 11:20	Wood-plastic composites processed by rotational molding: a relationship between properties and peak internal air temperature Arribasplata-Seguin Adan (Pontificia Universidad Católica del Peru, Peru), Quispe-Dominguez Roger, Vilcayauri-Rios Ademir, Acosta-Sulicahuamán Julio	Effect of ionizing irradiation on PLA-fiber properties Müller Michael Thomas (Leibniz-Institut für Polymerforschung Dresden, Germany), Zhang Yinglang	Influence of fiber orientation and temperature on the creep-fatigue behavior of short fiber reinforced high-performance polymers Stadler Gabriel (Montanuniversität Leoben, Austria)	The use of chemiluminescence to assess the recyclability of polypropylene Stam Rachael (University of Maastricht, Netherlands)
Tue 11:40	A NOVEL UNIDIRECTIONAL EPOXY/SISAL FIBERS PREPREGS: OBTAINING AND PROCESSING Dalla Libera Junior Vilson (University of Brasília and Federal Institute of Education, Science and Technology of Goiás, Brazil), Luz Sandra Maria da	Characterization of Multivalent Alginate Fibers Puchalski Adam (Clemson MSE, USA), Kornev Konstantin G	Exploring the Interplay Between Process, Structure, and Resulting Properties in Polymeric Multi-material Composites Inspired by Lithomimetics Principle Waly Christoph (Materials Science and Testing of Polymers, Montanuniversität Leoben, Austria) - 178	TGA derived activation energy and status of degradation for plastic jacket pipes in district heating Bernhardt Ricardo (Leibniz-Institut fuer Polymerforschung Dresden, Germany)
Tue 12:00	Epoxy Biocomposites Reinforced with Hemp and Figue Fibers: Thermal and Viscoelastic Performance for Sustainable Applications in the Aerospace Industry Hidalgo-Salazar Miguel Angel (Research Group for Manufacturing Technologies, Universidad Autónoma de Occidente, Colombia), Correa-Aguirre Juan Pablo, Ritt Stefan Andreas - 337	FILMS BASED ON GELATIN FUNCTIONALIZED WITH ESSENTIAL CINNAMON OIL AND ETHANOLIC POLLEN EXTRACT AS NEW BIODEGRADABLE MATERIALS Salamanca Grosso Guillermo (Universidad del Tolima, Colombia), Osorio Tangarife Mónica Patricia, Guarnizo Franco Anderson	Influence of Process Parameters on Morphology and Fatigue Behavior of Short-Fiber-reinforced Polymers Kojani Dario (Polymer Competence Center Leoben, Austria)	Enhanced degradation of multi layered PBAT-starch films in home and industrial composting environments Kansara Harshal J (Rochester Institute of Technology, USA) - 244
Tue 12:20	Thermally Conductive Liquid Crystalline Polyimide and Its Composite Films Ruan Kunpeng (Northwestern Polytechnical University, China)	Natural Polymer Nanoyarns Schauer Caroline L (Drexel University, USA)	DETERMINATION OF CREEP CRACK GROWTH KINETICS OF ABS VIA THE C* APPROACH AT DIFFERENT TEMPERATURES Frontini Patricia Maria (University of Mar del Plata, Argentina)	Chemical Treatment for Industrial Rubbers to Recycle by Metathesis Degradation to Obtain Bio-based Compounds Burelo Manuel (Tecnológico de Monterrey, Mexico)
Lunch				
Tue 14:20 Tue 15:00	Plenary: Tailoring the Structure and Properties of Isodimorphic Random Copolymers by Varying Chemical Structure and Composition (Room Bolívar) Alejandro J. Müller (Faculty of Chemistry, UPV/EHU, Spain) Session Chair: Amar Mohanty			
Break				
	POLYMER COMPOSITES Session Chair: Ana Isabel Ares Pernas, Universidad da Coruña, Spain	FIBERS & FILMS Session Chair: Chut B Park, University of Toronto, Canada	MECHANICAL PROPERTIES & FRACTURE Session Chair: Patricia Frontini, Universidad Nacional del Mar del Plata, Argentina	DEGRADATION, BIODEGRADATION & COMPOSTING Session Chair: Bruno Fayolle, PIMM, France
Tue 15:10	Keynote: CO2-derived poly(hydroxyurethane) thermosets as high-performance and dynamic matrices for natural fiber composites Raquez Jean Marie (University of Mons, Belgium)	Keynote: Melt-spun liquid-core filaments for microhydraulic applications Hufenus Rudolf (Empa, Switzerland)	Keynote: Sustainable Manufacturing: Enhancing Mechanical Behavior of Common Polymers Through Deformation Processing Wnek Gary (Case Western Reserve University, USA)	Keynote: Crystallization temperature as a proxy for fundamental degradation behavior of PBAT based plastic films in composting environments Hernandez-Charpak Yvan David (Rochester Institute of Technology, USA)
Tue 15:40	Controlled Distributed Ti3C2Tx Hollow Microspheres for Excellent Electromagnetic Interference Shielding Composite Films Zhang Yali (Northwestern Polytechnical University, China)	Polyketone-Polypropylene Core-Shell Fibers for Concrete Reinforcement Herz Jonas (Rosenheim Technical University of Applied Sciences, Germany), Hefenbrock Sophia, Lorenz Katharina, Muscat Dirk, Strubbe Nicole	TPMS lattice structures characterization under quasi-static conditions Serrano Ruiz Daniel Eduardo (Universidad de los Andes, Colombia)	Internal surface erosion - an overlooked mechanism of polymer degradation Machalschek Rainhard (Institute of Active Polymers, Helmholtz Zentrum Hereon, Germany)
Tue 16:00		Investigation of Performance Metrics for Meals, Ready-to-Eat (MRE) Ration Packaging towards Sustainable Packaging Options Cauden Karz (University of Massachusetts Lowell, USA), Tripathi Sandeep, Haque Md. Akif, Frolo-Blumsack Danielle, Ratto Jo Ann, Peterson Amy, Chen Wan-Ting	CAUSES OF FAILURES IN A RETREADED TIRE - A COMPREHENSIVE-AND-EASY GUIDE Mosquera Manuel Salvador (Automundial, Colombia)	
Tue 16:20 Tue 18:10	SAN FELIPE CASTLE TOUR			
Tue 16:20 Tue 18:10	UNIANDÉS SEDE CARIBE POSTER SESSION			

Wednesday 22				
Wed 8:30 Wed 9:10	Plenary: Crossing biological barriers – smart modalities to improve performance of polymeric nanocarriers (Room Bolivar) Marcelo Calderon (University of the Basque Country UPV/EHU, Spain) Session Chair: Martin Spörk, Research Center Pharmaceutical Engineering GmbH, Austria			
Wed 9:10 Wed 9:40	Industrial Keynote			
Break	Room Bolivar - Taghleef Industries	Room Cartagena - Daabon	Room Kalamary 1 - CAS	Room Guacamayo - Plastilene
Morning session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Highri Frie, Laval University, Canada	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Ozkoc Guralt, Xplore Instruments BV, Netherlands	CIRCULAR ECONOMY OF POLYMERS Session Chair: Aguiar Rafaela, University of Toronto, Canada	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Sadhan Jana, University of Akron, USA
Wed 9:50	Keynote: On the Cryo-Moulding process and subsequent forming processes of biopolymers with low glass transition temperature <u>Petrusch Julius</u> (Leibniz-Institut für Polymerforschung Dresden, Germany); Klein Daniel; Johannes Zimmer; Stommel Markus	Keynote: Field Assisted "Z" orientation of Nanophases to Produce Thickness Functionalized films For Flexible Electronics using a New Roll to Roll manufacturing Platform <u>Cakmak Miko</u> (Schools of Materials and Mechanical Engineering, USA)	Keynote: How much virgin fuel displacement can an complimentary recycling cascade achieve? <u>Bagaert Kim</u> (Maastricht University, Netherlands)	Keynote: 3D Printable Advanced Composites with Energy and Biomedical Applications <u>Song Kenan</u> (UGA, USA), Ravichandran Dhameedra, Zhu Yuxiang, Patti Danush, Thippanna Varunkumar, Ramanathan Arunachalam, Thummalapati Sri Vaishnavi, Fonseca Nathan
Wed 10:20	Evaluation of the effect of cellulose nanofibers in thermoplastic starch films <u>García-Aramendiz Johan Sebastian</u> (Universidad de Los Andes, Colombia); Forero-Varela Leonardo; Medina-Perilla Jorge Alberto	Characterization of High Performance Nanocomposites for Lunar Environment <u>Khaledi Behnam</u> (École de Technologie Supérieure, Canada), David Eric	Navigating heterogeneous single-polymer waste streams: mechanical insights into recycling <u>Schlossnigk Jessica</u> (TU Wien, Institute of Materials Science and Technology, Austria), Koch Thomas, Archodoulaki Vasiliki-Maria	Characterization and 3D printing of PLA/PBAT blends compatibilized with epoxidized canola oil <u>WAHBI MOHAMED</u> (Queen's University, Canada), Kontopoulou Marianna, De France Kiven , Litke Quintin , Liu Song , Levin David
Coffe Break				
Afternoon session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Joung Sook Hong, Seoul National University	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Luiz Pessan, Federal University of Sao Carlos, Brazil	CIRCULAR ECONOMY OF POLYMERS Session Chair: Laura Florez, ICIPC, Colombia	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Boldt Regine, Leibniz-Institut für Polymerforschung Dresden, Germany
Wed 11:00	Demystifying the crystallization kinetics of polyhydroxyalkanoates (PHAs) through hyperthermal cycles <u>Behzadfar Ehsan</u> (Toronto Metropolitan University, Colombia); Mondot Anindita; Wang Jun; Eih-Mozaffari Fahad	Metal Nanoparticles on Flexible Polyurethane Sponges: A Hydrothermal Route towards Catalysts for Lab-Scale and Continuous Flow Automation <u>Gazil Olivier</u> (CREPEC, Polytechnique Montréal, Canada), Pazzdor Robert, Virgilio Nick, Unterlass Miriam M.	Mechanical Recycling of Bulk Moulding Compound: a Technical and Environmental Assessment <u>Salvi Alessandro</u> (Politecnico di Milano, Italy), Ostrowska Martena, Dotelli Giovanni	Bio-Based Backbone for Highly- Reactive Metal Alloys Feedstocks for MEX <u>Holzer Clemens H.</u> (Montanuniversität Leoben, Austria), Momeni Vahid, Pohle Georg, Riecker Sebastian, Schuschnigg Stephan, Kukka Christian
Wed 11:20	Production of a Starch-Based Polymeric Coating with Incorporation of Bioactive Principles from Chemical Synthesis to extend the shelf life of Cavendish banana. <u>Salcedo Felipe</u> (Chemical Engineering Department, Universidad de los Andes, Colombia); Bejarano Molina Jose Felipe; Diaz Ochoa Juan Diego; Ortega Santiago Yina Paola; Vaca Bohorquez Aniel Mauricio	Analysis of nanocomposites with piezoelectric properties compounds of poly(vinylidene fluoride) and graphene oxide <u>Pachekoski Wagner Mauricio</u> (Universidade Federal de Santa Catarina, Brazil); Souza Anna Luiza, Dalmolin Carla, Pezzin Sérgio Henrique	Advancing Circularity and Sustainability for Rotational Moulding <u>Kelly-Walley Jake</u> (PhD Student Queens University Belfast, United Kingdom), Martin Peter	Multimaterial Printing of Thermoplastics in Combination with Fully Compounded Thermoset Elastomers <u>Diaz Armas Nathalia</u> (University of Massachusetts Lowell, USA), Patel Preet, Kazmer David, Mead Joey
Wed 11:40	Evaluation of dicumyl peroxide as a coupling agent in thermoplastic starch and BioPBS composites <u>López Galindo Andie Stelham</u> (Universidad de Los Andes, Colombia); Vargas Rojas Manueta; Medina Perilla Jorge Alberto	Enhanced electromagnetic interference shielding performance of reduced titanium carbonitride MXenes incorporated into porous polymer structures <u>Rahmati Reza</u> (University of Toronto, Canada), Ashouri-Sanjani Mehran , Salari Meysam, Salehi Amirmehdi, Hamidinejad Mahdi, Park Chul Bum	Advancing Plastics Identification and Quantification in Industrial Recycling with DSC <u>Redmann Alec</u> (NETS2CH, USA), Rudolph Natalie, Schindler Alexander	Electromagnetic Interference Shielding Aerogels based on 3D Printed Cellulosic Inks <u>Ajriamand Mohammad</u> (University of British Columbia, Canada), Amini Majed, Hosseini Hadi, Kamkar Milad
Wed 12:00	Polymeric biocomposites reinforced with microcrystalline cellulose recovered from agave bagasse: an alternative for the elaboration of materials for the automotive industry <u>Munguía-Aguilar Dendera</u> , (IPICYT - S.L.P., Mexico); Alaniste-Mondragon Felipe; Escobar-Barríos Vladimir A.	Bacterial Cellulose: Discovering the Potential for Advanced Sustainable Materials <u>Manuspha Hathakarn</u> (Chulalongkorn University, Thailand)	THE EFFECTS OF THERMOMECHANICAL CYCLES ON THE MORPHOLOGICAL, RHEOLOGICAL AND MECHANICAL PROPERTIES OF PA6/TPE BLENDS COMPATIBILIZED WITH NOVEL EPOXIDIZED FUNCTIONAL HYBRID NANOPARTICLES <u>Kodal Mehmet</u> (Kocaeli University - Turkey), Yildirim Rumeysa, Mert Olcay, Ozkoc Guralt	3D printing of syntactic thermoset foams via frontal polymerization <u>Younghani Mostafa</u> (Colorado State University, USA), Masoumpour Alireza
Wed 12:20	Processability and properties of Spent Coffee Ground (SCG) and Cocoa Pod Husk (CPH) and Polypropylene Bionanocomposites <u>Rigall Cedeño Andrés Francisco</u> (ESPOL-Laboratorio de Procesamiento de Plásticos, Ecuador); Menendez Alanis ; Coelho Melani; Suarez Looz Jose Antonio; Lazo Miriam; Adrian Estephany	Development of food packaging films able to be recycled <u>Machado Ana Vera</u> (University of Minho, Portugal), Barros Carolina, Carneiro Olga	PLA-based Bioplastics for a Circular Plastic Economy: Advantages and Challenges <u>Ray Suprakash Sinha</u> (CSIR and University of Johannesburg, South Africa)	3D printing of food gets: A novel vegetable-based bio-ink <u>Grizuti Nino</u> (University of Naples Federico II, Italy), usso Spena Simona, Visone Biagio
Lunch				
Wed 14:20 Wed 15:00	Plenary: Sustainable Polymer for a Circular Economy (Room Bolivar) Manjeri Miza (University of Guelph, Canada) Session Chair: Maria del Pilar Noriega, Daabon Group, Colombia			

Break

	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Luc Averous, University of Strasbourg, France	NANOTECHNOLOGY & NANOCOMPOSITES Session Chair: Petra Pötschke, Leibniz-Institut für Polymerforschung Dresden, Germany	CIRCULAR ECONOMY OF POLYMERS Session Chair: Bart Van Hooft, Universidad de los Andes, Colombia	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Song Kenan, UGA, USA
Wed 15:10	Keynote: Multiscale Structural Characterization of Biocompatible Poly(trimethylene carbonate) Photoreticulated Networks - From Conception to Mechanical Behavior <u>Bios de Anda Aguado</u> (Université Paris Est Créteil, Institut de Chimie et des Matériaux Paris Est, France); van Bochove Bas; Spolajic Steve; Seppälä Jukka; Sotta Paul	Keynote: Tailoring the Hierarchical Self-Assembly in Bioinspired Halloysite Nanotubes/Glass Fiber Hybrid Composites <u>Aguiar Rafaela</u> (University of Toronto, Canada), Sansone Nello D., Cheung Nichole, Tuccitto Anthony V., Lee Patrick C.	Keynote: Recycling of non-metallics derived from waste electronics: Printed circuit board <u>U. Sundararaj</u> (Maastricht University, Netherlands), Khaki Amir, Ebrahimi, University of Calgary, Canada)	Keynote: 3D Printing of Polymer-confined Liquid Metal-Patterning Composites <u>Patil Dhanush</u> (Arizona State University, USA), Song Kenan
Wed 15:40	Preparation of polymer-clay hybrid materials for drug delivery processes. <u>Manero Octavio</u> (National Autonomous University of Mexico, Mexico)	Enhancing the Piezoelectric Performance of Polyvinylidene Fluoride (PVDF) Via Controlled Electrical Polarization for Sensor Applications <u>Sixi Ghau</u> (University of Ontario Institute of Technology, Canada), Tariq Asra	The influence of composition on the characteristics of mechanically recycled polyolefins <u>Elorio Rudinei</u> (Maastricht University, Netherlands), Khaki Amir, Ebrahimi Ali, Ragaert Kim	Enhancing Biofabrication with Magnetic Fields: Advancing 3D Bioprinting through Multiphysics Simulations <u>Rodríguez Cristian E.</u> (Department of Biomedical Engineering, Universidad de Los Andes, Colombia), Quezada Valentina, Guzman-Satoque Paula, Reyes Luis H., Osma Johan F., Muñoz-Camargo Carolina, Cruz Juan C.
Wed 16:00	Synthesis of pultulan derivatives for the coating and postharvest preservation of blueberries <u>Hernandez-Tenorio Fabian</u> (Environmental Processes Research Group, Universidad EAFIT, Colombia); Mejía-Rua Mateo; Bedoya-Jaramillo Valeria; Marin-Palacio Luz Detsy; Giraldo-Estrada Catalina	High-performance barrier coatings using a rotational coating method. <u>Shaw Montgomery</u> (University of Connecticut, USA)	Graphene Synthesis through Recycling Lithium-Ion Battery Waste Polymers via CO2 laser <u>Farzana Sumaiya</u> (University of Toronto, Canada), Agular Rafaela Antunes Costa, Tuccitto Anthony, Lee Jun-UK, Lee Patrick C.	Advancing 3D Printing: Enhancing Speeds and Strength through Rotating Nozzle FFF Technology <u>Román Allen Jonathan</u> (University of Wisconsin-Madison, USA), Blanco Campos Juan Camilo, Rudolph Natalie, Osswald Tim A.
Wed 16:20	Characterization of oil palm biomass, derived materials, and applications <u>Notiega E. María del Pilar</u> (Daabon Group, Colombia); Teran Heidi; Giraldo Diana; Chiappo Carlo; Chejne Janna Farid	Industrial uses of polymeric capsules made via microfluidics <u>Sotelo Briceño Diana Camila</u> (Department of Electrical and Electronic Engineering, Universidad de los Andes)	An Investigation on the Effects of Post-industrial Glass Fiber Flakes on the Properties of Recycled Polypropylene <u>Baguz Ivan</u> (Montanuniversität Leoben, Austria) Shahroodi Zahra, Krempl Nina, Arbeiter Florian, Friesenbichler Walter, Holzer Clemens	Foam Additive Manufacturing <u>Deiry Andrea Lorenzo Henri Sergio</u> (University of Naples Federico II, Italy), Landolfi Luca, Tammara Daniele, Villone Massimiliano M., Squillace Antonino, Maffettone Pier Luca

Coffee Break

	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Petr Saha, Tomas Bata University, Czech Republic		CIRCULAR ECONOMY OF POLYMERS Session Chair: Suprakash Sinha Ray, University of Johannesburg, South Africa	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Cyrille Boyer, University of New South Wales, Australia
Wed 17:00	Compatibilization of polylactic acid (PLA) and thermoplastic starch (TPS) blends by reactive extrusion: characterization and evaluation of extrusion blown films <u>Castro M. Cidália B.</u> (Universidade do Minho, Portugal); Rodrigues Pedro V.; Cruz Vasco R.; Machado Ana V. R.		High performance polymers to improve sustainability of plastic packaging <u>Sierra Juan Diego</u> (Channel Prime Alliance, Colombia), Rojas Juan Fernando	Integrating Chemometrics and FDM-HME 3D Printing in Pharmaceutical Applications: A Case Study on Antihypertensive combination in Bilayer Tablets <u>Romero Ivan Dario</u> (Procaps S.A., Colombia), Villa Joe Luis, Gomez Humberto Arturo, Romero Alejandro Arturo, Hoyos Ferney Jose
Wed 17:20	Energy Storage Based on Biopolymers <u>Saha Petr</u> (Tomas Bata University in Zlín, Czech Republic); Saha Tomas; Stejskal Jaroslav; Bubulínka Constantin; Orinakova Renata; Fei Haojie; Joseph Nikhitha		A transdisciplinary approach to solving some of New Zealand's plastic waste problems <u>Verbeek Johan</u> (University of Auckland, New Zealand), Bickerton Simon, Fehrer Julia, Polson Deb, Pitto Maximilian, Bertin Maicon, Ashraf Jesna	Interfacial bond strength of hard-soft material combinations in extrusion based additive manufacturing <u>Schoone Erik</u> (Leibniz-Institut für Polymerforschung Dresden, Germany), Hoeneel David, Kuehnert Ines
Wed 17:40	Interface design of cellulose/polymers nanocomposites via tailored copolymer nanoparticles <u>Lo Re Giada</u> (Chalmers University of Technology, Sweden); Avella Angelica; Telaretti Leggieri Rosella; Kaldáus Tahnai; Malmström Jonsson Eva		Performance of post-consumer recycled polyolefins in rotational molding process <u>Martins Carla I.</u> (University of Minho, Portugal), Ribeiro Maria, Pereira Camila, Cruz Diogo, Silva Luis F.S., Pereira Nuno M	Microstructure in Laser-Based Powder Bed Fusion of Polymers <u>Cholewa Simon</u> (Collaborative Research Center 814, Germany)
Wed 18:00	Synthesis and Characterization of Bio-Based Polymer Composites Using PLA and Agro-industrial Residues for Food Packaging Products <u>Gamiz-Comde Alexa K.</u> (Tecnologico de Monterrey, Mexico); Burelo Manuel; Franco-Urquiza Edgar A.; Treviño-Quintanilla Cecilia D.		Importance of circularity micro-indicators in the decision-making process of plastics packaging development <u>Matos Joana</u> (Institute for Polymers and Composites IPC, University of Minho, Portugal), Martins Carla I., Simoes Ricardo	Additive Manufacturing of Polymer Covalent Adaptable Networks <u>Xia Hesheng</u> (Sichuan University, China)
Wed 18:20			Mechanical recycling of multilayer plastics (MLP) from flexible food packaging <u>Hernández Rubio Yael Alin</u> (Tecnologico de Monterrey, Mexico), Figueroa Lopez Ulises, Guevara Morales Andrea	Thermoplastic olefin blends and composites with improved processability in material extrusion <u>Kontopoulou Marianna</u> (Queen's University, Canada), Ho Quang Binh, Abdi Roxana

Wed 20:00
Wed 23:00

BANQUET

Wednesday 22				
Wed 8:30 Wed 9:10	Plenary: Crossing biological barriers - smart modalities to improve performance of polymeric nanocarriers (Room Bolivar) Marcelo Calderon (University of the Basque Country UPV/EHU, Spain) Session Chair: Martin Spörk, Research Center Pharmaceutical Engineering GmbH, Austria			
Wed 9:10 Wed 9:40	Industrial Keynote			
Break	Room Kalamary II - Anton Paar	Room Bolivar - Xplore	Room - NETZSCH	Room Bolivar - TA Instruments
Morning session	MODELING & SIMULATION Session Chair: Amine Ammar, ENSAM, France	FIBERS & FILMS Session Chair: Takeshi Kikuchi, Tokyo Institute of Technology, Japan	POLYMERIZATION & SYNTHESIS Session Chair: Sierra Avila Cesar Augusto, Universidad Nacional de Colombia, Colombia	FUNCTIONAL ADDITIVES AND REACTIVE PROCESSING Session Chair: Ernesto Di Maio, University of Naples Federico II, Italy
Wed 9:50	Distinguished Keynote: Digital Twin or Distant Cousin? The practical realities of modeling polymer material behavior in complex manufacturing processes. Costa Franco (Autodesk, Australia)	Keynote: Development of flexible packaging with PCR resins - Cicloleña® as a contribution to the circular economy of plastics in the region Yohana Garcia (Plastifene Group, Colombia)	Distinguished Keynote: Jean Francois Gérard (University of Lyon, National Institute of Applied Sciences Lyon, France)	Keynote: Thin films from modified polyglycolic acid with excellent water vapor barrier Hilhorst Marieke (Wageningen Food & Biobased Research, Netherlands), Callari Sara, Post Wouter, Kuijpers Bert, Alvarado Chacon Fresia
Wed 10:20	Theoretical insights into wall slip effects on displacement flows of non-Newtonian fluids for polymer processing applications Taghavi Seyed Mohammad (Université Laval, Canada)	Improving the gas barrier properties of polyvinyl alcohol using oppositely charge nanoparticles Valansavar Emra (Chemical Engineering Department, Polytechnique Montréal, Canada), Alji Abdellah, Saffar Amir	Synthesis of orderly packed nanofibrous membranes with thermo- and pH-responsive behavior Foudazi Reza (University of Oklahoma, USA), Saadat Younes, Kim Kyungae	Incorporation of carbon based materials as functional additives into anionic polymerized cast polyamides for tailor-made industrial applications Hübstein-González Laura Natalia (Thuringian Institute for Textile and Plastics Research, Germany)
Coffe Break				
Afternoon session	MODELING & SIMULATION Session Chair: Evan Mitsoulis, National Technical University of Athens, Greece	FIBERS & FILMS Session Chair: Abdellah Aji, Polytechnique Montreal, Canada	POLYMERIZATION & SYNTHESIS Session Chair: Jean François Gérard, University of Lyon, France	FUNCTIONAL ADDITIVES AND REACTIVE PROCESSING Session Chair: Hilhorst Marieke, Wageningen Food & Biobased Research, Netherlands
Wed 11:00	Virtualized engineering of injection-molded thermoplastic parts - Fast emulators and uncertainty quantification Cruz Camilo (Robert Bosch GmbH, Germany), Le Baube Valérie, Saad Sandra	Effect of structural evolution on film-forming property of polylactide acid during uniaxial hot-stretching process Zheng Yu (Sichuan University, China), Zeng Bingbing, Guo Shaoyun	Thermal and mechanical behavior of biobased vitrimer of epoxidized vegetal oil and lactic acid-based oligomers Dias Marcos Lopez (UNIVERSIDADE FEDERAL DO RIO DE JANEIRO, Brazil), RODRIGUES JOÃO GABRIEL PASSOS	Rheological investigation of chain modified recycled polyethylene terephthalate/polybutylene terephthalate blends and their corresponding foaming behavior Nofar Mohammedreza (Istanbul Technical University, Turkey), Akdevelioğlu Yavuz, Himmelsbach Andreas, Ruchdäscht Holger
Wed 11:20	One-dimensional CFD-based model for downdrawn polypropylene in spunbond Mohajer Behrang (University of Toronto, Canada), Salehi Amirmehdi, Jalali Amirjalal, Bussmann Markus, Park Chut	Multifunctional Flexible Sensors with 3D Fiber Network for Rapid Humidity Response and Long-Term Respiratory Monitoring Wu Lan Lan (Sichuan University, China), Li Jiang	Synthesis of Core-Shell Polymeric Nanoparticles for Essential Oil Encapsulation using Emulsion Polymerization as Potential Biopesticides Rodríguez Fernández Manuel Alfonso (Universidad Nacional de Colombia, Bogotá, Colombia), Peréz León Darío	Synthesis of cardanol derived from cashew nut shell liquid and utilization as an epoxy resin plasticizer León Johan (Universidad de los Andes, Department of Chemical and Food Engineering, GPPP, Colombia), Ortiz Jennifer Gabriela, Hernandez Camilo, Ayala Garcia Camilo, Marañon Alejandro, Gonzales Andrés, Alvarez Oscar, Porras Alicia
Wed 11:40	Simulative Approach for Predicting the Heating Behavior of Elastomers in the Solid-State Microwave Heating Process Petzke Jonas (Paderborn University, Germany), Klierschmidt Dennis, Brüning Florian	Portable electrospinning of PVA/Resveratrol membranes Pezzin Sérgio Henrique (Center of Technological Sciences, Santa Catarina State University, Brazil), dos Santos André Luiz	SYNTHESIS OF PROTON EXCHANGE MEMBRANES FROM STYRENE-ACRYLIC ESTER AND CHITOSAN FOR FUEL CELL Mendoza Beltrán Dina (Universidad de Cartagena, Colombia), Realpe Jiménez Alvaro, Acevedo Morantes María Teresa	Absorption Influence of Blend Surfactants with Silica Nanoparticles Mixture on a Highly Heterogeneous Rock Undergoing Chemical Injection Mendoza Ramirez Christian (Chemical engineer, Universidad Industrial de Santander, Colombia), Gambus Ordoz Maska, Mercado Ojeda Ronald
Wed 12:00	Calibration of Mechanical Properties of Fiber Composites for Improved Injection Molding Shape Prediction Costa Franco S (Autodesk Australia Pty Ltd, USA), Bakharev Alex, Yuan Zhongshuang, Wang Jin, Han Sejin	Keynote: Layer Multiplying Co-extrusion of Filled Polymer Composites Maia Joao (Case Western Reserve University, USA), Steinmetz Erik	Incorporation of aminoalcohols to tune the properties of polyurethane systems Adam Alexandra (University of Strasbourg, France), Rezaigui Saadane, Severac Romain (2), Bouquey Michel	Flame retardant properties of styrene-vinyl tetrazole copolymer additive on an LDPE/EVA blend Rodríguez Ramirez Karla Fabiola (Centro de Investigación en Química Aplicada, Mexico), da Silva Luciano, Sánchez Valdés Saúl
Wed 12:20	Optimizing Modeling the Multi-Layer Co-Extrusion Flow of Non-Newtonian Fluids Through Rectangular Ducts: Appropriate Shear Rate Definition for a Local Power-Law Formulation Naderer Thomas (Johannes Kepler University Linz, Austria), Hammer Alexander, Roland Wolfgang, Zacher Maximilian, Berger-Weber Gerald		Dispersion and distribution of additives in polyhydroxybutyrate (PHB)-polylactic acid (PLA) films as a replacement for polyethylene in agroindustry Sierra Avila Cesar Augusto (Universidad Nacional de Colombia, Bogotá, Colombia), Castellanos D., Bello J., Posada N., Herrera K., Bohorquez B.	
Lunch				
Wed 14:20 Wed 15:00	Plenary: Sustainable Polymer for a Circular Economy (Room Bolivar) Manjeri Miza (University of Guelph, Canada) Session Chair: Maria del Pilar Noriega, Daabon Group, Colombia			

Break				
	MODELING & SIMULATION Session Chair: Rodrigo Albuquerque , University of Bayreuth, Germany	RHEOLOGY & CHARACTERIZATION Session Chair: Khalid Lammwar , INSA Lyon, France	EXTRUSION Session Chair: Sevastiao Canevarolo , Federal University of São Carlos, Brazil	POLYMER FOAMS & MEMBRANES Session Chair: Paula Moldenaers , KU Leuven, Belgium
Wed 15:10	Keynote: Global Process Modeling. Extrusion vs Injection Molding Wilczyński Krzysztof (Warsaw University of Technology, Poland), Nastaj Andrzej , Lewandowski Adrian , Wilczyński Krzysztof J. , Narowski Przemysław , Buziak Kamila	Keynote: THE INTERPLAY OF SHEAR-INDUCED UNCOIL AND DISENTANGLEMENT OF POLYMER CHAINS Sebastiao V. Canevarolo Jr. (Department of Materials Engineering DEMa, Federal University of São Carlos UFSCar, Brazil), Tambolim Murilo	Distinguished Keynote: Extrusion Theory Today and Challenges for Tomorrow Rauwendael Chris (Rauwendael Extrusion Engineering, USA)	Distinguished Keynote: Processing of polymer bead foams - state of the art, perspectives and trends Thomas Neumayer (Manufacturing Science Program Area, Leibniz-Institut für Verbundwerkstoffe GmbH, Germany)
Wed 15:40	Advancing Profile Extrusion Modeling: Evaluating a Viscoelastic Model through User-Defined Functions in Ansys Fluent Aali Mohammadreza (IPFD, Johannes Kepler University Linz), Hammer Alexander , Puchinger M. , Kohl Stefan , Low-Baselli Bernhard , Berger-Weber Gerald	Rheology of PVC plastisols containing a recycled fraction: study of model systems FAJARDIE Pauline (Laboratoire d'Ingénierie des Matériaux Polymères, France), CASSAGNAN Philippe , CARROT Christian	Analysis of Spiral Mandrel Dies with Novel Channel Geometries to Draw Conclusions on the Purging Time of the Melt Using CFD Vorjohann Felix (University of Duisburg-Essen, Germany), Schiffers Reinhard	Controlling the structure in microcellular-foamed films using MOF Wang Jun (The Hong Kong University of Science and Technology-Guangzhou, China), Wang Jun
Wed 16:00	Anisotropic Effect of Fiber Orientation on Thermal Conductivity in Injection Molding Simulations of Composites Wang Jin (Autodesk, Inc, Australia), Costa Franco S. , Perumal Vishak , Rhoades Philip , Bricinat Paul	Examination of Rubber and Biopolymer Materials at the 3D-Nanoscale using Advanced Electron and Ion Microscopy Methodologies Sazem Ozkoc Mertem (Sabanci University SUNUM Nanotechnology Research and Application Center, Turkey), Camic Busra Tugba , Ozkoc Guralp	Optimization of a Profile Extrusion Die using OptiXtrue Software Gupta Mahesh (Kennesaw State university, USA)	Topologically optimized foams via physical foaming: design, production and mechanical validation Maio Ernesto Di (University of Naples Federico II, Italy), Iaccarino Paolo , Morganì Simone , Auricchio Ferdinando , Maresca Evira
Wed 16:20	Simulation of the Melting Region in Additive Manufacturing Material Extrusion Dies for Highly Filled Feedstocks Schuschnig Stephan (Montanuniversität Leoben, Austria), Hentschel Lukas , Holzer Clemens	Experimental and numerical characterization of the viscoelastic behavior of a family of thermoplastic membranes ABS (acrylonitrile butadiene styrene), HIPS (High Impact Polystyrene), PP (Polypropylene) and PVC (polyvinyl chloride) under the combined effect Fichou Equaz (Université du Québec en Abitibi-Témiscamingue, Canada), Saouli-Henanaoui Mohammed , Saouli-Henanaoui Fouad , Ezzadi Hassan	Improved melt-mixing in single-screw extrusion by geometry modification based on mixing mechanism Nakayama Yasuya (Kyushu University, Japan), Fujihara Taiishi , Kimura Koichi , Kajiwara Toshihisa	From vibrating molecules to a running shoe: Connecting dielectric properties with process feedback in radio-frequency welding of TPU bead foams Dippold Marcel (University of Bayreuth, Germany), Chairpoulou Makrina Artemis , Drexler Maximilian , Ruckdäschel Holger
Coffee Break				
	MODELING & SIMULATION Session Chair: Wilczyński Krzysztof , Warsaw University of Technology, Poland	RHEOLOGY & CHARACTERIZATION Session Chair: Octavio Manero , National Autonomous University of Mexico, Mexico	EXTRUSION Session Chair: Chris Rauwendael , Rauwendael Extrusion Engineering, USA	POLYMER FOAMS & MEMBRANES Session Chair: Thomas Neumayer , Leibniz-Institut für Verbundwerkstoffe, Germany
Wed 17:00	Computational model of inflatable soft load bearing elastomeric implant for knee osteoarthritis Galea Naudi Borz Karl (University of Malta, Malta), Mollicone Pierluigi , Rochman Arif , Buhagiar Joseph , Schembri Wisamyer Pierre	Correlation of Stereo DIC and Thermographic Imaging to Monitor Vacuum-Assisted Thermofforming of Thermoplastic Sheets Varedi Rasoul (KU Leuven Bruges Campus, Belgium), Buffel Bart , Desplentere Frederik	Recycling of multi-layer polymer films by solid-state shear pulverization (SSSP) and solid-state /melt extrusion (SSME) Benzemza Anais (IMP, France), CHALAMET Yvan	Pressure Dynamics in Foam Injection Molding: Unraveling the Impact on Expansion Ratio and Cell Morphology Güzel Kubra (University of Kassel, Germany), Zarges Jan-Christoph , Heim Hans-Peter
Wed 17:20	Fatigue lifetime analysis of POM gears for generalized tooth root loading and shapes Eberlein Robert (ZHAW, Switzerland), Düzel Sven	Rheological behavior of soft Thermoplastic Elastomers based on polyolefin blends: Process-oriented representation by rheometric data Wissner Sven (Leibniz-Institut fuer Polymerforschung Dresden, Germany), Kaempfe Markus , Fischer Matthieu , Kuehnert Ines	Novel intrinsic extrusion process for the production of aluminum-polymer-composites Hann Enno (Leibniz Institute of Polymer Research Dresden, Germany)	Bioethanol recovery from fermentation broth using pyrolyzed residue from pineapple dispersed in polydimethylsiloxane membranes by pervaporation Universidade Federal de Minas Gerais (Universidade Federal de Minas Gerais, Brazil), Nomato Sabrina de Matos , Coelho Robson Lorencini , Borbosa Thales Almeida , de Rezende Daniel Bastos , Pessoa Daniel Furst , Sebastião Rita de Cassia de Oliveira
Wed 17:40	Design Optimisation of Rotationally Moulded Hydrogen Pressure Vessels Pritchard Alex Jonathan (Queen's University Belfast, United Kingdom), Martin Peter , McCourt Mark , Keams Mark	Dynamic Mechanical Analysis: A Tool for Quality Control of Rubber Products Waltuch Matthias (Anton Paar GmbH, Austria), Kerschbaumer Roman , Christopher , Hornbacher Michaela	Improving the Layer Uniformity of Multilayered Films Produced with Interfacial Surface Generators Carmo Olga S J (IPC - Institute for Polymers and Composites, University of Minho, Portugal), Kotzyba Patrick , Zschech Carsten , Gebhard Johannes , Kühnert Ines , Korkolis Yannis , Stommel Markus , Tekkaya Erman	Sustainable foams Trommedorf Ulia (Sulzer Chemtech, Switzerland)
Wed 18:00	Injection molding simulation with crystallization kinetics of Polyoxymethylene and comparison with experimental data Schrank Theresa (Polymer Competence Center Leoben GmbH, Austria), Berer Michael , Ramos Bruno , Lucyshyn Thomas , Pinter Gerald , Speranza Vito , Pantani Roberto	Determination of Uniaxial and Planar Extensional Viscosity Using High-Pressure Capillary Rheometry Rolle Philip (NETZSCH, USA), Szántó Levente , Redmann Alec , Marsh Shona , Zaitoukal Martin	In Silico Process Design and Scale-up for an Amorphous Solid Dispersion Manufactured by Hot Melt Extrusion Matic Josip (RCPE GmbH, Austria), Meyer Jonathan , Ambardekar Rohan , McAllister Mark , Pinto Mark , Doshi Pankaj , Khinaest Johannes , Jajcevic Dalibor	Keynote: Understanding the Foamability and Mechanical Properties of Foamed Polypropylene Blends by Shear and Extensional Rheology Moldenaers Paula (KU Leuven, Belgium), Laguna-Gutierrez Ester , Van Hooghten Rob , Rodriguez-Perez Miguel
Wed 18:20	Simplified movement model to predict the thickness distribution of Robomould products Vanherck Jans (KU Leuven, Campus Diepenbeek, Department of Mechanical Engineering, Belgium), Zhou Hangtian , Goris Mathijs , Martin Peter , Van Bael Albert , Demeester Eric , Kellens Karel , Deckers Elke	Development of an Extraction and HPLC Quantification Method for Plasticizers as a Valuable Tool for Quality Control and Prediction of Adhesion Between Topcoat Layers in Vinyl Coated Fabrics Pelaez Gabriel Jaime (Proquinal, Colombia), Acetas Mauricio , Lasprilla-Botero Juliana , Giraldo Luis Fernando , Orozco Victor Hugo , Muñoz Ana Maria , Ruiz E	Influence of processing methods on the crack resistance of a polypropylene/recyclate blend Pinter Gerald (Montanuniversität Leoben, Austria), Hinczica Jessica , Messiha Mario , Arbeiter Florian	
Wed 20:00 Wed 23:00	BANQUET			

Thursday 23				
Thu 8:30	Morand Lambia Award Plenary: Thermally Conductive Polymers and Their Composites (Room Bolivar)			
Thu 9:10	Junwei Gu (School of Chemistry and Chemical Engineering, Northwestern Polytechnical University, China) Session Chair: Jose Antonio Covas , University of Minho, Portugal			
Thu 9:10	Industrial Keynote			
Thu 9:40	James L. White Innovation Award Plenary: Innovative Processing, Structures and Properties of Porous Material and Foam Applications.			
Thu 10:20	Chul B. Park (Department of Mechanical & Industrial Engineering, University of Toronto, Canada)			
Coffee Break	Room Bolivar - BASF	Room Cartagena - Daabon	Room Kalamary I - CAS	Room Guacamayo - PlastiFlene
Morning session	BIOPOLYMERS, BIOCOMPOSITES & BIOPROCESSING Session Chair: Margaret Sobkowicz , UMass Lowell, USA	MACHINE LEARNING IN POLYMER PROCESSING Session Chair: Delauany Yohann , Technical University of Denmark, Denmark	CIRCULAR ECONOMY OF POLYMERS Session Chair: Kim Ragaert , Maastricht University, Netherlands	ADDITIVE MANUFACTURING (3D PRINTING) Session Chair: Miguel Garzon , PM Tec Servicios de Ingenieria SAS, Colombia
Thu 10:40	Keynote: Biochar, production, and use: a detailed review of the Art Chaine Janna Farid (Universidad Nacional de Colombia, Colombia); Sierra Jimenez Valentina ; Cordoba Marlon ; Garcia Perez Manuel ; Noriega Escobar Maria del Pilar	Distinguished Keynote: The challenges of artificial intelligence and surrogate modelling for polymer processing Ammar Amine (Arts et Métiers ParisTech, ENSAM, France)	Keynote: What LCA can tell us about the impacts of microplastics Corella Elena (Dayrize BV, Netherlands)	Keynote: A study of the use of dry natural rubber in 3D printing Parella Jairo E. (Departamento de Ingeniería Química y Ambiental, Universidad Nacional de Colombia, Bogotá, Colombia), Osswald Tim A.
Thu 11:10	Enhancing the performance of Starch-Based Films with Polyvinyl Alcohol in Extrusion-Blown Processing Contreras Lozano Karen Paola (PRODUCTOS BULLER SAS, Colombia); CARRILLO RAMIREZ KATERIN MARCELA ; CARRILLO RAMON RODRIGUEZ LORA MARIA CAMILA	Application of Bayesian optimization to polymer engineering problems Albuquerque Rodrigo (University of Bayreuth, Germany), Rothenhäuser Florian , Brütting Christian , Groebe Philipp , Ruckdäschel Holger	Advancing Sustainable Practices in Food Packaging: Investigating Liquid State Decontamination of Post-Consumer Polystyrene Recyclate Mittermayr David (Institute of polymer testing and characterization, Johannes Kepler University, Austria), Fischer Jörg , Roland Wolfgang	Developing polypropylene for extrusion-based 3D printing Schmidt Hans-Werner (University of Bayreuth, Germany)
Thu 11:30	Don't waste food waste: Materializing (macro)molecules and biocolloids from agricultural side-streams Oroni Caio Gomide (DEMA UFSCar, Brazil)	Machine learning with finite element modeling to enhance the process of fabrication of hydrogen storage vessel of type 4 Kallel Achraf (DeVinci Research Center, France)	Performance of recycled materials with organoleptic and insect repellency in rotational molding Pereira Camila (University of Minho, Portugal), Ribeiro Maria, Cruz Diogo , Silva Luis , Pereira Nuno , Martins Carla	Comprehensive Study and Optimization of Fused Filament Fabrication (FFF) Process Soulestin Jerome (IMT Nord Europe, France), Charlon Sebastien , Ouvague Pierre , Domenech Trystan
Thu 11:50		Quantitative Impact of Process Expert Knowledge on Developing Pumping Models for Single-Screw Extruders Using Symbolic Regression Herzog Daniel (Johannes Kepler University Linz, Austria), Lehner Florian , Roland Wolfgang , Marschik Christian , Berger-Weber Gerald Roman	Plantic, The High Barrier Natural Polymers option for extension of shelf life Chacon David Ernesto (Kuraray America, USA)	Polyolefin Aerogels from Wastes: 3D Printing-Assisted Fabrication of Filter Media Jana Sadhan C. (The University of Akron, USA), Wu Leyao , Ghosh Moni
Thu 12:10		Data-Driven Modelling Towards the Digital Twin of Micro Injection Moulding Mollaei Ardestani Alireza (Technical University of Denmark, Denmark), Radhakrishnan Uma Mahesh , Kulachi Murat , Calaon Matteo , Hattel Jesper Henri , Tosello Guido	Keynote: Recyclates for sustainable food contact-method development for the validation of plasma-induced barriers Catin Ali (Institute for plastics processing IIV in industry and craft at RWTH Aachen, Germany), Dahlmann Rainer	Role of different ABS matrices and processes for multifunctional ABS/CNT nanocomposites Pessan Luiz Antonio (Federal University of Sao Carlos, Brazil), Ribeiro dos Anjos Eric Gabriel , Rodrigues Brazil Tayra , Passador Fabio Roberto
Thu 12:30		Strategies to reduce energy consumption in plastic injection moulding using novel Industry 4.0 tools Garzon Miguel (PM Tec Servicios de Ingenieria SAS, Colombia), Pulido Jose , Cruz Jeisson , Florez Laura , Henaio Daniel , Ossa Hugo		
Thu 12:50	CLOSING CEREMONY			
Thu 13:10	CLOSING CEREMONY			
Thursday 23				
Thu 8:30	Morand Lambia Award Plenary: Thermally Conductive Polymers and Their Composites (Room Bolivar)			
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Coffee Break	Room Kalamary II - Anton Paar	Room Bolivar - Xplore	Room - NETZSCH	Room Bolivar - TA Instruments
Morning session	MODELING & SIMULATION Session Chair: Camilo Cruz , Robert Bosch GmbH, Germany	RHEOLOGY & CHARACTERIZATION Session Chair: Felipe Salcedo , Universidad de los Andes, Colombia	EXTRUSION Session Chair: Mala Joao , Case Western Reserve University, USA	POLYMER FOAMS & MEMBRANES Session Chair: Volker Alstädt , University of Bayreuth, Germany
Thu 10:40	Keynote: Film Blowing Simulations with Integral Constitutive Equations Mitsoulis Evangelos (National Technical University of Athens, Greece)	Keynote: Integrated Rheometer-Raman Monitoring: Unraveling Crystallization and Polymerization Dynamics of Polymers Zagorec Viktor (Anton Paar OptoTec GmbH, Germany)	Keynote: Improving the thickness gradient in thermoformed parts by using sheets with non-uniform thickness Covas Jose Antonio (University of Minho, Portugal), Pequezeza Leonor , Duarte Fernando	Tailoring Electromagnetic Wave Properties through the Designation of Porous Polymer Materials via Supercritical Fluid Techniques Ma Haoyu (University of Toronto, Canada), Park Chul B. , Gong Pengjian , Li Guangxian
Thu 11:10	Simulative flow study to assess the processing stability of recycled polypropylene during injection molding Hobhoff Paula (University of Wisconsin, USA)	Material Property Prediction of Recycled Polypropylene via Data Driven Modeling Estela Garcia John Emmanuela (University of Wisconsin - Madison, USA)	Analytical Model of Melt Temperature Distribution in Single Screw Extruders Rauwendael Chris (Rauwendael Extrusion Engineering, Inc), Abeykoon Chamil , Perera Yasith	Impact Analysis of the Forward Osmosis Process Combined with Ultrafiltration Pretreatment in Coconut Water Concentration Hanti Abhinav (Department of Polymer and Process Engineering, IIT Roorkee, India, India), Pandey Asdiya
Thu 11:30	Simulation of the Fused Deposition Modeling Process with Moving Meshes Nóbrega Joao Miguel (University of Minho, Portugal), Castro João , Costa Ricardo	Rheological analysis of modified PLA by reactive process aiming at the production of foams Souciqueni Ana Beatriz Valim (Federal University of São Carlos UFSCar, Brazil), Bretas Rosario Elida Suman , Bras Julien , Bertini Silvia Helena Prado	New Degassing Technology for Single Screw Extruders - Experimental Results Ponzetti Giuseppe (Nexxus Channel, Italy), Rauwendael Chris , Florez Laur , Ospina Silvio , Coronado Juan , Estrada Omar	Morphology design of polymeric foams via pressure treatment Miele Lorenzo (University of Naples Federico II, Italy), Taki Kentaro , Di Maio Ernesto
Thu 11:50		RAMAN & NANORAMAN/ NANOPHOTOLUMINESCENCE: MULTIMODAL CO-LOCALIZED SPECTROSCOPY FOR PHYSICO-CHEMICAL CHARACTERIZATION OF POLYMERS Carvalho Igor (Horiba Scientific Brazil, Brazil), Cabral Filipe	Development of layer multiplication coextrusion technology and study of mechanical properties of microlayer pipes Yu Guaying (Sichuan University, China)	The effect of type of processing in obtaining membranes based on esterified Poly(vinyl alcohol) (PVOH) Muñoz Macías Jessica Jazmin (Instituto Potosino de Investigación Científica y Tecnológica A.C., Mexico), Escobar Barrios Vladimir Alonso
Thu 12:10		Keynote: Exploring Fluids' Behavior: Lab-Scale Capillary Breakup Extensional Rheometer and Its Applications in Polymer Processing Beaudoin Étienne (École de technologie supérieure, Canada), Kubaski Mauricio , Zednik Ricardo , Demarquette Nicole	Twin Screw Extruder Configurations to Process Bioplastics (PLA/PHA/PBH) Filled Formulations Martin Charlie (Leistritz Extrusion, USA)	Energy-saving Fabrication of Expanded Ethylene-propylene-butene-1 Copolymer Bead Guo Peng (Beijing Research Institute of Chemical Industry, China), Xu Yaohui , Lyu Mingtu , Zhang Shijun
Thu 12:30				
Thu 12:50	CLOSING CEREMONY			
Thu 13:10	CLOSING CEREMONY			

Monday 20th

Reference Number	Symposium	Abstract Title	Presenter Full Name
S02-315	Extrusion	"New Degassing Technology for Single Screw Extruders – Mechanics and Analysis"	Ponzielli, Giuseppe
S02-330	Extrusion	On-Line Optical Monitoring of the Mixing Performance in Co-Rotating Twin-Screw Extruders	Oliveira Campos Bernardo, Felipe
S02-419	Extrusion	Predicting Size and Shape Changes in Extrusion of Non-Circular Profiles	Rauwendael, Chris
S03-223	Functional Additive and Reactive Processing	Exploring Sustainable Materials for Enhanced Safety Footwear Soles	Pinto, Nelson
S03-376	Functional Additive and Reactive Processing	Foaming Modified Poly(lactic acid) Obtained by Reactive Processing as a Sustainable Solution for Single-Use Packaging.	Bettini, Silvia
S03-83	Functional Additive and Reactive Processing	Reversibly Cross-linked Polyethylene	Bikiaris, Dimitrios
S05-166	Polymerization and Synthesis	Polymerization Kinetics of a Bioproduct Epoxy by Means of Differential Scanning Calorimetry	Chrissafis, Konstantinos
S05-215	Polymerization and Synthesis	Decellularized Extracellular Matrix-Derived Hydrogel Embedded with Reduced Graphene Oxide Bioink for the Electrical Stimulation of Human Adipose-Derived Mesenchymal Stem Cells	Rincón-García, María
S05-22	Polymerization and Synthesis	Analysis of novel polycarbonate-based materials Poly(thiourethane-urethane)s	Sikora, Janusz
S05-267	Polymerization and Synthesis	Study of the critical micellar concentration using different techniques for monomethoxy-poly(ethylene glycol)-poly(ϵ -caprolactone) block copolymers for the encapsulation of bioactive molecules	Bermudez, Johan
S05-424	Polymerization and Synthesis	Polyisobutylene reinforcement through multi-block chain exchange shuffling polymerization with isotactic Polypropylene.	Ospina Yepes, Yuliana
S05-8	Polymerization and Synthesis	Synthesis of new biodegradable copolyesters via ROP using organic catalysis and metallo organic initiators: study of the influence of reaction parameters in their hydrolytic degradation	LOPEZ, HECTOR
S06-209	Polymers Blends and Alloys	UNDERSTANDING THE EFFECT OF THE BARREL GAP OF A MICROCOMPOUNDER ON THE COMPOUNDING OF RUBBERS	Kodal, Mehmet
S06-420	Polymers Blends and Alloys	LET-DOWN RATIOS OF PIGMENTS IN PLASTIC COMPOUNDING: PROCESSING CONDITIONS	Al Sadi, Jamal
S07-172	Polymer Composites	Influence of Melt Flow Rate on the Mechanical and Tribological Properties of Carbon Fiber Reinforced Polyoxamide Composites	Nishitani, Yosuke
S07-176	Polymer Composites	Rheological, Mechanical and Tribological Properties of Modified Cross Section Chopped Glass Fiber Reinforced Plant-Derived Polyamide 1010 Biomass Composites	Nishitani, Yosuke
S07-229	Polymer Composites	Development of New Materials for Safety Footwear: Exploring Multiple Grip Properties and Sustainability	Miranda, Sônia
S07-258	Polymer Composites	EFFECT OF CATALYST ON BIO-BASED EPOXY VITRIMER	Becerra Lovera, Angela
S07-292	Polymer Composites	Characterization of mechanical properties of composite materials of high density polyethylene matrix reinforced with natural fibers for application in safety footwear toe caps	Guzmán Sánchez, Manuel
S07-375	Polymer Composites	Strategies for obtaining electrically conductive composites with a low percolation threshold	Lucas, Alessandra
S07-45	Polymer Composites	HAEMOSTATIC DRESSINGS BASED ON CHITOSAN LOADED WITH POLY(BUTYLENE SUCCINATE) NANOPARTICLES AND HEPARIN WITH IMPROVED ANTIBACTERIAL ACTIVITY	BIKIARIS, RIZOS-EVANGELOS
S07-84	Polymer Composites	Manufacture and Characterization of Polymer based Doped Silicon Phthalocyanine Polymethylmethacrylate Composite Organic Semiconductor Films	Sandoval Plata, Emilio
S08-174	Polymer Foams and Membranes	Material Effects on Foam Evolution under Rotational Moulding Conditions	Pitchard, Alex
S08-227	Polymer Foams and Membranes	Carbon dioxide/nitrogen separation by means of mixed matrix membranes of polydimethylsiloxane with activated carbon	Figueiredo, Katia
S10-121	Fiber and Films	Polycrylonitrile nanocomposite fibers with carbon nanotubes and carbon black to produce carbon fibers via direct electrical heating	Arias-Monje, Pedro J.
S10-251	Fiber and Films	Thyroid hormone selective recognition: Elaboration of levothyroxine-selective molecularly imprinted nanostructured films	Estenoz, Diana
S10-298	Fiber and Films	Usage of Recycled Tetra Pak Substrates and Doped Vanadyl Phthalocyanine for the Manufacture of Semiconductor Films	Lopez Valenzuela, Valeria
S10-342	Fiber and Films	Effect of NIR fluorescence ceramic additives on structure evolution of poly(ethylene terephthalate) fibers in high-speed melt spinning	Oh, Hyun Ju
S10-355	Fiber and Films	Structure development of biodegradable poly(ethylene terephthalate) copolymer in high-speed melt spinning	Bae, Jong Hyuk
S10-359	Fiber and Films	Voltage polarity control on the proton conductivity of sulfonated polyetherimide membranes through electrospinning for fuel cell applications	Correa-Muñoz, Estefania
S10-363	Fiber and Films	Preparation and Structure Control of Liquid Crystalline Aromatic Copolyester Fibers in Melt-spinning Process	Hahm, Wan-Gyu
S11-157	Nanotechnology and Nanocomposites	Processing and characterization of polypropylene elastomer/MXenes nanocomposites	Vidotti, Suel
S11-167	Nanotechnology and Nanocomposites	In-line modification of Ca-Al LDH with stearic acid	Leuteritz, Andreas
S11-248	Nanotechnology and Nanocomposites	Design of polymeric nanocapsules as carriers for controlled release of iron	Camacho, Valentina
S11-259	Nanotechnology and Nanocomposites	Rational Design of Nanosystems for Simultaneous and Controlled Release of Drugs and Curcumin Focused on the Treatment of Breast Cancer	Rojas Pedreros, Doris
S11-26	Nanotechnology and Nanocomposites	Creating Advanced Wound Dressings: Laser-Patterned Nanocomposites with Hydrogel Surfaces and Silver Clusters	Molina, María
S11-271	Nanotechnology and Nanocomposites	Selective dispersion and compatibilizing effect of sepiolite nanoparticles in PLA/TPU blends	Marini, Juliano
S11-326	Nanotechnology and Nanocomposites	Forced Flow Processing of Highly Elastic Amorphous Poly lactide and Its Applications	Wu, Hong
S11-394	Nanotechnology and Nanocomposites	THERMOPLASTIC STARCH NANOCOMPOSITES REINFORCED WITH NANOFIBRILLATED CELLULOSE: PLASTICIZATION WITH GLYCEROL IN THE PRESENCE OF WATER AS PROCESS PLASTICIZER	COCHON LIPA, ANNETTE
S11-422	Nanotechnology and Nanocomposites	Graphitic Carbon Nitride (g-C ₃ N ₄) Functionalization of Polyaniline (PANI)-Titanium Carbide (TiC) Nanocomposites for Enhanced Hydrogen Storage: A DFT Study	Dekoya, Gbolahan Joseph
S11-80	Nanotechnology and Nanocomposites	Tailored distribution of 1D nanoparticles in co-continuous EMA/TPO flexible polymeric blends used as emerging materials for suppressing electromagnetic radiation	Katheria, Ankur
S15-135	Technology and Characterization	Modeling the crystallization kinetics of isotactic polypropylene (iPP)	Fischer, Matthieu
S15-142	Technology and Characterization	Isothermal Crystallization of Poly(butylene succinate) (PBS) Studied by Rheo-dielectric Measurements	Wilhelm, Manfred
S16-20	Technology and Structural Development	Investigation of isotactic polypropylene crystallization in processing conditions.	Pantani, Roberto
S18-109	Machine Learning in Polymer Processing	Development of new advanced industry 4.0 technologies for SMEs and MSMEs for polymer processing to increase energy and production efficiency.	Munoz Relpé, Nicolas
S18-325	Machine Learning in Polymer Processing	Use of Large Language Models to design and predict polymer features	Rincón Cerón, Bernardo

Tuesday 21st

Reference Number	Symposium	Abstract Title	Presenter Full Name
S01-104	Additive Manufacturing (3D Printing)	Development of recyclable metal-infused feedstock for low-cost 3D printing in the context of circular manufacturing	Strugova, Daria
S01-160	Additive Manufacturing (3D Printing)	Biocomposite Filaments of Poly(lactic Acid)/Nanocrystalline Cellulose Containing Carbon Nanotubes for Fused Deposition Modeling 3D Printing	Hosseini, Hadi
S01-242	Additive Manufacturing (3D Printing)	MSLA 3D Printing of Soft Networks Bearing Hindered Urea Groups	Lewis, Christopher
S01-261	Additive Manufacturing (3D Printing)	ABS 3D Printing Filaments Modified with SEBS and MWCNTs	Carvalho, Benjamin de Melo Carvalho
S01-360	Additive Manufacturing (3D Printing)	Individualised functional products through technology fusion	Kuehnert, Ines
S01-60	Additive Manufacturing (3D Printing)	Design of human transmission vehicle power transmission system through the use of additive manufacturing.	Morales Arias, Juan
S04-180	Injection Molding	Innovating Injection Moulding: A Digital Framework for Enhancing Process Insights and Eco-Efficiency	Cázar, Bernhard
S04-357	Injection Molding	Micro-Injection Molding: Crystallization of Polyoxymethylene and Influence of Molecular Weight	Fischer, Matthieu
S04-392	Injection Molding	OPTIMAL NUMBER OF CAVITIES IN A MOLD AND BY EXTENSION OF FRAME TOOLS	Mosquera, Manuel Salvador
S12-181	Mechanical Properties and Fracture	Impact of Nozzle Temperature on Failure Mode in Material Extrusion-Based Additive Manufacturing: A Study on Crack Deflection versus Crack Propagation	Waly, Christoph
S12-182	Mechanical Properties and Fracture	Effect of notches on the creep-fatigue performance of short fiber reinforced polypropylene	Stadler, Gabriel
S12-30	Mechanical Properties and Fracture	Influence of network structure determined by Time-domain 1H DQ NMR on the creep properties of non-stoichiometric epoxy-amine resins aimed for chemical anchoring applications	Rios de Anda, Agustin
S12-384	Mechanical Properties and Fracture	Effect of the addition of postconsumer PP-recyclates on the performance of PP-pipes	Pinter, Gerald
S12-388	Mechanical Properties and Fracture	Optimizing Floral Industry Infrastructure: A Comprehensive Redesign Shifting from Wood to Wood-Plastic Composite (WPC) for Support Structures	Monroy, Braian
S14-216	Modeling and Simulation	Consideration of the Morphologic Structure in an Integrative Simulation Chain for the Fatigue Life Assessment of Short-Fiber-reinforced Polymers	Kaylani, Dario
S14-398	Modeling and Simulation	Fiber Orientation Evolution Modeling in Thermoplastic Composites: Leveraging OpenFOAM and Symbolic Computation	Nóbrega, João
S17-170	Rubber and Elastomers	Influence of the Soft segment length on Physical Properties of Polyurethane Elastomers Crosslinked by Polyrotaxanes	Murakami, Hiroto
S17-224	Rubber and Elastomers	INFLUENCE OF PROCESSING ON THE DISPERSION OF CARBON NANOTUBES IN RUBBER COMPOSITES	Campini, Priscila
S17-23	Rubber and Elastomers	Study of the filler-matrix interaction of natural rubber/SBR composites with PU waste	José Dos Santos, Torres and Renivaldo
S17-300	Rubber and Elastomers	Effect of dispersed hard segments formed by low-crystallinity 2-hydroxypropyl- β -cyclodextrins as crosslinkers of PU/EP IPNs on damping properties	Li, Jiang
S17-318	Rubber and Elastomers	The Influence of rubber-to-plastic ratio on the ACM/PP TPV Performance	Xue, Rui
S17-319	Rubber and Elastomers	The influence of preparation method and rubber plastic ratio on the performance of MVQ/TPU TPV	Liao, Wenquan
S19-101	Biopolymers, Biocomposites and Bioprocessing	NATURAL RUBBER-BASED FIBROUS BIOCOMPOSITE REINFORCED WITH BIOACTIVE GLASS-CERAMIC PARTICLES FOR BIOMEDICAL APPLICATIONS	Silva, Michael
S19-118	Biopolymers, Biocomposites and Bioprocessing	Modified thermoplastic starches (TPS) obtained by reactive melt mixing	Villar, Marcelo
S19-119	Biopolymers, Biocomposites and Bioprocessing	Biodegradable materials of poly(3-hydroxybutyrate) and thermoplastic corn starch	Villar, Marcelo
S19-183	Biopolymers, Biocomposites and Bioprocessing	Exploring Centrifugal Electrospinning: A Sustainable Approach Using Recombinant Spider Silk for Controlled Nanofiber Production and Filtration	Sommer, Christoph
S19-193	Biopolymers, Biocomposites and Bioprocessing	BIODEGRADABLE CONTROLLED-RELEASE POLYMER TO PROMOTE PLANT GROWTH	Blach Vargas, Diana
S19-207	Biopolymers, Biocomposites and Bioprocessing	Coating Lycopersicon esculentum (tomato) seeds with an alginate polymer to provide micronutrients during the initial phases of plant development	Blach Vargas, Diana
S19-233	Biopolymers, Biocomposites and Bioprocessing	Development of an active film made from alginate, nanocellulose and rutin nanoemulsions	Barrios-Mejia, Pedro
S19-237	Biopolymers, Biocomposites and Bioprocessing	Identification and characterization of polyhydroxyalkanoate-producing bacteria in soil samples from the department of Santander	Hidalgo, William
S19-288	Biopolymers, Biocomposites and Bioprocessing	Cellulose fiber-reinforced polymer composites as an approach to deliver sustainable alternatives for eco-design product development	Marques, Mariana

S19-31	Biopolymers, Biocomposites and Bioprocessing	Fully Bio-based Epoxy-Amine Resins from Circular Economy: Conception, Multiscale Structural and Mechanical Behaviour Characterization toward Low Carbon-footprint Composites	Rios de Anda, Agustin
S19-335	Biopolymers, Biocomposites and Bioprocessing	Compatibilization of polylactic acid (PLA) and thermoplastic starch (TPS) blends by reactive extrusion: characterization and evaluation of extrusion blown films	Machado, Ana V.
S19-339	Biopolymers, Biocomposites and Bioprocessing	Exploring the Design and Material Selection for the Development of Sustainable Cotton Swabs: A Real Case Study	Hidalgo-Salazar, Miguel
S19-346	Biopolymers, Biocomposites and Bioprocessing	3D Eletrodes of Bacterial Celulose and Polyaniline for Electrochemical Applications	Dalmolin, Carla
S19-380	Biopolymers, Biocomposites and Bioprocessing	A comparison of the properties of starch derived from various sources and their effects on cast polymeric films	Perilla, Jairo
S19-381	Biopolymers, Biocomposites and Bioprocessing	REACTIVE EXTRUSION OF STARCH WITH MALEIC ANHYDRIDE FOR USE IN BIO-ADHESIVES	RODRIGUEZ LORA, MARIA
S19-51	Biopolymers, Biocomposites and Bioprocessing	Development of porous fibroin membrane for wastewater depollution applications	Bertagnolli, Caroline
S20-139	Circular Economy of Polymers	Self-Nucleation (SN) and Successive Self-nucleation and Annealing (SSA) as Powerful Tools to Determine the Composition of Polyolefin Post-Consumer Recycled (PCR) Blends	Coba-Daza, Sebastian
S20-187	Circular Economy of Polymers	Recycling of multilayer film packagings and their industry application	Plevová, Kateřina
S20-197	Circular Economy of Polymers	Footwear for the Future A Sustainable Approach to Safety	Barbosa, Raquel Barbosa
S20-220	Circular Economy of Polymers	Evaluating Environmental Impact: A Comprehensive Study on Blends of Recycled PET and Bio-PET in the Circular Economy	Saft, Graziella
S20-221	Circular Economy of Polymers	Life Cycle Analysis of post-consumer low-density polyethylene with non-halogenated flame retardants	Ladeira, Natália
S20-239	Circular Economy of Polymers	Polymeric blends containing different carboxylic acids	de Sousa, Fabiula
S20-240	Circular Economy of Polymers	Effect of clays in the mechanical properties of dynamically vulcanized blends composed of ground tire rubber/high-density polyethylene	de Sousa, Fabiula
S20-265	Circular Economy of Polymers	Processing of rotomolded parts based on recycled plastics: Different case studies	Rodrigue, Denis
S20-338	Circular Economy of Polymers	Polypropylene Granules Obtained by Solvent Extraction for Application in Furniture Design	Hidalgo-Salazar, Miguel
S20-352	Circular Economy of Polymers	Potential applications and challenges of Utilising Waste Recycled Polymers in Polymeric Membrane Fabrication	Maiti, Abhijit
S20-361	Circular Economy of Polymers	Advances in PVC recycling: mechanical and chemical techniques from a sustainable approach	Meléndez Plata, Gabriela
S20-57	Circular Economy of Polymers	Recycling ability and enhanced mechanical performance of novel poly(lactic acid)-co-poly(ethylene azelate) copolyesters	Bikiaris, Nikos
S22-241	Polymers in the Sustainable Development Goals of the United Nations	Plastics and the UN's Sustainable Development Goals	de Sousa, Fabiula