

**16º CBPOL**  
**CONGRESSO**  
**BRASILEIRO**  
DE  
**POLÍMEROS**

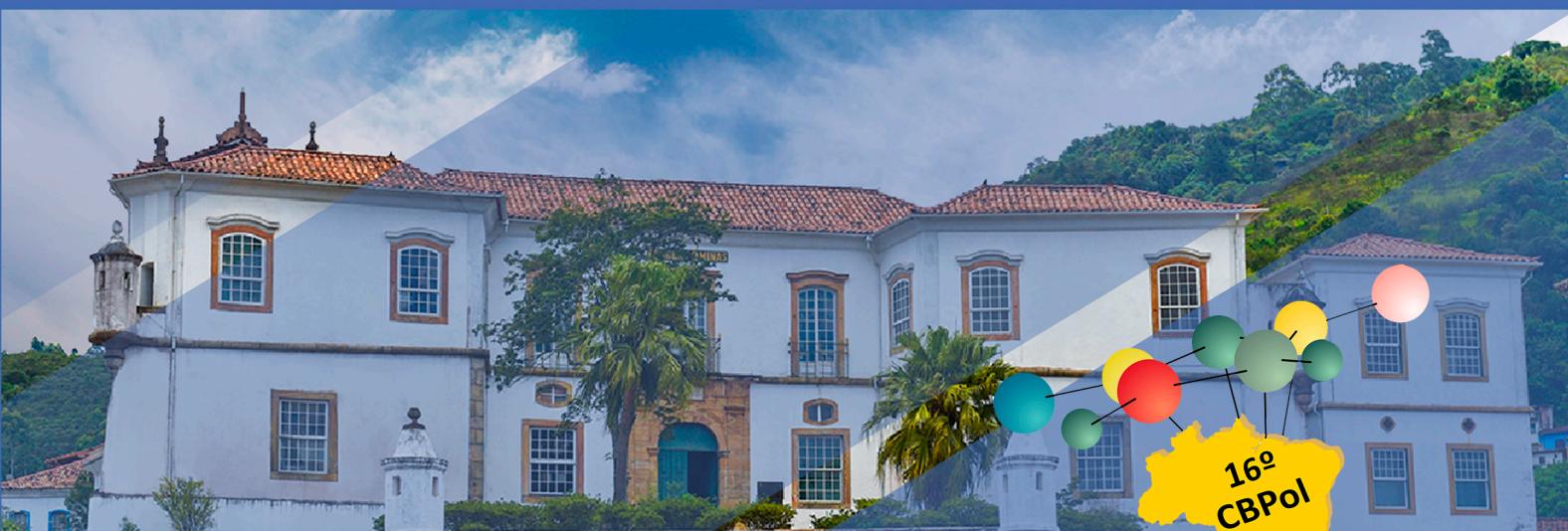
16th Brazilian Polymer Conference

24 a 28 de outubro de 2021  
Ouro Preto . Minas Gerais . Brasil

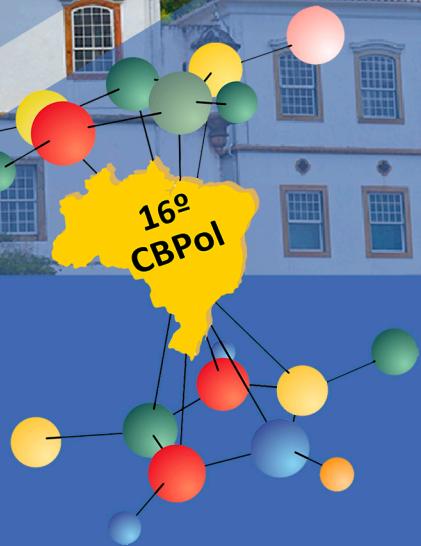
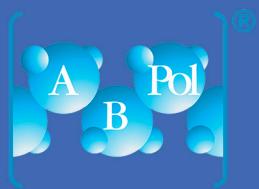
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**PROGRAM BOOK**



**16<sup>th</sup> Brazilian Polymer Congres**  
October 24 to 28, 2021  
**ONLINE**  
**Ouro Preto-MG**

**REALIZATION**



Associação Brasileira de Polímeros



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Congresso Brasileiro de Polímeros (16.:2021: Ouro Preto-MG)

Livro Programa do 16º Congresso Brasileiro de Polímeros (CBPol)/Associação

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## Editorial

CBPOL - Brazilian Polymer Congress - is a biennial event that has been going on for 30 years, since 1991. It is organized by the Brazilian Polymers Association - ABPol and welcomed about 800 participants in its 15th edition.

The 16th CBPol will be held from October 24 to 28, 2021, in a totally online format, having as "virtual venue" Ouro Preto in Minas Gerais - a revolutionary city which is always ahead of its time. In addition to the novelty of its digital format, this will be the first International CBPol and we are looking forward to the attendance of researchers, students and organizations from several countries.

Former capital of Minas Gerais in colonial times, Vila Rica, besides being recognized for its architectural beauties, is also a symbol of progress and innovation. Home of one of the first Higher Education Institutions in Latin America, created in 1839, the cosmopolitan Ouro Preto is in tune with the objectives of the 16th CBPol where internationally renowned scientists, researchers and students from Brazil, Latin America and other countries will present and discuss their research on polymers.

In parallel, delegates will be able to attend online technical exhibitions and webinars from polymer companies and laboratory equipment manufacturers, which will enrich discussions by recycling ideas and renewing concepts.

We encourage the participation of all those who think polymers play a fundamental role in modern society. We strongly believe that this will be a more comprehensive, innovative and inclusive CBPol due to its online format and international participations.

Share your ideas and let's write another chapter of our history!

Be welcome!

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## **Summary table of activities**

**Sunday, October 24, 2021**

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**19:30 - 20:30**      Opening Ceremony and Awards

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**20:30 - 21:00**      Cultural event

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# Monday, October 25, 2021

## Morning Sessions

<b>8:30 - 9:20</b>	<b>PLENARY SESSION 1:</b> Alejandro J. Müller - University of the Basque Country UPV/EHU (Spain) “Application of the SSA thermal fractionation technique to thermoplastic polyurethanes and recycled polyolefin blends” CHAIR: Claudio Gouvêa dos Santos
<b>9:30 - 10:20</b>	<b>PLENARY SESSION 2:</b> Denise Petri – USP (Brazil) “Polysaccharides as platforms for new functional materials” CHAIR: CristianeFinzi-Quintão

<b>10:20 - 10:30</b>		<b>Break</b>			
<b>Session</b>	<b>01-Environmental issues associated with polymers CHAIR: Daniel Pasquini</b>	<b>04-Polymer nanostructures and nanocomposites CHAIR: Carolina Morelli</b>	<b>05-Blends, composites and polymer networks CHAIR: Elisângela Corradini</b>	<b>06-Polymerization reactions and polymer chemistry CHAIR: Cesar Petzhold</b>	<b>08-Special polymer applications CHAIR: João Paulo Santos</b>
<b>10:30 - 10:50</b>	4DNH - Thermoplastic starch - urea, a feasible alternative in order to storage nitrogen as fertilizer - Daniel de Souza Gamarano (UEMG)	4DMV - Evaluation of shape memory in PLA/TPU filaments with carbon nanotubes and graphene nanoplatelets - Nayara Koba de Moura (UNIFESP)	4DMX - Polypinene and chitosan blends for functional bio-based film production - Plínio Ribeiro Rodrigues (UNICAMP)	4DPJ - The influence of curing agent ratio on epoxy resin by using FTIR spectroscopy - Lincoln Araujo Teixeira (UNB)	4DPH - Design of experiments and regression analysis for a compositional study of EVA foams - Murilo Lauer Sanson (Braskem)
<b>10:50 - 11:10</b>	4DNM – Influence of the incorporation of crystal polystyrene in expanded polystyrene microfibers in the removal of oil in emulsion - Laura Valácia de Carvalho (UFLA)	4DMY - Evaluation of the mechanical and electromagnetic Shielding properties PC/ABS blends-based graphene nanoplates nanocomposites - Fábio Roberto Passador (UNIFESP)	4DNY - Transparent wood composites fabricated by impregnation of epoxy resin into Jupati Petiole (Raphia Taedigera) - Lauro Arthur Farias Paiva Cohen (UEMG)	4DPF - PHOTO-OMRP of Butyl Acrylate Using New Ni(II) Complexes Coordinated to Non-Symmetric and Symmetric Schiff Bases - Naralyne Martins Pesqueira (UNESP)	4DPP - Evaluation of PEDOT:PSS hybrid capacitor with titanium and aluminum composite dielectric - Paola Dornel da Silva (UFRGS)
<b>11:10 - 11:30</b>	4DPC - Photopolymerization of limonene - Roniérik Pioli Vieira (UNICAMP)	4DNX - Improving the dispersion of MWCNT in PP using controlled extension flows in extrusion processing - Marcel Andrey de Goes (UEPG)	4DRF - Effect of addition of glassy carbon and graphene nanoplatelets on mechanical properties of poly(acid lactic)/poly(3-hydroxyvalerate-co-3-hydroxyvalerate) blend - Isabela Cesar Oyama (UNIFESP)	4DMW - Organocatalyzed atom transfer radical polymerization of $\beta$ -Pinene: synthesis and characterization - Plínio Ribeiro Rodrigues (UNICAMP)	4DPW - The Functionalization of Carbohydrate Polymers with B-Cyclodextrin Enhances Binding of Monophenols - Roberto Aguado Garcia (Universidade de Coimbra, Portugal)

Summary table of activities

<b>11:30 - 11:50</b>	4DQ4 - Polypropylene composite reinforced with unsmoked cigarette butts: influence of hydrogen peroxide fiber treatment on flexural properties - Alcides Lopes Leão (UNESP)	4DP6 - Evaluation of antimicrobial activity of PLA porous membranes containing BG45S5 and MWCNT - Nayara Koba de Moura (UNIFESP)	4DTN - Comparison study of calcined kaolin untreated and treated with silane for polyamide 6,6 - Gabriele Polezi (Imerys Campinas)	4EAA - Photochemical nitric oxide release from s-nitrosothiol-functionalized chitosan - Herllan Vieira de Almeida (UNICAMP)	4DTP - Biobased-matrices for nutrients sustainable coatings - Débora França (USP)
<b>11:50 - 12:10</b>	4DQG - Biodegradation and release correlations in soil/water medium of the polymer-fertilizer-based system - Roselena Faez (UFSCAR)	4DPG - Biosynthesis of silver nanoparticles using onion extract - Letícia Maria de Oliveira (UNIARA)	4DTQ - Study of O <sub>2</sub> transmission rate in BIIR rubber compound for different aspect ratio and particle size kaolins - Felipe Fantatho (Imerys)	4DPV - A Green Approach to Obtain Crosslinked Starch Through Reaction With Tartaric Acid by Reactive Extrusion - Jéssica Fernanda Pereira (UEL)	4DTP - Biobased-matrices for nutrients sustainable coatings - Débora França (USP)
<b>12:10 - 14:00</b>	<b>Lunch</b>				

**Afternoon Sessions**

**14:00 - PLENARY SESSION 3:** Ulrich Wiesner – Cornell University (USA)

**14:50** “Polymer Self-Assembly based Functional Materials”

CHAIR: Rodrigo Oréfice

**15:00 - PLENARY SESSION 4:** Sadhan C. Jana – The University of Akron (USA)

**15:50** “Design of Polymer-Derived Nanoparticles, Nanorods And Porous Microparticles”

CHAIR: João Paulo Santos

**15:50 -  
16:00**

**Break**

Session	02-Processing and printing of polymers CHAIR: Kátia Novack	03-Biomedical applications of polymers CHAIR: Denise Petri	07-Polymer physics and characterization CHAIR: Marcelo Rabello	04-Polymer nanostructures and nanocomposites CHAIR: Patrícia Patrício	Technical session CHAIR: Leonardo Canto
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<b>16:00 - 16:20</b>	4DND - Influence of different kneading blocks elements on polymer mixture dispersion during twin-screw extrusion - Felipe Oliveira Campos Bernardo (UFSCar)	4DNC - Wearable device based on electrospun gelatin/polycaprolactone nanofibers loaded with diclofenac potassium aiming a potential anti-inflammatory action - Gabriella Onila do Nascimento Soares (UFMG)	4DM4 - Dynamic wetting behavior of HDPE and PA 12 in contact with water - Ayrton Alef Castanheira Pereira (PUC-RIO)	4DQJ - Synthesis and characterization of heptakis-aminocyclodextrin nanosponges - Gianluca Utzeri (UC - Universidade de Coimbra)
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<b>16:20 - 16:40</b>	4DQ6 - Improving the dispersion of graphite in PP using controlled extension flows in extrusion processing - Marcel Andrey de Goes (UEPG)	4DNF - Evaluation of the dissolution profile and trypanocidal activity of benznidazole incorporated in PEG 4000 and its derivatives - Lucas Resende Dutra Sousa (UFOP)	4DNS - Evaluation of the degradation process of polyethylene by dilute solution viscosity - João Augusto Osório Brandão (UFRGS)	4DR4 - Synergistic effect of adding graphene nanoplates and carbon nanotubes in PC/ABS blends - Erick Gabriel Ribeiro dos Anjos (UNIFESP)	4EEK - Exploring the Impact of Humidity on Material Properties - Jason Saienga PhD TA Instruments USA – Product Manager
<b>16:40 - 17:00</b>	4DVC - Feasibility of using polymer blended filaments for fused deposition modeling 3d printing - Kasitpong Thanawuth (Silpakorn University (SU) - Faculty of Pharmacy, Tailândia)	4DQT - Orodispersible films containing chlorhexidine digluconate: physical characterization and microbiological in vitro analysis - Geanne Aparecida de Paula (UFES)	4DS2 - Fully Automated Instrument for Solution Viscosity in Polymeric Materials - Alberto Ortín Sebastián (Polymer Char)	4DRP - Synthesis of chitosan-based quantum dots: an analysis of the synthesis parameters - Bruno Peixoto de Oliveira (UECE)	4EET - The Royal Society of Chemistry short view over How to Publish - Elizabeth Magalhães (Royal Society of Chemistry - RSC - Brazil office)
<b>17:00 - 18:30</b>	<b>POSTER PRESENTATION #1: 01, 02, 03 and 06</b>				

## Tuesday, October 26, 2021

### Morning Sessions

<b>8:30 -</b>	<b>PLENARY SESSION 5:</b> André Studart - ETH Zürich (Switzerland) “3D Printing of Polymers into Biologically-Inspired Structures“ CHAIR: Daniel Pasquini				
<b>9:20</b>					
<b>9:30 -</b>	<b>PLENARY SESSION 6:</b> Rosario Bretas – UFSCar (Brazil) “Electrospinning: an Old Technique for New Applications” CHAIR: Kátia Novack				
<b>10:20 -</b>					
<b>10:30</b>	<b>Break</b>				
<b>Session</b>	<b>02-Processing and printing of polymers CHAIR: Patrícia Patrício</b>	<b>03-Biomedical applications of polymers CHAIR: Rodrigo Oréfice</b>	<b>07-Polymer physics and characterization CHAIR: Daniela Becker</b>	<b>05-Blends, composites and polymer networks CHAIR: Elisângela Corradini</b>	<b>Technical session CHAIR: Marco Aurélio de Paoli</b>
<b>10:30 -</b>					
<b>10:50</b>	4DWJ - Influence of processing temperature on the color tonality of PVC compounds - Mara Zeni Andrade (IFRS)	4DQZ - 3D printed scaffolds composed of PLA-TCP- SiO <sub>2</sub> and PLA-TCP-MgO for bone tissue engineering - Samarah Vargas Harb (UFSCar)	4DW6 - Study of mechanical and chemical properties stability of inner tubes exposed to gamma radiation - Sandra Regina Scagliusi Martin (USP)	4DW2 - Reinforcement of soy protein-Alginate-based materials through calcium chloride absorption - Estefanía Álvarez-Castillo (University of Seville - US)	4EEE - Do pellet à peça - A importância do bom processamento de polímeros! - Ricardo da Silva Souza (Reoterm)
<b>10:50 -</b>					
<b>11:10</b>	4DWS - Cellulose-based biocomposites for additive manufacturing - Beatriz Sakamoto Arsuffi (UFABC)	4DSZ - Incorporation of electrospun nanofiber mats to improve mechanical properties of hydrogels based on methacryloyl gelatin - Catarina Paschoalini Lehman (UFMG)	4DWA - Introduction to foamability study of a LDPE subjected to gamma radiation - Elizabeth Carvalho Leite Cardoso (IPEN)	4DXV - Use of carbon black and rockwool based filler system in fluorelastomers - Carolina Moutinho Ferreira (UFRJ)	4EEF - Vantagens do SEC-MALS e FFF-MALS na caracterização avançada de Polímeros e Biopolímeros - Guilherme Nunes (Flowscience)
<b>11:10 -</b>					
<b>11:30</b>	4E4A - Looking for a conductive polyaniline/acrylic formulation for DLP: printability versus electrical conductivity - Goretti Arias Ferreiro (Universidade da Coruña, Espanha)	4DS4 - Biodegradation behavior of PLA samples obtained by 3d printing and by compression molding - Adriana Martinelli Catelli Souza (FEI)	4DWR - Dressings produced from PVA nanofibers containing chloramphenicol - Gabriel Nardi Fraga (UNIOESTE)	4DY4 - Study of multi-scale phase separation and viscoelastic properties in a semi compatible resin blended elastomer system - Robins Kumar (University of Lyon - UNIV LYON)	4EEG - DMA de Alta Força – Principais Aplicações em Polímeros - HuguesBaurier Material Testing - Chefe de Vendas Internacionais – KCEN
<b>11:30 -</b>					

<b>11:30 - 11:50</b>	4E4P - Injection overmolded polymer-metal hybrid structures - Leonardo Bresciani Canto (UFSCar)	4DXQ - Bioactivity evaluation of natural amorphous silica fibers/PEEK composite produced through micro-injection moulding for implant dentistry applications - Ana Paula Marzagão Casadei (UFSC)	4DYE - Formic acid acting as a stress cracking agent in polyamide 6 - Ermeson David dos Santos Silva (Universidade Federal do Cariri)	4DYK - Effect and active potential of jatobá (hymenaea stigonocarpa) pulp extract on sodium alginate film - Gisele Fernanda Alves da Silva (FURG)	4EEH - Uso do reômetroMCR 702e da Anton Paar para análises termodinâmico-mecânicas e reologia de pós - Jorge Maia (AntonPaar)
<b>11:50 - 12:10</b>	4E6M - Degradation's study of commercial resins used in graphic inks - Ana Beatriz Silva de Oliveira (UEZO)	4DYP - Application of silver nanoparticles in biodegradable bamboo fiber for biomedical textile - Débora Kauanna Régis Da Luz (UFRN)	4E6E - Prediction of thermodynamic behavior and elasticity module for thermoplastic polyurethanes based on solubility parameter - Cristofor Portugal Oliveira da Silva (UFRGS)	4E4Q - Physical features of pine woods treated by in situ polymerization with three different monomers - Andrey Pereira Acosta (UFRGS)	4EEJ - Determinação das propriedades de tração ISO 527-2019 - Monique Naval Leite (ZwikRoell)
<b>12:10 - 14:00</b>	<b>Lunch</b>				

**Afternoon Sessions**

**14:00 - PLENARY SESSION 7:** Anthony Brennan - University of Florida (USA)

**14:50** "Recent Advances In Antifouling Technologies"  
CHAIR: Rodrigo Oréfice

**15:00 - PLENARY SESSION 8:** Mohammad Arjmand – The University of British Columbia (Canada)

**15:50** "Advanced Polymer-based Electromagnetic Shields"  
CHAIR: João Paulo Santos

<b>15:50 - 16:00</b>	<b>Break</b>				
<b>Session 01-</b> <b>Environmental issues associated with polymers</b> <b>CHAIR:</b> <b>Antonio Felix Carvalho</b>	<b>04-Polymer nanostructures and nanocomposites</b> <b>CHAIR:</b> <b>CristianeFinzi-Quintão</b>	<b>05-Blends, composites and polymer networks</b> <b>CHAIR:</b> <b>Rodrigo Oréfice</b>	<b>06-Polymerization reactions and polymer chemistry</b> <b>CHAIR:</b> <b>Claudio Gouvêa</b>	<b>08-Special polymer applications</b> <b>CHAIR:</b> <b>Andre Luis Marcomini</b>	
<b>16:00 - 16:20</b>	4DQK - Synthesis of thermoplastic starch aiming at improving your mechanical properties - Gilberto Sérgio da Silva Ramos Junior (UFPA)	4DVP - Thermal Characterization of PHBV Nanocomposites - Maria Eduarda Araújo Ribeiro (UENF)	4E4R - Decay resistance of pine woods modified with three different treatments - Kelvin Techera Barbosa (UFPEL)	4DQF - STUDY OF THE SOLUBILITY OF NATURAL POLYMERS WITH DIFFERENT SOLVENTS - Michaella Fialho (UNB)	4DVB - CHARACTERIZATION OF MINERAL FILLERS FOR EPOXY RESINS - Letícia Andreolli Dias (Feevale)

Summary table of activities

<b>16:20 - 16:40</b>	4EEN - Edible scaffolds with tunable mechanics and topology for cultured meat - Amy Rowat (UCLA)	4DVZ - Effects of silica nanofibers and mmt clay on mechanical properties of polyamide 6: a comparative study - Ermeson David dos Santos Silva (UFCA)	4E64 - Influence of pH on the hygroscopicity of blends of gelatin and potato skin starch – Samara Dias Osorio (UFRGS)	4DTA - FULLY BIOBASED POLYMER FROM EPOXIDIZED CANOLA OIL AND POLY(LACTIC ACID) OLIGOMER - João Gabriel Passos Rodrigues (UFRJ)	4DWC - NEW MIXED MATRIX MEMBRANES MADE FROM POROUS ORGANIC POLYMERS FOR CO2/N2 SEPARATION - Sandra Rico Martínez (University of Valladolid)
<b>16:40 - 17:00</b>	4DVM - Development of green composites of recycled polyethylene with the addition of cellulose obtained from cigarette filters - Maria Fernanda Romeu Lino de Souza (UNIFESP)	4DXB - Effects of test parameters on tribological and hardness properties oF UHMWPE / reduced graphene oxide nanocomposites - Pedro Henrique Vilela Soares (CEFET)	4E6H - Development and testing of devices for conducting dynamic mode-i and mode-ii interlaminar fracture tests - Fernando Guimarães Vianna (UFCG)	4DTF - SYNTHESIS AND CHARACTERIZATION OF XANTHAN CARBOXYMETHYLATED GUM FOR LEAD ADSORPTION - Micaele Ferreira Lima (UECE)	4DWY - BIODEGRADABLE DEVICE BASED ON STARCH AND GRAPHITE (TPS-Gr) WITH POTENTIAL FOR APPLICATION IN ELECTROCHEMICAL SENSING - Amanda de Sousa Martinez de Freitas (UNIFESP)
<b>17:00 - 18:30</b>	<b>POSTER PRESENTATION #2: 04 and 08</b>				

## Wednesday, October 27, 2021

### Morning Sessions

<b>8:30 - 9:20</b>	<b>PLENARY SESSION 9:</b> Silvia Bettini – UFSCar (Brazil) "Industrial citrus waste: an opportunity to obtain biodegradable and flexible compounds" CHAIR: Patrícia Patrício
<b>9:30 - 10:20</b>	<b>PLENARY SESSION 10:</b> José Carlos Costa da Silva Pinto – UFRJ (Brazil) "The Paradigms of Sustainability and Circularity in the Commercial Polymer Chain: a Brazilian Opportunit (ABPol "Eloisa Mano" Award Winner)" CHAIR: Kátia Novack
<b>10:20 - 10:30</b>	<b>Break</b>
<b>Session 01- Environmental issues associated with polymers CHAIR: Derval dos Santos Rosa</b>	<b>04-Polymer nanostructures and nanocomposites CHAIR: Cristiane Finzi-Quintão</b>
<b>10:30 - 11:00</b>	KEYNOTE: Maximilian Lackner (Austria) "Engineering at the Nanoscale: A Strategy for Developing High Performance Functional Materials".
<b>11:00 - 11:20</b>	4DWN - Filtering membranes obtained from polyvinyl alcohol nanofibers (PVA) and chitosan by electrospinning - Camila Cassia Cordeiro (UNIOESTE)
<b>11:20 - 11:40</b>	4DYV - Application of Rice Husk as Filler in Polymeric Composites: Evaluation of the Influence of Particle Size - Michel Vinicius Flach (FEEVALE)
<b>04-Blends, composites and polymer networks CHAIR: Lidiane Costa</b>	<b>05-Polymerization reactions and polymer chemistry CHAIR: Claudio Gouvêa</b>
<b>KEYNOTE: Dr. Luyi Sun (EUA)</b> "Bioinspired Surface Engineering for Mechanochromism and Thermal Management."	<b>KEYNOTE: Filomena Barreiro (Portugal)</b> "Microencapsulation: a world of possibilities."
<b>4DXC - Influence of multi-layer graphene oxide distribution on the microstructure and mechanical properties of poly(ethylene terephthalate) nanocomposites - Gabriel Matheus Pinto (MACKENZIE)</b>	<b>4E6J - Development of a biaxial tensile device in the plane for monotonic mechanical tests and cruciform specimens - Fernando Guimaraes Vianna (UFCG)</b>
<b>4DYD - Hybrid conductive gels used as flexible electrode - Joana de Barros Sacramento (UFABC)</b>	<b>4EAM - Effect of incorporation propolis extract in biopolymeric films based on pectin - Giuliana Thalina Franco (UFSCAR)</b>
<b>4DTT - Kinetics and Mechanism of Lipase-Catalysed polycondensation of glycerol and sebacic acid - Giovanni Bortoloni Perin (UNICAMP)</b>	<b>4E6K - Nanocellulose composites of conductive polymers for application in electronic devices and electromagnetic shielding - Paula Nunes Santos (UFU)</b>
<b>4E4T - Kinetic polymerization of castor oil polyurethanes by a rheological method and neural network - Joziel Aparecido da Cruz (UFRGS)</b>	<b>4DQN - Synthesis and characterization of polymeric membranes with the incorporation of adsorbent materials - Sirlei Marques Paschoal (UTFPR)</b>

## Summary table of activities

<b>11:40 - 12:00</b>	4DZM - Use of waste cottonseed oil in the synthesis of polyurethane coatings - Renata Costa Silva Araújo (UFMG)	4DYG - Effect of nanosilica, nanoclay or graphene oxide as reinforcing agents to EPDM rubber - Hugo Rafael Vallejo Angulo (USP)	4EBK - On the mode-I fracture toughness of filament wound curved laminates - Artur Altermann Pollet (UFRGS)	4EDF - Low molar mass polymethacrylates obtained by chemical recycling of artifacts post use acrylics - Ticiane Vieira de Paula Souza (UFPR)	4DQX - Polyelectrolyte-based ink with RGB EMISSION properties for safety tagging - Artur José Monteiro Valente (Universidade de Coimbra, Portugal)
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**12:00 -  
14:00**

## Lunch

## Afternoon Sessions

<b>14:00 - 14:50</b>	<b>PLENARY SESSION 11:</b> Richard Weiss – Georgetown University (USA) “Complex Polymeric Materials Through Self-Assembly Initiated by Small Molecules: Reversible Gels, Ionomers, and Rubbery Polymers” CHAIR: Marco Aurelio De Paoli
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<b>15:00 - 15:50</b>	<b>PLENARY SESSION 12:</b> Jaime C. Grunlan - Texas A&M University (USA) “Water-Based Multifunctional Nanocoatings from Polyelectrolyte Complexation: Opportunities & Challenges” CHAIR: Cesar Petzhold
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**15:50 -  
16:00**

## Break

Session	02-Processing and printing of polymers CHAIR: Lidiane Costa	03-Biomedical applications of polymers CHAIR: Rodrigo Oréfice	07-Polymer physics and characterization CHAIR: Andre Luis Marcomini	01-Environmental issues associated with polymers CHAIR: Antonio Felix Carvalho	09- Innovation and management involving polymers and topics in education CHAIR: Daniela Becker
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<b>16:00 - 16:20</b>	4EBH - Optimization of the FFF 3d printing applied to metal casting tools using the Taguchi method - Ariangelo Hauer Dias Filho (ITA/UEPG)	4E2N - Hydrogels containing microparticles for Dual-Drug release - Fabiana Perrechil Bonsanto (UNIFESP)	4EAB - Kinetic study of the thermal decomposition of a nitrogen fertilizer coated with methylcellulose by the Ozawa isoconversional method - Marcos Vinícius Ferreira (UFU)	4E4V - Thermophysical and mechanical evaluation of blends based on recycled poly(ethylene terephthalate) - PET and poly(high density ethylene) – PEAD - Kássio André Lacerda (FUMEC)	4DNP - STUDY OF CONSUMER VISUAL EXPECTATION REGARDING PECTIN AND WPI FILMS - Ana Carolina Salgado Oliveira (UFLA)
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<b>16:20 - 16:40</b>	4EBQ - FRESH 3D Printing of Double Crosslinked Hyaluronic Acid/Pectin Hydrogels - Daniele Mayara Catori (UNICAMP)	4EBM - Functionalization of Poly(lactic acid) and Poly(ethylene glycol) for Application in Multicomponent Ugi Reaction - Joana de Souza von der Weid (UFRJ)	4EAJ - Evaluation of mechanical properties of mixtures of virgin and recycled high- density polyethylene - Victor Abdo Hallack (UFOP)	4E6T - Chitosan as a green polymeric inhibitor for mild steel: electrochemical behavior in sodium chloride medium - Lisete Cristine Scienza (UFRGS)	4EDA - Development of a Preliminary Process Design for the Installation of a Pilot Plant To Produce Superabsorbent Hydrogel Reinforced With Fertilizers (NPK) For Application In Rice Crop (Oryza Sativa L.) - Yduo Salvador Ataucusi (Universidad Nacional Mayor de San Marcos, Peru)
<b>16:40 - 17:00</b>	4EDC - Influence of Alcohol Based Nonsolvents On The Formation of Cellulose Acetate Monolith Prepared From Nonsolvent/Thermally Induced Phase Separation Process - Poliana Ricci (UFU)	4EBS - Thermal analysis and study of atorvastatin (ATV) release from polycaprolactone/ATV films - Yasmin dos Anjos Garcia (UFRRJ)	4DWM - Obtaining and characterizing electrospun polymer fibers from PBAT/PLA with TiO <sub>2</sub> /Fe <sub>3</sub> O <sub>4</sub> - Alessandra Ruyz Medeiros (Universidade Estadual do Oeste do Paraná)	4EC6 - Comparative life cycle analysis of plastic and metallic fenders - Marcella Cristina Neves Alvarenga (STELLANTIS)	4EDH - Extraction and analysis of natural rubber from the latex of the fig tree, jackfruit, and polymer analysis of durian - Maximilian Lackner (FH Technikum Wien, Áustria)
<b>17:00 - 18:30</b>	<b>POSTER PRESENTATION #3: 05, 07 and 09</b>				

**Thursday, October 28, 2021**

## Morning Sessions

8:30 -	<b>PLENARY SESSION 13:</b> Amin Shavandi - Université Libre Bruxelles (Belgium)				
9:20	"Restore and Regenerate Our Natural Resources:High-value Biobased Products for Biomaterials Applications"				
	CHAIR: Denise Petri				
9:30 -	<b>PLENARY SESSION 14:</b> Jose Covas - Universidade do Minho (Portugal)				
10:20	"In-process characterization of polymer nanocomposites during extrusion"				
CHAIR: Kássio Lacerda					
10:20 -	<b>Break</b>				
10:30 -					
11:20	<b>PLENARY SESSION 15:</b> Patrícia Patrício - CEFET/MG (Brazil) "Integrated technologies using polymers that contribute to the reduction of waste from different industrial sectors"				
CHAIR: Edvani Muniz					
<b>Session</b>	<b>01-Environmental issues associated with polymers and nanocomposites</b>	<b>04-Polymer nanostructures</b>	<b>05-Blends, composites and polymer networks</b>	<b>06- Polymerization reactions and polymer chemistry</b>	<b>08-Special polymer applications</b>
	CHAIR: Carolina Morelli	CHAIR: Kássio Lacerda	CHAIR: Edvani Muniz	CHAIR: Daniela Becker	CHAIR: Kátia Novack
11:20 -	4EBT - Assessing microplastic degradation using FTIR: what it can tell and what it can whisper? - Walter Ruggeri Waldman (UFSCAR)	4E6W Crystallization kinetics of poly (lactic acid)/halloysite nanocomposites Lidiane Cristina Costa (UFSCAR)	- 4ECV Investigation of the reinforcing effect of organoclay Cloisite 15a on the recycled pet matrix by dynamic mechanical analysis - Luciana Ribeiro Honorato (CEDERJ)	- 4EAE - Synthesis of superabsorbent organoclay starch and acrylic acid Cloisite 15a on the Verónica Carranza Verópeza (Universidad Nacional Mayor de San Marcos, Peru)	- 4DXK - Release of oregano essential oil from PHBV biodegradable films - Renata Cerruti (UFSC) María Carranza da Costa (UFSC)
11:40					
11:40 -	4EBW - Properties of spent coffee grounds filled polypropylene as nanocarrier: synergistic effect between cisplatin and 5-fluorouracil	4EBX - Laponite-based nanohydrogel delivery and the synergistic effect obtained from polymerization of mamona oil (NMP)	4ECW Mechanical characterization of the polyurethane polystyrene biocomposite obtained from polymerization of carboxy-telechelic monomers	- 4ECA - Simulation of the synthesis of carboxy-telechelic polystyrene by microencapsulation of nitroxide mediated via solvent evaporation technique	- 4DY6 - Effect of the syntheses parameters in isocyanate isocyanate by microencapsulation
12:00	- Gustavo Luiz Bueno Cardoso (FEI)	- Samile Bezerra de Aguiar (UNICAMP)	- the reinforced Galego banana fibers - (UNICAMP)	- Inácio José Cassimiro Paulo Roberto Correia Marcelino (UFABC)	- Amanda Nascimento Santo Braga (UFABC)

<b>12:00 -</b>	4EBZ - Comparative life cycle analysis of Photodegradation of polypropylene using PS/MoS <sub>2</sub>	- 4EDN	- 4E6C - Effect of chain extenders on the strength behavior of polypropylene properties of composites with polyurethanes	- Porous Biodegradable Biomaterials Loaded with Melaleuca Oil and Curcuminoids for the Control of Aedes Aegypti - Glaucia Regina Medeiros Burin (UFPR)
<b>12:20</b>	<b>12:20 -</b> Closing Ceremony – Students Award Ceremony – ABPol convention <b>14:00</b>			
<b>16:00</b>	Editorial Council Meeting of the journal Polímeros: Ciência e Tecnologia			

## Plenaries

PLN-01 – 25/10

08:30 - 09:20

**Speaker: Alejandro J. Müller**

*University of the Basque Country, UPV/EHU (Spain)*

**Title: Application of the SSA thermal fractionation technique to thermoplastic polyurethanes and recycled polyolefin blends**

*Chair: Claudio Gouvêa dos Santos*



PLN-02 – 25/10

09:30 - 10:20

**Speaker: Denise Freitas Siqueira Petri**

*USP (Brazil)*

**Title: Polysaccharides as platforms for new functional materials**

*Chair: Cristiane Medina Finzi-Quintão*



PLN-03 – 25/10

14:00 - 14:50

**Speaker: Uli Wiesner**

*Cornell University (USA)*

**Title: Polymer Self-Assembly based Functional Materials**

*Chair: Rodrigo Lambert Oréfice*



PLN-04 – 25/10

15:00 - 15:50

**Speaker: Sadhan C. Jana**

*University of Akron (USA)*

**Title: Design of Polymer-Derived Nanoparticles, Nanorods And Porous Microparticles**

*Chair: João Santos*



PLN-05 – 26/10

08:30 - 09:20

**Speaker: André Studart**

*ETH Zürich (Switzerland)*

**Title: 3D Printing of Polymers into Biologically-Inspired Structures**

*Chair: Daniel Pasquini*



<b>PLN-06 – 26/10</b>	<b>09:30 - 10:20</b>	<p><b>Speaker:</b> Rosario Elida Suman Bretas  <i>UFSCar (Brazil)</i></p> <p><b>Title:</b> <b>Electrospinning: An old technique for new applications</b></p> <p><i>Chair:</i> Katia Monteiro Novack</p>	
<b>PLN-07 – 26/10</b>	<b>14:00 - 14:50</b>	<p><b>Speaker:</b> Anthony B. Brennan  <i>University of Florida (USA)</i></p> <p><b>Title:</b> <b>Recent Advances In Antifouling Technologies</b></p> <p><i>Chair:</i> Rodrigo Lambert Oréfice</p>	
<b>PLN-08 – 26/10</b>	<b>15:00 - 15:50</b>	<p><b>Speaker:</b> Mohammad Arjmand  <i>University of British Columbia (Canada)</i></p> <p><b>Title:</b> <b>Advanced Polymer-based Electromagnetic Shields</b></p> <p><i>Chair:</i> João Santos</p>	
<b>PLN-09 – 27/10</b>	<b>08:30 - 09:20</b>	<p><b>Speaker:</b> Sílvia Helena Prado Bettini  <i>UFSCar (Brazil)</i></p> <p><b>Title:</b> <b>Industrial citrus waste: an opportunity to obtain biodegradable and flexible compounds</b></p> <p><i>Chair:</i> Patrícia Santiago de Oliveira Patrício</p>	
<b>PLN-10 – 27/10</b>	<b>09:30 - 10:20</b>	<p><b>Speaker:</b> José Carlos Costa da Silva Pinto  <i>UFRJ (Brazil)</i></p> <p><b>Title:</b> <b>The Paradigms of Sustainability and Circularity in the Commercial Polymer Chain: a Brazilian Opportunity (ABPol “Eloisa Mano” Award Winner)</b></p> <p><i>Chair:</i> Katia Monteiro Novack</p>	
<b>PLN-11 – 27/10</b>	<b>14:00 - 14:50</b>	<p><b>Speaker:</b> Richard G. Weiss  <i>Georgetown University (USA)</i></p> <p><b>Title:</b> <b>Complex Polymeric Materials Through Self-Assembly Initiated by Small Molecules: Reversible Gels, Ionomers, and Rubbery Polymers</b></p> <p><i>Chair:</i> Marco Aurelio De Paoli</p>	

**PLN-12** – 27/10

**15:00 - 15:50**

**Speaker: Jaime C. Grunlan**

*Texas A&M University (USA)*

**Title: Water-Based Multifunctional Nanocoatings from Polyelectrolyte Complexation: Opportunities & Challenges**

*Chair: Cesar Liberato Petzhold*



**PLN-13** – 28/10

**08:30 - 09:20**

**Speaker: Amin Shavandi**

*Université Libre Bruxelles (Belgium)*

**Title: Water-Based Multifunctional Nanocoatings from Polyelectrolyte Complexation: Opportunities & Challenges**

*Chair: Denise Freitas Siqueira Petri*



**PLN-14** – 28/10

**09:30 - 10:20**

**Speaker: José António Colaço Gomes Covas**

*University of Minho (Portugal)*

**Title: In-process characterization of polymer nanocomposites during extrusion**

*Chair: Kássio André Lacerda*



**PLN-15** – 28/10

**10:30 - 11:20**

**Speaker: Patrícia Santiago de Oliveira Patrício**

*Cefet-MG (Brazil)*

**Title: Integrated technologies using polymers that contribute to the reduction of waste from different industrial sectors**

*Chair: Edvani Curti Muniz*



## ORAL PRESENTATIONS

**SUNDAY, OCTOBER 24**

**SESSION CAM (19:30 - 21:00) -- ROOM 1**

19:30 **CAM.1**

**OPENING CEREMONY, AWARDS AND CULTURAL EVENT**

Katia Monteiro Novack<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto

**MONDAY, OCTOBER 25**

**SESSION PS\_1 (08:30 - 09:20) - Polymer physics and characterization - ROOM 1**

08:30 **PS\_1.1**

**APPLICATION OF THE SSA THERMAL FRACTIONATION TECHNIQUE TO THERMOPLASTIC POLYURETHANES AND RECYCLED POLYOLEFIN BLENDS**

Alejandro J. Müller<sup>1</sup>; <sup>1</sup>University of the Basque Country

**SESSION PS\_2 (09:30 - 10:20) - Biomedical applications of polymers - ROOM 6**

09:30 **PS\_2.1**

**POLYSACCHARIDES AS PLATFORMS FOR NEW FUNCTIONAL MATERIALS**

Denise Freitas Siqueira Petri<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**SESSION 25M\_01 (10:30 - 12:10) - Environmental issues associated with polymers - ROOM 1**

10:30 **25M\_01.1**

**THERMOPLASTIC STARCH - UREA, A FEASIBLE ALTERNATIVE IN ORDER TO STORAGE NITROGEN AS FERTILIZER**

Daniel de Souza Gamarano<sup>1</sup>, Iaci Miranda Pereira<sup>2</sup>, Artur Caron Mottin<sup>3</sup>, Eliane Ayres<sup>1</sup>; <sup>1</sup>Universidade do Estado de Minas Gerais, <sup>2</sup>CENTRO TECNOLÓGICO DO EXÉRCITO, <sup>3</sup>Centro Federal de Educação Tecnológica de Minas Gerais

10:50 **25M\_01.2**

**INFLUENCE OF THE INCORPORATION OF CRYSTAL POLYSTYRENE IN EXPANDED POLYSTYRENE MICROFIBERS IN THE REMOVAL OF OIL IN EMULSION**

Laura Valálio de Carvalho<sup>1</sup>, Juliano Elvis Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

11:10 **25M\_01.3**

**PHOTOPOLYMERIZATION OF LIMONENE**

Edison Rogério Marques de Oliveira<sup>1</sup>, Roniérik Pioli Vieira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

11:30 25M\_01.4

**POLYPROPYLENE COMPOSITE REINFORCED WITH UNSMOKEDED CIGARETTE BUTTS: INFLUENCE OF HYDROGEN PEROXIDE FIBER TREATMENT ON FLEXURAL PROPERTIES**

Ivan Moroz<sup>1</sup>, Milena Chanes de Souza<sup>1</sup>, Giovana Roberta Francisco Bronzato<sup>1</sup>, Lucas Brito<sup>1</sup>, Murilo G. Zanzini<sup>1</sup>, Ivana Cesarino<sup>1</sup>, Alcides Lopes Leão<sup>1</sup>; <sup>1</sup>*Universidade Estadual Paulista*

11:50 25M\_01.5

**BIODEGRADATION AND RELEASE CORRELATIONS IN SOIL/WATER MEDIUM OF THE POLYMER-FERTILIZER-BASED SYSTEM**

Luciana Moretti Angelo<sup>1</sup>, Débora França<sup>2</sup>, Roselena Faez<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Carlos - Campus Araras*, <sup>2</sup>*Universidade de São Paulo*

**SESSION 25M\_04 (10:30 - 12:10) - Polymer nanostructures and nanocomposites - ROOM 2**

10:30 25M\_04.1

**EVALUATION OF SHAPE MEMORY IN PLA/TPU FILAMENTS WITH CARBON NANOTUBES AND GRAPHENE NANOPLAATELETS**

Nayara Koba de Moura<sup>1</sup>, Guilherme Ferreira de Melo Morgado<sup>1</sup>, Eduardo Ferreira Martins<sup>1</sup>, Camila Alves Escanio<sup>2</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*, <sup>2</sup>*Instituto Nacional de Pesquisas Espaciais*

10:50 25M\_04.2

**EVALUATION OF THE MECHANICAL AND ELECTROMAGNETIC SHIELDING PROPERTIES PC/ABS BLENDS-BASED GRAPHENE NANOPLAATES NANOCOMPOSITES**

Erick Gabriel Ribeiro dos Anjos<sup>1</sup>, Newton Adriano dos Santos Gomes<sup>1</sup>, Juliano Marini<sup>2</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*, <sup>2</sup>*Univerdade Federal de São Carlos*

11:10 25M\_04.3

**IMPROVING THE DISPERSION OF MWCNT IN PP USING CONTROLLED EXTENSION FLOWS IN EXTRUSION PROCESSING**

Marcel Andrey de Goes<sup>1</sup>, João Santos<sup>2</sup>, Benjamim Melo Carvalho<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Ponta Grossa*, <sup>2</sup>*Centro Federal de Educação Tecnológica de Minas Gerais*

11:30 25M\_04.4

**EVALUATION OF ANTIMICROBIAL ACTIVITY OF PLA POROUS MEMBRANES CONTAINING BG45S5 AND MWCNT**

Nayara Koba de Moura<sup>1</sup>, Eduardo Ferreira Martins<sup>1</sup>, Rodrigo Luiz Moraes Saldanha Oliveira<sup>1</sup>, João Paulo Barros Machado<sup>2</sup>, Idália Aparecida Waltrick de Brito Siqueira<sup>1</sup>, Elisa Esposito<sup>1</sup>, Fábio Roberto Passador<sup>1</sup>, Eliandra de Sousa Trichês<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*, <sup>2</sup>*Instituto Nacional de Pesquisas Espaciais*

11:50 25M\_04.5

**BIOSYNTHESIS OF SILVER NANOPARTICLES USING ONION EXTRACT**

Letícia Maria de Oliveira<sup>1,2</sup>, Hernane da Silva Barud<sup>1</sup>, Diógenes dos Santos Dias<sup>3</sup>; <sup>1</sup>*Centro Universitário de Araraquara*, <sup>2</sup>*Fundação Universidade Federal do Vale do São Francisco*, <sup>3</sup>*Universidade Estadual Paulista*

**SESSION 25M\_05 (10:30 - 12:10) - Blends, composites and polymer networks - ROOM 3**

10:30 25M\_05.1

**POLYPINENE AND CHITOSAN BLENDS FOR FUNCTIONAL BIO-BASED FILM PRODUCTION**

Plínio Ribeiro Rodrigues<sup>1</sup>, Luís Marangoni Júnior<sup>1</sup>, Rosa Maria Vercelino Alves<sup>2</sup>, Roniérik Pioli Vieira<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*, <sup>2</sup>*Instituto de Tecnologia de Alimentos*

10:50 25M\_05.2

**TRANSPARENT WOOD COMPOSITES FABRICATED BY IMPREGNATION OF EPOXY RESIN INTO JUPATI PETIOLE (RAPHIA TAEDIGERA)**

Lauro Arthur Farias Paiva Cohen<sup>1</sup>, Elisa Batista Conrado Martins<sup>1</sup>, MERCES COELHO DA SILVA<sup>2</sup>, Eliane Ayres<sup>1</sup>; <sup>1</sup>*Universidade do Estado de Minas Gerais*, <sup>2</sup>*Universidade Federal de Itajubá*

11:10 25M\_05.3

**EFFECT OF ADDITION OF GLASSY CARBON AND GRAPHENE NANOPLAQUELETS ON MECHANICAL PROPERTIES OF POLY (ACID LACTIC)/POLY (3-HYDROXYVALERATE-CO-3-HYDROXYVALERATE) BLEND**

Isabela Cesar Oyama<sup>1</sup>, Gabriel Portilho Monteiro de Souza<sup>1</sup>, Erick Gabriel Ribeiro dos Anjos<sup>1,2</sup>, Guilherme Ferreira de Melo Morgado<sup>1</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*, <sup>2</sup>*Universidade Federal de São Carlos*

11:30 25M\_05.4

**COMPARISON STUDY OF CALCINED KAOLIN UNTREATED AND TREATED WITH SILANE FOR POLYAMIDE 6,6**

Felipe Fantatho<sup>1</sup>, Gabriele Polezi<sup>2</sup>, Flavia Lima Souza<sup>2</sup>; <sup>1</sup>*Imerys Campinas*, <sup>2</sup>*Imerys*

11:50 25M\_05.5

**STUDY OF O<sub>2</sub> TRANSMISSION RATE IN BIIR RUBBER COMPOUND FOR DIFFERENT ASPECT RATIO AND PARTICLE SIZE KAOLINS**

Felipe Fantatho<sup>1</sup>, Flavia Lima Souza<sup>2</sup>, Gabriele Polezi<sup>2</sup>; <sup>1</sup>*Imerys Campinas*, <sup>2</sup>*Imerys*

**SESSION 25M\_06 (10:30 - 12:10) - Polymerization reactions and polymer chemistry - ROOM 4**

10:30 25M\_06.1

**THE INFLUENCE OF CURING AGENT RATIO ON EPOXY RESIN BY USING FTIR SPECTROSCOPY**

Lincoln Araujo Teixeira<sup>1</sup>, Vilson Dalla Libera Junior<sup>1</sup>, Sandra Luz<sup>1</sup>; <sup>1</sup>*Universidade de Brasília*

10:50 25M\_06.2

**PHOTO-OMRP OF BUTYL ACRYLATE USING NEW NI(II) COMPLEXES COORDINATED TO NON-SYMMETRIC AND SYMMETRIC SCHIFF BASES**

Naralyne Martins Pesqueira<sup>1</sup>, Camila Bignardi<sup>1</sup>, Larissa Fazioni de Oliveira<sup>1</sup>, Valdemiro Pereira de Carvalho Júnior<sup>1</sup>, Beatriz Eleutério Goi<sup>1</sup>; <sup>1</sup>*Universidade Estadual Paulista "Júlio de Mesquita Filho"- Faculdade de Ciências e Tecnologia*

11:10 25M\_06.3

**ORGANOCATALYZED ATOM TRANSFER RADICAL POLYMERIZATION OF B-PINENE: SYNTHESIS AND CHARACTERIZATION**

Plínio Ribeiro Rodrigues<sup>1</sup>, Sayen de Ávila Gonçalves<sup>1</sup>, Roniérik Pioli Vieira<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*

11:30 25M\_06.4

**PHOTOCHEMICAL NITRIC OXIDE RELEASE FROM S-NITROSOTHIOL-FUNCTIONALIZED CHITOSAN**

Herllan Vieira de Almeida<sup>1</sup>, Daniele Mayara Catori<sup>1</sup>, Laura Caetano Escobar da Silva<sup>1</sup>, Marcelo Ganzarolli De Oliveira<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*

11:50 25M\_06.5

**A GREEN APPROACH TO OBTAIN CROSSLINKED STARCH THROUGH REACTION WITH TARTARIC ACID BY REACTIVE EXTRUSION**

Beatriz Marjorie Marim<sup>1</sup>, Jéssica Fernanda Pereira<sup>1</sup>, Suzana Mali<sup>1</sup>; <sup>1</sup>*Universidade estadual de Londrina*

**SESSION 25M\_08 (10:30 - 12:10) - Special polymer applications - ROOM 5**

10:30 25M\_08.1

**DESIGN OF EXPERIMENTS AND REGRESSION ANALYSIS FOR A COMPOSITIONAL STUDY OF EVA FOAMS**

Murilo Lauer Sanson<sup>1</sup>, Nei Sebastião Domingues Junior<sup>1</sup>, Daniela Eduarda Schneider<sup>1</sup>, Juliani Cappra da Silva<sup>1</sup>; <sup>1</sup>*Braskem S.A.*

10:50 25M\_08.2

**EVALUATION OF PEDOT:PSS HYBRID CAPACITOR WITH TITANIUM AND ALUMINUM COMPOSITE DIELECTRIC**

Paola Dornel da Silva<sup>1</sup>, Alvaro Meneguzzi<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*

11:10 25M\_08.3

**THE FUNCTIONALIZATION OF CARBOHYDRATE POLYMERS WITH B-CYCLODEXTRIN ENHANCES BINDING OF MONOPHENOLS**

Roberto Aguado Garcia<sup>1</sup>, Dina Murtinho<sup>1</sup>, Artur José Monteiro Valente<sup>1</sup>; <sup>1</sup>*Universidade de Coimbra*

11:30 25M\_08.4

**BIOBASED-MATRICES FOR NUTRIENTS SUSTAINABLE COATINGS**

Débora França<sup>1</sup>, Luciana Moretti Angelo<sup>2</sup>, Claudinei Fonseca Souza<sup>2</sup>, Roselena Faez<sup>2</sup>; <sup>1</sup>*Universidade de São Paulo*, <sup>2</sup>*Universidade Federal de São Carlos - Campus Araras*

11:50 25M\_08.5

**APPLICABILITY OF POLYMERIC MEMBRANES IN THE BIODIESEL SEPARATION AND PURIFICATION**

Sirlei Marques Paschoal<sup>1</sup>, Fernanda Lini Seixas<sup>1</sup>, Leila Denise Fiorentin Ferrari<sup>2</sup>, Juliana Guerra Sgorlon<sup>1</sup>, Maria Carolina Sérgi Gomes<sup>1</sup>; <sup>1</sup>*Universidade Tecnológica Federal do Paraná*, <sup>2</sup>*Universidade Estadual do Oeste do Paraná*

**SESSION PS\_3 (14:00 - 14:50) - Polymer nanostructures and nanocomposites - ROOM 1**

14:00 PS\_3.1

**POLYMER SELF-ASSEMBLY BASED FUNCTIONAL MATERIALS**

Uli Wiesner<sup>1</sup>; <sup>1</sup>*Cornell University*

**SESSION PS\_4 (15:00 - 15:50) - Polymer nanostructures and nanocomposites - ROOM 5**

15:00 PS\_4.1

**DESIGN OF POLYMER-DERIVED NANOPARTICLES, NANORODS AND POROUS MICROPARTICLES**

Sadhan C. Jana<sup>1</sup>; <sup>1</sup>University of Akron

**SESSION 25A\_04 (16:00 - 17:00) - Polymer nanostructures and nanocomposites - ROOM 1**

16:00 25A\_04.1

**SYNTHESIS AND CHARACTERIZATION OF HEPTAKIS-AMINOCYCLODEXTRIN NANOSPONGES**

Gianluca Utzeri<sup>1</sup>, Dina Murtinho<sup>1</sup>, Artur José Monteiro Valente<sup>1</sup>; <sup>1</sup>Universidade de Coimbra

16:20 25A\_04.2

**SYNERGISTIC EFFECT OF ADDING GRAPHENE NANOPLATES AND CARBON NANOTUBES IN PC/ABS BLENDS**

Erick Gabriel Ribeiro dos Anjos<sup>1,2</sup>, Newton Adriano dos Santos Gomes<sup>1</sup>, Andreza de Moura Cardoso<sup>3</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Aeronáutica e Espaço

16:40 25A\_04.3

**SYNTHESIS OF CHITOSAN-BASED QUANTUM DOTS: AN ANALYSIS OF THE SYNTHESIS PARAMETERS**

Bruno Peixoto de Oliveira<sup>1</sup>, Nathália Uchôa de Castro Bessa<sup>1</sup>, Joice Farias do Nascimento<sup>1</sup>, Flávia Oliveira Monteiro da Silva Abreu<sup>1</sup>; <sup>1</sup>Universidade Estadual do Ceará

**SESSION 25A\_02 (16:00 - 17:00) - Processing and printing of polymers - ROOM 2**

16:00 25A\_02.1

**INFLUENCE OF DIFFERENT KNEADING BLOCKS ELEMENTS ON POLYMER MIXTURE DISPERSION DURING TWIN-SCREW EXTRUSION**

Felipe Oliveira Campos Bernardo<sup>1</sup>, Sebastião Vicente Canevarolo Jr.<sup>1</sup>, José António Colaço Gomes Covas<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade do Minho

16:20 25A\_02.2

**IMPROVING THE DISPERSION OF GRAPHITE IN PP USING CONTROLLED EXTENSION FLOWS IN EXTRUSION PROCESSING**

Marcel Andrey de Goes<sup>1</sup>, João Santos<sup>2</sup>, Benjamim Melo Carvalho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Centro Federal de Educação Tecnológica de Minas Gerais

16:40 25A\_02.3

**FEASIBILITY OF USING POLYMER BLENDED FILAMENTS FOR FUSED DEPOSITION MODELING 3D PRINTING**

Kasitpong Thanawuth<sup>1</sup>; <sup>1</sup>Silpakorn University

## SESSION 25A\_03 (16:00 - 17:00) - Biomedical applications of polymers - ROOM 3

16:00 25A\_03.1

### WEARABLE DEVICE BASED ON ELECTROSPUN GELATIN/POLYCAPROLACTONE NANOFIBERS LOADED WITH DICLOFENAC POTASSIUM AIMING A POTENTIAL ANTI-INFLAMMATORY ACTION

Gabriella Onila do Nascimento Soares<sup>1</sup>, Flávia Alves Lima<sup>1</sup>, Gisele Assis Castro Goulart<sup>1</sup>, Rodrigo Lambert Oréfice<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

16:20 25A\_03.2

### EVALUATION OF THE DISSOLUTION PROFILE AND TRYPANOCIDAL ACTIVITY OF BENZNIDAZOLE INCORPORATED IN PEG 4000 AND ITS DERIVATIVES

Lucas Resende Dutra Sousa<sup>1</sup>, Dayana Ferreira Rocha<sup>1</sup>, Tatiane Roquete Amparo<sup>1</sup>, Orlando David Henrique dos Santos<sup>1</sup>, Janaína Brandão Seibert<sup>2</sup>, Luciano Rodrigues Pereira<sup>2</sup>, Paula Melo de Abreu Vieira<sup>1</sup>, Cláudia Martins Carneiro<sup>1</sup>, Policarpo Ademar Sales Júnior<sup>3</sup>, Silvane Maria Fonseca Murta<sup>3</sup>, Katia Monteiro Novack<sup>1</sup>, Viviane Martins Rebello dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Fundação Oswaldo Cruz

16:40 25A\_03.3

### ORODISPERSIBLE FILMS CONTAINING CHLORHEXIDINE DIGLUCONATE: PHYSICAL CHARACTERIZATION AND MICROBIOLOGICAL IN VITRO ANALYSIS

Geanne Aparecida de Paula<sup>1</sup>, Renato Almeida Brambati<sup>1</sup>, Alice Cristina Morgado Cassa<sup>1</sup>, Kamila Arêas Bastos<sup>1</sup>, Juliana Alves Resende<sup>1</sup>, Janaina Cecília Oliveira Villanova<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo

## SESSION 25A\_07 (16:00 - 17:00) - Polymer physics and characterization - ROOM 4

16:00 25A\_07.1

### DYNAMIC WETTING BEHAVIOR OF HDPE AND PA 12 IN CONTACT WITH WATER

Ayrton Alef Castanheira Pereira<sup>1</sup>, Yoná Basilio Zanirath<sup>2</sup>, José Roberto Moraes d'Almeida<sup>1,2</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade do Estado do Rio de Janeiro

16:20 25A\_07.2

### EVALUATION OF THE DEGRADATION PROCESS OF POLYETHYLENE BY DILUTE SOLUTION VISCOSITY

João Augusto Osório Brandão<sup>1</sup>, Edson Francisquetti<sup>2</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

16:40 25A\_07.3

### FULLY AUTOMATED INSTRUMENT FOR SOLUTION VISCOSITY IN POLYMERIC MATERIALS

Pilar del Hierro<sup>1</sup>, Olivier Boyron<sup>2</sup>, Alberto Ortín Sebastián<sup>1</sup>; <sup>1</sup>Polymer Char, <sup>2</sup>Université de Lyon

**TUESDAY, OCTOBER 26**

## SESSION PS\_5 (08:30 - 09:20) - Processing and printing of polymers - ROOM 1

08:30 PS\_5.1

### 3D PRINTING OF POLYMERS INTO BIOLOGICALLY-INSPIRED STRUCTURES

André Studart<sup>1</sup>; <sup>1</sup>Swiss Federal Institute of Technology / Eidgenössische Technische Hochschule ETH Zürich

**SESSION PS\_6 (09:30 - 10:20) - Processing and printing of polymers - ROOM 5**

09:30 PS\_6.1

**ELECTROSPINNING: AN OLD TECHNIQUE FOR NEW APPLICATIONS**Rosario Elida Suman Bretas<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos**SESSION 26M-05 (10:30 - 12:10) - Blends, composites and polymer networks - ROOM 1**

10:30 26M-05.1

**REINFORCEMENT OF SOY PROTEIN-ALGINATE-BASED MATERIALS THROUGH CALCIUM CHLORIDE ABSORPTION**Estefanía Álvarez-Castillo<sup>1</sup>; <sup>1</sup>University of Seville

10:50 26M-05.2

**USE OF CARBON BLACK AND ROCKWOOL BASED FILLER SYSTEM IN FLUORELASTOMERS**Carolina Moutinho Ferreira<sup>1</sup>, Leila Lea Yuan Visconte<sup>1</sup>, Cristiane Xavier da Silva Campos<sup>2</sup>, Thiago Castro Lopes<sup>1</sup>, Ana Maria Furtado de Sousa<sup>3</sup>, Ana Lúcia Nazareth da Silva<sup>4</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloísa Mano, <sup>2</sup>Centro de Pesquisas Leopoldo Américo Miguez de Mello, <sup>3</sup>Universidade do Estado do Rio de Janeiro, <sup>4</sup>Universidade Federal do Rio de Janeiro

11:10 26M-05.3

**STUDY OF MULTI-SCALE PHASE SEPARATION AND VISCOELASTIC PROPERTIES IN A SEMI COMPATIBLE RESIN BLENDED ELASTOMER SYSTEM**Robins Kumar<sup>1,2</sup>, Laurent Chazeau<sup>1,3,4</sup>, Florent Dalmas<sup>1,3,4</sup>, Nicolas Malicki<sup>2</sup>, Catherine Gauthier<sup>2</sup>, Regis Schach<sup>2</sup>; <sup>1</sup>Institut National des Sciences Appliquées de Lyon, <sup>2</sup>Manufacture française des pneumatiques MICHELIN, Clermont-Ferrand, <sup>3</sup>University of Lyon, <sup>4</sup>Centre national de la recherche scientifique

11:30 26M-05.4

**EFFECT AND ACTIVE POTENTIAL OF JATOBÁ (*HYMENAEA STIGONOCARPA*) PULP EXTRACT ON SODIUM ALGINATE FILM**Gisele Fernanda Alves da Silva<sup>1</sup>, Viviane Patrícia Romani<sup>2</sup>, Vilásia Guimarães Martins<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande, <sup>2</sup>Universidade Estadual do Centro Oeste

11:50 26M-05.5

**PHYSICAL FEATURES OF PINE WOODS TREATED BY IN SITU POLYMERIZATION WITH THREE DIFFERENT MONOMERS**Andrey Pereira Acosta<sup>1</sup>, Kelvin Techera Barbosa<sup>2</sup>, André Luiz Missio<sup>2</sup>, Rafael Beltrame<sup>2</sup>, Rafael de Avila Delucis<sup>2</sup>, Darci Alberto Gatto<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Pelotas**SESSION 26M\_02 (10:30 - 12:10) - Processing and printing of polymers - ROOM 2**

10:30 26M\_02.1

**INFLUENCE OF PROCESSING TEMPERATURE ON THE COLOR TONALITY OF PVC COMPOUNDS**Mara Zeni Andrade<sup>1,2</sup>, Marcio R.C.Silveira<sup>1</sup>, Ana Maria Coulon Grisa<sup>3</sup>, Edson Francisquetti<sup>1</sup>, Rosmari N.Brandalise<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>2</sup>Instituto Federal de Educação ciencia e tecnologia, <sup>3</sup>Universidade de Caxias do Sul

10:50 26M\_02.2

### CELLULOSE-BASED BIOMATERIALS FOR ADDITIVE MANUFACTURING

Beatriz Sakamoto Arsuffi<sup>1</sup>, Silvia Titotto<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

11:10 26M\_02.3

### LOOKING FOR A CONDUCTIVE POLYANILINE/ACRYLIC FORMULATION FOR DLP: PRINTABILITY VERSUS ELECTRICAL CONDUCTIVITY

Goretti Arias Ferreiro<sup>1</sup>; <sup>1</sup>Universidade da Coruña

11:30 26M\_02.4

### INJECTION OVERMOLDED POLYMER-METAL HYBRID STRUCTURES

Leonardo Bresciani Canto<sup>1</sup>, Gean Henrique Marcatto de Oliveira<sup>1</sup>, Sergio de Traglia Amancio-Filho<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Graz University of Technology

11:50 26M\_02.5

### DEGRADATION'S STUDY OF COMMERCIAL RESINS USED IN GRAPHIC INKS

Ana Beatriz Silva de Oliveira<sup>1</sup>, Alex da Silva Sirqueira<sup>1</sup>, Jonathan da Silva Santana<sup>1</sup>, Patricia Reis Pinto<sup>1</sup>; <sup>1</sup>Centro Universitário Estadual da Zona Oeste

## SESSION 26M\_03 (10:30 - 12:10) - Biomedical applications of polymers - ROOM 3

10:30 26M\_03.1

### 3D PRINTED SCAFFOLDS COMPOSED OF PLA-TCP- SIO<sub>2</sub> AND PLA-TCP- MGO FOR BONE TISSUE ENGINEERING

Samarah Vargas Harb<sup>1</sup>, Cesar Augusto Gonçalves Beatrice<sup>1</sup>, Eduardo Henrique Backes<sup>1</sup>, Lidiane Cristina Costa<sup>1</sup>, Luiz Antonio Pessan<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

10:50 26M\_03.2

### INCORPORATION OF ELECTROSPUN NANOFIBER MATS TO IMPROVE MECHANICAL PROPERTIES OF HYDROGELS BASED ON METHACRYLOYL GELATIN

Catarina Paschoalini Lehman<sup>1</sup>, Sarah Oliveira Lamas de Souza<sup>1</sup>, Sérgio Mendes de Oliveira<sup>1</sup>, Luciana Maria Silva<sup>2</sup>, Rodrigo Lambert Oréfice<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Fundação Ezequiel Dias

11:10 26M\_03.3

### Biodegradation behavior of PLA samples obtained by 3D printing and by compression molding

Graziela Lisboa Gonzaga<sup>1</sup>, Adriana Martinelli Catelli Souza<sup>1</sup>, Alex Sandro Babetto<sup>1</sup>; <sup>1</sup>Centro Universitário da Fundação Educacional Inaciana Pe Sabóia de Medeiros

11:30 26M\_03.4

### BIOACTIVITY EVALUATION OF NATURAL AMORPHOUS SILICA FIBERS/PEEK COMPOSITE PRODUCED THROUGH MICRO-INJECTION MOULDING FOR IMPLANT DENTISTRY APPLICATIONS

Ana Paula Marzagão Casadei<sup>1</sup>, Renata Scheeren Brum<sup>1</sup>, Douglas Fabris<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Antonio Pedro Novaes de Oliveira<sup>1</sup>, César Augusto Magalhães Benfatti<sup>1</sup>, Claudia A. M. Volpato<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**SESSION 26M\_07 (10:30 - 12:10) - Polymer physics and characterization - ROOM 4**

10:30 26M\_07.1

**STUDY OF MECHANICAL AND CHEMICAL PROPERTIES STABILITY OF INNER TUBES EXPOSED TO GAMMA RADIATION**

Sandra Regina Scagliusi Martin<sup>1</sup>, Elizabeth Carvalho Leite Cardoso<sup>2</sup>, Fabio José Esper<sup>1</sup>, Ademar Benévolo Lugão<sup>2</sup>, Hélio Wiebeck<sup>1</sup>; <sup>1</sup>*Universidade de São Paulo*, <sup>2</sup>*Instituto de Pesquisas Energéticas e Nucleares*

10:50 26M\_07.2

**INTRODUCTION TO FOAMABILITY STUDY OF A LDPE SUBJECTED TO GAMMA RADIATION**

Elizabeth Carvalho Leite Cardoso<sup>1</sup>, Sandra Regina Scagliusi Martin<sup>2</sup>, Duclerc Fernandes Parra<sup>1</sup>, Ademar Benévolo Lugão<sup>1</sup>; <sup>1</sup>*Instituto de Pesquisas Energéticas e Nucleares*, <sup>2</sup>*Universidade de São Paulo*

11:10 26M\_07.3

**DRESSINGS PRODUCED FROM PVA NANOFIBERS CONTAINING CHLORAMPHENICOL**

Gabriel Nardi Fraga<sup>1</sup>, Alessandra Ruyz Medeiros<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>; <sup>1</sup>*Universidade Estadual do Oeste do Paraná*

11:30 26M\_07.4

**FORMIC ACID ACTING AS A STRESS CRACKING AGENT IN POLYAMIDE 6**

Rafael Ramos de Melo<sup>1</sup>, Ermeson David dos Santos Silva<sup>1</sup>, Edvânia Trajano Teófilo<sup>1</sup>; <sup>1</sup>*Universidade Federal do Cariri*

11:50 26M\_07.5

**PREDICTION OF THERMODYNAMIC BEHAVIOR AND ELASTICITY MODULE FOR THERMOPLASTIC POLYURETHANES BASED ON SOLUBILITY PARAMETER**

Lucas Paim da Silva<sup>1</sup>, Cristofor Portugal Oliveira da Silva<sup>1</sup>, Lucas Dall Agnol<sup>2</sup>, Otávio Bianchi<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*, <sup>2</sup>*Universidade de Caxias do Sul*

**SESSION TS\_2 (10:30 - 12:30) - Innovation and management involving polymers and topics in education - ROOM 6**

10:30 TS\_2.1

**DO PELLET À PEÇA - A IMPORTÂNCIA DO BOM PROCESSAMENTO DE POLÍMEROS!**

Ricardo da Silva Souza<sup>1</sup>; <sup>1</sup>*Reoterm*

10:50 TS\_2.2

**VANTAGENS DO SEC-MALS E FFF-MALS NA CARACTERIZAÇÃO AVANÇADA DE POLÍMEROS E BIOPOLÍMEROS**

Guilherme Nunes<sup>1</sup>; <sup>1</sup>*Flowscience*

11:30 TS\_2.3

**USO DO REÔMETRO MCR 702E DA ANTON PAAR PARA ANÁLISES TERMODINÂMICO-MECÂNICAS E REOLOGIA DE PÓS**

Jorge Maia<sup>1</sup>; <sup>1</sup>*Anton Paar*

11:50 TS\_2.4

**DETERMINAÇÃO DAS PROPRIEDADES DE TRAÇÃO ISO 527-2019**

Monique Naval<sup>1</sup>; <sup>1</sup>*ZwickRoell Ltda*

## SESSION PS\_7 (14:00 - 14:50) - Special polymer applications - ROOM 1

14:00 PS\_7.1

### RECENT ADVANCES IN ANTIFOULING TECHNOLOGIES

Anthony B. Brennan<sup>1</sup>; <sup>1</sup>*University of Florida*

## SESSION PS\_8 (15:00 - 15:50) - Special polymer applications - ROOM 6

15:00 PS\_8.1

### ADVANCED POLYMER-BASED ELECTROMAGNETIC SHIELDS

Mohammad Arjmand<sup>1</sup>; <sup>1</sup>*University of British Columbia*

## SESSION 26A\_04 (16:00 - 17:00) - Polymer nanostructures and nanocomposites - ROOM 1

16:00 26A\_04.1

### THERMAL CHARACTERIZATION OF PHBV NANOCOMPOSITES

Maria Eduarda Araújo Ribeiro<sup>1</sup>, Rubén Sánchez Rodríguez<sup>1</sup>; <sup>1</sup>*Universidade Estadual do Norte Fluminense Darcy Ribeiro*

16:20 26A\_04.2

### EFFECTS OF SILICA NANOFIBERS AND MMT CLAY ON MECHANICAL PROPERTIES OF POLYAMIDE 6: A COMPARATIVE STUDY

Gabriel Lucena de Oliveira<sup>1</sup>, Radamés da Silva Teixeira<sup>1</sup>, Ermeson David dos Santos Silva<sup>1</sup>, Rosiane Maria da Costa Farias<sup>2</sup>, Edvânia Trajano Teófilo<sup>1</sup>; <sup>1</sup>*Universidade Federal do Cariri*, <sup>2</sup>*Universidade Federal de Campina Grande*

16:40 26A\_04.3

### EFFECTS OF TEST PARAMETERS ON TRIBOLOGICAL AND HARDNESS PROPERTIES OF UHMWPE / REDUCED GRAPHENE OXIDE NANOCOMPOSITES

Pedro Henrique Vilela Soares<sup>1</sup>, Leice Gonçalves Amurin<sup>2</sup>, Aline Bruna da Silva<sup>1</sup>; <sup>1</sup>*Centro Federal de Educação Tecnológica de Minas Gerais*, <sup>2</sup>*Universidade Federal de Minas Gerais*

## SESSION 26A\_05 (16:00 - 17:00) - Blends, composites and polymer networks - ROOM 2

16:00 26A\_05.1

### DECAY RESISTANCE OF PINE WOODS MODIFIED WITH THREE DIFFERENT TREATMENTS

Kelvin Techera Barbosa<sup>1</sup>, Andrey Pereira Acosta<sup>2</sup>, Rafael Beltrame<sup>1</sup>, André Luiz Missio<sup>1</sup>, Rafael de Avila Delucis<sup>1</sup>, Darci Alberto Gatto<sup>1</sup>; <sup>1</sup>*Universidade Federal de Pelotas*, <sup>2</sup>*Universidade Federal do Rio Grande do Sul*

16:20 26A\_05.2

### INFLUENCE OF PH ON THE HYGROSCOPICITY OF BLENDS OF GELATIN AND POTATO SKIN STARCH

Samara Dias Osorio<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*

16:40 26A\_05.3

**DEVELOPMENT AND TESTING OF DEVICES FOR CONDUCTING DYNAMIC MODE-I AND MODE-II INTERLAMINAR FRACTURE TESTS**Thiago Takumi Tan<sup>1</sup>, Fernando Guimaraes Vianna<sup>1</sup>, WANDERLEY F AMORIM JR<sup>1</sup>; <sup>1</sup>*Universidade Federal de Campina Grande***SESSION 26A\_08 (16:00 - 17:00) - Special polymer applications - ROOM 3**

16:00 26A\_08.1

**CHARACTERIZATION OF MINERAL FILLERS FOR EPOXY RESINS**Gabriel Rangel de Fraga Seimetz<sup>1</sup>, Letícia Andreolli Dias<sup>1</sup>, Carina Mariane Stoltz<sup>1</sup>, Daiana Cristina Metz Arnold<sup>1</sup>, Fabricio Celso<sup>1</sup>, Carlos Leonardo Pandolfo Carone<sup>1</sup>, Adriana Teresinha da Silva Dutra<sup>1</sup>, Luciano de Oliveira<sup>2</sup>, Kelvyane Souza<sup>2</sup>; <sup>1</sup>*Universidade Feevale*, <sup>2</sup>*VALE S.A.*

16:40 26A\_08.2

**BIODEGRADABLE DEVICE BASED ON STARCH AND GRAPHITE (TPS-GR) WITH POTENTIAL FOR APPLICATION IN ELECTROCHEMICAL SENSING**Amanda de Sousa Martinez de Freitas<sup>1</sup>, Cristiane Carla Maciel<sup>2</sup>, Marystela Ferreira<sup>3</sup>, Ana Paula Lemes<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*, <sup>2</sup>*Universidade Estadual Paulista*, <sup>3</sup>*Universidade Federal de São Carlos - Campus Sorocaba***SESSION 26A\_06 (16:00 - 17:00) - Polymerization reactions and polymer chemistry - ROOM 4**

16:00 26A\_06.1

**STUDY OF THE SOLUBILITY OF NATURAL POLYMERS WITH DIFFERENT SOLVENTS**Ívia Maria Mendes<sup>1</sup>, Michaella Fialho<sup>1</sup>, Rosineide Miranda Leão<sup>2</sup>, Sandra Luz<sup>1</sup>; <sup>1</sup>*Universidade de Brasília*, <sup>2</sup>*Universidade Paulista*

16:20 26A\_06.2

**FULLY BIOBASED POLYMER FROM EPOXIDIZED CANOLA OIL AND POLY (LACTIC ACID) OLIGOMER**João Gabriel Passos Rodrigues<sup>1</sup>, Marcos Lopes Dias<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio de Janeiro*

16:40 26A\_06.3

**SYNTHESIS AND CHARACTERIZATION OF XANTHAN CARBOXYMETHYLATED GUM FOR LEAD ADSORPTION.**Micaele Ferreira Lima<sup>1</sup>, Maria Isabel Aragão Moura<sup>1</sup>, Wesithon Auday De Lima<sup>1</sup>, Flávia Oliveira Monteiro da Silva Abreu<sup>1</sup>; <sup>1</sup>*Universidade Estadual do Ceará***SESSION 26A\_01 (16:00 - 17:00) - Environmental issues associated with polymers - ROOM 5**

16:00 26A\_01.1

**SYNTHESIS OF THERMOPLASTIC STARCH AIMING AT IMPROVING YOUR MECHANICAL PROPERTIES**Gilberto Sérgio da Silva Ramos Junior<sup>1</sup>, Nathalia Maria Silva Malaquias<sup>1</sup>, Mailson Batista de Vilhena<sup>1</sup>, Edinaldo José de Sousa Cunha<sup>1</sup>; <sup>1</sup>*Universidade Federal do Pará*

16:20 26A\_01.2

**EDIBLE SCAFFOLDS WITH TUNABLE MECHANICS AND TOPOLOGY FOR CULTURED MEAT**

Amy Rowat<sup>1</sup>; <sup>1</sup>*University of California Los Angeles UCLA*

16:40 26A\_01.3

**DEVELOPMENT OF GREEN COMPOSITES OF RECYCLED POLYETHYLENE WITH THE ADDITION OF CELLULOSE OBTAINED FROM CIGARETTE FILTERS**

Maria Fernanda Romeu Lino de Souza<sup>1</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*

**WEDNESDAY, OCTOBER 27**

**SESSION PS\_9 (08:30 - 09:20) - Environmental issues associated with polymers - ROOM 1**

08:30 PS\_9.1

**INDUSTRIAL CITRUS WASTE: AN OPPORTUNITY TO OBTAIN BIODEGRADABLE AND FLEXIBLE COMPOUNDS**

Silvia Helena Prado Bettini<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Carlos*

**SESSION KN\_06 (10:30 - 11:00) - Polymerization reactions and polymer chemistry - ROOM 6**

10:30 KN\_06.1

**MICROENCAPSULATION: A WORLD OF POSSIBILITIES**

Maria Filomena Filipe Barreiro<sup>1</sup>; <sup>1</sup>*Instituto Politécnico de Bragança*

**SESSION KN\_01 (10:30 - 11:00) - Environmental issues associated with polymers - ROOM 7**

10:30 KN\_01.1

**PHB FROM METHANE USING METHANOTROPHIC BACTERIA – HIGH VOLUME WITH LOW LAND USE**

Dr. Maximilian Lackner<sup>1</sup>; <sup>1</sup>*Circe Biotechnologie GmbH*

**SESSION KN\_04 (10:30 - 11:00) - Polymer nanostructures and nanocomposites - ROOM 8**

10:30 KN\_04.1

**CIRCULAR ECONOMY: NEW OPPORTUNITIES IN SUSTAINABLE NANO MATERIALS**

SABU THOMAS<sup>1</sup>; <sup>1</sup>*Mahatma Gandhi University*

**SESSION KN\_05 (10:30 - 11:00) - Blends, composites and polymer networks - ROOM 9**

10:30 **KN\_05.1**

**BIOINSPIRED SURFACE ENGINEERING FOR MECHANOCHEMISM AND THERMAL MANAGEMENT**

Luyi Sun<sup>1</sup>; <sup>1</sup>Universidade de Connecticut

**SESSION KN\_08 (10:30 - 11:00) - Special polymer applications - ROOM 10**

10:30 **KN\_08.1**

**SCIENCE AND ENGINEERING OF POLYMERS APPLIED IN BIOLOGICAL SYSTEMS (YOUNG RESEARCHER AWARD WINNER)**

Juliano Elvis Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

**SESSION 27M\_04 (11:00 - 12:00) - Polymer nanostructures and nanocomposites - ROOM 1**

11:00 **27M\_04.1**

**INFLUENCE OF MULTI-LAYER GRAPHENE OXIDE DISTRIBUTION ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF POLY(ETHYLENE TEREPHTHALATE) NANOCOMPOSITES**

Guilhermino José Macedo Fechine<sup>1</sup>, Gabriel Matheus Pinto<sup>1</sup>, Giovanna da C. Silva<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie

11:20 **27M\_04.2**

**HYBRID CONDUCTIVE GELS USED AS FLEXIBLE ELECTRODES**

Joana de Barros Sacramento<sup>1</sup>, Rogério Ramos Sousa Júnior<sup>1</sup>, Danilo Justino Carastan<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

11:40 **27M\_04.3**

**EFFECT OF NANOSILICA, NANOCLAY OR GRAPHENE OXIDE AS REINFORCING AGENTS TO EPDM RUBBER**

Hugo Rafael Vallejo Angulo<sup>1</sup>, Abel Cardoso Gonzaga Neto<sup>1</sup>, Ticiane Sanches Valera<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**SESSION 27M\_05 (11:00 - 12:00) - Blends, composites and polymer networks - ROOM 2**

11:00 **27M\_05.1**

**DEVELOPMENT OF A BIAXIAL TENSILE DEVICE IN THE PLANE FOR MONOTONIC MECHANICAL TESTS AND CRUCIFORM SPECIMENS**

Walter Belarmino Filho<sup>1</sup>, Fernando Guimaraes Vianna<sup>1</sup>, Sergio Ricardo Soares Neves<sup>1</sup>, Fernando Almeida da Silva<sup>1</sup>, WANDERLEY FAMORIM JR<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande

11:20 **27M\_05.2**

**EFFECT OF INCORPORATION PROPOLIS EXTRACT IN BIOPOLYMERIC FILMS BASED ON PECTIN**

Giuliana Thalina Franco<sup>1</sup>, Henrique de Moraes Oliveira<sup>1</sup>, Caio Gomide Otoni<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos

11:40 27M\_05.3

### ON THE MODE-I FRACTURE TOUGHNESS OF FILAMENT WOUND CURVED LAMINATES

Artur Altermann Pollet<sup>1</sup>, Humberto Almeida Jr<sup>2</sup>, Sandro Campos Amico<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*, <sup>2</sup>*Queen's University Belfast*

## SESSION 27M\_08 (11:00 - 12:00) - Special polymer applications - ROOM 3

11:00 27M\_08.1

### NANOCELLULOSE COMPOSITES OF CONDUCTIVE POLYMERS FOR APPLICATION IN ELECTRONIC DEVICES AND ELECTROMAGNETIC SHIELDING

Paula Nunes Santos<sup>1</sup>, Mirella Cristina de Oliveira Silva<sup>1</sup>, LUIS CARLOS DE MORAIS<sup>2</sup>, Daniel Pasquini<sup>1</sup>; <sup>1</sup>*Universidade Federal de Uberlândia*, <sup>2</sup>*Universidade Federal do Triângulo Mineiro*

11:20 27M\_08.2

### SYNTHESIS AND CHARACTERIZATION OF POLYMERIC MEMBRANES WITH THE INCORPORATION OF ADSORBENT MATERIALS

Rafael Stival Mendes<sup>1</sup>, Maria Carolina Sérgi Gomes<sup>1</sup>, Sirlei Marques Paschoal<sup>1</sup>, Leila Denise Fiorentin Ferrari<sup>2</sup>, Fernanda Lini Seixas<sup>1</sup>; <sup>1</sup>*Universidade Tecnológica Federal do Paraná*, <sup>2</sup>*Universidade Estadual do Oeste do Paraná*

11:40 27M\_08.3

### POLYELECTROLYTE-BASED INK WITH RGB EMISSION PROPERTIES FOR SAFETY TAGGING

Artur José Monteiro Valente<sup>1</sup>, Beatriz Gomes<sup>1</sup>, Roberto Aguado Garcia<sup>1</sup>; <sup>1</sup>*Universidade de Coimbra*

## SESSION 27M\_06 (11:00 - 12:00) - Polymerization reactions and polymer chemistry - ROOM 4

11:00 27M\_06.1

### KINETICS AND MECHANISM OF LIPASE-CATALYSED POLYCONDENSATION OF GLYCEROL AND SEBACIC ACID

Giovanni Bortoloni Perin<sup>1</sup>, Maria Isabel Felisberti<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*

11:20 27M\_06.2

### KINETIC POLYMERIZATION OF CASTOR OIL POLYURETHANES BY A RHEOLOGICAL METHOD AND NEURAL NETWORK

Joziel Aparecido da Cruz<sup>1</sup>, Alexia Oberdiek<sup>1</sup>, Otávio Bianchi<sup>1</sup>, Sandro Campos Amico<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*

11:40 27M\_06.3

### LOW MOLAR MASS POLYMETHACRYLATES OBTAINED BY CHEMICAL RECYCLING OF ARTIFACTS POST USE ACRYLICS

Ticiane Vieira de Paula Souza<sup>1</sup>; <sup>1</sup>*Universidade Federal do Paraná*

**SESSION 27M\_01 (11:00 - 12:00) - Environmental issues associated with polymers - ROOM 5**

11:00 **27M\_01.1**

**FILTERING MEMBRANES OBTAINED FROM POLYVINYL ALCOHOL NANOFIBERS (PVA) AND CHITOSAN BY ELECTROSPINNING**

Camila Cassia Cordeiro<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>; <sup>1</sup>*Universidade Estadual do Oeste do Paraná*

11:20 **27M\_01.2**

**APPLICATION OF RICE HUSK AS FILLER IN POLIMERIC COMPOSITES: EVALUATION OF THE INFLUENCE OF PARTICLE SIZE**

Michel Vinicius Flach<sup>1</sup>, Eduarda Kraspenhar<sup>1</sup>, Fernando Dal Pont Morisso<sup>1</sup>, Carlos Leonardo Pandolfo Carone<sup>1</sup>, Vanusca Dalosto Jahno<sup>1</sup>; <sup>1</sup>*Universidade Feevale*

11:40 **27M\_01.3**

**USE OF WASTE COTTONSEED OIL IN THE SYNTHESIS OF POLYURETHANE COATINGS**

Renata Costa Silva Araújo<sup>1</sup>, Pedro Henrique Oliveira Barbosa Nogueira<sup>1</sup>, Janine Balmant Neiva<sup>1</sup>, Fernanda Basilio Obici Garcia<sup>1</sup>; <sup>1</sup>*Universidade Federal de Minas Gerais*

**SESSION PS\_11 (14:00 - 14:50) - Blends, composites and polymer networks - ROOM 1**

14:00 **PS\_11.1**

**COMPLEX POLYMERIC MATERIALS THROUGH SELF-ASSEMBLY INITIATED BY SMALL MOLECULES: REVERSIBLE GELS, IONOMERS, AND RUBBERY POLYMERS**

Richard G. Weiss<sup>1</sup>; <sup>1</sup>*Georgetown University*

**SESSION PS\_12 (15:00 - 15:50) - Special polymer applications - ROOM 6**

15:00 **PS\_12.1**

**WATER-BASED MULTIFUNCTIONAL NANOCOATINGS FROM POLYELECTROLYTE COMPLEXATION: OPPORTUNITIES & CHALLENGES**

Jaime C. Grunlan<sup>1</sup>; <sup>1</sup>*Texas A&M University*

**SESSION 27A\_09 (16:00 - 17:00) - Innovation and management involving polymers and topics in education - ROOM 1**

16:00 **27A\_09.1**

**STUDY OF CONSUMER VISUAL EXPECTATION REGARDING PECTIN AND WPI FILMS**

Ana Carolina Salgado Oliveira<sup>1</sup>, Michele Nayara Ribeiro<sup>1</sup>, Roney Alves da Rocha<sup>1</sup>, Julio Cesar Ugucioni<sup>1</sup>, Soraia Vilela Borges<sup>1</sup>; <sup>1</sup>*Universidade Federal de Lavras*

16:20 27A\_09.2

**DEVELOPMENT OF A PRELIMINARY PROCESS DESIGN FOR THE INSTALLATION OF A PILOT PLANT TO PRODUCE SUPERABSORBENT HYDROGEL REINFORCED WITH FERTILIZERS (NPK) FOR APPLICATION IN RICE CROP (*ORYZA SATIVA L.*)**

María Verónica Carranza Oropeza<sup>1</sup>, Diego David Pinzón Moreno<sup>1</sup>, José Vulfrano González Fernández<sup>1</sup>, José Luis Soto González<sup>1</sup>, Saul Olarte Calsina<sup>1</sup>, Yduo Salvador Ataucusi<sup>1</sup>; <sup>1</sup>*Universidad Nacional Mayor de San Marcos*

16:40 27A\_09.3

**EXTRACTION AND ANALYSIS OF NATURAL RUBBER FROM THE LATEX OF THE FIG TREE, JACKFRUIT, AND POLYMER ANALYSIS OF DURIAN**

Dr. Maximilian Lackner<sup>1</sup>, Isabella Wagner<sup>2</sup>; <sup>1</sup>*FH Technikum Wien*, <sup>2</sup>*University of Applied Sciences Technikum Wien*

**SESSION 27A\_02 (16:00 - 17:00) - Processing and printing of polymers - ROOM 2**

16:00 27A\_02.1

**OPTIMIZATION OF THE FFF 3D PRINTING APPLIED TO METAL CASTING TOOLS USING THE TAGUCHI METHOD**

Ariangelo Hauer Dias Filho<sup>1,2</sup>, Benjamim Melo Carvalho<sup>2</sup>, Gustavo Antoniácomi de Carvalho<sup>2</sup>; <sup>1</sup>*Instituto Tecnológico de Aeronáutica*, <sup>2</sup>*Universidade Estadual de Ponta Grossa*

16:20 27A\_02.2

**FRESH 3D PRINTING OF DOUBLE CROSSLINKED HYALURONIC ACID/PECTIN HYDROGELS**

Daniele Mayara Catori<sup>1</sup>, Marcos Vinícius Lorevice<sup>1</sup>, Laura Caetano Escobar da Silva<sup>1</sup>, GEOVANY CANDIDO<sup>2</sup>, ANA LUIZA GARCIA MASSAGUER MILLÁS<sup>2</sup>, Marcelo Ganzarolli De Oliveira<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*, <sup>2</sup>*3D Biotechnology Solutions*

16:40 27A\_02.3

**INFLUENCE OF ALCOHOL BASED NONSOLVENTS ON THE FORMATION OF CELLULOSE ACETATE MONOLITH PREPARED FROM NONSOLVENT/THERMALLY INDUCED PHASE SEPARATION PROCESS**

Poliana Ricci<sup>1</sup>, Andressa Tironi Vieira<sup>1</sup>, Rosana Maria Nascimento de Assunção<sup>1</sup>, Anizio Marcio de Faria<sup>1</sup>; <sup>1</sup>*Universidade Federal de Uberlândia*

**SESSION 27A\_03 (16:00 - 17:00) - Biomedical applications of polymers - ROOM 3**

16:00 27A\_03.1

**HYDROGELS CONTAINING MICROPARTICLES FOR DUAL-DRUG RELEASE**

Jose Gregorio Fontainez Garrido<sup>1</sup>, Mariana Agostini de Moraes<sup>1</sup>, Fabiana Perrechil Bonsanto<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Paulo*

16:20 27A\_03.2

**FUNCTIONALIZATION OF POLY(LACTIC ACID) AND POLY(ETHYLENE GLYCOL) FOR APPLICATION IN MULTICOMPONENT UGI REACTION**

Joana de Souza von der Weid<sup>1</sup>, Marcos Lopes Dias<sup>1</sup>, Luis Icart<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio de Janeiro*

16:40 27A\_03.3

### **THERMAL ANALYSIS AND STUDY OF ATORVASTATIN (ATV) RELEASE FROM POLYCAPROLACTONE/ATV FILMS**

Yasmin dos Anjos Garcia<sup>1</sup>, Debora Baptista Pereira<sup>1</sup>, Beatriz Ferreira de Carvalho Patrício<sup>2</sup>, Talita Goulart da Silva<sup>1</sup>, Hellen Regina Oliveira de Almeida<sup>1</sup>, Marcelo Henrique da Cunha Chaves<sup>2</sup>, Michelle Alvares Sarcinelli<sup>2</sup>, Helvécio Vinícius Antunes Rocha<sup>2</sup>, Roberta Helena Mendonça<sup>1</sup>; <sup>1</sup>*Universidade Federal Rural do Rio de Janeiro*, <sup>2</sup>*Fundação Oswaldo Cruz*

### **SESSION 27A\_07 (16:00 - 17:00) - Polymer physics and characterization - ROOM 4**

16:00 27A\_07.1

#### **KINETIC STUDY OF THE THERMAL DECOMPOSITION OF A NITROGEN FERTILIZER COATED WITH METHYLCELLULOSE BY THE OZAWA ISOCONVERSIONAL METHOD**

Murilo Thomé de Falco<sup>1</sup>, Marcos Vinícius Ferreira<sup>1</sup>, Rosana Maria Nascimento de Assunção<sup>1</sup>; <sup>1</sup>*Universidade Federal de Uberlândia*

16:20 27A\_07.2

#### **EVALUATION OF MECHANICAL PROPERTIES OF MIXTURES OF VIRGIN AND RECYCLED HIGH-DENSITY POLYETHYLENE**

Victor Abdo Hallack<sup>1</sup>, Leonardo Pereira<sup>2</sup>, Artur C. Mottin<sup>3</sup>, Lucas V. Moreira<sup>4</sup>, Rodrigo T. S. Freire<sup>4</sup>; <sup>1</sup>*Universidade Federal de Ouro Preto*, <sup>2</sup>*Instituto Federal de Educação, Ciência e Tecnologia de Minas Gerais*, <sup>3</sup>*Centro Federal de Educação Tecnológica de Minas Gerais*, <sup>4</sup>*Universidade Federal de São João Del Rei*

16:40 27A\_07.3

#### **OBTAINING AND CHARACTERIZING ELECTROSPUN POLYMER FIBERS FROM PBAT/PLA WITH TIO<sub>2</sub>/FE<sub>3</sub>O<sub>4</sub>**

Alessandra Ruyz Medeiros<sup>1</sup>, Fabiana Silva Lima<sup>2</sup>, Gabriel Nardi Fraga<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>, Josiane Caetano<sup>1</sup>; <sup>1</sup>*Universidade Estadual do Oeste do Paraná*, <sup>2</sup>*Universidade Estadual de Maringá*

### **SESSION 27A\_01 (16:00 - 17:00) - Environmental issues associated with polymers - ROOM 5**

16:00 27A\_01.1

#### **THERMOPHYSICAL AND MECHANICAL EVALUATION OF BLENDS BASED ON RECYCLED POLY(ETHYLENE TEREPHTHALATE) - PET AND POLY(HIGH DENSITY ETHYLENE) – PEAD**

Kássio André Lacerda<sup>1</sup>, Marco Elísio Marques<sup>1</sup>, André Ricardo de Souza<sup>1</sup>; <sup>1</sup>*Universidade Fumec*

16:20 27A\_01.2

#### **CHITOSAN AS A GREEN POLYMERIC INHIBITOR FOR MILD STEEL: ELECTROCHEMICAL BEHAVIOR IN SODIUM CHLORIDE MEDIUM**

Lisete Cristine Scienza<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*

16:40 27A\_01.3

#### **COMPARATIVE LIFE CYCLE ANALYSIS OF PLASTIC AND METALLIC FENDERS**

Maísa Pabis<sup>1</sup>, Julio César Souza<sup>1</sup>, Marcella Cristina Neves Alvarenga<sup>1</sup>; <sup>1</sup>*Stellantis*

## THURSDAY, OCTOBER 28

### SESSION PS\_13 (08:30 - 09:20) - Biomedical applications of polymers - ROOM 1

08:30 PS\_13.1

#### RESTORE AND REGENERATE OUR NATURAL RESOURCES: HIGH-VALUE BIOBASED PRODUCTS FOR BIOMATERIALS APPLICATIONS

Amin Shavandi<sup>1</sup>; <sup>1</sup>*Université Libre de Bruxelles*

### SESSION PS\_14 (09:30 - 10:20) - Processing and printing of polymers - ROOM 2

09:30 PS\_14.1

#### IN-PROCESS CHARACTERIZATION OF POLYMER NANOCOMPOSITES DURING EXTRUSION

José António Colaço Gomes Covas<sup>1</sup>; <sup>1</sup>*Universidade do Minho*

### SESSION PS\_15 (10:30 - 11:20) - Environmental issues associated with polymers - ROOM 6

10:30 PS\_15.1

#### INTEGRATED TECHNOLOGIES USING POLYMERS THAT CONTRIBUTE TO THE REDUCTION OF WASTE FROM DIFFERENT INDUSTRIAL SECTORS

Patrícia Santiago de Oliveira Patrício<sup>1</sup>; <sup>1</sup>*Centro Federal de Educação Tecnológica de Minas Gerais*

### SESSION 28M\_04 (11:20 - 12:20) - Polymer nanostructures and nanocomposites - ROOM 1

11:20 28M\_04.1

#### CRYSTALLIZATION KINETICS OF POLY (LACTIC ACID)/HALLOYSITE NANOCOMPOSITES

Lidiane Cristina Costa<sup>1</sup>, Juliano Marini<sup>1</sup>, Guilherme Gonçalves Biazin<sup>1</sup>; <sup>1</sup>*Universidade Federal de São Carlos*

11:40 28M\_04.2

#### LAPONITE-BASED NANOHYDROGEL AS NANOCARRIER: DELIVERY AND THE SYNERGISTIC EFFECT BETWEEN CISPLATIN AND 5-FLUOROURACIL

Samile Bezerra de Aguiar<sup>1</sup>, Carolyne Brustolin Braga<sup>1</sup>, Cátia Cristina Capôlo Ornelas Megiatto<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*

12:00 28M\_04.3

#### PHOTODEGRADATION OF PS/MOS<sub>2</sub> NANOCOMPOSITES WITH ULTRALOW CONTENT OF 2D FILLER

Gilhermino José Macedo Fechine<sup>1</sup>, Aurianny L. Angulo<sup>2</sup>, Camila Laura Celis<sup>2</sup>, Pablo Andrés Riveros Muñoz<sup>2</sup>; <sup>1</sup>*Universidade Presbiteriana Mackenzie*, <sup>2</sup>*Mackenzie Presbyterian University*

**SESSION 28M\_05 (11:20 - 12:20) - Blends, composites and polymer networks - ROOM 2**

11:20 28M\_05.1

**INVESTIGATION OF THE REINFORCING EFFECT OF ORGANOCLAY CLOISITE 15A ON THE RECYCLED PET MATRIX BY DYNAMIC MECHANICAL ANALYSIS**

Luciana Ribeiro Honrato<sup>1</sup>, Patrícia de Fátima Rodrigues<sup>2</sup>, Adriana dos Anjos Silva<sup>3</sup>, Luciano Pessanha Moreira<sup>2</sup>; <sup>1</sup>Fundação Centro de Ciências e Educação Superior à Distância do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense, <sup>3</sup>Universidade Federal do Rio de Janeiro

11:40 28M\_05.2

**MECHANICAL CHARACTERIZATION OF THE POLYURETHANE BIOMATERIAL OBTAINED FROM MAMONA OIL REINFORCED WITH BANANA FIBERS**

Paulo Roberto Correia Marcelino<sup>1</sup>, Bárbara Maria Mateus Gonçalves<sup>1</sup>, Eduarda Chiabai Rodrigues de Melo<sup>1</sup>, Mayara de Oliveira Camillo<sup>1</sup>, Poliana Dariva Menini<sup>1</sup>, Nayara Soares Satolo<sup>1</sup>, Sara Medeiros de Almeida<sup>1</sup>, Michel Picanço Oliveira<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

12:00 28M\_05.3

**MECHANICAL STRENGTH BEHAVIOR OF POLYPROPYLENE COMPOSITES WITH HYBRID GLASS FIBERS AND HOLLOW MICROSPHERES**

Gabriel Matos da Silva<sup>1</sup>, Gustavo Baldi de Carvalho<sup>1</sup>, Leonardo Bresciani Canto<sup>1</sup>, José Alexandrino Sousa<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

**SESSION 28M\_08 (11:20 - 12:20) - Special polymer applications - ROOM 3**

11:20 28M\_08.1

**RELEASE OF OREGANO ESSENTIAL OIL IN SIMULATED FOOD CONDITIONS FROM PHBV BIODEGRADABLE FILMS**

Renata Cerruti da Costa<sup>1</sup>, Ana Paula Ineichen<sup>1</sup>, Cristiano da Silva Teixeira<sup>1</sup>, Ismael Casagrande Bellettini<sup>1</sup>, Larissa Nardini Carli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

12:00 28M\_08.2

**POROUS BIODEGRADABLE BIOMATERIALS LOADED WITH MELALEUCA OIL AND CURCUMINOIDS FOR THE CONTROL OF AEDES AEGYPTI**

Glaucia Regina Medeiros Burin<sup>1</sup>, Vinícius Couto Pires<sup>2</sup>, Fábio Rocha Formiga<sup>2</sup>, Elaine Cabral Albuquerque<sup>3</sup>, Silvio A. B. Vieira de Melo<sup>3</sup>, Mara Elga Medeiros Braga<sup>4</sup>, Hermínio José Cipriano de Sousa<sup>4</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Fundação Oswaldo Cruz, <sup>3</sup>Universidade Federal da Bahia, <sup>4</sup>Universidade de Coimbra

**SESSION 28M\_06 (11:20 - 12:20) - Polymerization reactions and polymer chemistry - ROOM 4**

11:20 28M\_06.1

**SYNTHESIS AND CHARACTERIZATION OF SUPERABSORBENT HYDROGELS BASED ON STARCH AND ACRYLIC ACID**

Maria Verónica Carranza Oropeza<sup>1</sup>, Diego David Pinzón Moreno<sup>1</sup>, Isabel Rosali Maurate Fernández<sup>1</sup>; <sup>1</sup>Universidad Nacional Mayor de San Marcos

11:40 28M\_06.2

**SIMULATION OF THE SYNTHESIS OF CARBOXY-TELECHELIC POLYSTYRENE BY NITROXIDE MEDIATED POLYMERIZATION (NMP)**

Inácio José Galego Cassimiro<sup>1</sup>, Liliane Maria Ferrareso Lona<sup>1</sup>; <sup>1</sup>*UNIVERSIDADE ESTADUAL DE CAMPINAS*

12:00 28M\_06.3

**EFFECT OF CHAIN EXTENDERS ON THE STRUCTURE AND PROPERTIES OF POLYURETHANES**

Otávio Bianchi<sup>1</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*

**SESSION 28M\_01 (11:20 - 12:20) - Environmental issues associated with polymers - ROOM 5**

11:20 28M\_01.1

**ASSESSING MICROPLASTIC DEGRADATION USING FTIR: WHAT IT CAN TELL AND WHAT IT CAN WHISPER?**

Crislaine Bertoldi<sup>1</sup>, Larissa Zacher Lara<sup>1</sup>, Andreia Neves Fernandes<sup>1</sup>, Walter Ruggeri Waldman<sup>2</sup>; <sup>1</sup>*Universidade Federal do Rio Grande do Sul*, <sup>2</sup>*Universidade Federal de São Carlos - Campus Sorocaba*

11:40 28M\_01.2

**PROPERTIES OF SPENT COFFEE GROUNDS FILLED POLYPROPYLENE**

Baltus Cornelius Bonse<sup>1</sup>, Gustavo Luiz Bueno Cardoso<sup>1</sup>; <sup>1</sup>*Centro Universitário da Fundação Educacional Inaciana Pe Sabóia de Medeiros*

12:00 28M\_01.3

**COMPARATIVE LIFE CYCLE ANALYSIS OF POLYPROPYLENE USING EGGSHELL TO REPLACE NON-RENEWABLE MINERAL CARGO APPLIED TO AUTOMOTIVE COMPONENTS**

Maísa Pabis<sup>1</sup>, Julio César Souza<sup>1</sup>, Marcella Cristina Neves Alvarenga<sup>1</sup>; <sup>1</sup>*Stellantis*

**SESSION CAM\_2 (12:20 - 14:00) - - ROOM 6**

12:20 CAM\_2.1

**CLOSING CEREMONY – STUDENTS AWARD CEREMONY – ABPOL CONVENTION**

Marco Aurelio De Paoli<sup>1</sup>; <sup>1</sup>*Universidade Estadual de Campinas*

## POSTER PRESENTATIONS

**MONDAY, OCTOBER 25**

**SESSION 25\_P1(17:00 - 18:30) - Poster01\_01**

*01 - Environmental issues associated with polymers*

**25\_P1.1 MOISTURE INFLUENCE IN THE FLEXURAL PROPERTIES OF POLYPROPYLENE COMPOSITE REINFORCED WITH UNSMOKED CIGARETTE BUTTS**

Giovana Roberta Francisco Bronzato<sup>1</sup>, Milena Chanes de Souza<sup>1</sup>, Ivan Moroz<sup>1</sup>, Victor Angelo Cavalari Arantes dos Reis<sup>1</sup>, Ivana Cesarino<sup>1</sup>, Alcides Lopes Leão<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P1.2 STARCH-BASED EXPANDED COMPOSITES WITH BREWING INDUSTRIAL BYPRODUCTS**

Aline Carvalho Lopes<sup>1</sup>, Juliana Bonametti Olivato<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

**25\_P1.3 USE OF ELECTROSPUN POLYACRYLONITRILE MEMBRANE COATED WITH POLYPYRROLE AND POLYANILINE FOR REMOVAL OF THE REMAZOL BLACK B DYE: KINETIC AND EQUILIBRIUM STUDIES**

Andressa Nathally Rocha Leal<sup>1</sup>, Maurício Fonsêca de Aguiar<sup>1</sup>, Winnie Queiroz Brandão<sup>1</sup>, Hérica Dias da Rocha<sup>1</sup>, Joyce Silva<sup>1</sup>, Iranildo José da Cruz Filho<sup>1</sup>, Celso Pinto de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

**25\_P1.4 PREPARATION AND CHARACTERIZATION OF PAN/PPY MEMBRANES FOR GLYPHOSATE REMOVAL**

Joyce Silva<sup>1</sup>, Gizele das Graças Farias de Andrade<sup>1</sup>, JÉSSICA SIMÕES DE ANDRADE<sup>1</sup>, Andressa Nathally Rocha Leal<sup>1</sup>, Maurício Fonsêca de Aguiar<sup>1</sup>, Celso Pinto de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

**25\_P1.5 PEA PROTEIN AND CUTIN FILMS**

Anny Manrich<sup>1</sup>, Maria Alice Martins<sup>1</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação

**25\_P1.6 APPLE POMACE AS FEEDSTOCK FOR BIOCHAR PRODUCTION BY PYROLYSIS: STUDY AND APPLICATION**

Arthur V. de Oliveira<sup>1</sup>, Harumi Otaguro<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia

**25\_P1.7 IDENTIFICATION OF PLASTIC SAMPLES FOUND IN THE GASTROINTESTINAL SYSTEM OF SEA TURTLES OF THE SPECIE CHELONIA MYDAS (LINNAEUS, 1958)**

Ruth Rodrigues Alves<sup>1</sup>, Bruna Vanessa Quevedo Miranda<sup>2</sup>, Maira de Lourdes Rezende<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Sorocaba, <sup>2</sup>Universidade Federal de São Carlos - Campus Sorocaba

**25\_P1.8 SYNTHESIS OF FLAME RETARDANT POLYOLS FROM EPOXIDIZED SOYBEAN OIL**

Camila Silva Brambilla<sup>1</sup>, Cesar Liberato Petzhold<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**25\_P1.9 LINALOOL ESSENTIAL OIL/NANOCELLULOSE-BASED PICKERING EMULSIONS**

Alana Gabrieli Souza<sup>1</sup>, Jéssica Souza Marciano<sup>1</sup>, Rafaela Reis Ferreira<sup>1</sup>, Eder Ramin de Oliveira<sup>1</sup>, Mauricio Maruo Kato<sup>1</sup>, Derval dos Santos Rosa<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

**25\_P1.10 PBAT ACTIVE FILMS CONTAINING NANOCELLULOSE AND ESSENTIAL OIL CAPSULES**

Derval dos Santos Rosa<sup>1</sup>, Rennan Felix da Silva Barbosa<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

**25\_P1.11 SYNTHESIS AND CHARACTERIZATION OF SUSTAINABLE POLYURETHANE FROM CHICKEN FAT**

Edson Araujo de Almeida<sup>1</sup>, Andressa Mosoli<sup>2</sup>, Edvani Curti Muniz<sup>1,3,2</sup>, REGIANE DA SILVA GONZALEZ<sup>2</sup>, Letícia Ledo Marciniuk<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal do Piauí

**25\_P1.12 DOES BEESWAX-BASED COATING ON CELLULOSIC SUBSTRATE ENABLE TO REPLACE POLYVINYL CHLORIDE PLASTIC FILMS (PVC)?**

Danielle Kênia Fraga<sup>1</sup>, Caroline Salvan Pagnan<sup>1</sup>, Rosemary do Bom Conselho Sales<sup>1</sup>, Eliane Ayres<sup>1</sup>; <sup>1</sup>Universidade do Estado de Minas Gerais

**25\_P1.13 AN OVERVIEW ON MICROPLASTICS IN LAKES**

Fabiula Danielli Bastos de Sousa<sup>1,2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do ABC

**25\_P1.14 THE IMPACT OF PLASTIC TO THE ENVIRONMENT DURING THE COVID-19 PANDEMIC**

Fabiula Danielli Bastos de Sousa<sup>1,2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do ABC

**25\_P1.15 EFFECT OF POLYCARBODIIMIDE ON THE RHEOLOGICAL PROPERTIES OF POLY (ETHYLENE TEREPHTHALATE)**

Flavia Letícia Silva Freitas<sup>1</sup>, Anne Cristine Chinellato<sup>1</sup>, Sandra Andréa Cruz<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Federal de São Carlos

**25\_P1.16 INFLUENCE OF TEMPERATURE ON THE PYROLYSIS PROCESS FOR THE TREATMENT OF POLYSTYRENE-BASED PLASTIC**

Gabriel de Oliveira Rodrigues<sup>1</sup>, Sergio Duvoisin Junior<sup>1</sup>, Douglas Alberto Rocha de Castro<sup>2</sup>, Carlos Castro Vieira Quaresma<sup>2</sup>, Wanison André Gil Pessoa Júnior<sup>3</sup>, Lizandro Manzato<sup>3</sup>, Nélio Teixeira Machado<sup>4</sup>; <sup>1</sup>Universidade do Estado do Amazonas, <sup>2</sup>Universidade Luterana do Brasil, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas, <sup>4</sup>Universidade Federal do Pará

**25\_P1.17 STUDY OF PHB MIXTURES WITH POLYMER OF MORINGA OIL - EVALUATION OF BIODEGRADABILITY AND MIXING POTENTIAL**

Giovanna Medeiros Miranda<sup>1</sup>, Katia Monteiro Novack<sup>1</sup>, Tânia Márcia Sacramento Melo<sup>1</sup>, Cristiane Medina Finzi-Quintão<sup>2</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de São João Del Rei

**25\_P1.18 SURFACE HYDROPHOBIZATION OF PULP AND NANOFIBRILATED CELLULOSE FILMS USING BLOCKED ISOCYANATES**

Gustavo de Souza<sup>1</sup>, Ricardo Klaus Kramer<sup>1</sup>, Antonio José Felix Carvalho<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**25\_P1.19 ENHANCED PHOTOCATALYTIC DEGRADATION OF ORGANIC POLLUTANTS MEDIATED BY ZN(II)-PORPHYRIN/POLY(ACRYLIC ACID) HYBRID MICROPARTICLES.**

Henrique Peres da Mota<sup>1</sup>, Rafael Fonseca Neves Quadrado<sup>1</sup>, Bernardo Almeida Iglesias<sup>2</sup>, André Ricardo Fajardo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal de Santa Maria

**25\_P1.20 DEVELOPMENT OF SUPERABSORBENT HYDROGEL BASED ON GUM ARABIC FOR ENHANCED REMOVAL OF ANXIOLYTIC DRUG FROM WATER.**

Henrique Peres da Mota<sup>1</sup>, André Ricardo Fajardo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

**25\_P1.21 EVALUATION OF TOXICITY METHOD (*ARTEMIA SALINA*) IN HYDROGELS OF CASHEW GUM**

Idglan Sá de Lima<sup>1</sup>, Heldeney Rodrigues de Sousa<sup>1</sup>, Lucas Mateus de Lima Neris<sup>1</sup>, Albert Santos Silva<sup>1</sup>, Ariane Maria da Silva Santos Nascimento<sup>1</sup>, Francisca Pereira de Araújo<sup>1</sup>, Rafael Felipe Ratke<sup>2</sup>, Durcilene Alves Silva<sup>1</sup>, Edvani Curti Muniz<sup>3,1,4</sup>, Josy A. Osajima<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal de Mato Grosso do Sul, <sup>3</sup>Universidade Estadual de Maringá, <sup>4</sup>Universidade Tecnológica Federal do Paraná

**25\_P1.22 PREPARATION AND ANALYSIS OF THERMOPLASTIC STARCH/LDPE COMPOSITE IN BIODEGRADATION AFTER COMPOSTING PROCESS**

Jonas Ludwig de Bitencourt<sup>1</sup>, Edson Francisquetti<sup>1</sup>, Mara zeni de Andrade<sup>1</sup>, Laura Nallem Francisquetti<sup>1</sup>, Ana Maria Coulon Grisa<sup>2</sup>, Douglas Alexandre Simon<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>2</sup>Universidade de Caxias do Sul

**25\_P1.23 ANALYSIS OF THE MECHANICAL AND RHEOLOGICAL PROPERTIES OF POLYPROPYLENE/GRAPHENE OXIDE COMPOSITIONS OBTAINED FROM EXHAUSTED BATTERIES**

Paola Arícia Tarachuque<sup>1</sup>, Reinaldo Yoshio Morita<sup>1</sup>, Scheyla Elsi Camargo Zeck<sup>2</sup>, Luis Antonio Pinheiro<sup>3</sup>, Jarem Raul Garcia<sup>3</sup>, Alex Vieira Pedroso<sup>3</sup>, Juliana Regina Kloss<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Earth Renewable Technologies Company, <sup>3</sup>Universidade Estadual de Ponta Grossa

**25\_P1.24 BIOFLEX RUBBER: A NEW SUSTAINABLE PLASTICIZER FOR NATURAL RUBBER COMPOUNDS**

Karin Janete Stein Brito<sup>1</sup>, Maria Madalena de Camargo Forte<sup>1</sup>, Cristiane Jaqueline Mauss<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto SENAI de Inovação em Engenharia de Polímeros

**25\_P1.25 PRODUCTION AND CHARACTERIZATION OF STARCH/PVA BLENDS WITH BIOACTIVE COMPOUNDS FROM MALT BAGASSE**

Lais Cristina Monteiro de Almeida<sup>1</sup>, Juliana Bonametti Olivato<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

**25\_P1.26 EXOPOLYSACCHARIDE PRODUCTION FROM *BACILLUS* ISOLATED FROM BRAZIL'S NORTHEASTERN SOIL**

Bruna Marques de Paula<sup>1</sup>, Lara Isensee Saboya de Sousa<sup>1</sup>, Jessica Silva de Almeida<sup>1</sup>, Matheus de Oliveira Barros<sup>1</sup>, Christiana de Fátima Bruce da Silva<sup>2</sup>, Morsyleide de Freitas Rosa<sup>2</sup>, Ana Iraidy Santa Brígida<sup>2</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Embrapa Agroindústria Tropical

**25\_P1.27 ESTERS FROM CASTOR OIL FUNCTIONALIZED WITH AROMATIC AMINES AS POTENTIAL LUBRICANT**

Laura de Andrade Souza<sup>1</sup>, Cesar Liberato Petzhold<sup>1</sup>, Edson Francisquetti<sup>2</sup>, Denise Ramos Moreira<sup>3</sup>, Nágila Maria Pontes Silva Ricardo<sup>3</sup>, Martin E. Maier<sup>4</sup>, Francisco Murilo Tavares de Luna<sup>3</sup>, Paulo Roberto Campos Flexa Ribeiro Filho<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>3</sup>Universidade Federal do Ceará, <sup>4</sup>University of Tübingen

**25\_P1.28 REUSE OF POLYESTER FIBERS FROM DECOMMISSIONED OFFSHORE PLATFORMS BY BLENDING WITH POLYETHYLENE POST-CONSUMED**

Layz Mata Salimena<sup>1</sup>, Ana Lúcia Nazareth da Silva<sup>1</sup>, Monica Pertel<sup>1</sup>, Elisson Brum Dutra da Rocha<sup>2</sup>, Renan Henriques Gonçalves de Almeida<sup>3</sup>, Milton Briguet Bastos<sup>4</sup>, Ruth Osorio de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade do Estado do Rio de Janeiro, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro, <sup>4</sup>MBB Enterprises

**25\_P1.29 CHARACTERIZATION OF THE BLEND OF RECYCLED POLYSTYRENE WITH RECYCLED POLYPROPYLENE**

Eduardo Radovanovic<sup>1</sup>, lidia pereira amaro<sup>1</sup>, Silvia Luciana Fávaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá

**25\_P1.30 INFLUENCE OF INCORPORATION AND GRANULOMETRY OF POST-CONSUMPTION YERBA MATE ON THE DEGRADABILITY OF POLY(LACTIC ACID): NATURAL WEATHERING AND COMPOSTING**

Magali Canton Casagrande<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**25\_P1.31 BIODEGRADABILITY EVALUATION OF FILMS BASED ON CORN STARCH AND BREWER'S SPENT GRAIN**

Maria Natália Castanho<sup>1</sup>, Karen de Souza do Prado<sup>1</sup>, Janaína Braga do Carmo<sup>1</sup>, Jane Maria Faulstich de Paiva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba

**25\_P1.32 DEVELOPMENT OF A SENSOR USING ELECTROSPINNING TECHNIQUE FOR DYE REMOVAL**

Alessandra Ruyz Medeiros<sup>1</sup>, Marina Mulinari<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>, Josiane Caetano<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná

**25\_P1.33 SOLUBILIZATION OF CELLULOSE BY SUPERCRITIC CO<sub>2</sub> IN THE PRESENCE OF SUPERBASE DBU**

Matheus Fernandes Flores<sup>1</sup>, Marcelo Miranda de Oliveira<sup>1</sup>, Antonio Aprigio da Silva Curvelo<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**25\_P1.34 OXIDATIVE DELIGNIFICATION OF SUGAR-CANE BAGASSE**

Matheus Henrique dos Santos<sup>1</sup>, Antonio Aprigio da Silva Curvelo<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**25\_P1.35 ECO AUDIT ANALYSIS AND END-OF-LIFE ALTERNATIVES FOR DIFFERENT DRINKING STRAWS MATERIALS**

Patricia Schmid Calvão<sup>1</sup>; <sup>1</sup>Centro Universitário da Fundação Educacional Inaciana Pe Sabóia de Medeiros

**25\_P1.36 DEGRADATION EVOLUTION OF BLENDS PE/TPS DURING COMPOSTING**

Pedro Henrique Santaliestra e Silva<sup>1</sup>, Gabriela Oliveira Campos<sup>1</sup>, Fabiula Danielli Bastos de Sousa<sup>1,2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do ABC

**25\_P1.37 CHEMICAL MODIFICATIONS IN BLENDS PS/TPS COMPATIBILIZED WITH CARBOXYLIC ACID**

Gabriela Oliveira Campos<sup>1</sup>, Pedro Henrique Santaliestra e Silva<sup>1</sup>, Fabiula Danielli Bastos de Sousa<sup>1,2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do ABC

**25\_P1.38 WATER VAPOR AND LIGHT BARRIER PROPERTIES OF SODIUM ALGINATE/SIO<sub>2</sub> NANOCOMPOSITE FILMS**

Renan Garcia da Silva<sup>1</sup>, Roniérík Pioli Vieira<sup>2</sup>, Luís Marangoni Júnior<sup>3</sup>, Rosa Maria Vercelino Alves<sup>3</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL DE CAMPINAS, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Packaging Technology Center

**25\_P1.39 LIGNINS EXTRACTED FROM BANANA RESIDUES BY DIFFERENT METHODS**

Rosangela Almeida Maia<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P1.40 DETERMINATION OF MICROPLASTICS IN BRAZILIAN SEA SALT**

Sérgio Henrique Pezzin<sup>1</sup>, Laís Aparecida Piaz<sup>1</sup>, Cesar Gabriel Ribeiro<sup>1</sup>, José Augusto Da Col<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina

**25\_P1.41 INCORPORATION OF LIPASE IN BACTERIAL CELLULOSE FILTERS**

Victoria Fonseca Silveira<sup>1</sup>, Sandro Rogério Kumineck Junior<sup>1</sup>, Ana Paula Testa Pezzin<sup>1</sup>, Andrea Lima dos Santos Schneider<sup>1</sup>, Michele Cristina Formolo Garcia<sup>1</sup>; <sup>1</sup>Universidade da Região de Joinville

**25\_P1.42 BIOPOLYMERS MARKET AND ANALYSIS OF BRAZILIAN IMPORT DATA OF PLA**

Virnna Cristhielle Santana Barbosa<sup>1</sup>, Ana Maria Furtado de Sousa<sup>1</sup>, Ana Lúcia Nazareth da Silva<sup>2</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro

**25\_P1.43 REUSE OF POLYMERIC RESIDUE FROM THE TEXTILE AND CLOTHING INDUSTRY**

Willian Coelho Gomes<sup>1</sup>, Ana Lúcia Nazareth da Silva<sup>1</sup>, Elen Vasques Pacheco<sup>1</sup>, Maria Eloisa de Jesus Conceição<sup>2</sup>, Renan Henriques Gonçalves de Almeida<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro

**25\_P1.44 APPLICATION OF BIOPOLYMERS IN DRILLING FLUIDS: A LITERATURE REVIEW**

Valéria Silva dos Santos<sup>1</sup>, Andreas Nascimento<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

***02 - Processing and printing of polymers*****25\_P2.45 INFLUENCE OF THE CONCENTRATION OF COCONUT OIL IN THE PROCESSABILITY AND STABILITY OF THERMOPLASTIC STARCH**

Carlos Henrique Rodrigues Milfont<sup>1</sup>, Juciklécia da Silva Reinaldo<sup>1</sup>, Edson Noriyuki Ito<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte

**25\_P2.46 INTERACTION BETWEEN TYPE I AND II COAGENTS AND POLYBUTADIENE ISOMERS ON CROSSLINKING SYSTEMS USING ORGANIC PEROXIDE**

Chaiane Neumann<sup>1</sup>, Edson Francisquetti<sup>1</sup>, Daiane Romanzini<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

**25\_P2.47 A REVIEW ABOUT PLA FILAMENT RECLYCLING TO 3D PRINTING PROCESS**

Eyji Koike Cuff<sup>1</sup>, Caroline Ghidini Seben<sup>1</sup>, Fernando Brito Gluck<sup>1</sup>, Alexandre Luís Gasparin<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

**25\_P2.48 FILAMENTS BASED TO BIODEGRADABLE POLYMER COATED WITH GELATIN METHACRYLOYL HYDROGEL FOR USE AS SUTURE BIOMATERIAL**

Francisca Pereira de Araújo<sup>1</sup>, Conceição de Maria Vaz Elias<sup>1</sup>, Rômulo Ribeiro Magalhães de Sousa<sup>1</sup>, Heurison Sousa Silva<sup>1</sup>, Maria de Fátima Braga<sup>1</sup>, Napoleão Martins Argolo Neto<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>, JOSY ANTEVELI OSAJIMA<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí

**25\_P2.49 THERMAL PROPERTIES AND CRYSTALLIZATION BEHAVIOR OF DIFFERENT COMERCIAL PLA 3D PRINTING FILAMENTS**

Gustavo Antoniácomi de Carvalho<sup>1</sup>, Benjamim Melo Carvalho<sup>1</sup>, Ariangelo Hauer Dias Filho<sup>2,1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Instituto Tecnológico de Aeronáutica

**25\_P2.50 EVALUATION OF THE USE OF RECYCLED PP FOR OBTAINING RIGID FOAM**

Luis Paulo Bernardi<sup>1</sup>, Edson Francisquetti<sup>2</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

**25\_P2.51 INFLUENCE OF THE INCORPORATION OF STABILIZERS OR VIRGIN RESIN ON THE RECYCLED POLYPROPYLENE FROM COFFEE CAPSULES: THERMAL PROPERTIES**

Renata dos Reis Klering<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

*03 - Biomedical applications of polymers*

**25\_P3.52 INFLUENCE OF THE EDB CO-INITIATOR ON COMPOUND RESIN COMMERCIALLY AVAILABLE.**

Aline Cristina da Silva Tanaka<sup>1</sup>, Giovanny Carvalho dos Santos<sup>1</sup>, Rafael Turra Alarcon<sup>1</sup>, Luiz Carlos da Silva Filho<sup>1</sup>, Maria Cristina Rosifini Alves Rezende<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P3.53 RELEASE KINETIC AND MOISTURE RESISTANCE OF ACTIVE ALGINATE-CARBOXY METHYLCELLULOSE-NANOCELLULOSE FILMS**

Renato Poli Mari<sup>1</sup>, Andrea Cristiane Krause Bierhalz<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**25\_P3.54 NATURAL RUBBER DEPROTEINIZED AND CHEMICALLY MODIFIED WITH HYALURONIC ACID FOR BIOMEDICAL APPLICATIONS**

Bruna Vanessa Quevedo Miranda<sup>1</sup>, Lucas Camargo Soares Carvalho da Silva<sup>1</sup>, Daniel Komatsu<sup>2</sup>, Maira de Lourdes Rezende<sup>3</sup>, Eliana Aparecida de Rezende Duek<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Pontifícia Universidade Católica de São Paulo, <sup>3</sup>Faculdade de Tecnologia de Sorocaba

**25\_P3.55 INCORPORATION OF CLOVE OIL IN POLYPROPYLENE BY MELT EXTRUSION**

Carolina Lipparelli Morelli<sup>1</sup>, Aline Bruna da Silva<sup>2</sup>, Danielle Marra de Freitas Silva Azevedo<sup>2</sup>, Roberto Pedro dos Santos Junior<sup>3</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro Federal de Educação Tecnológica de Minas Gerais, <sup>3</sup>Universidade Federal de Itajubá

**25\_P3.56 ADDITION OF ANTIVIRAL AGENTS TO PLASTIC FILMS**

JOSE WELLINGTON VASCONCELOS GUERRA<sup>1</sup>, Yeda Medeiros Bastos de Almeida<sup>1</sup>, Carolina Lipparelli Morelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

**25\_P3.57 MAGNETIC GELATIN/ALGINATE HYDROGELS FOR CAFFEINE RELEASE**

Emilli Frachini<sup>1</sup>, Jéssica Soares Guimarães Selva<sup>1</sup>, Mauro Bertotti<sup>1</sup>, Daniel Reinaldo Cornejo<sup>1</sup>, Denise Freitas Siqueira Petri<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**25\_P3.58 NANOFIBERS OF ZEIN CROSS-LINKED WITH GRAPHENE OXIDE FOR CONTROLLED CURCUMIN RELEASE**

Gabriela Lauer Breitenbach<sup>1</sup>, Edson Araujo de Almeida<sup>1</sup>, Camila Dias de Oliveira<sup>2</sup>, Douglas Cardoso Dragunski<sup>2</sup>, Edvani Curti Muniz<sup>1,3,4</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Estadual do Oeste do Paraná, <sup>3</sup>Universidade Federal do Piauí, <sup>4</sup>Universidade Tecnológica Federal do Paraná

**25\_P3.59 INVESTIGATION OF THE PHYSICOCHEMICAL PROPERTIES AND ANTIFUNGAL ACTIVITY OF POLYMERIC FILM CONTAINING 1.25% W/W OF POMEGRANATE PEEL EXTRACT**

Geanne Aparecida de Paula<sup>1</sup>, Nubyá Nascimento Costa<sup>1</sup>, Thais Martins Silva<sup>1</sup>, Daiana Freitas Ferreira<sup>1</sup>, Kamila Arêas Bastos<sup>1</sup>, Lilian Gasparelli Carreira<sup>1</sup>, Juliana Aparecida Severi<sup>1</sup>, Rodrigo Lambert Oréfice<sup>2</sup>, Juliana Alves Resende<sup>1</sup>, Janaina Cecília Oliveira Villanova<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>Universidade Federal de Minas Gerais

**25\_P3.60 CHARACTERIZATION AND EVALUATION OF *IN VITRO* SKIN PERMEATION OF TACROLIMUS-LOADED POLY(ε-CAPROLACTONE) NANOCAPSULES**

Guilherme dos Anjos Camargo<sup>1</sup>, Leandro Ferreira<sup>1</sup>, Jessica Mendes Nadal<sup>1</sup>, Paulo Vitor Farago<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

**25\_P3.61 CYTOTOXIC AND ANTIBACTERIAL ACTIVITY OF CHICHÁ GUM HYDROGEL ASSOCIATED WITH NEROLIDOL**

Idglan Sá de Lima<sup>1</sup>, Maria Onaira Gonçalves Ferreira<sup>1</sup>, Albert Santos Silva<sup>1</sup>, Alessandra Braga Ribeiro<sup>1</sup>, Humberto Medeiros Barreto<sup>1</sup>, Edvani Curti Muniz<sup>2,1,3</sup>, Josy A. Osajima<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Estadual de Maringá, <sup>3</sup>Universidade Tecnológica Federal do Paraná

**25\_P3.62 CHARACTERIZATION OF PCL FIBERS PRODUCED BY SOLUTION BLOW SPINNING WITH DIFFERENT SOLVENT SYSTEMS**

Bruna Nunes Teixeira<sup>1</sup>, Javier Mauricio Anaya Mancipe<sup>1</sup>, Rossana Mara da Silva Moreira Thiré<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**25\_P3.63 ORODISPERSIBLE FILMS CONTAINING CHLORHEXIDINE DIGLUCONATE: CHARACTRIZATION BY FTIR, DRX AND THERMAL ANALYSIS**

Renato Almeida Brambati<sup>1</sup>, Geanne Aparecida de Paula<sup>1</sup>, Alice Cristina Morgado Cassa<sup>1</sup>, Janaina Cecília Oliveira Villanova<sup>1</sup>, Lilian Gasparelli Carreira<sup>2</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

**25\_P3.64 EVALUATION OF ANTIFUNGAL ACTIVITY AND CONTROLLED RELEASE OF KETOCONAZOLE INCORPORATED IN PMMA-G-PEG FILMS**

Lucas Resende Dutra Sousa<sup>1</sup>, Juliana Ribeiro Reynaldo<sup>1</sup>, Tatiane Roquete Amparo<sup>1</sup>, Paula Melo de Abreu Vieira<sup>1</sup>, Gustavo Henrique Bianco de Souza<sup>1</sup>, Luiz Fernando Medeiros Teixeira<sup>1</sup>, Ana Paula Moreira Barboza<sup>1</sup>, Bernardo Ruegger Almeida Neves<sup>2</sup>, Katia Monteiro Novack<sup>1</sup>, Viviane Martins Rebello dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Minas Gerais

**25\_P3.65 ENGINEERING POLY (VINYL ALCOHOL) NANOFIBERS LOADED WITH GREEN PROPOLIS EXTRACT, CHITOSAN AND NYSTATIN FOR PHARMACEUTICAL APPLICATIONS**

Maria Sirlene Moraes<sup>1</sup>, Daniela P. Freire Bonfim<sup>2</sup>, Mônica Lopes Aguiar<sup>2</sup>, Wanderley Pereira Oliveira<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Univerdade Federal de São Carlos

**25\_P3.66 THERMORESPONSIVE CELLULOSE NANOCRYSTALS: PROPERTIES IN CULTURE MEDIUM**

Nívia do Nascimento Marques<sup>1</sup>, José Aurélio Pinheiro<sup>1</sup>, Maylla Maria Correia Leite Silva<sup>1</sup>, Hugo Alexandre de Oliveira Rocha<sup>1</sup>, Rosangela de Carvalho Balaban<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte

**25\_P3.67 EVALUATION OF LIPID LEVELS IN INDUCED OBESITY RATS TREATED WITH PIPERINE MICROPARTICLES**

Patrícia Bubna Biscaia<sup>1</sup>, Dionísia Xavier Scomparin<sup>1</sup>, Jessica Mendes Nadal<sup>1</sup>, Paulo Vitor Farago<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

**25\_P3.68 CHANGES IN THE NANOTOPOGRAPHY OF VANILLIN CROSSLINKED CHITOSAN FILMS VIA IN-SITU OR EX-SITU EMULSION POLYMERIZATION**

Rafael Leonardo Cruz Gomes da Silva<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**25\_P3.69 DEVELOPMENT OF BACTERIAL CELLULOSE MEMBRANES INCORPORATED WITH PLANT EXTRACTS**

Sandro Rogério Kumineck Junior<sup>1</sup>, Eduarda Zeni Neves<sup>1</sup>, Grazieli Paulino Katrucha<sup>1</sup>, Victoria Fonseca Silveira<sup>1</sup>, Márcia Luciane Lange Silveira<sup>1</sup>, Michele Cristina Formolo Garcia<sup>1</sup>, Giannini Pasiznick Apati<sup>1</sup>, Andrea Lima dos Santos Schneider<sup>1</sup>, Ana Paula Testa Pezzin<sup>1</sup>; <sup>1</sup>Universidade da Região de Joinville

**25\_P3.70 STUDY OF POLYMERS FOR THE DEVELOPMENT OF UPPER LIMB ORTHOSIS**

Thiago Gonçalves de Oliveira<sup>1</sup>; <sup>1</sup>Centro Universitário de Itajubá - FEPI

**25\_P3.71 ELECTRICAL AND MORPHOLOGICAL PROPERTIES OF ALIGNED PLGA/NTCS MATS FOR TISSUE ENGINEERING**

Vanessa Oliveira Castro<sup>1</sup>, Claudia Merlini<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**25\_P3.72 WET-SPUN CHITOSAN FILAMENTS: EFFECT OF POLYMER CONCENTRATION AND COAGULATION BATH COMPOSITION ON ABSORPTION PROPERTIES**

Victor Fischer Missfeld<sup>1</sup>, Andrea Cristiane Krause Bierhalz<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**25\_P3.73 BLOW-SPINNING OF AQUEOUS POLYMER SOLUTIONS AND ITS PRELIMINARY BIOLOGICAL EVALUATION**

André de Oliveira Arruda<sup>1</sup>, Leonardo Galli Engler<sup>1</sup>, Lucas Dall Agnol<sup>1</sup>, Natália Fontana Nicoletti<sup>1</sup>, Fernanda Trindade Gonzalez Dias<sup>2</sup>, Janete Eunice Zorzi<sup>1</sup>, Otávio Bianchi<sup>3</sup>, ASDRÚBAL FALAVIGNA<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>3</sup>Universidade Federal do Rio Grande do Sul

*06 - Polymerization reactions and polymer chemistry*

**25\_P6.74 CROSSLINKING OF POLY(VINYL ALCOHOL) WITH CITRIC ACID: INVESTIGATION OF THE INFLUENCE ON POLYMER PROPERTIES**

Camila Suliani Raota<sup>1</sup>, Juliana Zanol Merck<sup>1</sup>, Jocelei Duarte<sup>1</sup>, Janaina da Silva Crespo<sup>1</sup>, Camila Baldasso<sup>1</sup>, Marcelo Giovanela<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul

**25\_P6.75 SYNTHESIS AND CHARACTERIZATIONS OF PEG 4000 DERIVATIVES INCORPORATED WITH KETOCONAZOLE**

Carolina Rodrigues Inácio<sup>1</sup>, Viviane Martins Rebello dos Santos<sup>1</sup>, Katia Monteiro Novack<sup>1</sup>, Ana Paula Moreira Barboza<sup>1</sup>, Bernardo Ruegger Almeida Neves<sup>2</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Minas Gerais

**25\_P6.76 THE USE OF GRAPE SEED OIL IN THE PRODUCTION OF TWO MONOMERS AND ONE COMPLETE RENEWABLE POLYMER**

Caroline Gagliari<sup>1</sup>, Rafael Turra Alarcon<sup>1</sup>, Raquel Magri<sup>1</sup>, GILBERT BANNACH<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P6.77 EFFECT OF IMIDAZOLE DERIVATIVES AS CATALYSTS IN THE POLYMERIZATION OF EPOXIDIZED WITH MALEINIZED GRAPE SEED OIL**

Caroline Gagliari<sup>1</sup>, Rafael Turra Alarcon<sup>1</sup>, Raquel Magri<sup>1</sup>, GILBERT BANNACH<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P6.78 PREPARATION OF THE POROUS STRUCTURES OF POLY(STYRENE-CO-DIVINYLBENZENE) MICROSpheres MODIFIED WITH 2,4,6-TRIMERCAPTOtriazine**

Henrique Almeida Cunha<sup>1</sup>, Marcos Antonio da Silva Costa<sup>1</sup>, Daniela de Luna Martins<sup>2</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense

**25\_P6.79 AMPHIPHILIC POLYMER POLI(*E*-CAPROLACTONE)-*B*-POLI(2-HYDROXYETHYL METHACRYLATE) SYNTHESIZED WITH CHOLESTEROL AS INICIATOR.**

Juliana Rodrigues Isidoro<sup>1</sup>, Vítor Hugo S. Ellwanger<sup>1</sup>, Cesar Liberato Petzhold<sup>1</sup>, Douglas Gamba<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**25\_P6.80 STUDY OF THE PRODUCTION OF BIOLUBRICANT FROM EPOXIDIZED MORINGA OIL**

Lara Cristina de Sousa<sup>1</sup>, Gabriel Luis Oliveira do Carmo<sup>1</sup>, Vitor Ferreira Galvão<sup>1</sup>, Matheus Teixeira Araujo Silva<sup>1</sup>, Iago Henrique Barros<sup>2</sup>, Natã Carlos Lira Madeira<sup>3,2</sup>, Katia Monteiro Novack<sup>4</sup>, Wanderson Romão<sup>5</sup>, Cristiane Medina Finzi-Quintão<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei, <sup>2</sup>Universidade Federal do Espírito Santo, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>4</sup>Universidade Federal de Ouro Preto, <sup>5</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

**25\_P6.81 STABILITY OF NATURAL AND TREATED GREEN COCONUT FIBERS WHEN INCUBATED IN DIFFERENT REACTIONAL MEDIA**

Jessica Silva de Almeida<sup>1</sup>, Micael Jessé Paiva Ribeiro<sup>2</sup>, Lara Isensee Saboya de Sousa<sup>1</sup>, Matheus de Oliveira Barros<sup>1</sup>, Veronica Maria de Araújo Calado<sup>3</sup>, Suely Pereira Freitas<sup>3</sup>, Morsyleide de Freitas Rosa<sup>4</sup>, Ana Iraidy Santa Brígida<sup>4</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Ceará, <sup>3</sup>Universidade Federal do Rio de Janeiro, <sup>4</sup>Embrapa Agroindústria Tropical

**25\_P6.82 EVALUATION OF CROSSLINKED SULFONATED POLYMERS FOR REMOVAL OF AMMONIUM IONS**

Luciana da Cunha Costa<sup>1</sup>, Marcos Guidi Torquato<sup>1</sup>, Ezaine Cristina Correa Torquato<sup>1</sup>, Ana Carolina Lopes de Moraes<sup>1</sup>, Fernanda de Andrade Buás Campeão<sup>1</sup>, Rodrigo José França<sup>2</sup>, Monica Regina da Costa Marques<sup>2</sup>; <sup>1</sup>Centro Universitário Estadual da Zona Oeste, <sup>2</sup>Universidade do Estado do Rio de Janeiro

**25\_P6.83 CHEMICAL RECICLYING OF OILY SLUDE AND POLYOLEFINS BY CATALYTIC CO-PYROLYSIS INVOLVING CLAY K-10 FOR OBTAINING DIESEL OIL**

Luciana da Cunha Costa<sup>1</sup>, Ana Cristina da Silva Serra<sup>2</sup>, Monica Regina da Costa Marques<sup>2</sup>, Jacyra Guimarães Faillace<sup>3</sup>; <sup>1</sup>Centro Universitário Estadual da Zona Oeste, <sup>2</sup>Universidade do Estado do Rio de Janeiro, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro

**25\_P6.84 THERMAL PROPERTIES OF POLY(ACRYLONITRILE-CO-METHACRYLIC ACID) WITH DIFFERENT ACID COMONOMERS CONTENT**

Luiz Guilherme Abreu de Paula<sup>1</sup>, Geilza Alves Porto<sup>1</sup>, Marcos Lopes Dias<sup>1</sup>, Ednildo Alcantara Machado<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**25\_P6.85 THE SYNTHESIS OF CHLORINADE STARCH AND DERIVATE FROM OBTAINNING PIRANOSYL RING OF THE MAIZ STARCH POLYMER**

Mara Zeni Andrade<sup>1,2</sup>, Roselaine<sup>3</sup>, Ana Maria Coulon Grisa<sup>3</sup>, Edson Francisquetti<sup>1</sup>, Jonas Ludwig de Bitencourt<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>2</sup>Instituto Federal de educação ciencia e tecnologia, <sup>3</sup>Universidade de Caxias do Sul

**25\_P6.86 STUDY OF THE MECHANISM OF CARDANOL POLYMERIZATION BY CATIONIC INITIATOR**

Maximiliano de Freitas Martins<sup>1</sup>, Thiago Muza Aversa<sup>2</sup>, Carla Michele Frota da Silva<sup>1</sup>, Elizabete Fernandes Lucas<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro

**25\_P6.87 CASTOR OIL DERIVATIVES: A POTENTIAL APPLICATION AS BIOLUBRICANT**

Paola Stradolini da Silva<sup>1</sup>, Cesar Liberato Petzhold<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**25\_P6.88 SYNTHESIS AND PHOTOPOLYMERIZATION OF AN ACRYLATED MACAW VEGETABLE OIL MONOMER**

Rafael Turra Alarcon<sup>1</sup>, Caroline Gagliari<sup>1</sup>, Raquel Magri<sup>1</sup>, GILBERT BANNACH<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P6.89 SYNTHESIS AND CHARACTERIZATION OF AM/AMPS/DMDAAC/AAC TETRAPOLYMER FOR APPLICATION IN DRILLING FLUID**

Raíssa Ferreira Brasil<sup>1</sup>, GRAZIELLE LOPES<sup>1</sup>, Daniele Cristina de Amorim<sup>1</sup>, Luciana S. Spinelli<sup>1</sup>, Elen Vasques Pacheco<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**25\_P6.90 SYNTHESIS OF CITRIC ACID POLYMER**

Raquel Magri<sup>1</sup>, Rafael Turra Alarcon<sup>1</sup>, Caroline Gagliari<sup>1</sup>, GILBERT BANNACH<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P6.91 SYNTHESIS OF LUMINESCENT POLYMERS FROM BARU EPOXIDIZED VEGETABLE OIL AND FUMARIC ACID**

Raquel Magri<sup>1</sup>, Rafael Turra Alarcon<sup>1</sup>, Caroline Gagliari<sup>1</sup>, GILBERT BANNACH<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**25\_P6.92 LIGHT INDUCED METAL-FREE/ORGANOCATALYZED ATOM-TRANSFER RADICAL POLYMERIZATION OF METHYL METHACRYLATE: SIMULATION APPROACH**

Ana Gabriela Belmonte Assalin<sup>1</sup>, Ramon Alvarelli da Silva<sup>1</sup>, Plínio Ribeiro Rodrigues<sup>1</sup>, Roniérik Pioli Vieira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

**25\_P6.93 EXPERIMENTAL CONDITIONS OPTIMIZATION OF PDMAEMA SYNTHESIS FROM PHOTOINDUCED POLYMERIZATION**

Sayeny de Ávila Gonçalves<sup>1</sup>, Roniérik Pioli Vieira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

**25\_P6.94 PRODUCTION OF ‘GREEN’ THERMOPLASTIC POLYURETHANES FROM DECAMETHYLENE SEBACATE-CO-ISOSORBIDE COPOLYMERS**

Sérgio Henrique Pezzin<sup>1</sup>, Ângela Graziela Lechinski da Luz de Andrade<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina

**25\_P6.95 SYNTHESIS AND EVALUATION OF IRON-BASED COMPLEX AS PHOTINITIATOR FOR RADICAL PHOTOPOLYMERIZATION OF DENTAL RESINS**

Talita Ferreira Cipriano<sup>1</sup>, Alexandre Carneiro Silvino<sup>1</sup>, Dayane Carvalho Ramos Salles de Oliveira<sup>2</sup>, <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>University of Florida

**25\_P6.96 SYNTHESIS OF POLYACRYLAMIDES MODIFIED WITH ALLYL GLUCOSE**

Tatiane Rocha Montes D'Oca<sup>1</sup>, Cesar Liberato Petzhold<sup>1</sup>, Augusto C.C. Peres<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Centro de Pesquisas Leopoldo Américo Miguez de Mello

**25\_P6.97 STUDY OF CURING EXTENT OF DIFFERENT EPOXY SYSTEMS FOR PREPREGS APPLICATION**

Vilson Dalla Libera Junior<sup>1,2</sup>, Lincoln Araujo Teixeira<sup>1</sup>, Mateus da Silva Batista<sup>1</sup>, Sandra Maria da Luz<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Centro Universitário de Anápolis

**25\_P6.98 SYNTHESIS AND PHOTINITIATION ACTION INVESTIGATION OF METACRYLATE QUINOLINE DERIVATIVES IN THE POLYMERIZATION OF MONOMERIC RESINS USED IN DENTAL BIOMATERIALS**

Vitor Fernandes Moreno<sup>1</sup>, Marcelo Henrique Ayala Gomes<sup>1</sup>, Lucas Michelão Martins<sup>1</sup>, Luiz Carlos da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**TUESDAY, OCTOBER 26**

**SESSION 26\_P4(17:00 - 18:30) - Poster02\_04**

*04 - Polymer nanostructures and nanocomposites*

**26\_P4.1 NATURAL GUM HYDROGELS NANOCOMPOSITES CONTAINING SILVER NANOPARTICLES**

Albert Santos Silva<sup>1</sup>, Idglan Sá de Lima<sup>1</sup>, Heldeney Rodrigues Sousa<sup>1</sup>, Ariane Maria da Silva Santos Nascimento<sup>1</sup>, Maria do Carmo de Carvalho Neta<sup>1</sup>, Francisca Pereira de Araújo<sup>1</sup>, Edvani Curti Muniz<sup>2,1,3</sup>, JOSY ANTEVELI OSAJIMA<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Estadual de Maringá, <sup>3</sup>Universidade Tecnológica Federal do Paraná

**26\_P4.2 NANOCELLULOSE OBTAINED FROM DYED AND BLEACHED COTTON FIBERS**

Lucas Souza da Silva<sup>1</sup>, Victor Kreutzfeld<sup>1</sup>, Rita de Cássia Siqueira Curto Valle<sup>1</sup>, Andrea Cristiane Krause Bierhalz<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**26\_P4.3 ENCAPSULATION OF CONCENTRATED GEOPROPOLIS EXTRACT IN PMMA NANOPARTICLES PRODUCED BY MINIEMULSION POLYMERIZATION**

André Lourenço Nogueira<sup>1</sup>, Thiago Schroeder da Silva<sup>2</sup>, Fernando Humel Lafratta<sup>3</sup>; <sup>1</sup>Universidade da Região de Joinville, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Fundação Universidade do Estado de Santa Catarina

**26\_P4.4 PMMA-CNC NANOCOMPOSITE PARTICLES PRODUCED *IN-SITU* BY SUSPENSION POLYMERIZATION**

André Lourenço Nogueira<sup>1</sup>, Jeniffer Katarine Wanzeler Fuckner<sup>1</sup>, Ana Paula Testa Pezzin<sup>1</sup>, Liliane Maria Ferrareso Lona<sup>2</sup>, Filipe V. Ferreira<sup>3</sup>; <sup>1</sup>Universidade da Região de Joinville, <sup>2</sup>UNIVERSIDADE ESTADUAL DE CAMPINAS, <sup>3</sup>Universidade Estadual de Campinas

**26\_P4.5 ADSORPTION OF TOLUENE AND BENZENE FROM WATER USING AN HYDROGEL OF ALGINATE-GRAFTED WITH MESOPOROUS SÍLICA**

André Ricardo Fajardo<sup>1</sup>, Juliê Silveira da Costa<sup>1</sup>, Emanuel G. Bertizollo<sup>1</sup>, Daniela Bianchini<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

**26\_P4.6 OBTENTION AND CHARACTERIZATION OF THIN AND NANOSTRUCTURED LAYER-BY-LAYER FILMS WITH APPLICATION IN BACTERICIDAL MATERIALS.**

Ariane Aparecida Vidal da Silva<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Paraná

**26\_P4.7 OPTIMIZATION AND CHARACTERIZATION OF ELECTROSPUN POLY(VINYL ALCOHOL) WITH DIFFERENT HYDROLYSIS DEGREE**

Ariane Regina de Souza Rossin<sup>1,2</sup>, Évelin Lemos de Oliveira<sup>1</sup>, Fabiana Silva Lima<sup>1</sup>, Heloisa Georgia Zanella<sup>1</sup>, Josiane Caetano<sup>2</sup>, Wilker Caetano<sup>1</sup>, Douglas Cardoso Dragunski<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Estadual do Oeste do Paraná

**26\_P4.8 MORPHOLOGICAL STUDY OF ELECTROSPUN POLY(STYRENE-B-BUTADIENE-B-STYRENE) FIBERS**

Beatriz Paiva da Fonseca<sup>1</sup>, Rosario Elida Suman Bretas<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

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**26\_P4.10 IN SITU PREPARATION OF SILVER NANOPARTICLES ON POLYANILINE NANOFIBERS FILMS FOR SERS APPLICATIONS**

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Bruna Frugoli Alves Ferreira<sup>1</sup>, Gustavo De Gusmão Celestino<sup>1</sup>, Camila Assis da Silva<sup>1</sup>, Rita de Cassia Pessanha Nunes <sup>1</sup>, Elizabete Fernandes Lucas<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

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Camila Spinola Gonçalves Ferreira<sup>1</sup>, Vania Lúcia Dantas dos Anjos Racca<sup>2</sup>, Gisele Cristina Valle Iulianelli<sup>2</sup>, Emerson Oliveira da Silva<sup>2</sup>, Maria Inês Bruno Tavares<sup>2</sup>; <sup>1</sup>– Instituto de Macromoléculas Professora Eloisa Mano (IMA), Universidade Federal do Rio de Janeiro (UFRJ), <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano

**26\_P4.14 EFFECT OF CELLULOSE NANOCRYSTALS TREATMENT ON VULCANIZATION OF NATURAL RUBBER COMPOSITES**

Carla Almeda Correia<sup>1</sup>, Flavia Letícia Silva Freitas<sup>2</sup>, Letícia Mota de Oliveira<sup>2</sup>, Ticiane Sanches Valera<sup>2</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Universidade de São Paulo

**26\_P4.15 POLYPYRROLE AND KAOLINITE NANOCOMPOSITE AS A POTENCIAL ABSORBER IN X BAND**

Caroline Paganucci dos Reis Malere<sup>1</sup>, Liliane Maria Ferrareso Lona<sup>1</sup>, Valdirene Aparecida da Silva<sup>2</sup>, Bruno Ferraz Donati<sup>2</sup>, Nicholas Eras Fonseca<sup>2</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL DE CAMPINAS, <sup>2</sup>Universidade do Vale do Paraíba

**26\_P4.16 HIGH-DENSITY POLYETHYLENE FILMS REINFORCED WITH CALCIUM CARBONATE NANOPARTICLES**

Celso Roman Junior<sup>1</sup>, Daiane Romanzini<sup>2</sup>, Ademir José Zattera<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

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Daiene Dorfey<sup>1</sup>, Pâmela Metz Coimbra da Silva<sup>1</sup>, Fernando Dal Pont Morisso<sup>1</sup>, Carlos Leonardo Pandolfo Carone<sup>1</sup>, Vanusca Dalosto Jahno<sup>1</sup>; <sup>1</sup>Universidade Feevale

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Danieli Dallé<sup>1</sup>, Lilian Vanessa Rossa Beltrami<sup>1</sup>, Cleide Borsoi<sup>2</sup>, Ademir José Zattera<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Universidade do Vale do Taquari

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Lucas Dall Agnol<sup>1</sup>, Fernanda Trindade Gonzalez Dias<sup>2</sup>, Otávio Bianchi<sup>3</sup>, <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>3</sup>Universidade Federal do Rio Grande do Sul

**26\_P4.23 FLUORESCENT CHITOSAN TRACKING LOADED WITH MYRCENE IN MOSQUITO TISSUES**

Bruna Lima Rocha<sup>1</sup>, Hemilly Cirqueira Martins<sup>1</sup>, Mauren Cristine Agustini da Silveira<sup>1</sup>, Benedito Albuquerque<sup>1</sup>, Alex Sander Rodrigues Cangussu<sup>1</sup>, Raimundo Wagner de Souza Aguiar<sup>1</sup>, Ana Maria da Silva Maia<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Tocantins

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Thiago Monteiro Maquine<sup>1</sup>, João Christian Paixão Fonseca<sup>2</sup>, Thais da Silva Santos<sup>2</sup>, José Costa de Macedo Neto<sup>2</sup>, Jefferson Renan Santos da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Universidade do Estado do Amazonas

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Júlia Audrem Gomes de Oliveira<sup>1</sup>, Djalma Souza<sup>1</sup>, Tháles Shelton Mareto Cardoso<sup>1</sup>, Monique da Silva Fernandes<sup>1</sup>; <sup>1</sup>Universidade Estadual do Norte Fluminense Darcy Ribeiro

**26\_P4.28 INFLUENCE OF THE TRIMODAL MIXTURE OF CARBON BLACKS ON THE COLORIMETRIC PROPERTIES OF LOW DENSITY POLYETHYLENE FILM: PART 1**

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**26\_P4.29 INFLUENCE OF SPECIFIC ENERGY EXTRUSION IN TRIMODAL MIXTURE OF CARBON BLACKS ON THE COLORIMETRIC PROPERTIES OF LOW DENSITY POLYETHYLENE FILM: PART 2**

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**26\_P4.30 SYNTHESIS AND CHARACTERIZATION OF NANOFIBERS CONTAINING POLYVINYL PYRROLIDONE AND TIO<sub>2</sub> USED AS SEMICONDUCTORS IN PHOTODEGRADATION TESTS**

Luana Góes Soares da Silva<sup>1</sup>, Annelise Kopp Alves<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**26\_P4.31 PREPARATION OF POLYMER SOLUTIONS FOR THE OBTAINING OF NANOFIBERS BY ELECTROSPINNINGPREPARATION OF POLYMER SOLUTIONS FOR THE OBTAINING OF NANOFIBERS BY ELECTROSPINNING**

Luana Góes Soares da Silva<sup>1</sup>, Annelise Kopp Alves<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**26\_P4.32 LUMINESCENT YVO<sub>4</sub>:EU<sup>3+</sup>: FROM NANOPARTICLES TO NANOCOMPOSITES**

Luciana Mentasti<sup>1</sup>, Nahuel Martínez<sup>1</sup>, Agostina Cammarata<sup>2</sup>, Romina Glisoni<sup>2</sup>, Ileana A. Zucchi<sup>3</sup>, Martín Santiago<sup>1</sup>, Gastón Barreto<sup>1</sup>; <sup>1</sup>Centro de Investigaciones en Física e Ingeniería del Centro de la Provincia de Buenos Aires, <sup>2</sup>Instituto de Nanobiotecnología, <sup>3</sup>Instituto de Investigaciones en Ciencia y Tecnología de Materiales

**26\_P4.33 INCORPORATING MWNT-O INTO POLYSULFONE TO PREPARE ASYMMETRIC MIXED MATRIX MEMBRANE FOR POST-COMBUSTION CO<sub>2</sub> SEPARATION**

Marcelo Costa Flores<sup>1</sup>, Kátia Cecília de Souza Figueiredo<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

**26\_P4.34 MODELLING OF CO<sub>2</sub> AND N<sub>2</sub> PERMEATION THROUGH MIXED MATRIX MEMBRANES CONTAINING OXYGENATED CARBON NANOTUBES DISPERSED IN POLYSULFONE**

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**26\_P4.35 CELLULOSE NANOCRYSTAL PRODUCTION BY SUBCRITICAL WATER ASSISTED BY CARBON DIOXIDE.**

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Maria Esther Kawashita Dalla Vecchia<sup>1</sup>, Mariana de Almeida Zaine<sup>1</sup>, Luiz Gustavo Hiroki Komatsu<sup>1</sup>, Jessica Dipold<sup>1</sup>, Anderson Zanardi<sup>1</sup>, Niklaus Ursus Wetter<sup>1</sup>, Duclerc Fernandes Parra<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares

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Micaele Ferreira Lima<sup>1</sup>, Maria Isabel Aragão Moura<sup>1</sup>, Wesithon Auday De Lima<sup>1</sup>, Mayrla Rocha Lima<sup>1</sup>, Flávia Oliveira Monteiro da Silva Abreu<sup>1</sup>; <sup>1</sup>Universidade Estadual do Ceará

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Moyra Freitas Vieira<sup>1</sup>, Celly M. S. Izumi<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora

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Murilo Barbosa Valerio<sup>1</sup>, Larissa Eduarda Gomes dos Santos<sup>1</sup>, Ana Lúcia Nazareth da Silva<sup>1</sup>, Leila Yone Reznik<sup>1</sup>, Ladimir José de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**26\_P4.43 EFFECT OF MONTMORILLONITE NANOCLAY ADDITION ON POLYAMIDE 12 PROPERTIES FOR OFFSHORE APPLICATION**

Murilo Barbosa Valerio<sup>1</sup>, Larissa Eduarda Gomes dos Santos<sup>1</sup>, Ana Lúcia Nazareth da Silva<sup>1</sup>, Leila Yone Reznik<sup>1</sup>, Ladimir José de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

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Pâmela Rosa Oliveira<sup>1</sup>, Daniele Smanhotto Malvessi<sup>1</sup>, Renata Cerruti da Costa<sup>1</sup>, Janaina da Silva Crespo<sup>2</sup>, Cristiano da Silva Teixeira<sup>1</sup>, Ismael Casagrande Bellettini<sup>1</sup>, Larissa Nardini Carli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade de Caxias do Sul

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Patricia de França Marins<sup>1</sup>, Ana Cristina de Souza Andrete<sup>1</sup>, Gabriela Pereira<sup>1</sup>, Juliana Regina Kloss<sup>1</sup>, Reinaldo Yoshiro Morita<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná

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Raelle Ferreira Gomes<sup>1</sup>, Laís Ramos Monteiro de Lima<sup>1</sup>, Regina Célia Monteiro de Paula<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará

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**26\_P4.51 INFLUENCE OF SILICA NANOFIBERS ON THE THERMAL PROPERTIES OF POLYAMIDE 6**

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**26\_P4.52 PREPARATION AND CHARACTERIZATION OF GELATIN-BASED MICROGEL WITH INCORPORATION OF PHOSPHOLIPID ORGANOGEL**

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Roger Gonçalves<sup>1</sup>, Rafael Barbosa<sup>1</sup>, Kaique Afonso Tozzi<sup>1</sup>, Carlos Henrique Scuracchio<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

**26\_P4.54 ASSESSMENT OF THE RHEOMETRIC AND MECHANICAL PROPERTIES AND OF THE CROSSLINK DENSITY OF NANOCOMPOSITES OF BUTADIENE-STYRENE COPOLYMER (SBR) WITH SYNTHETIC MICA**

Skarlett Toledo Caetano<sup>1</sup>, Amanda Galvão Carvalho<sup>1</sup>, Cléverson Fernandes Senra Gabriel<sup>1</sup>, Thiago Castro Lopes<sup>2</sup>, Regina Célia Reis Nunes<sup>1</sup>, CRISTINA RUSSI GUIMARAES FURTADO<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloísa Mano, <sup>3</sup>Universidade do Estado do Rio de Janeiro

**26\_P4.55 PREPARATION OF POLYMERIC NANOCOMPOSITES OF PP/PE BY THE MODIFICATION OF LAYERED DOUBLE HYDROXIDE WITH IONIC LIQUIDS**

Talita Portes dos Santos<sup>1</sup>, Ana Paula Vollrath<sup>1</sup>, Eveline Bischoff<sup>2</sup>, Raquel Santos Mauler<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

**26\_P4.56 PRODUCTION OF 3D-PRINTED PETG-BASED NANOCOMPOSITES AGAINST SARS-COV-2 VIRUS**

Thais da Silva Santos<sup>1</sup>, Roger Hoel Bello<sup>1</sup>, João Martins Da Costa<sup>1</sup>, Thiago Monteiro Maquine<sup>2</sup>, José Costa de Macedo Neto<sup>1</sup>, Jorge Luiz Melo de Freitas<sup>2</sup>; <sup>1</sup>Universidade do Estado do Amazonas, <sup>2</sup>Universidade Federal do Amazonas

**26\_P4.57 RHEOLOGICAL STUDY OF PA6/ATP NANOCOMPOSITES**

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**26\_P4.58 EFFECT OF DIFFERENT SURFACE MODIFICATIONS OF BRAZILIAN ATTAPULGITE (ATP) ON THE MECHANICAL PROPERTIES OF LLDPE/ATP NANOCOMPOSITES**

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**26\_P4.59 STUDY OF PLASMA APPLICATION IN POLYHYDROXYBUTYRATE SOLUTION FOR FILM PRODUCTION - EFFECTS ON MORPHOLOGY AND OTHER PROPERTIES**

Victor Gabriel Sermoud Rosa<sup>1</sup>, Roberta Helena Mendonça<sup>1</sup>, Renata Antoun Simão<sup>2</sup>, Daniele Cruz Bastos<sup>3</sup>; <sup>1</sup>Universidade Federal Rural do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Centro Universitário Estadual da Zona Oeste

**26\_P4.60 PLA/SEP NANOCOMPOSITES: EFFECT OF NANOPARTICLE CONTENT ON THE SHORT-TERM MECHANICAL PROPERTIES**

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**08 - Special polymer applications****26\_P8.61 SUPERABSORBENT HYDROGEL BASED ON CASHEW GUM AS A NEW PLATFORM FOR FERTILIZER RELEASE**

Heldeney Rodrigues de Sousa<sup>1</sup>, Idglan Sá de Lima<sup>1</sup>, Lucas Mateus de Lima Neris<sup>1</sup>, Albert Santos Silva<sup>1</sup>, Ariane Maria da Silva Santos Nascimento<sup>1</sup>, Francisca Pereira de Araújo<sup>1</sup>, Rafael Felippe Ratke<sup>2</sup>, Durcilene Alves da Silva<sup>3</sup>, JOSY ANTEVELI OSAJIMA<sup>1</sup>, Leilson Rocha Bezerra<sup>4</sup>, Edvani Curti Muniz<sup>5,1,6</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal de Mato Grosso do Sul, <sup>3</sup>Universidade Federal do Delta do Parnaíba, <sup>4</sup>Universidade Federal de Campina Grande, <sup>5</sup>Universidade Estadual de Maringá, <sup>6</sup>Universidade Tecnológica Federal do Paraná

**26\_P8.62 SUPERABSORBENT HYDROGELS BASED ON CASHEW GUM FOR USE IN AGRICULTURE**

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**26\_P8.63 EFFECT OF GUM ARABIC IN THE PHYSICAL AND MECHANICAL PROPERTIES OF TISSUE PAPERS**

Ana Cláudia dos Santos Ferreira<sup>1</sup>, Ana Margarida Carta<sup>2</sup>, Raquel Bértolo<sup>2</sup>, Dina Murtinho<sup>1</sup>, Artur José Monteiro Valente<sup>1</sup>; <sup>1</sup>Universidade de Coimbra, <sup>2</sup>Instituto de Investigação da Floresta e do Papel

**26\_P8.64 CONDUCTIVITY BEHAVIOR OF A PROTOMIC SOLID ELECTROLYTEDOPED IN SITU**

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**26\_P8.65 EVALUATION OF BIODIESEL PRODUCTION BY ESTERIFICATION THROUGH HETEROGENEOUS CATALYSIS USING SULFONATED POLYSULFONE**

LYNICKER YAN OLIVEIRA DOURADO<sup>1</sup>, Bárbara Nascimento Aud<sup>1</sup>, Andressa Tironi Vieira<sup>1</sup>, Allyson Leandro Rodrigues dos Santos<sup>1</sup>, Daniel Pasquini<sup>1</sup>, Anizio Marcio de Faria<sup>1</sup>, Rosana Maria Nascimento de Assunção<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia

**26\_P8.66 INFLUENCE OF SULFONATED POLYPROPYLENE SYNTHESIS PARAMETERS ON THE CATALYTIC ACTIVITY OF THE OLEIC ACID ESTERIFICATION REACTIONS**

Bárbara Nascimento Aud<sup>1</sup>, Marcos Vinícius Ferreira<sup>1</sup>, Rosana Maria Nascimento de Assunção<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia

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Camila Ariana Müller<sup>1</sup>, Carolina Lima Dalla Barba<sup>1</sup>, Fabricio Celso<sup>1</sup>, Carlos Leonardo Pandolfo Carone<sup>1</sup>, Daiana Cristina Metz Arnold<sup>1</sup>, Adriana Teresinha da Silva Dutra<sup>1</sup>, Carina Mariane Stoltz<sup>1</sup>, Luciano Oliveira<sup>2</sup>, Kelvyane Souza<sup>2</sup>; <sup>1</sup>Universidade Feevale, <sup>2</sup>VALE S.A.

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Edson Noriyuki Ito<sup>1</sup>, Carla Laize dos Santos Cruz Costa<sup>1</sup>, Carlos Henrique Rodrigues Milfont<sup>1</sup>, Juciklécia da Silva Reinaldo<sup>1</sup>, José Ivan de Medeiros<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte

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Daniela Eduarda Schneider<sup>1</sup>, Murilo Lauer Sanson<sup>1</sup>, Nei Sebastião Domingues Junior<sup>1</sup>, Juliani Cappra da Silva<sup>1</sup>; <sup>1</sup>Braskem S.A.

**26\_P8.70 SYNTHESIS OF SUPERABSORVENT POLYMERS CONTAINING RICE HUSK ASH AS AN INTERNAL CURING AGENT FOR CONCRETES**

Edson Araujo de Almeida<sup>1</sup>, Gabriela Lauer Breitenbach<sup>1</sup>, REGIANE DA SILVA GONZALEZ<sup>2</sup>, Edvani Curti Muniz<sup>1,3,2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal do Piauí

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Liliane Cruz Gomes de Souza Santos<sup>1</sup>, Iaci Miranda Pereira<sup>2</sup>, Maria Adircila Starling Sobreira<sup>1</sup>, Marys Lene Braga Almeida<sup>3</sup>, Eliane Ayres<sup>1</sup>; <sup>1</sup>Universidade do Estado de Minas Gerais, <sup>2</sup>CENTRO TECNOLÓGICO DO EXÉRCITO, <sup>3</sup>Universidade Federal de Minas Gerais

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Gabriel Rodrigues de Almeida Neto<sup>1</sup>, Cesar Augusto Gonçalves Beatrice<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, Luiz Antonio Pessan<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

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Gustavo De Gusmão Celestino<sup>1</sup>, Marcele de Carvalho dos Santos<sup>1</sup>, Elizabete Fernandes Lucas<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**26\_P8.74 INFLUENCE OF ION AND RELATIVE HUMIDITY ON IPMC SENSING CAPACITY**

Iago Cordeiro Santa Bárbara<sup>1</sup>, Roger Gonçalves<sup>1</sup>, Kaique Afonso Tozzi<sup>1</sup>, Carlos Henrique Scuracchio<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

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Jackson Wesley Silva dos Santos<sup>1</sup>, Classius Ferreira da Silva<sup>1</sup>, Cristiana Maria Pedroso Yoshida<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

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Jaquellyne Bittencourt Moraes Duarte da Silva<sup>1</sup>, Mayara Thamela Pessoa Paiva<sup>1</sup>, Janaina Mantovan<sup>1</sup>, Ana Clara L. Pavanello<sup>1</sup>, Adriana Lourenço Soares<sup>1</sup>, Suzana Mali<sup>1</sup>; <sup>1</sup>Universidade estadual de Londrina

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Jaquellyne Bittencourt Moraes Duarte da Silva<sup>1</sup>, Mayara Thamela Pessoa Paiva<sup>1</sup>, Janaina Mantovan<sup>1</sup>, Suzana Mali<sup>1</sup>; <sup>1</sup>Universidade estadual de Londrina

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João Henrique Lingner Moura<sup>1</sup>, Emilse Maria Agostini Martini<sup>1</sup>, Cesar Liberato Petzhold<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

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Jones Luís Müller<sup>1</sup>, Carlos Leonardo Pandolfo Carone<sup>1</sup>, Daiana Cristina Metz Arnold<sup>1</sup>, Adriana Teresinha da Silva Dutra<sup>1</sup>, Fabricio Celso<sup>1</sup>, Luciano Oliveira<sup>2</sup>, Kelvyane Souza<sup>2</sup>; <sup>1</sup>Universidade Feevale, <sup>2</sup>VALE S.A.

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Letícia Andreolli Dias<sup>1</sup>, Gabriel Rangel de Fraga Seimetz<sup>1</sup>, Carina Mariane Stoltz<sup>1</sup>, Daiana Cristina Metz Arnold<sup>1</sup>, Fabricio Celso<sup>1</sup>, Carlos Leonardo Pandolfo Carone<sup>1</sup>, Adriana Teresinha da Silva Dutra<sup>1</sup>, Luciano Oliveira<sup>2</sup>, Kelvyane Souza<sup>2</sup>; <sup>1</sup>Universidade Feevale, <sup>2</sup>VALE S.A.

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Letícia Silveira<sup>1</sup>, Saymon Menezes de Souza<sup>1</sup>, Renata Carolina Zanetti Lofrano<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei

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Matheus Colovati Saccardo<sup>1</sup>, Ariel Zuquello<sup>1</sup>, Rafael Barbosa<sup>1</sup>, Roger Gonçalves<sup>1</sup>, Kaique Afonso Tozzi<sup>1</sup>, Marina de Sousa de Paula<sup>1</sup>, Carlos Henrique Scuracchio<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

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Ana Carolina Moreira Silva<sup>1</sup>, MERCES COELHO DA SILVA<sup>1</sup>, Pradeep K. Rohatgi<sup>2</sup>, Reny Angela Renzetti<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>University of Wisconsin-Milwaukee

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Moisés Henrique Moreira Santos<sup>1</sup>, Joyce Batista Azevedo<sup>2</sup>, Pollyana da Silva Melo<sup>1</sup>, Josiane Dantas Viana Barbosa<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia Senai Cimatec, <sup>2</sup>Universidade Federal da Bahia

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Nívia do Nascimento Marques<sup>1</sup>, Bruna Luiza Batista de Lima<sup>1</sup>, Elessandre Alves de Souza<sup>2</sup>, Rosangela de Carvalho Balaban<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Centro de Pesquisas Leopoldo Américo Miguez de Mello

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Rebeca da Rocha Rodrigues<sup>1</sup>, Tamires Pedrali de Aquino<sup>1</sup>, Luciano Caseli<sup>1</sup>, Laura Oliveira Péres<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

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Renata Herrera Brandelero<sup>1</sup>, EVANDRO MARTIN BRANDELRO<sup>1</sup>, Gabriela Paulina Herrera Brandelero<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Faculdade de Direito Francisco Beltrão

**26\_P8.88 FILMS OF CALCIUM ALGINATE AND POLYETHYLENE GLYCOL FOR CO<sub>2</sub>/N<sub>2</sub> SEPARATION**

Ana Paula Benevides<sup>1</sup>, Rodrigo Azevedo Reis<sup>1</sup>, Alene Dutra Nascimento<sup>1</sup>, Ivana Lourenço de Mello Ferreira<sup>1</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro

**26\_P8.89 MACROFUNGI MYCELIA AS A RESOURCE FOR THE DEVELOPMENT OF ADVANCED BIOMATERIALS – SUBSTRATE EVALUATION FOR DEVELOPMENT AND MECHANICAL PROPERTIES OF MYCOMATERIAL**

Rosmary Nichele Brandalise<sup>1</sup>, Bruna Pertile<sup>1</sup>, Roselei Fontana<sup>1</sup>, Marli Camassola<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul

**26\_P8.90 DEVELOPMENT OF CHITOSAN FILMS WITH ADDED LIMONENE OR POLY(LIMONENE)**

Mateus Henrique Ramos Barbosa<sup>1</sup>, Sayeny de Ávila Gonçalves<sup>1</sup>, Roniérik Pioli Vieira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

**26\_P8.91 ASSESSMENT OF PROFILE RELEASE OF PHEROMONES IN EVA FIBERS OBTAINED BY SOLUTION BLOW SPINNING**

Silvana Pereira Rempel<sup>1</sup>, Gustavo Sganzerla Martinez<sup>2</sup>, Cássia Virginia de Oliveira<sup>1</sup>, Scheila de Avila e Silva<sup>2</sup>, Otávio Bianchi<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade de Caxias do Sul

**26\_P8.92 SORPTION BEHAVIOR OF ACETONE, BUTANOL AND ETHANOL IN MIXED MATRIX MEMBRANES CONTAINING ACTIVATED CARBON DISPERSED IN POLYDIMETHYLSILOXANE**

Thaynara Brasil Felizardo<sup>1</sup>, Bruno José Arcanjo Gonçalves<sup>1</sup>, Kátia Cecília de Souza Figueiredo<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

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Thaynara Brasil Felizardo<sup>1</sup>, Bruno José Arcanjo Gonçalves<sup>1</sup>, Kátia Cecília de Souza Figueiredo<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

**26\_P8.94 DEVELOPMENT OF SODIUM ALGINATE FILMS RETICULATED WITH CALCIUM CHLORIDE USED IN THE CONSERVATION OF APPLES**

Vinícius André de Jesus Pires<sup>1</sup>, Maira de Lourdes Rezende<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Sorocaba

**26\_P8.95 STUDY OF ADSORPTIVE CAPACITY OF COMMERCIAL LUBRICANTS IN POLYURETHANE FOAM: A REVIEW**

Vitor Ferreira Galvão<sup>1</sup>, Gabriel Luis Oliveira do Carmo<sup>1</sup>, Lara Cristina de Sousa<sup>1</sup>, Matheus Teixeira Araujo Silva<sup>1</sup>, Cristiane Medina Finzi-Quintão<sup>1</sup>, Katia Monteiro Novack<sup>2</sup>; <sup>1</sup>Universidade Federal de São João Del Rei, <sup>2</sup>Universidade Federal de Ouro Preto

*04 - Polymer nanostructures and nanocomposites*

**WEDNESDAY, OCTOBER 27**

**SESSION 27\_P5(17:00 - 18:30) - Poster03\_05**

*05 - Blends, composites and polymer networks*

**27\_P5.1 INFLUENCE OF NANOPARTICLES INCORPORATION ON THE MECHANICAL AND THERMAL PROPERTIES OF PA6/IONOMER SCRAPS BLEND**

Roberto Alves Taveira Jr.<sup>1</sup>, Adriana Martinelli Catelli Souza<sup>1</sup>; <sup>1</sup>Centro Universitário da Fundação Educacional Inaciana Pe Sabóia de Medeiros

**27\_P5.2 CHARACTERIZATION OF THE GLASS TRANSITION TEMPERATURE OF NITROCELLULOSE BLENDS IN FILM FORM BY DMA-MATERIAL POCKET**

Aislana Cole de Paula<sup>1</sup>, Fabrício Uliana<sup>1</sup>, Eloi Alves da Silva Filho<sup>1</sup>, Kinglston Soares<sup>2</sup>, Priscilla Paiva Luz<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo

**27\_P5.3 INVESTIGATION ON EFFECTS OF NON HALOGENATED ORGANIC PHOSPHINATES ON THERMAL PROPERTIES AND FLAME RETARDANCY OF GLASS FIBER REINFORCED POLYAMIDE 6.6 COMPOSITE**

Alexandre Menezes Steffani<sup>1</sup>, Edson Francisquetti<sup>1</sup>, Eveline Bischoff<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

**27\_P5.4 CHARACTERIZATIONS OF NON HALOGENATED ORGANIC PHOSPHINATES COMPOUNDS FLAME RETARDANT GLASS FIBER REINFORCED POLYAMIDE 6.0 COMPOSITE**

Edson Francisquetti<sup>1</sup>, Alexandre Menezes Steffani<sup>1</sup>, Rosmary Nichele Brandalise<sup>2</sup>, Ana Maria Coulon Grisa<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>2</sup>Universidade de Caxias do Sul

**27\_P5.5 PRELIMINARY STUDY ON THE EFFECT OF AIR ENTRAPMENT REDUCER AND CURING TEMPERATURE ON POLYESTER/AGGREGATE COMPOUNDS**

Joyce Batista Azevedo<sup>1</sup>, Amanda Dantas<sup>2</sup>, Josiane Dantas Viana Barbosa<sup>2</sup>, Marcelo de Sousa Carvalho<sup>2</sup>; <sup>1</sup>Universidade Federal da Bahia, <sup>2</sup>Faculdade de Tecnologia Senai Cimatec

**27\_P5.6 STUDY OF THE MECHANICAL PROPERTIES OF SUSTAINABLE COMPOSITES REINFORCED WITH CALCIUM CARBONATE EXTRACTED FROM EGG SHELLS**

Kássia Peçanha Vieira<sup>1</sup>, Alexandra Augusta Reichert<sup>1</sup>, Gabriel Monteiro Cholant<sup>1</sup>, Cesar Augusto Gonçalves Beatrice<sup>2</sup>, Amanda Dantas Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal de São Carlos

**27\_P5.7 EVALUATION OF THE MECHANICAL PROPERTIES OF BIODEGRADABLE FILMS BASED ON CORN STARCH REINFORCED WITH CELLULOSE**

Alexandra Augusta Reichert<sup>1</sup>, Mariana Ribas de Sá<sup>1</sup>, Thales Castilhos de Freitas<sup>2</sup>, José Henrique Alano<sup>3</sup>, Amanda Dantas Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal de Juiz de Fora, <sup>3</sup>Universidade Federal do Rio Grande

**27\_P5.8 BIODEGRADATION OF COMPOSITES BASED ON THERMOPLASTIC STARCH AND KRAFT LIGNIN, AIMING AT APPLICATIONS IN CONTROLLED-RELEASE FERTILIZER**

Amanda de Sousa Martinez de Freitas<sup>1</sup>, Jéssica Souza Rodrigues<sup>2</sup>, Cristiane Carla Maciel<sup>3</sup>, Ariane Aparecida F. Pires<sup>2</sup>, Wagner Roberto Botaro<sup>2</sup>, Marystela Ferreira<sup>2</sup>, Ana Paula Lemes<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>3</sup>Universidade Estadual Paulista

**27\_P5.9 THE ANTIOXIDANT ACTION OF VEGETABLE THYME OIL ON PECTIN AND WPI EXTRUDATES**

Ana Carolina Salgado Oliveira<sup>1</sup>, Raíssa Alvarenga Carvalho Gomide<sup>1</sup>, Alfredo Rodrigues de Sena Neto<sup>1</sup>, Julio Cesar Ugucioni<sup>1</sup>, Soraia Vilela Borges<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

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Laura Fonseca Ferreira<sup>1</sup>, Ana Carolina Salgado Oliveira<sup>1</sup>, Jayne de Abreu Figueiredo<sup>1</sup>, Alfredo Rodrigues de Sena Neto<sup>1</sup>, Soraia Vilela Borges<sup>1</sup>, Marali Vilela Dias<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

**27\_P5.11 BLENDS OF THERMOPLASTIC STARCH AND CHITOSAN PLASTICIZED WITH DEEP EUTECTIC SOLVENTS**

Ana Clara Lancarovici Alves<sup>1</sup>, Antonio José Felix Carvalho<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**27\_P5.12 POLYSACCHARIDE-BASED HYDROGEL SYNTHESIZED THROUGH A BORIC ACID-CATALYZED MICHAEL ADDITION CROSSLINKING METHOD**

André Ricardo Fajardo<sup>1</sup>, Rafael Fonseca Neves Quadrado<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

**27\_P5.13 COUNTER-ION, VOLTAGE AND HUMIDITY INFLUENCE ON BACK-RELAXATION PHENOMENON IN IPMC FILM BASED ON NAFION®/PT**

Ariel Zuquello<sup>1</sup>, Matheus Colovati Saccardo<sup>1</sup>, Kaique Afonso Tozzi<sup>1</sup>, Roger Gonçalves<sup>1</sup>, Rafael Barbosa<sup>1</sup>, Carlos Henrique Scuracchio<sup>1</sup>; <sup>1</sup>Univerdade Federal de São Carlos

**27\_P5.14 CHITOSAN BIOFILMS: STUDY OF THE INFLUENCE OF VARIABLES AND PROCESS CONDITIONS**

Bárbara Stefany Silva<sup>1</sup>, Paula Sibeli Celestino da Silva<sup>1</sup>, André Luis Simões Andrade<sup>2</sup>, Daniela L. A. C. S Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal Rural de Pernambuco, <sup>2</sup>Faculdade Maurício de Nassau

**27\_P5.15 CHITOSAN / MONTMORILONITE MEMBRANES: CHARACTERIZATION OF THE EFFECT OF THE LOAD CONTENT ON THE PREPARATION OF BIOFILMS**

Bárbara Stefany Silva<sup>1</sup>, Paula Sibeli Celestino da Silva<sup>1</sup>, Izarelli S. Duarte<sup>2</sup>, André Luis Simões Andrade<sup>3</sup>, Daniela L. A. C. S Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal Rural de Pernambuco, <sup>2</sup>Universidade Federal de Pernambuco, <sup>3</sup>Faculdade Maurício de Nassau

**27\_P5.16 COMPATIBILIZATION OF EPOXY RESIN WITH LIQUID CARBOXYLATED ISOPRENE ELASTOMER**

Caio Rosemberg Fonseca do Nascimento<sup>1,2</sup>, Bluma Guenther Soares<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, <sup>2</sup>Instituto Nacional de Tecnologia

**27\_P5.17 ANALYSIS OF CHEMICALLY TREATED NEWSPAPER FIBERS FOR USE AS COMPOSITE REINFORCEMENT**

Cécile Chaves Hernandez<sup>1</sup>, Iris Joana Santana<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Faculdade de Tecnologia de Sorocaba

**27\_P5.18 MECHANICAL ANALYSIS OF THE POLYESTER REINFORCED WITH NEWSPRINT FIBERS**

Cécile Chaves Hernandez<sup>1</sup>, Iris Joana Santana<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Faculdade de Tecnologia de Sorocaba

**27\_P5.19 MANUFACTURING OF FILAMENT WOUND CYLINDERS LOCALLY REINFORCED BY TAILORED PATCHES**

Cristiano Baierle de Azevedo<sup>1</sup>, José Humberto Santos Almeida Júnior<sup>2</sup>, Tales de Vargas Lisboa<sup>3</sup>, Axel Spickenheuer<sup>3</sup>, Leonardo Guilherme Scherer<sup>1</sup>, Sandro Campos Amico<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Aalto University / Aalto-yliopisto, <sup>3</sup>Leibniz Institute of Polymer Research

**27\_P5.20 INFLUENCE OF CARBON NANOTUBES COATED WITH POLYANILINE ON THE ELECTRICAL, MECHANICAL AND THERMAL PROPERTIES IN CO-CONTINUOUS POLYSTYRENE/POLY (METHYL METHACRYLATE) BLEND**

Daniel Felipe Pieteza<sup>1</sup>, Carla Dalmolin<sup>1</sup>, Daniela Becker<sup>1</sup>, Fabio Andres Silva Vega<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina

**27\_P5.21 INFLUENCE OF LASER WELDING ON THE MECHANICAL AND STRUCTURAL PROPERTIES OF PA6/LLDPE BLEND-BASED CARBON BLACK NANOCOMPOSITE**

Denis Angelo da Silva<sup>1</sup>, Erick Gabriel Ribeiro dos Anjos<sup>1,2</sup>, Guilherme Ferreira de Melo Morgado<sup>1</sup>, Aline Capella de Oliveira<sup>1</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Univerdade Federal de São Carlos

**27\_P5.22 CHARACTERIZATION OF THE TPS/PBAT BLENDS IRRADIATED BY IONIZING RADIATION**

Dione Pereira de Castro<sup>1</sup>, Leonardo Gondim de Andrade Silva<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares

**27\_P5.23 FLEXIBLE COMPOSITES BASED ON THERMOSETTING RESINS AND LIGNOCELLULOSIC FIBERS**

Edivane da Silva Araujo Cardoso<sup>1</sup>, Elen Vasques Pacheco<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**27\_P5.24 POLY (LACTIC ACID) NANOCOMPOSITES REINFORCED WITH NANOFIBRILATED CELLULOSE PREPARED BY THE MASTERBATCH TECHNIQUE USING POLY (VINYL ALCOHOL) AS CARRIER AGENT**

Emanoelle Maria Santos Chiromito<sup>1</sup>, Antonio José Felix Carvalho<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

**27\_P5.25 EFFECT OF RECYCLED GRAPHITE AS AN ANTISTATIC AGENT ON THERMAL PROPERTIES AND ELECTRICAL RESISTIVITY OF POLI (TRIMETHYLENE TEREPHTHALATE)**

Henrique Morales Zaggo<sup>1</sup>, Erick Gabriel Ribeiro dos Anjos<sup>1,2</sup>, Natália Ferreira Braga<sup>1</sup>, Fábio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Univerdade Federal de São Carlos

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Fernanda Ana Carraro Boaretto<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina

**27\_P5.27 ADDITION OF MICROALGAL BIOMASS CULTURED IN TREATED WASTEWATER AS BIOPOLYMER IN A PLA MATRIX**

Fernanda Ochner de Souza<sup>1</sup>, Daniela Becker<sup>1</sup>, Fábio de Faria Neves<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina

**27\_P5.28 A HYBRID RECYCLED POLYPROPYLENE/DIMENSION STONE WASTE/COCONUT FIBER COMPOSITE**

Gabriella Neto Chagas<sup>1</sup>, Maiccon Martins Barros<sup>1</sup>, Ariadne Gonçalves de Leão<sup>2</sup>, Roberto Carlos da Conceição Ribeiro<sup>1</sup>, Daniele Cruz Bastos<sup>3</sup>, <sup>1</sup>Centro de Tecnologia Mineral, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Centro Universitário Estadual da Zona Oeste

**27\_P5.29 EFFECT OF THE RESIDUAL SURFACTANTS OF EMULSION MADE ABS COPOLYMERS ON THE MORPHOLOGY AND MECHANICAL PROPERTIES OF PBT/ABS BLENDS**

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**27\_P5.30 ACTIVE PACKAGING OF SODIUM ALGINATE INCORPORATED WITH EXTRACTS FROM DIFFERENT PARTS OF THE MACAÚBA (*ACROCOMIA ACULEATE*) FRUIT**

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**27\_P5.31 POLYSULFONE/CHITOSAN MEMBRANES WITH INORGANIC NANOPARTICLES**

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**27\_P5.32 EVALUATION OF SHAPE MEMORY IN POLY(LACTIC ACID)/THERMOPLASTIC POLYURETHANE BLENDS**

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**27\_P5.33 EVALUATION OF THE PHYSICAL AND MORPHOLOGICAL PROPERTIES OF MEDIUM DENSITY PARTICLEBOARDS REINFORCED WITH BURITI RESIDUE (*MAURITIA FLEXUOSA*)**

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**27\_P5.34 MYRCENE RELEASE BY CHITOSAN LOADERS CROSSLINKED WITH SODIUM TRIPOLYPHOSPHATE OR GLUTARALDEHYDE**

Marcus Vinicius Alves Barros<sup>1</sup>, Hemilly Cirqueira Martins<sup>1</sup>, Keila Cardoso Teixeira<sup>1</sup>, Laene da Silva Santos<sup>1</sup>, Ana Maria da Silva Maia<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Tocantins

**27\_P5.35 NOVEL BIOPOLYMERIC FILMS WITH NATURAL ANTIOXIDANT SOURCE AS PROMISING SYSTEMS FOR DERMATOLOGICAL APPLICATION**

Beatriz Marjorie Marim<sup>1</sup>, Jéssica Fernanda Pereira<sup>1</sup>, Suzana Mali<sup>1</sup>, Audrey S. Garcia Lonni<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina

**27\_P5.36 EVALUATION OF A CROSS-LINKING AGENT IN THE PREPARATION OF FILMS BASED ON PECTIN AND CHITOSANE FOR FOOD PACKING APPLICATIONS**

José Luis Rivera-Armenta<sup>1</sup>, MARGARITA MARIA SALDIVAR GUEVARA<sup>1</sup>, VERONICA SAUCEDO RIVALCOBA<sup>1</sup>; <sup>1</sup>TECNOLOGICO NACIONAL DE MEXICO

**27\_P5.37 POLYESTER/SISAL COMPOSITES FOR APPLICATION AS A CLADDING ELEMENT**

Josiane Dantas Viana<sup>1</sup>, Lorrane Carneiro Laranjeira Silva<sup>2</sup>, Matheus Vinicius Falcão Morreira<sup>2</sup>, Daniel Vianna Goes Araujo<sup>1</sup>, Joyce Batista Azevedo<sup>3</sup>, Pollyana da Silva Melo<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia Senai Cimatec, <sup>2</sup>Universidade Federal do Recôncavo da Bahia, <sup>3</sup>Universidade Federal da Bahia

**27\_P5.38 PREPARATION OF PSYLLIUM MUCILAGE AND SODIUM ALGINATE HYDROGEL FOR BIOMEDICAL APPLICATIONS**

Kainan Akio Weege<sup>1</sup>, Andrea Cristiane Krause Bierhalz<sup>1</sup>, Antonio Augusto de Souza<sup>1</sup>, Ana Paula Immich<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**27\_P5.39 BIOPOLYMERIC FILMS OF WHEY PROTEIN ISOLATE/LIGNIN AND ITS APPLICATION AS A UV BLOCKER FOR FOOD PACKAGING.**

Karoline Ferreira e Silva<sup>1</sup>, Anderson de Freitas Junior<sup>1</sup>, Marali Vilela Dias<sup>1</sup>, Fábio Akira Mori<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

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**27\_P5.41 WATER SORPTION PROPERTIES OF SOY PROTEIN/CASSAVA STARCH/CAMU-CAMU MICROPARTICULES BLENDS**

Laura Fonseca Ferreira<sup>1</sup>, Jayne de Abreu Figueiredo<sup>1</sup>, Soraia Vilela Borges<sup>1</sup>, Alfredo Rodrigues de Sena Neto<sup>1</sup>, Marali Vilela Dias<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

**27\_P5.42 PERFORMANCE AND BIODEGRADATION OF PCL/TPS/VEGETABLE FIBER BLENDS**

Laura Hecker de Carvalho<sup>1</sup>, José Adelmo Gama Neto<sup>1</sup>, Mario Alberto de Albuquerque Filho<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande

**27\_P5.43 WATER ABSORPTION KINETICS IN POLYESTER/GLASS/JUTE FIBER HYBRID COMPOSITES**

Laura Hecker de Carvalho<sup>1</sup>, Mario Alberto de Albuquerque Filho<sup>1</sup>, Rudá Aranha<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande

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Lauro Arthur Farias Paiva Cohen<sup>1</sup>, Elisa Batista Conrado Martins<sup>1</sup>, MERCES COELHO DA SILVA<sup>2</sup>, Nubia Suely Silva Santos<sup>3</sup>, Eliane Ayres<sup>1</sup>; <sup>1</sup>Universidade do Estado de Minas Gerais, <sup>2</sup>Universidade Federal de Itajubá, <sup>3</sup>Universidade do Estado do Pará

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Letícia Capalonga Pittol<sup>1</sup>, Vanessa Zimmer Kieffer<sup>1</sup>, Edson Francisquetti<sup>2</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul

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Roberta Motta Neves<sup>1</sup>, Lídia Kunz Lazzari<sup>1</sup>, Ademir José Zattera<sup>2</sup>, Sandro Campos Amico<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade de Caxias do Sul

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Magali Canton Casagrande<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

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Marcelo Aparecido Chinelatto<sup>1</sup>, Paula do Patrocínio Dias<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

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Mariana Chiocheta Bueno<sup>1</sup>, Patricia Teixeira Marques<sup>1</sup>, Antonio Guilherme Pereira<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná

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Karen de Souza do Prado<sup>1</sup>, Maria Natália Castanho<sup>1</sup>, Jane Maria Faulstich de Paiva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba

**27\_P5.53 INFLUENCE OF POLYPROPYLENE RANDOM COPOLYMER IN MECHANICAL PROPERTIES OF STRETCH WRAP FILMS**

Matheus Borlino Lotumolo<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

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Matheus Vinicius Gregory Zimmerman<sup>1</sup>, André Luis Catto<sup>2</sup>, Cleide Borsoi<sup>2</sup>; <sup>1</sup>Universidade do Extremo Sul Catarinense, <sup>2</sup>Centro Universitário Univates

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Meire Noriko Hosokawa<sup>1</sup>, Jane Maria Faulstich de Paiva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba

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Mayara de Oliveira Camillo<sup>1</sup>, André Cometti de Souza<sup>2</sup>, Bárbara Maria Mateus Gonçalves<sup>1</sup>, Eduarda Chiabai Rodrigues de Melo<sup>1</sup>, Poliana Dariva Menini<sup>1</sup>, Paulo Roberto Correia Marcelino<sup>1</sup>, Nayara Soares Satolo<sup>1</sup>, Sara Medeiros de Almeida<sup>1</sup>, Michel Picanço Oliveira<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO, <sup>2</sup>Universidade Federal do Espírito Santo

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Gerson Luiz Mantovani<sup>1</sup>, Anderson Felix Manoel<sup>1</sup>, Pedro Ivo Cunha Claro<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>3</sup>, José Manoel Marconcini<sup>3</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Embrapa Instrumentação

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Priscila da Silva e Souza<sup>1,2</sup>, Ana Lúcia Nazareth da Silva<sup>1</sup>, Ana Maria Furtado de Sousa<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>- Instituto de Macromoléculas Professora Eloisa Mano (IMA), Universidade Federal do Rio de Janeiro (UFRJ), <sup>3</sup>Universidade do Estado do Rio de Janeiro

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Renan Henriques Gonçalves de Almeida<sup>1</sup>, Teresa Maria Dias Fernandes<sup>2</sup>, Ana Lúcia Nazareth da Silva<sup>2</sup>, Elen Vasques Pacheco<sup>2</sup>, Ana Maria Furtado de Sousa<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Universidade do Estado do Rio de Janeiro

**27\_P5.61 PROTON EXCHANGE MEMBRANES BASED ON SODIUM ALGINATE DOPED WITH BIS(HYDROXYETHYL)AMMONIUM ACETATE**

Rodrigo Azevedo Reis<sup>1</sup>, Alene Dutra Nascimento<sup>1</sup>, Lilian Ferreira de Senna<sup>1</sup>, Silvana Mattedi<sup>2</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal da Bahia

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Érica Correia Duarte<sup>1</sup>, Rodrigo Lambert Oréfice<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

**27\_P5.63 INFLUENCE OF GELATIN CONTENT IN BLENDS WITH STARCH EXTRACTED FROM POTATO SKINS**

Samara Dias Osorio<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

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Tauan Chaves Araujo<sup>1</sup>, Isadora Tavares Rodrigues Lima<sup>1</sup>, Bianca Mendonça Cunha<sup>1</sup>, Zora Ionara Gama Santos<sup>1</sup>, Jose Kaio Max Alves do Rêgo<sup>1</sup>, Maria da Gloria Gomes Silva de Santana<sup>1</sup>; <sup>1</sup>Universidade Federal de Sergipe

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Thatiana Cristina Pereira de Macedo<sup>1</sup>, Diego Adalberto Teles Campos<sup>1</sup>, Tiago Nunes Lima<sup>1</sup>, Zora Ionara Gama Santos<sup>1</sup>, Jose Kaio Max Alves do Rêgo<sup>1</sup>, Edson Noriyuki Ito<sup>2</sup>, Marcelo Massayoshi Ueki<sup>1</sup>; <sup>1</sup>Universidade Federal de Sergipe, <sup>2</sup>Universidade Federal do Rio Grande do Norte

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Thiago dos Santos Silva<sup>1</sup>, Ariadne G. de Leão<sup>2</sup>, Renata Nunes Oliveira<sup>1</sup>, Loan Filipi Calheiros Souto<sup>2</sup>, Bluma Guenther Soares<sup>2</sup>; <sup>1</sup>Universidade Federal Rural do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro

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Valdilene Oliveira da Silva<sup>1</sup>, Thaises Brunelle Santana de Lima<sup>1</sup>, Elmo Silvano de Araujo<sup>1</sup>, Patricia Lopes Barros de Araujo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

**27\_P5.69 INFLUENCE OF LAURIC ACID ON THE THERMAL PROPERTIES IN THE RECYCLED POLYPROPYLENE/BAMBOO FIBER COMPOSITE**

Vanessa Zimmer Kieffer<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>, Lety del Pilar Fajardo Cabrera de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**27\_P5.70 INFLUENCE OF PHYSICAL TREATMENT IN CURAUA FIBER ON POST-CONSUMPTION HDPE COMPOSITES**

Vanessa Zimmer Kieffer<sup>1</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**27\_P5.71 INFLUENCE OF PROCESSING PARAMETERS AND ADDITIVES ON THE BEHAVIOR OF THE PLA/PBAT BLEND**

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**27\_P5.72 EVALUATION OF THERMAL STABILITY IN BLENDS OF BACTERIAL CELLULOSE AND SODIUM ALGINATE IN DIFFERENT COMPOSITIONS**

Girlaine Santos da Silva<sup>1</sup>, Viviane Fonseca Caetano<sup>1</sup>, Yêda Medeiros Bastos de Almeida<sup>1</sup>, Glória Maria Vinhas<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

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**27\_P7.73 INFLUENCE OF VULCANIZATION SYSTEM ON NATURAL RUBBER NETWORK**

Amanda Faria Baruel<sup>1,2</sup>, Sandra Aparecida Coelho de Mello<sup>2</sup>, FERNANDA MENEZES<sup>2</sup>, Silvana Navarro Cassu<sup>1,2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço

**27\_P7.74 EFFECT OF VULCANIZATION SYSTEM ON DAMPING PROPERTIES OF NATURAL RUBBER**

Amanda Faria Baruel<sup>1,2</sup>, Sandra Aparecida Coelho de Mello<sup>2</sup>, FERNANDA MENEZES<sup>2</sup>, Silvana Navarro Cassu<sup>1,2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço

**27\_P7.75 DETERMINATION OF CROSS-LINK DENSITY OF FILLED AND UNFILLED NITRILE RUBBER BY DYNAMIC SHEAR TEST**

Ana Carolina Ribeiro Coimbra<sup>1</sup>, Gustavo Ninho Campos<sup>1</sup>, Felipe Nunes Linhares<sup>1</sup>, Elisson Brum Dutra da Rocha<sup>1</sup>, Arianne Aparecida da Silva<sup>1</sup>, Ana Maria Furtado de Sousa<sup>1</sup>, CRISTINA RUSSI GUIMARAES FURTADO<sup>1</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro

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**27\_P7.77 PHYSICAL AND CHEMICAL CHARACTERIZATION OF HYDROPHOBICALLY MODIFIED POLYACRYLAMIDE FOR APPLICATION IN PETROLEUM EXTRACTION**

Caroline Pereira Dutra<sup>1</sup>, Tiago Silva<sup>1</sup>, Grasiela Gheno<sup>1</sup>, Augusto C.C. Peres<sup>2</sup>, Cesar Liberato Petzhold<sup>1</sup>, Nádyia Pesce da Silveira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Centro de Pesquisas Leopoldo Américo Miguez de Mello

**27\_P7.78 EVALUATION OF NATURAL SWEETENER USING TG/DTG, DTA & FTIR**

Naienne da S. Santana<sup>1</sup>, Cheila G. Mothé<sup>1</sup>, Marcio Nele<sup>1</sup>, Michelle G. Mothé<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**27\_P7.79 DETERMINATION OF CRYSTALLINITY AND WATER VAPOUR PERMEABILITY OF BIOPOLYMER P3(HB-CO-HHX)**

Ester Coutinho da Costa da Silva<sup>1</sup>, Jose Gregorio Gomez Cabrera<sup>2</sup>, Luiziana Ferreira da Silva<sup>2</sup>, Rubén Sánchez Rodríguez<sup>1</sup>; <sup>1</sup>Universidade Estadual do Norte Fluminense Darcy Ribeiro, <sup>2</sup>Universidade de São Paulo

**27\_P7.80 SYNTHESIS AND CHARACTERIZATION OF POLYOLS FROM THERMODEGRADED SOYBEAN OIL**

Gabriel Luis Oliveira do Carmo<sup>1</sup>, Mariana Simões Gualberto<sup>1</sup>, Natâa Carlos Lira Madeira<sup>2</sup>, Katia Monteiro Novack<sup>3</sup>, Wanderson Romao<sup>2</sup>, Fabiano Luiz Naves<sup>1</sup>, Cristiane Medina Finzi-Quintão<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei, <sup>2</sup>Universidade Federal do Espírito Santo, <sup>3</sup>Universidade Federal de Ouro Preto

**27\_P7.81 PHASE BEHAVIOR OF POLY(3-HYDROXYBUTYRATE-CO-3-HYDROXYVALERATE) PLASTICIZED WITH AN OLIGOMERIC POLYESTER**

Giovanni Bortoloni Perin<sup>1</sup>, Jacqueline Leme Barbosa<sup>1</sup>, Maria Isabel Felisberti<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

**27\_P7.82 SYNTHESIS AND FTIR CHARACTERIZATION OF DENDRIMERS AND HYDROPHOBIZED POLYETHYLENE GLYCOLS WITH POTENTIAL TO INHIBIT CLAY SWELLING**

Hugo Noronha da Silva Barros<sup>1</sup>, Thiago M Rossi<sup>1</sup>, Gabriel C. Ramos<sup>1</sup>, GRAZIELLE LOPES<sup>1</sup>, Elizabete Fernandes Lucas<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

**27\_P7.83 FTIR AS A TOOL TO EVALUATE THE PHOTOOXIDATIVE DEGRADATION OF POLYETHYLENE**

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**27\_P7.84 CELLULOSE/BIOCHAR AEROGELS: THERMAL PROPERTIES AND LIFETIME PREDICTION**

Lídia Kunz Lazzari<sup>1</sup>, Roberta Motta Neves<sup>1</sup>, Daniele Perondi<sup>2</sup>, Ademir José Zattera<sup>2</sup>, Ruth Marlene Campomanes Santana<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade de Caxias do Sul

**27\_P7.85 RENEWABLE POLYMERS WITH LUMINESCENT PROPERTIES**

Rafael Turra Alarcon<sup>1</sup>, Caroline Gagliari<sup>1</sup>, Giovanny Carvalho dos Santos<sup>1</sup>, Raquel Magri<sup>1</sup>, Aguinaldo Robinson de Souza<sup>1</sup>, GILBERT BANNACH<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

**27\_P7.86 RICINOLEIC ACID AS A REAGENT IN THE SYNTHESIS OF IONOMICRIC COPOLYESTER AMIDES FOR COATING APPLICATIONS**

Roberta Lopes de Paula<sup>1</sup>, Elisabete Frollini<sup>1</sup>, Micaela Vannini<sup>2</sup>, Grazia Totaro<sup>2</sup>, Laura Sisti<sup>2</sup>, Natalia Mayumi Inada<sup>1</sup>, Clara Maria Gonçalves de Faria<sup>1</sup>, Annamaria Celli<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade de Bolonha

**27\_P7.87 THERMAL BEHAVIOR OF NATURAL PRESERVATIVES COMPARED TO PARABEN BY TG/DTG AND DTA**

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**27\_P7.88 STUDY ON THERMAL DEGRADATION KINETICS OF THE POLY(L-LACTIC ACID)/GRAPHITE EXPANDED COMPOSITE BY THERMOGRAVIMETRIC ANALYSIS**

Valdilene Oliveira da Silva<sup>1</sup>, Thaises Brunelle Santana de Lima<sup>1</sup>, Elmo Silvano de Araujo<sup>1</sup>, Patricia Lopes Barros de Araujo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

**27\_P7.89 EVALUATION OF THE THERMAL STABILITY OF BACTERIAL CELLULOSE MEMBRANES PRODUCED FROM SALINE MEDIUM**

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*09 - Innovation and management involving polymers and topics in education*

**27\_P9.90 TIRE TREAD EDUCATIONAL FLOOR, A MODEL OF MOBILITY MARKERS FOR THE DISABLED**

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**27\_P9.91 STATE OF THE ART OF POLYMER ELECTROLYTE MEMBRANES IN FUEL CELLS**

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**27\_P9.92 PEO BASED SOLID POLYMER ELECTROLYTES FOR LITHIUM-ION BATTERIES: STATE OF THE ART**

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