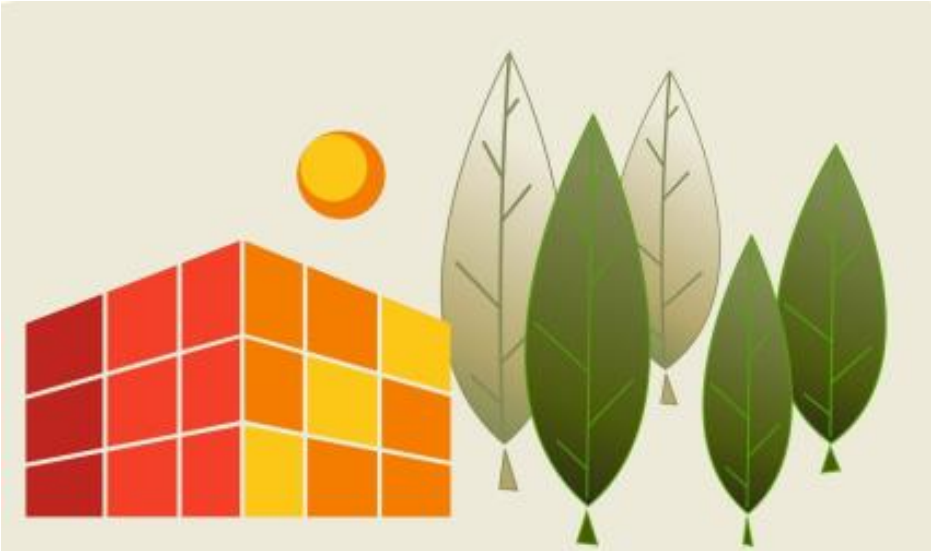

BIOPOL-2019. SCIENTIFIC PROGRAMME

Stockholm, 17th-19th JUNE 2019

Monday, June 17th, 2019

10.00 – 11.15. Registration

11:15 – 11:30. Opening by Alfonso Jiménez, Francisco Vilaplana, Lars Berglund and Sigbritt Karlsson (President KTH)

Session 1.

Room F1. Chairperson Lars Berglund

11:30-12:15. Opening Lecture. David Kaplan (Tufts University, MA, United States of America) "Silk Proteins – Functional Materials for Medicine"

12.15-13.30. Lunch

Session 2.

Room F1. Chairperson Katja Loos

13.30-14.00. Keynote Lecture 1. Tadaisha Iwata (Department of Biomaterial Sciences, The University of Tokyo, Japan) "Mechanical Properties, Structure Analysis And Enzymatic Degradation Of Microbial Polyester Fibers"

14.00-14.20. Oral Communication 1. Per-Olof Syrén (KTH, Royal Institute of Technology, Stockholm, Sweden). "Retrobiosynthesis To Generate Terpene-Based Polymers"

14.20-14.40. Oral Communication 2. Yasmin Raupp (Karlsruhe Institute of Technology (KIT), Germany). "Catalytic Aerobic Oxidation Of Terpenes And Follow-Up Chemistry Towards Renewable Poly(Hydroxy Urethane)s"

14.40-15.00. Oral Communication 3. Annamaria Celli (University of Bologna, Italy). "Vanillic Acid: A Natural Aromatic Building Block For The Design Of New Copolymers With Tunable Properties"

15.00-15.20. Oral Communication 4. Olatz Guaresti Larrea (University of the Basque Country, Donostia - San Sebastián, Spain). Light Induced Cycloaddition For Chitosan-Based 3d Fluorescent Networks Formation"

Room F2. Chairperson Suprakas Sinha Ray

14.00-14.20. Oral Communication 5. Emilie Gauthier (The University of Queensland, Australia). "Biopolymer Composite For Slow Release To Manage Pimelea Poisoning In Cattle"

14.20-14.40. Oral Communication 6. Ian Levett (The University of Queensland, Australia). "Extruded Bacterial Polyester PHBV For Controlled Release Agrichemicals – Applying Tomography To Understand The Mechanisms Controlling Release"

14.40-15.00. Oral Communication 7. Ignacio Solaberrieta (University of Alicante, Spain). "Encapsulation Of Natural Active Principles Extracted From Aloe Vera Agro Wastes In Electrospun Polyethylene Oxide Nanofibers"

15.00-15.20. Oral Communication 8. Cansu Ülker Turan (Istanbul Technical University, Turkey) "Fabrication Of Home-Made Biopolyester/Natural Polymer Nanofibers: Potential Drug Delivery Systems"

Room F3. Chairperson Andreas Kuenkel

14.00-14.20. Oral Communication 9. Gerrit Gobius du Sart (Total Corbion PLA, The Netherlands). "Processing In a Co-crystallization Window: A Novel Production Method For Stereocomplex Polylactic Acid Powder"

14.20-14.40. Oral Communication 10. Piming Ma (The Key Laboratory of Synthetic and Biological Colloids, Ministry of Education, China). "Supertough And Heat-Resistant PLLA/Elastomer Blends By Controlling The Distribution Of Sc Crystallites And Tailoring The Morphology"

14.40-15.00. Oral Communication 11. Ainara Sangroniz (University of the Basque Country, Donostia - San Sebastián, Spain), "Effect Of Rigid Amorphous Fraction And Crystallinity On Polylactide Transport Properties"

15.00-15.20. Oral Communication 12. Zhaobin Qiu (Beijing University of Chemical Technology, China), "Effect Of Poly(Diethylene Glycol Adipate) And Cellullose Nanocrystals On The Crystallization Behavior Of Biodegradable Poly(L-Lactide)"

15.20-15.50. Coffee Break

Session 3.
Room F1. Chairperson Tadaisha Iwata

15.50-16.20. Keynote Lecture 2. Andreas Kuenkel (BASF SE, Ludwigshafen am Rhein, Germany). "Fundamental Understanding Of Biodegradability"

16.20-16.40. Oral Communication 13. Shanmugam Thiyagarajan (Wageningen Food & Biobased Research, The Netherlands). "Furandicarboxylic Acid Based Polyesters: A Tool Box Constructed To Derive a Polymer With Desired Properties"

16.40-17.00. Oral Communication 14. Nadia Lotti (University of Bologna, Italy). "Poly(Diethylene 2,5-Furandicarboxylate): A New Compostable Biobased Polyester With Outstanding Barrier Properties"

17.00-17.20. Oral Communication 15. Ricardo Chagas (Universidade Nova de Lisboa, Portugal). "New Cellulose Based Polymer For Wine Proteins Removal"

17.20-17.40. Oral Communication 16. Andreia F. Sousa (University of Aveiro, Portugal). "Furanoate-Based Nanomaterials: Two Case Studies Based On Poly(Butylene 2,5-Furanoate)"

Room F2. Chairperson Dimitrios N. Bikiaris

16.20-16.40. Oral Communication 17. Matthieu George (Université de Montpellier, France), "New Insights For The Fragmentation Of Plastics Into Microplastics In The Ocean"

16.40-17.00. Oral Communication 18. Emmanuelle Gastaldi (UMR IATE Ingénierie des Agropolymères et Technologies Emergentes, Montpellier, France). "Biodegradation Performance Of PHBV And PBSA: What Makes The Difference"

17.00-17.20. Oral Communication 19. Clémentine Arnault (CARBIOLICE, Riom, France), "CARBIOLICE'S Enzymatic Technology To Achieve PLA Home Composting"

17.20-17.40. Oral Communication 20. Stefano Fiori (Condensia Química S.A, Barcelona, Spain). "Major Trends On The Market Of Bioplastics"

Room F3. Chairperson Susana Fernandes

16.20-16.40. Oral Communication 21. Anna Sangregorio (Avantium Chemicals B.V., Amsterdam, The Netherlands). "Valorization Of a Novel Biorefinery Derived Thermosetting In All "Green" Composite Applications"

16.40-17.00. Oral Communication 22. Rut Fernández-Marín (University of the Basque Country, Donostia-San Sebastián, Spain). "α-Chitin Nanocrystals/PVA Nanocomposites Films With Oreganum Vulgare Essential Oil"

17.00-17.20. Oral Communication 23. Fengwei Xie (University of Warwick, Coventry, United Kingdom). "Competing Interactions In Hybridised-Biopolymer Nanocomposites"

17.20-17.40. Oral Communication 24. Blanca Jalvo Sánchez (Stockholm University, Sweden). "Isolation and characterization of tunicin nanocrystals from modified tunicate biomass"

19.00 – Reception in Stockholm City Hall hosted by Stockholm City

Tuesday, June 18th, 2019

Session 4.
Room F1. Chairperson Michael Meier

08:30-09:10. Invited Lecture. Kristiina Oksman (University of Lulea, Sweden). "Cellulose nanomaterials"

09.10-09.40 Keynote Lecture 3. Sicco de Vos (Corbion BV, The Netherlands). "Fully resorbable PLA-glass composite materials"

09.40-10.00. Oral Communication 25. Rebeca Hernández (Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), Madrid, Spain). "Biobased Polyelectrolytes: Novel Green Processes For The Preparation Of Functional Biomaterials"

10.00-10.20. Oral Communication 26. Marcel Kluge (Fraunhofer Institute for Wood Research, Braunschweig, Germany). "Polyester Amides Based On Succinic Acid And Symmetrical Amido Diols – Suppressing The Chain-Terminating Imides"

10.20-10.40. Oral Communication 27. Iñigo Díez-García (University of the Basque Country, Donostia-San Sebastian, Spain), **"**Preparation Of Nanocomposites By Ex-situ Incorporation Of TiO_2 Nanoparticles To Synthesize Solvent-free Waterborne Poly(urethane-urea)s Based On Triblock Copolymers"

Room F2. Chairperson José M. Lagarón

09.40-10.00. Oral Communication 28. Suprakas Sinha Ray (1DST-CSIR National Centre for Nano-Structured Materials, Pretoria, South Africa). "Depth Filtration Of Airborne Agglomerates Using Electrospun Bio-Based Polylactide Membranes"

10.00-10.20. Oral Communication 29. Ana Cristina Mellinas (University of Alicante, Spain). "Microwave-Assisted Biosynthesis Of Selenium Nanoparticles Using Cocoa Bean Shell Waste Extracts"

10.20-10.40. Oral Communication 30. Bàrbara Micó-Vicent (University of Alicante, Spain). "Using Laminar Nanoclays For Phycocyanin Stabilization And Application As New Natural Blue Pigments From Microalgae Extraction"

Room F3. Chairperson Nadia Lotti

09.40-10.00. Oral Communication 31. Antonella Esposito (Normandie University, Rouen, France). "How Can Molecular Mobility Unveil The Limits And Potentialities Of Biopolymers?"

10.00-10.20. Oral Communication 32. Benjamin Le Delliou (AgroParisTech, Massy Cedex, France). "Development Of Biodegradable Poly(Hydroxybutyrate-Co-Hydroxyvalerate) And Poly(Butylene Succinate-Co-Adipate) Blends: Toughening Effect"

10.20-10.40. Oral Communication 33. Maria Cristina Righetti (CNR-IPCF, National Research Council – Institute for Chemical and Physical Processes, Pisa, Italy). "Polymorphism In Bio-Based Poly(Propylene 2,5-Furandicarboxylate): Morphology, Crystal Transformation And Melting Behavior"

10.40-11.10. Coffee Break and Poster Session 1

Session 5.
Room F1. Chairperson Stephen A. Miller

11.10-11.40 Keynote Lecture 4. Katja Loos (University of Groningen, The Netherlands). "Enzymatic Polymerizations – Novel Ways to (New) Polymer Systems"

11.40-12.00. Oral Communication 34. Laurent Lebrun (Université de Rouen Normandie, France). "Bio-Based Polyester For Food Packaging: Synthesis, Thermal, Mechanical, And Permeation Properties"

12.00-12.20. Oral Communication 35. Stamatina N. Vouyiouka (National Technical University of Athens, Greece). "Poly(Lactic Acid) Microcapsules: Tailoring Properties Via Solid State Polymerization"

12.20-12.40. Oral Communication 36. Dimitrios N. Bikiaris (Aristotle University of Thessaloniki, Greece). **"**Effect of catalyst time and polymerization conditions on poly(ethylene fulanoate) synthesis using FDCA monomer"

Room F2. Chairperson Kristiina Oksman

11.40-12.00. Oral Communication 37. Demetres Briassoulis (Agricultural University Of Athens, Greece). "Techno-Economic Sustainability Criteria For Post-Consumer Bio-Based Plastics Material Recovery"

12.00-12.20. Oral Communication 38. Benjamine Belloncle (Materia Nova, Mons, Belgium). "Evolutive Use Of LCA Tools In The Development Of Research Projects Related To Bio-Based Polymers"

12.20-12.40. Oral Communication 39. Antje Lieske (Fraunhofer Institute for Applied Polymer Research, Potsdam-Golm, Germany). "Feedstock recycling of PLA – A systematic approach to a novel recycling route"

Room F3. Chairperson Sandra Domenek

11.40-12.00. Oral Communication 40. Stephane Bruzaud (Université de Bretagne-Sud, Lorient, France). "Blends Based On Polyhydroxyalkanoates: From The Elaboration To The Recycling"

12.00-12.20. Oral Communication 41. José Maria Lagarón (Novel Materials and Nanotechnology Group, CSIC, Valencia, Spain). "High Performance Antimicrobial, Antioxidant And Oxygen Scavening Electrospun Polyhydroxyalkanoate And Polycaprolactone (PCL) Based Biopapers"

12.20-12.40. Oral Communication 42. Jose Gámez-Pérez (Universitat Jaume I, Castelló, Spain). "Recent Developments Towards Massive Use Of PHAs In Packaging Applications"

12.40-14.00. Lunch

Session 6.

Room F1. Chairperson Jumpei Kawada

14.00-14.40. Invited Lecture. Michael Meier (Karlsruhe Institute of Technology (KIT), Germany). "Renewability Is Not Enough: Sustainable Synthesis of Biomass-derived Monomers And Polymers"

14.40-15.00. Oral Communication 43. Peter Olsen, (Wallenberg Wood Science Center, Stockholm, Sweden). "Opening Rings; From Biomass, In Water And Beyond"

15.00-15.20. Oral Communication 44. Pia Loser (Karlsruhe Institute of Technology (KIT), Germany). "Synthesis Of Cleavable Bio-Based Monomers: Towards Recyclable Thermosets"

15.20-15.40. Oral Communication 45. Nicolas Jacquel (Roquette Frères, Lestrem France). "Pushing Further The Limits Of Polyesters With Isosorbide"

Room F2. Chairperson Emmanuelle Gastaldi

14.40-15.00. Oral Communication 46. Vito Gigante (University of Pisa, Italy), "Composites Based On PHB-HV and Saw Dust Fibers For Terrestrial Applications: Processability And Degradability"

15.00-15.20. Oral Communication 47. Orietta Monticelli, (University of Genova, Italy). "On Novel Applications Of Sc-PLA In The Formulation Of Polymer Particles To Be Used As Drug Carrier"

15.20-15.40. Oral Communication 48. Johana Andrade (Universitat Politècnica de València, Spain). "Incorporation Of Carvacrol Into Poly (Vinyl Alcohol) Films As Affected By The Polymer Molecular Characteristics"

Room F3. Chairperson Eric Dargent

14.40-15.00. Oral Communication 49. Nadège Follain (Normandie University, Rouen, France). "Evidence Of Nanolayer Assembly For Biodegradable Polyesters. Impact On Barrier Properties"

15.00-15.20. Oral Communication 50. Shiyu Geng (Luleå University of Technology, Sweden). "Solid-State Drawing – An Efficient Approach Towards Strong And Stiff Nanocellulose Reinforced Poly(Lactic Acid) Nanocomposites"

15.20-15.40. Oral Communication 51. Deborah LeCorre-Bordes (New Zealand Institute for Plant & Food Research Limited, New Zealand). "Improved 3D-Printability Of Collagen With Nano-Polysaccharides"

15.40-16.25. Coffee Break and Poster Session 1

Session 7.
Room F1. Chairperson Stefano Fiori

16.25-16.55. Keynote Lecture 5. Maria del Carmen Garrigós (University of Alicante, Spain). "Agro-food waste valorization as a source of valuable biochemicals towards a circular economy: BARBARA project"

16.55-17.15. Oral Communication 52. Balazs Imre (KTH, Royal Institute of Technology, Stockholm, Sweden). "Organocatalytic esterification of corn starch for materials applications"

17.15-17.35. Oral Communication 53. Luigi Torre (University of Perugia, Terni, Italy). "Polyester-based biocomposites with enhanced properties by using natural additives obtained from agrofood wastes"

17.35-17.55. Oral Communication 54. Lidia García (AITIIP Technology Center, Zaragoza, Spain). "Filament development for 3D printing based on BARBARA biocomposites"

Room F2. Chairperson Arantxa Eceiza

16.55-17.15. Oral Communication 55. Charlotte Menager (Université Côte d'Azur, Nice, France). "Relations Between Polymerization Mechanisms Of Epoxidized Linseed Oil With Various Dicarboxylic Acids And Mechanical Properties"

17.15-17.35. Oral Communication 56. Valeriia Karaseva (INRA, Montpellier, France). "Design Of An Epoxy Prepolymer Based On Chestnut Agro-Residues"

17.35-17.55. Oral Communication 57. Tobias Robert (Fraunhofer Institute for Wood Research, Braunschweig, Germany). "Itaconic Acid As Renewable Building Block For Unsaturated Polyesters"

Room F3. Chairperson Orietta Monticelli

16.55-17.15. Oral Communication 58. Alexander Piontek (Fraunhofer Institute for Environmental, Safety and Energy Technology, Oberhausen, Germany). "Reactive Compatibilization Of Poly(Lactic Acid) (PLA) With Bio-Based Ethylene-Propylene-Diene-Rubber (EPDM)"

17.15-17.35. Oral Communication 59. Andrea Lazzeri (University of Pisa, Italy). "Rubber toughening of Polylactic acid (PLA) with Poly(butylene adipate-co-terephthalate) (PBAT): mechanical properties, fracture mechanics and analysis of brittle-ductile behavior varying temperature and test speed"

17.35-17.55. Oral Communication 60. Si-Chong Chen (Sichuan University, China). "Supertoughen Polylactide By Constructing Biodegradable Pseudo-Crosslink Network"

19.00 – Conference Dinner (Vasa Museum, *Vasamuseet*)

Wednesday 19th June 2019

Session 8

Room F1. Chairperson David Kaplan

09:00-09:40 Invited Lecture. Stephen Miller (University of Florida, United States of America). "Programming The Properties And Degradation Of Biopolymers For Packaging Applications"

09.40-10.10 Keynote Lecture 6. Susana C.M. Fernandes (University of Pau and Pays de l'Adour, France). "Marine Polymers: A Rising Tide Of Challenges For The Development Of Functional Biomaterials"

10.10-10.30. Oral Communication 61. Gianmarco Griffini (Politecnico di Milano, Italy). "Lignin Functionalization As Versatile Tool For Advanced Bio-Based Coatings"

10.30-10.50. Oral Communication 62. Francesca Luzi (University of Perugia, Terni, Italy). "Study Of Thermal, Antioxidant And Swelling Behaviour Of PVA/Hydrophobic Citric Acid-Modified Lignin Nanoparticles"

10.50-11.10. Oral Communication 63. Yunsheng Xu (KTH Royal Institute of Technology, Stockholm, Sweden). "Isosorbide And Lignin As Rigid Building Blocks For Tailoring Bio Based Thermosets With Tunable Properties"

Room F2. Chairperson Debora Puglia

10.10-10.30. Oral Communication 64. Patrizia Cinelli (University of Pisa, Italy). "Biomass Valorization In Production Of Biocomposites With Tailored Properties And Degradability"

10.30-10.50. Oral Communication 65. Hari B Sunkara (DuPont Industrial Biosciences, Wilmington, DE, United States of America). "Poly(Trimethylene 2,5-Furandicarboxylate): An Industrial Perspective"

10.50-11.10. Oral Communication 66. Michelina Soccio (University of Bologna, Italy). "Very Versatile Fully Biobased Copolyesters Of Poly(Butylene Succinate): From Packaging To Biomedicine"

Room F3. Chairperson Stephane Bruzaud

10.10-10.30. Oral Communication 67. David Sandquist (VTT Technical Research Centre of Finland Ltd, Tampere, Finland), "Light-Weight Biocomposites By Extrusion Foaming: Effect Of Wood Based Fibers On Foaming Behaviour Of Poly(Lactic Acid)"

10.30-10.50. Oral Communication 68. Giacomo Tedeschi (University of Genova, Italy). "Multifunctional Wood-Like Bioplastics By Reassembly Of Hydrolyzed Lignin, Hemicellulose, And Cellulose"

10.50-11.10. Oral Communication 69. Julio Vidal (AITIIP Technology Center, Zaragoza, Spain). "Advanced Sustainable Biobased Composite Materials Reinforced With Natural Fibres"

11.10-11.40. Coffee Break and Poster Session 2

Session 9

Room F1. Chairperson Sicco de Vos

11.40-12.10 Keynote Lecture 7. Debora Puglia (University of Perugia, Terni, Italy). "Lignin based nanocomposites"

12.10-12.30. Oral Communication 70. Sylvain Legrand (INSA Lyon, Villeurbanne, France). "Synthesis And Properties Of Poly(1,4-Cyclohexanedimethylene-Co-Isosorbide Terephthalate), A Biobased Copolyester With High Performances"

12.30-12.50. Oral Communication 71. Amaia Morales (University of the Basque Country, Donostia – San Sebastián, Spain). "Influence of the molecular weight of poly(vinyl alcohol) in physically crosslinked lignin-based green hydrogels"

Room F2. Chairperson Demetres Briassoulis

12.10-12.30. Oral Communication 72. Kim Tremblay-Parrado (University of Strasbourg, France). “From Vegetable and Microalgae Oils to Innovative, Responsive and Dynamic Materials”

12.30-12.50. Oral Communication 73. Jafar Al-Hakkak (New Zealand Institute for Plant and Food Research Limited, Auckland, New Zealand). “Effect Of Freezing On Starches From Different Botanical Sources”

Room F3. Chairperson Andrea Lazzeri

12.10-12.30. Oral Communication 74. Christofer Lendel (KTH Royal Institute of Technology, Stockholm, Sweden). “Protein Nanomaterials From Renewable Resources”

12.30-12.50. Oral Communication 75. Fei Song (Sichuan University, China). “Superhydrophobic And Self-Cleaning Soy Protein Films With Hierarchically Micro-/Nano-Structured Surfaces: Preparation And Applications”

12.50-14.00. Lunch

14.00-14.45. Poster Session 2

Session 10

Room F1. Chairperson Patrizia Cinelli

14.45-15.05. Oral Communication 76. Zhenjiang Li (Nanjing Tech University, China), “Saccharinate Pyridinium Binary Organocatalyst For Bulk Ring-Opening Polymerization Of Lactide”

15.05-15.25. Oral Communication 77. Aurélie Bourdet (Normandie University, Rouen, France). “Thermal Properties And Molecular Mobility Of A New Generation Of Furanic Copolyesters”

15.25-15.45. Oral Communication 78. Giulia Scoponi (University of Genova, Italy)**,** **"**Tuning The Properties Of Poly(Lactic Acid)-Based Biomaterials By Green Blending Of Linear PLLA"

Room F2. Chairperson Luigi Torre

14.45-15.05. Oral Communication 79. Rosana Moriana-Torró (KTH-Royal Institute of Technology, Stockholm, Sweden). "From Forest Residues To Green Nanocomposites For Packaging Applications"

15.05-15.25. Oral Communication 80. Martin Sterner (KTH-Royal Institute of Technology, Stockholm, Sweden). "From Seaweed Biomass To High Performance Materials"

15.25-15.45. Oral Communication 81. Amparo Jiménez-Quero (KTH-Royal Institute of Technology, Stockholm, Sweden). "Cascade Biorefinery Approach For Valorization Of Mushroom Farming By-products"

Room F3. Chairperson Gianmarco Griffini

14.45-15.05. Oral Communication 82. Arunjunai Raj Mahendran (Wood K plus – Competence Center for Wood Composites & Wood Chemistry, Linz, Austria). "Biobased Thermoset Resins From Vegetable Oil For Natural Fiber Reinforced Composite"

15.05-15.25. Oral Communication 83. Katharina Resch-Fauster (Montanuniversitaet Leoben, Austria). "High-Performance Epoxy-Thermosets With 100% Bio-Based Carbon Content"

15.25-15.45. Oral Communication 84. Laura Peponi (Institute of Polymer Science and Technology-CSIC, Madrid, Spain). "Biodegradable Polyurethanes With Shape Memory Behavior"

Session 11

Room F1. Chairperson Lars Berglund

15.45-16.30. Closing Lecture. Jumpei Kawada (Toyota Polymer Blends, Japan). “Bio-Alloys For Automobiles”

16.30-16.45. Announcement of BIOPOL-2021 – Best Poster Award Ceremony

16.45. BIOPOL-2019 closure

POSTER SESSION 1 (Tuesday 18th June 2019)

P1.1. Hajar Faraj, Nadège Follain, Giana Almeida, Alain Guinault, Matthieu Gervais, Cyrille Sollogoub, Sandra Domenek. DEVELOPMENT OF NANOCELLULOSE-BASED HIGH GAS BARRIER COMPOSITES FOR PACKAGING

P1.2. Malin From, Bo Andreasson, Ida Svanedal, Håkan Edlund, Magnus Norgren, Per Tomas Larsson. INFLUENCE OF REGENERATION LIQUID POLARITY ON DIFFERENT MATERIAL PROPERTIES OF DRIED CELLULOSE II FILMS

P1.3. Kizkitza González, Senda Basasoro, Arantxa Eceiza, Nagore Gabilondo. CELLULOSE NANOCRYSTALS AS DRUG DELIVERY EFFICIENCY MODULATORS IN STARCH-BASED CLICK HYDROGELS

P1.4. Jonathan Cimadoro, Federico Trupp, Nicolás Torasso, Lucas Guz, Nagore Gabilondo, Silvia Goyanes. ANTIBACTERIAL POLY(VINYL ALCOHOL) LOADED WITH ZINC NITRATE: ELECTROSPUN MATS vs CONTINUOUS FILMS

P1.5. Sergejs Gaidukovs, Oskars Platnieks, V.K. Thakur, Inese Filipova. CHARACTERIZATION OF MELT PROCESSED POLYBUTYLENE SUCCINATE AND RECYCLED TETRAPAK CELLULOSE COMPOSITES

P1.6. Dimitrios Georgouvelas. BIO-BASED WATER FILTRATION SYSTEMS COMPOSED OF CELLULOSE AND LIGNOCELLULOSE NANOPARTICLES

P1.7. Joseba Gómez-Hermoso-de-Mendoza, Hernane S. Barud, Junkal Gutierrez, Agnieszka Tercjak. CELLULOSE TRIACETATE NANOCOMPOSITES WITH PHOTOCHROMIC AND UV-SHIELDING PROPERTIES

P1.8. Leire Urbina, Olatz Guaresti, Arantxa Eceiza, María Ángeles Corcuera, Aloña Retegi. STIFF BACTERIAL CELLULOSE NANOPAPERS WITH IMPROVED HYDROPHOBICITY AND ANTIOXIDANT PROPERTIES

P1.9. Paloma Cabecas Segura, Rob Onderwater, Audrey Tanghe, Ruddy Wattiez, Baptiste Leroy. IMPACT OF CARBON SOURCE ON THE PRODUCTION OF PHB-co-HV IN RHODOSPIRILLUM RUBRUM

P1.10. Chiara Magnani, Paloma Cabecas Segura, Baptiste Leroy, Ruddy Wattiez, Giada Lo Re, Jean-Marie Raquez. PHBV/FUNCTIONALIZED CELLULOSE NANOCRYSTALS:BIODEGRADABLE NANOMATERIALS WITH CONTROLLED CRYSTALLIZATION AND THERMAL STABILITY

P1.11. Bruno Medronho, Alexandra Filipe, Carolina Costa, Anabela Romano, Björn Lindman, Hakan Edlund, Magnus Norgren. MICRORHEOLOGY OF NOVEL CELLULOSE STABILIZED OIL-IN-WATER EMULSIONS

P1.12. Alexandra Mocanu, Gabriela Isopencu, Cristina Busuioc, Oana-Maria Popa, Paul Dietrich, Liana-Socaciu Siebert. BACTERIAL CELLULOSE SUBSTRATE IMPREGNATED WITH ZINC OXIDE NANOPARTICLES AND PROPOLIS EXTRACTS AND THEIR SYNERGETIC ANTIMICROBIAL EFFECT

P1.13. D. M. Panaitescu, S. Stoian, M. Oprea, A. N. Frone, I. Chiulan, A. R. Gabor, C. A. Nicolae, R. Trusca, P. O. Stanescu. NANOCOMPOSITES FROM FUNCTIONALIZED BACTERIAL CELLULOSE AND BIOPOLYMERS

P.1.14. J. Rodolfo Rendón-Villalobos, Amanda Ortíz-Sánchez, Miguel A. Lorenzo-Santiago. BIOPLASTICS COMPOSED OF CELLULOSE AND STARCH FROM MANGO WASTE: BIODEGRADATION AND MECHANICAL PROPERTIES

P1.15. Jatin Sethi, Yunus Can Görür, Per A. Larsson, Lars Wågberg. IMPROVING THE PERFORMANCE OF TRANSPARENT PACKAGING MATERIALS FROM NANOCELLULOSE BY NOVEL COMPOSITE APPROACHES

P1.16. Alena Šišková, Joanna Rydz, Angela Kleinová, Anita Andicsová–Eckstein. CELLULOSE-BASED DELIVERY SYSTEMS FOR THE AGRICULTURAL USE TO REDUCE THE ENVIRONMENTAL BURDEN

P1.17. Sahar Sultan, Aji P. Mathew. 3D PRINTED NANOCELLULOSE HYDROGEL SCAFFOLDS WITH TAILORED POROSITY AND MECHANICAL PROPERTIES FOR BIOMEDICAL APPLICATIONS

P1.18. C. Thibaut, H. Murtaza, A. Denneulin, S. Rolland du Roscoat, P. Lhuissier, L. Salvo, D. Beneventi, L. Orgéas, D. Chaussy. A FIBROUS CELLULOSE WATER BASED PASTE: CHARACTERIZATION DURING DRYING OF 3D PRINTING PARTS PRODUCED BY EXTRUSION

P1.19. Thi Nga Tran, Athanassia Athanassiou. COCOA SHELL WASTE-BASED BIO-FILAMENTS FOR 3D PRINTING APPLICATIONS

P1.20. Jenevieve G. Yao, Nejla B. Erdal, Minna Hakkarainen. BIOACTIVE SCAFFOLDS SURFACE FUNCTIONALIZED WITH CELLULOSE-DERIVED NANOGRAPHENE OXIDE

P1.21. Nadège Follain, Sébastien Charlon, Eric Dargent, Jérémie Soulestin, Michel Sclavons, Stéphane Marais. WATER TRANSPORT PROPERTIES OF BIOPOLYESTER NANOCOMPOSITES: IMPACT OF WATER-ASSISTED EXTRUSION PROCESS AND CLAY INCORPORATION

P1.22. Karin H. Adolfsson, Monika Golda-Cepa, Nejla B. Erdal, Joanna Duch, Andrzej Kotarba, Minna Hakkarainen. ANTIBACTERIAL PROPERTIES OF CELLULOSE DERIVED CARBON SPHERES

P1.23. C. Fritz, P. Reyes-Contreras, O. Gil-Castell, R. Texieira Mendonça, I. Carrilo, M. Faccini, J.D. Badia, A. Ribes-Greus. DETERMINATION OF STRUCTURAL DIFFERENCES IN CELLULOSE NANOCRYSTALS FROM EUCALYPTUS SPECIES

P1.24. Francisca Rivera, Daniel Canales, O. Gil-Castell, A. Ribes-Greus, M. Faccini, Paula A. Zapata. PREPARATION AND CHARACTERISATION OF ANTIMICROBIAL NANOCOMPOSITES BASED ON POLY(LACTIC ACID) WITH ZnO NANOPARTICLES FOR FOOD PACKAGING

P1.25. Chanchai Thongpin, Jedtarin Chareonta. THE PREPARATION OF CELLULAR THERMOPLASTIC VULCANIZATE FROM BIOBASED NATURAL RUBBER: POLY (BUTYLENE SUCCINATE), PBS BLEND

P1.26. I. Chiulan, J.M. Raquez, C. Magnani, A.N. Frone, D.M. Panaitescu, R. Gabor, C.A. Nicolae, Valentin Rădiţoiu, Bogdan Trică. CHEMICAL AND PHYSICAL MODIFICATION OF CELLULOSE FROM DIFFERENT SOURCES FOR USE IN BIOCOMPOSITES

P1.27. Florian Diot-Néant, Enita Rastoder, Stephen A. Miller, Florent Allais. CHEMO-ENZYMATIC SYNTHESIS AND FREE RADICAL POLYMERIZATION OF RENEWABLE ACRYLATE MONOMERS FROM CELLULOSE-BASED LACTONES

P1.28. Izaskun Larraza, Julen Vadillo, Kizkitza Gonzalez, Álvaro Tejado, Ainara Saralegi, M. Ángeles Corcuera, Aitor Arbelaiz, Arantxa Eceiza. GREEN WATERBORNE POLYURETHANE NANOCOMPOSITES REINFORCED WITH CELLULOSE AND GRAPHENE: SYNTHESIS AND CHARACTERIZATION

P1.29. Laura Ribba, Jonathan Daniel Cimadoro, Arantxa Eceiza, Silvia Goyanes. BIODEGRADABLE AND BIOBASED ELECTROSPUN MEMBRANE FOR EFFICIENT WATER IN OIL EMULSIONS SEPARATION

P1.30. Tatiana Thomas, Alexis Bazire, Anne Elain, Stéphane Bruzaud. Characterization And Exploitation Of The Marine Bacterium Halomonas Sp. SF2003 For Optimization Of PHA Production

P1.31. Juan Carlos de Haro, Chiara Allegretti, Stefano Turri, Paola D'Arrigo, Gianmarco Griffini. DEVELOPMENT OF HIGH-LIGNIN-CONTENT POLYURETHANE COATINGS WITH TAILORED PROPERTIES

P1.32. Marcus Jawerth, Mats Johansson, Martin Lawoko. LIGNIN BASED THERMOSETS AND THE EFFECT OF FRACTIONATION ON MATERIAL PROPERTIES

P1.33. Jonatan Perez-Arce, Eduardo J. García-Suárez, Jalel Labidi, José R. Ochoa-Gómez. A NEW SYNTHETIC ROUTE TO OBTAIN A FAMILY OF LIGNIN-BASED POLYOLS

P1.34. Linnea Cederholm, Yunsheng Xu, Olena Sevastyanova, Karin Odelius, Minna Hakkarainen. MICROWAVE PROCESSING OF LIGNIN

P1.35. Stefano Fiori, Daniel Tolaguera, Julieta Sodupe, María del Carmen Garrigós, Alfonso Jiménez. VALORISATION OF MUSHROOM AGRO-WASTES TO OBTAIN BIO-BASED LUBRICANT FLUIDS

P1.36. P. Soulenthone, F. Muroi, Y. Tachibana, Y. Kobayashi, K. Kasuya. CHARACTERIZATION OF AN ALIPHATIC-AROMATIC COPOLYESTER-DEGRADING ENZYME FROM MESOPHILIC BACTERIUM

P1.37. Katarína Mosnáčková, Miroslav Šlosár, Jozef Kollár, Alena Šišková, Ivan Chodák, Štefan Chmela, Jaroslav Mosnáček. EFFECT OF AGEING ON PHYSICAL PROPERTIES OF POLY(LACTIC ACID)/POLY(3-HYDROXYBUTYRATE)/CARBON BLACK MULCHING FILMS

P1.38. Sangmin Lee, Soo Youn Lee, Hana Nur Fitriana, Min-Sik Kim, Gwon Woo Park, Jin-Suk Lee. DEVELOPMENT OF BIO-REFINERY PLATFORM TECHNOLOGY BASED ON CO_2-CONSUMING MICROORGANISMS

P1.39. Alessandro Nanni, Massimo Messori. A ROUTE TO FULLY WINE BASED PLASTICS: SYNTHESIS, STABILIZATION AND COMPOUNDING OF POLY-(3-HYDROXYBUTYRATE) USING WINE WASTES AS SUBSTRATE, ANTIOXIDANT AND FILLERS

P1.40. Klara Nilsson, Rosana Moriana, Corine Sandström, Mikael Hedenqvist, Maud Langton. FROM FABA-BEAN TO NOVEL TEXTURIZED FOOD PRODUCTS

P1.41. C.T. Primaz, O. Gil-Castell, R. Teruel-Juanes, B. Pascual-José, J.D. Badia, A. Ribes-Greus. VALORIZATION OF AGRO-RESIDUES FOR BIO-OIL AND BIOCHAR PRODUCTION THROUGH FAST PYROLYSIS OF SPENT COFFEE GROUNDS AND COTTON SEED

P1.42. B. Pascual-Jose, R. Teruel-Juanes, A. Ribes-Greus. INTERCONVERSION BETWEEN DIELECTRIC AND MECHANICAL MEASUREMENTS OF A POLYLACTIDE

P1.43. Ana Isabel Quilez-Molina, José Alejandro Heredia-Guerrero, Andrea Armirotti, Uttam Paul, Athanassia Athanassiou, Ilker S. Bayer. FABRICATION AND CHARACTERIZATION OF ANTIOXIDANT FILMS BASED ON GREEN TEA AND BALSAMIC VINEGAR WASTES

P1.44. Justine Muller, Simona Neri, Laura Rodríguez. BIOMACROMOLECULES FROM MUNICIPAL SOLID BIO-WASTE FRACTIONS AND FISH REST RAW MATERIALS FOR HIGH ADDED VALUE APPLICATIONS

P1.45. Reskandi C. Rudjito Amparo Jiménez-Quero, Mahmoud Hamzaoui, Stéphane Kohnen, Francisco Vilaplana. EFFECT OF pH ON SUBCRITICAL WATER EXTRACTION OF GLUCURONOARABINOXYLANS FROM CORN FIBER

P1.46. Jon Trifol, Rosana Moriana. BIOREFINERY PROCESSES FOR THE INTEGRAL VALORIZATION OF RESIDUAL FOREST BIOMASS INTO BARRIER AND ACTIVE FOOD PACKAGING

P1.47. Karen Alaluf, Cansu Ulker Turan, Gunseli Ozmedir, Yuksel Guvenilir. CHICKEN FEATHER AND OLIVE CAKE AS RENEWABLE SUPPORT MATERIALS FOR LIPASE IMMOBILIZATION

P1.48. Julio Vidal, Pere Castell, David Ponce. RECYSITE & ECOXY PROJECTS: PRODUCTION OF FULLY RECYCLABLE AND REUSABLE GREEN COMPOSITES BASED ON BIORESINS AND NATURAL FIBRES

P1.49. W. Yang, E. Fortunati, F. Bertoglio, J.S. Owczarek, G. Bruni, M. Kozanecki, J.M. Kenny, L. Torre, L. Visai, D. Puglia. POLYVINYL ALCOHOL/CHITOSAN HYDROGELS WITH ENHANCED ANTIOXIDANT AND ANTIBACTERIAL PROPERTIES INDUCED BY LIGNIN NANOPARTICLES

P1.50. Eva Bäckström, Karin Odelius, Minna Hakkarainen. ENVIRONMENTALLY DEGRADABLE PLASTICIZERS DERIVED FROM POLYETHYLENE WASTE

P1.51. Jesús Rodriguez, Peter Martin, Eoin Cunningham, Rodrigo Briones. BIODEGRADABLE BLENDS DERIVED FROM LIQUEFIED AGRICULTURAL RESIDUES

P1.52. E. Cruz, I. Gracia, J. M. García-Vargas, J.F. Rodríguez, M. T. García. OBTENTION OF HIGH VALUABLE COMPOUNDS FROM LOW-COST MATERIALS OF THE AGRO-INDUSTRIAL SECTOR OF CASTILLA LA MANCHA THROUGH SUPERCRITICAL TECHNOLOGY

P1.53. Mónica Carvalheira, Catarina SS Oliveira, Eliana Guarda, Nuno Marques, Daniela Pequito, David Lopes and Maria A.M. Reis. PILOT SCALE PRODUCTION OF POLYHYDROXYALKANOATES FROM INDUSTRIAL CHEESE WHEY

P1.54. Pablo Ortiz, Mohan Wadekar, Richard Vendamme. (FULLY) BIO-BASED AROMATIC POLYMERS FROM (DEPOLYMERIZED) LIGNIN

P1.55. Mikhail Glagolev, Valentina Vasilevskaya. MULTISCALE SIMULATION OF PLA BLENDS

P1.56. Lu He, De-Fu Li, Xi Zhao, Fei Song, Xiu-Li Wang, Yu-Zhong Wang. A FULLY BIOBASED UNSATURATED COPOLYESTER WITH A RIGID RING STRUCTURE FOR TOUGHENING POLYLACTIC ACID

P1.57. Katanyu Kultravut, Keiichi Kuboyama, Toshiaki Ougizawa. EFFECT OF ANNEALING TEMPERATURE ON TENSILE PROPERTIES OF POLY(LACTIC ACID) BLEND BY TWO-STEP BLENDING WITH POLY(TRIMETHYLENE TEREPHTHALATE)

P1.58. Adrián Leonés, Agueda Sonseca, Daniel López, Stefano Fiori, Laura Peponi. PLASTICIZED PLA ELECTROSPUN FIBERS WITH SHAPE MEMORY PROPERTIES

P1.59. Antje Lieske, André Gomoll, Benjamin Rodriguez. INVESTIGATIONS ON THE FEASIBILITY OF A POLYCONDENSATION / CHAIN EXTENSION ROUTE TO PLA AND PLA BLOCK COPOLYMERS

P1.60. M.P. Arrieta, M. Perdiguero, D. López, S. Fiori, L. Peponi. ELECTROSPUN PLA-PHB FIBERS PLASTICIZED WITH OLIGOMERIC LACTIC ACID

P1.61. A. Carbonell-Verdu, M.P. Arrieta, D. Garcia-Garcia, J. López-Martínez, M.D. Samper. EPOXIDATION OF KARANJA OIL FOR PLA PLASTICIZATION

P1.62. N. Rouault, J.M. Ferri, J. López-Martínez, H. De La Rosa, M. Aldas. PROCESSING AND CHARACTERIZATION OF A BIO-BASED COMPOSITE MATERIAL OBTAINED FROM WOOL FIBRES AND POLYLACTIC ACID

P1.63. Kun Li, Alberto Fina, Samuele Colonna, Orietta Monticelli. ENHANCEMENT OF PLA FILM HYDROLYSIS RESISTANCE BY THE SURFACE GRAFTING OF POSS

P1.64. K. Moraczewski, M. Stepczyńska, R. Malinowski, T. Karasiewicz, B. Jagodziński, B. Budner. AGING STABILITY OF POLYLACTIDE CONTAINING NATURAL ANTI-AGING COMPOUNDS

P1.65. Chanchai Thongpin, Kantapong Samleekaew. EFFECT OF PROCESSING CONDITION AND MOLECULAR ARCHITECTURE OF PE ON MORPHOLOGY AND MECHANICAL PROPERTIES OF PLA/PE COMPOSITE FILMS

P1.66. Liana Stoll, Alessandro Rios, Sandra Domenek. POLYLACTIDE FILMS WITH INCREASED OPTICAL BARRIER PROPERTIES THROUGH THE USE OF BIXIN

P1.67. Yoga Sugama Salim, Antonella Esposito, Laurent Delbreilh, Loïc Le Pluart. PHYSICAL PROPERTIES AND MICROSTRUCTURE OF POLY(LACTIC ACID) WITH DIFFERENT MOLECULAR WEIGHTS: DOES SIZE MATTER?

P1.68. Supakij Suttiruengwong, Paphada Kantipongpipat, Manus Seadan, Taweechai Amornsakchai. THERMO-MECHANICAL PROPERTIES OF POLY(L-LACTIC ACID) FILLED WITH PALF/SILICA AND PDLA

P1.69. Chanchai Thongpin, Nisakorn Sonthikheson, Nutchonnee Thunpittayakul, Yanisa Wongdao. BIOCOMPOSITE BETWEEN PLA AND BETEL NUT SPATHE POWDER

P1.70. Panagiotis A. Klonos, Konstantina Chronaki, Stamatina N. Vouyiouka, Constantine D. Papaspyrides, Apostolos Kyritsis. THERMAL TRANSITIONS AND MOLECULAR DYNAMICS IN BIODEGRADABLE PLA-BASED MICROCAPSULES

P1.71. Wenxiang Xuan, Karin Odelius, Minna Hakkarainen. POLYLACTIDE PLASTICIZERS FROM GREEN PLATFORM CHEMICALS

P1.72. Dan-Dan Yang, Si-Chong Chen, Yu-Zhong Wang. A EFFICIENT TOUGHENING METHOD FOR POLY(L-LACTIDE)

P1.73. Laura Aliotta, Patrizia Cinelli, Maria Beatrice Coltelli, Andrea Lazzeri. TOUGHENING STUDY OF PLASTICIZED PLA AND CALCIUM CARBONATE COMPOSITES

P1.74. A. Porfyris, K. Chronaki, P. Diamanti, R. Pfaendner, S. Vouyiouka, C. Papaspyrides. PHOSPHOROUS-CONTAINING ADDITIVES CATALYZING THE SOLID STATE POLYMERIZATION OF POLY(LACTIC ACID)

P1.75. Alessandra D'Anna, Rossella Arrigo, Alberto Frache. PLA-PHB BLENDS: THE EFFECT OF DIFFERENT COMPATIBILIZERS AND THE PROCESS PARAMETERS ON MECHANICAL AND RHEOLOGICAL PROPERTIES

P1.76. Nagihan Varol, Kateryna Fatyeyeva, Laurent Delbreilh, Allisson Saiter, Eric Dargent. EFFECT OF STEREOCOMPLEXATION ON THE AMORPHOUS FRACTIONS OF PLA FILMS: INVESTIGATION OF PHYSICAL AND TRANSPORT PROPERTIES

P1.77. Aitor Arbelaiz, Axier Dominguez, Ander Orue, Iñigo Díez-García, Marian Corcuera, Arantxa Eceiza. PREPARATION AND CHARACTERIZATION OF COMPOSITES BASED ON PLA/PHBV MATRIX AND LIGNOCELLULOSIC FIBERS

P1.78. L. Cabedo, J. Luis, P Feijoo, M. Bandres, E. Safont, A. Aldureid, J. Gamez-Perez. TOUGHNESS ASSESSMENT OF NOVEL PHB-BASED SHEETS BY MEANS OF THE ESSENTIAL WORK OF FRACTURE METHOD

P1.79. Natalia Pettinelli, L. Álvarez, L. Barral, R. Bouza, Y. Farrag. PHBV MICROPARTICLES LOADED IN κ-CARRAGEENAN/LOCUST BEAN GUM HYDROGELS FOR DUAL DRUG DELIVERY

P1.80. Guillaume Bayon-Vicente, Audrey Tanghe, Rob Onderwater, Baptiste Leroy, Ruddy Wattiez. PRODUCTION OF POLYHYDROXYALKANOATES BY PURPLE PHOTOTROPHIC BACTERIA USING WASTEWATER TREATMENT PRODUCTS

P1.81. Reza Hosseinpourpia, Stergios Adamopoulos, Arantxa Eceiza. THERMAL STABILITY AND WATER VAPOR SORPTION OF WHEAT STARCH MODIFIED WITH ISOCYANATE FUNCTIONAL GROUPS

P1.82. Francesca Lionetto, Roberto López-Muñoz, Carlos Espinoza-González, Oliverio Rodríguez-Fernández, Alfonso Maffezzoli. EFFECT OF NATURAL WAXES ON THE INTERCALATION OF GRAPHENE STACKS

POSTER SESSION 2. (Wednesday 19th June 2019)

P2.1. Wissam Farhat, Arne Stamm, Antonino Biundo, Linda Fogelström, Eva Malmström, Per-Olof Syrén. BIOCATALYSIS FOR TERPENE-BASED POLYMERS AND THEIR APPLICATIONS AS THERMO-SENSITIVE NETWORKS

P2.2. César Filho, Mara Silva, Joana Capela-Pires, Isabel Campos-Gonçalves, Alexandre C. Craveiro. SYNTHESIS AND CHARACTERIZATION OF CARBOXYMETHYL CHITOSAN HYDROGEL: POTENTIAL USE FOR PROTEIN DRUG DELIVERY

P2.3. S. Semlitsch, M. Finnveden, O. He, M. Martinelle. MONO-SUBSTITUTION OF SYMMETRICAL DIESTERS: SELECTIVE BIOCATALYSIS FOR SYNTHESIS OF FUNCTIONAL BUILDING BLOCKS

P2.4. Clément Fosse, Aurélie Bourdet, Shanmugam Thiyagarajan, Rutger J.I. Knoop, Pierre Lemechko, Stéphane Bruzaud, Yoga Sugama Salim, Kumar Sudesh, Michelina Soccio, Nadia Lotti, Antonella Esposito, Laurent Delbreilh, Éric Dargent. EFFECT OF MOLECULAR STRUCTURE ON THE PROPERTIES OF DIFFERENT BIOPOLYMERS

P2.5. Senri Hayashi, Tatsuya Wasano, Yuya Tachibana, Ken-ichi Kasuya. SYNTHESIS AND CHARACTERIZATION OF BIOBASED POLY(SCHIFF-BASE) DERIVED FROM FURFURAL

P2.6. Haydn Ingram, James Winterburn. PRODUCTION OF POLYHYDROXYALKANOATES BY *CUPRIAVIDUS NECATOR* FROM EMULSFIED AND SAPONIFIED SPENT COFFEE GROUNDS OIL

P2.7. Ioanna Koumentakou, Lazaros Papadopoulos, Dimitrios Bikiaris, Dimitra Patsiaoura, Kostantinos Chrissafis, Charles Markessini, Eleftheria Athanasiadou, Electra Papadopoulou. SYNTHESIS OF BIO-BASED UNSATURATED RESINS, BASED ON RENEWABLE MONOMERS

P2.8. Sonia López, María Teresa García, Juan Francisco Rodríguez, Ignacio Gracia, María J. Ramos. SYNTHESIS OF COPOLYMER OF L-LACTIDE AND POLY (ETHYLENE GLYCOL) α – HYDROXY- ω-AZIDO TERMINATED

P2.9. Ilaria Armentano, Ilaria Bicchi, Matteo Gigli, Francesca Luzi, Chiara Argenati, Francesco Morena, Luigi Torre, Michelina Soccio, Sabata Martino, Andrea Munari, Nadia Lotti. POLY(BUTYLENE 1,4-CYCLOHEXANEDICARBOXYLATE/DIGLYCOLATE) RANDOM COPOLYMERS: MATERIAL PROPERTIES AND STEM CELL SHAPE CORRELATION

P2.10. Yusuke Matsumoto, Yukiko Enomoto, Tadahisa Iwata. PREPARATION AND CHARACTERIZATION OF α-1,3 GLUCAN AND β-1,3 GLUCANS CHEMICAL CROSS-LINKING HYDROGELS BY USING ETHYLENE GLYCOL DIGLYCIDYL ETHER AS CROSS-LINKER

P2.11. Julie Meimoun, Yann Bernhard, Lydie Pelinski, Till Bousquet, Sylvain Pellegrini, Pascal Gerbaux, Valérie Gaucher, Grégory Stoclet, Audrey Favrelle, Philippe Zinck. SYNTHESIS AND ENZYMATIC POLYCONDENSATION OF NEW DIOL-DIAMIDE MONOMERS FROM MICROALGAES

P2.12. Georgia Michailidou, Eleftheria Xanthopoulou, Ainali Nina-Maria, Dimitrios N. Bikiaris. FORMULATION OF CHITOSAN MICROPARTICLES CONTAINING FLUTICASONE PROPIONATE AND SALMETEROL XINAFOATE AS A METHOD FOR COPD TREATMENT

P2.13. Tania Palmeiro-Sánchez, Piet Lens, Vincent O'Flaherty. THERMOPHILIC PRODUCTION OF P(HB-CO-HV) COPOLYMERS FROM A MIXED MICROBIAL CULTURE

P2.14. Lazaros Papadopoulos, Dimitrios Bikiaris, Dimitra Patsiaoura, Konstantinos Chrissafis, Charles Markessini, Electra Papadopoulou, Emmanouil Karagiannidis. NOVEL ECO-FRIENDLY UNSATURATED POLYESTER RESINS AND THE EFFECT OF MOLECULAR STRUCTURE ON THE PROPERTIES OF THE CROSS-LINKED MATERIALS

P2.15. Sacha Pérocheau Arnaud, Tobias Robert. BIO-BASED UV-CURING HYPERBRANCHED POLYMERS FROM ITACONIC ACID

P2.16. Charalampos Pronoitis, Geng Hua, Minna Hakkarainen, Karin Odelius. SYNTHESIS OF BIOBASED THERMOPLASTIC AND THERMOSET POLYAMIDES WITH SUPERIOR PROPERTIES

P.2.17. Yu Shi, Si-Chong Chen, Yu-Zhong Wang. FABRICATION OF "BRICK-MUD" CHWS/PVA COMPOSITE FILMS VIA ALKALI-INDUCED RECONSTRUCTION OF HYDROGEN BONDS

P2.18. Arne Stamm, Antonino Biundo, Linda Fogelström, Eva Malmström, Per-Olof Syren. NEW CHEMO-ENZYMATIC PATHWAYS FOR SUSTAINABLE TERPENE-BASED POLYMERIC MATERIALS

P2.19. Nina Maria Ainali, Nejib Kasmi, Eleni Agapiou, Dimitrios N. Bikiaris, George Z. Papageorgiou. SYNTHESIS AND CHARACTERIZATION OF NEW HIGH Tg BIOBASED COPOLYESTERS FROM ISOSORBIDE, 1,6-HEXANEDIOL AND 2,5-FURANDICARBOXYLIC ACID

P2.20. Dimitrios Bikiaris, Zoi Terzopoulou, Anna Michopoulou, Artemis Palamidi, Eleni Pavlidou. EFFECT OF COVALENT HEPARIN IMMOBILIZATION ON THE PROPERTIES OF COLLAGEN SCAFFOLDS

P2.21. Evi Christodoulou, Eirini Nakiou, Dimitrios N. Bikiaris, Eleana Kontonasaki, Liliana Liverani, Aldo R. Boccaccini. SYNTHESIS AND PROPERTIES OF POLY(GLYCEROL-CO-DIACIDS): APPLICATION OF POLY(GLYCEROL SUCCINATE) FOR COATING BIOGLASS-BASED POROUS SCAFFOLDS

P2.22. Yosra Chebbi, Nejib Kasmi, Mustapha Majdoub, George Z. Papageorgiou, Dimitrios N. Bikiaris. SOLID-STATE POLYMERIZATION OF POLY(ETHYLENE FURANOATE) BIOBASED POLYESTER, III: EXTEND STUDY ON EFFECT OF CATALYST TYPE ON MOLECULAR WEIGHT INCREASE

P2.23. Yosra Chebbi, Nejib Kasmi, Mustapha Majdoub, Pierfrancesco Cerruti, Gennaro Scarinzi, Mario Malinconico, George Z. Papageorgiou, Dimitrios N. Bikiaris. SYNTHESIS, CHARACTERIZATION, AND BIODEGRADABILITY OF NOVEL FULLY BIOBASED POLY(DECAMETHYLENE -CO-ISOSORBIDE-2,5-FURANDICARBOXYLATE) COPOLYESTERS WITH ENHANCED MECHANICAL PROPERTIES

P2.24. A. Domiński, T. Konieczny, P. Kurcok. SYNTHESIS AND CHARACTERIZATION OF TELECHELIC BIOMACROMONOMERS OF POLY(3-HYDROXYBUTYRATE)S

P2.25. A. N. Frone, D. Batalu, D. M. Panaitescu, I. Chiulan, A. R. Gabor, C. A. Nicolae. FILAMENT EXTRUSION AND 3D PRINTING OF POLYESTER BASED BIOCOMPOSITES

P2.26. S. Hemsri, N. Intakornudom, T. Chariyachindasathian, P. Bunsripirat. MORPHOLOGY AND MECHANICAL PROPERTIES OF POLY(BUTYLENE SUCCINATE)/ETHYLENE VINYL ACETATE COPOLYMER BLEND

P2.27. Eva Hernández, María Vargas, Amparo Chiralt. OBTAINING CASSAVA AND CORN STARCH FILMS WITH GELLAN AND XANTHAN GUM BY MELT-BLENDING-COMPRESSION MOULDING

P2.28. Emma Talón, Lorena Atarés, Maria Vargas, Amparo Chiralt. CHARACTERIZATION OF CHITOSAN NANOPARTICLES LOADED WITH ACTIVE INGREDIENTS FROM ESSENTIAL OILS

P2.29. Xinchen Ye, Christofer Lendel, Mikael S. Hedenqvist. PROTEIN/PROTEIN NANOCOMPOSITE BASED ON WHEY PROTEIN NANOFIBRILS IN A WHEY PROTEIN MATRIX

P2.30. Carolin Menzel, Francisco Vilaplana, Amparo Chiralt, Chelo González-Martínez. NATURAL ANTIOXIDANTS FROM RICE STRAW AND THEIR UTILIZATION IN RENEWABLE STARCH FILMS

P2.31. Hüsamettin D. Özeren, Fritjof Nilsson, Richard Olsson, Mikael S. Hedenqvist. INVESTIGATION OF PLASTICIZATION MECHANISM OF STARCH; EXPERIMENTAL AND MOLECULAR DYNAMICS APPROACH

P2.32. Gabriela Ruphuy, Jaroslav Hanuš, Petra Šalamunová, František Štepánek. YEAST-DERIVED BETA GLUCAN PARTICLES: BEYOND TARGETED DELIVERY

P2.33. Alina Tampau, Chelo González-Martínez, Amparo Chiralt. BIODEGRADATION OF THERMOPLASTIC STARCH FILMS CONTAINING ELECTROSPUN POLY-ε-CAPROLACTONE ENCAPSULATING CARVACROL

P2.34. Laura Gabriela Tamayo Rojas, Ariel Mauricio Vaca Bohórquez, Felipe Salcedo Galán. PRODUCTION AND CHARACTERIZATION OF CASSAVA STARCH FILMS MODIFIED WITH CITRIC ACID TO APPLY AS COLOMBIAN FRUITS COATING

P2.35. S. Sharma, A. Majumdar, B.S. Butola. TUNING THE MECHANICAL AND THERMO-MECHANICAL RESPONSES OF BIO NANOCOMPOSITE FILMS OF PLASTICIZED POLYLACTIC ACID WITH HALLOYSITE NANOTUBES

P2.36. Raquel Heras-Mozos, Rafael Gavara, Pilar Hernández-Muñoz. MOLECULAR BIODYNAMERS BASED ON CHITOSAN FOR THE STIMULI-RESPONSIVE RELEASE OF NATURALLY OCURRING ANTIFUNGAL VOLATILES

P2.37. Heba Asem, Joakim Engström, Michael Malkoch, Eva Malmström. DESIGN OF PISA-LATEX VIA RAFT AQUEOUS EMULSION POLYMERIZATION FOR TARGETED DRUG DELIVERY

P2.38. Patrizia Cinelli, Laura Aliotta, Andrea Lazzeri, Alfonso Jiménez, Maria del Carmen Garrigos Selva, Stefano Fiori. ECOAT- ECOSUSTAINABLE MULTIFUNCTIONAL BIOBASED COATINGS WITH ENHANCED PERFORMANCE AND END OF LIFE OPTIONS

P2.39. Qiuyun Liu, Gary Ogden, John Flaherty, Steve Cunningham, Radek Braganca, Robert Elias. HEAT DEFLECTION AND BIODEGRADATION PROPERTIES OF COMPOUNDED BIOPOLYMERS FOR PACKAGING AND AGRICULTURAL APPLICATION

P2.40. F. Luzi, D. Puglia, E. Pannucci, R. Bernini, L. Santi, L. Torre. QUERCETIN AND GALLIC ACID PVA FILMS: STRUCTURAL AND FUNCTIONAL PROPERTIES FOR PACKAGING APPLICATIONS

P2.41. Hadaly Serrano-Ruíz, Jordi Eras, Lluís Martín-Closas, Ana M. Pelacho. COMPOUNDS RELEASED FROM UNUSED BIODEGRADABLE MULCH MATERIALS AFTER CONTACT WITH WATER

P2.42. Justine Muller, Elodie Bugnicourt, Laura Rodríguez. FULL RECYCLABLE FOOD PACKAGE WITH ENHANCED GAS BARRIER PROPERTIES AND ACTIVE FUNCTIONALITIES BY THE USE OF HIGH PERFORMANCE COATINGS

P2.43. Almudena Muñoz Puche, Mª del Pilar Muñoz Muñoz, Mª Virtudes Navarro Bañón. ECO-FRIENDLY MATERIALS FOR THERMAL AND ACOUSTIC INSULATION

P2.44. Hendrik Roch, Oscar Vernaez, Stephan Kabasci. BIO-BASED PARTICLE FOAM

P2.45. Petra Šalamúnová, Zuzana Plavcová, Dominik Rotrekl, Jan Hošek, Frantisek Štěpánek, Jaroslav Hanuš. THE GLUCAN PARTICLES AS POTENTIAL CARRIERS FOR ANTI-INFLAMMATORY DRUGS

P2.46. Ainara Sangroniz, Leire Sangroniz, Antxon Santamaria, Marian Iriarte, Agustin Etxeberria. AN APPROACH TO IMPROVE A BIODEGRADABLE POLYESTER FOR PACKAGING APPPLICATIONS

P2.47. Zoi Terzopoulou, Anna Michopoulou, Artemis Palamidi, Dimitrios Bikiaris. COLLAGEN-BASED SCAFFOLDS LOADED WITH CURCUMIN FOR THE TREATMENT OF PSORIASIS

P2.48. Zoi Terzopoulou, Mohamed Wahbi, Nejib Kasmi, George Z. Papageorgiou, Dimitrios N. Bikiaris. EFFECT OF CATALYST TYPE AND STABILISERS ON THE THERMO-OXIDATIVE STABILITY OF POLY(ETHYLENE FURANOATE) BIOBASED POLYESTER

P2.49. Kenichiro Tsukahara, Tatsuo Yagishita, Kiyotaka Tahara. LIFE CYCLE ASSESSMENT FOR MATERIAL UTILIZATION OF NON-EDIBLE LIGNOCELLULOSIC BIOMASS

P2.50. Hülya Çakmak, Yeşim Özselek, Osman Yağız Turan, Ebru Firatligil, Funda Karbancioglu Guler. WHEY PROTEIN ISOLATE EDIBLE FILMS INCORPORATED WITH ESSENTIAL OILS: ANTIMICROBIAL ACTIVITY AND BARRIER PROPERTIES

P2.51. Pengwu Xu, Baogou Wu, Piming Ma, Weifu Dong, Mingqing Chen, Pieter Jan Lemstra. POLYHYDROXYALKANOATE NANOCOMPOSITES WITH ENHANCED BARRIER AND ANTIBACTERIAL EFFECTS FOR FOOD PACKAGING

P2.52. Magdalena Zięba, Paweł Chaber, Jakub Włodarczyk, Wanda Sikorska, Małgorzata Pastusiak, Nijole Savickiene, Xintao Shuai, Abhishek Gupta, Iza Radecka Marek Kowalczuk, Grażyna Adamus. ALIPHATIC POLYESTER-BASED ELECTROSPUN FIBERS AS A WOUND DRESSING FOR SUSTAINED DELIVERY OF PELARGONIUM SIDOIDES EXTRACTS

P2.53. Anda Barkane, Sergejs Gaidukovs, Oskars Platnieks, Nejib Kasmi, Youssef Habibi. UV-LIGHT CURING OF BIO-BASED POLYMER AND ITS FORMULATION FOR ADDITIVE MANUFACTURING APPLICATIONS

P2.54. Antonio Capezza, William Newson, Richard Olsson, Mikael Hedenqvist, Eva Johansson. NOVEL ABSORBENT MATERIALS OBTAINED FROM PLANT PROTEINS

P2.55. Didem Aycan, Neslihan Alemdar Yayla, Yasar Andelib Aydin. CHITOSAN POLYVINYL ALCOHOL BLEND FILMS FOR IBUPROFEN ENCAPSULATION: FABRICATION, CHARACTERIZATION AND KINETICS

P2.56. Yaiza Flores, Carlos Pelegrín, Sagrario Gironés, Oscar Gutierrez, Eduardo Fages, María del Carmen Garrigós, Alfonso Jiménez. DISINTEGRABILITY OF INNOVATIVE MATERIALS OBTAINED FROM VALORIZATION OF INDUSTRIAL RESIDUES FROM DIFFERENT SECTORS IN THE VALENCIAN COMMUNITY (SPAIN). CIRCLE PROJECT

P2.57. Carlos Pelegrín, Yaiza Flores, Esther Franco, María del Mar Ortiz, Eduardo Fages, María del Carmen Garrigós, Alfonso Jiménez. DISINTEGRABILITY OF INNOVATIVE FORMULATIONS OF REDUCED ENVIRONMENTAL IMPACT MATERIALS USED FOR CARPETS PRODUCTION. ECO&TECNO CARPET PROJECT

P2.58. Jennifer M. DeBruyn, Sreejata Bandopadhyay, Kyle Bonifer, Marife Anunciado, Henry Sintim, Jose E. Liquet-Gonzalez, Markus Flury, Douglas Hayes, Todd Reynolds. SOIL BIODEGRADATION OF AGRICULTURAL BIODEGRADABLE PLASTIC MULCH FILMS

P2.59. Secil Yilmaz Turan, Amparo Jiménez Quero, Rosana Moriana Torro, Francisco Vilaplana. BIOPROCESSING OF WHEAT BRAN HEMICELLULOSES AND FILM FORMATION PROPERTIES

P2.60. Lidia García Quiles, Julio Vidal, Pere Castell. DEVELOPMENT OF STRATEGIES FOR COLOR FIXING AND MECHANICAL ENHANCEMENT IN PBS BIOPOLYMERS

P2.61. Gabriela Albara Lando, William Lopes, Felipe Kessler, Augusto Schrank, Marilene Vainstein, Daniel Eduardo Weibel. INDUCED BIODEGRADATION OF UV-SURFACE MODIFIED POLYSULFONE BY ENTOMOPATHOGENIC FUNGI

P2.62. Beom Soo Kim, Tuan Kiet Tran, Pritam Kumar Dikshit, Chanin Khomlaem, Abhishek Negi. BIO-BASED POLYURETHANES FROM MICROBIALLY CONVERTED VEGETABLE OIL

P2.63. Yu-Qiong Luo, Song Fei, Yu-Zhong Wang. HOW TO PREPARE “JANUS” CARBONIZED WOOD SLICE FOR TWO-WAY OIL/WATER SEPARATION

P2.64. Giuseppe Melilli, Nejla Erdal, Minna Hakkarainen. MICROWAVE ASSISTED CARBONIZATION OF SODIUM-LIGNOSULFONATE

P2.65. Marta Muñoz Martí, Mª Virtudes Navarro Bañón, M. Pilar Muñoz Muñoz. BIOPOLYOL AND NATURAL ORIGIN FIBRES FOR DEVELOPMENT OF ECO-SUSTAINABLE VISCOELASTIC POLYURETHANE FOAM

P2.66. Migle Lebedevaite, Aukse Navaruckiene, Jolita Ostrauskaite. PHOTOCROSS-LINKED POLYMERS OF ACRYLATED EPOXIDIZED SOYBEAN OIL AND ACRYLATED VANILLIN

P2.67. Anda Ozolina, Mikelis Kirpluks, Edgars Vanags, Ugis Cabulis. ENZYMATIC EPOXIDATION OF TALL OIL AND REACTION OPTIMIZATION

P2.68. Edwin Makhado, Sadanand Pandey, James Ramontja. MICROWAVE ASSISTED SYNTHESIS OF XANTHAN GUM-CL-POLY (ACRYLIC ACID) BASED-REDUCED GRAPHENE OXIDE HYDROGEL COMPOSITE FOR ADSORPTION OF METHYLENE BLUE AND METHYL VIOLET FROM AQUEOUS SOLUTION

P2.69. Aksarapak Rattana, Sudsiri Hemsri. LINEAR LOW DENSITY POLYETHYLENE/ POLY(BUTYLENE ADIPATE-CO-TEREPHTHALATE)/TiO_2 BLEND FILMS: MORPHOLOGIES, MECHANICAL PROPERTIES AND GAS PERMEABILITY

P2.70. Sanita Reinerte, Līga Avotiņa, Uģis Cābulis, Arturs Vīksna. TGA/FTIR AS A METHOD IN POLYURETHANE-POLYISOCYANURATE MATERIAL PYROLYTIC DESTRUCTION GASEOUS PRODUCT ANALYSIS

P2.71. Marie Reulier, Guillaume Chollet, Maxime Charman, Didier Chauffaille, Henri Cramail, Etienne Grau. Development OF NEW BIOBASED EXTENDER OILS MADE FROM RENEWABLE SOURCES

P2.72. JD. Badia, R. Teruel-Juanes, Y. Echegoyen, S. Torres-Giner, J.M. Lagarón, A. Ribes-Greus. DIELECTRIC PROPERTIES OF ETHYLENE-VINYL ALCOHOL NANOFIBER WITH GRAPHENE NANOPLATELETS

P2.73. O. Gil-Castell, G. Mezzasalma, J.D. Badia, M.G. Baschetti, A. Ribes-Greus. TAILORED CONDUCTIVE ELECTROSPUN NANOFIBROUS POLY(CAPROLACTONE) / GELATIN / POLYANILINE SCAFFOLDS

P2.74. Mara Silva, Joana Capela-Pires, Isabel Campos-Gonçalves, Pedro V. A. Bueno, Alan F. Y. Matsushita, Adley F. Rubira, Edvani C. Muniz, Luísa Durães, Dina M. B. Murtinho, Cesar Filho, Artur J.M. Valente, Alexandre C. Craveiro. BIOLOGICAL ACTIVITY OF CHITOSAN/PECTIN-BASED HYDROGEL: GREEN ALTERNATIVE FOR INFECTED WOUNDS

P2.75. Kateřina Skleničková, Vladimír Kočí, Martin Halecký, Hynek Beneš. BIODEGRADABLE POLYURETHANE FOAMS WITH DIFFERENT MORPHOLOGY FOR ENVIRONMENTAL APPLICATIONS

P2.76. Michelina Soccio, Silvia Quattrosoldi, Franco Dominici, Francesca Luzi, Nadia Lotti, Debora Puglia. PBS-BASED COPOLYMER AS COMPATIBILIZER IN THERMOPLASTIC FLOUR/POLY(BUTYLENE SUCCINATE) BLENDS

P2.77. Edgars Vanags, Mikelis Kirpluks, Arnis Abolins, Anda Fridrihsone, Beatrise Sture, Ugis Cabulis. BIO-BASED POLYOLS OBTAINED FROM EPOXIDIZED ALL OIL FATTY ACIDS