

# ISPAC 2022 PROGRAM

## Sunday, June 5th

10:00 – 11:00	<b>Registration</b> Foyer U6/9
11:00 – 12:30	<b>Short Course #1: “Separation Techniques”</b> <b>Albena LEDERER</b> , <i>Leibniz Institute of Polymer Research Dresden, Germany</i> U6/9
12:30 – 14:00	<b>Lunch</b> Foyer U6/9
14:00 – 15:30	<b>Short Course #2 - REMOTE: “Electron Microscopy”</b> <b>Hiroshi JINNAI</b> , <i>Tohoku University, Japan</i> U6/9
15:30 – 17:00	<b>Short Course #3: “AFM and Quantitative Nanomechanics”</b> <b>G. Julius VANCOSO</b> , <i>University of Twente, Netherlands</i> U6/9
17:00 – 17:30	<b>Break</b>
17:30 – 19:00	<b>Short Course #4: “LAM, SAXS and WAXS”</b> <b>Yeng Ming LAM</b> , <i>Nanyang Technological University, Singapore</i> U6/9
19:00 – 19:30	<b>Free Time</b>
19:30 – 21:00	<b>Welcome Buffet</b> Foyer U6/9

Session 1: **SMART** - Characterization of smart polymers and hybrid natural-biobased polymers

Session 2: **NETWORKS** - Molecular characterization of network polymers

Session 3: **FUTURE** - Future trends

Session 4: **CIRCULAR** - Characterization challenges posed by the advancement of circular economy

Session 5: **TURN-KEY** - Opportunities and challenges in using turn-key instruments

## Monday, June 6th

8:30 – 9:00	<b>Opening</b>	
	<b>Invited Talks, Session 1: SMART.</b> Chair: <b>C. SCHWARZINGER</b> U6/9	
9:00 – 9:30	<b>Invited Talk #1:</b> “How electrostatic effects effect the wetting dynamics of polymers” <b>Hans-Jürgen BUTT</b> , <i>Max Planck Institute for Polymer Research, Germany</i>	
9:30 – 10:00	<b>Invited Talk #2:</b> “Preparation, Characterization and Applications of Co-Crystalline and Nanoporous-Crystalline Polymers” <b>Gaetano GUERRA</b> , <i>University of Salerno, Italy</i>	
10:00 – 10:30	<b>Invited Talk #3:</b> “Marine biofouling: The surface characterization challenge and some lessons to learn” <b>G. Julius VANCISO</b> , <i>University of Twente, Netherlands</i>	
10:30 – 11:00	<b>Panel Discussion #1</b>	
11:00 – 11:30	<b>Break</b>	
	<b>Contributed Talks: SMART and FUTURE</b>	
	Chair: <b>G. GUERRA</b> U6/9	Chair: <b>H.J. BUTT</b> U6/1c
11:30 – 11:50	<b>C1.1:</b> “Development of a MALDI-TOF method for the quantification of molecular weight discrimination in grafting to reactions” <b>Viviana Maria OSPINA GUARIN</b> , <i>University of Eastern Piedmont, Italy</i>	<b>C2.1:</b> “Impact of thermal shock and short-time thermal conditioning environment on shear strength properties of nanoparticle embedded CF/EP composite” <b>Ruchir SHRIVASTAVA</b> , <i>Indian Institute of Technology, India</i>
11:50 – 12:10	<b>C1.2:</b> “Lacquer coatings of Neolithic lacquerware found in Zhejiang Province of China” <b>Yoshimi KAMIYA</b> , <i>Kanazawa University, Japan</i>	<b>C2.2:</b> “3D Printing: Crystallization Kinetics of Polyamide 12 during Selective Laser Sintering” <b>Elena MOUKHINA</b> , <i>Netszch, Germany</i>
12:10 – 12:30	<b>C1.3:</b> “Synthesis and Characterization of Carbene Based Hybrid Polymer Network for Biomedical Applications” <b>Ivan DJORDJEVIC</b> , <i>Nanyang Technological University, Singapore</i>	<b>C2.3:</b> “The advanced methods Rheo-NMR, Rheo-IR and Rheo-Dielectric combine rheology with molecular methods, allowing in-situ correlations between molecular information and mechanical properties” <b>Manfred WILHELM</b> , <i>Karlsruhe Institute of Technology, Germany</i>

## Monday, June 6th

12:30 – 14:00	<b>Lunch-time Seminar</b> <b>WATERS™</b> U6/9	
	<b>Invited Talks, Session 2: NETWORKS.</b> Chair: <b>G.J. VANCOSO</b> U6/9	
14:00 – 14:30	<b>Invited Talk #4:</b> “Polymeric hydrogels for water retention and delivery of agrochemicals” <b>Yeng Ming LAM</b> , <i>Nanyang Technological University, Singapore</i>	
14:30 – 15:00	<b>Invited Talk #5:</b> “Dynamics and Relaxation of Supramolecular Polymer-Network Gels in View of their Microstructure” <b>Sebastian SEIFFERT</b> , <i>Johannes Gutenberg University Mainz, Germany</i>	
15:00 – 15:30	<b>Invited Talk #6:</b> “Molecular models of polymer networks and adhesives: balancing complexity and simplicity” <b>Guido RAOS</b> , <i>Politecnico di Milano, Italy</i>	
15:30 – 16:00	<b>Panel Discussion #2</b>	
16:00 – 16:30	<b>Break</b>	
	<b>Contributed Talks: SMART, NETWORKS and CIRCULAR</b>	
	Chair: <b>S. SEIFFERT</b> U6/9	Chair: <b>M. WILHELM</b> U6/1c
16:30 – 16:50	<b>C3.1:</b> “Multimethod approach for the analysis and development of novel water-dispersible polyester systems” <b>Klara SALLER</b> , <i>Johannes Kepler University Linz, Germany</i>	<b>C4.1:</b> “X-ray and QM studies of M12L8 poly-[n]-catenanes” <b>Antonino FAMULARI</b> , <i>Politecnico di Milano, Italy</i>
16:50 – 17:10	<b>C3.2:</b> “Shear-induced crystal nucleation of poly (l-lactic acid)” <b>Mengxue DU</b> , <i>Martin Luther University Halle-Wittenberg, Germany</i>	<b>C4.2:</b> “Quantitatively distinguishing crosslink densities in rubber-containing blends by solid-state NMR spectroscopy” <b>Akshay KAREKAR</b> , <i>Martin Luther University Halle-Wittenberg, Germany</i>

## Monday, June 6th

17:10 – 17:30	<p><b>C3.3:</b> “Sophisticated conformation studies of polymer-protein hybrids using asymmetrical flow field-flow fractionation with multidetection”</p> <p><b>Susanne BOYE</b>, <i>Leibniz Institute of Polymer Research Dresden, Germany</i></p>	<p><b>C4.3:</b> “Cross-linked polyethylene copolymers by reactive extrusion using vitrimers chemistry”</p> <p><b>Diego CIARDI</b>, <i>ESPCI Paris, France</i></p>
17:30 – 17:50	<p><b>C3.4:</b> “Aqueous phosphoric acid: A powerful solvent for natural polymers”</p> <p><b>Xiaofeng SUI</b>, <i>Donghua University, China</i></p>	<p><b>C4.4:</b> “NMR-based molecular rheology: a study on complex polymer systems”</p> <p><b>Farhad SHAHSAVAN</b>, <i>Martin Luther University Halle-Wittenberg, Germany</i></p>
17:50 – 19:00	<b>Free Time</b>	
19:00 – 21:00	<p><b>Wine and Cheese</b></p> <p><b>Poster Sessions</b></p> <p>Foyer U6/9 and U6/1d</p>	

## Tuesday, June 7th

	<b>Invited Talks, Session 3: FUTURE.</b> Chair: <b>N. HADJICHRISTIDIS</b> U6/9	
9:00 – 9:30	<b>Invited Talk #7 - REMOTE:</b> “Nano-diffraction Imaging of Polymer Crystals” <b>Hiroshi JINNAI</b> , <i>Tohoku University, Japan</i>	
9:30 – 10:00	<b>Invited Talk #8:</b> “Topology and Dispersity: Additional Parameters Regulating the Properties of Bioinert and Functional Polymer Interfaces” <b>Edmondo M. BENETTI</b> , <i>University of Padova, Italy</i>	
10:00 – 10:30	<b>Invited Talk #9:</b> “Lignin Nano- and Microcarriers for Sustainable Plant Protection” <b>Frederik R. WURM</b> , <i>University of Twente, Netherlands</i>	
10:30 – 11:00	<b>Panel Discussion #3</b>	
11:00 – 11:30	<b>Break</b>	
	<b>Contributed Talks: SMART and CIRCULAR</b>	
	Chair: <b>F.R. WURM</b> U6/9	Chair: <b>G. RAOS</b> U6/1c
11:30 – 11:50	<b>C5.1:</b> “Cellulose derivatives from Passerini three component reaction: Study of their adsorption on amorphous cellulose” <b>Etienne FLEURY</b> , <i>INSA Lyon, France</i>	<b>C6.1:</b> “Detecting microplastics and their molecular degradation products to understand environmental pollution and (self)remediation routes” <b>Valter CASTELVETRO</b> , <i>University of Pisa, Italy</i>
11:50 – 12:10	<b>C5.2:</b> “Design and characterization of hemp fibers based green composites as high-performance hydrophobic and flame retardant multi-layered materials” <b>Gianluca VISCUSI</b> , <i>University of Salerno, Italy</i>	<b>C6.2 – REMOTE:</b> “Precise Analysis of Environmental Microplastics Originated from Polyolefins” <b>Atsushi TAKAHARA</b> , <i>Kyushu University, Japan</i>
12:10 – 12:30	<b>C5.3:</b> “Tunable transparency and superhydrophobicity of chitosan-based fluorine-free coatings” <b>Irene TAGLIARO</b> , <i>University of Milano-Bicocca, Italy</i>	<b>C6.3:</b> “Organoleptic Evaluation of Polymers Using Hybrid Characterization Techniques- A Trending Research Field” <b>Umesh B. GAGDOLI</b> , <i>Borouge, United Arab Emirates</i>
12:30 – 14:00	<b>Lunch</b>	
14:00 – 16:00	<b>Free Time</b>	

## Tuesday, June 7th

<b>Invited Talks, Session 3: FUTURE. Chair: Y.M. LAM U6/9</b>	
16:00 – 16:30	<b>Invited Talk #10:</b> “Short vs Long Chains Competition During the “Grafting to” Process” <b>Michele LAUS</b> , <i>University of Eastern Piedmont, Italy</i>
16:30 – 17:00	<b>Invited Talk #11:</b> “Controlling crystallization and properties of polyolefins based crystalline block copolymers through design of the molecular structure” <b>Claudio DE ROSA</b> , <i>University of Naples Federico II, Italy</i>
17:00 – 17:30	<b>Invited Talk #12 - REMOTE:</b> “3D Imaging of Defects in Block Copolymers” <b>Edwin L. THOMAS</b> , <i>Texas A&amp;M University, USA</i>
17:30 – 18:00	<b>Panel Discussion #4</b>
18:00 – 18:30	<b>Break</b>
18:30 – 19:00	<b>Special Keynote Presentation. Chair: R. SIMONUTTI</b> <b>Kay SAALWAECHTER</b> , <i>Martin Luther University Halle-Wittenberg, Germany</i> U6/9
19:00 – 20:00	<b>Free Time</b>
20:00	<b>Social Dinner</b>

## Wednesday, June 8th

Invited Talks, Session 4: <b>CIRCULAR</b> and Session 5: <b>TURN-KEY</b> .	
Chair: <b>M. LAUS</b> U6/9	
9:00 – 9:30	<b>Invited Talk #13:</b> “Characterization challenges posed by the advancement of circular economy: biopolymers” <b>Béla PUKÁNSZKY</b> , <i>Budapest University of Technology and Economics, Hungary</i>
9:30 – 10:00	<b>Invited Talk #14:</b> “FFF for supramolecular and complex polymer materials” <b>Albena LEDERER</b> , <i>Leibniz Institute of Polymer Research Dresden, Germany</i>
10:00 – 10:30	<b>Invited Talk #15:</b> “Formulation and solid state rheology of high- $T_g$ vitrimers with accelerated relaxation” <b>François TOURNILHAC</b> , <i>ESPCI Paris, France</i>
10:30 – 11:00	<b>Panel Discussion #5</b>
11:00 – 11:30	<b>Break</b>
Contributed Talks: <b>SMART</b> , <b>CIRCULAR</b> and <b>TURN-KEY</b>	
	Chair: <b>B. PUKÁNSZKY</b> U6/9
	Chair: <b>A. LEDERER</b> U6/1c
11:30 – 11:50	<b>C7.1:</b> “Multimodal Rheometry of Light, Voltage, and Magnetic Sensitive Smart Polymers and Materials” <b>Terry W.J. STEELE</b> , <i>Nanyang Technological University, Singapore</i>
11:50 – 12:10	<b>C7.2:</b> “Characterization of Amphiphilic Cobaltocenium Copolymers” <b>Nasrollah HAMIDI</b> , <i>Southern Connecticut State University, USA</i>
12:10 – 12:30	<b>C7.3:</b> “Characterization of crystal structure in thin films of functional semiconducting polymers by X-ray scattering and AFM” <b>Oleksandr DOLYNCHUK</b> , <i>Martin Luther University Halle-Wittenberg, Germany</i>
11:30 – 11:50	<b>C8.1:</b> “Applications of a new IR detector with extended spectral range coupled to high temperature gel permeation chromatography” <b>Esther LÓPEZ</b> , <i>Polymer Char</i>
11:50 – 12:10	<b>C8.2:</b> “Characterization of selectively cross-linked blend with different morphology” <b>Mariele STOCKER</b> , <i>Braskem</i>
12:10 – 12:30	<b>C8.3:</b> “Advanced microstructure analysis of tire polymer materials using cutting edge multi scale electron microscopy technologies” <b>Min WU</b> , <i>Thermofisher</i>

## Wednesday, June 8th

12:30 – 12:50		<b>C8.4:</b> “Investigation of Thermal Stability of BDNPA/F Nitroplasticizer” <b>Dali YANG</b> , <i>Los Alamos National Laboratory, USA</i>
12:50 – 14:00	<b>Farewell Lunch</b> Foyer U6/9	