

MILAN POLYMER DAYS 5TH-7TH JUNE 2024

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PROGRAM OF THE ORAL COMMUNICATIONS

Keynotes (KN), invited lectures (IL), short oral communications (OC) and MIPOL Young oral communications (MYOC)

The times refer to the local time in Milan, Italy, i.e. CEST (UTC + 2).

DAY 1 - JUNE 5TH, 2024

9:30 AM	REGISTRATION	
10:30 AM	OPENING CEREMONY	
	E. Ranucci , University of Milan (IT), Congress Chair	
	A. Baldi , University of Milan (IT), Deputy Rector for Internationalization	
	L. Lay , University of Milan (I), University of Milan, Head of the Department of Chemistry	
	1st Session - Chairpersons: E. Ranucci , A. Baldi and L. Lay , University of Milan (IT)	
11:00 AM	KN	I. Roy , University of Sheffield (UK). Natural and sustainable polymers of bacterial origin and their biomedical applications
11:45 AM	IL	M. Vamvakaki , University of Crete (GR). Stimuli-responsive main chain biodegradable polymers: synthesis and aqueous solution properties
12:05 PM	IL	R. Cavalli , University of Turin (IT). Albumin: a natural polymer exploited for the effective delivery of drugs
12:35 PM	IL	F. Barroso-Bujans , Donostia International Physics Center (ES). Constructing cyclic polymers for potential biomedical applications
12:55 PM	Lunch time and poster session	
	2nd Session - Chairpersons: M. Ortenzi , University of Milan (IT) and O. Santoro , University of Insubria (IT)	
02:25 PM	OC	A. Scomparin , University of Turin (IT). Injectable nanogels for <i>in situ</i> postsurgical treatment of glioblastoma
02:40 PM	MYOC	R. Cillari , University of Palermo (IT). Photoluminescent glucose-functionalized hybrid gold/carbon nanodots for multimodal theranostic treatments of breast cancer
02:55 PM	MYOC	A. Giordano , University of Naples Federico II (IT). Heterophasic copolymers of isotactic polypropylene: development of methods for improving toughness without losing mechanical strength
03:10 PM	MYOC	R. Villaccio , University of Naples Federico II (IT). Syndiotactic propylene/ α,ω -non-conjugated dienes copolymers as the basis for novel functional elastomers
03:25 PM	Coffee break	
	3rd Session - Chairpersons: E. Ranucci , University of Milan (IT) and I. Roy , University of Sheffield (UK)	
03:55 PM	KN	N. Sbirrazzuoli , University Côte d'Azur (FR). Thermal and mechanical properties of furan based thermoplastics and biobased epoxy thermosets
04:40 PM	OC	L. Riva , Polytechnic University of Milan (IT). Nanocellulose-based eco-safe materials for water treatment

05:00 PM	IL	T. Bardelli , NETZSCH-Gerätebau GmbH (DE). Acrylate photopolymers in additive manufacturing: a dive into thermal stability and curing kinetics
05:20 PM	IL	A. Dorigato , University of Trento (IT). Recent developments on furanoate polyesters and their role in the future bioplastics industry
05:40 PM	MYOC	M. Arioli , Polytechnic University of Catalonia (ES). Nylon 5,6 - natural rubber blends for the enhancement of biobased polyamide properties
05:55 PM	MYOC	F. Ferruti , Stockholm University (SE). How to achieve safe, scalable, and sustainable industrial adhesives from lignin?
06:25 PM	END of SESSION	
07:00 PM	Apericena	

DAY 2, JUNE 6TH, 2024

4th Session - Chairpersons: E. Ranucci , University of Milan (IT) and N. Sbirrazzuoli , University Côte d'Azur (FR)		
09:00 AM	KN	I. Rossetti , University of Milan (IT). Computer aided process design: opportunities and challenges in polymer science and technology
09:45 AM	IL	C. Bianchi , University of Milan (IT). Green choices from the lab bench: eco-design and LCA in (polymer) chemistry
10:05 AM	IL	N. Van Zee , CNRS, ESPCI, Paris (FR). Upcycling polyolefin blends into high performance materials
10:25 AM	IL	D. Portinha , INSA, Lyon (FR). Chemical strategies to favor repairing, redesigning and recycling silicone-based materials
10:45 AM	Coffee break	
5th Session - Chairpersons: E. Falletta , University of Milan (IT) and N. Mauro , University of Palermo (IT)		
11:15 AM	IL	M. Ortenzi , University of Milan (IT). Upgrading the household plastic waste: the case of PET and plasmix
11:35 AM	IL	S. Del Buffa , Alfatest s.r.l. (IT). Thermal analysis and dynamic-mechanical characterization of bio-polymer films
11:50 AM	MYOC	J. Jeschke , Haute-Alsace University (FR). Efficient avenues towards upcycling of polybutadiene facilitated by metal-free chemoselective approaches
12:05 PM	MYOC	S. Treccani , University of Milan (IT). Short term ecotoxicity screening of water-soluble polyamidoamines by seed germination test
12:20 PM	MYOC	L. Broggio , University of Trento (IT). Anionic polymerization of polyamide 6: development and characterization of thermoplastic nanocomposites
12:35 PM	MYOC	I. Porello , Polytechnic University of Milan (IT). Tailoring functional copolymer interactions for efficient nanotherapeutic delivery: a novel design-by-architecture approach
12:50 PM	Lunch time and poster session	
6th Session – Chairpersons: S. Gazzotti , University of Milan (IT) and D. d'Hooge , University of Ghent (BE)		
02:20 PM	IL	F. Carosio , Polytechnic University of Turin (IT). Green, mechanically strong and fire safe materials from layer-by-layer coated natural fibers
02:40 PM	OC	G. Papa , ICAP-SIRA Chemicals and Polymers S.p.A. (IT). Synthesis of polyurethanes with intrinsic flame-retardant properties
02:55 PM	MYOC	A. Sekar , Swiss Federal Laboratories for Materials Science and Technology, Switzerland (CH). Reduction of heat release in unsaturated polyester resin-based thermosets: exploring the effect of <i>in-situ</i> grown SiO ₂ nanoparticles for a transparent composite
03:10 PM	MYOC	M. Flejszar , Rzeszow University of Technology (PL). Polymer brushes nanolayers with complex architecture in microliter and milliliter scale
03:25 PM	MYOC	G. Damonte , University of Genoa (IT). ATRP biofunctionalized poly(lactide) films as neuronal cell growth scaffolds
03:40 PM	Coffee break	
7th Session – Chairpersons: E. Falletta , University of Milan (IT) and P. Chmielarz , Rzeszow University of Technology (PL)		
04:10 PM	IL	M. Dobrzyńska-Mizera , Poznan University of Technology (PL). Thermosensitive hydrogel doped with osteoinductive fillers: from synthesis to medical application
04:30 PM	IL	F. Trotta , University of Turin (IT). Hyper branched and cross-linked cyclodextrin based polymers for the gene delivery
04:50 PM	IL	S. Halila , CNRS, Université Grenoble Alpes (FR). Synthesis, self-assembly and applications of glyco-amphiphiles

05:10 PM	IL	N. Mauro , University of Palermo (IT). Microporous poly(D,L-lactide) acid-carbon nanodots nanocomposite scaffolds with multicolor emission for image-guided bone regeneration
05:30 PM	OC	A. Matencio , University of Turin (IT). Anticoagulant effect of cyclodextrin hyper-branched-based polymers: in vitro and in vivo evaluation
05:45 PM	MYOC	M. Topa-Skwarczyńska , Cracow University of Technology (PL). Towards a better dentistry: using light and multicomponent initiator systems to produce new generation polymeric dental composites
06:00 PM	MYOC	R. Oliva , University of Messina (IT). Synthesis of linear and branched amphiphilic PLA-PEG copolymers for drug delivery
06:15 PM	MYOC	K. Ślusarczyk , Rzeszow University of Technology (PL). The application of surface-initiated atom transfer radical polymerization for biocompatible bone implant precursor material design
06:30 PM	END of SESSION	

DAY 3, JUNE 7TH, 2024

8th Session - Chairpersons: E. Ranucci , University of Milan (IT) and C. Bianchi , University of Milan (IT)		
09:00 AM	IL	M.L. Di Lorenzo , Italian National Research Council (CNR-IPCB), Pozzuoli (IT). Optimization of polymer melting in fused filament fabrication
09:20 AM	IL	M. Ricci-Jürgensen , Italian Composting and Biogas Association (IT). 30 years of bio-waste recycling in Italy: the inclusion of compostable plastics
09:50 AM	IL	H. Mutlu , Haute-Alsace University (FR). Main-chain macromolecular photoswitches
10:10 AM	IL	F. Mathevet , CNRS, Sorbonne University (FR). Donor-acceptor semiconducting macromolecular architectures for optoelectronic applications
10:30 AM	OC	A. Fina , Polytechnic University of Turin (IT). Melt processing of dynamic polymer networks
10:50 AM	Coffee break	
9th Session - Chairpersons: M.L. Di Lorenzo , National Research Council (IT) and A. Dorigato , University of Trento (IT)		
11:20 AM	IL	J. Ortyl , Cracow University of Technology (PL). Harnessing light to create functional, three-dimensional polymeric materials: multitasking initiation systems as the critical key to success
11:40 AM	IL	D. D'Hooge , University of Ghent (BE). Molecular scale driven design for polymer recycling: the impact of distributed properties
12:00 PM	IL	E. Glynos , University of Crete (GR). Designing high performance single-ion nanostructured polymer electrolytes at the molecular scale for energy storage
12:20 PM	OC	E. Falletta , University of Milan (IT). Highly porous polyaniline (PANI): a novel green catalytic method for morphology control
12:35 PM	MYOC	C.A. Pagnacco , Donostia International Physics Center (ES). Synthesis and characterization of cyclic graft hyperbranched polyglycerol
12:50 PM	MYOC	R. Wu , Swiss Federal Laboratories for Materials Science and Technology, Switzerland (CH). Catalytic spinning process via confined-space ethylene extrusion polymerization
01:05 PM	Lunch time	
10th Session - Chairpersons: A. Fina , Polytechnic University of Turin (IT), and S. Gazzotti , University of Milan (IT)		
02:35 PM	MYOC	G. Tonsi , University of Milan (IT). Polyamide recycling by selective dissolution approach: LCA study and environmental impacts comparison with different recycling technologies
02:50 PM	MYOC	A. Kocaarslan , Karlsruhe Institute of Technology (DE). Unveiling the photonic potential of curtius rearrangement in polymer science
03:05 PM	MYOC	F. De Stefano , University of Naples "Federico II" (IT). Synthesis and characterization of crystalline 4-methyl-1-pentene/1,5-hexadiene isotactic copolymers with enhanced low-temperature mechanical performance
03:20 PM	MYOC	M.S. Altuncu , University of Wuppertal (DE). Phosphorus-containing polyamidoamines
03:35 PM	Coffee break	
11th Session - Chairperson: E. Ranucci , University of Milan (IT)		
04:05 PM	OC	C. Strigini , University of Milan (IT). Synthesis and study of bio-based polymers as compatibilizers for potato peel-polybutylene succinate blends
04:20 PM	OC	M. Coletti , Waters-TA Instruments Italia, Milan (IT). Thermal analysis of battery separator film
04:35 PM	OC	C. Sciancalepore , University of Parma (IT). PLA-based composites loaded with stabilized hay flour for ecological packaging applications
04:50 PM	OC	C. Cecone , University of Turin (IT). One-step <i>in-situ</i> production of gold nanoparticles supported on carbon sub-micrometric fibers from maltodextrin-based electrospun mats
05:05 PM	END of SESSION, AWARD ANNOUNCEMENTS and CLOSING REMARKS	

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POSTER LIST

P1	G. Boni , Italian National Research Council (CNR-SCITEC), Milan (IT). Synthesis, characterization and recycling of polyesters and polycarbonates with long aliphatic segments (polyethylene-like materials)
P2	F. Caldera , University of Turin (IT). New redox-responsive β -cyclodextrin/lipoic acid nanosponges for the controlled release of antitumorals
P3	M. Campolungo , Italian Institute of Technology, Genoa (IT). A mechanistic overview of the cellular uptake of hyaluronic acid
P4	G. Di Stefano , University of Naples Federico II (IT). Synthesis and characterization of bio-based non-isocyanate waterborne poly(hydroxyl urethane)s
P5	S. Del Buffa , Alfatest s.r.l. (IT). Enhancing the quality of plant-based meat analogues: effects of methylcellulose on mechanical properties and texture
P6	E. Gómez Urreizti , Donostia International Physics Center (ES). Polymerization of glycidol with $B(C_6F_5)_3$: kinetics and further applications
P7	M. Knitter , Poznan University of Technology (PL). Hydroxyapatite coatings on poly(lactic acid) for medical applications
P8	F. Marelli , University of Milan-Bicocca (IT). Explaining ice-polysaccharide interaction
P9	S. Silvano , Italian National Research Council (CNR-SCITEC), Milan (IT). Novel bio-based materials from vegetable oils
P10	A. Sysło , Cracow University of Technology (PL). Carbon dots as photocatalysts in photoinitiating systems for photopolymerization processes in 3D printing application
P11	L. Van Renterghem , University of Mons (BE). Benzoxazine coatings based on biobased adaptive covalent networks for the protection of metallic substrates
P12	E. Zonta , University of Trento (IT). Toughening effect of 2,5-furandicarboxylate polyesters on polylactide-based compatibilized renewable fibers