

Milan Polymer Days 2022

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Sunday, June 19th, 2022

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

PROGRAM of the POSTER SESSION

The poster communications will be presented in oral form via the MS-TEAMS platform

09:30 AM **OPENING CEREMONY**

E. Ranucci, University of Milan (I), Congress Chair

MS TEAMS PLATFORM: MIPOL ROOM 1

1st Session - Chairperson: *N. Mauro, University of Palermo (I)*

09:40 AM **E. Bondi**, University of Bologna (I). Ad hoc design of cyclohexane-based random copolyesters for vascular repair

09:55 AM **S. Voci**, University "Magna Græcia" of Catanzaro (I). Gliadin nanoparticles as potential carriers for ascorbic acid: characterization, stability and in vitro antioxidant activity

10:10 AM **A. Zamboulis**, Aristotle University of Thessaloniki (GR). Poly(lactic acid)/poly(ethylene adipate) copolymers for paclitaxel controlled delivery

10:25 AM **A. Pagani**, Sorbonne University (F). Epitope molecularly imprinted polymers for breast cancer stem cell therapy

10:40 AM **Break time**

2nd Session - Chairperson: *N. Tirelli, Italian Institute of Technology, Genoa (I)*

10:55 AM **N. Ambrosio**, University "Magna Græcia" of Catanzaro (I). Strategies of stabilization of zein nanoparticles containing doxorubicin hydrochloride

11:10 AM **G. Barberi**, University of Palermo (I). Production and characterization of injectable hydrogels based on a catechol derivative of gellan gum for controlled release of antibiotic

11:25 AM **E. Christodoulou**, Aristotle University of Thessaloniki (GR). Branched poly(ϵ -caprolactone)-based copolyesters of different architectures and their use in preparation of paclitaxel nano-delivery systems

11:40 AM **R. Cillari**, University of Palermo (I). β -cyclodextrin functionalized carbon nanodots for light-triggered chemophotothermal cancer therapy

11:55 AM **Break time**

3rd Session - Chairperson: *A. Dorigato, University of Trento (I)*

12:10 PM **G. Coradello**, Italian Institute of Technology, Genoa (I). Colloidal systems of sulfur(II)-based copolymers for anti-inflammatory therapies

12:25 PM **L. R. Doveri**, University of Pavia (I). Optimization of ultra-thin layer of PDMS to stabilize Prussian Blue nanomaterial for neural cell photothermal stimulation

12:40 PM **P. Lagarrigue**, Polytechnic University of Milan (I). Nanocarriers for personalized medicine: from functionalized amphiphilic copolymers to well defined polymeric nanoparticles for targeted delivery

12:55 PM **S. Treccani**, University of Milan (I). β -Cyclodextrin α,ω -end-functionalized oligomeric polyamidoamines as water soluble curcumin carriers

01:10 PM **Lunch time**

MS TEAMS PLATFORM: MIPOL ROOM 2

4th Session - Chairperson: *F. Cellesi, Polytechnic University of Milan (I)*

01:45 PM	L. Simonini , University of Trento (I). Investigation of the interfacial self-healing properties of polycaprolactone coated glass fibers/epoxy microcomposites
02:00 PM	N. M. Ainali , Aristotle University of Thessaloniki (GR). Investigation of recycled HDPE as a sustainable component for eco-friendly wood/plastic composite products
02:15 PM	E. Bianchi , University of Bologna (I). Novel biobased block and random polyesters from 2,4-furandicarboxylic acid, succinic acid and trimethylene glycol with exceptional gas barrier and mechanical properties for sustainable food packaging applications
02:30 PM	G. Femina , University of Naples "Federico II" (I). Relationships between network structure, strain-induced crystallization and mechanical properties of hydrogenated nitrile butadiene rubbers
02:45 PM	E. Manzini , University of Milan-Bicocca (I). Multiphase rubber systems: the study of nanoparticles effect
03:00 PM	M. Arioli , Polytechnic University of Catalonia (E). Exploring spherulitic morphologies of Nylon 7,10 via different microscopic techniques
03:15 PM	Break time
5th Session - Chairperson: P. Chmielarz , Rzeszow University of Technology (PL)	
03:30 PM	S. Silvano , Italian National Research Council (CNR-SCITEC), Milan (I). Sulfur-dipentene polysulfides: from industrial waste to sustainable, low-cost materials
03:45 PM	A. Sorze , University of Trento (I). Novel xanthan-based hydrogels composites to promote plant growth and forest protection
04:00 PM	E. Testa , Polytechnic University of Milan (I). Polypeptides from <i>Hermetia illucens</i> : a bio-source for innovative materials in the framework of a circular economy model
04:15 PM	F. Ferruti , University of Milan-Bicocca (I). Refined and selectively functionalised lignin nanoparticles
04:30 PM	E. Barabani , University of Milan (I). Polyamidoamine/silk composite hydrogel membranes for absorbing Cr(VI) from polluted water
04:45 PM	END of SESSION and CLOSING REMARKS
MS TEAMS PLATFORM: MIPOL ROOM 3	
6th Session - Chairperson: A. M. Bossi , University of Verona (I)	
01:45 PM	E. Passaglia , Italian National Research Council (CNR-ICCOOM), Pisa (I). Plasma-activated immobilization of polyphenols onto NWF of face mask
02:00 PM	M. Tom , Mahatma Gandhi University (IN). Effect of geometry of nanocellulose in reinforcing natural rubber for functional nanocomposites
02:15 PM	R. Aad , University of Milan (I). Use of calcium chloride to enhance the efficacy of polyamidoamines as flame-retardants for cotton
02:30 PM	M. Marcioni , Polytechnic University of Turin (I). Lightweight flame-retardant foams from layer-by-layer coated cellulose fibers
02:45 PM	A. Beduini , University of Milan (I). Durable, washing resistant flame-retardant finishing for cotton fabrics by covalent grafting of α -amino acid-derived polyamidoamines
03:00 PM	P. Ben ghouzi , Sorbonne University (F). Nano isothermal titration calorimetry used for the characterization of molecularly imprinted polymers
03:15 PM	Break time
7th Session - Chairperson: N. Griffete , Sorbonne University (F)	
03:30 PM	G. Urciuoli , University of Naples "Federico II" (I). Tailoring the segregation strength and the mechanical properties in statistical ethylene/1-octene multiblock copolymers by chain shuttling polymerization
03:45 PM	S. Vaghi , University of Insubria (I). On MMA-DMAEMA copolymerization catalyzed by Cu(I) complexes
04:00 PM	A. Vittore , University of Insubria (I). ARGET-ATRP polymerization of eugenol derivatives as promising macroinitiator for block copolymers from renewable sources
04:15 PM	F. Stella , University of Camerino (I). Heterogeneous catalyzed synthesis of bio-based poly(urethane-acrylate)
04:30 PM	A. Bergomi , University of Milan (I). Application of a polymer-based photocatalytic coating for the protection of Carrara marble: an exposure study
04:45 PM	END of SESSION and CLOSING REMARKS

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PROGRAM of ORAL SESSIONS – June 20th and 21st, 2022

The oral communications will consist of keynotes (KN), invited lectures (IL), and short oral communications (OC)

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Monday, June 20th, 2022

9:30 AM		REGISTRATION
10:30 AM		OPENING CEREMONY
		E. Ranucci , University of Milan (I), Congress Chair
		M. P. Abbraccio , University of Milan (I), Delegate Vice-Rector for the Coordination and Promotion of Research
		1st Session - Chairpersons: P. Ferruti and E. Ranucci , University of Milan (I)
10:50 AM	KN	D. Bikiaris , Aristotle University of Thessaloniki (GR). Microplastics in the environment: formation mechanism and their effect to living organisms
11:30 AM	IL	N. Tirelli , Italian Institute of Technology, Genoa (I). Protein conjugation with ROS-scavenging polymers
12:00 PM	IL	J. M. Nóbrega , University of Minho (P). Computational rheology with OpenFOAM computational library
12:20 PM		Lunch time
		2nd Session - Chairpersons: A. M. Bossi , University of Verona (I) and N. Tirelli , Italian Institute of Technology, Genoa (I)
01:20 PM	KN	C. Bonduelle , Bordeaux University (F). Polypeptides from novel approaches to unconventional self-assembly
02:00 PM	IL	M. Fresta , University "Magna Græcia" of Catanzaro (I). Macromolecular smart decoration of colloidal carriers to manage the biological fate
02:20 PM	IL	N. Mauro , University of Palermo (I). Reactive melt-extrusion of polyesters as a facile way to obtain photo-stable fluorescent nanocomposites for 3D printing
02:40 PM	IL	A. Scomparin , University of Turin (I). Alkylated β-cyclodextrin cationic polymers for miR-145 delivery: a novel tool for cystic fibrosis therapy
03:00 PM		Coffee break
		3rd Session - Chairpersons: N. S. Kehr , Independent Researcher (D) and N. Mauro , University of Palermo (I)
03:20 PM	OC	A. Tagliabue , University of Insubria (I). A panoramic virtual tour in the world of knotted polyelectrolytes
03:35 PM	OC	D. Rigotti , University of Trento (I). Development of recycling treatments for polymeric waste: solutions for a circular economy
03:50 PM	OC	L. Riva , Polytechnic University of Milan (I). Cellulose nanofibers as additives for sustainable buildings: analysis on raw earths
04:05 PM	OC	M. Coletti , TA Instruments, Milan (I). Comparison of the thermal behavior of different types of recycled PET for advanced honeycomb structures
04:20 PM		Coffee break
		4th Session - Chairpersons: C. Bonduelle , Bordeaux University (F) and M. Coletti , TA Instruments, Milan (I)

04:40 PM	OC	N. S. Kehr , <i>Independent Researcher</i> (D). 3D Printing of nanocomposite hydrogels/polymers for local drug delivery applications
04:55 PM	OC	S. E. Drago , University of Palermo (I). TAT decorated polyplexes for siRNA inhalation delivery in anti-asthma therapy
05:10 PM	OC	A. M. Bossi , University of Verona (I). From the natural polymer silk fibroin to the production of biocompatible molecularly imprinted nanoparticles: synthesis and properties of bioMIPs
05:25 PM	OC	I. Zaborniak , Rzeszow University of Technology (PL). Naturally-derived compounds: how nature can improve ATRP techniques?
05:40 PM	OC	S. Granados-Focil , Worcester Polytechnic Institute (USA). Thermochromic phase changing materials coatings for building temperature regulation: experimental and numerical study
05:55 PM	END of SESSION	

Tuesday, June 21st, 2022

5th Session - Chairpersons: P. Ferruti and E. Ranucci , <i>University of Milan (I)</i>		
09:00 AM	KN	L. Cavallo , King Abdullah University of Science and Technology (SAU) & University of Salerno (I). The mechanics behind polymerizations for a greener sustainable future
09:40 AM	IL	F. Auremma , University of Naples "Federico II" (I). Complexity in statistical multiblock copolymers: chain microstructure and beyond
10:00 AM	IL	S. M. Guillaume , Rennes 1 University (F). Functional PHAs and (co)polymers therefrom by ring-opening polymerization
10:20 AM	IL	P. Chmielarz , Rzeszow University of Technology (PL). Riboflavin-mediated reversible deactivation radical polymerization – outlook for eco-friendly synthesis of functional materials
10:40 AM	Coffee break	
6th Session - Chairpersons: U. Edlund , <i>Royal Institute of Technology, Stockholm (SE)</i> and P. Chmielarz , <i>Rzeszow University of Technology (PL)</i>		
11:00 AM	IL	C. Capacchione , University of Salerno (I). New elastomeric materials from biomass: stereoregular polymerization of acyclic terpenes in the presence of titanium catalysts
11:20 AM	IL	M. L. Di Lorenzo , Italian National Research Council (CNR-IPCB), Pozzuoli, Napoli (I). Mesophase-induced crystallization in poly(L-lactic acid)
11:40 AM	OC	M. A. Orteni , University of Milan (I). 1,3-Dioxolan-4-ones (DOXs) as functional lactide-equivalent comonomers in polylactic acid bulk polymerization
11:55 AM	OC	V. Pasini , Thermo Fisher Scientific (I). Sub-micron layers in polymer laminates analysis with confocal Raman microscopy
12:10 PM	OC	M. Tiboni , University of Urbino "Carlo Bo" (I). A polypropylene-based 3D printed microfluidic device to advance the manufacturing of polymeric nanoparticles
12:25 PM	Lunch time	
7th Session – Chairpersons: M. L. Di Lorenzo , <i>Italian National Research Council (CNR-IPCB), Pozzuoli, Napoli (I)</i> and C. Capacchione , <i>University of Salerno (I)</i>		
01:25 PM	KN	J. Desbrieres , University of Pau (F). Amphiphilic polysaccharides and stabilization of concentrated oil-in-water emulsions
02:05 PM	IL	S. Bruzard , Bretagne Sud University (F). Tailor-made biosynthesis of polyhydroxyalkanoates: towards polymers with planned biodegradation
02:25 PM	IL	A. Dorigato , University of Trento (I). Novel biobased poly(lactic acid)/poly(ethylene furanoate) blends for packaging applications
02:45 PM	IL	A. Sousa , University of Aveiro, Campus de Santiago (P). In the pathway to sustainable (furanic) polymers!
03:05 PM	OC	M. Malavolti , Vinavil SpA (I). Vinavil 03V and its 50-years long history
03:20 PM	Coffee break	
8th Session - Chairpersons: J. Desbrieres , <i>University of Pau (F)</i> and A. Dorigato , <i>University of Trento (I)</i>		
03:40 PM	IL	U. Edlund , Royal Institute of Technology, Stockholm (SE). New polymer materials from algal biorefining

04:00 PM	OC	M. Soccio , University of Bologna (I). High-performance, compostable and flexible films of poly(octylene 2,5-furanoate) containing PEG-like moieties for food packaging
04:15 PM	OC	F. Zaccheria , Italian National Research Council (CNR-SCITEC), Milan (I). Styrene-free thermosetting resins from vegetable oils
04:30 PM	OC	G. Raffaini , Polytechnic University of Milan (I). Molecular modeling of albumin adsorption on TiO ₂ anatase 3D-nanocrystal: role of surface chemistry, crystal structure, size and topography
04:45 PM	OC	O. Santoro , University of Insubria (I). Biodegradable polylactones by Ti-catalyzed Ring Opening Polymerization (ROP) of cyclic esters
05:00 PM	OC	F. Maggi , University of Milan (I). Polyamidoamine composite hydrogels for tissue engineering applications
05:15 PM	END of SESSION, POSTER AWARD and MARIO MALINCONICO AWARD ANNOUNCEMENTS and CLOSING REMARKS	
05:50 PM	END of CONGRESS	