

-  Plenary lecture
 Keynote lecture

-  Polimeri da fonti rinnovabili e degradabili, riciclo
 Materiali polimerici ibridi e (nano)compositi: sintesi, caratterizzazione e applicazioni
 Processabilità e stampa 3D di materiali polimerici
 Chimica e fisica dei polimeri



DOMENICA 6 SETTEMBRE



Politecnico di Torino – Corso Duca degli Abruzzi 24

18:00



Registrazione

19:00



Welcome party

LUNEDÌ 7 SETTEMBRE



Polo Biotecnologico dell'Università di Torino (Via Nizza 52)

8:30



Registrazione

9:00



Apertura lavori - Sala Keplero



Chairperson: R. Bongiovanni

9:10

PL1 **Y. Leterrier** (Ecole Polytechnique Fédérale de Lausanne)
Robust superhydrophobic composite surfaces

10:00

KN1 **A. Dodero** (University of Fribourg)
Block copolymer self-assembly in emulsions: from structural-color microparticles to multifunctional and reprogrammable photonics

10:30



Coffee break

PARALLEL SESSIONS



Sala Keplero



Sala Leonardo



Chairperson: M. Salzano de Luna



Chairperson: R. Simonutti

11:00

O1.1 **A. Barbato** (Università di Salerno)
Development of active biodegradable PLA/PBSA films containing blueberry waste antioxidants extracted using nades as green solvents

O3.1

A. Bardelli (Università di Genova)
From marine plastic litter to 3D printing: optimising blended polyolefin formulations for additive manufacturing

11:15

O1.2 **B. Brugnoli** (Università di Roma – La Sapienza)
Multifunctional eugenol-based nanogels through copolymer design: antioxidant activity, intrinsic fluorescence, and drug encapsulation

O3.2

R. Di Girolamo (Università di Napoli Federico II)
In situ stereocomplex formation during melt extrusion: an efficient nucleating strategy for crystallization of high-molecular weight PLA

11:30

O1.3 **A. D'Iorio** (Università di Ferrara)
Solvent-free grafting of pbs oligomers onto cellulose nanofibers for enhanced biocomposite compatibility

O3.3

A. Sorze (Università di Trento)
Effect of natural fillers as substitutes for glass fibers in polyamide 6 composites for large-format additive manufacturing

11:45

O1.4 **M.R. Acocella** (Università di Salerno)
Mechanochemical polymer-to-polymer recycling of polylactic acid

O3.4

E. Togliatti (Università di Parma)
Influence of graphene on the electrical and mechanical properties of SLS-printed PA11

12:00

O1.5 **F. Bisio** (Università del Piemonte Orientale)
(Meth)-acrylated tannic acid as a bio-based adhesion promoter for EB-curable coatings

O3.5

D. Rigotti (Università di Trento)
Fused filament fabrication of TPU/PCM composites for thermally active wearable sport applications

12:15

O1.6 **G. Damonte** (Università di Genova)
Environmentally friendly upcycling of PHA-based copolymers into branched multifunctional oligomers

O3.6

A. Caccini (Politecnico di Milano)
Extending rubber fracture characterisation methods to layer adhesion assessment in 3D-printed TPU

12:30



Lunch time



METTLER TOLEDO



LUNEDÌ 7 SETTEMBRE (cont.)

		Sala Keplero		
		<i>Chairperson: K. Sparnacci</i>		
14:30	KN2	V. Ambrogio (Università di Napoli Federico II) Rethinking epoxy thermosets: from dynamic networks to circular materials		
SESSIONI PARALLELE				
				
Sala Keplero		Sala Leonardo		
				
<i>Chairperson: P. Stagnaro</i>		<i>Chairperson: C. Marano</i>		
15:00	O1.7	M. Calosi (Università di Ferrara) Amorphous blends of PLA and PHA for waterborne coatings and foam applications	O2.1	A. Bifulco (Università di Napoli Federico II) Transparent and self-extinguishing silica-epoxy nanocomposites based on Novolac resin
15:15	O1.8	R. Chiarcos (Università del Piemonte Orientale) Investigation into the potential of poly(β -amino ester)-based vitrimers	O2.2	L. Broggio (Università di Trento) Solvent-free processing of high β -phase poly(vinylidene fluoride) films for energy conversion applications
15:30	O1.9	S. Alfano (Università di Roma – La Sapienza) Formulation and characterization of polyhydroxyalkanoate blends with waste protein fibers for packaging application	O2.3	E. Buratti (Università di Ferrara) Hybrid microgels based on PNIPAM and natural proteins: from molecular interactions to biomaterial applications
15:45	O1.10	A. Giovagnoli (Università di Bologna) Development and industrial processing of cellulose-based materials for rigid packaging applications	O2.4	M.T. Letizia (Istituto Universitario di Studi Superiori Pavia) Towards sustainable electrical cable insulation: design of a novel polyethylene-based composite system
16:00	O1.11	D. Gaikwad (Università Milano Bicocca) Use of fruit peels for the development of bio-based hydrogels	O2.5	C. Ciarlantini (Università di Roma – La Sapienza) Cyclodextrin-grafted chitosan scaffolds for enhanced curcumin delivery
16:15	O1.12	G. Filippone (Università di Napoli Federico II) Effect of processing pressure on the interfacial shear strength in short fiber biocomposites: implications for manufacturing	O2.6	B. Bertoncini (Università di Pisa) Long vs. short chain covalent functionalization in the preparation of mechanochromic polymers
16:30		<i>Coffee break</i>		
18:00		<i>Torino Tour – Ritrovo in Piazza San Carlo, di fronte al monumento</i>		



METTLER TOLEDO



MARTEDÌ 8 SETTEMBRE



Polo Biotecnologico dell'Università di Torino (Via Nizza 52)



Sala Keplero



Chairperson: G. Malucelli

9:00

PL2

D. Beneventi (University Grenoble Alpes)
Cellulose fibres and derivatives: from traditional papermaking to advanced additive manufacturing

9:50

KN3

S. Losio (Istituto di Scienze e Tecnologie Chimiche)
Cyclic olefin based copolymers via transition metal catalysis: bridging synthesis and functional application

10:20



Coffee break

SESSIONI PARALLELE



Sala Keplero



Sala Leonardo



Chairperson: A. Dorigato



Chairperson: A. Pucci

10:50

O2.7

A. Bianucci (Politecnico di Milano)
Effect of silane coupling agent content on strain-induced cavitation in silica-filled SBR

O4.1

C. Ceccone (Università di Torino)
Electrospun membranes obtained from plant proteins and maltodextrins for the treatment of gadolinium-contaminated wastewater

11:05

O2.8

S. Gabellini (Università di Bologna)
Synthesis and nanostructuration of DPP-based fluorescent polyesters for bioimaging

O4.2

M. Turriani (Università di Pisa)
From amphiphilic random copolymers to functional nano-chelators: a new strategy for radionuclides sequestration

11:20

O2.9

C. Imparato (Università di Napoli Federico II)
Silica-based nanostructured mixed oxides via sol-gel for the enhancement of fire resistance and recyclability of epoxy resins

O4.3

L. Tosato (Università di Bologna)
A novel melamine-free waterborne intumescent coating for fire protection of wood

11:35

O2.10

L. Gianoglio (Università di Torino)
Electrospun maltodextrin-derived carbon fibers: a sustainable platform for gold-based catalysts

O4.4

J.A. Talamo Ruiz (Politecnico di Torino)
Electrospinning and solution blow spinning of water-based polymer solutions for the sustainable manufacturing of nanofibrous mats

11:50

O2.11

A. Liguori (Università di Bologna)
Multifunctional and sustainable vitrimer systems

O4.5

M. Scoti (Università di Napoli Federico II)
Tacticity-independent crystallization as a design strategy for chemically recyclable semicrystalline polymers

12:05

O2.12

A. Nicosia (Università di Catania)
Functional polymers for the optical detection of amines: from bio-inspired to natural sensing units

O4.6

G. Pignatiello (Università di Napoli Federico II)
Structure-property relationships in biopolymeric cryogels produced by freeze-casting

12:20

O2.13

M. Righetti (Università di Torino)
Intercalated sodium bentonite in thermoplasticized corn starch: tuning oxygen barrier and mechanical performance for flexible food packaging applications

O4.7

F. Olla (Politecnico di Milano)
Pressure-induced crystallization and polymorphic transitions of polybutene-1: high-pressure PVT study

12:35

O2.14

F. Passoni (Politecnico di Milano)
Study of the high-pressure H₂ exposure effect on the mechanical behaviour of nbr based compounds

O4.8

E. Guazzelli (Università di Pisa)
HEMIN-based amphiphilic random copolymers as biomimetic and recyclable catalysts for ARGET-ATRP in water

13:00



Lunch time



METTLER TOLEDO



MARTEDÌ 8 SETTEMBRE (cont.)



Sala Keplero



Chairperson: P. Bracco

14:30

KN4

C. Zagni (Università di Catania)

Functionalized polymeric materials: versatile macromolecular platforms for pharmaceutical and environmental applications

SESSIONI PARALLELE



Sala Keplero



Sala Leonardo



Chairperson: P. Russo



Chairperson: D. Caretti

15:00

O1.13

M. Colombo (Politecnico di Milano)

Structural control and amyloid reinforcement of waste-derived protein films

O2.15

L. Simonini (Università di Trento)

Development and characterization of sandwich composites with thermal management and mechanical properties

15:15

O1.14

V. La Matta (Università di Napoli Federico II)

Prospective life cycle assessment of tyre manufacturing: evaluating industrial decarbonisation pathways

O2.16

R. Medri (Università di Bologna)

Eco-friendly dye-porphyrin copolymer for organic solar cells: from ternary donor to interfacial layer

15:30

O1.15

N. Ferrentino (Università di Salerno)

From thiol-ene chemistry to bio-based polymeric networks: multifunctional limonene-derived materials

O2.17

A. Riccioni (Politecnico di Torino)

Furanized cellulose nanocrystals for the preparation of diels-alder rubber composites

15:45

O1.16

C. Di Bernardo (Politecnico di Torino)

Emerging concepts for sustainable biocomposites

O2.18

R. Rossi (Università di Firenze)

Smart polymeric architectures based on photoswitches: from adhesives to responsive nanocarriers

16:00

O1.17

A. Longo (IPCB-CNR)

Tuning PLLA Crystallization Kinetics via Reactive Extrusion Branching Strategies

O2.19

P. Stagnaro (SCITEC-CNR)

Engineered polymer-based composites for radiative cooling systems

16:15



Coffee break

16:30

O1.18

M. Mollo (Politecnico di Torino)

Designing vanillin-based dynamic networks for the development of sustainable thermosets for future generation composites

O2.20

L. Vitiello (IPCB-CNR)

Enhanced hydrolytic degradation of pla green composites by nanometric zno covalently bound on natural fibres via ALD

16:45

O1.19

E. Pellegrino (Politecnico di Torino)

Melt-processing of dialcohol cellulose fibres/starch blends: processing strategies, structure and properties

O2.21

V. Spinoso (Università di Firenze)

Capacitive sensor based on porous liquid crystalline gel

17:00

O1.20

V. Giglio (IPCB-CNR)

Beyond biodegradability: comparative lc-ms profiling of plastic additive release from fossil-based and biodegradable agricultural mulch films into soil

O2.22

A. Pucci (Università di Pisa)

Pyrolysis-derived telechelic polypropylene as a mechanochromic probe for visualizing stress redistribution and cavitation in polyolefin-based materials

17:15

O1.21

C. Invigorito (Anton Paar) Multiscale polymer analysis: correlating chemical structure, thermal behavior, and rheological response through complementary analytical techniques

17:30



Assemblea dei Soci

18:00



Sessione Poster

20:30



Cena di gala @OGR Officine Grandi Riparazioni, Corso Castelfidardo, 22



METTLER TOLEDO



MERCOLEDÌ 9 SETTEMBRE



Polo Biotecnologico dell'Università di Torino (Via Nizza 52)



Sala Keplero



Chairperson: M. Zanetti

9:00

PL3

A. Figoli (Istituto per la Tecnologia delle Membrane - CNR)
Innovative polymerised tailored membranes for gas and liquid applications

9:50

KN5

D. Martella (Università di Firenze)
3D printing meets liquid crystal polymers: responsive materials across different scales and applications

10:20



Coffee break

SESSIONI PARALLELE



Sala Keplero



Sala Leonardo



Chairperson: M. Messori



Chairperson: M. Castellano

10:50

O1.21

D.H. Lamparelli (Università di Salerno)
When molecular imperfection works: sustainable polyester copolymers with industrial potential

O2.23

P. Rizzo (Università di Salerno)
From hydrophobic to high-performance water filled polymeric films: a new paradigm in water purification materials

11:05

O1.22

P. Russo (IPCB-CNR)
Natural antioxidant effect of hazelnut shell powder in PBS biocomposites under accelerated UV aging

O2.24

S. Scurti (Università di Bologna)
Missive bottle-brush copolymers for soft opto-electronic via orthogonal polymerization

11:20

O1.23

C. Noè (Politecnico di Torino)
Bio-based and antifungal by design: UV-cured eso/essential oil composites for next-generation active packaging

O2.25

A. Dorigato (Università di Trento)
eEvaluation of the self-healing behaviour of multifunctional thermoplastic composite laminates

11:35

O1.24

C. Pellecchia (Università di Salerno)
Engineering circular polyesters through molecular architecture: from thermoplastic elastomers to dynamic covalent networks

O2.26

G. Proietto Salanitri (Università di Bologna)
Functional polymer hybrid hydrogels for multi-adsorption of oppositely charged emergent pollutants

11:50

O1.25

R. Sergi (Università di Roma – La Sapienza)
Eugenol-derived polymeric networks as eco-friendly and circular wet-strength agents for high-performance paper products

O2.27

C. Parmeggiani (Università di Firenze)
Shape-changing polymeric microparticles based on liquid crystal emulsions

12:05

O1.26

F. Cano (Università di Torino)
Mechanical recycling of multi coupled material body seals based on thermoplastic elastomers in the automotive industry

O2.28

R. Simonutti (Università di Milano Bicocca)
Fabrication of porous microparticles by RAFT polymerization

12:20

O2.29

A. Fusari (Politecnico di Milano)
Investigating bacteria-driven alginate hydrogel matrix degradation: a rheological framework to discriminate between crosslinker depletion and backbone cleavage

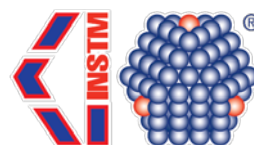
13.00



Lunch time



METTLER TOLEDO



MERCOLEDÌ 9 SETTEMBRE (cont)



Sala Keplero



Chairperson: G. Filippone

14:00

KN6

M. Bertoldo (Università di Ferrara)
Polyesters in water: from dispersion strategies to functional applications

14:30

KN7

D. Natali (Ecole Polytechnique Fédérale de Lausanne) *Macrogiovani 2026 Winner*
4D-Printable shape morphing double network granular elastomers (DNGEs)

15:00



Conclusioni e saluti finali

15:30



Coffee break

POSTER

Polimeri da fonti rinnovabili e degradabili, riciclo	
P1.1	B. Cavallo (Università di Torino) Development of cellulose fibers recovery strategy from siliconized papers
P1.2	M. Ceraulo (Università di Palermo) PBAT/grape pomace biocomposite for film blowing applications
P1.3	S. Coiai (ICCOM-CNR) Antioxidant and UVv-blocking poly(butylene succinate) films via nitroxide radical coupling functionalization
P1.4	E. Di Francesco (Università di Genova) Thermal method to recover glass fibers from epoxy resin composites
P1.5	M. Di Maro (STEMS-CNR) Influence of fast pyrolysis bio-oil-derived phenolic-rich fraction on PLLA UV stability
P1.6	G. Fredi (Università di Trento) Polyethylene glycol-assisted film stacking of polylactide/bacterial cellulose nanocomposites for sustainable food packaging
P1.7	L. Gianoglio (Università di Torino) Biopol4Soil- Bioderived polymeric granules and non-woven fabrics for sustainable agriculture: biodegradability and phytotoxicity evaluation
P1.8	C. Meo (Università di Ferrara) Characterization of hydrolyzed polyesters from agro-waste: effect of extraction conditions on composition
P1.9	M.C. Mistretta (Università di Palermo) Influence of glochids and compatibilizer on the rheological, mechanical and biodegradation behaviour of PBAT and PLA biocomposites
P1.10	P. Scarfato (Università di Salerno) Circular valorization of post-consumer polyurethane foams through mechanical recycling and sustainable composite design
P1.11	R. Simonutti (Università di Milano Bicocca) Itaconic Acid: a sustainable platform alternative to acrylic acid in radical polymerization
P1.12	S. Zeynalova (Politecnico di Torino) Biobased vitrimers using eutectic hardener systems

Materiali polimerici ibridi e (nano)compositi: sintesi, caratterizzazione e applicazioni	
P2.1	E. Caianiello (IPCB-CNR) Graphene oxide functionalization of bacterial cellulose: effects on the structure and adsorption performance
P2.2	F. Cicogna (ICCOM-CNR) Residual antioxidant activity of winery by-product biofillers in LDPE and HDPE composites
P2.3	L. Conzatti (SCITEC-CNR) Upcycling hazelnut by-Products into functional elastomeric composites for sustainable sports surfaces
P2.4	R. D'Auria (IPCB-CNR) Development of lignin-containing biodegradable polymer blends for fishing net applications
P2.5	D. Errico (Università di Ferrara) Preparation and characterization of thermoresponsive films obtained from hybrid PNIPAM/silk fibroin systems
P2.6	T. Landovsaky (Institute of Physics of the Czech Academy of Sciences) Stabilization of magnetic nanoparticles in liquid crystalline polymers via tailor-made ligands
P2.7	V. Fiore (Università di Palermo) Development of PBSA-based biocomposites reinforced with ceiba speciosa natural fibres
P2.8	G. Malucelli (Politecnico di Torino) Physics-informed machine learning for predicting optical transmittance and haze in transparent wood
P2.9	G. Malucelli (Politecnico di Torino) Preparation and characterization of UV-LED curable bio-based coatings containing polymeric carbon dots
P2.10	G. Malucelli (Politecnico di Torino) Sustainable transparent wood based on bio-based isobornyl acrylate/methacrylate matrices
P2.11	M. Morreale (Università di Enna "Kore") Microplastics release from pp-based blends and nanocomposites

Processabilità e stampa 3D di materiali polimerici

P3.1	R. Arrigo (Politecnico di Torino) Processing as a design tool for tailoring microstructure and properties in complex polymer systems
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Chimica e fisica dei polimeri

P4.1	A. Bandini (Università di Pisa) Fluorine-free proton exchange membranes: synthesis and characterization of sulfonated PPO-PBI networks for pemwes
P4.2	A. Frache (Politecnico di Torino) Towards circular flame-retarded polypropylene: fire performance after recycling and aging
P4.3	S. Pragliola (Università di Salerno) Design of carbazole-functionalized poly(triphenylamine)s for VISIBLE-driven water remediation