

7TH EUROPEAN CONGRESS

On Eco-Plasturgy and safe, smart and sustainable plastic materials

FROM NOVEMBER 5TH TO 6TH, 2025 Lyon, France







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PROGRAM

WEDNESDAY NOVEMBER 5 TH, 2025

9:15 - 10:00 AM 10:00 - 10:10 AM	Welcome coffee & networking Opening remarks - Polymeris
10:10 - 12:10 PM	SESSION 1 - BIO-BASED MATERIALS AND INNOVATIONS
10:10 AM	NAFILAB: the Science behind hemp-reinforced compound's hidden potential Materi'Act - Thibaud DEBUISSY & Laure BOUQUEREL
10:30 AM	From the sea to the material: algae in biomaterials Eranova - Philippe MICHON
10:50 AM	Notpla's Advances in Bio-based, Home Compostable Packaging Notpla - Andre GADUAN
11:10 AM	Phyli, the bio-based alternative to leather and soft plastics Renature Materials - Marc CESTARI & Sixtine DE CHATEAUNEUF RANDON
11:30 AM	Goodbye bioplastics? Limitations and opportunities of a circular economy FKuR – Niklas VOß
11:50 AM	Biosourced biomolecules and polysaccharides as raw material platform Université d'Artois – Nicolas JOLY
12:10 - 1:40 PM	LUNCH & NETWORKING
2:00 - 1:40 PM	SESSION 2 - Recycling and Circular Economy
1:40 PM	Regeneration of thermoplastic composite materials Polyloop – Gabriel FAYSSE
2:00 PM	Recycling advanced composites with CURTI technology: turning end-of-life waste into high-value resources Curti – Mirco CANTELLI
2:20 PM	Textiles to Plastics Mapea – Jean-Michel DUIVON
2:40 PM	Radiation processing for circular economy: sterilize, secure, valorize Ionisos – Sophie ROUIF
3:00 PM	Biodegradation and compostability: basics, solutions, EU regulations and research Normec – Steven VERSTICHEL
3:20 PM	End-of-life solutions of polyurethane elastomers through mechanical and chemical recycling Covestro – Hélène VIGOUROUX
3:40 - 4:00 PM	COFFEE BREAK

WEDNESDAY NOVEMBER 5 TH, 2025

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4:00 - 6:00 PM	SESSION 3 - AI, SIMULATION & DIGITAL TOOLS	
4:00 PM	Closed-chambers respirometry: innovative system for compostability and	
	biodegradation testing	
	BPC Instruments – Elton MELO	
4:20 PM	How simulation helps anticipate the impact of recycled material variability:	
	virtual design of experiments	
	SCConsultants - Laurent RATTE	
4:40 PM	Real-time optimization of recycled materials using AI: the FAVIA project	
	Materi'Act - Michael LEMOINE	
5:00 PM	Designing the Hidden Molecular Scale to Advance Sustainable Polymer	
	Production and Recycling	
	Polinivo – Thomas PINTELON	
5:20 PM	What Can Al Do for Polymers? Insights from the DetectNano Framework	
	LCPM – University of Lorraine – Khalid FERJI	
5:40 PM	Optimizing Lab-scale Polymer Synthesis with Flow Chemistry and Machine	
	Learning	
	LCPO - University of Bordeaux - Simon HARRISSON	
6:00 - 6:45 PM	SPEED-MEETING SESSION	
6:45 - 8:00 PM	NETWORKING COCKTAIL	
THURSDAY NOVEMBER 6TH, 2025		
8:30 - 9:00 AM	WELCOME TO THE DAY - POLYMERIS	
9:00 - 10:30 AM	SESSION 4 - EUROPE, INNOVATION & STANDARDISATION	
9:00 AM	Project presentation: BioUptake	
	Polymeris - Nicolas LONGHITANO	
9:10 AM	Biobive European collaborative project	
	Guerin Plastiques – Estelle COURT	
9:30 AM	Introducing Syensqo Scientific Services	
	Syensqo – Jean-Claude MASTEAU	
9:50 AM	The Role of the ESM Pilot in Sustainable Manufacturing	
	AFIL - Paolo VERCESI	
10:10 AM	Real time monitoring and optimization of extrusion process using optical	
	spectroscopy	
	Axel'One – Manis GHEGHIANI	
10:30 - 13:00 PM	INDUSTRIAL VISITS	
	SYENSQO - Presentation & site tour	
	AXEL'ONE - Presentation & platform tour	

1:00 PM CLOSING OF THE CONGRESS & LUNCH TO GO FOR PARTICIPANTS

NOVEMBER 5TH TO 6TH, 2025

VISITS

VISIT TO AXEL'ONE PMI & SYENSQO - SAINT-FONS

The visit will showcase collaborative innovation in chemistry and materials. It will begin at the **Axel'One PMI site**, with a presentation of the instrumented twin-screw **extruder D27 TSA**, a state-of-the-art equipment enabling the development of new formulations, scale-up trials, and the exploration of reactive processes under near-industrial conditions.

It will continue at the **Syensqo** research center, with the discovery of the **pilot tools of the AdChem4 project**, illustrating how research, innovation, and industrial partnerships come together to accelerate the transition toward more sustainable chemistry.

This visit will provide a concrete overview of the unique equipment available and the synergies between collaborative research and industrial applications.





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ADVANCING CIRCULAR ECONOMY:

POLYMERIS' INVOLVEMENT IN EUROPEAN PROJECTS







SOLSTICE PROJECT

The **SOLSTICE** project, coordinated by **Axel'One** in partnership with **Polymeris**, aims to establish a circular and carbon-neutral economy in the textile sector. It seeks to develop replicable systemic solutions in four European regions (France, Spain, Italy, Germany) using the 5R methodology (Refuse, Reduce, Reuse, Repair, Repurpose, Recycle). By leveraging automated sorting technologies and chemical recycling for major polymers like polyester and polyamide, SOLSTICE is also committed to traceability through digital product passports.

www.solstice-project.eu

Horizon Europe program of the European Union, under the grant agreement n°101134989

PLASTICE PROJECT

The **PLASTICE** project aims to close the plastic production loop by demonstrating three innovative recycling routes—microwave-assisted pyrolysis with hydrothermal liquefaction, gasification with syngas conversion, and enzymatic hydrolysis with fermentation. By processing unsorted plastic and textile waste, it will generate sustainable feedstocks for new polymers, reduce the carbon footprint of recycling processes, and establish a roadmap for industrial deployment.

www.plastice.eu

European Union LIFE program, under the grant agreement n°101058540

BIO-UPTAKE PROJECT

Finally, the **Bio-Uptake** project aims to encourage the adoption of bioplastic composites by driving both green and digital transformations in the European manufacturing industry. It focuses on developing innovative processes for bio-based finished products in the construction, medical, and packaging sectors, as well as creating training programs and a digital platform dedicated to bio-based materials.

www.bio-uptake-project.eu

Horizon Europe program of the European Union, under the grant agreement n°101057049



Polymeris brings together **20 years** of experience in supporting businesses, with strong expertise in emerging technologies and the markets of the future.

As the leading innovation cluster for **plastics**, **rubbers**, and **composites**, we foster a dynamic and forward-looking industry in France and internationally, connecting public and private stakeholders across regional, national, and European levels.

Our mission is to accelerate innovation by helping companies launch new R&D projects, showcase technological advances, and expand internationally. Today, Polymeris unites more than **600 members** and a network of **134 partners** from research, education, laboratories, and industrial technical centers (CTI).

By the end of 2025, our ambition is to strengthen our international footprint through strategic partnerships with leading clusters and to generate **50 new European projects**. Beyond Europe, Polymeris is also expanding collaborations in the **Middle East**, **Asia**, **North America**, and **North Africa** to support global innovation dynamics.

Your contact during the event:



WWW.POLYMERIS.FR



Axel'One is a collaborative innovation platform dedicated to chemistry and the circular economy, pooling services, tools and expertise to lower costs and risks associated with industrial scale-up.

Based on three sites in the Lyon area (Solaize, Saint-Fons and Villeurbanne), Axel'One offers solutions tailored to the needs of innovative companies:

- Tailored hosting: laboratories, technology hall, offices and shared spaces designed to support R&D projects.
- **Shared tools**: access to state-of-the-art equipment to accelerate the development and industrialization of innovations in chemistry and the environment.
- Customized support: expertise and assistance for R&D projects, SMEs and start-ups in three key areas:
 - Polymers and advanced materials (synthesis, functionalization, recycling...)
 - Processes and divided solids (process intensification, scale-up...)
 - Smart Process (online analysis, real-time monitoring)

Today, Axel'One hosts 22 SMEs and start-ups, provides 9,000 m² dedicated to innovation, and contributes to over 70 collaborative projects. The association is involved both through services and as a partner in collaborative projects, actively fostering innovation and competitiveness in the sector.

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WWW.AXELONE.COM

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