epf Summer School 2027

Recycling and Recyclability of Polymers: from Fundamental to Holistic Approaches

Bertinoro, FC - Italy - May, 9-13 2027

https://www.aim.it/epf-summer-school-2027/

1ST CIRCULAR

About the School: Driving the Polymer Revolution

Developing a true **Circular Economy** in the plastics sector is an absolute necessity. Today, **less than a third of EU plastic waste reaches recycling facilities**, and only a fraction is actually recycled. Achieving a 100% recycling rate is a monumental scientific and socio-economic challenge.

Our mission is to advance and stimulate innovation to break down the technical, economic, and behavioral barriers hindering global recycling rates.

Daily plastic objects are highly complex, combining diverse polymer formulations, additives, and mixed materials (paper, aluminum, glass fibers) across sectors like packaging, automotive and aerospace.

Because no single entity can solve this alone, the **EPF Summer School 2027** adopts a strictly systemic approach targeting every link in the value chain:

🧪 Chemical & polymer industries; 🏭 Manufacturers & retailers;
🏠 Households & municipalities; 🚚 Waste collectors & processors

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Previous EPF Summer Schools

Since 2003, the European Polymer Federation has organized the organized a biennial series of Summer Schools focusing on leading-edge areas of macromolecular science and techology. These events combine high-level scientific reseach with strong relevance for industrial applications. Thanks to the School's residential format, ample time is dedicated to open discussions.

Topic of past EPF Summer Schools have included:

- 2015: Polymers at Interfaces and Surfaces
- 2017: Transport Phenomena in Polymers and Hybrid Materials
- 2019: Dynamic and Reversible Polymer Networks
- 2021: Polymers and Circular Economy
- 2023: Polymers and Ionic Liquids
- 2025: Cutting-edge polymer materials for future battery technologies

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Scientific Program

The scientific program will feature plenary lectures and poster presentations. With the overarching goal of fostering a fossil-free, circular socio-economic system—one that leverages biogenic carbon from biomass to offset system losses—the school focuses on three interconnected dimensions. Specifically, the major addressed topics will be:

Technical Innovation & Material Design

- Smart Waste Management: advanced collection systems powered by tagging, blockchain, and artificial intelligence (AI)
- Next-Gen Recycling: Innovative mechanical, chemical, and bio-tech solutions with advanced contaminant tracking.
- Design for Circularity: creating materials recyclable by definition and structures built for easy dismantling.

Socio-Economic Frameworks & Human Behavior

- Economic Flows: Understanding macro stocks, financial flows, and waste management economics.
- Environmental Metrics: Evaluating real-world impacts using rigorous Life Cycle Analysis (LCA).
- Stakeholder Dynamics: Studying consumer sorting behavior and industrial incentives.

Modeling, Regulation & Standardization

- Systemic modeling: Analyzing recycling loops and processes.

Policy & Rules: Addressing current challenges in international regulations, policy frameworks, and industry standardization.

Invited Speakers (Up to now)

- **Antoine Buchard**, University of York (UK)
- **Sylvestre Njakou Djomo**, Aarhus University (Denmark)
- **Mathieu Durand**, Le Mans Université (France)
- **Mariya Edeleva**, Ghent University, (Belgium)
- **Vincenzo Gente**, EU, Circular Economy & Secondary Raw Materials Unit (Belgium)
- **Minna Hakkarainen**, KTH Royal Institute of Technology (Sweden)
- **Thomas Längle**, Fraunhofer-Institut für Optronik, Karlsruhe (Germany)
- **Anthony J. Ryan**, University of Sheffield (UK)
- **Martina Salzano De Luna**, Università di Napoli Federico II (Italy)
- **Michael Shaver**, University of Manchester (UK)

Scientific Committee

Sabrina C. Carroccio, CNR-IPCB, Italy; Silvia Vicini, Univ. di Genova, Italy;
Paolo Lomellini, Eni-Versalis, Italy; Maria Castellano, Università di Genova, Italy.

School Secretariat	Administrative Secretariat
Maria G. Viola	Patrizia Barraco & Silvia Vicini
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Call for Abstracts

Share your research and contribute to the scientific excellence of the EPF Summer School! We warmly invite you to submit your abstract. Don't miss the chance to showcase your work: the **submission deadline is Febrary 28th, 2027**, and **acceptance notifications** will be sent out on **March 15th, 2027**.Find out more on https://www.aim.it/epf-summer-school-2027/

Registration

Participation in the EPF Summer School is **exclusive** to **AIM members**. The annual membership fee for 2027 is **€50,** which must be paid **in addition** to the school registration fee. AIM fee for Members of the Società Chimica Italiana (SCI), is €30.
The registration fees for the School are listed in the table below and **do not include** the AIM membership fee.

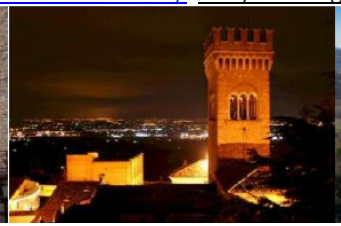
Registration category*	Early Bird Rate (By April 1, 2027) VAT 22% included	Regular Rate (After April 1, 2027) VAT 22% included
PhDs** / Young Researchers	€ 760	€ 820
Accompanying Person	€ 360	€ 420

*__What is included__: the registration fee fully covers the welcome party, social dinner, all coffee breaks, daily lunches, and double-room accommodation at the conference venue.
** __Students__: you must provide proof of your status, such as a valid student card or an official letter from your supervisor.

Instructions on how to **register** are available on the page https://www.aim.it/epf-summer-school-2027/

Venue, Accommodation & Travel Facilities

The School will be held on 9-13 May 2027, at the University Residential Center, in Bertinoro (FC), Italy.
Accommodation and transport details: follow the instructions given on the page https://www.aim.it/epf-summer-school-2027/. Early booking is recommended.


Cancellation Policy

A 50% reimbursement of the prepaid registration fee will be made available after the conference for cancellations received in writing by April 20th, 2027. No refunds will be possible after that date.