
nova-Institut GmbH (www.nova-institute.eu)

PRESS RELEASE

Advanced Recycling Conference 2024 – Driving Innovation in Sustainable Materials Management

Europe's largest conference on advanced recycling explores innovative technologies and transformative strategies that are reshaping the future of sustainability.

Hürth, 04 November 2024: This year, the **Advanced Recycling Conference (ARC) 2024** will expand its scope beyond conventional plastic packaging waste to address pressing issues like e-waste valorisation, PVC recycling, textile recycling, and advanced recycling techniques for engineering thermoplastics. The conference will also highlight innovative funding strategies essential for these advancements.

ARC is set for November 20-21, 2024, in Cologne, Germany, and online and will gather industry leaders, researchers, and policymakers to explore groundbreaking technologies and strategies that can reshape sustainability.

Europe's largest conference on advanced recycling

With nearly 300 participants from 26 countries attending the 2023 event – a 30 % increase of attendees compared to the year before – ARC has established itself as the largest conference in Europe for advanced recycling. This standing is underlined by this year's program, with a lineup of 46 speakers, the largest to date. Dedicated sessions will introduce innovative technologies such as dissolution, depolymerisation, pyrolysis and gasification with Carbon Capture and Utilisation (CCU). They will also discuss policy issues such as the EU recycling targets of up to 70 % for packaging and 55 % for plastics.

ARC 2024 promises invaluable insights into emerging trends and collaboration opportunities in both physical and chemical recycling and serves as a crucial platform for industry leaders, brands, investors, and policymakers to navigate the evolving regulatory landscape and explore new opportunities in recycling.

More information on the conference is available at <https://advanced-recycling.eu>.

Navigating the next wave of recycling challenges

The conference will feature various dynamic sessions led by industry experts that explore all aspects of the diverse landscape of advanced recycling, which among others include:

Perspectives of Advanced Plastics Recycling, Markets, Investments and Funding

Recycling requirements vary depending on the specific polymer and sector. From this viewpoint, topics such as recycling technologies and capacities, their complementary use, solutions for engineering and commodity thermoplastics as well as e-waste plastics, will be addressed. Further topics include price dynamics and market evolution in the plastics recycling industry as well as funding and the perspective of investors.

Dissolution Technologies for Recycling of PS and Engineering Plastics and Commodity Plastics

This solvent-based technology dissolves targeted polymers from mixed plastic wastes while the chemical structure of the polymer remains intact. Other undissolved plastic components (e.g. additives, pigments, fillers, non-targeted polymers) can be cleaned from the dissolved target polymer. The session covers polymer extraction or purification from PS and engineering plastics (e.g. ABS) through physical recycling using dissolution technologies.

From Polymer to Building Units and Back to Polymer – An Excursion Through Different Depolymerisation Technologies

Assisted by heat, radiation, the use of catalysts or addition of chemicals and enzymes, depolymerisation breaks plastic waste, and even textiles into its building units (e.g. monomers) that can be fed back into polymer production. The session covers thermal depolymerisation, solvolysis, and enzymatic recycling.

Thermochemical Recycling

Pyrolysis is a versatile tool able to complement mechanical recycling and to produce a wide range of different products for the chemical and plastics industry. Depending on the reactor and reaction design, different products in different qualities can be obtained to realise open or closed recycling loops.

Depolymerisation Technologies for PET

Assisted by solid or liquid chemicals and enzymes, depolymerisation breaks PET waste, and even textiles into its building units (e.g. monomers) that then can be fed back into polymer production. Deeper insights into solid-state hydrolysis, solvolysis, and enzymolysis will be provided.

Pre-/Post Treatment and Upgrading

These technologies are connecting elements (enablers) to all advanced recycling technologies. The here introduced processes realise higher yields and achieve higher product qualities while bringing recycling to another level.

Insights into Policy, Sustainability, Mass-balance and Alternative Naphtha

The latest updates about EU policy on Chemical Recycling and Mass Balance and Attribution will be presented, as well as deeper insights into Chemical Recycling for the Production of Alternative Naphtha and the status quo of Life Cycle Assessment (LCA) Recycling.

Find the full program at <https://advanced-recycling.eu/program/>.

Registration Information

The ARC 2024 presents a unique opportunity to connect with transformative developments in sustainable materials management and contribute to shaping a more sustainable future.

Registration is available for on-site and online attendance: <https://advanced-recycling.eu/registration/>.

Sponsorship and exhibition

ARC 2024 is supported by visionary sponsors and kindly thanks gold sponsor DePoly and bronze sponsors BUSS ChemTech AG, Erema Group and Starlinger Group for their support and commitment to advancing recycling technologies.

For more information on sponsorship packages and exhibition options, please visit the website or contact the sponsorship team at: <https://advanced-recycling.eu/sponsoring/>.

Partnerships

The Advanced Recycling Conference is supported by industry and trade associations, non-profit organisations, research institutions and interest groups that are thematically linked to the conference: Alliance to End Plastic Waste (International), BCNP Consultants (DE), C.A.R.M.E.N. (DE), CEFIC (EU), ChemCologne (DE), Chemical Recycling Europe (EU), Chemie-Cluster Bayern (DE), CPRRA -China Plastics Reuse and Recycling Association (CN), Circular Plastics NL (NL), CLIB (DE), IBB Netzwerk (DE), ITA - International Centre for Sustainable Textiles (DE), kunststoffland.NRW (DE), Plastics Europe (DE), Renewable Carbon Initiative (International).

Find all nova press releases, images and more free-for-press material at www.nova-institute.eu/press

Responsible for the content under German press law (V. i. S. d. P.):

Dipl.-Phys. Michael Carus (Geschäftsführer)
nova-Institut für politische und ökologische Innovation GmbH

Leyboldstraße 16 Tel: +49 2233 460 14 00
50354 Hürth Fax +49 2233 460 14 01
Germany contact@nova-institut.de

nova-Institut GmbH has been working in the field of sustainability since the mid-1990s and focuses today primarily on the topic of renewable carbon cycles (recycling, bioeconomy and CO₂ utilisation/CCU).

As an independent research institute, **nova** supports in particular customers in chemical, plastics and materials industries with the transformation from fossil to renewable carbon from biomass, direct CO₂ utilisation and recycling.

Both in the accompanying research of international innovation projects and in individual, scientifically based management consulting, a multidisciplinary team of scientists at **nova** deals with the entire range of topics from renewable raw materials, technologies and markets, economics, political framework conditions, life cycle assessments and sustainability to communication, target groups and strategy development.

50 experts from various disciplines are working together on the defossilisation of the industry and for a climate neutral future. More information at: nova-institute.eu – renewable-carbon.eu

Get the latest news from nova. Subscribe to <https://renewable-carbon.eu/newsletters>