

# **Diversity of Advanced Recycling** of Plastic Waste

All you want to know about advanced recycling technologies and renewable chemicals, building blocks, monomers, and polymers based on recycling



#### CHALLENGES

- Large share of non-recycled waste streams
- High demand and search for renewable raw materials for chemicals and materials
- Ambitious EU recycling targets
- Commitments from chemical industry and brand owners
- Customer demands

#### LEADS TO

Advanced recycling technologies are developing at

a rapid pace, new players are constantly entering the market, from start-ups to giants – new plants are being built or scaled up, new capacities are being achieved, new partnerships are being formed.

## SOLUTION

The Advanced Recycling Conference – a new home for technology providers, related industries, waste management companies, brands and investors, policy makers and scientists. An overview and in-depth insight into all available recycling technologies for various streams of different plastic waste, as well as policy issues and environmental impacts.



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# Day 1 28 November 2023

## Policy, Markets, and Strategy

## Michael Carus

**nova-Institute (DE)** Importance of Advanced Recycling for the Renewable Carbon Economy

## Lars Krause

**nova-Institute (DE)** Advanced Recycling Overview and Worldwide Capacities

### Lara Dammer

**nova-Institute (DE)** From Mass Balance to End-of-Waste Criteria: What's New in Policy for Advanced Recycling

Luis Hoffmann Sulzer Chemtech (CH) How Collaboration Enables Circular Plastics

**Dimitri Daniels Der Grüne Punkt (DE)** Mechanical and Chemical Recycling to Achieve Circularity of Plastic Packaging

## **Pyrolysis**

**Carlos Monreal Plastic Energy (UK)** Supporting a Circular Economy for Plastic Waste Through Chemical Recycling

#### David Sudolsky Anellotech (US) Recycled BTX Made From Mixed Waste Plastics via Plas-TCat® Process

**Oliver Borek Mura Technology (UK)** Mura Technology: Key Advantages of Hydrothermal Liquefaction

**Christian Haupts** Carboliq (DE) A Roadmap Towards TRL 9 in Chemical Recycling – The Knapsack 10 kta Plan(t)

**Valentijn de Neve** BlueAlp (NL) BlueAlp – Accelerating Plastic Recycling

## Dissolution

#### Abidin Balan Trinseo (NL) Dissolution Technology: An Approach for Infinite Circularity

## Matthias Wilhelm

Lober (DE) Dissolution Recycling as a Solution for a Multilayered Problem

## **Florian Riedl**

APK (DE)

High-Quality Recyclates from Post-Consumer Flexible Packaging Waste via the Solvent-Based Newcycling Technology

## Panzheng Zhou

### University of Wisconsin-Madison (US)

Computational Modeling of Dissolution-based Plastic Recycling: Solubility Prediction, Solvent Screening, and Process Design

## Versatility of Extruders (Pretreatment and Reactive Extrusion) & Advanced Mechanical Recycling (No Online Transmission)

#### Klaus Lederer EREMA Group (AT)

Advanced Input Stream Preparation Technologies for Chemical Recyclers

## Belén Monje

AIMPLAS (ES) Reactive Extrusion Potential in Recycling and Repolymerization

#### Frank Eisenträger INEOS Styrolution (CH)

Advanced Mechanical Recycling of Polystyrene

## Lars Biermann

### Krauss Maffei Extrusion (DE)

Closing the Material Loop of Polyethylene Terephthalate Through Chemical Recycling Technologies

# **Day 2** 29 November 2023

## Depolymerisation

## Fabio Silvestri

**gr3n (CH)** We MADE it! Towards Tangible Changes in the Plastic Industry

## Vladislav Jaso

TotalEnergies Corbion (NL)

Advanced Recycling of Luminy Poly Lactic Acid (PLA)

#### Cecilia Mattsson

**RISE Research Institutes of Sweden (SE)** DeToxoLys – Detoxification and Recycling of Contaminated Plastic Waste Streams with Hydrothermal Liquefaction (HTL)/Solvolysis

## Stefan Schonauer

**RWTH Aachen University (DE)** Enzymatic Recycling of Textiles

Gasification (No Online Transmission)

**Freya Burton** LanzaTech (UK) Enabling a Circular Economy: Low Carbon Fuel and Chemical Production from Waste

### Stephan Renninger

Cyclize (DE) Zero Emission Waste Reforming to Enable a Circular Carbon Cconomy in Europe

#### Cecilia Hofmann Re:Lab (FR)

Gasification and Pyrolysis of Plastic Waste Under a Circular Economy Perspective: A Literature Review

## Pre-/Post-treatment & Upgrading

## Tobias Rieger Fraunhofer UMSICHT (DE)

Application of a Novel and Cheap Post-Reforming Agent to Produce High-Quality Aromatic Bulk Chemicals from MSPW Pyrolysis Oils and Dehalogenation Thereof

## Trine Dabros

TOPSOE (DK)

Hydrotreating of Plastic Pyrolysis Oil: How to Maximize the Learnings From the First Industrial Plant

## Beate Dr. Kummer

Polysecure (DE)

New Sorting Technology for Fractions to Improve Advanced Recycling Output

## LCA and Environmental Aspects

### Matthias Stratmann

nova-Institute (DE) Advanced Recycling in LCA - The Status Quo

## **Edzard Scholten**

BASF (DE)

Environmental and Health Aspects of ChemCycling: A Measurement Program

## Pyrolysis and Other Thermochemical Approaches

## Frank Riedewald

### **Composite Recycling (IE)**

Lower OPEX and CAPEX Waste Plastic Chemical Recycling Facilities with Molten Metals

## Jasper Munier

Clariter (LU)

You Don't Need Mass Balance When You Make High-Value, High-Purity Petrochemicals From 100% Recycled Plastic Waste

## Geoff Smith

Itero Technologies (UK) Managing Waste Variability in a Pyrolysis Process

## Marcus Trygstad Aduro Clean Technologies (CA)

Advancing Chemical Recycling Through Chemical Thinking and Chemolysis

## **Sponsoring Options**

As a sponsor of this forward-looking conference, you will be at the forefront of the transition to an advanced recycling industry for renewable materials and chemicals. Your company understands the challenges such as climate change, the substitution of fossil-based carbon feedstocks with renewable ones, as well as the new policy framework that is also an opportunity for new developments. By becoming a sponsor, you can actively support innovation, new technologies and products, as well as new strategies and visions.



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## **Exhibition Information**

Companies that would like to book an exhibition booth (6m<sup>2</sup>) can do so for the price of 1,400 EUR (excl. 19% VAT). Included in the booth fee is one full conference ticket. The exhibition is located prominently within the conference hall so the interaction with participants is guaranteed. For sponsors the exhibition booth is included into their sponsoring package.



## Your stand booking consists of:

- One Table (1,40 m x 0,70 m), tablecloths and two chairs
- Pinboard (1,20 m width x 2 m height)
- Power Socket (240 V)

You are also welcome to make use of your own booth system.

For your exhibition stand booking or further questions, please contact

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or visit advanced-recycling.eu/exhibition-booking



Organiser

#### Contact



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#### Venue

Maternushaus Kardinal-Frings-Str. 1–3 50668 Cologne, Germany