



# Bio-based Polymers – Markets, Applications and Innovation

**Michael Carus** • [nova-Institute \(DE\)](#)

Renewable Polymers: Status and Outlook

**Martin Clemesha** • [Braskem Netherlands \(NL\)](#)

Bio-based Polyethylene Success Story: History, Status and Outlook

**Geoffroy Delvinquier** • [Futerra \(BE\)](#)

PLA Success Story: History, Status and Outlook

**Roland Klein** • [Fraunhofer LBF \(DE\)](#)

From Compostable to Capable: Tailoring Bio-based Polyesters via Additivation

**Michaël van der Jagt** • [polySCOUT \(NL\)](#)

Advancing Fossil-Free Polymers Through AI-Powered Polymer Development

**Stefaan De Wildeman** • [B4Plastics \(BE\)](#)

Swap or Scrap – Making Europe's New Biopolymers in its Existing Assets

**Paul Stockmann** • [Fraunhofer IGB \(DE\)](#)

Caramides – Monoterpene-based Polyamides Scaled for Fibres, Foams, and Cast Polyamides

**Marcus Elmer** • [Lixea Sweden \(SE\)](#)

High Performing Fibres from Annual Crops Through Ionic Liquid Fractionation

**Pramod Shankar Kumbhar** • [Praj Matrix-R&D Center \(IN\)](#) • From HA (Hyaluronic acid) to PHA (Polyhydroxy alkanoate)

**Jouni Lattu** • [VTT \(FI\)](#)

Novel PGA Barrier Polymer

**Kazumitsu Suzuki** • [AC Biode \(AT\)](#)

Biogenic and Biodegradable Superabsorbent Polymers

## Adhesives & Binders

**Michael Wilhelm** • [Henkel \(DE\)](#)

Fuelled by Data, Driven by Markets – Henkel Adhesive Technologies' Renewable Carbon Pathway

**Sanjay Wahal** • [Decarbonization \(US\)](#)

Mycelium-Based Binders and Packaging Materials: High-Performance, Circular Alternatives for Hygiene and Spill-Control Applications

## CO<sub>2</sub>-based Polymers

**Nick Smith** • [Viridi \(UK\)](#)

New CO<sub>2</sub>-to-Polymers Catalysts Made for the Industry We Have Today

**Sergio Santos** • [TECNALIA Research & Innovation \(ES\)](#)

Plastics Sustainability: Synthesis of CO<sub>2</sub>- and Bio-based Polycarbonates and Polyurethanes

## Bio-based Coating

**Thomas Lueder** • [Beckers Group \(DE\)](#)

How to Create a Pull for Renewable Coatings in the Construction Industry?

**Tim Kidd** • [Stahl \(NL\)](#)

Beyond the Surface: How Coatings Can Enable the Transition to Renewable Carbon

**Sarvesh Poddar** • [Sustanix Materialtech \(NL\)](#)

100% Solid Bio-Coating System to Replace Water/Solvent Based PFAS & Acrylate Systems

## Recycled Polymers & Plastics

**Delphine Largeteau** • [Schneider Electric \(FR\)](#)

Open, Software-defined Automation as a Catalyst for the Sustainable Carbon Industry

**Oliver Borek** • [Entzimatiko \(ES\)](#)

Converting Polyolefins into Monomeric Building Blocks Using Enzymatic Machinery

**Andreas Sommerfeldt** • [Danish Technological](#)

[Institute \(DK\)](#) • From RePURpose to PURfection: Danish Innovation Towards a Fully Circular Economy for Polyurethane

**Ulphard Thoden van Velzen** • [Wageningen](#)

[University & Research \(NL\)](#) • Mechanical Recycling of PLA Based Food Packaging

## Innovation Award

**Michael Carus** • [nova-Institute \(DE\)](#)

Innovation Award Introduction

**Arthur Groh** • [KUORI \(CH\)](#)

A RMC Success Story – Biobased and Biodegradable Elastomers for Abrasion-Critical Applications

**Christoph Gürtler** • [Covestro \(DE\)](#)

Importance of Innovation

**Carmen Danner** • [AeoniQ Holding \(CH\)](#)

Revolutionary New Cellulosic Man-made Filament Yarn

**Fanny Liao** • [Far Eastern New Century \(TW\)](#)

World's First Commercially Realised CO<sub>2</sub>-based Non-Isocyanate Polyurethane

**Akshaykumar Kompa** • [Inst. for Bioengineering of Catalonia \(ES\)](#)

First Biomaterial Chitin Becomes Stronger in Water

**Oskari Larkimo** • [Kemira \(FI\)](#)

Breakthrough Renewable Polymer Technology for Wastewater Treatment

**Vishal Patil** • [UPM Biochemicals \(DE/FI\)](#)

World's First Bio-based Circular Renewable Black™

**Nick Smith** • [Viridi \(UK\)](#)

World's First Anionic Surfactant Made Using Upcycled CO<sub>2</sub>