

## Moving a step forward from poly(lactic acid) to bio-copolymers

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### **Next generation polymerization process for biopolymers of versatile applications**

The environmental impact caused by fossil resources through carbon-cycle addition and green-house gas emissions represents a matter of primary importance, nowadays. Therefore, the end-of-life cycles of fossil-based plastics are currently extensively addressed by the development of alternative polyesters from renewable resources.

Poly(lactic acid) (PLA), being a bio-based, compostable, and 100% recyclable polymer produced from renewable feedstocks, is one of the most commercially viable bioplastics nowadays. Beyond the strong and continuous growth of the PLA market, its domain of application can be further widespread by extending the mechanical and thermal properties of the virgin PLA form. Being the global market leader in PLA technology, Sulzer continues to strengthen its core business by offering tailored solutions to produce not only PLA, but also other bio-(co)polymers of versatile applications.

Herein, the successful PLA story in Sulzer will be illustrated as a base case and the next generation polymerization process for other bio-(co)polymers will be uncovered. The key breakthroughs as well as tools developed in R&D shall pave the road for commercialization and will be outlined in this presentation.