



## Dr. Kristina Maria Zentel

**Coupling Experiments with Modelling for  
Process and Product Design of Polymers**

Dr. Kristina Maria Zentel is Junior Research Group Leader in Chemistry at the Technical University of Darmstadt (Germany), specializing in polymer reaction engineering and the rational design of sustainable polymers. Her research combines multi-scale modeling with experimental studies to advance emulsion and high-pressure polymerization processes. Here, she also focuses on sustainable polymer production as well as recycling. She has held international research positions at the University of Stellenbosch (South Africa) and the University of Hamburg (Germany), and is currently a Visiting Professor at Queen's University in Kingston (Canada). Dr. Zentel earned her PhD at TU Darmstadt with *summa cum laude* honors, and her work has been recognized with prestigious awards including the Dr. Hans Messer Stiftungspreis (2023), the Siegfried Peter-Preis (2023), and the Max Buchner Fellowship of DECHEMA (2020). She also serves as elected secretary of the EFCE Working Party on Polymer Reaction Engineering WP PRE (since 2019) and as organization committee member for the Annual PhD Student Workshop of the EFCE WP PRE (since 2015).