

This volume represents the proceedings of the 10th International Workshop on “Polymer Reaction Engineering” held at the University of Hamburg, Germany, in cooperation with DECHEMA (Gesellschaft für Chemische Technik und Biotechnologie e.V., Frankfurt a. M.), October 10–13, 2010.

For almost thirty years the workshop series and the corresponding proceedings successfully accompany the chemical community promoting the update, exchange and discussion of new findings in the field of polymer reaction engineering between experts from academia and industry alike. The Scientific Advisory Committee accepted 90 contributions which were presented in the form of keynote lectures, short lectures or posters by numerous experts from 19 countries of all parts of the world. With 165 participants the 10th International Workshop was again one of the largest meetings this kind worldwide. As long as this workshop exists the organizers fund young scientists to take part in the conference. This year a quarter of the participants were young PhD students, and thanks the generous support of WILEY-VCH Publisher, awards for the two most outstanding posters could be granted.

After all, one third of the participants from industry document special relevance attached to the conference. A significant part of the contributions are compiled in the present proceedings. Excellent papers of emerging new concepts and promising

developments, technologies from neighboring fields of chemical engineering and industrial solutions in process and product design are widely discussed from a superior perspective. New catalysts and catalytic polymerization processes, controlled radical polymerization, high-throughput and micro technologies, new reactor and process design and intensified processes are included. Polymer thermodynamics, process analytics, modeling and process control enable development and application of these technologies. Distinctive spotlights were put on contributions of new environmentally benign polymerization processes in consideration of economical needs. Furthermore nanotechnologies perform new and extended characteristics to polymer materials.

We thank all the contributors for providing their manuscripts and thankfully acknowledge WILEY-VCH Publisher for publishing this volume, thus making the proceedings available not only to the conference attendees.

We are indebted to DECHEMA for organizing this workshop as an outstanding international conference and especially encouraging young scientists to join the scientific community.

Finally we like to thank the members of the Scientific Advisory Committee for helping to establish the scientific program of high quality and for careful revision of the contributions.

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