DESCRIPTION

A much-needed overview of the state of the art of hyperbranched polymers

The last two decades have seen a surge of interest in hyperbranched polymers due to their ease of synthesis on a large scale and their promising applications in diverse fields, from medicine to nanotechnology.

Written by leading scientists in academia and industry, this book provides for the first time a comprehensive overview of the topic, bringing together in one complete volume a wealth of information previously available only in articles scattered across the literature. Drawing on their work at the cutting edge of this dynamic area of research, the authors cover everything readers need to know about hyperbranched polymers when designing highly functional materials. Clear, thorough discussions include:

• How irregular branching affects polymer properties and their potential applications

• Important theoretical basics, plus a useful summary of characterization techniques
How hyperbranched polymers compare with dendrimers as well as linear polymers

Future trends in the synthesis and application of hyperbranched polymers

Geared to novices and experts alike, Hyperbranched Polymers is a must-have resource for anyone working in polymer architectures, polymer engineering, and functional materials. It is also useful for scientists in related fields who need a primer on the synthesis, theory, and applications of hyperbranched polymers.

ABOUT THE AUTHOR

Deyue Yan, PhD, is a professor at the School of Chemistry and Chemical Engineering of Shanghai Jiao Tong University, P.R. China, and a member of the Chinese Academy of Sciences. Dr. Yan has served on the editorial board of Macromolecular Theory and Simulations and is currently on the editorial board of the Chinese Journal of Polymer Science.

Chao Gao, PhD, is Professor in the Department of Polymer Science and Engineering at Zhejiang University, P.R. China. Dr. Gao also serves on the editorial advisory boards of the Open Macromolecules Journal and the Open Process Chemistry Journal.

Holger Frey, PhD, is Full Professor of Organic and Macromolecular Chemistry at the Institute of Organic Chemistry at Johannes Gutenberg University Mainz, Germany. Dr. Frey has served on the editorial advisory boards of several polymer journals.

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