DESCRIPTION

This first book on this important and emerging topic presents an overview of the very latest results obtained in single-chain polymer nanoparticles obtained by folding synthetic single polymer chains, painting a complete picture from synthesis via characterization to everyday applications.

The initial chapters describe the synthetics methods as well as the molecular simulation of these nanoparticles, while subsequent chapters discuss the analytical techniques that are applied to characterize them, including size and structural characterization as well as scattering techniques. The final chapters are then devoted to the practical applications in nanomedicine, sensing, catalysis and several other uses, concluding with a look at the future for such nanoparticles.

Essential reading for polymer and materials scientists, materials engineers, biochemists as well as environmental chemists.

ABOUT THE AUTHOR

José A. Pomposo is IKERBASQUE Research Professor at the Materials Physics Department of the University of the Basque Country - UPV/EHU. He is in charge of the Chemistry Laboratory oriented to Polymer Synthesis of the Polymers & Soft Matter Group. He received his Ph.D. from the University of the Basque Country in 1994. He spent 12 years as Head of the New Materials Department in a Technological Research Center, and 1 year at the Donostia International Physics Center - DIPC. He has contributed to more than 130 scientific publications and 9 international patents.
His research interests include the synthesis of uniform soft nano-objects, research on the structure, dynamics & self-assembly behaviour of complex single-chain nano-objects, and the construction of hybrid organic nanostructures.

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