DESCRIPTION

This comprehensive, truly one-stop reference discusses monomers, methods, stereochemistry, industrial applications and more. Chapters written by internationally acclaimed experts in their respective fields cover both basic principles and up-to-date information, ranging from the controlled ring-opening polymerization methods to polymer materials of industrial interest. All main classes of monomers including heterocyclics, cyclic olefins and alkynes, and cycloalkanes, are discussed separately as well as their specificities regarding the ring-opening polymerization techniques, the mechanisms, the degree of control, the properties of the related polymers and their applications. The two last chapters are devoted to the implementation of green chemistry in ring-opening polymerization processes.

Of much interest to chemists in academia and industry.

ABOUT THE AUTHOR

Philippe Dubois received his PhD degree from University of Liège. In 1997 he moved to University of Mons-Hainaut (UMH) where he obtained the chair of macromolecular chemistry and directed the Laboratory of Polymeric and Composite Materials. He has co-authored more than 350 peer-reviewed publications and is co-inventor of 40 patents. He co-edited 5 books. In 2007 he became Director of of The Center of Innovation and Research in Materials and Polymers (CIRMAP) at UMH. He is currently past-president of the Belgian Royal Chemical Society (president in 2006-2007) and scientific director of Materia Nova research center in Mons.
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Jean-Marie Raquez, PhD in chemistry um UMH, Belgium, is currently postdoctoral researcher by Belgian F.R.S.-FNRS and works in the Laboratory of Polymeric and Composites Materials (Professor Philippe Dubois) at University of Mons-Hainaut (UMH) in Mons, Belgium. He has authored 12 scientific papers and 5 US patents in Materials Technology including macromolecular synthesis and reactive processing. In 2004, he joined the Michigan State University, USa, for his postdoctoral research.

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