DESCRIPTION

Searching for green and environmentally friendly polymerization methods by using enzymes? This first handbook on this hot and essential topic contains the whole chain of knowledge of biocatalysis in polymer chemistry in both a comprehensive and compact form. International leading experts cover all important aspects, from enzymatic monomer synthesis to polymer modification and degradation.

While the major focus of the book is on enzymatic polymerizations of the polymer classes reported so far, industrial contributions are also included, making this invaluable reading for biochemists and polymer chemists working in academia and industry.

ABOUT THE AUTHOR

Katja Loos is an Associate Professor at the Department of Polymer Chemistry of the Zernike Institute for Advanced Materials of the University of Groningen, The Netherlands. Her main research interests are currently the different aspects of enzymatic polymerizations and modifications of polymers, biocatalytic synthesis of novel monomers, polysaccharides, the interaction of proteins with specialized surfaces, living polymerization techniques and block copolymer self assemblies.

She specialized in Organic Chemistry and Polymer Chemistry during her university studies at the Johannes Gutenberg Universität in Mainz, Germany, and moved into the field of Enzymatic Polymerizations during her doctoral research at the University of Bayreuth, Germany. After a postdoctoral research stay at the Polytechnic University in Brooklyn, NY, USA, she started an independent research group at the University of Groningen in the field of Biocatalysis in Polymer Chemistry.