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Following a brief introduction, the book goes on to discuss various synthetic approaches to sequence-controlled polymers, including template polymerization, genetic engineering and solid-phase chemistry. Moreover, monomer sequence regulation in classical polymerization techniques such as step-growth polymerization, living ionic polymerizations and controlled radical polymerizations are explained, before concluding with a look at the future for sequence-controlled polymers.

With its unique coverage of this interdisciplinary field, the text will prove invaluable to polymer and environmental chemists, as well as biochemists and bioengineers.

Dr. Jean-François Lutz is CNRS research director, deputy director of the Institut Charles Sadron and head of the Precision Macromolecular Chemistry group in Strasbourg, France. He obtained his PhD from the University of Montpellier II, France, in 2000 and his habilitation degree from the University of Potsdam, Germany, in 2009. Before joining the CNRS, he subsequently was a post-doctoral fellow in the group of Krzysztof Matyjaszewski at Carnegie Mellon University, USA (2001-2003) and group leader Nanotechnology for Life Science at the Fraunhofer Institute for Applied Polymer Research in Potsdam (2003-2010).
He received in 2008 the prize of the polymer division of the French Chemical Society and he is listed since 2015 as an ISI Highly-Cited Researcher in Chemistry. He is also an European Research Council (ERC) laureate since 2010 through successive starting (StG 2010) and proofs of concept (PoC 2015) grants. His current research interests include the synthesis of sequence-controlled polymers, single-chain technologies and the preparation of information-containing macromolecules. He is author of more than 200 publications.

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