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"This is an exciting book written by top specialists in the field. It covers all major aspects of preparation of drug delivery systems in a very comprehensive manner: from dedicated polymer synthesis to preparation of most advanced nanocarriers designed for treatment of diseases posing major threats to the mankind nowadays. The book is written in a way that makes it interesting and useful for both newcomers to the field and specialists. The former can find in it excellent and clearly presented introductory information. For the latter it would be a comprehensive reference book and a source of new ideas and inspirations."

Prof. Dr. Hab. Stanisław Słomkowski
CMMS, Polish Academy of Sciences, Poland

In the area of controlled release of active substances, such as drugs, a strong interest in nanoparticles as carriers of active ingredients has arisen. Some of the active components are extremely hydrophobic, without cellular permeability, and susceptible to metabolic degradation, owing to which their use is limited. Such agents can be transported without any problem through physiological media by using nanoparticles. Nanoparticles (including nanogels) that release their contents by external triggering open up new possibilities for therapeutic strategies. If only a part of the wall of the nanoparticle (nanocapsule) is responsive, we are dealing with the so-called nanobottles, a nanocontainer with the active substance and a lid on the container that can be "opened" and "closed" by external triggering.

This book focuses on responsive nanoparticles and brings together two interesting areas: nanoparticles and responsive polymers. The concept of the book is that of a systematic approach from nanoparticles synthesis via responsive polymers to nanobottles. The book brings together contributions from experts in the field and provides a state-of-the-art overview on the field.

Alexander van Herk is team leader and senior researcher at the Institute of Chemical and Engineering Sciences, Singapore, since 2012 and a visiting professor of polymer reaction engineering at the Eindhoven University of Technology, the Netherlands. His field of research is nanotechnology, water-based coatings, and emulsion polymerization. He has edited 4 books and authored more than 180 papers.

Jacqueline Forcada is associate professor of chemical engineering and group leader in the Department of Applied Chemistry at the University of the Basque Country, Spain. Her research focuses on the synthesis, characterization, modeling, and biotechnological applications of functionalized polymeric and hybrid nanoparticles and nanogels.

Giorgia Pastorin is associate professor in the Department of Pharmacy in the Faculty of Science at the National University of Singapore. Her research interests focus on drug delivery (through the development of functionalized nanomaterials for potential biomedical applications) and medicinal chemistry (through the synthesis of heterocyclic molecules, as potent and selective GPCR ligands and potential therapeutics for several pathological conditions, including Parkinson's disease and cancer).

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