The application of process intensification (PI) presents a set of radically innovative principles in process and equipment design, that can provide significant benefits in terms of efficiency, capital and operating costs, quality, process safety, and sustainability. Typical approaches in bioprocess intensification are the reduction of the number of production steps, continuous processing, integrated processes, and alternative energy inputs.

- Introduction of all essential technologies of PI.
- Presentation across the entire value chain.
- Focusing on methods that allow the readers to transfer them to their specific questions.



Dirk Holtmann
is Professor of Electrobiotechnology at the Karlsruhe Institute of Technology (KIT). Previously, he was Professor for Intensification of Bioprocesses at THM, Giessen, Germany, and lecturer at the University of Kaiserslautern and Provadis University.

www.degruyter.com
ISBN 978-3-11-076032-3