This volume offers a broad and interdisciplinary view of modern approaches to drug discovery as used by pharmaceutical companies and research institutes. It comprehensively covers proteomics, bioinformatics, screening techniques such as high-throughput-, natural compounds-, and NMR-based screenings, combinatorial chemistry, compound library design, ligand- and structure-based drug design and pharmacokinetic approaches. Each of the thirteen chapters reviews the theory, background and application of a key technology in drug discovery and is complemented by an extensive list of references to the original literature.

This concise source of information will be useful for researchers, both in industry and academia, as well as students in the fields of medicinal, pharmaceutical and computational chemistry, bioinformatics, biochemistry, molecular biology and pharmacology.

Features and benefits
- Structure-based drug design, molecular modeling, bioinformatics, screening methods, combinatorial chemistry and physicochemical concepts in drug discovery are comprehensively covered.
- The volume is written from the viewpoint of the “drug researcher” working in the pharmaceutical industry, and also presents chapters on novel approaches developed in academia.
- Offers high practical value for young scientists who need a quick introduction to the topic.
- Provides an overview of the drug discovery process, particularly for specialized scientists working in drug discovery and pharma-managers.