DESCRIPTION

Divided into the three main sections of synthesis, analysis and drug development, this handbook covers all stages of the drug development process, including large-scale synthesis and purification of chirally pure pharmaceuticals.

The two editors from academia and a major pharmaceutical company have assembled an experienced, international team who provide first-hand practical advice and report previously unpublished data.

In the first section, the isolation of chiral drugs from natural sources, their production in enzymatic processes and the resolution of racemic mixtures in preparative chromatography are outlined in separate chapters. For the section on qualitative and quantitative analysis, enantioselective chromatographic methods are presented as well as optical methods and CE-MS, while the final section deals with the pharmacology, pharmacokinetics and metabolic aspects of chiral drugs, devoting whole chapters to stereoselective drug binding and modeling chiral drug-receptor interactions.

With its unique industry-relevant aspects, this is a must for medicinal and pharmaceutical chemists.

ABOUT THE AUTHOR

Eric Francotte received his BS and PhD degrees from the University of Louvain (Belgium). After postdoctoral work at the University of Geneva, he joined the Central Research Laboratories at Ciba-Geigy, where he was working on optically active polymers. He is now Director and Head of Separations at the Novartis Institutes for BioMedical Research in Basel (Switzerland). He is also an
editor of the Wiley journal "Chirality". His major interests include development and applications of chiral stationary phases for the separation of stereoisomers on an analytical and preparative scale.

Wolfgang Lindner received his PhD degree in Organic Chemistry from the University of Graz (Austria). After several academic positions, including a period at the FDA in Bethesda (USA), he was appointed the chair in Analytical Chemistry at the University of Vienna (Austria). He is also the editor of the Journal of Chromatography B, and the current president of the Austrian Society of Analytical Chemistry. His major interests lie in enantioselective separation techniques, including LC, CE, membranes, extractions, and in stereoselective pharmacokinetics.