DESCRIPTION

An informative look at the intricacies of today's drug development process

Once a discovery organization has identified a potential new drug candidate, it is the daunting task of synthetic organic chemists to identify the chemical process suitable for preparation of this compound in a highly regulated environment. Only through a multi-layered chemical process that takes into account such factors as safety, environmental considerations, freedom to operate and cost-effectiveness can researchers begin to refine the drug in terms of quality and yield.

This book covers both recent advances in the design and synthesis of new drugs, as well as the myriad other issues facing a new drug candidate as it moves through the development process. Utilizing recent case studies, the authors provide valuable insights into the complexities of the process, from designing new synthetic methodologies and applying new automated techniques for finding optimal reaction conditions to selecting the final drug form and formulation.

Both novice and active researchers will appreciate the inclusion of chapters on such diverse topics as:

* Cross-coupling methods
* Asymmetric synthesis
A wealth of real-world examples and contributions from leading process scientists, engineers, and related professionals make this book a valuable addition to the scientific literature.

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