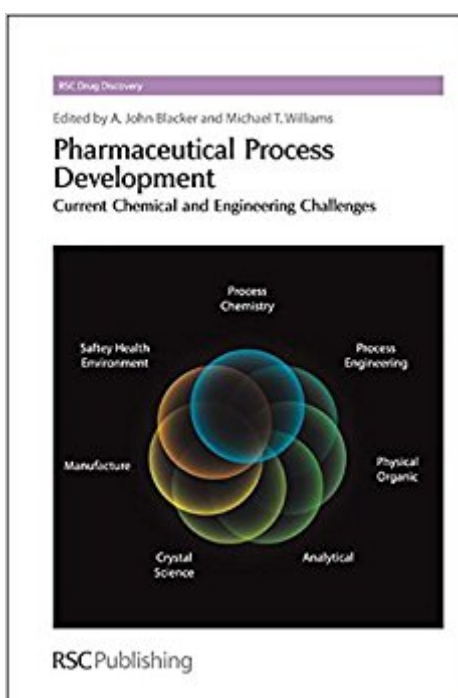


The book was found

Pharmaceutical Process Development: Current Chemical And Engineering Challenges (Drug Discovery)



Synopsis

Pharmaceutical process research and development is an exacting, multidisciplinary effort but a somewhat neglected discipline in the chemical curriculum. This book presents an overview of the many facets of process development and how recent advances in synthetic organic chemistry, process technology and chemical engineering have impacted on the manufacture of pharmaceuticals. In 15 concise chapters the book covers such diverse subjects as route selection and economics, the interface with medicinal chemistry, the impact of green chemistry, safety, the crucial role of physical organic measurements in gaining a deeper understanding of chemical behaviour, the role of the analyst, new tools and innovations in reactor design, purification and separation, solid state chemistry and its role in formulation. The book ends with an assessment of future trends and challenges. The book provides a valuable overview of: both early and late stage chemical development, how safe and scaleable synthetic routes are designed, selected and developed, the importance of the chemical engineering, analytical and manufacturing interfaces, the key enabling technologies, including catalysis and biocatalysis, the importance of the green chemical perspective and solid form issues. The book, written and edited by experts in the field, is a contemporary, holistic treatise, with a logical sequence for process development and mini-case histories within the chapters to bring alive different aspects of the process. It is completely pharmaceutical themed, encompassing all essential aspects, from route and reagent selection to manufacture of the active compound. The book is aimed at both graduates and postgraduates interested in a career in the pharmaceutical industry. It informs them about the breadth of the work carried out in chemical research and development departments, and gives them a feel for the challenges involved in the job. The book is also of value to academics who often understand the drug discovery arena, but have far less appreciation of the drug development area, and are thus unable to advise their students about the relative merits of careers in chemical development versus discovery.

Book Information

Series: Drug Discovery (Book 9)

Hardcover: 374 pages

Publisher: Royal Society of Chemistry; 1 edition (August 30, 2011)

Language: English

ISBN-10: 1849731462

ISBN-13: 978-1849731461

Product Dimensions: 6.1 x 1.1 x 9.2 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #4,348,978 in Books (See Top 100 in Books) #95 in Books > Engineering & Transportation > Engineering > Reference > Research #289 in Books > Science & Math > Chemistry > Clinical #2113 in Books > Science & Math > Chemistry > Industrial & Technical

Customer Reviews

Drug discovery and development requires the active collaborations of researches from many scientific disciplines and sub-disciplines and the RSC has created a great opportunity to provide the necessary range of publications to facilitate this. Professor Robin Ganellin, University College, London, UK

Pharmaceutical process research and development is an exacting, multidisciplinary effort but a neglected discipline in the chemical curriculum. This book presents an overview of process development and how recent advances in synthetic organic chemistry, process technology and chemical engineering have impacted on the manufacture of pharmaceuticals. The concise chapters cover such diverse subjects as route selection and economics, the interface with medicinal chemistry, the impact of green chemistry, safety, the crucial role of physical organic measurements in gaining a deeper understanding of chemical behaviour, the role of the analyst, new tools and innovations in reactor design, purification and separation, solid state chemistry and its role in formulation and ends with an assessment of future trends and challenges.

[Download to continue reading...](#)

Pharmaceutical Process Development: Current Chemical and Engineering Challenges (Drug Discovery) Handbook of Assay Development in Drug Discovery (Drug Discovery Series) Pharmaceutical Process Validation, Second Edition (Drugs and the Pharmaceutical Sciences) Discovery Map 85: Cork Kerry (Discovery Maps): Cork Kerry (Discovery Maps) (Irish Discovery Series) The Clinical Audit in Pharmaceutical Development (Drugs and the Pharmaceutical Sciences) Cell Cycle Inhibitors in Cancer Therapy: Current Strategies (Cancer Drug Discovery and Development) Chemical Process Safety: Fundamentals with Applications (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Drug Delivery: Principles and Applications (Wiley Series in Drug Discovery and Development) Mass Spectrometry for Drug Discovery and Drug Development The Process of New Drug Discovery and Development, Second

Edition Drug Targeting Technology: Physical Chemical Biological Methods (Drugs and the Pharmaceutical Sciences) Basic Principles and Calculations in Chemical Engineering (8th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamental Concepts and Computations in Chemical Engineering (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) New Drug Development: A Regulatory Overview (New Drug Development (Mathieu)) Fundamentals of Chemical Engineering Thermodynamics (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Elements of Chemical Reaction Engineering (5th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Essentials of Chemical Reaction Engineering (Prentice Hall International Series in Physical and Chemical Engineering) Unit Operations of Chemical Engineering (7th edition)(McGraw Hill Chemical Engineering Series) Fluid Mechanics for Chemical Engineers (UK Higher Education Engineering Chemical Engineering) Introduction to Chemical Engineering Thermodynamics (The McGraw-Hill Chemical Engineering Series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)