nity. It provides a solid information base, divided into the following six main chapters, subdivided into 40 chapters, written by 113 contributors, all of them participants in the HTS evolution. (1) Natural Products as a Discovery Resource, edited by J. Devlin, 146 pages, 243 references, dealing with different resources such as plants, products of fermentation using enzymes or microbes and marine natural products. (2) Compound Sourcing: Chemically Generated Screening Libraries, edited by M. Pavia, 128 pages, 158 references. This chapter describes the principles of generating chemical libraries with expanding molecular diversity by combinatorial chemistry or parallel synthesis. The next chapter refers to (3) Assay Technologies and Detection Methods, edited by A. Kolb, 168 pages, 298 references, containing the most frequently employed current assays and detection methods like Scintillation Proximity Assay (SPA), Flash Plate® technology, high performance microphysiometry and techniques applying time-resolved fluorometry, fluorescence polarization or optical biosensors like BIAcore. (4) Automation and Robotics, edited by A. Kolb, 68 pages, 27 references. (5) Data Retrieval, Handling and Integration, edited by J.Devlin, 76 pages, 29 references. (6) Laboratory Design and Management, edited by M. Sills, 44 pages, 16 references.

This recommendable book should be of great value for the entry in high throughput screening systems in industry and research. It gives a very useful and clear description of the development of HTS systems from finding resources and generating libraries to assay and detection methods and finally automation, data handling and laboratory design.

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Process Chemistry in the Pharmaceutical Industry
K.G. Gadamasetti (Ed.), Marcel Dekker, Inc., New York 1999.

Could it be interesting for organic or pharmaceutical chemists to read a book on process chemistry unless they are working specifically in this area? Could a book on industrial applications be a good place to look for elegant synthetic transformations driven by modern reagents? Could be someone who is fascinated by the complex architecture of natural products find adequate molecules in a book on synthetic drugs developed by industry? If you answer any of these questions affirmative, you will like to read this book. If your answer to any of these questions is no, you should consider reading this book because it might change some of your perceptions on process chemistry.

The book *Process Chemistry in the Pharmaceutical Industry* gives in a total of 23 chapters a broad overview on various aspects in this field. Moreover, it clearly demonstrates the high standard that has been achieved in industrial applications of drug synthesis. In addition, obstacles not encountered in small-scale laboratory synthesis are pointed out, and creative solutions are revealed which were found to overcome them.

In an introductory chapter, the essential aspects of process chemistry in combination with the general ideas of the book are outlined. Also, a list of the top 30 prescription drugs by worldwide sales is given, which gives a quick overview of the structures of important pharmaceutical compounds. In the following chapter strategies by pharmaceutical companies are presented to improve on one of the most critical factors for their success: to shorten the time for drug development.

In the next 12 chapters case studies of processes for the synthesis of commercial drugs are described in detail that span a broad range of organic chemistry. Many modern methods such as diastereo- and enantioselective reactions as well as resolution approaches, application of organometallic reagents as well as transition metal catalysts, cycloadditions, arene functionalizations or photochemical transformations can be found here, always keeping the goal of efficiency in mind. At the same time a broad variety of pharmacological important compounds such as thromboxane A2, 5-hydroxytryptamine $(HT)_{1a}$ and *N*-methyl-D-aspartate (NMDA) receptor antagonists, 5-lipoxygenase inhibitors, vitamin D, purine bronchodilators, vasodilators, inhibitors of noradrenaline uptake, HIV protease inhibitors, cholesterol reducing agents, or HMG-CoA reductase inhibitors are introduced. Last but not least, most of the major pharmaceutical companies are represented with a highlight of their drug development, ensuring the reader a broad variety of chemistry described.

Two more technological oriented chapters evaluate enzymatic and phase transfer catalysis for pharmaceutical processes. Given the increasing importance of asymmetric synthesis and catalysis in drug research, a special section containing three chapters on important developments in this area are described.

At the end of the book, four chapters not dealing with the actual synthesis of drugs but with different aspects of chemical processes are discussed. At first, one learns about formulation and thermal process safety of drugs. Finally, factorial and combinatorial methods as well as laboratory automation towards faster development of chemical processes are described.

Despite a few mistakes mainly in the graphical schemes, the book presents pharmaceutical synthesis at its best in a very concise and educational way. The wealth of references and illustrations, and the carefully compiled subject index