

## Book Review

### **High Throughput Screening**

The Discovery of Bioactive Substances

Edited by John P. Devlin

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There can be few advances in the development of new pharmaceutical compounds that have had such an impact as high throughput screening and combinatorial chemistry in the last five years. Everyone now wants to be involved. To assist them Devlin has put together a forty chapter book on this subject. This is really a reference book for the laboratory scientist, not the undergraduate student, and acts as a starting point to delve into this exploding area of scientific progress.

The book is split neatly into six sections progressing through many of the issues associated with high throughput screening and combinatorial chemistry. The first section opens the book, detailing the use of natural products as a source of novel pharmaceutical compounds. This is followed by a useful and well illustrated section on the generation of combinatorial libraries. The remainder of the book is truly dedicated to high throughput screening, the third and largest section describing the use of assay technologies and detection methods with emphasis on fluorescence and gene expression. Logically following this lengthy account, is a section describing automation and robotics associated with high throughput screening. The final two sections summarize, and lead the reader through some of the aspects of the utilization of databases for information storage. Finally, overviews are given of the laboratory design and management aspects of planning a high throughput screening project.

The contributors to this text include many renowned experts in the fields of combinatorial chemistry and high throughput screening. The vast majority of the authors are, however, from North America. The remainder are European. Whilst it is acknowledged that North America may be leading the world in these technologies, it might have been of interest to elicit contributions from other geographical areas such as Japan and other Asian countries. An inevitable pitfall of a multi-authored book is the bias that can be given by some authors to their own products and a failure to be critical and place their work in a broader light. A large proportion of the chapters fall into this category, and some read more as advertisements than scientific reports. Despite this, there are some excellent critical overviews of the state-of-the-art in the various areas; it is just a shame that there were not more of them!

One of the features of this book is that it is likely to form a source of reference. Many of the chapters contain useful addresses and points of contact. Overall the book is well written and edited to a high standard. The text and referencing are consistent throughout. It appears free from some of the discrepancies that occasionally can ruin multi-authored books.

It is a challenging task for anyone to prepare a book, but to attempt it in such a rapidly evolving area as high throughput screening should be admired. This book will no doubt be out of date in a very short time, but whilst it is current it forms a valuable reference text to dip into as the need requires.

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