

## Book Reviews

**Bioactive Natural Products. Detection, Isolation, and Structural Determination. Second Edition.** Edited by Steven M. Colegate and Russell J. Molyneux. CRC Press, Taylor and Francis Group, Boca Raton, FL. 2008. xiii + 605 pp. 18 × 26 cm. ISBN 13 978-0-8493-7258-2. \$199.95.

This text is described by its editors as a “complementary extension of the first edition rather than simply a revised and updated version”, and indeed it is. Only a few chapters (three) represent significant updates of those same found in the first edition, and they were authored by the same contributors. The remaining 18 chapters are either partially or completely different from those of the previous edition and are written by new contributors. As evidenced by their publishing histories, these new contributors were chosen because of their familiarity with their topics and their personal research in the areas addressed.

The book encompasses a broad range of topics that include techniques such as NMR strategies, quantitative NMR, LC–NMR, dereplication using UV spectroscopy, LC–MS, and a particularly fine chapter on high speed countercurrent chromatography by H. Li and F. Chen. Several chapters deal with bioassay/biosensing procedures, including a very timely contribution by X. Gu et al. on biological fingerprinting analysis of Chinese medicines. This latter chapter will be particularly useful to those scientists in industry who are in the process of developing their dietary supplement cGMPs as recently required by the FDA.

Rounding out this excellent text are chapters on anticancer drug discovery, natural products from endophytic microbes, mycobacteria, glycosidase inhibitors, antimalarial compounds, and germination stimulants in smoke. Figures and tables are clear and consistent throughout the text. There is a 20-page useable index. The book is remarkably free from errors. References total more than 1700 and are located at the end of each chapter. They are current to 2005–2006 with a few into 2007.

This book, although it is expensive, should be in the library of every department that is involved in natural product research. Everyone who has the first edition will value this second edition equally, if not more so, as its complementary extension.

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**Bitter Nemesis. The Intimate History of Strychnine.** By John Buckingham. CRC Press, Boca Raton, FL. 2008. xi + 298 pp. 15 × 23.5 cm. ISBN 9781420053159 (Paperback). \$39.95.

This book is described by the publisher as “a scholarly and compelling history” of strychnine “from its discovery to modern times”. However, the average chemist reader may conclude that the term “scholarly” is somewhat misused. The book seems to this reviewer to be aimed at a lay readership. While some little space is devoted to references to strychnine in the early literature and to descriptions of its botanical source(s) and to early and more modern-day unsuccessful attempts to utilize strychnine as a therapeutic agent, much of the book is anecdotal in nature. There are only very brief references to chemical aspects of the alkaloid; some of the great early alkaloid chemists are mentioned as being at least tangentially involved with strychnine: Pelletier, Caventou, Sertürner, Vauquelin. A mere half page shows the only chemical structures in the book: the several proposed structures for strychnine, including the correct one. No narrative is included that describes the efforts of chemists to unravel strychnine’s structure or how chemists arrived at the true structure. The challenge of describing the stereochemistry of this molecule, which has a multiplicity of asymmetric centers, is ignored. Sir Robert Robinson, Vladimir Prelog, and R. B. Woodward are cited as being instrumental in solving the strychnine structure, and Woodward is rather grudgingly credited with its synthesis. However, most of the space devoted to these chemists consists of rather pithy, somewhat uncomplimentary minibiographies of Sir Robert and of Woodward.

A considerable portion of the book comprises descriptions of lurid homicidal cases in which strychnine was involved; extensive quotations from the actual testimonies from trials are included. The author provides discussions of patent medicine nostrums of the past that contained strychnine. An illustration section includes (inter alia) pictures of notorious multiple-murder strychnine poisoners, as well as an adjacent photograph of Sir Robert Robinson and R. B. Woodward, together before a blackboard covered with chemical structures.

Having heaped criticism on scientific and technical aspects of the book, this reviewer must admit that *Bitter Nemesis* is well written and it would be highly entertaining light reading by chemists for their sheer pleasure. Curl up with it on a rainy Saturday afternoon.

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