appeal to a number of chemistry communities including medicinal, biological, and computational. Unfortunately, the price set by the publishers may limit this book to the library shelf.

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Strategies for Organic Drug Synthesis and **Design.** By Daniel Lednicer. John Wiley & Sons, Inc., New York. 1998. xv + 502 pp. 16.5×24 cm. ISBN 0-471-19657-6. \$79.95.

The syntheses of active pharmaceutical agents comprise a special and unique place in organic synthesis. Certain considerations must be met in order for a drug to be cost-effectively produced on a multiton scale. Many drugs both in the marketplace and in development are significant synthetic challenges in this regard. Author Lednicer attempts to provide some insight into these challenges and to indicate how they have been met in his well-known compellation, The Organic Chemistry of *Drug Synthesis.* The material for this new monograph is taken from that original series, although with a

different twist. Where the earlier series concentrated on how various classes of drugs were prepared on a manufacturing scale, this monograph emphasizes the strategy and tactics used in the design of a drug synthesis. It discusses the synthetic organic chemistry involved in the synthesis of these drugs.

The book consists of 15 chapters that discuss various classes of drugs, based upon their structural type. Chapter 1 provides information on prostaglandins, protease inhibitors, and retinoids. Chapters 2 and 3 cover compounds based on substituted and polycyclic aromatic rings. Chapters 3 and 4 discuss steroids; Chapter 6 covers nonsteroidal estrogens. Opioid analgesics are presented in Chapter 7. The remainder of the chapters cover compounds based on their ring type and size, five- or six-membered, heterocyclic and fused type ring systems. Chapter 14 discusses β -lactam antibiotics. The monograph contains a useful cross index of compounds as well as a reaction index and subject index. References are located at the end of each chapter.

Anyone interested in the synthetic aspects of pharmaceutical research will find this monograph interesting reading.

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