

Carbohydrates in Drug Design, Z.J. Witzak, K.A. Nieforth (Eds), Marcel Dekker, 1997, p. 703, approximately US\$175.00, ISBN 0-8247-9982-8

Despite being one of the most abundant classes of naturally occurring products, carbohydrates have received considerably less attention from synthetic chemists than many other fields of natural product chemistry. Until recently, development of drugs based on carbohydrates has been all but ignored by pharmaceutical companies. However, this has now changed: carbohydrate research is fast becoming a focal point for synthetic chemists, particularly in the areas of medicinal and pharmaceutical chemistry.

Carbohydrates in Drug Design presents an excellent collection of accounts on many types of new, potentially therapeutic carbohydrates, reviewing major advances in medicinal carbohydrate chemistry. Contributions from nearly thirty internationally-recognised authors illustrate the highly diverse and crucial role of carbohydrates with

antiinflammatory, anticancer, antidiabetic, anticonvulsant, antibiotic, antithrombotic, antiadhesion and antifungal activity: in short, they cover the majority of areas targeted for current drug development.

This well-produced and well-indexed volume, with over 1800 references, covers chemical properties, biological functions, methodologies for synthesising model compounds, synthetic and enzymatic approaches, and new discoveries in the fast-developing field of medicinal carbohydrate chemistry.

The book is highly recommended: not only for medicinal, carbohydrate and pharmaceutical chemists, but also for biochemists, pharmacologists, glycobiologists and other scientists interested in staying abreast of progress in the carbohydrate field.

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***Introduction to Analytical Gas Chromatography*, by R. P. W. Scott, Marcel Dekker, 1998, 397 pp., ca. \$125.00, ISBN 0-8247-0016-3**

Gas chromatography is undoubtedly an analytical technique most applicable to the analysis of volatile substances. However, despite the basic simplicity of this chromatographic technique, complex physicochemical concepts are involved: complicated ancillary electronic equipment is necessary for efficient chromatographic operation. Hence some in-depth knowledge is required for its effective use.

Introduction to Analytical Gas Chromatography is an excellent introduction to all the basic concepts involved in understanding the chromatographic process, the instrumentation necessary for performing analyses, and the various operational procedures. Numerous examples, taken from

manufacturers' data sheets, of readily available equipment, detectors, columns, stationary phases and operating conditions enable the reader to duplicate the analyses described by the author in the book.

The *Second Edition* is completely rewritten and updated to provide up-to-date information on the latest developments: the application of chirally active stationary phases of carbohydrates such as cyclodextrins, reflecting the increasing importance of asymmetric syntheses in pharmaceutical research is a prime example.

The book is concise, well-produced and well-indexed: an easily read reference and text. It is highly recommended, both for the newcomer to the field and the experienced chromatographer.

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