Many interesting items are presented, three of these are: soot, sometimes referred to as carbon, is actually hydrocarbon; coffee, first cultivated by the Arabians in 575AD, was only introduced to the western hemisphere in 1725, and a table listing the 15 causes of colour.

As with all previous volumes extensive lists of references are given after each chapter and cross-referencing is used. For certain entries the reader is referred to a different volume, *e.g.* compact discs—see information storage materials. The high quality of this encyclopedia continues to impress.

P. J. Cox

Trends In Analytical Chemistry—Reference Edition, Volume 11: Elsevier, Amsterdam, 1992. Pages viii + 402. US$387.50, Dfl 620.00. ISBN 0-444-89926-X.

The latest Reference Edition of Trends in Analytical Chemistry contains all the archival material from the 1992 Library Edition of TrAC. For subscribers to the Library Edition the cost of this compilation is included in the subscription charges.

As usual the 10 issues of TrAc are maintained as separate sections within the Reference Edition, with the articles divided up under such headings as: opinions, trends, monitor, computer corner and interface. The subject coverage is as comprehensive as ever and written in the house-style of the Trends Journals (with their highly successful emphasis on readability and accessibility to a multidisciplinary audience). There are an increasing number of articles that address specific applications. This is especially evident in the bioanalytical area where arguably some of the most exciting developments in analytical chemistry are being made with excellent contributions on capillary electrophoresis, sample preparation by microdialysis, biomolecular tracing with accelerator mass spectrometry, viral protein modifications by mass spectrometry, electrophoresis of biopolymers, ICP/MS analysis of biological materials, etc.

The articles are mostly commissioned so the authors are established authorities in their respective fields. Authors adhere to a strict policy of length, number of references, *etc.* This format has widespread appeal to the specialist (to keep abreast of related fields) and to the novice who may be looking for new ways of solving problems. TrAC is also a terrific source of materials for lecturers and for students on projects or assignments.

Purchasers of this compilation should consider the relative cost of taking up a subscription to Library Edition of TrAC. Part of the strength of the Trends Journals is their speed of publication and current relevance to new areas/developments. To some extent this appeal is lost to those who only subscribe to the Reference Editions.

Finally, at Dfl 620 the price is a 14% increase on last year—quite steep in this age of recession and cost cutting.

B. A. McGaw

Nucleic Acid Targeted Drug Design: C. L. Propst and T. J. Perun (editors), Dekker, New York, 1992. Pages xiii + 619. $165.00. ISBN 0-8247-8662-9.

Drugs that interact with DNA, thereby directly inhibiting cell growth and replication, cover a very wide range of chemical type, as well as mechanisms of interaction. Some bind reversibly, typified by the classic intercalators. Others bond covalently, at a variety of sites on DNA, depending on their stereoelectronic properties. A number of DNA-interactive drugs are active and clinically-important anti-cancer agents, albeit with a number of severe drawbacks. The continuing search for new agents with enhanced selectivity to tumour cells has been a major impetus for many studies in the drug-DNA field. An increasingly important goal now and in the future is to devise compounds that will specifically recognize particular sequences of DNA (or RNA), thereby artificially regulating the expression of a particular gene. This approach will clearly have implications for a wide range of human diseases.

This timely book provides a number of authoritative reviews of the drug-DNA area, focusing on the rational design of new agents on the basis of mainly biophysical information. In this, the editors are reflecting modern approaches to molecular and drug design, with heavy reliance on results from X-ray crystallography, NMR and molecular modelling. All of these techniques are well represented in this book, with contributions from some leading experts, in 13 chapters. That by A. H.-J. Wang and H. Robinson is notable for discussing combined crystallographic and NMR studies on several intercalation complexes, largely studied in their laboratory, and for providing a useful account of the scope and limitations of the two methods in the context of drug-DNA interactions. Results from crystallography also dominate the thorough review of DNA groove-binding agents by M. L. Kopka and T. A. Larsen. Several other chapters describe either the contributions of individual laboratories (that by W. A. Remers, M. D. Barklay and L. H. Hurley on combined fluorescence, NMR and molecular modelling is especially useful) or attempt to cover an entire field, with that by J. C. Dabrowiak, A. A. Stankus and J. Goodisman on "sequence specificity" being an outstanding example. A few contributions are of lesser quality and make the book somewhat of a curate's egg; that on modelling and computational chemistry approaches (an important topic and one of very considerable current activity), not only fails to provide the reader with a balanced view, but is fatally flawed with some glaring and serious errors, such as incorrectly defining the various polymorphs of DNA, and ignoring much of the basic experimental data on which sensible modelling must be based.

At $165, this book is not destined for individual bookshelves. However it does have a useful place in the libraries of all those interested in the molecular basis of action and the design of new anticancer, antiviral and antiparasitic agents.

S. Neidle