

of nitrogen fixation has been included. Since during the last 5 years there have been major advances in the understanding of the regulation of the genes coding for a number of the enzymes involved in nitrogen metabolism, the nitrogen metabolic process is described in great detail. The structure of the genome in nucleus, chloroplasts and mitochondria, the regulation of gene expression, molecular control of development, and the technology of genetic manipulation of plants are also described.

Plant Biochemistry and Molecular Biology will be invaluable to undergraduate and postgraduate students in the plant sciences and to all those requiring an introduction to the current concepts in molecular plant science.

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Handbook of Derivatization Reactions for HPLC

G. Lunn, L.C. Hellwig (Eds.); Wiley, Chichester, 1998, 1795 pages, hardbound & CD ROM, ISBN 0-471-16458-5, £320.00, hardbound, ISBN 0-471-23888-0, £161.00, CD ROM, ISBN 0-471-23889-9, £210.00

HPLC has become a household term in chromatography, covering a vast array of procedure profiles which yield excellent separations of mixtures of compounds both at the analytical and preparative levels, and it would be difficult to run an analytical facility without the availability of such a technique.

The contents of the *Handbook of Derivatization Reactions for HPLC* and the accompanying CD ROM are a collection of derivatization procedures, the products of

which can then be analysed by high performance liquid chromatography (HPLC) or capillary electrophoresis (CE).

The CD ROM provides the information in a convenient and rapidly accessible form, which is a distinct advantage. The search can be either simple or complex. Simple: where one search parameter is selected. Complex: two search parameters. The parameters available are: derivatization type; reagent; compound; reaction; matrix; procedure and literature reference. A list of hits is generated, which can then be accessed.

The book and CD ROM contains up-to-date material with more than 2100 abstracts from published papers, half of which were published since 1991. The format is of a monograph type: an illustration of the reaction; sample matrix and analyte; sample preparation; instrument variables, i.e. column, mobile phase, injection volume, etc.; detector type and parameters, i.e. retention time, internal standard, limit of detection; other substances, compounds which can be simultaneously analysed; key words and references.

Both the book and CD ROM are up-to-date and clearly written. Either one would be an excellent reference tool, the choice being personal preference. It is highly recommended for scientists providing chromatographic analysis where derivatization procedures, HPLC and CE methods, post column reactions and sample preparation are undertaken. It would also be extremely useful for organic and inorganic researchers using derivatization and analysis as an elucidation and identification tool.

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