logical operational order, viz. immunisation, fusion, screening, large scale production, antibody characterisation and immunodiagnostics. The first chapter is orientated towards handling bacteria and viruses and components thereof for immunisation purposes, whilst the others could be applicable to producing antibodies to most antigens. Apart from the last chapter where a summary of diagnostic kits and their possible commercial exploitation is provided, the information given is extremely detailed and 'user-friendly'. A major feature is the advice (and reasons) on experimental and safety techniques which accompanies many of the practical steps, e.g. the need to avoid plastic syringes when handling adjuvants because of the swelling of the plunger.

The book has a publication date of 1988 and hence has a pre-1987 reference list. Of other current techniques, in vitro immunisation is described but one would not expect to find human hybridomas or 'humanised' antibodies in such a book. However, the commercial availability of chromatographic kits for antibody purification has been missed. There are a few errors in the text and a major mislabelling of photographs of cells has led to an loose erratum sheet being inserted after publication. A second edition might also deal with minor issues such as defining the term antibody 'avidity' as the novice might expect 'affinity' to be used instead. Likewise, it took some minutes to realise what was meant by a 'blank sample comb' for use in SDS-PAGE.

In terms of price and content the book is a good buy for those interested in infectious diseases. For more general and current coverage of monoclonal antibodies readers may prefer to consult recent texts such as 'A Practical Guide to Monoclonal Antibodies' by J.E. Liddell and A. Cryer (Wiley, 1991) or A.M. Campbell's approach in 'Laboratiry Techniques in Biochemistry and Molecular Biology, Volume 23' (Elsevier, Amsterdam, 1991).

A.J. MacGillivray

Liquid chromatography in biomedical analysis (Journal of Chromatography Library–Volume 50); Edited by T. Hanai; Elsevier; Amsterdam, 1991; xii + 296 pages; Dfl 270.00, $154.50

This book attempts, in my opinion successfully, to describe the potential role of HPLC in all types of biomedical analysis.

The introductory chapter gives a comprehensive overview of practical liquid chromatography, describing sampling techniques, type of sample (including a welcome appreciation of the problems encountered with plasma), and sample preparation, including the now widespread solid-phase extraction techniques. The HPLC section describes the separation chemistries available to the chromatographer, including more recent developments such as porous graphitic carbon.

Chapter two describes optimisation techniques with considerable mathematical analysis of both separation chemistry and analyte behaviour. There are sections dealing with most categories of biomolecule, and separation chemistries applicable to each. There is also discussion of predictive techniques. It's a pity that the elution of peptides on HPLC is not discussed here as the author claims that peptides are more predictable than amino acids in their retention characteristics.

Subsequent chapters deal with individual classes of biomolecule, beginning with amino acids, and including bile acids, carbohydrates, catecholamines, fatty acids, nucleotides, porphyrins, prostaglandins and steriod hormones. The final chapter covers a variety of miscellaneous molecules not covered in the main text.

Each chapter describes in considerable detail how a routine system can be devised for clinical analysis. Derivitization chemistry and methods of detection are described. It is refreshing to see that the HPLC results presented are from real samples, allowing discussion of such phenomena as spurious peaks, baseline drift, peak overlap, and so on. Most chapters also deal with the problems of devising automated or semi-automated systems. Overall the emphasis is very much on understanding the principles which are routinely employed in HPLC. Every worker who uses an HPLC, whether for research or routine analysis wil find (as I have done) that there is something of value in this volume.

My only major criticism, besides the rather high price, is that many trade products described are Japanese, which is obviously not surprising as the majority of contributors are Japanese. However, for distribution in Europe, a list of equivalent products would be useful. A glossary of HPLC terms would also help, as some contributors use different terms to define analyte behaviour.

The book itself is more easily accessible than some of the very large HPLC manuals which have appeared recently, and its emphasis on real problems encountered with real samples makes it a volume which will be continually consulted.

John L. Morton

Novel Calcium-Binding Proteins: Fundamentals and Clinical Implications; Edited by C.W. Heizmann; Springer-Verlag; Berlin, 1991; xii + 624 pages. DM 248.00

The calcium ion (Ca^{2+}) has a fundamental role in regulating a variety of cellular functions. One mechanism whereby Ca^{2+} exerts its effects is by interacting with a variety of Ca^{2+}-binding proteins. In the book 'Novel Ca^{2+}-Binding Proteins: Fundamentals and Clinical Implications' attempts have been made to summarize recent developments in the identification and characterization of Ca^{2+}-binding proteins. Followed by a preface emphasizing the role of Ca^{2+}-binding proteins not only in physiology but also in pathophysiology, the book is divided into six sections dealing with: Calcium signaling by calcium-binding proteins; EF-hand calcium

Journal of liquid chromatography, 18(18&19), 3833-3846 (1995). Determination of photodestruction quantum yields using capillary electro-. Phoresis: application to 0-PHTHALALDE-HYDE/p-mercaptoethanol-labeled amino acids.Â Hjertkn (1) was one of the first to demonstrate what he termed â€œhigh-performance electrophoresisâ€ by analogy with high-performance liquid chromatography in which. 3833. Copyright 0 1995 by Marcel Dekker, Inc. Journal of Chromatography, 531 (1991) 3349. Elsevier Science Publishers B.V., Amsterdam. CHROMSYMP. 1994. Molecular interactions in liquid chromatographyâ€. S. N. LANIN and Yu. S. NIKITIN*.Â phase was used for the liquid chromatography of carbohydrates [30]. Fig. 5 shows that.Â 8 T. Hanai, K. C. Tran and J. Hubert, J. Chromatogr., 239 (1982) 385. 9 S. N. Lanin and Yu. S. Nikitin, Chromatographia, 25 (1988) 272. Liquid chromatography-tandem mass spectrometry assay for the quantification of free and total sialic acid in human cerebrospinal fluid.Â Quantification of free and total sialic acid excretion by LC-MS/MS. Journal of Chromatography B-Analytical Technologies in the Biomedical and Life Sciences, 848(2), 251-257. https://doi.org/10.1016/j.jchromb.2006.10.066. Bischoff, R., M. Luider, T., J. Vonk, R., A. Heeren, R., & Piersma, S. (2007). Biomarker discovery by mass spectrometry symposium, May 18-19, 2006. The Journal of Chromatography B publishes papers on developments in separation science relevant to biology and biomedical research including both fundamental advances and applications. Analytical techniques which may be considered include the various facets of chromatography, electrophoresis and related methods, affinity and immunoaffinity-based methodologies, hyphenated and other multi-dimensional techniques, and microanalytical approaches.Â The SJR is a size-independent prestige indicator that ranks journals by their 'average prestige per article'. It is based on the idea that 'all citations are not created equal'. SJR is a measure of scientific influence of journals that accounts for both the number of