

This article was downloaded by:

On: 24 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Liquid Chromatography & Related Technologies

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713597273>

A Review of: "Introduction to Microscale High-Performance Liquid Chromatography, Daido Ishil, *Editor VCH Publishers, Inc. FRG, 1988, 209 pp. xiii, \$59.95*"

Haleem. J. Issaq^a

^a Program Resources, Inc. NCI-Frederick Cancer Research Facility, Frederick, MD

To cite this Article Issaq, Haleem. J.(1988) 'A Review of: "Introduction to Microscale High-Performance Liquid Chromatography, Daido Ishil, *Editor VCH Publishers, Inc. FRG, 1988, 209 pp. xiii, \$59.95*"', *Journal of Liquid Chromatography & Related Technologies*, 11: 12, 2631 – 2632

To link to this Article: DOI: 10.1080/01483918808076752

URL: <http://dx.doi.org/10.1080/01483918808076752>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

BOOK REVIEW

INTRODUCTION TO MICROSCALE HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

Daido Ishii, Editor

VCH Publishers, Inc.

FRG, 1988, 209 pp. + xiii, \$59.95

Professor Ishii states, in his introduction that "this book is intended to give introductory and comprehensive information to people who are interested in micro-HPLC...." The book does this, using an easy-to-follow approach.

The book defines micro bore columns by their volume and not by their internal diameter, "since columns having the same vacant volume give the same peak volume irrespective of the bore (internal diameter). Bearing this in mind, we should, the authors state, call a column of one-hundredth or less the volume of a conventional column as micro column and a column of about one-tenth the volume as semi-micro column." This may not be an accurate statement, and I am not sure many micro column users will agree with it. One-hundredth the volume of a 250 x 4.6 mm column would give a 13 x 2 mm column which will not qualify as a micro column, since it has a 2 mm ID, as stated on page 4, Table 1-2, which defines a micro column as one having an ID of .46 mm.

The book contains seven chapters, 10 appendices, a list of symbols and an index. The chapters deal with instrumental requirements in microscale HPLC, which is probably the best chapter of the book. It is concise, straightforward and to the point. Although microscale columns are discussed briefly in Chapter 2, they are discussed in detail in Chapter 3, which deals with instrumentation requirements, pre-column concentration, and characteristics of microcolumns and different types of columns, including capillary, packed microcapillary and semimicro columns. Chapter 4 deals with detection systems, UV, fluorescence and voltammetric detectors. Unfortunately, this chapter does not cover use of lasers as detector sources for micro HPLC. The work of Dr. Yeung (Iowa State University) should have been discussed.

Chapter 5 deals with hyphenated systems, e.g., HPLC-IR, HPLC-MS, but no mention of the use of HPLC-Atomic Absorption or Inductively Couple Plasma Spectrometry. Chapters 6 and 7 discuss post-column derivatization and applications of micro, semimicro and high-speed HPLC. A good selection of examples are presented to give the reader a general idea of the uses of these techniques.

Overall, the book is a good reference on the subject. The bibliographies at the ends of the chapters are current and up-to-date, although, in certain instances, some significant work is missing.

This volume is recommended as a reference and supplement to the chromatographer's library.

Dr. Haleem J. Issaq
Program Resources, Inc.
NCI-Frederick Cancer Research Facility
P. O. Box B
Frederick, MD 21701.