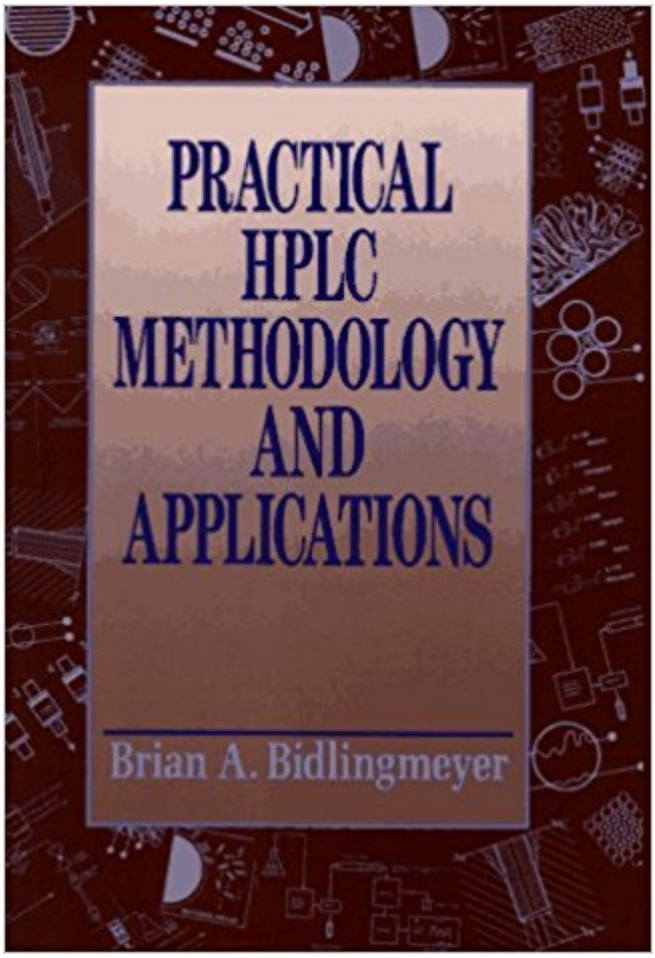
Practical HPLC Methodology And Applications



Synopsis

Of related interest. Trace and Ultratrace Analysis by HPLC Satinder Ahuja Written by a leading scientist in the field, this monograph provides the first definitive and technically up-to-date treatment of the theory, equipment, and applications of chemistry's most powerful reliable analytical technique. Coverage includes an encyclopedic compendium of common substances that require trace and ultratrace analysis, and features clear discussion of such important topics as considerations for HPLC equipment, sensitive detectors, sample preparation, method development, selectivity and computer-based optimizations, optimizing detectability, and much more. 1991 (0 471-51419-5) 432 pp. High Performance Liquid Chromatography in Biotechnology Edited by William S. Hancock Analytical chemists, biochemists, and chemical engineers will find this up-to-date guide to HPLC's recent developments essential for enhancing on-the-job technical expertise. Extensive coverage includes the broad applications of HPLC, ranging from major chromatographic techniques (including reversed phase, ion exchange, affinity and hydrophobic interaction chromatography) to specific separations such as those in monoclonal antibody and nucleic acid purification. Techniques for quality control programs and advanced technology are also discussed. 1990 (0 471-82584-0) 564 pp. Unified Separation Science J. Calvin Giddings This advanced text/monograph brings together for the first time the variety of techniques used for chemical separations by outlining their common underlying mechanisms. The mass transport phenomena underlying all separation processes are developed in a simple physical-mathematical form, facilitating analysis of alternative separation techniques and the factors integral to separation power. The first six chapters provide background material applicable to a wide range of separation methods, while the final five chapters illustrate specific techniques and methods. 1991 (0 471-52089-6) 320 pp.

Book Information

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Customer Reviews

Offers all the pragmatic and essential information necessary to begin developing successful separations and maximize the performance output of the HPLC equipment in solving practical problems. Provides readers with an understanding of how chromatography is used to solve problems as well as which technique(s) should be employed to accomplish the separation of interest. Demonstrates the benefits of a systematic study of the interactions of the sample with the stationary and mobile phases thus setting the stage for more advanced discussions and work. Contains nine tested experiments to teach the basics with hands-on investigations.

Since its commercial introduction nearly 25 years ago, high performance liquid chromatography (HPLC) has progressed from a complicated "art" to a straightforward separation science and has become one of the fastest growing techniques in the modern laboratory. But while HPLC instruments have become indispensable in science and industry and HPLC opportunities nearly unlimited, many of today’s chemists, scientists, and technicians have little or no personal experience with the HPLC process. Written primarily for those new to the subject, Practical HPLC Methodology and Applications provides a broad foundation in the field of chromatography as well as all the information necessary to develop useful separations. Following an applications-oriented approach, the book presents a thorough account of how separations are developed along with where, how, and which HPLC technique(s) are most appropriate for accomplishing a particular separation. Serving as a bridge between strictly introductory texts and more advanced treatises, this book presents a great deal of important information from the formative years of HPLC—much of which is drawn from "dated" references but is nonetheless integral to understanding the purposes and procedures of chromatography. Beginning with a general overview of modern liquid chromatography, the author follows with detailed accounts of the use of liquid chromatography as a research tool, the nature of the chromatogram and contributing factors, problem assessment, separation development, considerations for proper operation of a liquid chromatograph, and gradient elution chromatography. Maintaining an emphasis on methods and applications, the book employs ten tested experiments to illustrate key issues and instill requisite experimental and operational skills. These experiments contain brief discussions with practical insights that put the subject matter into proper perspective, highlight the necessity of particular steps, and reveal how

each contributes to the entire experiment. Example results are then discussed and supplementary examples for further investigation are suggested. For analytical chemists using HPLC as an analytical tool, or chemists, scientists, and students who need a thorough introduction to the subject, Practical HPLC Methodology and Applications provides all the information needed to develop successful separations and maximize the performance output of HPLC equipment in solving practical problems.

very good, thorough coverage from basics, working through some specific strategies. You can probably find most practical tables that will help with HPLC method development in here. Ends with a few actual experiments to work through, which could be used in undergrad teaching.

Practical HPLC Methodology and Applications Percutaneous Absorption: Drugs--Cosmetics--Mechanisms--Methodology: Drugs--Cosmetics--Mechanisms--Methodology, Third Edition, (Drugs and the Pharmaceutical Sciences) HPLC: Practical and Industrial Applications, Second Edition (Analytical Chemistry) HPLC of Macromolecules: A Practical Approach (Practical Approach Series) HPLC in Nucleic Acid Research: Methods and Applications (Chromatographic Science Series) Practical HPLC Method Development Practical Problem Solving in HPLC HPLC: A Practical User's Guide Single Case Research Methodology: Applications in Special Education and Behavioral Sciences Theory Construction and Model-Building Skills: A Practical Guide for Social Scientists (Methodology in the Social Sciences) Sight-Singing for SSA: A Practical Sight-Singing Course for Beginning and Intermediate Choirs (Methodology Chorals) Practical Risk Management: The ATOM Methodology, Second Edition Basic HPLC and CE of Biomolecules HPLC Columns: Theory, Technology, and Practice Hplc Of Biological Macro- Molecules, Revised And Expanded (Chromatographic Science (Hardcover)) Troubleshooting HPLC Systems: A Bench Manual Handbook of Derivatization Reactions for HPLC HPLC Methods for Recently Approved Pharmaceuticals HPLC in Enzymatic Analysis (Methods of Biochemical Analysis) Diode Array Detection in HPLC (Chromatographic Science Series)