Supercritical Fluid Technology Theoretical Amp Applied Approaches To Analytical Chemistry Acsss 488

#Supercritical Fluid Technology #Analytical Chemistry #Applied Chemistry #Chemical Analysis Techniques #AC-<u>SSS 488</u>

Explore the foundational theories and practical applications of Supercritical Fluid Technology within the realm of Analytical Chemistry. This comprehensive resource delves into advanced approaches, offering essential insights for researchers and students, including specialized content relevant to ACSSS 488 programs.

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Supercritical Fluid Technology

Presents the current state of supercritical fluid technology and provides a link between researchers studying fundamental aspects of the science and those involved in the application of supercritical fluid technology to difficult chemical problems. Includes discussions of the fundamental aspects of solvation in supercritical fluid media and presents applications in spectroscopy, chromatography, extraction, and computer modeling. Also offers a discussion on regulatory agencies' roles in the implementation of supercritical fluid technology.

Supercritical Fluid Technology (1991)

In this volume, we have collected a series of reviews that cover both experimental and theoretical work geared toward the more exact requirements of current SFE applications. While we have artificially divided the volume into experimental and theoretical sections, natural overlaps will be apparent. Many of the papers on experimental and theoretical sections, natural overlaps will be apparent. Many of the papers on experimental technique contain discussions on equation of state correlations. Indeed, a good deal of the experimental work is intimately tied to a mathematical description of fluid mixtures. The theoretical section presents reviews that cover the modern theory of critical phenomena, methods to correlate near critical experimental results and approaches to understanding the behavior of near critical fluids from microscopic theory. It is hoped that the scope of these reviews will provide the reader with the basis to further develop our understanding of the behavior of supercritical fluids.

Ultrasound in Chemistry

Mit Ultraschall kann man den Fortgang von Reaktionen verfolgen und Arbeitsschritte in der Analytik beschleunigen. Neben den klassischen Anwendungen in der Extraktion stellt dieser Band auch

moderne Einsatzgebiete, unter anderem in der Proteomforschung und Polymertechnik, vor. Spezielle Kapitel widmen sich den erforderlichen Instrumenten wie Ultraschallbädern und -sonden.

Handbook of Solid Phase Microextraction

The relatively new technique of solid phase microextraction (SPME) is an important tool to prepare samples both in the lab and on-site. SPME is a "green" technology because it eliminates organic solvents from analytical laboratory and can be used in environmental, food and fragrance, and forensic and drug analysis. This handbook offers a thorough background of the theory and practical implementation of SPME. SPME protocols are presented outlining each stage of the method and providing useful tips and potential pitfalls. In addition, devices and fiber coatings, automated SPME systems, SPME method development, and In Vivo applications are discussed. This handbook is essential for its discussion of the latest SPME developments as well as its in depth information on the history, theory, and practical application of the method. Practical application of Solid Phase Microextraction methods including detailed steps Provides history of extraction methods to better understand the process Suitable for all levels, from beginning student to experienced practitioner

Broadband Dielectric Spectroscopy

"This book is about Broadband Dielectric Spectroscopy as a Modern Analytical Technique"--

Solvent Extraction

The main challenge in modern solvent extraction separation is that most techniques are mainly empirical, specific and particular for narrow fields of practice and require a large degree of experimentation. This concise and modern book provides a complete overview of both solvent extraction separation techniques and the novel and unified competitive complexation/solvation theory. This novel and unified technique presented in the book provides a key for a preliminary quantitative prediction of suitable extraction systems without experimentation, thus saving researchers time and resources. Analyzes and compares both classical and new competitive models and techniques Offers a novel and unified competitive complexation / solvation theory that permits researchers to standardize some parameters, which decreases the need for experimentation at R&D Presents examples of applications in multiple disciplines such as chemical, biochemical, radiochemical, pharmaceutical and analytical separation Written by an outstanding scientist who is prolific in the field of separation science

Modern Flow Analysis

Flow analysis is an automatic, precise and fast way to perform analytical tests. Flow instruments are used for clinical and pharmaceutical analyses, quality control of industrial products, monitoring of environmental pollution and many other fields. The book presents the latest methodological, technical and instrumental achievements in flow analysis. It shows new possibilities for the miniaturization and full mechanization of flow systems, together with examples of their interesting application. The proposed solutions contribute to reducing the amount of used reagents and waste, as well as increasing the safety of working with hazardous reagents, resulting in modern devices operating in accordance with the principles of green chemistry. A number of innovative methods of processing and measuring analytical samples have also been described. The book very well reflects the current state of flow analysis and development directions.

Environmental Chemical Analysis

The study of the environment requires the reliable and accurate measurement of extremely small quantities of chemicals and the ability to determine if they are pollutants or naturally occurring species. Historically, a "dilute and disperse" method of waste disposal has been accepted; yet as we learn the long-term consequences of such an approach, it is clear that more rigorous waste management techniques are necessary to understand the sources and fates of contaminants and to regulate their discharge. This volume presents the details of the basic analytical science involved in making these measurements. It concentrates on the basic principles of sampling and sample preparation, followed by the chemical principles of the major instrumental methods used in chemical analysis, and detailed discussions of the major environmental matrices. This book also provides coverage of topics usually only partially discussed in textbooks, such as quality assurance plans and statistical data handling. Students majoring in environmental sciences need a foundation in measurement techniques used in

the field. Environmental Chemical Analysis gives students a thorough grounding in this field and enough information to judge the quality and interpret the information produced in the analytical laboratory.

Marine Phenolics

Phenolic compounds are an extremely diverse class of ubiquitous secondary metabolites produced by a variety of organisms playing different biological roles. They have numerous types of demonstrated bioactivities, including antioxidant, antimicrobial, anti-inflammatory, antitumoral, immunomodulator, neuroprotective, cardioprotective, and antidiabetic activities. Marine organisms produce a vast collection of unique phenolic structures, some of them not found in terrestrial habitats. Progress in different aspects is rapidly advancing, and this Special Issue will provide updated information and recent studies on marine phenolics. Specially, this issue is focused on their chemical characterization, elucidation of their structures, evaluation of their biological properties and mechanisms of action, efficient extraction and purification technologies, development of value-added applications, as well as formulation of novel products.

Process Analytical Chemistry

Process analytical chemistry (PAC) can be defined as the technology of obtaining quantitative and qualitative information about a chemical process in order to control or optimise its performance. This highly practical book provides an up-to-date introduction to the field with a special emphasis placed on industrial processes. Edited by representatives from one of the world's leading chemical companies and centres of excellence for research into the subject, the book is written by a transatlantic team of authors who provide a global perspective.

New Trends in Fluorescence Spectroscopy

This first volume in the new Springer Series on Fluorescence brings together fundamental and applied research from this highly interdisciplinary and field, ranging from chemistry and physics to biology and medicine. Special attention is given to supramolecular systems, sensor applications, confocal microscopy and protein-protein interactions. This carefully edited collection of articles is an invaluable tool for practitioners and novices.

Porous Polymers

This book gathers the various aspects of the porous polymer field into one volume. It not only presents a fundamental description of the field, but also describes the state of the art for such materials and provides a glimpse into the future. Emphasizing a different aspect of the ongoing research and development in porous polymers, the book is divided into three sections: Synthesis, Characterization, and Applications. The first part of each chapter presents the basic scientific and engineering principles underlying the topic, while the second part presents the state of the art results based on those principles. In this fashion, the book connects and integrates topics from seemingly disparate fields, each of which embodies different aspects inherent in the diverse field of porous polymeric materials.

Chemical Analysis of Food: Techniques and Applications

Chemical Analysis of Food: Techniques and Applications reviews new technology and challenges in food analysis from multiple perspectives: a review of novel technologies being used in food analysis, an in-depth analysis of several specific approaches, and an examination of the most innovative applications and future trends. This book won a 2012 PROSE Award Honorable Mention in Chemistry and Physics from the Association of American Publishers. The book is structured in two parts: the first describes the role of the latest developments in analytical and bio-analytical techniques and the second reviews the most innovative applications and issues in food analysis. Each chapter is written by experts on the subject and is extensively referenced in order to serve as an effective resource for more detailed information. The techniques discussed range from the non-invasive and non-destructive, such as infrared spectroscopy and ultrasound, to emerging areas such as nanotechnology, biosensors and electronic noses and tongues. Important tools for problem-solving in chemical and biological analysis are discussed in detail. Winner of a PROSE Award 2012, Book: Honorable Mention in Physical Sciences and Mathematics - Chemistry and Physics from the American Association of Publishers Provides researchers with a single source for up-to-date information in food analysis Single go-to reference for

emerging techniques and technologies Over 20 renowned international contributors Broad coverage of many important techniques makes this reference useful for a range of food scientists

Treatment of Micropollutants in Water and Wastewater

Over the last few years there has been a growing concern over the increasing concentration of micropollutants originating from a great variety of sources including pharmaceutical, chemical engineering and personal care product industries in rivers, lakes, soil and groundwater. As most of the micropollutants are polar and persistent compounds, they are only partially or not at all removed from wastewater and thus can enter the environment posing a great risk to the biota. It is hypothesized that wastewater is one of the most important point sources for micropollutants. Treatment of Micropollutants in Water and Wastewater gives a comprehensive overview of modern analytical methods and will summarize novel single and hybrid methods to remove continuously emerging contaminants - micropollutants from the aqueous phase. New trends (e.g. sensor technology, nanotechnology and hybrid treatment technologies) are described in detail. The book is very timely because the new techniques are still in the development phase and have to be realized not only in the laboratory but also on a larger scale. The content of the book is divided into chapters that present current descriptive and analytical methods that are available to detect and measure micropollutants together with detailed information on various chemical, biological and physicochemical methods that have evolved over the last few decades. Treatment of Micropollutants in Water and Wastewater will also enable readers to make well informed choices through providing an understanding of why and how micropollutants must be removed from water sources, and what are the most appropriate and available techniques for providing a cost and technologically effective and sustainable solutions for reaching the goal of micropollutant-free water and wastewater. The book will be suitable for water and wastewater professionals as well for students and researchers in civil engineering, environmental engineering and process engineering fields.

Applied Biocatalysis

Provides clear and comprehensive coverage of recently developed applied biocatalysis for synthetic organic chemists with an emphasis to promote green chemistry in pharmaceutical and process chemistry This book aims to make biocatalysis more accessible to both academic and industrial synthetic organic chemists. It focuses on current topics within the applied industrial biocatalysis field and includes short but detailed experimental methods on timely novel biocatalytic transformations using new enzymes or new methodologies using known enzymes. The book also features reactions that are "expanding and making the enzyme toolbox available to chemists"—providing readers with comprehensive methodology and detailed key sourcing information of a wide range of enzymes. Chapters in Applied Biocatalysis: The Chemist's Enzyme Toolkit are organized by reaction type and feature a short introductory section describing the current state of the art for each example. Much of the book focuses on processes for which the enzymes are readily available so that organic chemists can synthesize appropriate quantities of chemicals with available materials in a standard chemical laboratory. Advanced methods are included to present examples of new enzymes that might encourage collaboration with suppliers or academic groups and that will educate chemists of rapidly expanding future possibilities. Focuses on current topics within the applied industrial biocatalysis field Offers experimental methods on novel biocatalytic transformations using new enzymes or new methodology using known enzymes Covers the hot topics of enzyme and chemoenzymatic cascades and biocatalysis in flow Edited by noted experts from both academia and industry with years of experience in the field of biocatalysis—particularly, the industrial applications of enzymes Written for synthetic organic chemists working in all industries but especially the pharmaceutical industry and for those in academia with an eye for biocatalysis, Applied Biocatalysis: The Chemist's Enzyme Toolkit will also benefit academic groups in chemistry and related sciences that are using enzymes for synthetic purposes, as well as those working in the area of enzymology and molecular biology.

Urban Drainage

Urban Drainage has been thoroughly revised and updated to reflect changes in the practice and priorities of urban drainage. New and expanded coverage includes: Sewer flooding The impact of climate change Flooding models The move towards sustainability Providing a descriptive overview of the issues involved as well as the engineering principles and analysis, it draws on real-world examples as well as models to support and demonstrate the key issues facing engineers dealing with drainage issues. It also deals with both the design of new drainage systems and the analysis and upgrading

of existing infrastructure. This is a unique and essential textbook for students of water, environmental, and public health engineering as well as a valuable resource for practising engineers.

Springer Handbook of Experimental Fluid Mechanics

Accompanying DVD-ROM contains ... "all chapters of the Springer Handbook."--Page 3 of cover.

Design and Engineering of Microreactor and Smart-Scaled Flow Processes

This book is a printed edition of the Special Issue "Design and Engineering of Microreactor and Smart-Scaled Flow Processes" that was published in Processes

Aerosol Science

AEROSOL SCIENCE TECHNOLOGY AND APPLICATIONS Aerosols influence many areas of our daily life. They are at the core of environmental problems such as global warming, photochemical smog and poor air quality. They can also have diverse effects on human health, where exposure occurs in both outdoor and indoor environments. However, aerosols can have beneficial effects too; the delivery of drugs to the lungs, the delivery of fuels for combustion and the production of nanomaterials all rely on aerosols. Advances in particle measurement technologies have made it possible to take advantage of rapid changes in both particle size and concentration. Likewise, aerosols can now be produced in a controlled fashion. Reviewing many technological applications together with the current scientific status of aerosol modelling and measurements, this book includes: Satellite aerosol remote sensing The effects of aerosols on climate change Air pollution and health Pharmaceutical aerosols and pulmonary drug delivery Bioaerosols and hospital infections Particle emissions from vehicles The safety of emerging nanomaterials Radioactive aerosols: tracers of atmospheric processes With the importance of this topic brought to the public's attention after the eruption of the Icelandic volcano Eyjafjallajökull, this book provides a timely, concise and accessible overview of the many facets of aerosol science.

Microfluidics and Nanofluidics Handbook

This comprehensive handbook presents fundamental aspects, fabrication techniques, introductory materials on microbiology and chemistry, measurement techniques, and applications of microfluidics and nanofluidics. The second volume focuses on topics related to experimental and numerical methods. It also covers fabrication and applications in a variety of areas, from aerospace to biological systems. Reflecting the inherent nature of microfluidics and nanofluidics, the book includes as much interdisciplinary knowledge as possible. It provides the fundamental science background for newcomers and advanced techniques and concepts for experienced researchers and professionals.

Proceedings of the Scientific-Practical Conference Research and Development - 2016

This book is open access under a CC BY 4.0 license. It relates to the III Annual Conference hosted by The Ministry of Education and Science of the Russian Federation in December 2016. This event has summarized, analyzed and discussed the interim results, academic outputs and scientific achievements of the Russian Federal Targeted Programme "Research and Development in Priority Areas of Development of the Russian Scientific and Technological Complex for 2014–2020." It contains 75 selected papers from 6 areas considered priority by the Federal Targeted Programme: computer science, ecology & environment sciences; energy and energy efficiency; lifesciences; nanoscience & nanotechnology and transport & communications. The chapters report the results of the 3-years research projects supported by the Programme and finalized in 2016.

Carbon Capture and Storage

This book will provide the latest global perspective on the role and value of carbon capture and storage (CCS) in delivering temperature targets and reducing the impact of global warming. As well as providing a comprehensive, up-to-date overview of the major sources of carbon dioxide emission and negative emissions technologies, the book also discusses technical, economic and political issues associated with CCS along with strategies to enable commercialisation.

Chemical Enhanced Oil Recovery

This book aims at presenting, describing, and summarizing the latest advances in polymer flooding regarding the chemical synthesis of the EOR agents and the numerical simulation of compositional models in porous media, including a description of the possible applications of nanotechnology acting as a booster of traditional chemical EOR processes. A large part of the world economy depends nowadays on non-renewable energy sources, most of them of fossil origin. Though the search for and the development of newer, greener, and more sustainable sources have been going on for the last decades, humanity is still fossil-fuel dependent. Primary and secondary oil recovery techniques merely produce up to a half of the Original Oil In Place. Enhanced Oil Recovery (EOR) processes are aimed at further increasing this value. Among these, chemical EOR techniques (including polymer flooding) present a great potential in low- and medium-viscosity oilfields. • Describes recent advances in chemical enhanced oil recovery. • Contains detailed description of polymer flooding and nanotechnology as promising boosting tools for EOR. • Includes both experimental and theoretical studies. About the Authors Patrizio Raffa is Assistant Professor at the University of Groningen. He focuses on design and synthesis of new polymeric materials optimized for industrial applications such as EOR, coatings and smart materials. He (co)authored about 40 articles in peer reviewed journals. Pablo Druetta works as lecturer at the University of Groningen (RUG) and as engineering consultant. He received his Ph.D. from RUG in 2018 and has been teaching at a graduate level for 15 years. His research focus lies on computational fluid dynamics (CFD).

Chemical Biology

This volume seeks to enable the discovery of tools in chemical biology by providing readers with various techniques ranging from initial chemical genetic screening to target identification. To successfully highlight the essential components of the chemical biology tool discovery process, the book is organizes into four parts that focus on platforms for molecular discovery in in vitro cellular systems, in vivo chemical genetic screening protocols, and methods used to discover functional protein targets. Written in the highly successful Methods of Molecular Biology series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step readily reproducible laboratory protocols, and key tips on troubleshooting and avoiding known pitfalls. Practical and informative, Chemical Biology: Methods and Protocols seeks to improve the success rate of the chemical biology field through the dissemination of detailed and experiential knowledge.

Aulton's Pharmaceutics

"Pharmaceutics is the art of pharmaceutical preparations. It encompasses design of drugs, their manufacture and the elimination of micro-organisms from the products. This book encompasses all of these areas."--Provided by publisher.

Introduction to Chemical Kinetics

Introduction to Chemical Kinetics is a compilation of lecture notes of the author about principles, concepts, and theories in chemical kinetics. The book tackles the nature of chemical kinetics, reaction rates and order, and thermodynamic consistency of rate laws. The effects of temperature on kinetics, prediction of reaction rates, gas-phase reactions, and controlled reactions are also discussed. The text also explains the reactions catalyzed by enzymes; reactions in solids and heterogenous systems; oxidation of metals; catalysis of reactions by solids; and methods for different reaction rates. The monograph is recommended as a textbook for undergraduate students in chemistry who are currently taking up kinetics, as it is an easily understood and concise book that can also be used as reference.

Quantitative Chemical Analysis

The gold standard in analytical chemistry, Dan Harris' Quantitative Chemical Analysis provides a sound physical understanding of the principles of analytical chemistry and their applications in the disciplines

Handbook of Food Analysis - Two Volume Set

Updated to reflect changes in the industry during the last ten years, The Handbook of Food Analysis, Third Edition covers the new analysis systems, optimization of existing techniques, and automation and miniaturization methods. Under the editorial guidance of food science pioneer Leo M.L. Nollet and new editor Fidel Toldra, the chapters take an in

Green Analytical Chemistry

The book explains the principles and fundamentals of Green Analytical Chemistry (GAC) and highlights the current developments and future potential of the analytical green chemistry-oriented applications of various solutions. The book consists of sixteen chapters, including the history and milestones of GAC; issues related to teaching of green analytical chemistry and greening the university laboratories; evaluation of impact of analytical activities on the environmental and human health, direct techniques of detection, identification and determination of trace constituents; new achievements in the field of extraction of trace analytes from samples characterized by complex composition of the matrix; "green" nature of the derivatization process in analytical chemistry; passive techniques of sampling of analytes; green sorption materials used in analytical procedures; new types of solvents in the field of analytical chemistry. In addition green chromatography and related techniques, fast tests for assessment of the wide spectrum of pollutants in the different types of the medium, remote monitoring of environmental pollutants, qualitative and comparative evaluation, quantitative assessment, and future trends and perspectives are discussed. This book appeals to a wide readership of the academic and industrial researchers. In addition, it can be used in the classroom for undergraduate and graduate Ph.D. students focusing on elaboration of new analytical procedures for organic and inorganic compounds determination in different kinds of samples characterized by complex matrices composition. Jacek Namie[nik was a Professor at the Department of Analytical Chemistry, GdaDsk University of Technology, Poland. Justyna PBotka-Wasylka is a teacher and researcher at the same department.

Toxicological Profile for Chlordane

In Vivo EPR (ESR) is a textbook on this relatively new subject in biomedical electron spin resonance. While a few chapters have appeared in special topics volumes in this series, this book covers the principles and theory, instrumentation as well as the latest applications at the time of its writing. The authors are world-renowned experts and pioneers in their fields. This book is divided into two major sections dealing with theory and instrumentation, and aspects of biochemistry, in vitro and in vivo applications. A significant amount of detail is devoted to clinical applications and the problems and pitfalls encountered in in vivo spectroscopy and imaging. Key Features: -History of In Vivo EPR, -Principles of Imaging-Theory and Instrumentation, -Time-domain Radio Frequency EPR Imaging, -The Measurement of Oxygen In Vivo Using In Vivo EPR Techniques, -Potential Medical (Clinical) Applications of EPR, -Combining NMR and EPR/ESR for In Vivo Experiments.

In Vivo EPR (ESR)

Electromagnetic moisture measurement technologies have proven to be valuable tools in diverse applications. This monograph covers basic aspects of nondestructive electromagnetic methods of water content determination and relates to the associated highly multidisciplinary field of research and development. It also presents a comprehensive selection of relevant field-tested methods and instruments. The fundamentals of electromagnetic field interactions with dipolar materials are briefly discussed, with special attention towards the dielectric properties of water and aqueous solutions. A tutorial and overview of electromagnetic measurement methods is presented, including dielectric spectroscopy in broad frequency and time domains, as well as dielectric imaging techniques. This review is complemented by a demonstration of successful real-world implementations for the moisture determination of soils, snow, buildings and building materials, food and agricultural goods, as well as various industrial products. The text is completed by a guide concerning the use of reference liquids for the calibration of sensors and instrumentation and by a bibliography of more than 850 references. The monograph is useful as a reference book for researchers and engineers and as a textbook for upper-level students interested in the water content determination of materials.

Electromagnetic moisture measurement

"Reviews in Pharmaceutical and Biomedical Analysis contains coverage and review of new trends and applications in all areas of pharmaceutical, biomedical and analytical chemistry. Authors have contributed review articles according to their expertise on var"

Reviews in Pharmaceutical and Biomedical Analysis

This book explains the notational system NUSAP (Numeral, Unit, Spread, Assessment, Pedigree) and applies it to several examples from the environmental sciences. The authors are now making further

extensions of NUSAP, including an algorithm for the propagation of quality-grades through models used in risk and safety studies. They are also developing the concept of `Post-normal Science', in which quality assurance of information requires the participation of `extended peer-communities' lying outside the traditional expertise.

Principles of Geochemical Prospecting

This book focuses on the fundamental concepts and physical and chemical aspects of pulsed laser ablation of solid targets in liquid environments and its applications in the preparation of nanomaterials and fabrication of nanostructures. The areas of focus include basic thermodynamic and kinetic processes of laser ablation in liquids, and its applications in metal and metal oxides nanocrystals synthesis and semiconductor nanostructures fabrication. The book comprises theoretical and experimental analysis of laser ablation in liquids, research methods, and preparation techniques.

Uncertainty and Quality in Science for Policy

This Symposium on Modern Methods of Food Analysis was the sev enth in a series of basic symposia, begun in 1976, on topics of major importance to food scientists and food technologists. The Symposium, sponsored jointly by the Institute of Food Technologists and the In ternational Union of Food Science and Technology, was held June 17 and 18, 1983, in New Orleans immediately prior to the 43rd annual 1FT meeting. Like the other six basic symposia, the program brought together outstanding speakers, from biochemistry, chemistry, food science, microbiology and nutrition, who are at the cutting edge of their specialty, and provided a setting where they could interact with each other and with the participants. The Symposium and this book are dedicated to the memory of George F. Stewart (1908-1982) who made so many important contributions to the field of food science, including that of food analysis. Bernard S. Schweigert has documented George F. Stewart's contributions in the Dedication of this book.

Laser Ablation in Liquids

This 2-volume set includes extensive discussions of scattering techniques (light, neutron and X-ray) and related fluctuation and grating techniques that are at the forefront of this field. Most of the scattering techniques are Fourier space techniques. Recent advances have seen the development of powerful direct imaging methods such as atomic force microscopy and scanning probe microscopy. In addition, techniques that can be used to manipulate soft matter on the nanometer scale are also in rapid development. These include the scanning probe microscopy technique mentioned above as well as optical and magnetic tweezers.

Modern Methods of Food Analysis

With the novice user in mind, this beginner's guide explains thebasics behind microwave technology, evaluates available instrumentsand reaction modes, and provides practical hints for everyeventuality. Includes 27 detailed protocols for often-usedreactions. From the contents: 1 Microwave Synthesis - An Introduction 2 Microwave Theory 3 Equipment Review 4 Microwave Processing Techniques 5 Starting With Microwave Chemistry 6 Experimental Protocols 6.1 General Small-Scale Sealed-Vessel Microwave Processing 6.2 Reaction Optimization 6.3 Library Generation 6.4 Reaction Scale-Up 6.5 Special Processing Techniques

Soft-Matter Characterization

Mehrdimensionale Chromatographie im analytischen Labor: Dieses Buch bespricht erstmals alle gängigen Verfahren sowie Anwendungen auf verschiedensten Gebieten, von der Pharmazie, Biologie und Chemie bis hin zur Umwelttechnik und erdölverarbeitender Industrie. Die Autoren sind selbst aktiv in der einschlägigen Forschung tätig.

Practical Microwave Synthesis for Organic Chemists

Multidimensional Chromatography