Edited by Christoph A. Schalley

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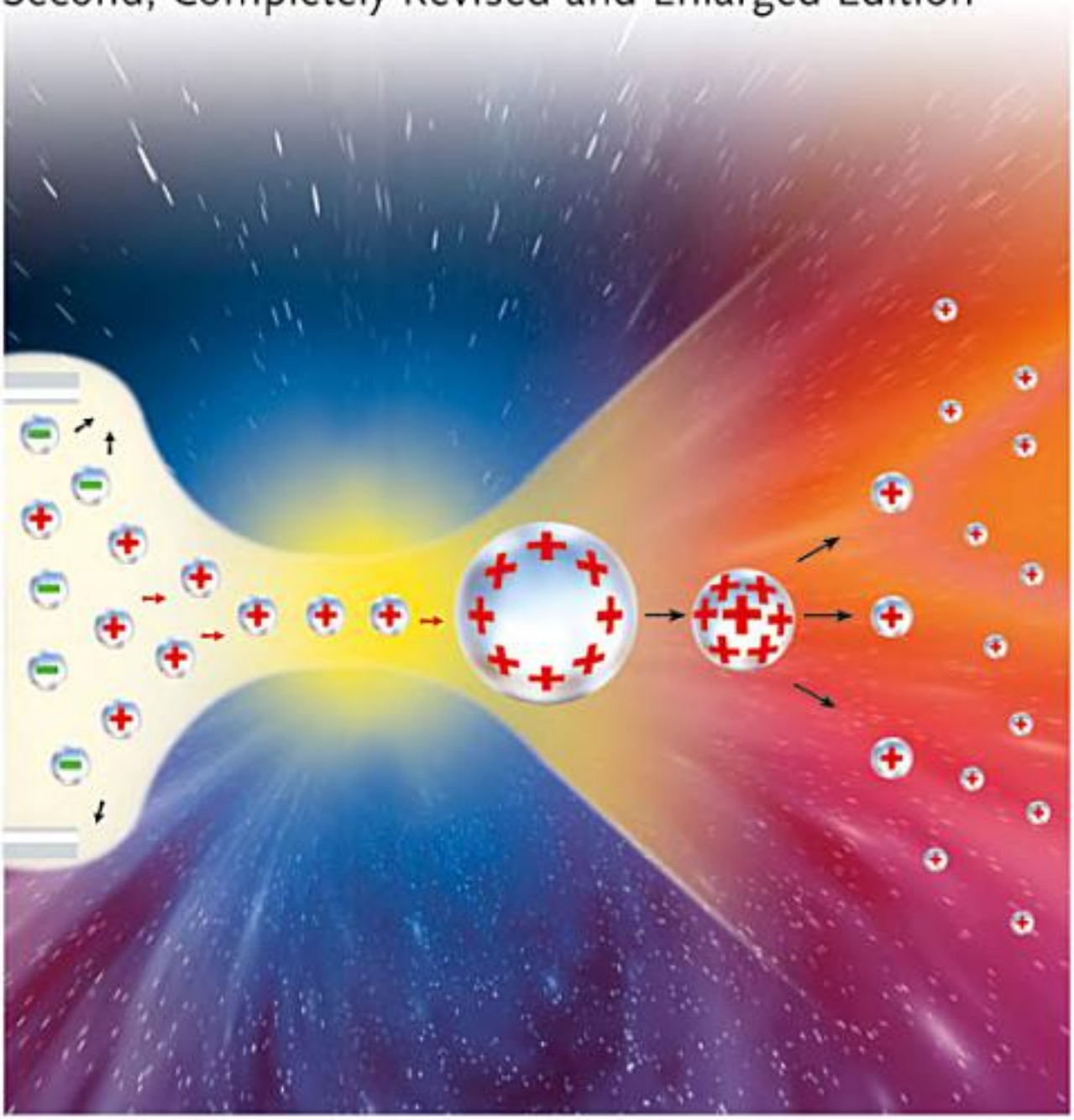
Analytical Methods in Supramolecular Chemistry

Second, Completely Revised and Enlarged Edition



Analytical Methods in Supramolecular Chemistry, Christoph A. Schalley, John Wiley & Sons, 2012, 3527644156, 9783527644155, 844 pages. The second edition of "Analytical Methods in Supramolecular Chemistry" comes in two volumes and covers a broad range of modern methods and techniques now used for investigating supramolecular systems, e. g. NMR spectroscopy, mass spectrometry, extraction methods, crystallography, single molecule spectroscopy, electrochemisty, and many more. In this second edition, tutorial inserts have been introduced, making the book also suitable as supplementary reading for courses on supramolecular chemistry. All chapters have been revised and updated and four new chapters have been added. A must-have handbook for Organic and Analytical Chemists, Spectroscopists, Materials Scientists, and Ph.D. Students in Chemistry.From reviews of the first edition:"This timely book should have its place in laboratories dealing with supramolecular objects. It will be a source of reference for graduatestudents and more experienced researchers and could induce new ideas on the use of techniques other than those usually used in the laboratory."Journal of the American Chemical Society (2008) VOL. 130, NO. 1 doi: 10.1021/ja0769649 "The book as a whole or single chapters will stimulate the reader to widen his horizon in chemistry and will help him to have new ideas in his research."Anal Bioanal Chem (2007) 389:2039?2040 DOI: 10.1007/s00216-007-1677-1.

Separations and Reactions in Organic Supramolecular Chemistry Perspectives in Supramolecular Chemistry, Fumio Toda, Roger Bishop, Apr 21, 2004, Science, 250 pages. A new volume in the "Perspectives in Supramolecular Chemistry" series focusing on separating supramolecular structures, a key step in supramolecular chemistry. Two guest ....

Core Concepts in Supramolecular Chemistry and Nanochemistry , Jonathan W. Steed, David R. Turner, Karl Wallace, Apr 30, 2007, Science, 320 pages. Supramolecular chemistry and nanochemistry are two strongly interrelated cutting edge frontiers in research in the chemical sciences. The results of recent work in the area are ....

Supramolecular Chemistry From Biological Inspiration to Biomedical Applications, Peter J. Cragg, Aug 26, 2010, Science, 276 pages. The aim of this book is to return to the biomimicry and medicinal potential that inspired many of the early supramolecular chemists and to set it in the context of current ....

Molecular Encapsulation Organic Reactions in Constrained Systems, Udo H. Brinker, Jean-Luc Mieusset, Jul 7, 2011, Science, 520 pages. The inclusion of small guest molecules within suitable host compounds results in constrained systems that imbue novel properties upon the incarcerated organic substrates ....

Supramolecular chemistry , Vincenzo Balzani, 1992, Science, 450 pages. .

Templated Organic Synthesis , Fran?ois Diederich, Peter J. Stang, Jul 11, 2008, Science, 431 pages. Template-controlled reactions allow the synthesis of complex molecules which would hardly be achievable through classical methods. This handbook offers authoratative ....

A practical guide to supramolecular chemistry , Peter J. Cragg, 2005, Science, 203 pages. A Practical Guide to Supramolecular Chemistry is an introductory manual of practical experiments for chemists with little or no prior experience of supramolecular chemistry ....

Introduction to Supramolecular Chemistry , Helena Dodziuk, Dec 31, 2001, Science, 368 pages. A new rapidly progressing field on the crossroads among chemistry, biochemistry, physics and technology - supramolecular chemistry - has just emerged. You have to be involved ....

Halogen Bonding Fundamentals and Applications, Pierangelo Metrangolo, Giuseppe Resnati, 2008, Science, 221 pages. This series presents critical reviews of the present position and future trends in modern chemical research concerned with chemical structure and bonding. It contains short and ....

Supramolecular Polymer Chemistry , Akira Harada, Sep 27, 2012, Science, 390 pages. Presenting the work of pioneering experts in this exciting field of supramolecular polymer chemistry, this monograph covers an extensive range of applications, including drug ....

Supramolecular chemistry and self-assembly special feature , National Academy of Sciences (U.S.), 2002, Technology & Engineering, 427 pages. .

Mass Spectrometry of Non-Covalent Complexes Supramolecular Chemistry in the Gas Phase, Christoph A. Schalley, Andreas Springer, Sep 8, 2009, Science, 571 pages. Details the many benefits of applying mass spectrometry to supramolecular chemistry Except as a method for the most basic measurements, mass spectrometry (MS) has long been ....

Modern Supramolecular Chemistry Strategies for Macrocycle Synthesis, Fran?ois Diederich, Peter J. Stang, Rik R. Tykwinski, Mar 17, 2008, Science, 400 pages. Written by internationally acclaimed experts, this handy volume covers all major classes of supramolecular compounds. Chapters include cyclophanes, resorcinarene and calixarene ....

Patterns for Supramolecular Design , Subramania Ranganathan, Jan 1, 2002, Supramolecular chemistry, 128 pages. Darshan Ranganathan Was Born On June 4, 1941 In Delhi, And Sadly Passed Away On June 4, 2001, From Metastasis Of Cancer, At The Crest Of Her Career, In Hyderabad. After ....

Supramolecular Chemistry , Jonathan W. Steed, Jerry L. Atwood, Jan 9, 2009, Science, 990 pages. Supramolecular chemistry is Ð²Ð‚chemistry beyond the moleculeÐ²Ð‚â„¢ - the chemistry of molecular assemblies and intermolecular bonds. It is one of todayÐ²Ð‚â„¢s fastest growing disciplines ....

Supramolecular Chemistry - Fundamentals and Applications Advanced Textbook, Katsuhiko Ariga, Toyoki Kunitake, Aug 2, 2006, Science, 218 pages. This book describes "supramolecular chemistry" from its basic concepts to the latest developments. It begins by treating molecular recognition chemistry including crown ethers ....

Supramolecular Electrochemistry , Angel E. Kaifer, Marielle G?mez-Kaifer, Jul 11, 2008, Science, 255 pages. This book describes the electrochemical behavior of supramolecular systems. Special emphasis will be given to the electrochemistry of host-guest complexes, monolayer and ....

The second edition of "Analytical Methods in Supramolecular Chemistry" comes in two volumes and covers a broad range of modern methods and techniques now used for investigating supramolecular systems, e. g. NMR spectroscopy, mass spectrometry, extraction methods, crystallography, single molecule spectroscopy, electrochemisty, and many more. In this second edition, tutorial inserts have been introduced, making the book also suitable as supplementary reading for courses on supramolecular chemistry. All chapters have been revised and updated and four new chapters have been added.

Christoph A. Schalley is professor for organic chemistry and modular synthesis at the Free University of Berlin since October 2005. He received his PhD under the supervision of Helmut Schwarz at the Technical University of Berlin followed by a postdoctorate with Julius Rebek, Jr. at The Scripps Research Institute in California. In 1999 he joined the University of Bonn as a Liebig-Fellow of the Fonds der Chemischen Industrie to start his own independent research group. Professor Schalley has authored more than 150 publications and (co-)edited several books on mass spectrometry, dendrimers and template synthesis. He is recipient of Dozentenstipendium of the Fonds der Chemischen Industrie (2004) and the Mattauch-Herzog award of the German Society for Mass Spectrometry (2006). His research interests also include mass spectrometric characterization and gas-phase chemistry of supramolecules.

An overview of the techniques used to examine supramolecular aggregates from a methodological

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Christoph Schalley has received his PhD under the guidance of Helmut Schwarz and did his postdoctorate with Julius Rebek at the Scripps Research Institute in California. Currently, he is assistant professor in Bonn and has already authored more than 85 publications and four books. He was awarded with the Dozentenstipendium in 2004 of the Fonds der Chemischen Industrie.