

# Thieme Chemistry E-Books



## SERIES

- Science of Synthesis
- Houben-Weyl

## MONOGRAPHS

- Protecting Groups
- Spectroscopic Methods
- Synthetic Methods of Organometallic and Inorganic Chemistry
- Pharmaceutical Substances



# Science of Synthesis Series

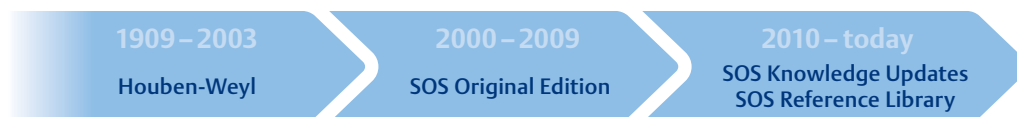
## Science of Synthesis

**The only full-text resource for evaluated methods in synthetic organic chemistry!**

Science of Synthesis provides a critical review of the synthetic methodology developed from the early 1800s to-date for the entire field of organic and organometallic chemistry. Written by chemists for chemists, SOS presents expert recommendations from over 1,750 contributors as well as unique insights into the scope and limitations of synthetic methods. It is the only resource including full-text reviews of organic and organometallic transformations as well as experimental procedures. The original series comprises 54 volumes that were published between 2000 and 2010 (Original Edition). Since 2010 the original content is regularly updated (Knowledge Updates) and complemented by topics of particular interest (Reference Library).

“In a world where information, or data, has become trivial to access anywhere, all the time, it is important to reflect on the words of Einstein “Information is not knowledge.” Science of Synthesis is the furnace through which information is forged into high quality knowledge-based principles that invigorate practicing scientists to make learned, enabling decisions. It is the tool which one can deploy to do great science.”

Prof. Erick M. Carreira, ETH Zurich, Switzerland



## Science of Synthesis – Electronic Edition

The text- and structure-searchable online version of Science of Synthesis has a modern web interface, allowing rapid lead generation and route optimization. The intuitive search function provides comprehensive hit lists including illustrating schemes. It gives easy access to the full-text reviews of methods and experimental procedures in Science of Synthesis and Houben-Weyl, and to related primary literature. An interactive table of contents allows convenient browsing of the content and gives a comprehensive overview of the field.

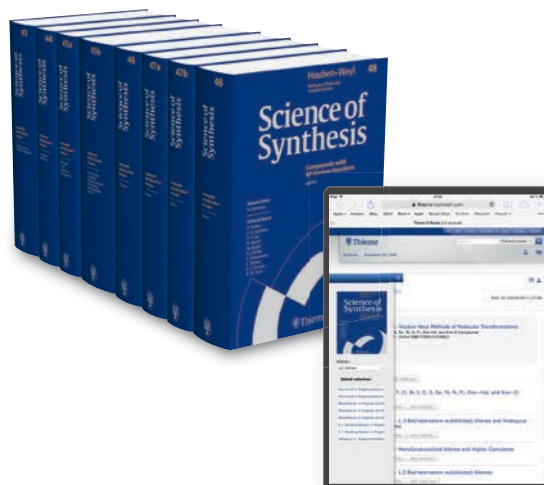


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## Science of Synthesis – Original Edition

The original series, published between 2000 and 2010, comprises 48 volumes covering the whole field of organic and organometallic chemistry, organized in six categories. It includes 28,000 generally applicable synthetic methods and 250,000 reactions for over 2,700 different kinds of organic compounds. Six volumes were split into two parts (e.g. 8a and 8b), so that the total series includes 54 volumes and 6 additional index volumes.



Format	Category	Volume	Subject
PDF	1	1–8	Organometallics
PDF	2	9–17	Heteroarenes and Related Ring Systems
PDF	3	18–24	Compounds with Four and Three Carbon—Heteroatom Bonds
PDF	4	25–33	Compounds with Two Carbon—Heteroatom Bonds
PDF	5	34–42	Compounds with One Saturated Carbon—Heteroatom Bond
PDF	6	43–48	Compounds with All-Carbon Functions

## Science of Synthesis – Knowledge Updates

Since 2010 Science of Synthesis is continuously updated with high-quality content using clearly defined criteria for method selection as well as established editorial processes. The Editorial Board, in conjunction with the volume editors and authors, reviews the whole field of synthetic organic chemistry as presented in Science of Synthesis and evaluate significant developments in synthetic methodology. Authors, who are renowned specialists in their respective fields, add new methods and add new (or completely revise existing) product (sub) classes. Each year 2–4 Knowledge Updates volumes are published.



Format	Volume	Year	Contributions
PDF	1–4	2010	57
PDF	1–4	2011	40
PDF	1–4	2012	44
PDF	1–4	2013	35
PDF	1–4	2014	44
PDF	1–2	2015	30
PDF	1-3	2016	17
PDF	1-3	2017	33
PDF	1-4	2018	30
PDF	1-3	2019	22
PDF	1-3	2020	34

## Science of Synthesis – Reference Library

The Reference Library volumes focus on subjects of particular current interest. Each set gives a broad overview of the state of the art in the specific field and provides critical reviews of organic transformations by experts, including experimental procedures. The series highlights new angles and perspectives of importance in organic synthesis. It comprises volumes covering special topics of organic chemistry in a modular fashion, with six main classifications (Classical, Advances, Transformations, Applications, Structures, and Techniques).



Format	Volumes	Year	Subject	Volume Editor
PDF	3	2010	Stereoselective Synthesis	De Vries/Molander/Evans
PDF	1	2011	Water in Organic Synthesis	Kobayashi
PDF	2	2011	Asymmetric Organocatalysis	List/Maruoka
PDF	3	2012	Cross Coupling and Heck-Type Reactions	Molander/Wolfe/Larhed
PDF	2	2013	Multicomponent Reactions	Müller
PDF	2	2013	C-1 Building Blocks in Organic Synthesis	Van Leeuwen
PDF	3	2014	Biocatalysis in Organic Synthesis	Faber/Fessner/Turner
PDF	2	2015	Catalytic Transformations via C–H Activation	Yu
PDF	2	2015	Domino Transformations in Organic Synthesis	Snyder
PDF	2	2016	Metal-Catalyzed Cyclization Reactions	Ma/Gao
PDF	1	2016	Catalytic Oxidation Reactions in Organic Synthesis	Muniz
PDF	2	2017	N-Heterocyclic Carbenes in Catalytic Organic Synthesis	Nolan/Cazin
PDF	2	2018	Catalytic Reduction in Organic Synthesis	de Vries
PDF	1	2018	Flow Chemistry in Organic Synthesis	Jamison/Koch
PDF	1	2019	Photocatalysis in Organic Synthesis	Koenig
PDF	1	2020	Advances in Organoboron Chemistry towards Organic Synthesis	Fernández
PDF	2	2020	Dual Catalysis in Organic Synthesis	Molander
PDF	2	2021	Free Radicals: Fundamentals and Applications in Organic Synthesis	Fensterbank
PDF	1	2021	Click Chemistry	Rutjes
PDF	1	2021	Electrochemistry	Ackermann

## Houben-Weyl

The classic Houben–Weyl reference work series is a must-have for all organic synthetic chemists interested in synthetic methodology. It features selected methods and detailed experimental procedures as well as numerous tables of examples. The extensive use of formula schemes helps make the earlier German-language volumes more readily understandable to non-German readers. The success of Houben–Weyl over the last 100 years was made possible by the collaborative work of world-renowned chemists in both industry and academia, who created a balanced work by considering published results from journals, books, and the patent literature. Thus, Houben–Weyl has become an important and celebrated standard reference work.

### Overall Scope

- 160,000 pages (160 volumes)
- 580,000 structures
- 146,000 experimental procedures
- 700,000 references (back to the 1800s)

Format	Houben-Weyl Editions	Volumes	Years	Language
PDF	1st edition	2	1909–1911	German
PDF	2nd edition	4	1921–1924	German
PDF	3rd edition	4	1924–1941	German
PDF	4th edition	67	1952–1987	German
PDF	E-Series (Supplementary volumes)	23	1982–2003	German until 1990 English from 1990

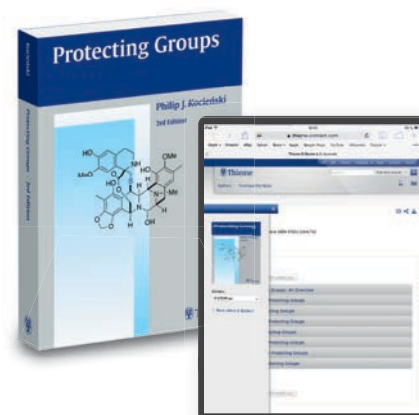


# Monographs

## Protecting Groups

This monograph provides a critical survey of protecting group methodology and focuses on the most widely used protecting groups for the most common functional groups. Therefore it serves as an essential learning tool for advanced students and professionals in a broad range of disciplines involving organic synthesis. Protecting Groups is organized by functional group and places special emphasis on deprotection conditions applied to complex structures where selectivity is a key issue. It includes 1,200 schemes and 2,270 references.

PDF · 3rd Edition 2005 · 668 pages

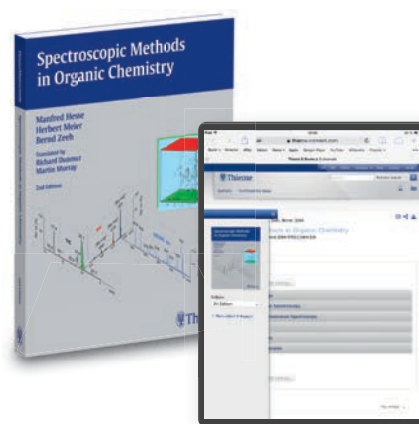


## Spectroscopic Methods in Organic Chemistry

Spectroscopic Methods in Organic Chemistry covers all aspects of modern spectroscopic methodology. It provides the necessary equipment for the application of spectroscopic methods in organic chemistry, for both students and professional chemists. The following methods are explained and examples given:

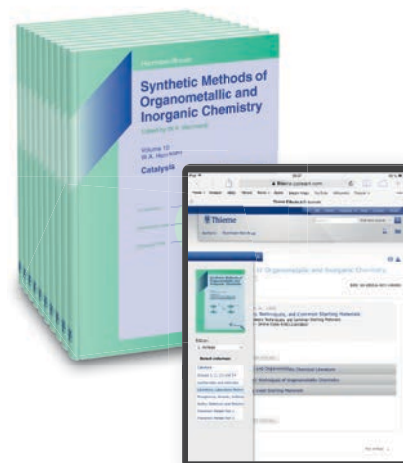
- UV/Vis Spectroscopy
- Infrared (IR) and Raman Spectroscopy
- Nuclear Magnetic Resonance Spectroscopy (NMR)
- Mass spectrometry (MS)

PDF · 2nd Edition 2007 · 450 pages



## Synthetic Methods of Organometallic and Inorganic Chemistry

This series includes detailed and reliable experimental procedures for the preparation of common but important starting compounds, organized according to the periodic table. Properties of the compounds and additional references are also provided. In most cases, no strict borderline has been drawn between inorganic and organometallic compounds. Instead, the material is conveniently presented so that for every group of elements, the various aspects of the chemistry are combined. More than a hundred international specialists have contributed, resulting in proven and reliable preparations. Synthetic Methods of Organometallic and Inorganic Chemistry provides you with a compilation of carefully selected examples for all significant classes of compounds.



Format	Volume	Year	Subject	Pages
PDF	1	1996	Literature, Laboratory Techniques, and Common Starting Materials	192
PDF	2	1996	Groups 1, 2, 13, and 14	320
PDF	3	1996	Phosphorus, Arsenic, Antimony, and Bismuth	240
PDF	4	1997	Sulfur, Selenium, and Tellurium	244
PDF	5	1997	Copper, Silver, Gold, Zinc, Cadmium, and Mercury	258
PDF	6	1997	Lanthanides and Actinides	236
PDF	7	1997	Transition Metals Part 1	306
PDF	8	1997	Transition Metals Part 2	266
PDF	9	2000	Transition Metals Part 3	33
PDF	10	2002	Catalysis	253

# Pharmaceutical Substances

Pharmaceutical Substances provides users with a compendium of over 1,300 of the most significant pharmaceutical compounds that are of interest to the chemical and pharmaceutical industries. All compounds are organized alphabetically according to their International Non-proprietary Name (INN). For added ease of use, the book features four indexes:

- Trade Names
- Intermediates
- Enzymes, Microorganisms, Plants and Animal Tissues
- Substance Classes



PDF · 5th Edition 2009 · 1,800 pages

## Licensing

### Licensing benefits

- Site-wide licensing available for an unlimited number of simultaneous users
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