

# Release: SOS 4.6, December 2016



What's  
New?

## Software

1. **Upload CDX:** An "Upload CDX" option now replaces the "Use ChemDraw" function enabling the easy upload of .cdx (ChemDraw) files.
2. **Structure/Reaction Searching Optimized:** The structure/reaction searching module has been optimized further so that the identification of relevant results and their overall ranking has been improved.
3. **Result List Shows Structures/Reactions:** The default format of the reaction search hit list (Results tab) now presents the expanded view with the reactions and structures visible.
4. **Filter Order:** The filter order on the Results tab has been changed so that the best results are listed first (structure/reaction search).
5. **Explore Contents Default:** The Explore Contents default has changed so that the SOS category folders are closed and the Special Topics folder is open (expanded). This means that the user can now immediately see any new content available covering hot topics in organic synthesis.
6. **Search Tips:** Search tips for a citation search, DOI search, and, structure/reaction search have been included on the Query tab. It is also possible to hide the search tips if the user prefers.
7. **Bug Fixing:** Reported bugs fixed and general improvements to product software.

## Content

### New: Science of Synthesis Knowledge Updates

SOS 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 SOS and evaluate significant developments in synthetic methodology.

A list of strict criteria for method selection guides the updating process in order to guarantee that only the best and most reliable synthetic methods are included in SOS. Authors, who are renowned specialists in their respective fields, add new methods and add new (or completely revise existing) product (sub)classes.

The updating procedure is continuous and new content will continually be added to the electronic version. SOS continues to be the most up-to-date evaluated electronic reference work available, emphasizing the most significant developments in synthetic methodology.

This release will see the addition of **2 new update volume** comprising approx. **1,000 printed pages**.

### SOS Knowledge Updates 2016/2 and 2016/3, highlights:

- A major new chapter on **azaindoles** (J.-Y. Mérour and B. Joseph), which are also known as pyrrolopyridines. These molecules are relatively rare in nature, but synthetic derivatives have been shown to possess extensive biological activity. The chapter reviews a wide range of methods for the synthesis of all four isomeric isoindole frameworks as well as methods for the elaboration of the preformed heterocyclic core.
- A new chapter on **radical-based palladium-catalyzed bond constructions** (Y. Li, W. Xie, and X. Jiang) that illustrates how palladium(I) and palladium(III) species can be employed as active intermediates in the synthesis of a wide variety of organic molecules.
- Chapters on **C(sp<sup>3</sup>)-H functionalization by allylic C-H activation of zirconocene complexes** and the **synthesis and reactivity of heteroatom-substituted vinylzirconocene derivatives and hetarylzirconocenes** (A. Vasseur and J. Bruffaerts).
- A practically useful chapter on the **role of solvents and additives in reactions of samarium(II) iodide and related reductants** (T. V. Chciuk and R. A. Flowers, II) describing how tuning of conditions can affect reactivity and selectivity.
- Updates on various types of acetals including **carbohydrate derivatives containing O,N-acetals** (T. Nokami), **O,P-acetals** (K. Murai and H. Fujioka), **acyclic S,S-acetals** (A. Tsubouchi), **acyclic and cyclic S,S-acetal S-oxides and S,S'-dioxides** (A. Ishii), **selenium- and tellurium-containing acetals** (M. Yoshimatsu), and **N,P- and P,P-acetals** (T. Kimura).

## Overview of Content Availability in SOS 4.6, December 2016

Work	Text and Graphics Available?	Structure/Reaction Search Available?
Houben-Weyl Series	Yes, scanned PDFs available for browsing and download	No, not structure searchable
Science of Synthesis Original Series Vols. 1–48	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Knowledge Updates 2010, 2011, 2012, 2013 and 2014 (Vols. 1–4)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Knowledge Updates 2015 (Vol. 1 and 2), 2016 (Vol. 1–3)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Stereoselective Synthesis (Vols. 1–3)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Asymmetric Organocatalysis (Vols. 1 and 2)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Water in Organic Synthesis	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Cross Coupling and Heck-Type Reactions (Vols. 1–3)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Multicomponent Reactions (Vols. 1 and 2)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: C–1 Building Blocks in Organic Synthesis (Vols. 1 and 2)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Biocatalysis in Organic Synthesis (Vols. 1–3)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Catalytic Transformations via C–H Activation (Vols. 1 and 2)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Applications of Domino Transformations in Organic Synthesis (Vols. 1 and 2)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: Metal-Catalyzed Cyclization Reactions (Vols. 1 and 2)	Yes, text searching available and chapter PDFs available for download	Yes, reactions and structures indexed and searchable
Science of Synthesis Reference Library: N-Heterocyclic Carbenes in Catalytic Organic Synthesis (Vols. 1 and 2)	Currently being prepared for an upcoming release	Being indexed currently for an upcoming release