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Content

New: Free Radicals: Fundamentals and Applications in Organic Synthesis

Radical chemistry is undergoing a renaissance, both in the selective generation of organic radicals and in their use in organic synthetic reactions. **Free Radicals: Fundamentals and Applications in Organic Synthesis**, edited by **Louis Fensterbank** and **Cyril Ollivier**, both renowned radical chemists based at the Sorbonne University in Paris, presents these key developments, reviewed by some of the most well-known names in the field, in a readily accessible and practical fashion.

Topics covered in Volume 1 include:

- **Improving Radical Persistence through Confinement**
M. P. Bertrand, E. Besson, and S. Gastaldi
- **Nitroxides in Organic Synthesis**
G. Casano and O. Ouari
- **Modelling Radicals and Their Reactivities**
E. Derat and B. Braïda
- **Electron Catalysis**
E. Shirakawa
- **Photochemistry and Radical Generation: Approaches in Mechanism Elucidation**
S. B. Cahoon and T. P. Yoon
- **Sulfur-, Selenium-, and Silicon-Centered Radicals**
A. Kaga and H. Yorimitsu
- **Phosphorus-Centered Radicals**
C. Bellanger, S. Chelli, and S. Lakhdar
- **Nitrogen-Centered Radicals**
X.-L. Lu, B. Wang, and S. Chiba
- **Oxygen-Centered Radicals**
J. Zhang, D. Liu, and Y. Chen
- **Boron-Centered Radicals**
F.-L. Zhang and Y.-F. Wang



Prof. Louis Fensterbank

Dr. Cyril Ollivier

- **Generation of Radicals from Organoboranes**
E. André-Joyaux, L. Gnägi, C. Meléndez, V. Soulard, and P. Renaud
- **Intermolecular Radical C-H Functionalization**
M. Bietti and F. Dénès
- **Intramolecular Hydrogen-Atom Transfer**
S. M. Treacy, X. Zhang, and T. Rovis
- **Palladium(I)-Mediated Reactions**
G. Maestri and A. Serafino

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 expert authors, reviews the whole field of synthetic organic chemistry as presented in SOS and evaluates significant developments in synthetic methodology.

This release will see the addition of **one new update volume** comprising approx. **450 printed pages**.

SOS Knowledge Updates 2021/2 highlights:

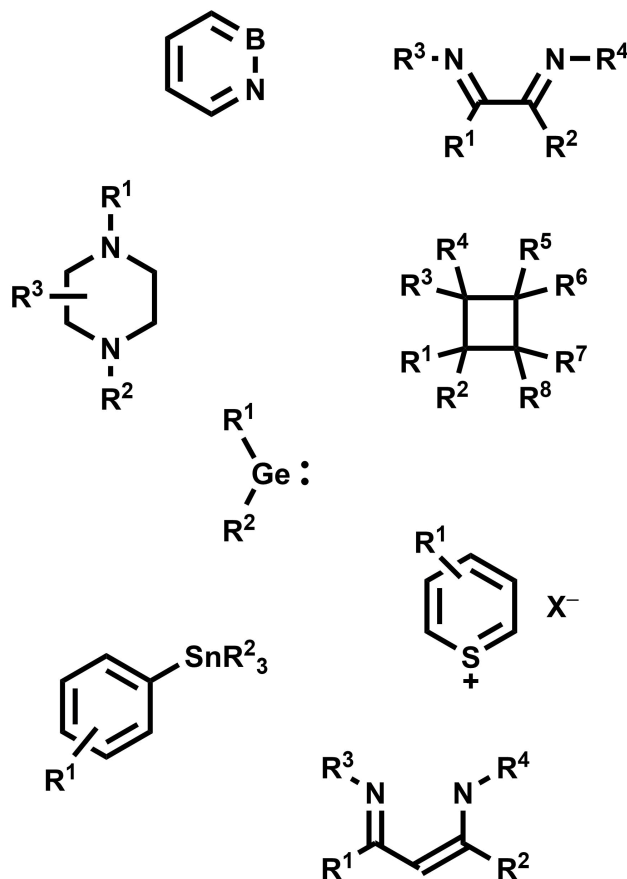
A revised chapter on the synthesis of **germylenes** (N. Takeda) and updates on **arylstannanes** (J. Vrána and A. Růžička) and **α -boryl carbonyl compounds** (A. Trofimova, M. Sirvinskas, and A. K. Yudin), including MIDA boronates.

A new chapter on **azaborines (borazines)** (G. H. M. Davies and S. R. Wisniewski), as well as an update on the synthesis of **thiopyrylium salts** (M. Wang and X. Jiang).

New chapters on **1,2-diimines** (R. Isovitsch) and **1,3-diimines**, also known as **β -diketimines** (K. Chand, Umesh, D. P. Dorairaj, and S. C. N. Hsu), both of which are important ligands for transition-metal complexes.

A new chapter on **piperazines** (Z.-S. Ye), saturated cyclic diamines that occur widely in natural products and pharmaceuticals.

An update on **cyclobutanes** (Y. Xiong, R. Guo, and G. Z. Zhang), with a focus on transition-metal catalyzed and photochemical approaches to these strained carbocyclic species.



Software/User Interface

The screenshot shows the Science of Synthesis website interface. At the top, there is a navigation bar with 'Thieme Science of Synthesis' and a search bar. Below the navigation bar, there are tabs for 'Query', 'Results', 'Full Text', 'Explore Contents', and 'Training & Support'. A 'download PDF' button is highlighted with a red circle. The main content area displays the title '1.5 Photochemistry and Radical Generation: Approaches in Mechanism Elucidation' and the DOI '10.1055/sos-SD-234-00064'. Below the title, there is a small thumbnail image and a link to the full text.

The screenshot shows a social media sharing interface. It displays a tweet for the article 'Photochemistry and Radical Generation: Approaches in Mechanism Elucidation' by Cahoon, S. B., Yoon, T. P. The tweet includes the article title, authors, and a link to the full text: <https://doi.org/10.1055/sos-SD-234-00064>. The tweet is set to 'Everyone can reply' and has a 'Tweet' button.

Article Sharing

You can now easily share links to Science of Synthesis articles by e-mail, on Twitter, Facebook, or LinkedIn using the button located at the top right-hand side of each page.