



Organization

The main difference between the 48 core volumes of *Science of Synthesis* and the new *Stereoselective Synthesis* volumes is in the organization. The original *Science of Synthesis* volumes are organized according to the product formed (e.g., what are the best methods for forming pyrroles?), whereas the organization of *Stereoselective Synthesis* is based on the methods themselves (e.g., which are the best methods for stereoselective dihydroxylation?). This format allows a clearer presentation of the state of the art in this field.

Stereoselective Synthesis will comprise three volumes, in which the methods are roughly based on reactions of carbon–carbon multiple bonds (Volume 1), reactions of carbon–heteroatom multiple bonds (Volume 2), and finally cyclization reactions, cross coupling, and C–H/C–X activation (Volume 3).

In the original, product-based *Science of Synthesis* volumes, the sections (Product Classes) are generally subdivided into further numbered sections by Product Subclass, Synthesis (or Applications) of Product Subclass, Methods, and Variations. Within the individual manuscripts of *Stereoselective Synthesis*, however, authors are free to subdivide the manuscript in whatever way they believe allows for the clearest presentation and most useful comparison of the material discussed, provided that the presentation is consistent within the manuscript, and subject to the approval of the Volume Editor. The Editorial Office requests, however, that authors restrict the subdivision of the individual manuscripts to a total of no more than six levels of hierarchy (i.e., the volume number, the section number, and then up to four more subdivisions).

Selection Criteria

Authors are expected to critically evaluate the chemical literature, and select only the best available methods for stereoselective synthesis, regardless of when they were originally published, for inclusion in their manuscripts. These methods may be stoichiometric or catalytic, and the latter may include metal, organic, or enzyme catalysis. Nonstereoselective methods should, in general, not be covered.

When evaluating methods for inclusion, a high degree of critical selection is called for. Consideration should be given to the following factors:

- Yield (generally >70%)
- Selectivity (chemo-, regio-, diastereo-, and/or enantioselectivity of >90%)
- Broad applicability
- Atom economy
- Robustness
- Scalability
- Environmental impact

Exceptions will exist where a method is the only one available and finds practical application. In short, *Stereoselective Synthesis* is not a set of comprehensive reviews of specific areas, but rather a critical presentation of the best, most useful methods currently available for stereoselective organic synthesis.

For each selected method, the scope and relative advantages (and any problems) should be discussed, in order to allow the uninitiated reader to make a well-informed choice.

Essential Reading:

Stereoselective Synthesis Manuscript Preparation page 2/2



Manuscript Style

The accompanying excerpts have been taken from published volumes of the *Science of Synthesis* series, and are intended to serve as examples of the style in which text, schemes, schemetables, tables, experimental procedures, references, etc. are presented in *Science of Synthesis*. This style will also be used in the *Stereoselective Synthesis* volumes. These particular excerpts have been selected as examples as they all have a more methodology-based focus than is usual in the core volumes of *Science of Synthesis*, but which is more similar to what is expected for *Stereoselective Synthesis*; however, they do still contain the Method and Variation subheadings used in *Science of Synthesis*, which need not be used in *Stereoselective Synthesis* (see above). Detailed information on manuscript style can be found in the Editorial Guidelines and in the other Essential Reading documents.

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