

Silver in Organic Chemistry

Silver in Organic Chemistry. Michael Harmata, Editor. Wiley: Hoboken, NJ. 2010. 402 + xviii pages. £73.50. ISBN 978-0-470-46611-7.

In this multiauthor work, the use of silver catalysis in all aspects of organic chemistry, such as alkylation and arylation reactions, pericyclic processes, isomerisations, carbenoids and nitrenes, aldol and other coupling reactions, is explored. The main criticism that process chemists are likely to vent is that there is little mention of substrate to catalyst ratio or turnover numbers, nor comparison to less expensive metals (or more expensive ones for that matter).

The last chapter entitled “A Critical Comparison: Copper Silver and Gold” attempts to address this deficiency, but his conclusion says it all — “Most of the investigations in the area of coinage metal catalysis only provide data that do not allow a sound comparison of the catalytic activity or selectivity of the different metal complexes. In an often random manner, not only the metal but also the counterions and/or ligands and/or solvents are changed, and perhaps the reaction temperature as well. One gets the impression that the complexes that were at hand were the ones to be tested, not the ones that scientifically make sense at the point of the investigation”

Readers may prefer to consult The Special Issue of *Chemical Reviews* (2008) on coinage metal catalysis rather than purchase this book, which has few references beyond 2008 anyway.

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Editor

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