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## Book review

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*Silylation Agents*, by G. Simchen and J. Heberle, Fluka Chemie, Buchs, Switzerland, 2nd ed., 1995, 199 pp., free of charge, ISBN 3-905617-07-2.

The monograph begins with probably the most complete list of 46 reviews and books published earlier dealing at least partly with the topic of silylation. After having read such a list one would wonder what new approach can be invented in compiling this type of material. But the authors have done their job astonishingly good.

At the first reading the completely different approach is remarkable compared to "classical" reviews. Each chapter gives the reader on a relatively small space not too detailed but very dense and instructive information based on practical examples. Over 2300 references of original sources, some of them falling in 1994, support this scheme for gaining further detailed knowledge. Besides classical and well-established reagents, more sophisticated and finely tuned agents are included both for analytical and preparative applications as well as for surface silanisation procedures. A prompt catalogue-like 52 pages Reagent List (out of 199 of the whole book) is provided giving the reader a really exhaustive view.

As mentioned, the monograph is introduced by a list, invaluable in itself already, of existing reviews and monographs on silylation. A Complete list of Abbreviations used throughout the book is followed by a short Introduction (Chapter 1).

An attempt to compare the stability of different trialkylsilyl protecting groups is featured in Chapter 2. Such a comparison obviously suffers from a shortage of relevant studies so that only few aspects are discussed.

Nearly half of the book is covered by Chapters 3 and 4 dealing with the most common trimethylsilyl and (other) trialkylsilyl groups, respectively. Forty-six reagents are described for the introduction of trimethyl and 2-(trimethylsilyl)ethyl groups into various substrates. Further, more than 21 trialkylsilyl derivatives and methods of their preparation are discussed. Expedient analytical and synthetic applications are dealt with separately with typical procedures. However, a common shortcoming of nearly all reviews of this type is not solved: a newcomer in the field facing such a vast number of possibilities is not advised what is the best solution of his particular problem. This is probably due to a shortage of studies in the literature comparing different types of derivatives. Most of the authors propagate reagents discovered by themselves and do not like comparisons too much.

The next three chapters, much smaller in volume, are devoted to reagents for introduction of alkoxydialkylsilyl, bis-trialkylsilyl, and silylene groups. The Chapter 8 on Silanisation is somewhat out of the scope of the book but very useful from the practical point of view. An Application Index, a List of Fluka Silylation Reagents, and an Alphabetical Index end the story of the book.

The present monograph will indisputably be a valuable addition to the libraries of both synthetic and analytical chemists as a source of quick information and help to find the way to targets in the giant and boundless world of silylation.

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