

Frontiers of Organosilicon Chemistry, A.R. Bassindale and P.P. Gaspar (Eds.), Royal Society of Chemistry, Cambridge, 1991, x + 410 pages. £52.50. ISBN 0-85186-097-4

This volume arises from the very successful and highly enjoyable IXth International Symposium on Organosilicon Chemistry held in Edinburgh in July 1990. It places on record the content of 35 invited lectures delivered at that symposium, arranged in five sections, *viz*: (i) silicon-based polymeric materials; (ii) mechanistic organosilicon chemistry, (a) gas-phase and photochemical reactions; (iii) mechanistic organosilicon chemistry, (b) hypervalent silicon, nucleophilic substitution, and biotransformations; (iv) structural organosilicon chemistry and new organosilicon compounds; (v) organic synthesis using silicon. Its title is an apt one, since it does provide a very effective outline of the directions in which organosilicon chemistry is developing at present (in some areas very rapidly).

It would be invidious to try to select individual papers for special mention since all are by leading authorities in their fields. The overall standard of both content and presentation is high, and the whole is much more useful than most compilations of conference proceedings. There is also a good subject index that gives the impression of having been compiled by application of a human brain rather than by a computer as is common these days. Anyone who would like to see how alive and flourishing organosilicon chemistry is, and how diverse are the growth points, could not do better than to consult this volume.

Within the limits imposed by photoreproduction of typescripts the book is well produced, and is moderately priced. Because its contents are of interest to materials scientists and synthetic organic chemists as well as to organometallic chemists it should be available in a wide range of laboratories.

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Preparative Polar Organometallic Chemistry, Vol. 2, by L. Brandsma, Springer-Verlag, 1990, xii + 227 pages. DM 86. ISBN 3-540-52749-4

This book, together with Volume 1 (reviewed in this Journal, 335 (1987) C7) constitutes an invaluable source of information for laboratory workers. The two books contain a wealth of procedures for carrying out selected organometallic reactions, which are full of practical tips and guidelines, many of them unpublished elsewhere. For example, I have already made use of this book, in overcoming difficulties encountered in using the House procedure for preparing trimethylsilyl enol ethers (see p. 190). Nevertheless, the prospective purchaser should be aware of the exact scope of these books. They are confined almost entirely to reactions of organoalkali metal compounds; although the back cover refers to 'organoalkali and Grignard reagents', and Volume 1 does contain a few procedures involving Grignard reagents, there are very few references to organomagnesium compounds in Volume 2. Moreover, the procedures in both Volumes are almost entirely confined to applications in organic synthesis; there are very few procedures for using the 'polar organometallic compounds' for preparing organic derivatives of

other metals, and none at all for using them to prepare organotransition metal compounds. On the other hand, a useful feature of both Volumes is the inclusion of procedures for preparing some of the substrates for the organometallic reactions.

The division of material between Volumes 1 and 2 is made on the basis of the hybridisation of the carbon atom to which the metal is formally bonded: sp^2 and sp in Volume 1 and sp^3 in Volume 2. However, the division is, perhaps inevitably, somewhat arbitrary: for example, metal enolates are regarded as involving sp^3 -hybridised carbon and included in Volume 2, and the preparation of n-butyllithium will be found in Volume 1! On the other hand, most users will surely have access to both Volumes, and the layout and indexing make it easy to locate information.

Volume 2 contains a few typographical errors, but they are mostly trivial, and occasionally amusing – someone should write an account of the tragedy of the dying nitriles (p. 161, Note 1).

In summary, this book is highly recommended to readers of this Journal with an interest in the chemistry of organoalkali metal compounds, many of whom will find both Volumes indispensable. It will also be useful to many with an interest in other aspects of organometallic chemistry, for guidance in preparing organoalkali metal compounds to use in preparing derivatives of other metals.

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Announcement

1992 Gordon Research Conference on Organometallic Chemistry

The 1992 Gordon Research Conference on Organometallic Chemistry will be held at Salve Regina University in Newport, Rhode Island, USA, during the period July 27–31, 1992.

For further information contact Dr. Alexander M. Cruickshank, Gordon Research Conferences, Gordon Research Center, University of Rhode Island, Kingston, Rhode Island 02881-0801; telephone 401-783-4011 or 401-783-3372; telefax 401-783-7644; BITNET address: BCP101@URIACC.