

Book review

Soviet Scientific Reviews. Section B. Chemistry Reviews. Vol. 1, edited by M.E. Vol'pin, published under the auspices of the Academy of Sciences of the U.S.S.R. and distributed by Horwood Academic Publishers, Chichester, 1979, 277 pages, U.S. \$ 46.00; Dfl. 85.00.

This volume is the first of a new series of reviews which is greatly to be welcomed. The series will be devoted to the presentation of accounts of recent scientific advances in the U.S.S.R., and should help to reduce the degree of neglect of Soviet research by Western scientists, to which the publishers refer in their introduction. I have the impression, which I hope is accurate, that there will be a volume each year devoted to chemistry, though I cannot interpret the relevant sentence in the Preface, which reads "Soviet Scientific Reviews will appear annually, with the average of specific subject areas in each of the sciences varying from year to year". (I hasten to add that I did not notice in the book any other sentence which I could not understand, and the standard of the translation is generally high.)

Readers of this journal will be pleased that an eminent organometallic chemist has been chosen as the Editor of the Chemistry section of the Reviews. The longest review is in the field of organometallic chemistry, 86 pages being devoted to "New developments in the Reaction Mechanisms of Organometallic Compounds" by I.P. Beletskaya. This deals with the very interesting researches by the author and her colleagues (many jointly with O.A. Reutov) on (i) the ion-pair mechanism of electrophilic bimolecular substitution, (ii) redox reactions of organometallic compounds, and (iii) reactions of fluorenyl, triphenylmethyl, and indenyl carbanions (free and ion paired); the account is comprehensive but clear and concise, and represents a valuable contribution to the literature on mechanisms of reactions of organic derivatives of main group elements. (I dislike the translator's use of the term "Organostannic compounds", where "organotin compounds" would be appropriate, but that is a very minor criticism.)

The other chapters are not of such specific interest to organometallic chemists, but the interesting review (68 pages), of the Effects of magnetic fields on radical reactions in solution by Yu.N. Molin, R.Z. Sagdeev, and K.M. Salikhov, devotes several pages to reactions of organolithium compounds, and has some general implications for reactions involving metal-centred organometallic free radicals. The other two reviews are on (a) Molecular basis for heterogeneous catalysis by acids through the participation of Brønsted centres (50 pages), by V. Kazanskii, and (b) General principles of enzymatic catalysis (73 pages), by I.V. Berezin, A.A. Klyosov, and K. Martinek.