

Book review

SPECIALIST PERIODICAL REPORTS — INORGANIC REACTION MECHANISMS, VOL. 3, The Chemical Society, J. Burgess (senior reporter) price £ 14.00, date of publication November 1974.

This third volume of the series covering the period December 1971 to June 1973 is similar in format to previous volumes.

Part I, Electron Transfer Reactions, (by A. McAuley, 113 pages) covers metal-metal, metal-ligand redox reactions, as well as reactions involving oxygen and hydrogen peroxide.

Part II, Substitution and Related Reactions, (by J. Burgess and D.N. Hague, 208 pages) includes reactions of main group elements and of square planar, tetrahedral, and octahedral transition metal complexes.

Part III, Reaction of Biological Interest, (D.N. Hague, 19 pages) contains sections on ion transport, complex formation, metal porphyrins, and redox reactions.

Part IV, Organometallic Compounds, (R.D.W. Kemmett and M.A.R. Smith, 134 pages) has separate chapters on substitution, metal alkyls, homogeneous catalysis, insertion, oxidative addition, reactions of coordinated ligands, and isomerization.

This series continues to provide an important service to those interested in the kinetics and mechanisms of inorganic reactions. This volume includes a chapter on solvent effects (omitted in volume 2). With the advent of a The Specialist Report on Organometallic Chemistry, the reporters have been more selective in choosing references for this section so as not to overlap with the separate series.

The shortness of the chapter on reactions of biological interest is somewhat misleading since many topics of biological interest are included elsewhere in the text. For example reactions involving oxygen and hydrogen peroxide are discussed in the chapter on redox, peptide hydrolysis under reactions of coordinated ligands, and much additional biologically relevant data is under the chapter on labile metal complexes.

Those interested in classical ligand substitution reactions, redox reactions, homogeneous catalysis, reaction of coordinated ligands, fluxional molecules, or transition metal photochemistry will all find separate sections concerning their area of interest. Specialists may want their salaries geared to the cost of this series which has doubled in price already and is only at volume 3. (Contemplate volume 10!)

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