This volume deals with publications appearing in 1964—1975, with some references from 1976. "Inorganic" is arbitrarily taken to mean "containing not more than one carbon atom"; this inevitably leads to anomalies, e.g. the $Cl_3$ Si and $MeCl_2$ Si radicals are included, but not the $Me_2$ ClSi, and $Me_3$ Si radicals, which will be dealt with in later parts. 'Simple' inorganic-centred radicals are treated separately from radicals in metal complexes. Listed for each radical are (i) the formula, the name (where appropriate), and structural formula; (ii) the conditions under which it was generated; (iii) the method used to determine $g$ and $a$ values; (iv) the $g$ factors; (v) the $a$ factors; and (vi) the relevant reference(s).

In view of the rapidly growing study of inorganic free radicals this book is exceptionally timely and valuable, and when all four parts of the Volume have appeared (all are due in 1977 or 1978) a great deal of time will be saved in literature surveys. The book is finely produced, and the high standard of lay-out and printing leads to unusual clarity. Inevitably the price is high, but no laboratory concerned with study of free radicals can afford to be without this volume and its later companion parts.

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COLIN EABORN

*The Chemistry of Mercury*, C.A. McAuliffe (Ed.), MacMillan, London, 1977, viii + 238 pages, £ 25.00.

This book consists of four sections, written by different authors or groups of authors. The first part is a 43 page history of mercury by W.V. Farrar and A.R. Williams in which various aspects of the fascinating history of mercury are traced from the earliest times to the present day.

The second and third parts will be of the greatest interest to readers of this journal: the co-ordination chemistry of mercury by W. Leavason and C.A. McAuliffe (87 pages, 815 references), and the organic chemistry of mercury by A.J. Bloodworth (120 pages, 500 references). Both parts provide a good coverage of the material, with many references to secondary sources where more details of specialized topics can be found. The coverage is up-to-date; a sample showed 40% of references in part II and 66% in part III were to work published in the 1970's.

A final 23 page section on the biochemistry and toxicology of mercury by K.H. Falchuk, L.J. Goldwater, and B.L. Vallee rounds off this book, which should be of interest to all chemists working on any aspect of mercury chemistry.

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