

Book review

Mass Spectrometry of Inorganic and Organometallic Compounds; by M.R. Litzow and T.R. Spalding. Elsevier, Amsterdam, 1973, pp. 620, Dfl. 150.00 (ca. U.S.\$52.60).

This book can be strongly recommended for library purchase. It is divided into 12 chapters, covering all aspects of the subject up to 1970, and it includes some references to the 1971 literature. In Part 1 basic instrumentation is treated successfully and briefly in 17 pages, and this is followed by two well organized and readable chapters dealing with general aspects of mass spectra, and the information that can be derived from them.

Part 2 of the book (pages 70–469) treats compounds of non-transition elements according to their periodic group. Each chapter is well provided with tabulations of data, making for easy reference. One point that emerges is the wide variation in ionization and appearance potentials reported by different workers for ions derived from a given compound. Where possible the authors have compared electron impact ionization potentials with values obtained by photoionization and photoelectron spectroscopy.

The section on compounds of the transition metals has clearly involved organizational problems, and the authors have treated the subject according to the types of ligands (carbonyl, allyl, arene etc.) present. This allows correlations to be drawn, but makes it rather difficult to locate specific compounds, especially in relation to coordination compounds.

The general presentation is excellent with clear diagrams and formulae, but the book does not include an author index and the subject index might have been extended considerably. For example aluminium β -diketonates are discussed under transition metal coordination complexes without a subject index reference.

*Department of Chemistry
The Queen's University of Belfast
Belfast BT9 5AG (Great Britain)*

F. GLOCKLING