Molecular Spectroscopy, IXth European Congress, Madrid, 1967, Butterworths, London, 1969, pp. 129, price £2.90.

The contents of this book comprise the general lectures presented at the "Ninth European Congress on Molecular Spectroscopy" held in Madrid in the autumn of 1967. Even though the contents have already been published (*Pure and Applied Chemistry*, Vol. 18, 1969) the present publication will be welcomed in book form, since many spectroscopists will appreciate having easy access to the stimulating, expert talks delivered in Madrid.

The topics covered were all concerned with vibrational spectroscopy and included infrared spectra of transient species in lasers, digital recording of spectra, band contours, potential functions, band intensities and vibrational analysis.

J. W.

The Chemistry of Fluorine and its Compounds, by H. J. EMELEUS, Academic Press, London and New York, 1969, pp. ix+133, price £3.25, $6.95.

This book is not the comprehensive treatise that might be expected from its title. It contains an expanded account of material presented in a series of lectures at the Polytechnic Institute of Brooklyn at the end of 1966. The book is concerned only with the chemistry of the fluorides of the non-metallic elements (excluding the noble gases) a field with which the author has been closely associated.

In the introductory chapter the factors which influence the chemistry of fluorine are discussed and the behaviour of the element is contrasted with that of the other halogens. The following chapters deal with the fluorides of the non-metallic elements, giving a coverage ranging from boron alone in Group III, increasing to all the elements in Groups VI and VII.

The first member of each Group is given particular attention. For carbon there is a separate chapter (the largest in the book) dealing with perfluoro-organometallic compounds as well as a description of carbon fluorides. In general the coverage reflects the current research interests for the particular element and the bibliography contains many review articles for further reading. It is unfortunate that the survey extends only to the end of 1966.

Although this work does not contain the detail required by the active research worker in the field, it does provide an excellent introduction to the fluorine chemistry of non-metallic elements, and the author has certainly achieved his stated main objective of illustrating the richness of this field.

A. J. E.