

Book Review

"Topics in Sulfur Chemistry", Vol. 2, A. Senning, ed.,; "Carbon Sulfides and their Inorganic and Complex Chemistry", by G. Gattow and W. Behrendt, Georg Thieme Verlag, Stuttgart, vi + 261 pages, 1977, DM 128.

For a paperback of only 261 pages, this book is packed with an incredible amount of information on carbon disulfide, carbon monosulfide, carbon subsulfide, dithiocarbamates, dithiocarbimates, cyanodithiocarbimates, dithiocarbazates, xanthates, thioxanthates, di-, tri-, and perthiocarbonates, dithioformates, and azido-, cyano-, halo- and phosphinodithioformates. To illustrate the thoroughness of the treatment of these compounds, let me list some of the information which is included for CS_2 : preparations, thermodynamic data (bond energies, heats of formation, fusion, vaporization, and sublimation, and heat capacities), melting and boiling points, vapor pressures, density, expansion coefficient, compressibility, surface tension, viscosity, magnetic, electric, optical, and acoustical properties, ir, Raman, nmr, and mass spectral data, structures, methods of analysis, and reactions with non-metals, metals, neutrons, electrons, and γ -radiation. In addition, the metal complex chemistry of each of these compounds is surveyed in considerable depth including preparations, spectroscopic studies, and thermodynamic and x-ray structural results, where available. There are numerous references to recent reviews of areas related to those in the book. The writing style is terse with many equations, structures, tables and an excellent subject index which provide sufficient information to determine whether or not it is worth consulting the original literature. The literature coverage (2107 references) is considered to be complete up to the Summer of 1975. Although its price will be a strong deterrent to the purchase of individual copies, anyone doing research in the area of sulfur-containing ligands will want to have access to this book.

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