Handbook of Analytical Chemistry (Fresenius). Third Part: Quantitative Estimation and Separation Methods. Vol. 6by-Tungsten; by G. Wunsch, Springer Verlag, Berlin, Heidelberg, and New York, 1978; xvi + 286 pages, DM 146 (in German)

This volume continues the comprehensive and exemplary series on analytical chemistry. The discussion of all techniques and methods are minutely detailed so that reference to the original literature cited is not really necessary. After a very brief introductory chapter, there follows a discussion of sample preparation from a variety of sources ranging from ores to biological materials. The discussion then ranges from separation methods through classical gravimetric techniques, titration methods and photometric and fluorometric methods to the more sophisticated emission and absorption spectral analyses. Electrochemical, radiochemical and thermochemical methods are then reviewed and there is a final selection of more exotic techniques such as X-ray fluorescence, mass spectrometry and gas chromatography, as well as a section dealing with particular compounds such as heteropoly acids.

This is an exhaustive survey of all analytical methods which have been used for the quantitative determination of tungsten. It should prove invaluable to anyone who wishes to determine tungsten and may well stimulate those (e.g., organometallic chemists) who normally avoid metal determinations to attempt them. It cannot, however, in all conscience, be recommended for other than the library shelf unless one's interest in analysis is all-consuming.

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