Thermochimica Acta, 10 (1974) 215

Book reviews

Thermal Analysis, by T. Daniels (BIP Chemicals Ltd.), John Wiley & Sons, New York, 1973, 272 pp.

According to the author, the purpose of this book is to outline the more important thermal analysis techniques, their instrumentation and application so that the reader can then critically assess the approach most suited to his particular problem. The scope of thermal analysis is presented in Chapter 1, which is a little over three pages long, followed by a chapter on the general features of thermal analysis instrumentation. Thermogravimetry is covered in a single chapter as is DTA and DSC. Dilatometry is the subject of Chapter 5 while EC and magnetic techniques are covered in Chapter 6. The detection of evolved gaseous products is discussed in Chapter 7 and combined thermal analysis techniques are presented in Chapter 8. A summary of commercial thermal analysis equipment is given in Chapter 9 and the literature of thermal analysis is discussed briefly in Chapter 10.

This book, as the author points out, is only an introduction to the vast subject of thermal analysis.

W. W. Wendlandt

Atlas of Thermoanalytical Curves, edited by G. Liptay (Technical Univ., Budapest) Heyden & Son Ltd., London, 1973, 161 pp.

In this second volume of the series, the plastic overlay sheets showing the higher sensitivity curves have been replaced by a two color curve presentation. A black line curve is used for the larger sample size and faster (10 °C min^{-1}) heating rate, while a red line curve represents the smaller sample and slower (3 °C min^{-1}) heating rate. For each curve, the sample purity or source, sample mass, heating rate, furnace atmosphere, crucible type, and balance sensitivity are given. Also, each mass loss is given by a chemical equation, if known. All of the curves were recorded, of course, on a derivatograph.

TG, DTG, and DTA curves are presented for 83 compounds, most of them inorganic. Included in this volume are ammonium salts, black coal samples, rare earth salts, manganese(II) salts, numerous potassium and sodium salts, and others.

W. W. Wendlandt