Book Review

Atlas of Thermoanalytical Curves, Volume 2, Editor: G. LIPTAY, Heyden and Son, Ltd., London and Akadémiai Kiadó, Budapest, 1973. 161 pp. £ 11.5, $ 31.65, DM 94.50

We have been waiting for the second volume of this book for a long time, and it is very welcome now. This book is the result of a great endeavour by the author to collect the thermal data obtained by means of a complex method involving thermogravimetry (TG), derivative thermogravimetry (DTG) and differential thermal analysis (DTA). From the above-mentioned, thermoanalytical curves, recorded simultaneously under fairly extreme experimental conditions, one can obtain information on the nature of reactions taking place during the heating process, and in most cases thermal decomposition. Two sample sizes are generally used, one about 10 times larger than the other. Two different heating rates are applied: 3 and 10° min^{-1} in the investigation of inorganic compounds, and 1 and 3° min^{-1} in the decomposition of organic materials. The curves are easy to survey because that for the smaller sample size is drawn in red and that for the larger one in black. The additional data given on the back of the worksheet, concerning the consecutive decomposition levels and the literature references, support the basic concept well. This volume contains the investigation of 75 compounds, and it can be stated that the proportions of inorganic and organic materials studied show an improvement compared with the first volume.

As far as the format of the book is concerned, the use of a four-ring binder seems to be useful, since it allows an individual arrangement of the materials which are of interest.

This series continues to demonstrate the versatility of simultaneous complex methods. It is a pity that this volume does not contain contributions obtained by complex methods other than the Derivatograph. There does not appear to be any systematic attempt to arrange the compounds according to some guiding principle.

This compilation should be of interest to scientists in the field of thermal analysis, dealing with either theoretical or practical aspects of investigation, and especially those having a Derivatograph.

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