

Book review

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Thermal Analysis

Fundamentals and Applications and Polymer Science (second edition)

John Wiley & Sons, Chichester-New York-Weinheim-Brisbane-Toronto, \$55

This book serves as a good source-work for newcomers to the field of TA. Its main purpose is to introduce the basic principles of TA methods to the reader and to demonstrate both the limitations and advantages of this method as regards industrial applications. The second edition includes an enlarged, updated section on TMDSC and also extends to techniques related to TA.

As concerns the contents in detail:

Chapter 1 gives a definition of TA and provides readers with a brief discussion of the limitations and the advantages of this method.

Chapters 2 and 3 furnish fundamental theoretical information and the basic principles of different DTA and DSC methods, with more details on TMDSC. Useful information is given as concerns calibration and sample preparation in Chapter 3.

Chapter 4 deals with the other very important TA method, TG, and provides a brief discussion of the most significant experimental conditions, relating to sample, sample mass, form of sample, atmosphere, and heating rate.

Chapter 5 illustrates the application of TA techniques to polymer science. General information relating to the evaluation of different TA curves (mainly DSC and DTA curves) is to be found here.

In Chapter 6, other TA techniques are briefly described, so that newcomers can obtain an insight into techniques, other than those that are best known.

The introductory work is facilitated by a well-structured glossary of TA terms, indexes, a survey of standard reference materials and TA conversion tables.

In summary, this is a well-readable and usable book which can serve as a good source-work for newcomers to the field of TA.

B. Androsits