

LITERATURE SURVEY ON THERMAL ANALYSIS REFERENCE MATERIALS

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Results of a literature search on thermal analysis reference materials are listed.

Keywords: calibration, reference materials, standard, thermal analysis

Introduction

A Task Group has been formed by the Standardisation Committee of ICTAC to assess the published literature on the Certified Reference Materials (CRMs) developed by the Standardisation Committee for the temperature calibration of thermal analysis equipment. This work forms part of an overall programme to obtain more accurate values for the CRMs to enable their use as primary calibration materials. At the same time, data on other materials which have been used in thermal analysis calibration have also been reviewed.

This paper reports the results of a preliminary survey based on computer search of Chemical Abstracts covering the period 1967–1991 and using the following search criteria: Thermal analysis, calibration, reference material, standard.

The search produced a total of 88 references of which the majority are listed below with their full titles. The references have been divided into three categories: differential thermal analysis and differential scanning calorimetry; thermogravimetry; other thermal analysis techniques. Where the paper has shown more than one technique it is listed under the main application. As would be expected, the survey shows that the majority of the work has been carried out in the fields of DSC and DTA.

This survey together with a more detailed search on individual compounds will form the basis of a critical assessment of best values for the current ICTAC

materials and may also lead to the selection of new materials for development as CRMs.

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Zusammenfassung — Vorliegend werden die Ergebnisse einer Literaturrecherche über Referenzsubstanzen für die thermische Analyse dargelegt.