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摘要：采用6种标准物质测定CDR-1型差动热分析仪的差热分析法和差示扫描量热法仪器常数，结果表明：CDR-1型差动热分析仪的差热分析法和差示扫描量热法仪器常数均随温度的升高而增大，而差热分析法仪器常数受温度的影响更为显著。用最小二乘法得出在一定条件下差热分析法和差示扫描量热法仪器常数与温度的函数关系。对KNO₃样品的摩尔晶型转变焓和摩尔熔化焓进行的对照测定表明：用相应转变温度下的仪器常数进行计算，比用单点标定的仪器常数进行计算，可以较大程度地提高焓变测定的准确度。

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Effect of temperature on the apparatus constant of

Abstract: The DTA and DSC apparatus constant of CDR-1 dynamic differential thermal analyzer was determined under different temperature by six kinds of standard matters. The result indicated that, DTA and DSC apparatus constants of CDR-1 dynamic differential thermal analyzer increase along with temperature increment, but influence of temperature on DTA apparatus constant is more remarkable. The functional relations of DTA and DSC apparatus constants for temperature were obtained by the least squares method under to a certainty condition. The balance determination for Δt_{Hm} and Δf_{Hm} of KNO₃ indicated that, the veracity of result, which was gained with apparatus constant under corresponding temperature, remarkably was enhanced.

Key words:

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