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Improving the Combined Product-Quality Control System at Enterprises of the 'Soyuzmetallurgprom' All-Union Industrial Association. F. I. Zenchenko et al [Stal' 1982 (7) 75-78] (Russ.) BISI 21600

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O. A. Kaibyshev et al [Izv. V.U.Z. Chernaya Metall. 1982 (7) 120-125] (Russ.) BISI 21617

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Influence of Inoculating Additions of Silicocalcium and Ferro-Silicon on the Primary Structure and Graphitisation in Blackheart Malleable Cast Iron. D. Labbe and L. Rimlinger [Fonderie 1980 35 (395) 3-15] (Fr.) BISI 20666

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N. S. Oknin et al [Stal' 1982 (7) 91-93] (Russ.) BISI 21602

書 評

熱分析実験技術入門 第2集

長崎 誠 三監修・真空理工(株)編

本書は昭和 54 年に出版された「熱分析実験技術入門」の続編である。すなわち、熱分析、熱物性測定およびその周辺技術に関して、それぞれの分野における第一線にある研究者が真空理工ジャーナルの昭和 55 年 2 月号から昭和 57 年 7 月号までに執筆した解説、測定結果などを骨子としてまとめ成書としたものである。「第 1 集」では主に測定対象別に分類していたが、本書では測定法別にまとめている。まず、第 1 章「熱分析と熱物性測定のあらまし」で全体を概説し、第 2 章「熱重量測定」、第 3 章「示差熱分析と示差走査熱量測定」、第 4 章「熱膨張測定と熱機械測定」でそれぞれの測定法の進歩と具体的適応例をまとめ、第 5 章「反応速度の解析とその応用」で解析法について述べている。第 6 章から第 9 章は、高圧熱天秤、AC カロリメトリーなどを含む「その他の熱測定と周辺実験技術」、17 種類の有機酸塩に関する TG-DTA の「熱分析

データ集」、熱分析研究室訪問、「熱分析タブー・プラス・ノウハウ」に当てられている。

本書は、断片的であるが、具体的事例について、新しい技術をどのように測定法に取り入れるか、測定しようとする新しい対象がどのようにふうを凝らせば測定できるかなど実験研究者の経験が述べられているという「第 1 集」の特徴はそのまま引き継がれている。「第 1 集」と比較すると、測定の自動化の進展、測定条件の拡大などの技術的進歩ばかりでなく、熱分析が品質管理、品質保証、受入検査、製品検査などの生産現場にますます広く取り入れられていく趨勢にあることなども実感されて興味深い。(菊池 実)

B 5 判・243 ページ

定価 4,200円 (送料別)

1982 年 11 月 科学技術社発行