# ADVANCED MATERIALS

The basic modes of operation within microbeam analysis; the recording of line scans, area maps and depth profiles, are certainly not common knowledge and should have been described.

The main emphasis is placed on the methods and applications in the semiconductor and microelectronic industries. Recent innovations like the small-spot ESCA and the LMIS (liquid metal ion source) have been considered and modern analytical electron microscopy is treated in greater detail. On the other hand, there is no mention of the recent development of the STM (scanning tunneling microscope) and the two methods, PIXE (proton-induced X-ray emission) and SXRF (synchrotron X-ray fluorescence), have not even been briefly referred to. Both methods, like RBS (Rutherford backscattering) are dependent on accelerators or storage rings which are scarcely available to the general public, but are very effective.

The literature coverage in both parts of the book is somewhat dated, the mean value lying in the middle of the 70's (only 14% of the citations are dated after 1983) and about 25% of the references are second-rate (sales brochures, internal reports, technical notes, etc.). Some representations are also poor (e.g. Figure 1-74).

Overall, the book is generously illustrated with figures and relatively free of printing errors (Rushka instead of Ruska, p. 20;  $K_{1,2}$  instead of  $K\alpha_{1,2}$ , p. 123). However, a great disadvantage is imposed by the great number of figures of poor quality. Of the 306 figures contained in the book, more than half are photographs, mainly included in Part 2, and the majority of these are reproduced badly. This is partly due to bad models, partly to poor quality of the paper — and this at a price which cannot be considered as low. Only the photographic reproduction of Figures 2-35 to 2-38 and the five color photographs is acceptable.

It is for these reasons that the book cannot be recommended without reservations. But since the demand for such a survey is certainly great, the author as well as the publishers should be encouraged to commence with preparations for a revised edition.

Reinhold Klockenkämper Institut für Spektrochemie und angewandte Spektroskopie, Dortmund (FRG)

# **Conference Calendar**

### August 1989

13–26 High-T<sub>c</sub> Superconductors
NATO Adv. Study Inst.
Bad Windsheim (Fed. Rep.
Germany)
Contact: R. Kossowsky, Applied Res. Lab., Pennsylvania
State Univ., P.O. Box 30, State
College, PA 16804, USA

### 14-17 Shock Compression of Condensed Matter

APS Top. Conf. Albuquerque (USA) Contact: A. Roach, MS-P 915, Los Alamos Nat. Lab., Los Alamos, NM 87545, USA

#### 14-18 Hopping Transport

8th Conf. Chapel Hill (USA) Contact: M. Pollak, Dept. of Phys., Univ. of California, Riverside, CA 92521, USA



### 16-18 Properties Through Processing

Amherst (USA) Contact: H. H. Winter, Dept. Chem. Eng., Univ. of Massachusetts, Amherst, MA 01003, USA

# 20-24 Imaging Systems—150 Years of Photography

Int. Symp. (ISIS '89)
Dresden (German Dem. Rep.)
Contact: Conf. Secretary,
ISIS '89, Technische Univ.
Dresden, Sektion Physik, Wissenschaftsbereich Photophysik,
Mommsenstr. 13, DDR-8027
Dresden, GDR

### 20-25 Crystal Growth: Progress in Science and Technology

9th Int. Conf. Sendai (Japan) Contact: Prof. T. Nishinaga, Inter Group Corp., Akasaka Yamakatsu Bldg., 8-5-32, Akasaka Minato-ku, Tokyo 107, Japan