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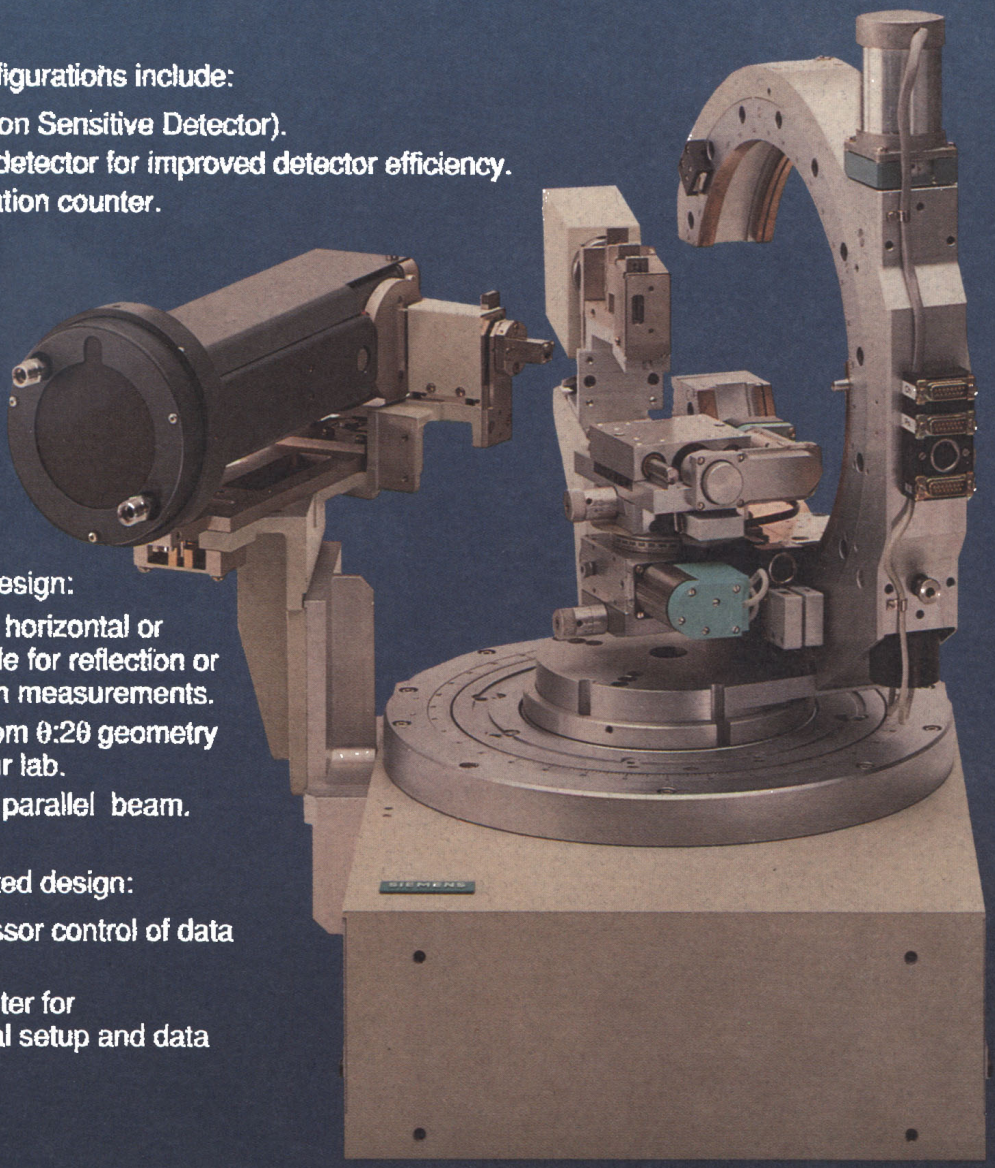

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The JCPDS - International Centre for Diffraction Data, is inviting applications for an Assistant to the Editor-in-Chief. The major function of the Editor-in-Chief is to scrutinize and evaluate, with the help of editorial consultants, all data submitted to the Powder Diffraction File. Because of the expanded work load over the past several years, due to the processing of increasing numbers of patterns and the improvement in quality of data, the International Centre has decided to supplement the in-house editorial effort by providing an assistant to understudy the existing Editor-in-Chief.

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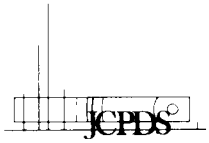

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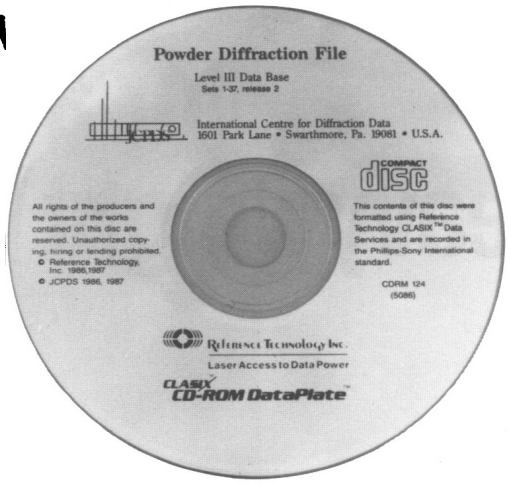

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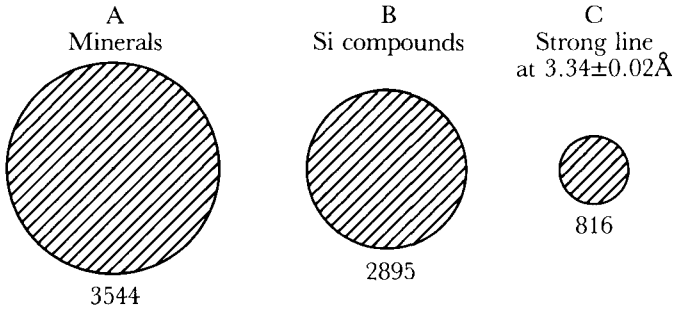

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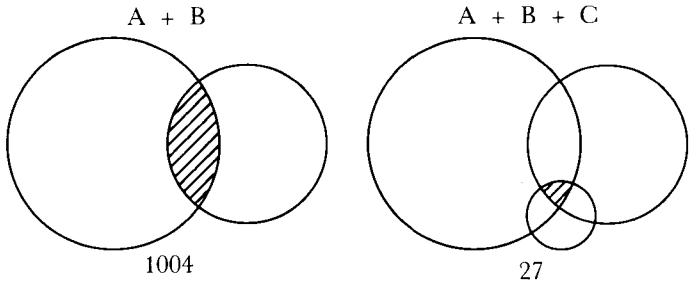

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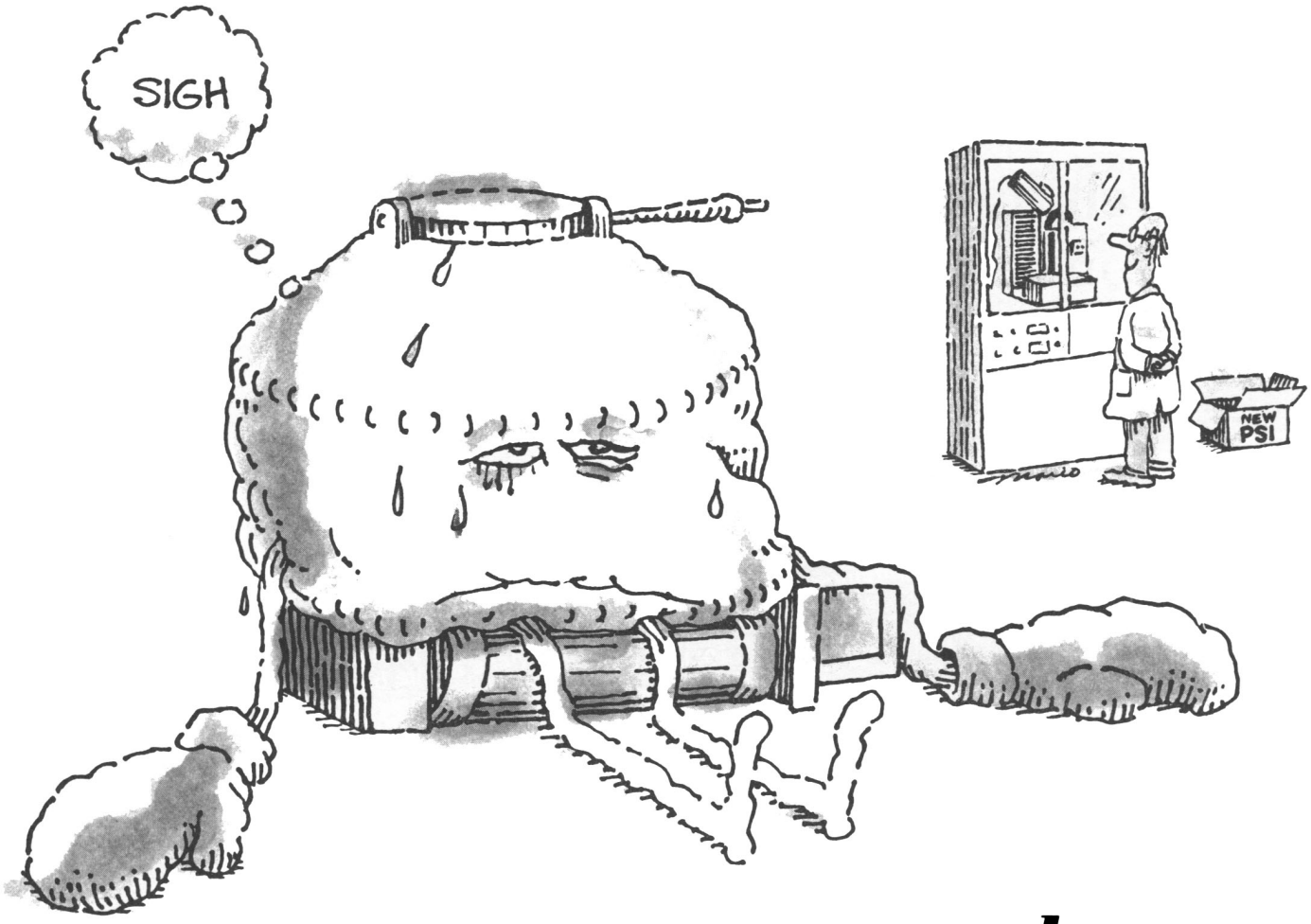

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Editorial

New Educational Materials in Powder Diffraction

Continuing education in the use of powder diffraction for characterization and analysis is becoming more and more important as new crystalline materials are being developed at an ever increasing rate. The recent flurry of activity in the rush to find new superconductors has emphasized the need to have detailed knowledge of the crystalline state to correlate with the physical property measurements during the development of such materials. Most materials laboratories have modern diffraction equipment capable of obtaining data of far better quality than even 10 years ago. Unfortunately, the training of the personnel who use the equipment has not kept pace with the level of sophistication of the equipment except in those laboratories where new types of experimentation are being developed. In the service-oriented laboratory, the personnel are often assigned the responsibility of providing the important crystal data without adequate prior training in their academic education. The training is then obtained on the job and in short courses run by universities and organizations such as the International Centre for Diffraction Data.

The ICDD has been concerned with continuing education for over 20 years, and the Education Subcommittee has been responsible for the development of courses and study materials which are used in the courses. At the present time, the ICDD runs half a dozen short courses each year throughout the U.S. and Europe on the use of the Powder Diffraction File for identification of materials and their characterization. In addition, members assist in other short courses on diffraction experimentation and data interpretation both at university sites and associated with scientific meetings. Education is also the topic of many of the papers in this journal. These experiences have lead to the preparation of three new products which may be useful to the experienced diffractionist as well as the newcomer to the field.

The first of these products has been 11 years in the making. In conjunction with the American Chemical Society, an AUDIO COURSE IN X-RAY POWDER DIFFRACTION has been prepared. This course is designed to instruct the beginner in the principles of diffraction experiments, instrumentation, sample preparation and data evaluation in qualitative analysis. Cassette tapes in instruction-module format are listened to while referring to a manual with detailed illustrations for the student to follow. This course is a good way to introduce the newly assigned personnel to the methods of analysis that they will most likely use in the course of their work. The instructional package is available from the American Chemical Society as part of their Professional Development Courses for the Chemical Sciences. Orders may be placed through the ACS Department of Continuing Education, P.O. Box 57136, West End Station, Washington, DC 20037.

The ICDD is continuing to collect the educational papers which have appeared in this journal, and they are incorporated in the METHODS AND PRACTICES MANUAL which is avialable from ICDD. This manual is dynamic in that it continues to grow as new papers are prepared. There is a long-range plan to cover topics such as sample preparation for all types of experiments, alignment of instruments and data correction techniques, reference standards and tests, and many other subjects of practical application in the laboratory. Although most authors are active ICDD members working on subcommittee projects, nonmembers are encouraged to submit appropriate papers for consideration to this journal.

The third edition of the USE OF THE POWDER DIFFRACTION FILE and accompanying SELECTED POWDER DIFFRACTION DATA FOR EDUCATION AND TRAINING has just been released which is the work package used in the ICDD short courses. This work package has evolved over 15 years and has also been used in many diffraction courses in universities. It is especially appropriate at institutions which do not have the equipment to collect data; its well selected examples illustrate many typical problems encountered in all laboratories. The data book provides a subset of the Powder Diffraction File for use with other topical workbooks in preparation. One example is the Mineral File Workbook which is available. Other topics include problems in forensic analysis, organic analysis and metallurgy. These materials are available from ICDD.

Education is a continuing matter for all researchers. Hopefully, the availability of these new products will fill some of the training voids which have been present for some time.

Deane K. Smith
Chairman, International Centre
for Diffraction Data