

Powder Diffraction

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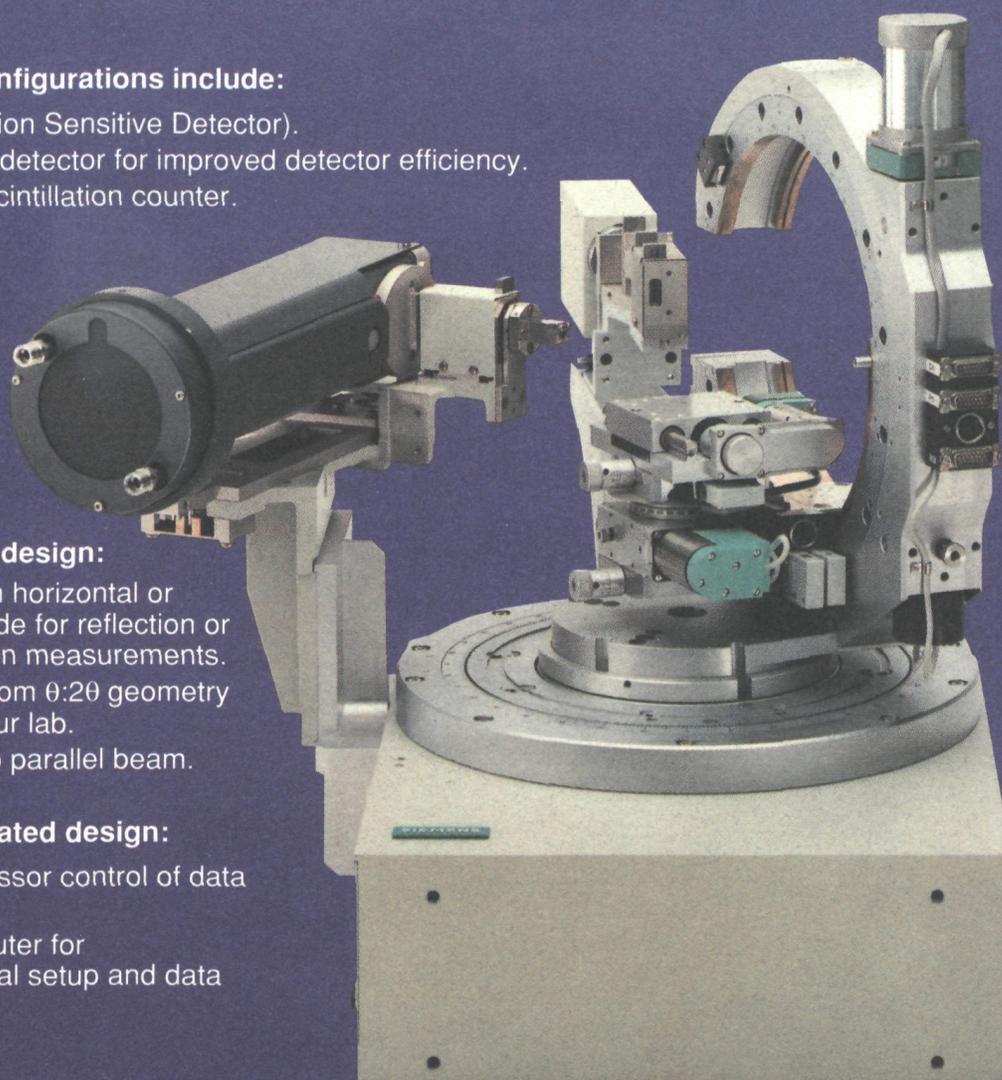
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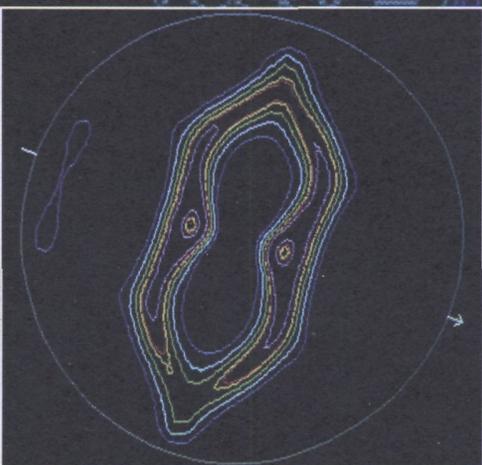
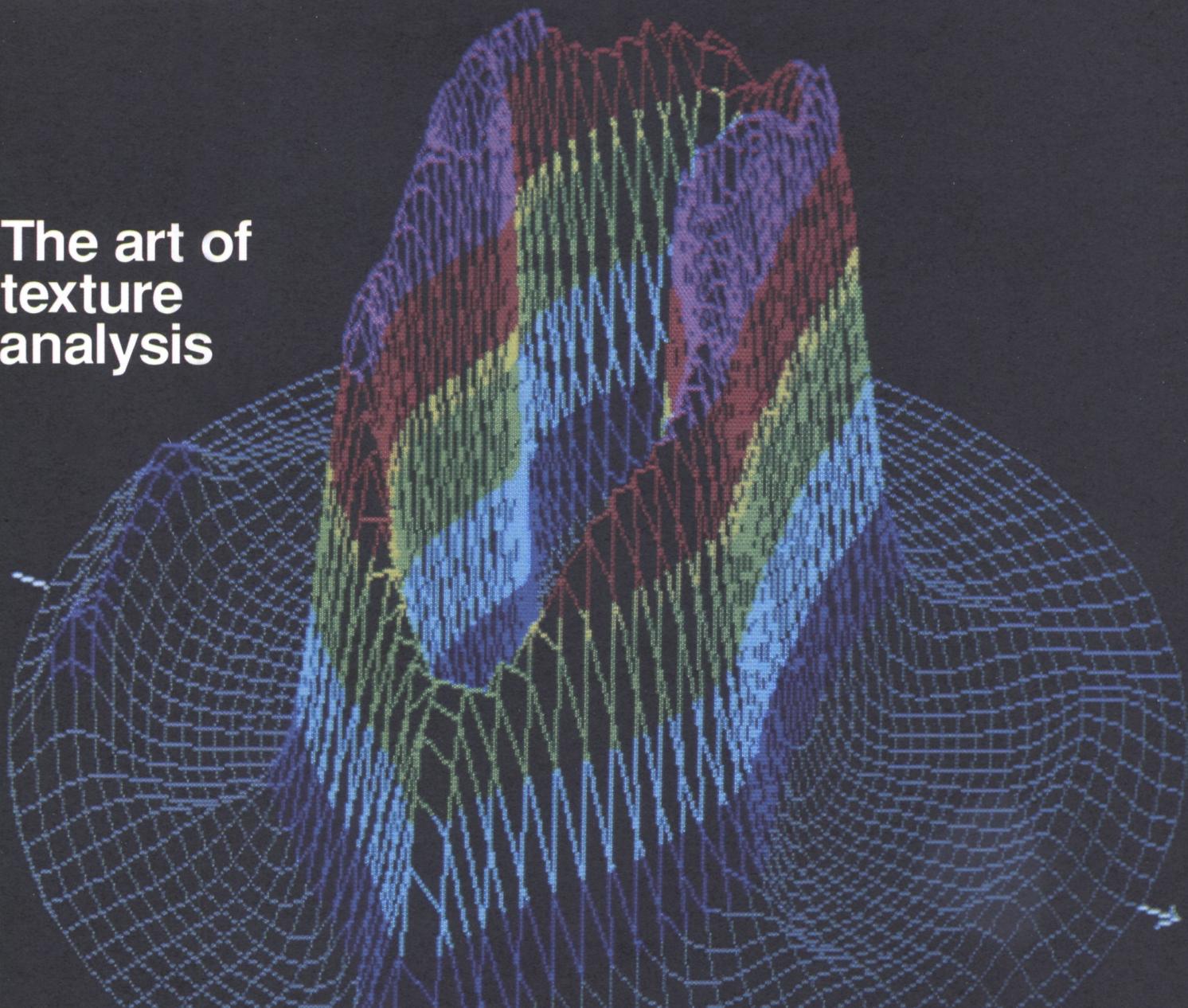
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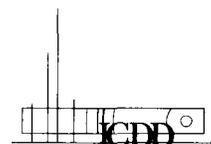
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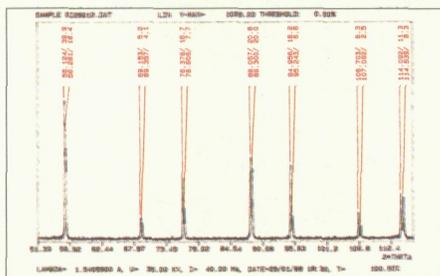
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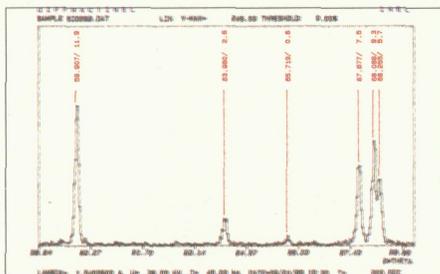
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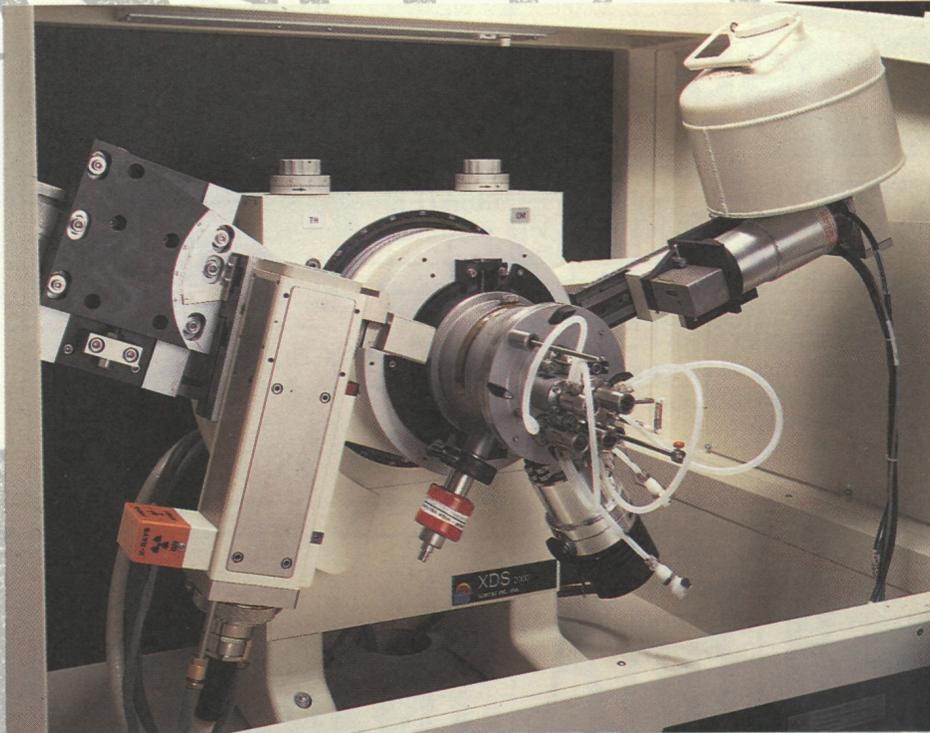
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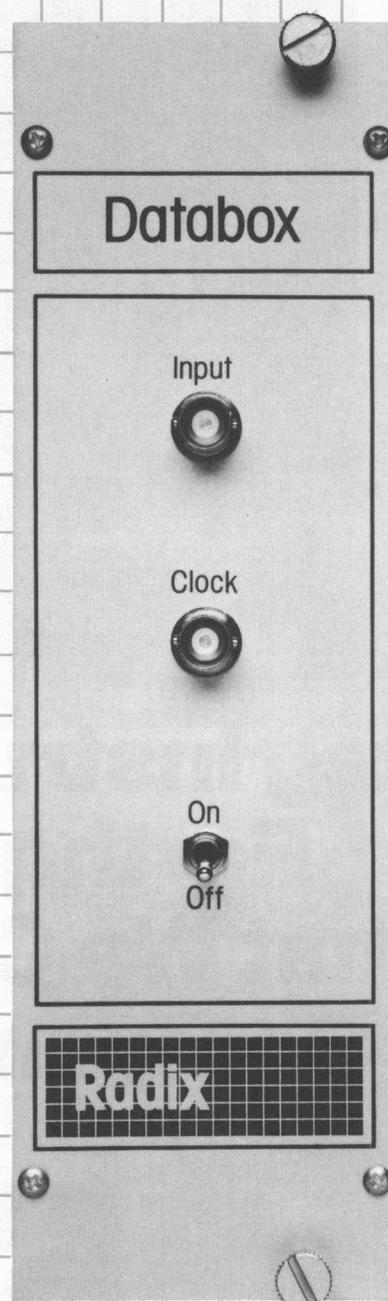
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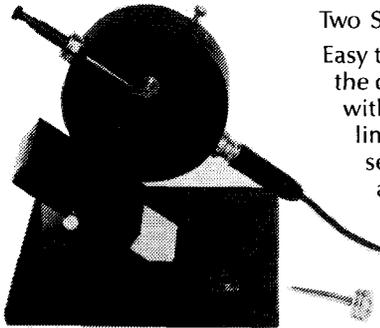
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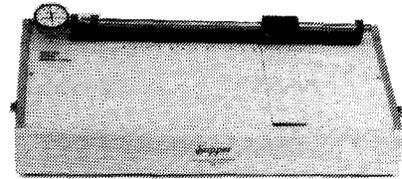
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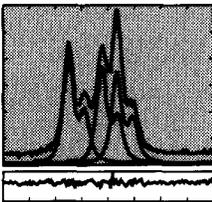
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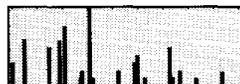
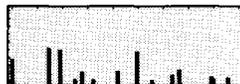
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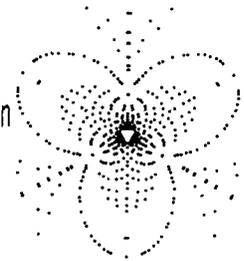
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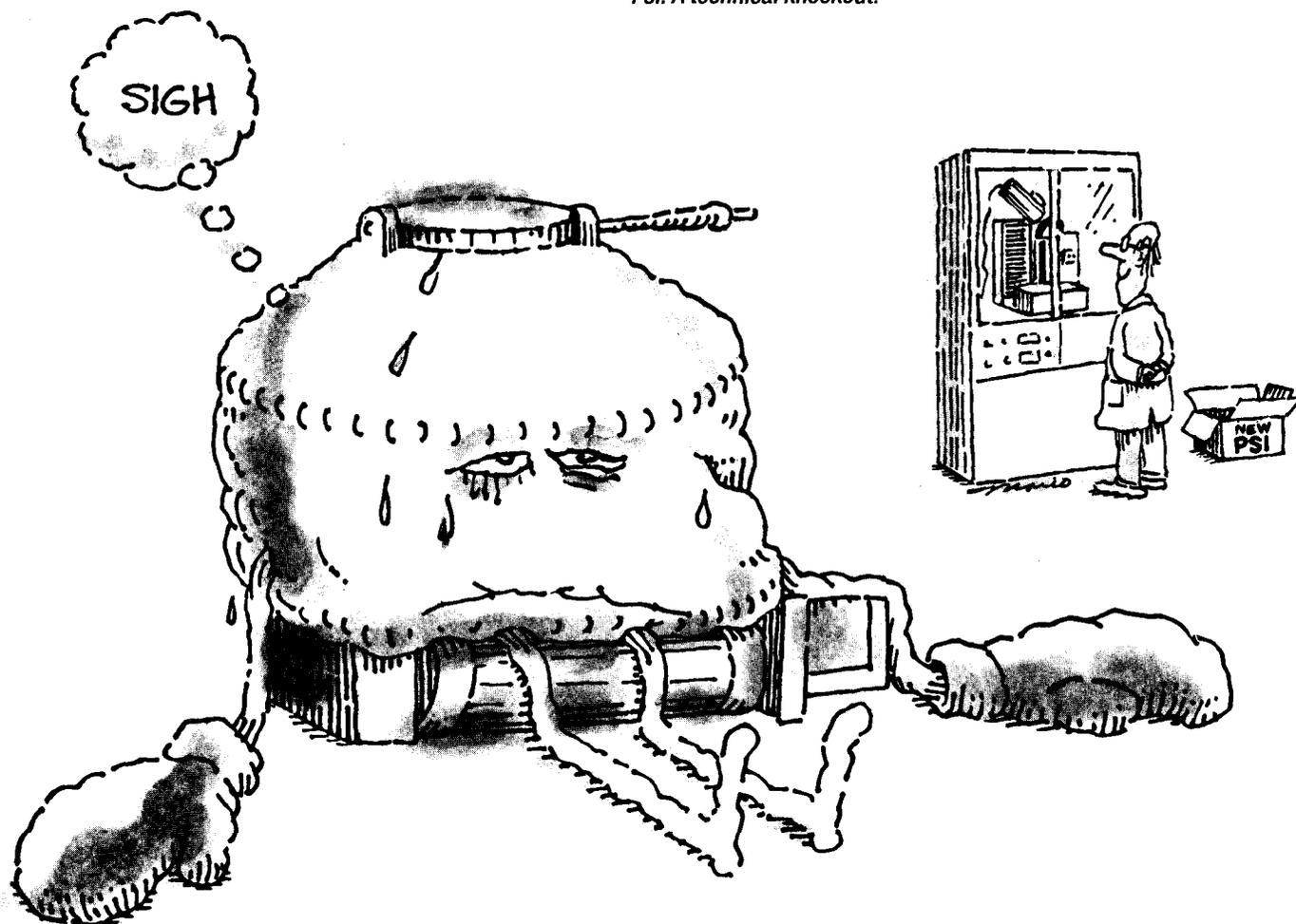
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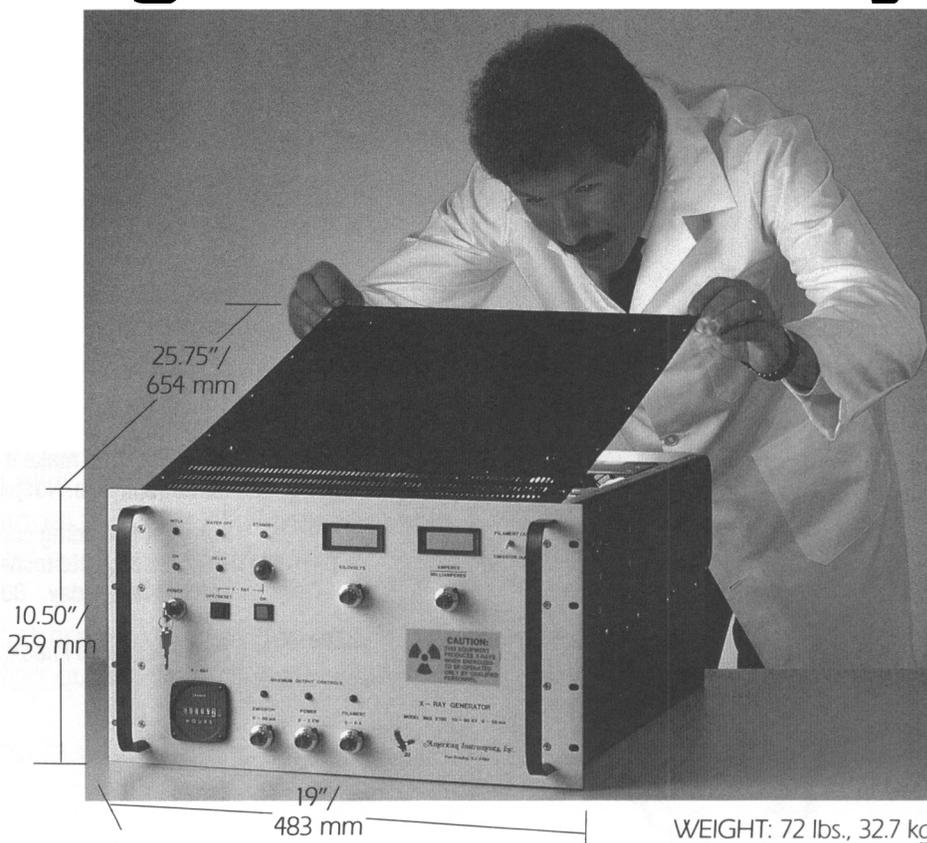
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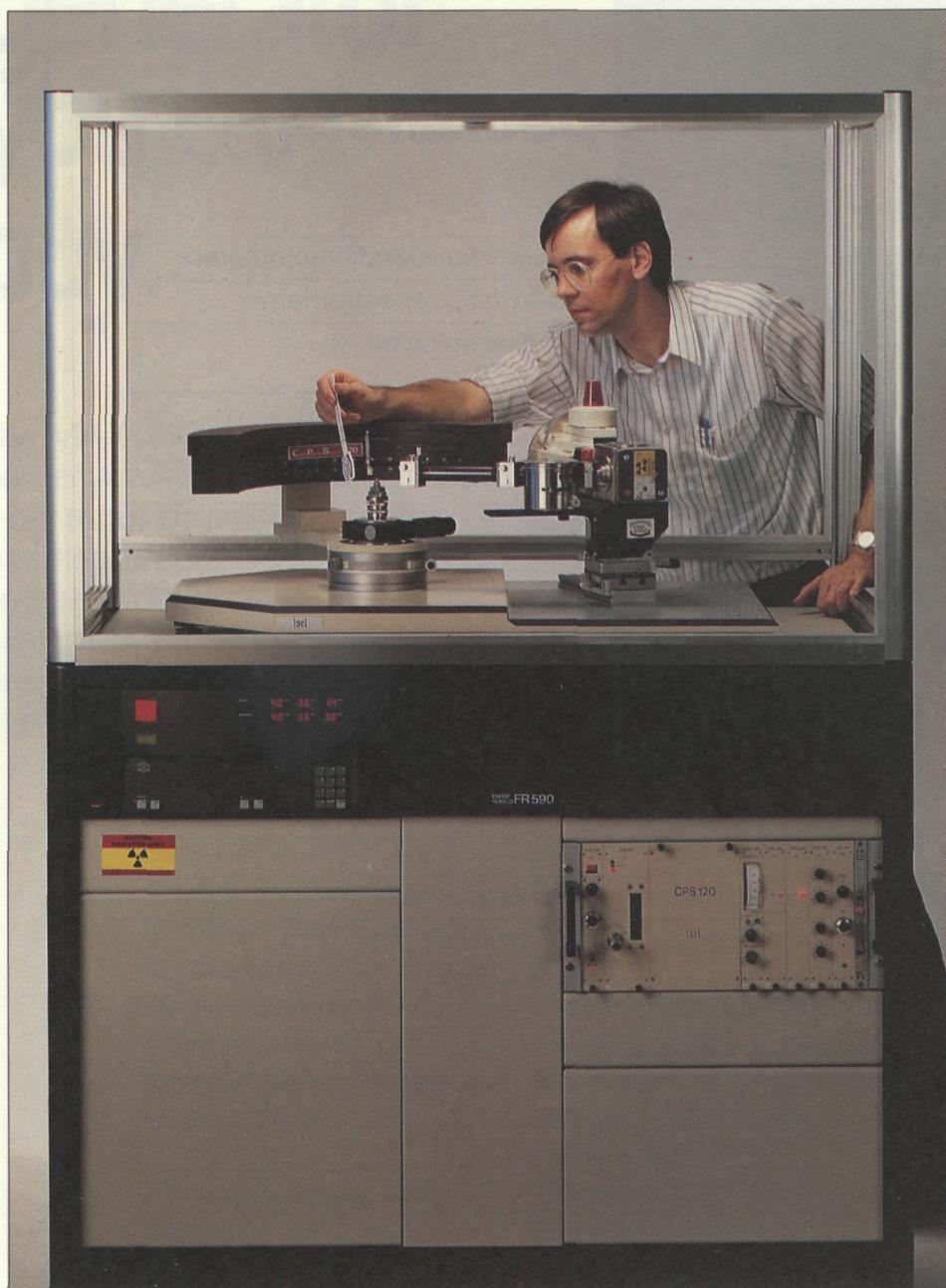
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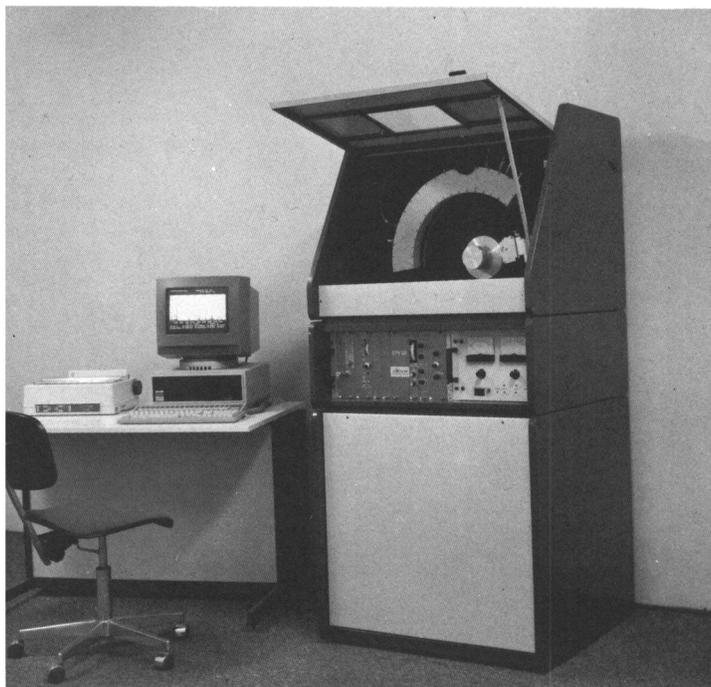
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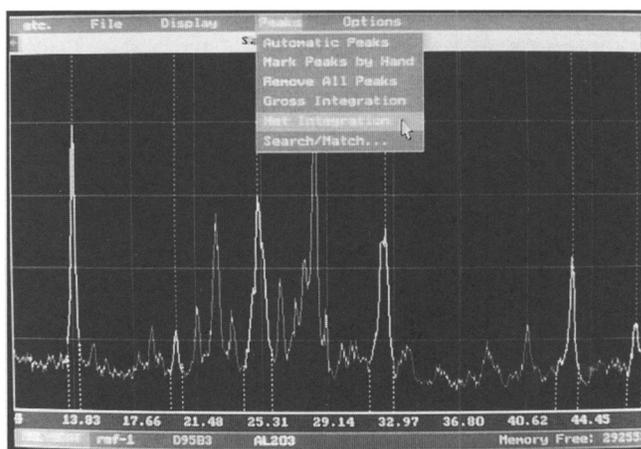
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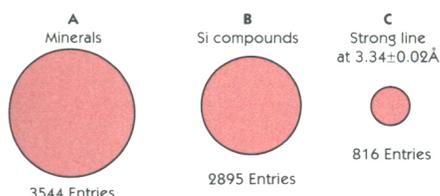
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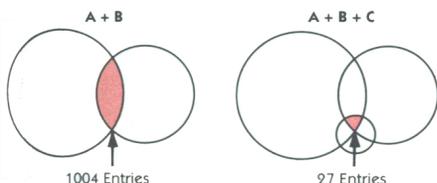
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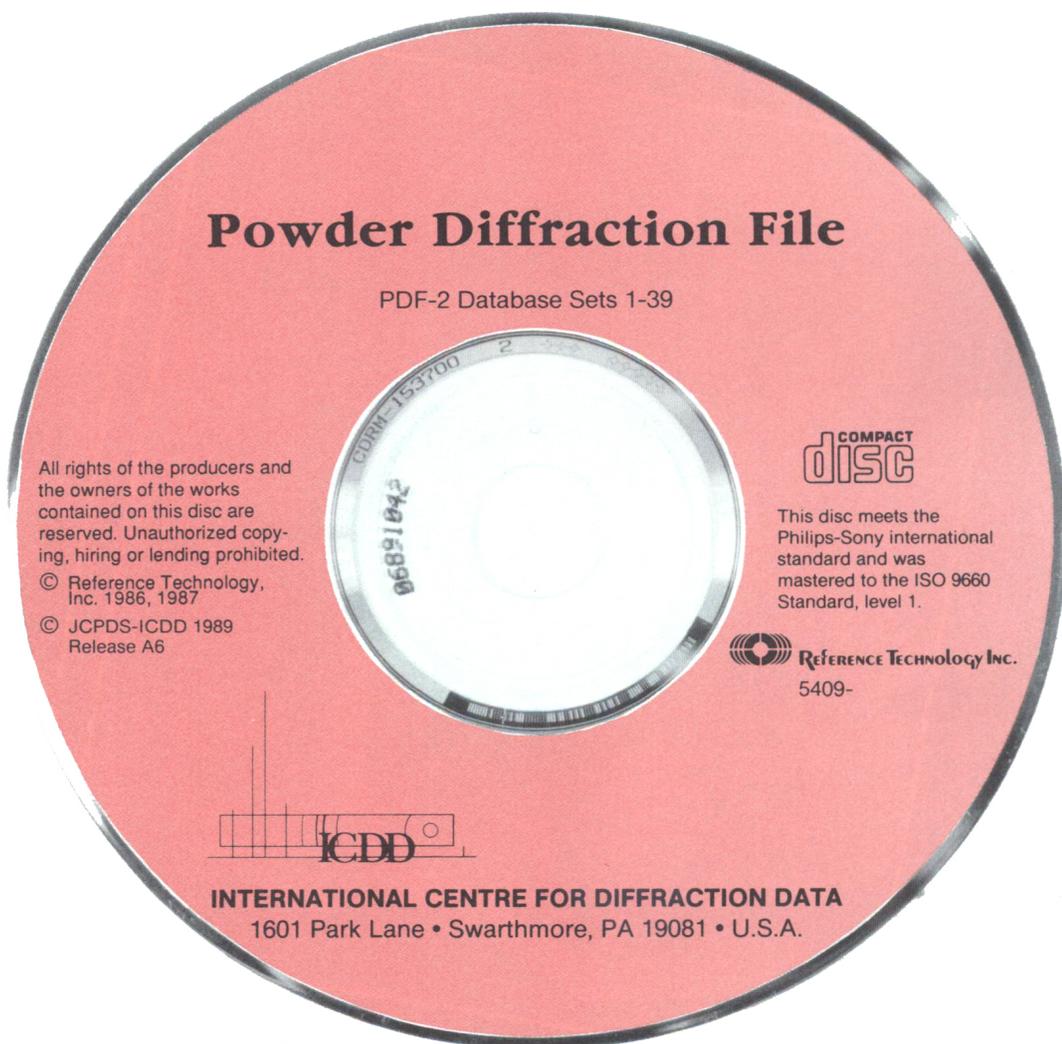
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Editorial

More on the ICDD Clinic

In the editorial for the last issue, I indicated that the International Centre for Diffraction Data was planning to continue the SUNY Albany Clinic on X-ray diffraction analysis. This planning is now well along as this editorial is being prepared, and the course will be underway when this issue is delivered to you. The preliminary response has been strong, and the usual number of registrants is expected. The transfer of this clinic seems to be progressing satisfactorily.

The previous editorial mentioned that the ICDD would be evaluating the future of the clinic during the summer and fall with the goal of making the major decisions in October. In order for the ICDD to meet the needs of the diffraction community most effectively, we need to hear from past, present and future attendees and supervisors who will be sending personnel to be trained as well as potential host institutions.

One question concerns the future location of the clinic. There are several options. One is to select a single, central location and continue to hold the clinic at this location. This option must consider facilities, local staff and convenience for the attendees. Another option is to move the clinic to a new geographic location each year, and would follow the successful pattern used by the ICDD Workshops on the Powder Diffraction File. Attendees from geographically close locations may find it easier to attend when the travel is minimized. A variant on this latter plan is to select a few specific locations and rotate the clinic among these locations. The choice of locations will depend on having host institutions offer their facilities and personnel. But is the moving clinic a good idea for the attendees? This question is better answered by potential attendees rather than the staff. With the central organization and registration based at ICDD, the registration continuity will be maintained. Will moving the clinic confuse its identity and make it more difficult for supervisors to approve participation by their staff?

The possibility of changing the time of the year for the clinic is also being considered. Because the previous clinic was held at a university, the June time frame was logical for the most effective use of the local facilities. If the clinic were to move to a non-academic site, the time of the year will not be as critical. Would a winter schedule, or some other time of the year, be more suitable for attendees? Most of the attendees are from industry where production schedules may dictate when staff are indispensable. Are there potential attendees who have not been able to register because of the June schedule used previously?

The content of the clinic is also under review. The present schedule is for the first week to be very basic including an introduction to the principles of diffraction, cameras and diffractometers, reduction of diffraction data, and qualitative phase identification. The second week will be devoted to the improvement of diffraction data and its analysis. This analysis will include computer methods, but in one week, there is not much time to go into depth or cover all possible

topics. Several questions must be considered for future courses. Should the content be modified, and if so, what topics should be included and which ones should be replaced? Is the level of instruction at the right level? Should a third week be added to cover more advanced topics and more computer experience?

Another question concerns the nature of the laboratory experience portion of the course. Instruction in the use of specific Automated Powder Diffractometers is impractical for many reasons. No site has all the manufacturers represented, and attendees usually want to use the same type that they have in their own laboratory. It usually requires one full day just to get used to a specific unit to be able to use it in a hands-on situation. The ICDD also does not endorse any specific unit, so the availability of equipment will depend solely on the host institution. Manufacturers have in the past brought equipment to the clinic, but these demonstrations are expensive for them and will not be continued. Present plans are to use a manual diffractometer to demonstrate the optical principles of alignment and recording strategies, and to provide prepared data packages for student interpretation illustrating the various topics of the course. Is this approach the best approach? Should students get direct hands-on experience in the collection and reduction of data? Which methods provide the most effective learning experience for the student?

One of the comments heard often when potential attendees call ICDD for information is concern about the future of the X-ray fluorescence portion of the clinic. Should the ICDD continue that portion as well? Although most of the members of the ICDD are diffractionists, there are several who have XRF experience and could organize an XRF course. This year, the organizers felt it would be too much to plan both parts for June presentation, but next year is still open for suggestions. This decision also must be made in October.

This editorial has posed some questions for which the ICDD would like input from the readers of *Powder Diffraction*. Any and all comments will be appreciated and receive serious consideration. All letters should be directed to Ron Jenkins, International Centre for Diffraction Data, 1601 Park Lane, Swarthmore, PA 19081. Consider all the questions asked above, add any additional remarks that come to mind and send in those letters before October. The most important suggestions are those from the most concerned critics.

Deane K. Smith
Editor-in-Chief and
Instructor in 1990 Clinic