

# Commercial Announcements

## Radiation Survey Meter

The Bicron 'Micro Rem' radiation survey meter is designed to have a flat energy response to X-ray and gamma radiation.

Its internal plastic scintillator gives tissue-equivalent photo response from environmental levels of 0-20urem/h full scale up to normal levels of 200mrem/h full scale over five ranges. The instrument is available in a micro sievert version, which has a uSv/h meter scale and micro sievert labels.

For more information contact local agent.

## X-Ray Diffractometer Automation Product

Sietronics Pty. Limited announces the integration of JCPDS PDF-2 full file on CD-ROM into their X-ray diffractometer automation system Sieray 112 via the Fein-Marquart uPDSM search-match software.

Sieray 112 is a complete data acquisition, data reduction, database search-match and information retrieval package. It consists of an interface which controls a stepping motor and data acquisition subsystem which can be fitted to any manufacturer's diffractometer and a software shell which runs the programs for data reduction and search-match.

Further information can be obtained from Sietronics Pty. Ltd. Telephone: ISD (6162) STD (062) 516611, FAX: ISD (6162) STD (062) 516659. PO Box 84, Hawker, ACT 2614, Australia.

Fein-Marquart Associates, Inc, 7125 York Road, Baltimore, MD 21212. Telephone : (301) 821 5980

## QPDANAL : A new user-friendly system for standards analysis and crystal size/strain determination.

Ian Madsen and Rod Hill, CFIRO Division of Mineral Products, Port Melbourne, Victoria, Australia are developing a new procedure for the direct determination of phase abundance in multicomponent polycrystalline materials using the scale factor values of each phase obtained by Rietveld analysis of the full step-scan diffraction profile. The power of the Rietveld method in this application is that it permits the determination of phase abundance in much more complex mixtures of phases than has hitherto been possible. The primary reason for the advance is that there is no longer any need for the diffraction pattern to contain free-standing peaks from each phase for the measurement of their integrated intensities; the method deconvolutes the individual peaks by analysis of the full diffraction peak intensities are calculated from first principles using the crystal structure parameters of each phase, there is no need to obtain phase-pure standard samples, or to undertake laborious experimental calibration procedures, as in traditional phase analytical methods. Ian and Rod, are interested in obtaining some idea of the general level of interest in a system of this sort among members of the powder diffraction community for the purposes of :

- i) Ensuring that the system reaches its full potential by incorporating the ideas of a broad range of potential users, and,
- ii) Establishing likely numbers of attendees at a possible workshop on the uses and applications of the system around the middle of 1988.

For further information write to Ian Madsen at :  
CFIRO Division of Mineral Products, PO Box 124, Port Melbourne, Victoria 3207, AUSTRALIA. Telephone (03) 647 0366.

### Advertisers in Powder Diffraction

	Page Number	PD Number
American Instruments, Inc.	II	PD3
American Instruments, Inc.	IV	PD4
Charles Supper Corporation	VII	PD8
Charles Supper Corporation	IX	PD11
Fein-Marquart Associates	I	PD2
IC Laboratories	XII	PD16
inel	XV	PD22
Ital Structures	XIV	PD20
JCPDS CD-ROM	Inside Back Cover	PD24
JCPDS PDF 31-32	IX	PD12
JCPDS PIXCAM	XVI	PD23
JCPDS Schools	IX	PD10
JCPDS Set 38	XII	PD18
JEOL	VIII	PD9
KeveX Corporation	X	PD13
Materials Data Inc.	VII	PD7
Oneida Research Services, Inc.	XII	PD17
Radix Instruments	VI	PD6
Rigaku/U.S.A. Inc.	Back Cover	PD25
Scintag	V	PD5
Siemens/Nicolet	Inside Front Cover	PD1
Sietronics Pty Limited	XIV	PD21
Spellman High Voltage Electronics Corporation	XI	PD14
SPEX Industries, Inc.	XIII	PD19
The Gem Dugout	XI	PD15