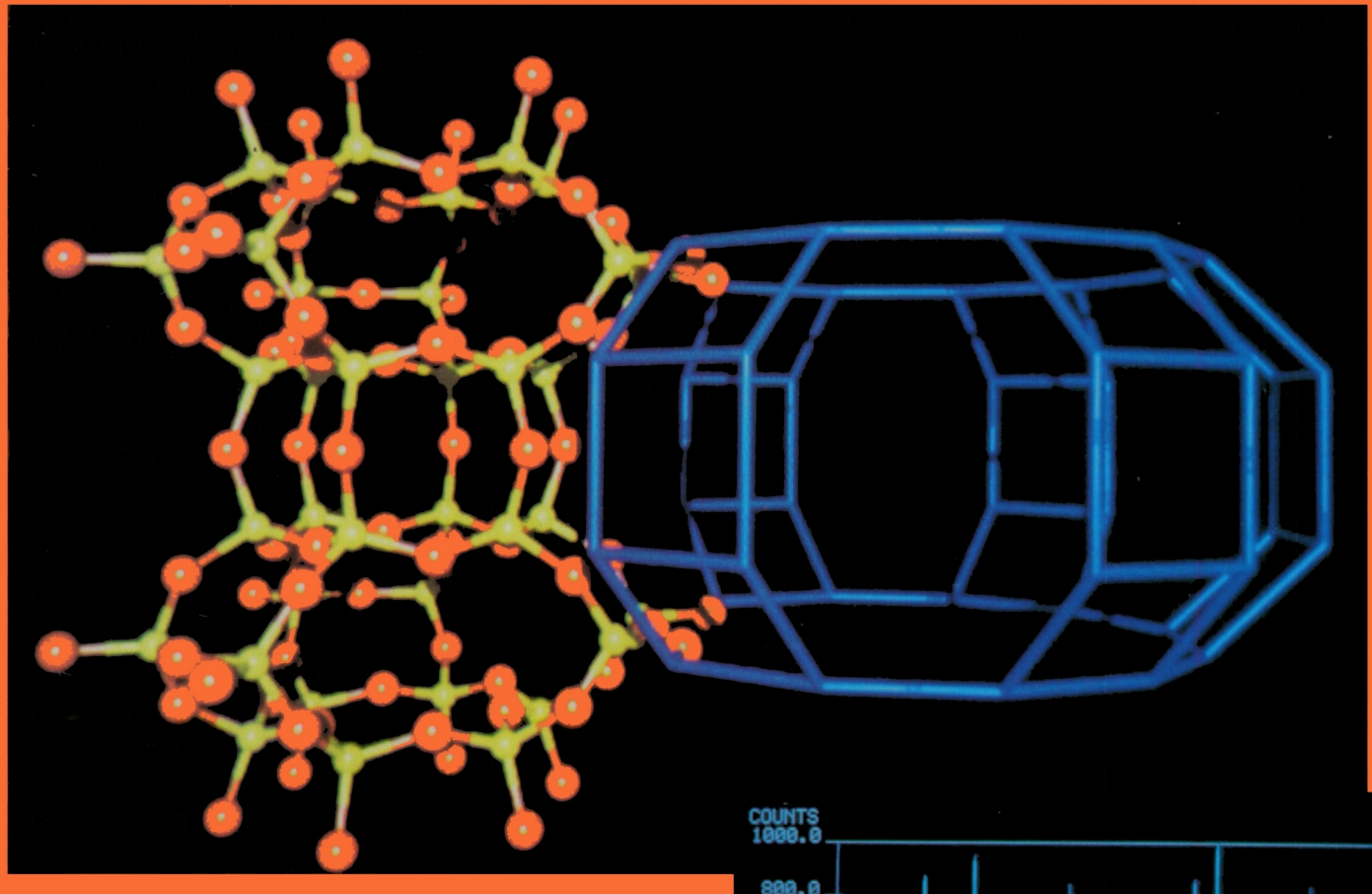
MRS BULLETIN

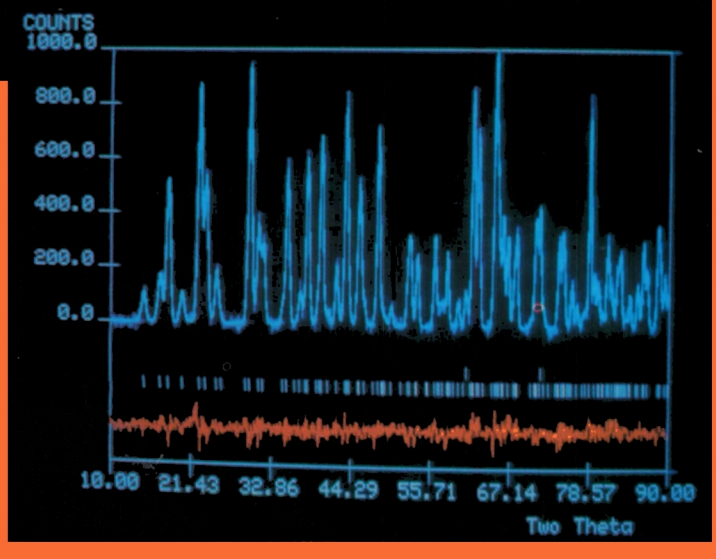
November 1990

Volume XV, Number 11

Serving the International Materials Research Community

Neutron Scattering





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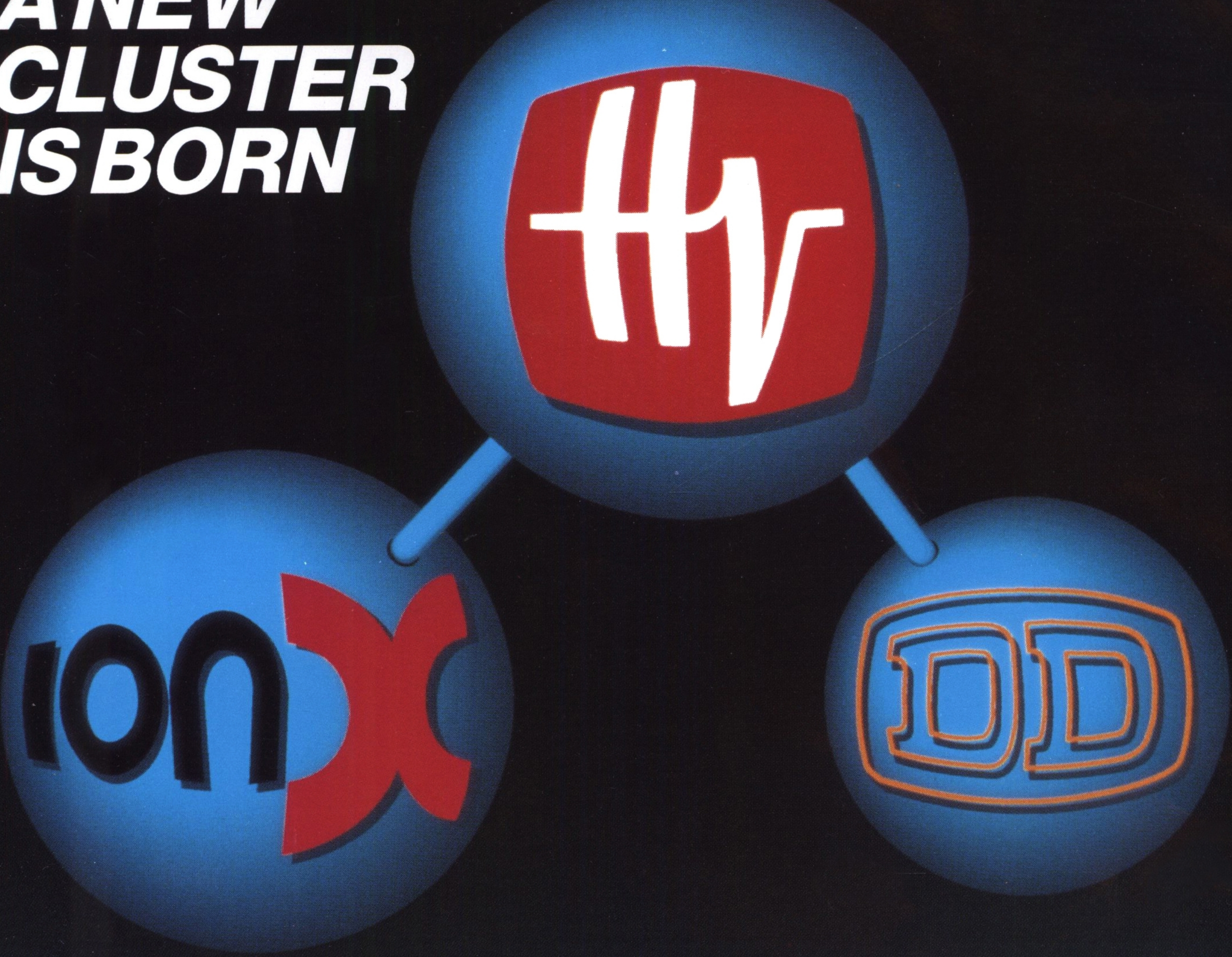
A NEW CLUSTER IS BORN



General Ionex acquired by High Voltage Engineering Europa B.V.

In December 1987 High Voltage Engineering Europa B.V. (HVEE) acquired Dowlish Developments Ltd (DD), an accelerator tube manufacturer located in the United Kingdom.

On April 10, 1989, HVEE purchased the General Ionex Analytical Product Group from Genus Inc. based in the United States.

Through this acquisition HVEE positions itself as the largest and most diverse manufacturer of particle accelerators for the scientific and industrial research communities.

The acquired General Ionex (GI) product lines, which include the Tandetron accelerator systems and Model 4175 RBS Analyser, will be manufactured in HVEE's new, well-equipped facility in Amersfoort, The Netherlands.

World wide marketing of all products from HVEE, DD and GI will originate from HVEE Amersfoort with sales and service offices in the USA, Europe and Japan.

After addition of the newly acquired products HVEE's product lines include:

– *Ion Accelerator Systems*
  - Air insulated accelerators up to 500 kV
  - Single ended Van de Graaff accelerators up to 4 MV
  - Tandem Tandetron accelerators up to 3 MV/TV
– *Research ion implanters*
  - Beam energies 10 keV-9 MeV and higher
– *Systems for ion beam analysis*
  - Systems for RBS, PIXE, PIGE, NRA, ERD, MACS and MEIS
– *Components*
  - HV power supplies, electron and ion accelerator tubes, ion sources beamline components, beam monitoring equipment, UHV sample manipulators, etc.

For further information on this transaction and product literature please contact HVEE in Amersfoort/NL.

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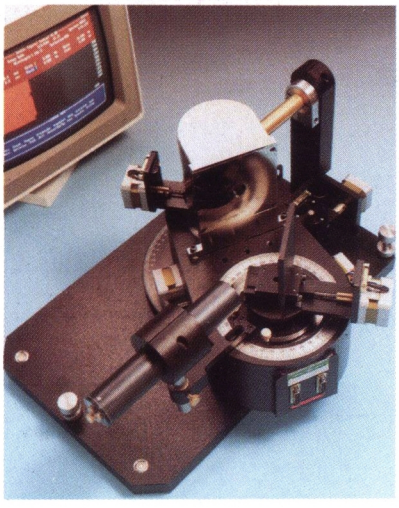
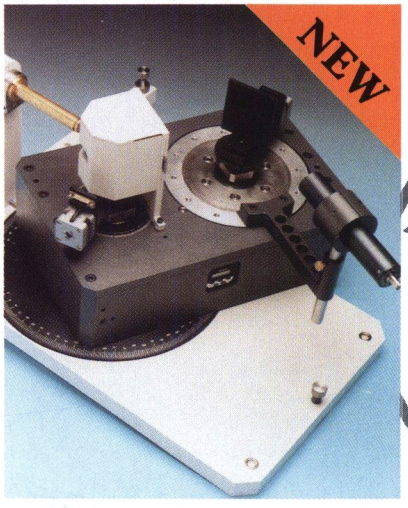
Sales Office for USA & CANADA: Peabody Scientific, P.O. Box 2009, Peabody, MA 01960, USA Phone: (508) 535-0444, Fax: (508) 535-5827

High Resolution X-ray Diffraction Instruments and Software from Bede Scientific

Model 150 Diffractometer

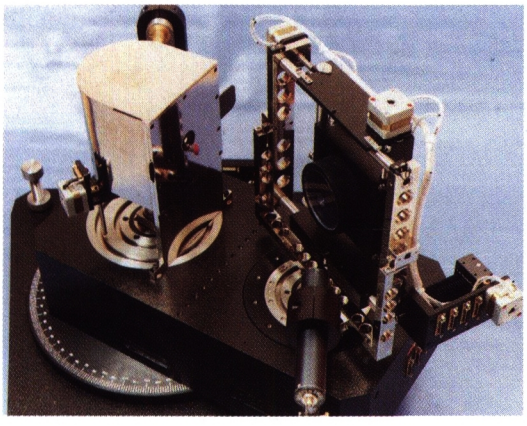


Model 200 Diffractometer

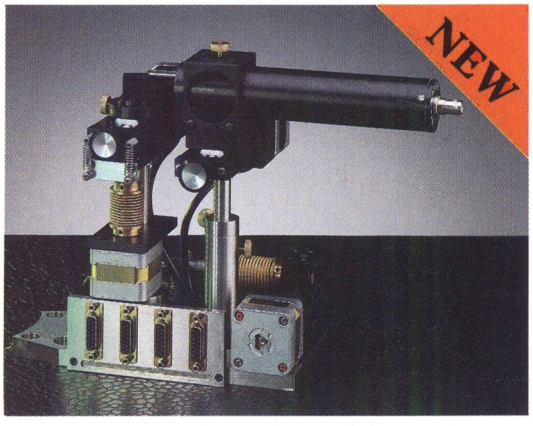


Visit NORTH EASTERN ANALYTICAL CORP at Stand No 807 MRS Boston 26th November – 1st December 1990

Model 300 Diffractometer – X Y Translation Stage

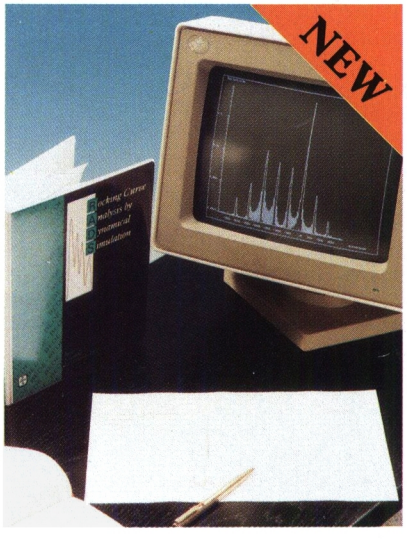


Triple Axis Attachment



QC2 Diffractometer

Rocking Curve Analysis Software (RADS)



For further information on these and other products contact

Bede Scientific

Lindsey Park, Bowburn,
Durham DH6 5PF, England.
Tel: (091) 377 2476. Fax: (091) 377 3013.

NORTH EASTERN ANALYTICAL CORP.

X-Ray & Laboratory Equipment
17 Sherman Road, P.O. Box 25
Millis, MA 02054
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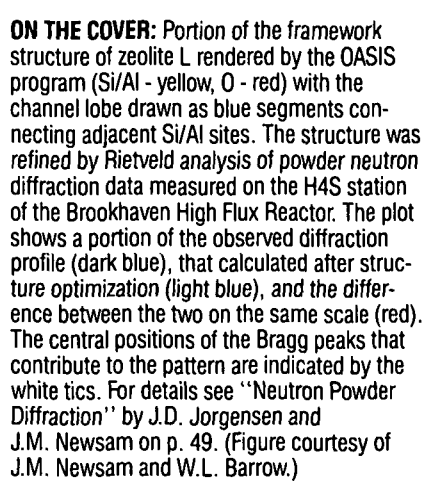

ON THE COVER: Portion of the framework structure of zeolite L rendered by the OASIS program (Si/Al - yellow, O - red) with the channel lobe drawn as blue segments connecting adjacent Si/Al sites. The structure was refined by Rietveld analysis of powder neutron diffraction data measured on the H4S station of the Brookhaven High Flux Reactor. The plot shows a portion of the observed diffraction profile (dark blue), that calculated after structure optimization (light blue), and the difference between the two on the same scale (red). The central positions of the Bragg peaks that contribute to the pattern are indicated by the white tics. For details see "Neutron Powder Diffraction" by J.D. Jorgensen and J.M. Newsam on p. 49. (Figure courtesy of J.M. Newsam and W.L. Barrow.)

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ABOUT THE MATERIALS RESEARCH SOCIETY

The Materials Research Society (MRS) is a nonprofit scientific association founded in 1973 to promote interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes more than 10,000 scientists from industrial, government, and university research laboratories in the United States and more than 25 countries.

The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-discipline professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors two major international annual meetings encompassing approximately 40 topical symposia, as well as numerous single-topic scientific meetings each year. It recognizes professional and technical excellence, conducts short courses, and fosters technical exchange in various local geographic regions through Section activities and University Chapters.

MRS is an Affiliated Society of the American Institute of Physics and participates in the international arena of materials research through associations with professional organizations such as European MRS.

MRS publishes symposium proceedings, the *MRS BULLETIN, Journal of Materials Research,* and other current scientific developments.

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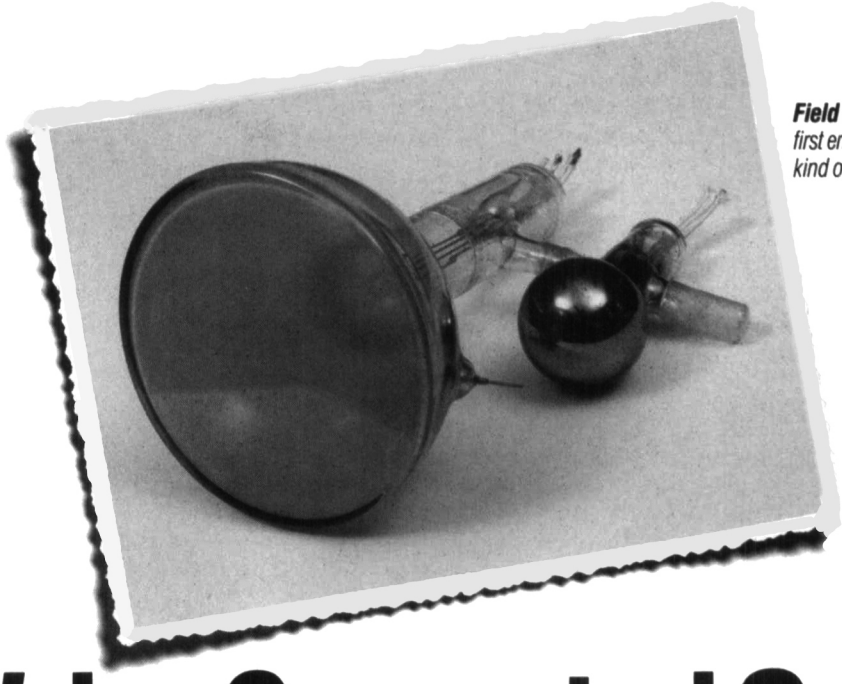

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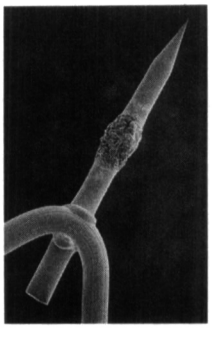

Tip of an an FEI ZrO/W Schottky emission cathode.

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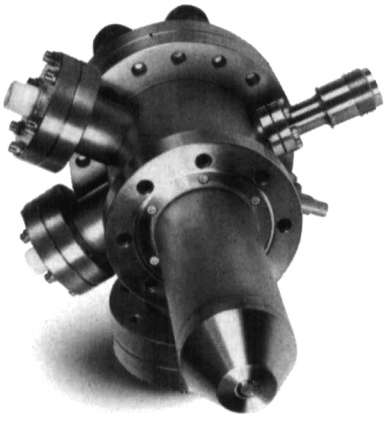

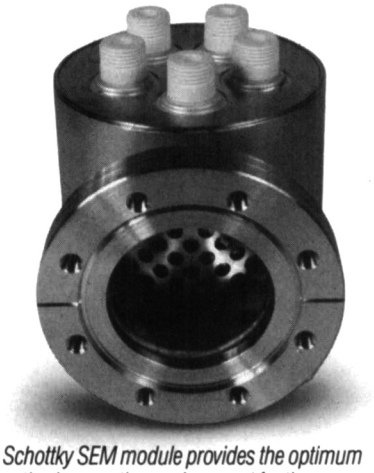

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Please visit Booth No. 509 at the MRS Show in Boston, November 27-29, 1990.

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