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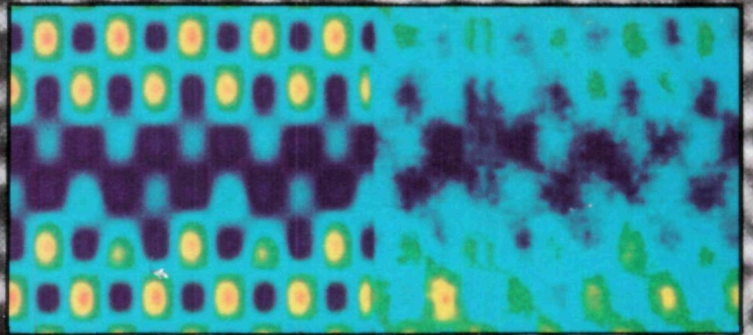
BULLETIN

March 1991

Volume XVI, Number 3

Serving the International Materials Research Community

Imaging in Materials Science



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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static \stat-ik\adj **a.** marked by a lack of movement, animation, or progression **b.** standing or fixed in one place **c.** showing little change **d. a dc magnetometer**



dynamic \dī-'nam-ik\ adj **a.** characterized by continuous productive activity or change **b.** the pattern of change or growth of an object or phenomenon **c.** marked by energy **d. an AC Susceptometer**



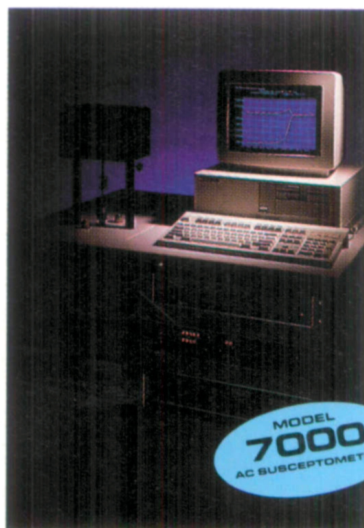
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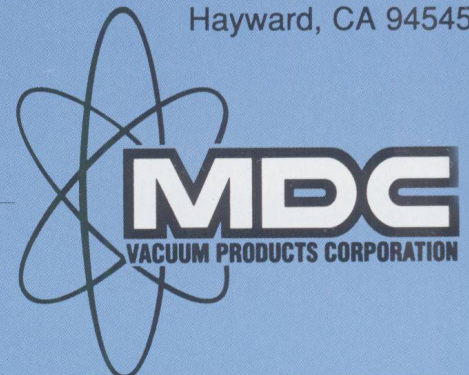
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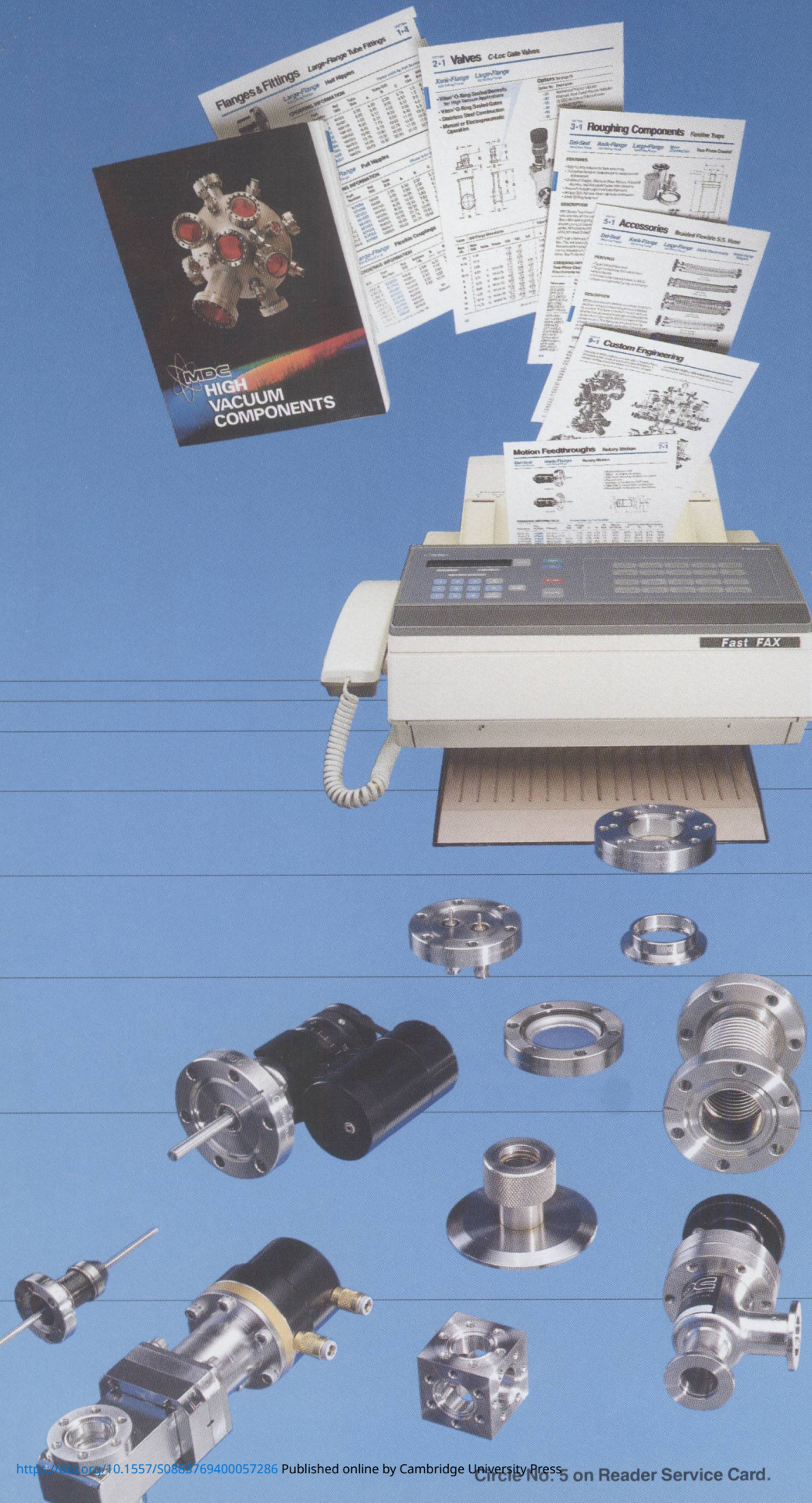
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ON THE COVER: The background is an STM image of (7x7) reconstructed Si(111) islands epitaxially grown on a Si(111)-(7x7) substrate at 450°C. It is from Figure 2b in the article by R.J. Hamers on p. 22.

The upper inset shows an artificially colored [110] Z-contrast STEM image of interfacial ordering of an ultrathin (Si₄Ge₂)₂ superlattice. The right of the inset shows actual data, the left a simulated image. This image is from Figure 8 in the article by D.E. Jesson and S.J. Pennycook on p. 34.

The lower inset, also artificially colored, is a high resolution TEM micrograph of the interface between NiSi₂ and Si. This metal-semiconductor contact forms a Schottky barrier, and its barrier height and atomic structure have been correlated from an analysis of similar images. This micrograph is from Figure 3b in the article by J.M. Gibson on p. 27.

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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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