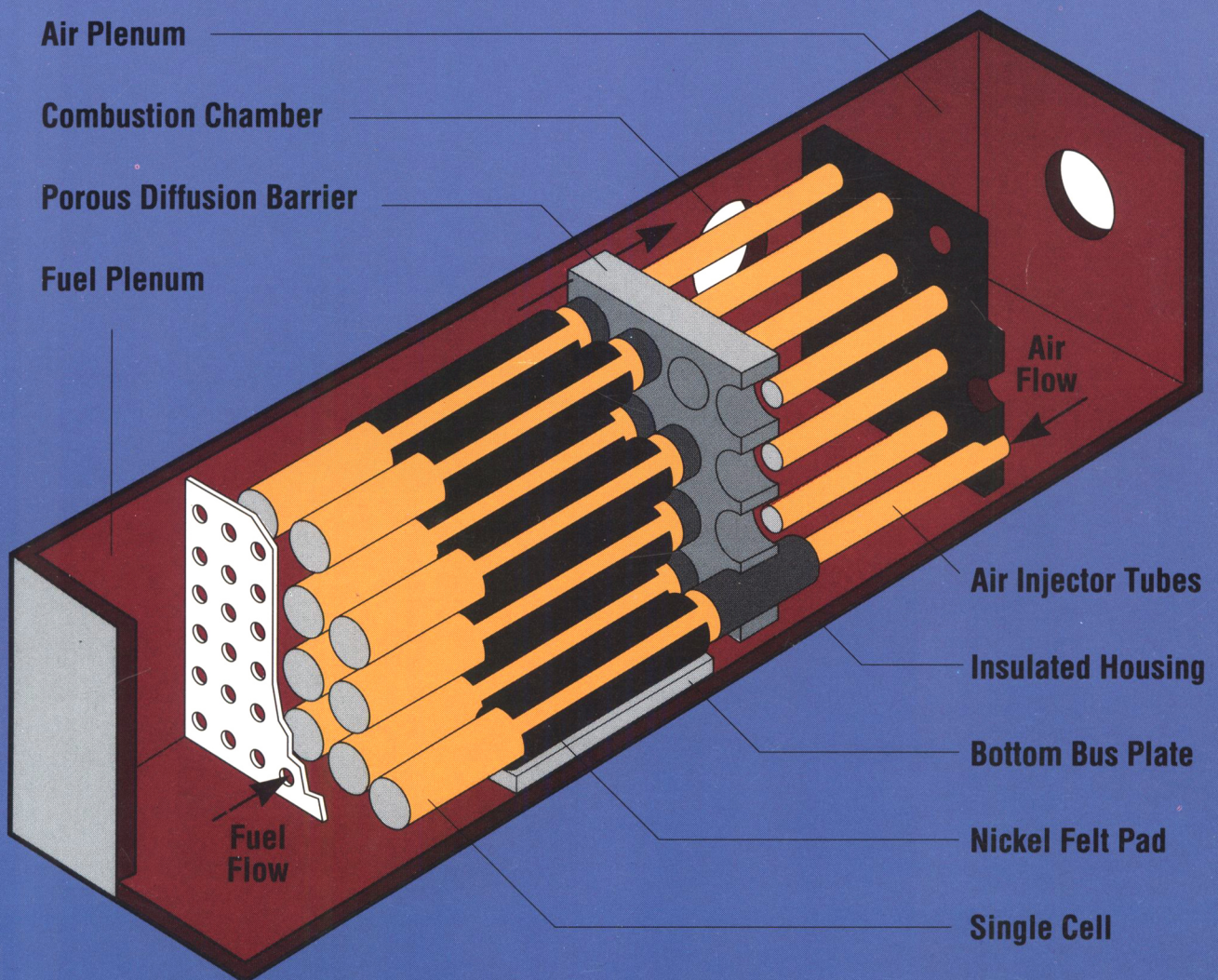


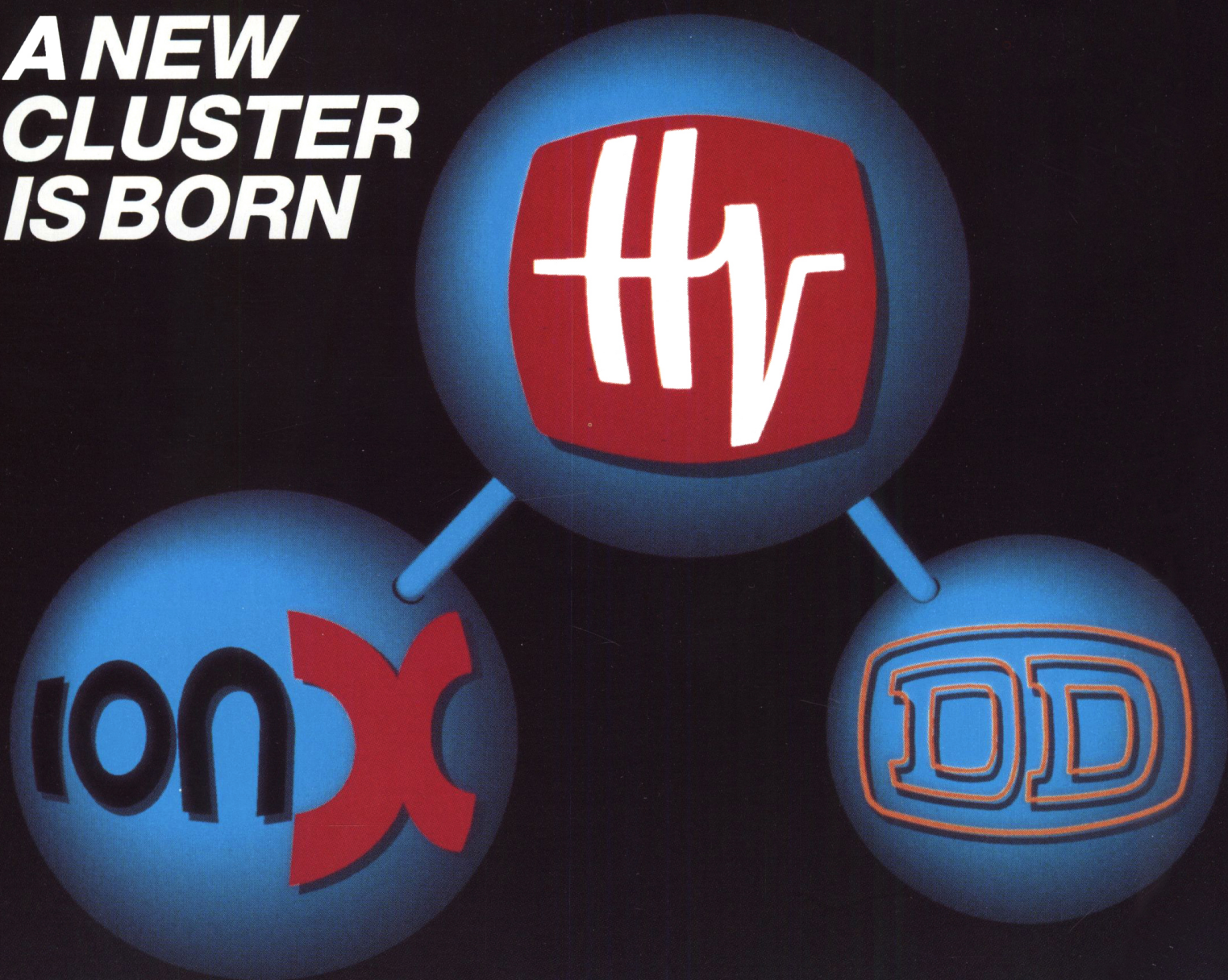
## ► Materials Research Abroad

## ► Fuel Cells





# 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 Dowlisch 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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# MRS BULLETIN

June 1989

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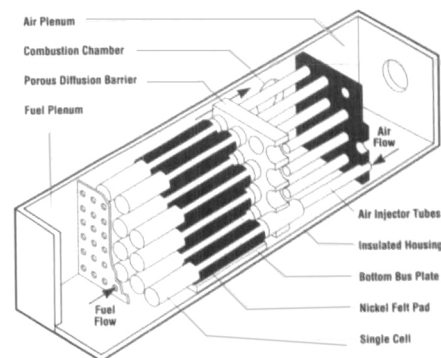
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**ON THE COVER:** Schematic drawing of a solid oxide fuel cell (SOFC) system that incorporates a ceramic solid oxide electrolyte. The mid-1980s witnessed a resurgence of interest in SOFC systems because developments in ceramic technology allowed fabricating monolithic ceramic electrolyte configurations incorporating thin, strong, tough components with high area/volume ratios. Westinghouse has optimized this tubular configuration, originally used in the 1970s. It has been scaled up to produce 5 kW. For more about this topic, see "Materials Engineering and Fuel Cell Development" by B.C.H. Steele on p. 19.

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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 30 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 Student Chapters on university campuses.

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

For further information on the Society's activities, contact MRS Headquarters, 9800 McKnight Road, Suite 327, Pittsburgh, Pennsylvania 15237; telephone (412) 367-3003; facsimile (412) 367-4373.



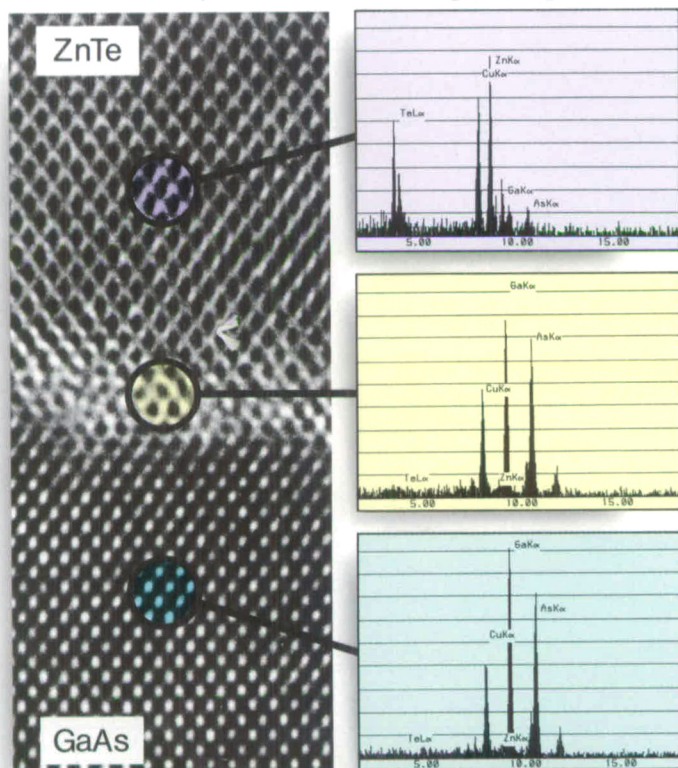
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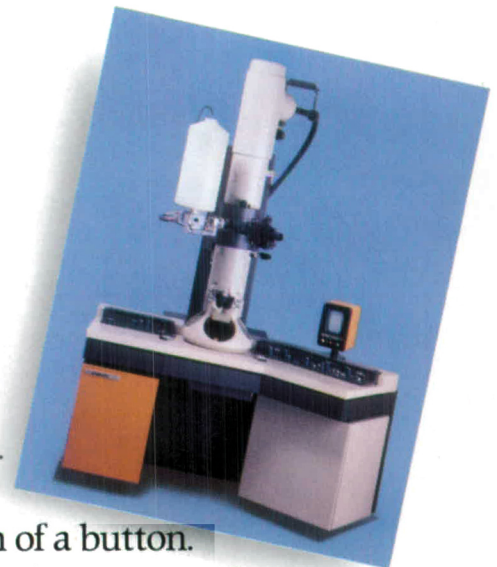
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