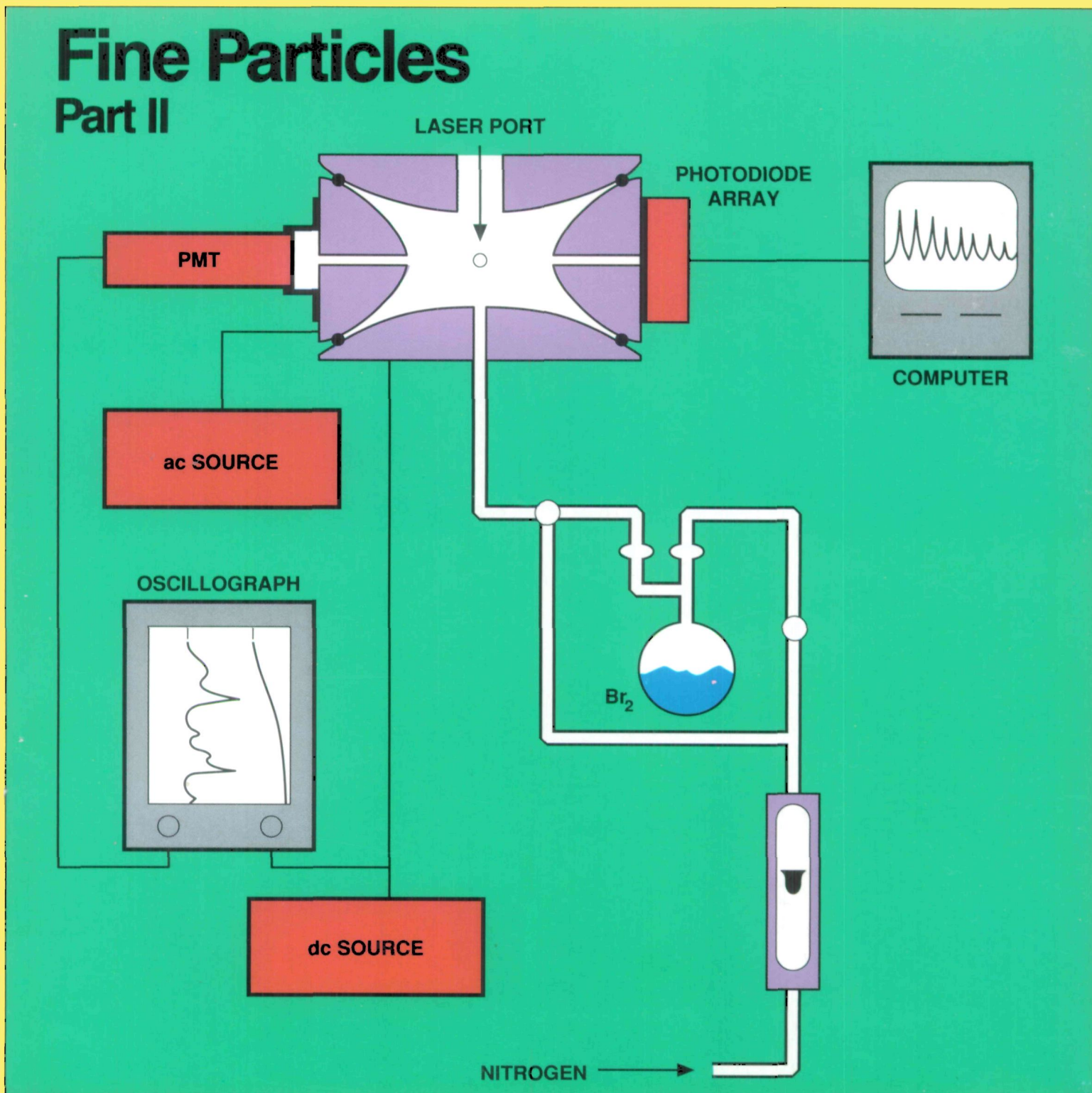
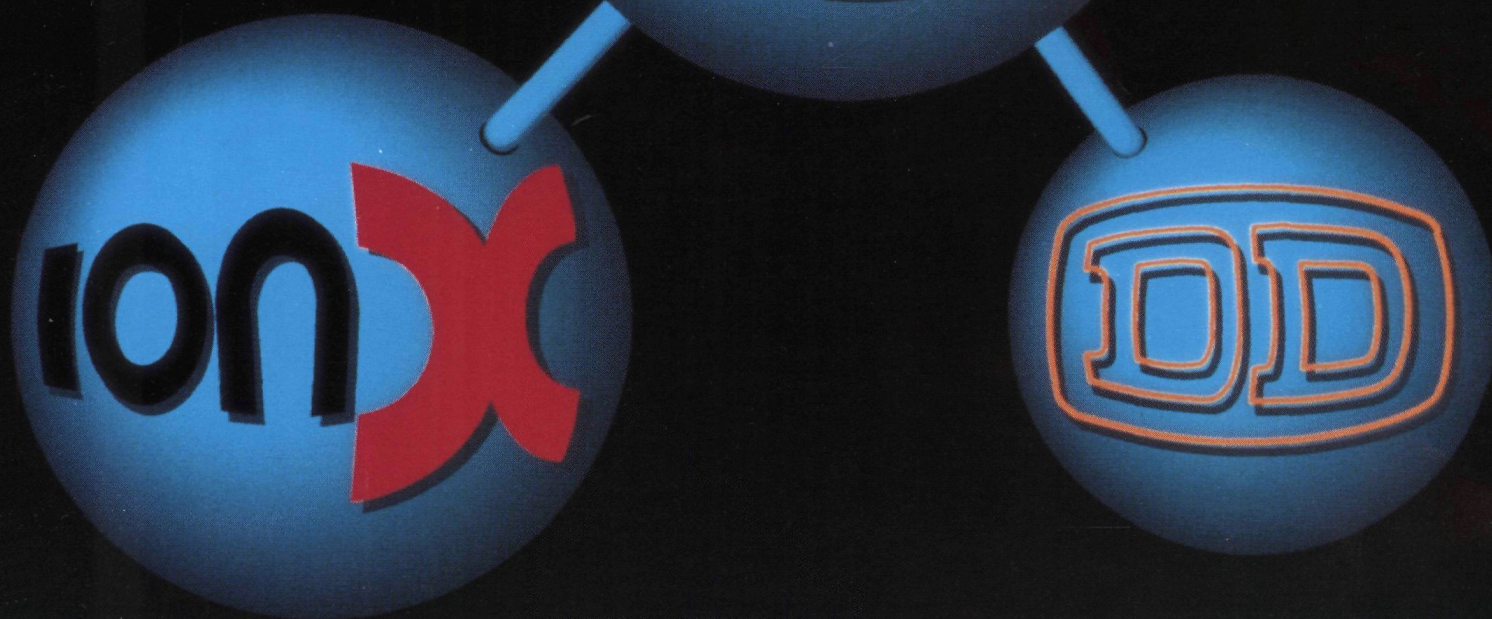


Fine Particles Part II



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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HIGH VOLTAGE ENGINEERING EUROPA B.V.

MRS BULLETIN

January 1990

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FINE PARTICLES Part II

- 16 Fine Particles: Formation Mechanisms and Applications**
E. Matijević, Guest Editor
- 18 Chemical Synthesis of Fine Powders**
J. Livage, M. Henry, J.P. Jolivet, and C. Sanchez
- 26 Chemical Reactions with Single Microparticles**
E.J. Davis and M.F. Buehler
- 34 Processing of Fine Ceramic Powders**
T.A. Ring
- 41 Adhesion of Fine Particles at Solid/Solution Interfaces**
N. Kallay

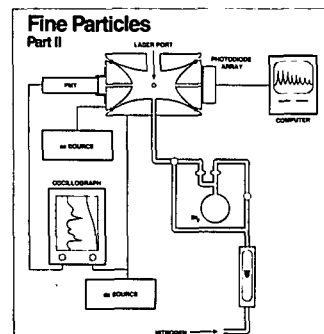
INTERNATIONAL

- 48 1990 E-MRS Spring Meeting Set for Strasbourg**

DEPARTMENTS

- 4 Letter from the President**
- 6 Material Matters**
- 8 Research/Researchers**
- 13 From Washington**
- 15 Research Resources**
- 50 Short Course News**
- 52 Historical Note**
- 55 Book Reviews**
- 57 Calendar**
- 61 Classified**
- 64 Postterminaries**
- 64 Advertisers in This Issue**

MRS BULLETIN



ON THE COVER: Schematic depicts the apparatus used to trap single microparticles for studies of particle properties and their chemical reactions. A small particle is levitated in a laser beam by means of ac and dc electrical fields. Laser light scattering is then used to determine the particle chemistry and physical properties. A similar device was the basis for the 1989 Nobel Prize in physics awarded to Wolfgang Paul (University of Bonn) and Hans Dehmelt (University of Washington) for developing ion traps. For more about how the pictured device was used to trap and study microparticles, see the article by E.J. Davis and M.F. Buehler on p. 26 in this issue.

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MRS BULLETIN

Editor

G. A. Oare
(412) 367-3036

Assistant Editor

F. M. Wieloch
(412) 367-3036

Copy Editor

S. W. Morelli

Design/Production

C. Love, W. Appman
(412) 367-3003

Editorial Assistant

J. Dininny
(412) 367-3036

Advertising and Circulation

M. E. Kaufold
(412) 367-3036

Associate Editor—Europe

I. W. Boyd
University College London
Dept. of Electronic and
Electrical Engineering
Torrington Place
London WC1E 7JE
United Kingdom
01-387-7050
ext. 3956 or 7340

Contributor

K. J. Anderson

Guest Editor

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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 9,500 scientists from industrial, government, and university research laboratories in the United States and more than 25 countries.

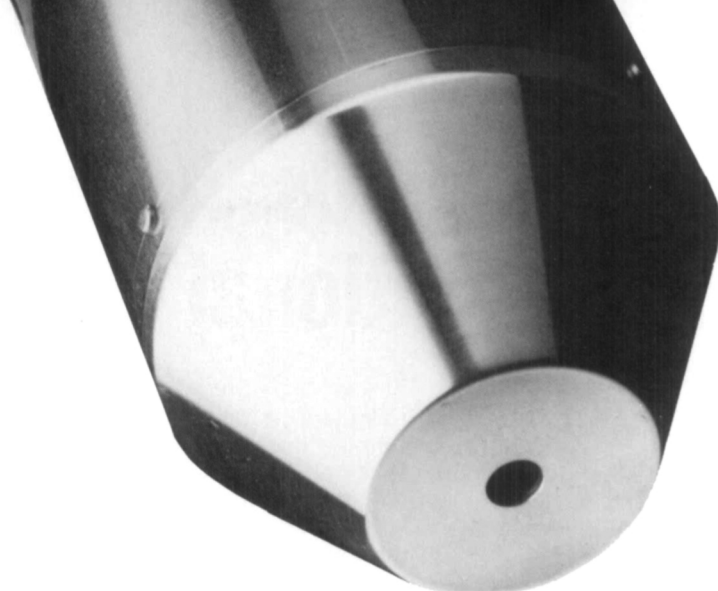
The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-discipline professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors two major 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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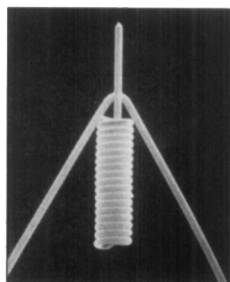


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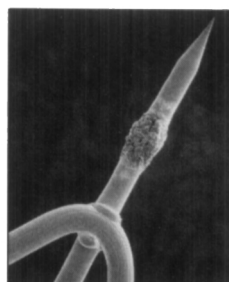
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SEM micrograph of Gallium LMI source.

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