

A New Opportunity for A & D in the Nanotechnology Field AVS 56th Symposium & Exhibition in San Jose, CA

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AVS (American Vacuum Society) International 56th Symposium & Exhibition was held in San Jose, California, USA from November 9 to 13, 2009. The exhibition was held from November 10 to 12, 2009 at the San Jose McEnery Convention Center in San Jose.

Web site: <http://www.avs.org>

This year's symposium program consisted of 126 oral and 2 poster sessions on topics such as fundamental materials and surface science, material characterization, interfacial phenomena, surface engineering, micro / nano-electronics, nano-science and technology, material processing and equipment, and MEMS/NEMS processing and application. There were about 2750 attendees at this year's symposium and exhibition.



About 140 companies participated in the exhibition. There were quality corporate members to support the exhibition, such as Kratos Analytical Limited, which is a wholly owned subsidiary of Shimadzu Corporation of Kyoto, Japan, and Thermo Scientific group exhibitors.



We set up a booth in cooperation with our subsidiary, A&D Engineering, Inc. We would like to thank CEO Teruhisa Moriya , Ms. Masae Jimenez, and Mr. Jaime Valdez at A&D Engineering, Inc. for their support in setting up A&D 's booth at #812.
Web site: <http://www.andonline.com>



This was the first opportunity for A&D Company Limited to participate in this exhibition and we displayed the following panels and promoted EB / FIB related products using 3 LCD

displays.

- Electron Beam (EB) column poster
- Focused Ion Beam (FIB) column poster
- A/D D/A Converter (DAC) poster

We also displayed a panel to promote the newly developed FIB-TOF-SIMS (Focused Ion Beam Time-of-Flight Secondary Ion Mass Spectrometer) from Toyama Co., Ltd., which incorporates A&D 's 30 kV Focused Ion Beam. The apparatus is equipped with a high lateral resolution ToF-SIMS and SEM function for seeking analytical targets. This system can also be utilized for surface analysis at the nano-level, and therefore can be used for defect analysis in semiconductor fields.



Newly Developed!!

Pioneering new Horizons in Science

TOYAMA

FIB-TOF-SIMS

Focused Ion Beam Time-of-Flight Secondary Ion Mass Spectrometer

Features

- Both SEM and FIB analyze the same position, which makes it possible to obtain SIMS without damaging the surface.
- Sample processing software is included so operation is seamless from cutting to analyzing the sample.
- The five-axis, PC-controlled UHV manipulator ensures flexible processing and analysis.
- The low energy electron beam gun neutralizes the sample to enable direct analysis of dielectric material.
- Cooling and heating ranges from -120°C to 900°C .
- Extension port for an ion gun (ICF114).
- Uses post laser ionization processing.

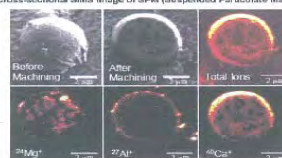
Please ask TOYAMA to measure test samples!

TOYAMA Co., Ltd.

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E-mail: salesdept@toyama-jp.com URL: <http://www.toyama-jp.com>



Example
Cross-sectional SIMS image of SPM (Suspended Particulate Matter)

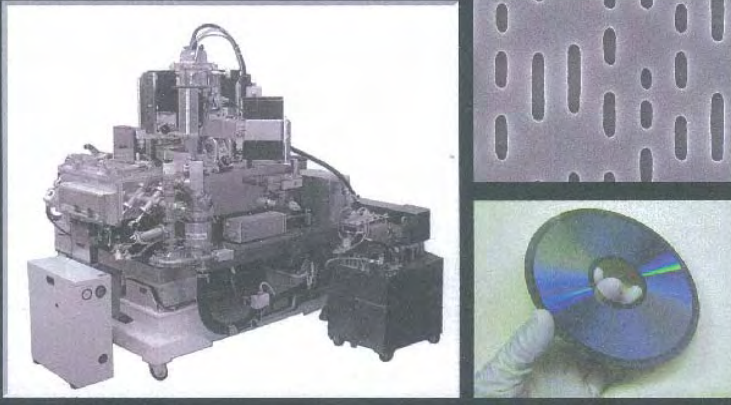


We also introduced products from our partner manufacturer, Pioneer FA Corporation and Pioneer Corporation. Pioneer has been developing Electron Beam Recorders (EBR) for high-density storage media since 1993. The EBR-301 model is equipped with a 50 kV electron beam for optical discs and next-generation optical discs. The EBR-401 model is equipped with a 100 kV electron beam and supports the development of discrete track and

bit patterned recording.

Pioneer

EBR-301
supports development of next generation optical disc

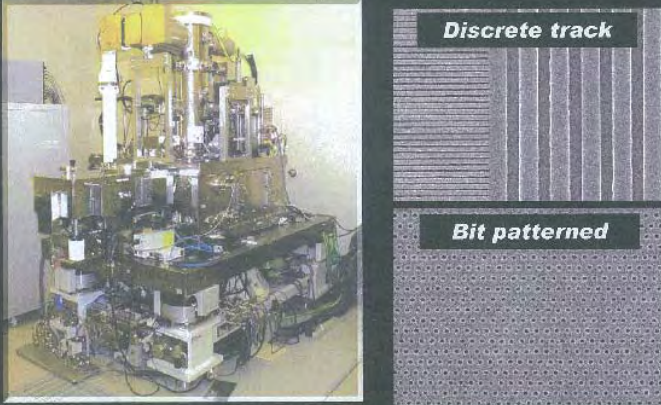


The image shows the Pioneer EBR-301 machine on the left, which is a complex piece of industrial equipment with various components and cables. To the right, there are two inset images: the top one shows a close-up of a disc surface with a grid of vertical oval-shaped patterns, and the bottom one shows a hand holding a disc with a blue laser beam reflecting off its surface.

A&D EB is employed
AVS 56th

Pioneer

EBR-401
supports development of discrete track and bit patterned recording



The image shows the Pioneer EBR-401 machine on the left, a large industrial device with many wires and components. To the right, there are two inset images: the top one is labeled "Discrete track" and shows a grid of vertical lines, and the bottom one is labeled "Bit patterned" and shows a dense grid of small dots.

A&D EB is employed
AVS 56th

Thank you very much to all who visited our booth at the symposium and requested our catalogues. See you next year at the AVS 57th Symposium & Exhibition in Albuquerque, NM.