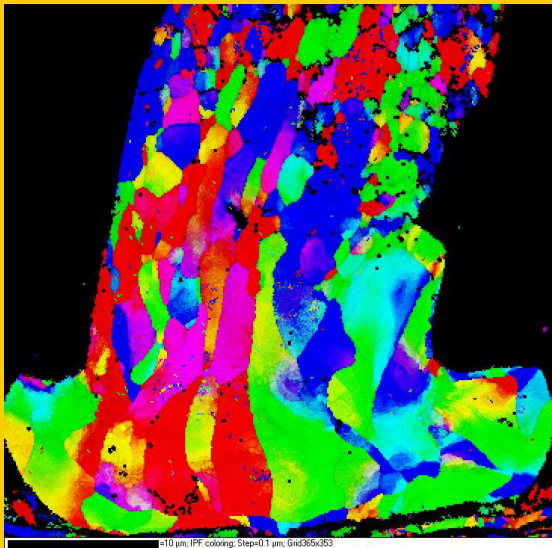


JEOLink

JEOL USA SEM & TEM News

November 2008

Extreme Image



110 µm, IPF coloring, Step=0.1 µm, Grid=35x35

EBSDF map of wire bond cross section prepared with JEOL CP Cross Section Polisher.

1st place winner of the 2008 Electron Device Failure Analysis Society (EDFAS) Photo Contest for false color images.

New David H. Murdock Research Institute Specifies JEOL Cryo-electron Microscopes

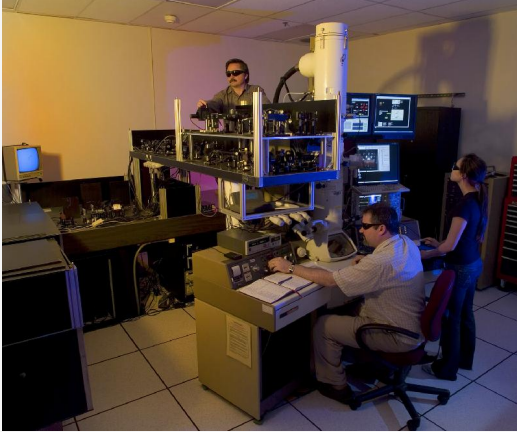


Two of JEOL's top-of-the-line cryo-electron microscopes will be key instrumentation for multi-disciplinary scientific advances in a new \$1 billion research center in Kannapolis, North Carolina. The [David H. Murdock Research Institute \(DHMRI\)](#) has selected JEOL's high resolution electron microscopes for its world-class laboratory, which will serve as a central resource to multiple university research institutes and private companies.

Announced at the 34th International Symposium for Testing and Failure Analysis (ISTFA 2008).

JEOL in the News

A Snapshot of the Transformation of Nanoscale Structures



LIVERMORE, Calif. - Researchers have achieved a milestone in materials science and electron microscopy by taking a high-resolution snapshot of the transformation of nanoscale structures. Using the Lab's Dynamic Transmission Electron Microscope (DTEM), Judy Kim and colleagues peered into the microstructure and properties of reactive multilayer foils (also known as nanolaminates) with 15-nanosecond-scale resolution.

[Read the full story>>](#)

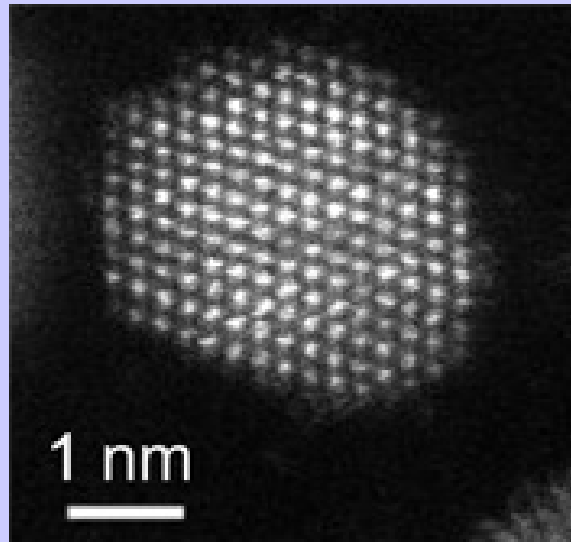
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The vision and impetus behind this collaborative research institute is that of David H. Murdock, Chairman and sole owner of Dole Food Company, Inc., a Fortune 500 company.

[Read the full story>>](#)

University of Texas Team Takes First Atomic Scale Compositional Images of Fuel Cell Nanoparticles



Aberration-corrected Scanning Transmission Electron Microscopy image of a Pt₃Co catalyst Nanoparticle for Fuel Cells. Image taken at the JEOL FS 2200 STEM located at Oak Ridge National Laboratory (courtesy of P.J. Ferreira, Y. Shao-Horn and L.F. Allard).

In a step toward developing better fuel cells for electric cars and more, The University of Texas at Austin, together with MIT and the Oak Ridge National Laboratory, have taken the first images of individual atoms on and near the surface of nanoparticles key to the eco-friendly energy conversion devices. Using a new technique known as aberration-corrected Scanning Transmission Electron Microscopy, Prof. Ferreira, Prof. Shao-Horn and Dr. Larry Allard of Oak Ridge National Laboratory identified specific atomic structures near the surface of such catalyst particles.

See Us at These Upcoming Meetings and
Tradeshows



Fall MRS
Boston, MA
Dec 2-4, 2008

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JEOL USA Mission Statement



Mission Statement

Achieve customer fulfillment and loyalty by delivering outstanding technology and superior support while maintaining a leadership position in the industries and institutions that we serve.

[Read the full story >>](#)

Pioneer in Materials Science and President of Tohoku University Visits JEOL USA



Prof. Akihisa Inoue, President of Tohoku University (middle) with S. Watanabe, Chairman of JEOL USA Board of Directors (left) and G. Kurihara, President of JEOL, Ltd. (right) at JEOL USA in Peabody, Mass.

JEOL USA hosted a special visit recently from renowned materials scientist Dr. Akihisa Inoue, President of Tohoku University in Sendai, Japan.

For more than three decades, the relationship between JEOL and Tohoku University, one of the world's top materials science schools, has contributed to research and the subsequent development of world-leading technologies in materials science.

Dr. Inoue's research in a new class of bulk amorphous metals has made a major impact on subsequent research into new materials around the world. This year he was one of only nine foreign associates to be elected to the U.S. National Academy of Engineering in 2008 for "outstanding achievements and international leadership in the design of advanced bulk metallic glasses and other meta-stable materials."

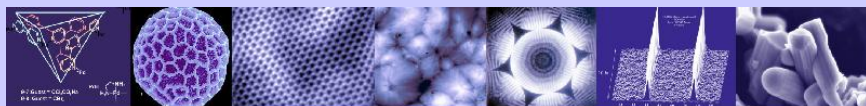
He has also been named the recipient of the APS 2009 James C. McGroddy Prize for New Materials Award. The award will be shared with co-researcher Dr. William L. Johnson of the California Institute of Technology, in recognition of their project on development of bulk glassy alloys through slow cooling.

[More about Dr. Inoue's visit >>](#)

SEM Specimen Holders



JEOL USA has the widest offering of sample holders for SEMs. Follow the link above to our Parts Online pages to see the selection. We also work closely with our customers when they have unique requirements. For more information, contact us at salesinfo@jeol.com.



Microscopy Seminars Coast to Coast *University of Michigan Draws Large Attendance*



"The Changing World of Electron Microscopy" seminar was hosted by The University of Michigan's North Campus Electron Microbeam Analysis Laboratory on October 21st. The seminar, run by JEOL USA and EDAX, Inc., and was one the 2008 series of workshops offered coast to coast this fall, with collaboration between JEOL and several key suppliers of SEM and TEM accessories. The workshops are tailored to the interests of the audience. Popular topics have been:

- Applications of SEM in the IC Industry
- Preparing Difficult Cross Sections
- Low Vacuum SEM
- Contemporary CL
- Low kV Backscatter Imaging and Microanalysis
- State of the Art Dual Beam and TEM in a High Throughput Failure Analysis Environment

Seminars have been held in California, Minnesota, Massachusetts, Florida. Upcoming seminars include one at Rice University in Texas and University of Southern California.