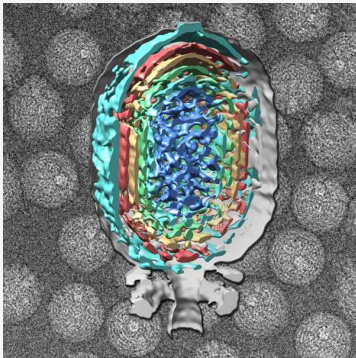


JEOLink

JEOL USA SEM & TEM News

February 2009

Extreme Image



What is the molecular mechanism of DNA packaging in the confined space of a virus capsid? Comolli et al. (J. Virology 371:267) found, in 3D reconstructions from frozen-hydrated specimens, that the double-stranded DNA tends to be in concentric layers, or shells, although there is no fixed packaging pattern.

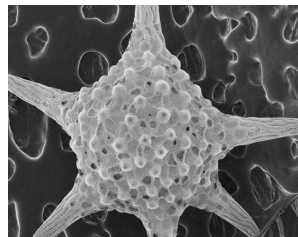
(Courtesy of Life Sciences Division, Lawrence Berkeley National Laboratory)

PITTCON
CONFERENCE & EXPO **2009**
CHICAGO • MARCH 8-MARCH 13

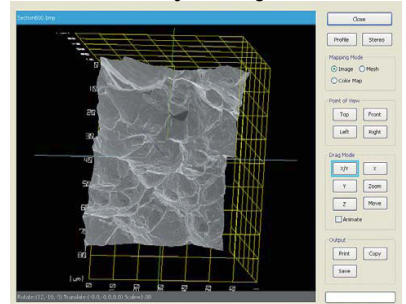
See Us at Pittcon (booth 3948/4048)

We're celebrating our 60th anniversary this year, and so is Pittcon!

JEOL USA heads to Chicago in March to the 60th annual Pittcon conference and exhibition. As always, the JEOL booth will be the site for demonstrations of new instruments. The new JEOL family of tungsten SEMs will be represented by the popular [JSM-6610LV](#) with an all-new design and a high resolution of 3.0nm at 30kV. The JSM-6610LV delivers amazing clarity of the finest structures and features 3D measurement from stereo images. Dual live image display of the secondary electron image and a backscattered composition image allow the user to contrast and compare specific details.



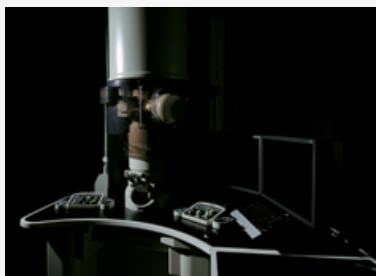
Nikon will be joining us to demonstrate the [NeoScope](#) benchtop SEM - the only one in its class to offer selectable settings for high and low vacuum and acceleration voltage. Nothing could be simpler to use, or more economical, for your SEM needs.



On the [analytical instrumentation](#) side, we'll be introducing a new time-of-flight mass spectrometer as well as demonstrating DART for direct analysis in real time, and our powerful NMR software, DELTA.

We'll also have some announcements to share during our Press Conference on Tuesday, March 10, and throughout the show. Please join us - booth #3948-4048 - or contact your JEOL sales representative with any questions or to reserve a demonstration time.

New S/TEM



The new atomic resolution microscope from JEOL.

Breakthrough technology.

All new design.

Ask your JEOL representative for details or [send us an email](#) and we will contact you.

JEOL USA in the News

[UTSA Sees Big Things Ahead with Microscope](#)

Upcoming Meetings & Tradeshows

[Pittcon](#)
Booth #3948/4048
Chicago, IL
Mar 9-12, 2009

Nikon Instruments will demonstrate the NeoScope tabletop SEM in the JEOL booth. We will demonstrate the JSM-6610LV SEM, the AccuTOF-DART mass spectrometer, and Delta NMR software.

[Contact us for demonstrations!](#)

[Don't miss The Japan Symposium](#)



Japan Symposium

JEOL will also be presenting two papers during the Japan Analytical Instruments Manufacturers' Association (JAIMA) conference on Tuesday, March 10. "Development of a NMR-Chip for On-Site Monitoring of Chemical Synthesis" will be presented at 11:10 a.m. by Dr. Yutaka Takahashi, and "An Electron Microscope for Nanotechnology: To See Something Small You'll Need Something Big," will be presented at 3:00 p.m. by Dr. Michael Kersker.

To see the program, [click here>>](#)

February Focus on Forensics

At the American Academy of Forensic Scientists (AAFS) meeting on Wednesday, February 18th, 2009 in Denver, Colorado, JEOL demonstrated the CarryScope, a mobile, self-contained SEM for transporting lab-to-lab. Additionally, JEOL's unique mass spectrometer, AccuTOF-DART, was highlighted.

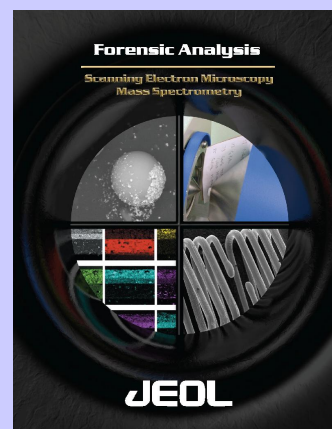
JEOL was pleased to note that the winners of the Emerging Forensic Scientist Awards presented during the meeting have ties to JEOL.



Heidi (Barron) Nawrocki, who recently graduated with a Master of Science degree in Chemistry from [West Virginia University](#), was awarded for her work using cathodoluminescence to categorize glass shards by color. The resulting data makes it possible to quantify the color using the CIELAB color system.

"It's a quantitative color similar to what they already have for fibers and paints," she explained. "You might see something as light green and I see it as dark green - this system quantifies the color." The precise, numeric identification of glass colors sets the foundation for a data base that will be instrumental in forensic analysis of fragmented glass collected from crime scenes, including drinking glasses, windows, and headlights. [Read the full story >>](#)

For more information on JEOL instruments for forensic science, [download the new brochure](#) or [visit the web page](#).



Tuesday, March 10
8:30 - 4:45

Featuring from 3:00 - 3:45
Dr. Michael M. Kersker
presenting: "An Electron
Microscope for
Nanotechnology: To See
Something Small You Need
Something Big"

Florida AVS
Mar 9-10, 2009
Orlando, FL

Spring ACS
Booth #1724
Mar 22-25, 2009
Salt Lake City, UT

MRS Spring
April 14-16, 2009
San Francisco, CA

Texas Microscopy
Society Spring Mtg.
April 23-25, 2009
Westlake, TX

New England
Society for
Microscopy
May 1-2, 2009
Woods Hole, MA

Quick Links

JEOL News Magazine
July 2008 - Volume
43 (Note: requires online
registration to download).

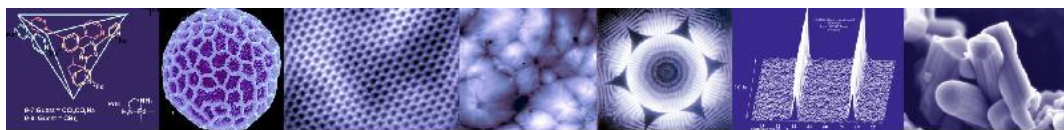
Invitation to the SEM
World

Energy Table for EDS
Analysis

A Guide to Scanning
Microscope
Observation

JEOL USA Online
Products
Resources

SEM/TEM Image Gallery



The Changing World of Electron Microscopy Seminars

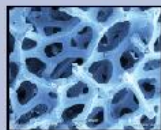
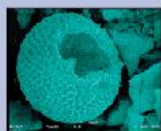
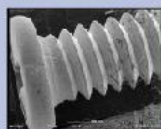
Drexel University's Material Science & Engineering Dept., JEOL USA, Oxford Instruments and Nikon Instruments will present several pertinent topics on "The Changing World of Electron Microscopy" on March 19th, 2009, to be held at Drexel University in Philadelphia.

Topics include "The New Face of In Situ TEM: Varied Environments Spanning Multiple Time Scales," presented by Prof. Mihtra Tahiri of Drexel University.

JEOL is pleased to have offered a successful and well-attended series of seminars throughout the United States over the past year. To learn more about this upcoming seminar, [contact us.](#)

Fast, Fit, Flexible...Fantastic

a high resolution SEM that fits on your desk



Contact Nikon >

NeoScope Benchtop SEM

- 10-20,000X
- point and shoot
- <3 minutes

[Cross Section Image Gallery](#)
[Tomography](#)

[Past Issues](#)



[Contact Us](#)

high and low vacuum

Contact JEOL to schedule a demo at Pittcon 2009, booth 3948, or stop by!

Contact Nikon for sales information.