



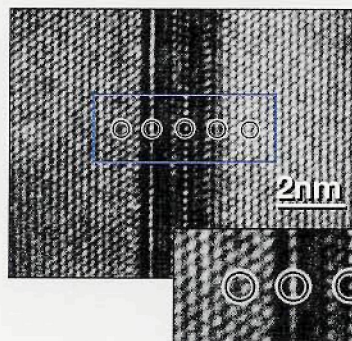
Sights Unseen.

With the New JEM-2010F Field Emission Electron Microscope You'll See It ... If It's There.

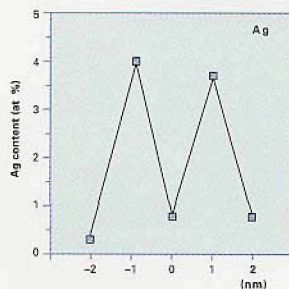
From JEOL...the newest generation of precision equipment that permits unprecedented resolution in 3-dimensional, subnanometer analysis of microstructures. Featuring user-friendly operation and long-term stability, the JEM-2010F also offers:

- Schottky Emission: High Current High Brightness
- High Probe Current: 0.5nm Probe with 100 pA Current
- High Resolution: Information Limit 1.4Å, Scherzer 1.9Å
- Holography: Option Available
- STEM Resolution: 0.2nm Magnification: 8MX

Discover the JEM-2010F and visit sights previously unseen.



Al-Cu-Mg (Ag) precipitate in aluminum showing silver segregation to interface.



Data courtesy of Dr. James M. Howe, Department of Materials Science & Engineering, University of Virginia, U.S.A.



JEOL USA, Inc., 11 Dearborn Road, Peabody, MA 01960
Tel: 508-535-5900 Fax: 508-536-2205 e-mail: eod@jeol.com

SEEING IS BELIEVING.

SEEING EVERYTHING IS KNOWLEDGE

Lumina™ is the first and only integrated microscope that lets you see your sample across the complete optical spectrum and beyond. Use the conventional inverted optical microscope to find the area of interest of your sample. Then switch to Lumina's near-field (NSOM) mode and view the exact same area, but in the 50nm resolution range. Since both modes employ the same optics, you can use the same filters, beam splitters, and detectors. Now, for even more information, change to the AFM scanning mode and get high-resolution topographic and surface-force data about your sample. And do all of this, everything, with one integrated instrument.

For the first time, you *will* see everything. No mid-resolution range missing. Nothing assumed. Nothing left out. And once you've seen everything, you're certain to know a whole lot more than you did.

To learn everything about Lumina, call us today. We'll rush product information to you that's guaranteed to open your eyes.



LUMINA

 **TOPOMETRIX**
VISUALIZING THE MICRO WORLD

5403 Betsy Ross Drive, Santa Clara, CA 95054 • Tel (408) 982-9700 • Fax (408) 982-9751
<http://www.topometrix.com>

© TOPOMETRIX CORPORATION 1996

Circle Reader Inquiry #1

Far-field

A phase-contrast image of polytene chromosomes obtained with the inverted optical microscope.



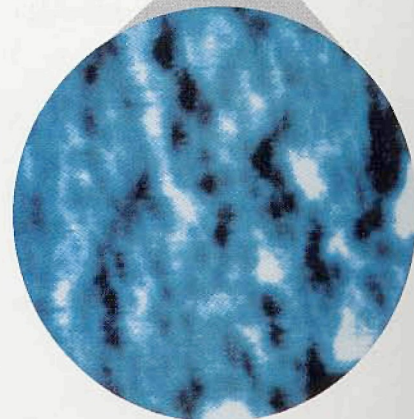
AFM

An atomic force image of the circled area in the inverted optical microscope view shows surface topography over a 30µm area.



Near-field

An 8µm, NSOM transmission image magnifies the circled area of the AFM image, showing more transmitted light in the brighter areas.



Images courtesy of Sid Ragona and Phil Haydon, Laboratory of Cellular Signaling, Department of Zoology and Genetics, Iowa State University