

FEI (NASDAQ: FEIC) and **The Scripps Institute** have announced that the **Leginon™** software system, an advanced solution for automated control and image acquisition from a transmission electron microscope (TEM), will now be available to the global scientific community as open source code. The Leginon software was developed by Scripps with funding from the National Center for Research Resources, National Institutes of Health and has been marketed by FEI since 2003. It is most commonly used for Single Particle Analysis (SPA) applications, where three-dimensional models of nanoscale particles are created.

FEI **Sponsors Video Games Designed to Be Fun While Inspiring the Next Generation of Scientists**. As governments and corporations around the world continue to increase investments in nanoscale research and development, there is an alarming decline in the number of students who choose to pursue studies in science and technology. Educators and government officials, as well as organizations that will require increased access to highly-educated, technical employees in the next few decades agree that innovative approaches are needed to attract today's students back to the sciences.

FEI has introduced the next generation of its popular **Vitrobot™ cryo sample preparation tool**, the Vitrobot Mark IV. The Mark IV is an easy-to-use system that features a newly-designed touchscreen user interface operated under a Linux operating system and robotics that ensures high-quality, reproducible freezing of samples. Automated transfer from the vitrification medium into the liquid nitrogen atmosphere offers more consistent and higher yield sample throughput.

FEI has announced the availability of an all-new software package known as the **microValidator™**. This unique software is designed to deliver rapid validation of FEI's scanning electron microscope (SEM) and X-Ray Microanalysis (EDS) systems used for automated particle and phase search analysis. Such applications are utilized to study gun shot residue (GSR) and for mineral liberation analysis (MLA) in the forensics and mining industries, respectively.

FEI introduced its latest and most powerful **scanning electron microscope (SEM), the Nova NanoSEM™ 30 series**. This high-end, versatile field emission SEM series features new low kV performance for enhanced surface characterization, high current for compositional analysis capabilities and the world's only high-resolution operation in low vacuum to characterize uncoated and even insulating samples.

Carl Zeiss SMT Inc., has successfully **moved its North American headquarters from Thornwood, N.Y. to a new facility in Peabody, Mass.**, located close to the city of Boston. The move goes along with the operational integration of ALIS Corporation, Peabody, Mass., a technology start-up developing Helium ion microscopy, which was acquired by Carl Zeiss SMT in 2006. The newly formed North American headquarters cover the full range of operations. This includes research and product development, manufacturing and application development as well as sales, system demonstration and service of Carl Zeiss SMT's market leading product portfolio of nanoscale imaging, structuring and analysis solutions.

Carl Zeiss SMT Inc., announced that it has successfully **shipped its first ORION™ Helium ion microscope to the National Institute of Standards and Technology (NIST)** in Gaithersburg, MD. The microscope, which has already achieved site acceptance, uses proprietary new technology developed by ALIS Corporation, a Peabody (MA) based start-up company acquired by Carl Zeiss SMT in 2006.

Carl Zeiss SMT presents at Microscopy & Analysis 2007 its newly developed **"ULTRA plus" Scanning Electron Microscope (SEM)** with unique technology for charge compensation of non-conductive samples. For the first time, high resolution, stable and noise-free images from samples such as ceramics, polymers, fibre optics and many more can be obtained even at high acceleration voltage and high probe current. This technological advancement was specifically developed for satisfying increasing customer demands in analytical research, development and

testing of advanced materials. For the purpose of charge neutralization, a proprietary gas-injection system enables for a local flush application of an inert gas. Thereby, electrostatic charging of samples is neutralized and detection of secondary electrons (SE) as well as backscattered electrons (BSE) becomes feasible. Numerous applications in life sciences, materials analysis and semiconductors will profit from this development.

Carl Zeiss SMT officially **introduces its world-wide unique monochromator module (MC) for its LIBRA® 200 kV TEM series systems**. The highly innovative and patent protected ZEISS monochromator enables the reduction of the energy width of primary electrons to less than 0.2 eV and thereby allows for highest resolution Electron Energy Loss Spectroscopy (EELS).

Carl Zeiss SMT presents at Microscopy & Analysis 2007 the newly designed and substantially improved **EVO® MA and EVO® LS microscope series**. These scanning electron microscopes (SEM) are introduced to meet the ever increasing application demands in Materials Analysis and Life Sciences. Building upon the foundations laid by the successful EVO® series, the MA and LS series reveal application orientated imaging solutions while raising ease of use and sample navigation to a new level within a stylish user environment. With SmartSEM™ as an integral part of the EVO® solution offering, the user interface caters to all skill levels to provide a productive user experience.

The Nano Technology Systems Division (NTS) at Carl Zeiss SMT will introduce the new **CENTRA™ 100, a transmission electron microscope with up to 100 kV accelerating voltage**, at the MC Saarbrücken. Specially designed as an sophisticated "imaging system", the highly compact and robust instrument offers maximum resolution down to 0.2 nm. The ease-of-use and fast specimen exchange capability make this microscope particularly well-suited for biomedical or clinical laboratory environments. It also features low operating costs, high specimen throughput, a very attractive price/performance ratio and low space requirements thanks to the small footprint. See <http://www.smt.zeiss.com/> for more information.

Oxford Instruments NanoAnalysis is pleased to announce the launch of a **new 50mm² Si(Li) TEM EDS detector** for users who want to maximise solid angle or minimise counting time. Collection efficiency of the X-ray detector is an important parameter in EDS analysis on an Analytical Transmission Electron Microscope (ATEM) since it determines the rate of signal acquisition. The larger crystal size in the new 50mm² detector results in a two to three-fold increase in solid angle and hence collection efficiency compared to standard 30mm² detectors. The main benefits to the customer of this new detector are: Larger Solid Angle, Higher Collection Efficiency, Decreased Counting Time, and the Ability to Analyse Smaller Structures.

BudgetSensors®, a Bulgarian manufacturer of silicon and silicon nitride probes, as well as AFM accessories for Atomic Force Microscopes (AFM), announces a **new AFM probe type - the Soft Tapping Mode AFM Probes Tap150**. Similar to Tap300 AFM probes, the new Tap150 AFM probes are suitable for soft tapping mode measurements with a lower resonance frequency of about 150 kHz and a force constant of about 5 N/m. However, FREE SAMPLES may already be ordered via BudgetSensors' local distributors and over sales@budgetsensors.com.

Detectors, Detectors, Detectors, This year, 2007 marks the 10th year anniversary of **Evex's** implementation of solid state - liquid nitrogen free detector technology for electron microscopy. "Detector technology has come along way over the past decade, and Evex will continue to push the detector technology envelope so electron microscopist can perform better science and that is the reason for EvexConcerto", said Claudio Tarquinio of Evex. The EvexQDD Violin x-ray detector is joined by a multitude of EvexQDD Violin detectors to form the **"EvexConcerto"**. EvexConcerto consists of Evex NanoAnalysis software (spectroscopy, imaging, elemental mapping software) as the conductor coordinating 2 to 4 x-ray detectors

configured on the electron microscope column to optimize spectral collection. Bulk material analysis, low voltage SEM operation, and high speed elemental mapping all benefit from having a multitude of detectors. Call Evex for more information (609) 252-9192 or visit them on the web at <http://www.evex.com>

XEI Scientific Inc., introduces the **Dry Plasma Systems, Inc. DSS-1 remote plasma generator** for the etching and removal of hydrocarbons in very large chamber vacuum systems and large electron microscopes. This powerful remote plasma device was developed for resist stripping and has the power to extend plasma cleaning to remote corners of large chambers by using a nitric oxide afterglow plasma. The patented constricted plasma chamber uses RF inductive coupling to create oxygen radicals at a higher pressure before injecting them into the main chamber. The afterglow plasma extends the life of the radicals so they will reach remote corners of large vacuum chambers to remove hydrocarbons by oxidation. The DSS-1 system operates at 50-75 watts of RF power and has a built-in RF matching circuit. In 50 liter chambers it has about twice the cleaning rate of the gentler cleaning of the EvactronR D-C. The DSS-1 with its greater strength is the ideal cleaner for larger chambers (300 - 1000 liters) and is the perfect complement to our EvactronR D-C for small systems.

XEI Scientific Inc., introduces **new remote RF Plasma Cleaner models, the Evactron® 40 & 45 D-Cs**, for removal of hydrocarbon contamination in SEMs, TEMs, and FIBs. The new microprocessor controlled Evactron® 40 & 45 D-Cs allow you to pre-set variable RF power, pressure, time and purge settings for remote plasma cleaning of hydrocarbon deposits. Evactron® 45 D-C is rack mounted and operates either from a front panel display or from a PC interface via serial port. Evactron® 40 D-C operates only through a PC interface. In electron microscopes, hydrocarbons in the atmosphere leave deposits on your sample leading to image distortion and interference with examination of specimens at the nanometer level. The Evactron® D-C cleans electron microscope equipment by producing oxygen radicals using an RF plasma and room air. Oxygen radicals react with the hydrocarbon contamination to make H₂O, CO, and CO₂ which get continuously purged and swept out of the way leaving a clear view of your sample. Both Evactron® 40 & 45 D-Cs also come with error and operational logs. Visit us at <http://evactron.com/> to find out more.

SEMTECH SOLUTIONS, has recently **hired Dr. Ernest T. Dobi to manage its new Field Emission (FE) SEM services laboratory**. The laboratory is equipped with two FE-SEMs. The first FE-SEM will be primarily used for its analytical capabilities that include an Energy Dispersive Spectrometer and a Back Scattered Electron detector, as well as providing Secondary Electron Imaging. The second FE-SEM, a 3-D metrology system from Elionix in Japan, can measure surface height roughness profiles ranging from 1 nm to several hundred microns. The Elionix system is targeted at metallurgical companies where an AFM has trouble measuring large surface roughness height deviations or wide lateral measurement fields.

Technical Manufacturing Corporation introduced its **FloorPlatform PZT™ active inertial vibration cancellation system** designed for use with scanning electron microscopes (SEMs) at the 2007 Microscopy & Micro-analysis show in Ft. Lauderdale. The FloorPlatform PZT features sub-Hz vibration cancellation in an active hard-mount floor platform that fits most commercial SEMs. SEMs are among the most vibration sensitive tools made, and these precision instruments typically incorporate an internal vibration isolation system. FloorPlatform PZT is compatible with all internal vibration isolation systems. Contact: Steve Ryan sryan@techmfg.com

Anasys Instruments announced its **nano-TA® sub-100nm local thermal analysis product is a recipient of the prestigious R&D100 award for 2007**. Nanoscale thermal analysis (nano-TA) enables the study of thermal properties locally at sub-100nm resolution, an improvement of over fifty times that of existing technologies. Users of nano-TA are found in many

Fortune-500 companies, especially those in the polymer and pharmaceutical markets. These markets have many applications on the sub-100nm length scale and while they have used thermal analysis for several decades, they had no means to study thermal properties locally with nanoscale resolution. See www.anasysinstruments.com

Heating and freezing stages have brought many benefits to scientists wishing to visualise a sample under different temperature regimes. However, sample access has usually been restricted due to the confines of a standard upright microscope. The objective lens is usually very close to the stage making the loading and unloading of samples quite inconvenient. In cases where a sample has to be clamped in place within the stage, e.g. with **Linkam's TST350** optical tensile stage, working with an upright microscope can be impractical. Linkam have addressed this challenge in the production of their **New Optical Imaging Station**. Here, the viewing optics are mounted in a fully retractable arm allowing complete unrestricted access to the sample. The arm has mounts for one or two standard high resolution microscope objectives enabling either lens to be quickly and easily selected. With most stages allowing study using both transmitted and reflected light, the new Imaging Station also contains a long working distance condenser with a 10x phase ring and polarizer which is mounted above an adjustable diaphragm in the base. See www.linkam.co.uk

nanoMIPOS 400 CAP high-capacity Micro Objective Focusing System by piezosystem jena. This new system compliments the well-tryed and cost effective system MIPOS 500 with a new nano positioner with a capacitive measurement system. The nano positioner provides a travel of 450 µm with a resolution in the range of nanometers. contact: Jim Litynski E-mail: jim@piezोजना.com

Media Cybernetics is pleased to announce the release of **AutoQuant X Version 2** image deconvolution and 3D visualization software. AutoQuant X2 now offers 64-bit support, in addition to other feature enhancements. AutoQuant X includes AutoDeblur, the life science industry's leading image deconvolution software. AutoQuant X users can retrieve better data from their images using the most complete suite of 2D and 3D algorithms available, including the industry's only Blind Deconvolution Algorithm. Unlike other image processing programs that tie up a computer, the multi-dimensional and multi-processing capabilities in AutoDeblur will allow users to start working on another dataset once processing has begun. Users no longer need to process time-series data one by one. With AutoDeblur they can load and process datasets all at once. A free trial version of AutoQuant X Version 2 is available on the Media Cybernetics website at www.mediacy.com.

Pfeiffer Vacuum has expanded its **line of magnetically levitated, maintenance-free turbopumps with integrated drive electronics to include the HiMag 3400**. Like the HiMag 2400, the larger HiMag 3400 provides especially high pumping speeds, high compression and high gas throughput. It's IP 54 protection class against environmental dust and water spray makes the HiMag 3400 especially robust and suitable for industrial applications, coating processes, research and development and the semiconductor industry, where particulate contamination, high gas loads and corrosive gases are common. E-Mail: roland.hellmer@pfeiffer-vacuum.com

Dolan-Jenner Industries introduces the new and improved **Fiber-Lite® DC950H Machine Vision Fiber Optic Illuminator** for machine vision integrators. The DC950H is a 150-watt quartz halogen regulated illuminator, which has been improved to produce a higher output with greater reliability, and is now RoHS compliant. It features DC regulated output, fast lamp response, and a 0-5 VDC remote intensity control interface with linear voltage adjustment (8 bit D/A module available). The DC950H can be operated remotely and offers remote notification of lamp failure to decrease downtime. Visit <http://www.dolan-jenner.com>.

At this year's Fort Lauderdale M&M conference, **Olympus Soft Imaging Solutions** is launching the **CantegaG2**, the 2nd generation Olympus

Soft Imaging Solutions 2k x 2k, bottom-mounted CCD TEM camera for all TEM brands. The fiber-optically coupled and water-cooled CantegaG2 sets new image benchmarks regarding resolution, uniformity and sensitivity for bottom-mounted TEM cameras. In order to match customers' requirements, the CantegaG2 is equipped with an optimized YAG scintillator. On customer request, OSIS supplies a phosphor scintillator as well. The highly sensitive CCD chip provides 2048 x 2048 pixel resolution with a 14-bit dynamic range. With a pixel size of 14 μm x 14 μm , the full frame CCD offers an active area of 28.7 mm x 28.7 mm. The CCD sensor possesses a uniquely high quantum efficiency. The CantegaG2 supports different frame rates. In the 5 MHz mode the cameras offers about 6 frames per second at binning 4. The high quality 2 MHz mode supports 14 bits and offers 3 frames per second at binning 8. A partial read-out mode can be used for searching throughout the sample, making it attractively convenient to find features of interest and to adjust microscope parameters. At any resolution, this camera provides superb dynamic range and sensitivity. CantegaG2 offers extremely low exposure times (as little as 1 ms and up to 100 s), making acquisition viable with intense illumination and with images of very low intensity as well. Combining a dark current of < 0.6 -e/p/s, a full well capacity of about 250K electrons, a read-out noise of about 8 e, and its low temperature, the high sensitivity of the CantegaG2 allows the observation of samples on the computer monitor at beam intensities so low, they prohibit any image on the TEM viewing screen. See www.soft-imaging.net or www.olympus-sis.com

Imago Scientific Instruments® announced the release of its new **LEAP HR** family of microscopes for a wide range of materials research applications. The "HR" designates that the product offers best in class High (mass) Resolution enabling the analysis of individual atoms to be performed with unprecedented compositional accuracy in voltage pulse mode. The LEAP 3000 HR configuration provides the best voltage pulse mass resolution ever offered on a commercial atom probe. The LEAP 3000X HR configuration includes laser based atom probe capability in addition to voltage pulsing. This capability, combined with the large Field Of View makes the HR the perfect choice for material science research particularly for metallurgy and other advanced materials applications. The LEAP HR is the latest atom probe solution from Imago and complements the LEAP 3000X Si™ product family which was developed for and is targeted at semiconductor and microelectronics applications. Visit www.imago.com

JEOL USA announced that it has **completed installation and acceptance of its first thermal field emission electron microprobe in the United States**. The microprobe was installed at NIST in Gaithersburg, Maryland, in one of the world's most technically advanced laboratories for developing new technologies and standards for a wide range of nanotechnology fields. A fully-automated, high-throughput versatile electron probe microanalyzer (EPMA), the JEOL JXA-8500F is a unique type of electron microscope with analytical ability that surpasses that of even the most advanced scanning electron microscopes (SEM) available today. While most manufacturers and researchers choose the SEM, the EPMA has more of a niche market for customers requiring the ultimate quantitative results and data acquisition. The ability to simultaneously utilize an energy dispersive x-ray spectrometer (EDS) and up to five wavelength dispersive x-ray spectrometers (WDS) increases speed for elemental analysis of nanometric sample areas. All but a few of the elements on the periodic table can be analyzed. As a result, this "super" microprobe is ideal for the materials, geological, and petrological fields. The JXA-8500F is the only EPMA to use a Schottky-type field emission gun. The probe diameter is 1/10th the size of conventional probes. See <http://www.jeolusa.com/Default.aspx?tabid=224>

Buehler, Ltd. proudly introduces the new **MetaServ 3000® Grinder-Polishers!** The MetaServ® 3000 products are Buehler's newest family of metallographic grinder-polishers. The MetaServ® 3000 grinder-polishers feature variable speed bases, a corrosion resistant molded base, bright

LED power indicator, adjustable water flow nozzle, universal input voltage, quiet belt drive operation and built-in circuit protection. Available with 8" -12" (203-305mm) diameter platens and in single or dual platens. Upgrade the MetaServ® 3000 grinder-polishers to semi-automatic sample preparation with the addition of the Vector® LC power head. For more information, contact Buehler, Ltd., 41 Waukegan Road, Lake Bluff, IL 60044, (ph)847-295-6500.

HREM Research Inc. today announced it is shipping **HREM Filters Pro/Lite, sophisticated optimal Wiener and Difference filters for Digital Micrograph (Gatan)**. HREM Filters Pro/Lite works even for non-ideal crystals, such as a nano-crystal, cylindrical crystal, quasi-crystal, twin and so on. Key Features include: Uses smoothed two-dimensional background; Uses locally estimated backgrounds; Trend-subtraction; Optimal periodic Wiener filter using accurate base vectors. HREM-Filters Lite can be downloaded free of charge from our web site: www.hremresearch.com.

In collaboration with Dr. Atsushi Miyawaki of RIKEN, **Omega Optical** developed three **new filter sets for use with CoralHue™ Keima-Red fluorescent protein**, further expanding Omega's extensive product line of fluorescence filter sets for the rapidly growing library of fluorescent proteins. The new filter sets include versions with both longpass and bandpass emission filters to accommodate a variety of single and multi-fluor applications. Visit Omega Optical's website at www.omegafilters.com

The **QUANTAX EDS system** from **Bruker AXS** utilizes a high-resolution 125 eV XFlash® detector and, with the latest release of ESPRIT software, introduces new features and modules that can help you find elusive trace elements and make routine analysis easier than ever. Silicon Drift Detectors (SDDs) offer unprecedented speed and resolution, providing researchers with more data in a shorter amount of time than ever before. As a result, new analysis techniques have been developed that take advantage of this additional data. Maximum Pixel Spectrum, or MaxSpec, is a technique developed at NIST1 that is useful when searching for trace constituents in an unknown specimen. Such small, localized concentrations may not be detected in the standard sum spectrum as the number of counts is usually too small. Utilizing a HyperMap data cube, the Maximum Pixel Spectrum tool generates a spectrum that prominently shows the peaks of low concentration elements. Because this type of analysis requires large amounts of data, it can take many hours with a Si(Li) detector, but the XFlash SDD can gather this data in minutes; sometimes in seconds!

Diatome, introduces the first Cryo diamond knife with a diamond plateau: This unique knife offers optimized pick up for Best section quality in immunocytochemistry. The **Cryo-Immuno knife** offers the most perfect cryosections from Ultra-thin to Semi-thin with the ease of movement of the cryo sections over the diamond Plateau and quick and easy pick up directly from the plateau. The knife is Available in a 35 degree angle so compression is minimized. This knife offers a considerable reduction of structural damage in tissues and cells simply by having the sections picked up directly from the platform with a loop and sucrose/methyl cellulose droplet. This pick up method offered by the knife reduces the stress applied to the sections and leads to better structural preservation. Diatome, has a knife for most every application. From cutting wet to dry, at room or cryo temperatures, thick or thin or even middle of the road Diatome has thought of everything. Diatome's knives are available in 35 and 45 angles as a standard, and they will custom make any other at your request. Diatome Knives are used in applications including but not limited too: Biological samples; Hard and brittle industrial samples; Surfacing samples for STM, AFM, SEM, Etc.; ESI; 3-D reconstruction; HVEM-Alternating sectioning; Optical microscopy.

Diatome, the company whom brought you the first diamond knife for Light Microscopy has done it again with the **Diatome Histo Jumbo**. This unique knife from Diatome allows you to pick up serial sections with ease. For successful ribbons of semithin sections the Histo Jumbo is perfect offer-

ing no section loss, no folding, and the same orientation of all sections all of the time. The Histo Jumbo saves time and allows for the easy pick up of up to 20 sections per ribbon and multiple ribbons on one slide. The Histo Jumbo is Ideal for 3D reconstruction and also for immunohistochemistry. See Web Site: www.emsdiasum.com

Electron Microscopy Sciences has recently built and has now officially opened as of August 2004 its State-of-the-Art Equipment repair center. No equipment is too small or impossible to either repair, refurbish or upgrade. Our facility is equipped to handle Manufacturers such as Balzers/Baltech, Denton, Edwards, Emitech, Emscope, Bio-Rad, Leica, Reichert-Jung, LKB, RMC-Boeckeler just to name a few and equipment such as Vacuum Systems, Microtomes, Ultramicrotomes, Tissue Slicers, Vibratomes, Ovens, Baths, Shakers, Tissue Processors, Lynx, Freeze Fracture Instruments, High Pressure Freezers/Slammers/ Propane Jet Freezers. Our unique services allows us to either come to you or you send the equipment to us depending on the level of repair/refurbishment.

Electron Microscopy Sciences is now exclusively distributing **Quantomix QX Capsules** that completely isolate wet samples from the vacuum in the microscope chamber. This allows for the imaging of fully hydrated samples- including food, cosmetics, ink, human-animal-plant- and microbial cells, tissues and fluids- at resolutions unachievable with light microscopy. These capsules fit all SEM specimen stages and they combine the function of a specimen holder, cell culture dish, or a tissue specimen holder with an electron transparent, vacuum tight window. These unique capsules permits EM of samples held in water or any other liquid medium at atmospheric pressure. The imaging of the sample in the capsule is accomplished with back scattered electron detection, x-ray detection, or light detection, to reveal structure as well as material composition.

The **DuraSiN™ Film product family**, offered by EMS, provides durable, low scatter substrates for quantitative TEM and X-ray analysis at affordable prices. DuraSiN™ Film substrates are fabricated from high quality, low-stress silicon nitride and supported on a rigid silicon substrate. DuraSiN™ Film products are robust to most cleaning procedures, including acetone, alcohol and oxygen plasma/UV ozone. Products are available in sizes ranging from standard TEM (2.65mm diameter) to greater than 10mm for x-ray applications. Electron Microscopy Sciences released their New Automated Tissue Processor. The LYNX II is designed to be the successor of Lynx Tissue Processor with several enhancements including capabilities to perform optional processing of the larger size samples for Histology.

LYNX II holds 24 reagent vials for EM processing. Optional HP (Histology processing) will be done with 12 larger size reagent vials for HP processing. In both EM and HP modes, LYNX II has two, independently controlled, heating/cooling stations. Visit www.emsdiasum.com For more information on any EMS product or service

Thermo Fisher Scientific Inc. announces that **Abiogen Pharma S.p.A.**, a leading pharmaceutical manufacturer, headquartered in Pisa, Italy, has chosen the Thermo Scientific Antaris FT-NIR analytical system to perform raw materials characterization in its manufacturing facilities. With the complete Antaris FT-NIR platform fully installed, analysis of one container of raw material now takes Abiogen only two minutes at the point of raw materials receipt compared to traditional, time-consuming laboratory-based methods which take between 15-60 minutes to complete.

Thermo Fisher Scientific Inc. announces that the **Thermo Scientific K-Alpha** has been named by R&D Magazine as one of the top 100 most technologically significant products introduced into the marketplace over the past year. Utilizing the fast growing technique of X-ray Photoelectron Spectroscopy (XPS), the K-Alpha enables rapid, accurate and cost-effective quantitative monitoring of the surface chemical composition, providing chemical characterization of the top few nanometers of inorganic, organic, biological, metallurgical, semi-conducting and magnetic solids. Designed for high-throughput sample analysis, the revolutionary system incorporates data processing algorithms offering full automation for data acquisition through to interpretation and reporting.

Thermo Fisher Scientific Inc. announces the addition of a new kit for coupling Gas Chromatography (GC) to the **Thermo Scientific high resolution ICP-MS ELEMENT 2 and ELEMENT XR**. Designed to enable scientists to use a high resolution magnetic sector field ICP-MS as a detector for GC, the kit extends traditional ICP-MS capabilities for elemental speciation analysis of volatile compounds. This novel system is the latest offering, further expanding the unique and comprehensive capabilities of the Thermo Scientific ELEMENT 2 and ELEMENT XR which are manufactured at the company's Mass Spectrometry Center of Excellence, based in Bremen. Visit www.thermofisher.com

OMNIPROBE, INC., a supplier of nano-scale failure analysis and process control solutions, announced today that they have acquired the assets of **Ascend Instruments, LLC, of Beaverton, Oregon**. Ascend Instruments provides hardware and software for sample preparation and manipulation in the Focused Ion Beam (FIB) microscope. In the near term, the Ascend Instruments product line will be manufactured at Omniprobe's Dallas, Texas, facility.

In addition, **Omniprobe, Inc.**, has been selected by **Entrepreneur magazine** for their "Hot 500" Fastest Growing Companies in the U.S. The Hot 500 rankings are based on company performance and sales growth. The listing appears in the August 2007 issue of Entrepreneur magazine. See <http://www.omniprobe.com>

Vibration Engineering Consultants announces a new, low cost environmental measuring system, **LabGarde**. Our real time monitoring system provides measurement of 8 channels of environmental parameters including 3 channels of vibration, 3 channels of EMI, acoustic and temperature for less than \$8000. The system comes complete with computer, data acquisition and software. Solve the problem of deciding whether the image disturbance is environmental or machine related. Did an environmental excursion occur during a long e-beam write? Please contact Craig Franklin, craig@vibeng.co,

TOUSIMIS announces the introduction of a **new automated Critical Point Dryer Model** capable of drying larger or numerous samples. The process chamber measures 4.5" ID and has been demonstrated to process large pieces of Aorta, large botanical samples as well as Nano-particles and Gels. The new Autosamdri-815B, Series A is a tabletop fully automatic CPD system. The 815B has an extremely easy to operate user interface making training other users very simple. A number of stock sample holders are available and custom sample holders may be fabricated upon request for your particular sample type. We have a global distribution support network. The system is able to process sample runs back-to-back without any down time and comes with a standard 2 year warranty. Please contact our USA office at tel# 301.881.2450 or via email at trc@tousimis.com.

Asylum Research, in conjunction with the University of Münster, CeNTech, and Atomic Force F&E, announces the **Euro AFM Forum to be held at the University of Münster, Germany, Sept. 3-5**. The Euro AFM Forum is a conference for AFM researchers to share the cutting-edge research being done specifically in the field of AFM/SPM. Conference registration is free and is open to anyone who is currently doing work in AFM or for those interested in learning more on the topic. The first full day of the Forum will include invited talks and submitted posters on a variety of AFM topics from bio to semiconductors. The second day will be a hands-on workshop that will consist of equipment demonstrations and lectures on such topics as fluid imaging, electrical characterization and new AFM imaging modes. Researchers may submit their posters for the conference as well as their AFM images for an image contest. Three winners will be selected to receive an iPod Nano for their winning image. Conference details and registration can be found on the official conference site at www.AsylumResearch.com/EuroForum.