

NEW AND/OR INTERESTING AT EMSA/MAS/MSC CONFERENCE '92

For the interest of readers who were not able to make it to Boston, we have attempted to summarize some of what was "new and/or interesting" at the Conference:

- **Advanced Microscopy Techniques (508)948-5507:** The LfV-1024 High Resolution Slow Scan CCD Camera features high resolution 1024 x 1024 digital images at both high and low magnifications. Slow scan imaging provides high sensitivity while unprecedented 10 MHz readout rates allow live-time, full screen display. Combined on-chip signal integration and 20 MHz pipelined image processing provide high quality images. The system includes a Windows based control system optimized for TEM. Archival storage and networking are also available.
- **Alden Electronics, Inc. (508)366-8851:** Exhibited their Model 9315CTP Continuous Tone Printer. Features include 2048 pixels per line across 10 inches and 256 shades of gray per pixel. SCSI, GBID and parallel interfaces are available.
- **AMRAY INC. (617)275-1400/(800)225-1462:** Exhibited its model 1845 FE SEM which combines superb image quality with a unique analytical capability of performing both EDX and WDX in a field emission SEM. A patented field emission gun, excellent beam stability, low maintenance vacuum and computer control make the 1845 FE unique in its class.
- **BAL-TEC PRODUCTS, INC. (800)875-3713:** Offering a complete line of equipment from single sputter coaters and plunge freezers to ion-beam depositon and high pressure freezing.
- **Dapple Systems (408)733-3283:** QuantumPCI™ is a Windows-based image capture system for electron microscopes. Digital images up to 4096 x 4096 resolution are archived in the industry-standard TIFF format compatible with desktop publishing and graphics packages. The unique passive interface does not require beam control or otherwise compromise normal microscope operation.
- **Delaware Diamond Knives, Inc. (302)999-7476/(800)222-5143:** Look to DDK for the highest quality diamond knives and latest products for ultramicrotomy. Our PS1000 proves that quality IN-SITU cryofixation is not only possible, but affordable. Call for the latest information.
- **Diatome (215)646-1478:** The leaders in diamond knife technology, exhibited their complete collection of diamond knives for biological and materials science. With three different angles (35°, 45°, 55°) and 6 different knife types (ultrathin, semithin, cryo-wet, cryo-dry, histo, histo-cryo), they covered the entire microtomy spectrum. Also shown was the "original" anti-static device for perfect cryo sections; The Static Line.
- **E.A. Fischione Instruments, Inc. (412)325-5444:** Newly introduced products include the Model 3000 Ion Mill, a table-top, turbo-pumped, micro-processor-based device incorporating variable milling angles and low energy ion sources, and the Model 330 Ultrasonic Disk Cutter for the preparation of TEM specimen disks.
- **EDAX International (201)529-4880:** New products included:
 - Model DX-4: World's first fully-integrated Microsoft Windows™ based workstation for X-ray microanalysis and digital imaging.
 - Model NX-2: Fully integrated EDAX/UNIX based workstation for EDS and digital imaging.
 - CDU™: Innovative compact detecting unit for microanalysis features significantly reduced LN₂ consumption and requires cooling only when used.
- **E. Fjeld Co., Inc. (508)667-1416:** New products introduced were a Six-Axis Specimen Stage, a 1000 pound Tensile Stage, an Airlock Transfer Station and a CCD Chamber Imaging System. Features of the Six-Axis Stage include two perpendicular tilt axes enabling the operator unlimited flexibility in sample orientation and operation by a six degree of freedom hand controller which will drive the motors independently or simultaneously.
- **Electron Microscopy Sciences (215)646-1566:** Complimenting Electron Microscopy Sciences' Series IX catalog of the most complete line of chemicals, accessories, supplies and equipment for electron and light microscopy is their latest newsletter, *News & Views - Fall 1992*. This newsletter announces new lower osmium prices and introduces the most up-to-date oscillating tissue slicer as well as a series of technical tips and recommendations for many applications.
- **ETP-USA/Electron Detectors, Inc. ETP-USA** had on display at the EMSA Meeting it's Robinson BSE detector equipped with the new low accelerating voltage BSE imaging system allowing BSE imaging at 500 V accelerating potential.
- **Fisons/Kevev ((805)295-0019:** New products/features at EMSA:
 - QuantexPlus - the most accurate standardless analysis software available.
 - New Image processing software.
 - 486PC hardware platform for DeltaPro.
 - DeltaPro Enhanced mode software, including Color TIFF output of spectra and images.
 - Boron detection guaranteed on QuantumDry detectors.
- **Galileo Electro-Optics (508)347-9191/(800)648-1800:** Introduced the SEM 6484, a microchannel plate-based detector accessory for JEOL series JSM 820, 840, 6300, 6400 and 6600 SEMs. The detector upgrades the performance of existing SEMs to closely match that of the new SEM models at a fraction of the cost. Compositional and topographical imaging at ultralow signal conditions, and significantly improved signal-to-noise capabilities are just some of the advantages offered by this dual-anode system.
- **Kaiser Optical Systems, Inc. (313)665-8083:** State-of-the-art holographic optical components including Holographic Notch and Super-Notch™ Filters and Holographic Beamsplitters in the 350 nm to 1064 nm wavelength range for Laser applications including Raman Spectroscopy, Fluorescence and Confocal Microscopy.
- **Ladd Research, Inc. (800)451-3406:** Since 1955, has supplied electron microscope laboratory supplies throughout the world. Call today for a free catalog.
- **LASERTECHNICS, Inc. (505)822-1123:** DIR Gray Scale Printer that produces high resolution, continuous tone, monochrome prints that rival conventional photographs in near real time. This can be accomplished for a fraction of the cost of instant film. GPIB (IEEE-488) or SCSI interfaces are available with drivers for IBM PC, MacIntosh and SUN.
- **Leybold Vacuum Products, Inc. (800)433-4021:** One source supplier for both ceramic ball bearing and magnetic bearing turbomolecular pumps, with compact solid state power supplies. Rotary vane pumps, UHV fittings and valves. Worldwide network for service and spare parts.

- **Micro Engineering, Inc.** (800)533-2509: Sapphire blades for Vibratomes. Manufactured to extremely high sharpness and perfection - which produce much better quality sections. Standard 38mm edge: \$290. Prsharpenable. Test before paying.
- **Microscopy/Marketing & Education** (413)746-6931: A consortium of microscopy and training experts, specializes in on-site training and applications development using your people and your equipment to solve your problems.
- **Microspec Corporation** (510)656-8820: Manufacturer of the WDX-3PC wavelength dispersive X-ray spectrometer for SEMs. Utilizing fully-focusing optics (Johansson) for the LIF, PET, and TAP crystals, the WDX-3PC achieves higher resolution and sensitivities than semifocusing (Johann) systems.
- **NIST/NIH** (301)975-2208: Their new Desktop Spectrum Analyzer and X-ray Database featuring:
 - X-ray spectrum generation/interpretation
 - Complete spectrum analysis
 - Realistic specimen property & microscope-detector emulation
 - Functions as a multichannel analyzer
- **Oxford Instruments Microanalysis Group** (615)482-4041: Announced their new microanalysis system, the Link ISIS. Based on the intuitive Windows 3.1 user interface, the system emphasizes ease of use, accuracy and productivity. Features include full on line help, autocalibration routines, applications programs with push button simplicity and real time operation. In terms of speed, the Link ISIS is impressive - with X-ray maps in less than 5 seconds and full quantitative analysis in less than a second. Also new was the SuperATW detector with Be detection guaranteed and acquisition rates in excess of 30,000 cps.
- **Philips Electronic Instruments Co.** (201)529-3800: Introduced their CM10 BioTWIN TEM and XL30 SEM with integrated EDS system. The BioTWIN has been designed for life scientists who want to have high contrast images over a large magnification area.
- **Princeton Gamma-Tech** (609)924-7310: PGT highlighted many new applications packages for the IMIX™ and IMAGIST™ systems. These included automated probe current compensation for FE SEMs, True Color Imaging for Light Microscopy, a versatile Coatings Analysis Module, and the EM Multiplexor for interfacing a single system (both X-ray and image collection) to 4 separate microscopes.
- **Raith** (516)293-0870: Introduces a new product, an ULTRA HIGH VACUUM Macrostage, for those who need large travel, high stability and computer controlled specimen handling in an UHV environment. Another first for Raith, a leader in the field of specialized stages for the SEM.
- **RJ Lee Group, Inc.** (412)325-1776: Introduced an affordable Personal SEM™. Designed for ease of use, it incorporates PC-based technology for point and click operation, features disposable, pre-aligned filament capsules, turbomolecular-based vacuum, and column liner tubes for easy maintenance, and plugs into a 110V outlet.
- **Scanalytics** (617)272-600: CELLscan™ is a digital alternate to confocal microscopy and allows visualization of living cells in three dimensions with unprecedented clarity. By digitally reversing distortions introduced by the microscope, CELLscan™ vastly improves image resolution without the inefficiencies and disruption of samples inherent in confocal systems.
- **SEMICAPS, Inc.** (408)986-0121: PC base imaging system interfaces both analog and digital SEMs. Compatible with light microscopes, TEMs, EDS/WDS (X-ray mapping). High resolution acquisition, archiving, networking, image processing and analysis. Low cost prints.
- **South Bay Technology, Inc.** (714)492-2600/(800)SBT-2233: NEW UltraSonic Cutter: The Sonicut 380 UltraSonic Cutter with self-tuning horn, automatic termination and SoniLoc Circuitry was featured at EMSA in Boston. Also on display was a complete range of sample preparation equipment for METALLOGRAPHY, CRYSTALLOGRAPHY and ELECTRON MICROSCOPY.
- **SPI Supplies** (800)2424-SPI: Introduced our newest reagent, Protein AG-Gold Complex, a highly versatile probe for immunochemical and immunocytochemical studies and a useful reagent in immunoblot analysis. Like all our SPI-MARK™ products, we maintain purity, uniformity of size, high optical density and long shelf life.
- **Structure Probe, Inc.** (215)436-5400: An independent analytical research laboratory specializing in the application of electron microscopy and surface analysis techniques to problem solving in the materials sciences. Founded in 1970; accredited by the American Association for Laboratory Accreditation; clients include industry, legal, governmental and academic.
- **TopoMetrix** (408)982-9700: The leader in instrument innovation continues to bring flexibility to SPM users: the TMX 1000 Explorer, a free-standing AFM stage capable of imaging any surface, in liquid or air, in topography, lateral force, and modulated modes; and the Universal Sample Stage, a large sample scanning AFM for wafers, disks and comparable samples were featured at EMSA '92.
- **XEI Scientific** (415)369-0133: Oil contamination and oil drip from EDS detectors stop being a problem when a low cost SEMCLEAN system is installed on your SEM. The dark contamination spots disappear and the window clean-up problems simply go away.

NEW AND/OR INTERESTING IN MICROSCOPY

Commencing with our next (October) issue, we are going to offer a different concept in classified advertising. With the above format, we will offer suppliers of equipment, materials or services an inexpensive format to present short form information to a very wide audience of potential purchasers - in a very timely fashion. While new product/service announcements may be made, our major objective is to allow the effective and efficient presentation of product/service improvements and enhancements. The advertising rate will be \$5.00 per word, with a \$100 (20 word) minimum.