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PGT has developed a new and sophisticated **AutoID program** for performing an automatic qualitative analysis on EDS spectra. In this method, the unknown spectrum is handled statistically with no prior knowledge necessary. The background is filtered, and the peaks are fit to pure element peaks by linear-least-squares. The method is fast and accurate. Of course, if a user has outside knowledge of the sample, that can be applied too. This new AutoID is standard on PGT Avalon and Spirit systems, and it is applied automatically to spectrum images to select elements for mapping. This program provides much-needed assistance to new analysts as they gain experience with EDS.

Oxford Instruments have launched a **new X-ray microanalysis web site**, complementing www.ebsd.com, which went live last year. Http://www.x-raymicroanalysis.com contains extensive tutorials on EDS and WDS techniques and detectors. It also guides you simply and easily through the INCAEnergy and INCAWave software. Click on any navigator button and get a result! Oxford Instruments already have a range of Microanalysis Explained booklets. To request a set of Microanalysis Explained booklets, or information on INCA products, please email us at analytical@oxinst.co.uk.

Oxford Instruments Analytical announced a new range of **liquid nitrogen-free Si(Li) EDS detectors**, INCADryCool, for installation on SEM instruments. INCADryCool uses a revolutionary, patented, pulse tube cooling system to offer many advantages over other liquid nitrogen-free detectors. INCADryCool offers the same high analytical performance of a liquid nitrogen cooled detector, even at low energies. There is no external compressor, flammable gases, gas lines or image degradation from vibration. The only requirement of INCADryCool is a stable mains electrical supply. For more information go to www.oxford-instruments.com/drycool or email analytical@oxinst.co.uk or contact Lynn Shepherd at Oxford Instruments Analytical Tel: +44 1494 479371 Fax : +44 1494 461033 Email: lynn.shepherd@oxinst.co.uk.

Carl Zeiss MicroImaging is introducing the **MIRAX SCAN** - a fully automated system platform for digital histology that considerably facilitates the process of assessing pathological specimens in clinical laboratories. It combines optics and technology from Carl Zeiss with IBM's experience in digital archiving. Digitization of specimens and integration of data into the electronic patient file revolutionize processes both in pathology and radiology. For more information contact Carl Zeiss MicroImaging, Inc., 800-233-2343, www.zeiss.com/micro.

Carl Zeiss SMT announces a major break-through by achieving a **record image resolution of 0.8 Angstrom** (0.08 nanometer) during qualification of its latest generation ultra-high-resolution transmission electron microscope (UHRTEM). The milestone was achieved using a newly developed 200 kV field-emission UHRTEM equipped with electron optical components for aberration correction, electron beam monochromatization and energy filtered imaging, partly co-developed with CEOS GmbH, Heidelberg. By unique and proprietary integration of these advanced components into a revolutionary new UHRTEM platform, image resolution of even down to 0.7 Angstrom was demonstrated for certain image directions which nearly equals the theoretically achievable resolution limit The TEM instrument is specifically designed for sub-Angstrom characterization of advanced materials and device structures, e.g. for atomic scale analysis of transistor gate areas, and will be made available to demanding customers in cutting-edge nanotechnology research and development. contact: Jan-Peter Vermeulen, Carl Zeiss SMT AG, Phone +49 7364 20-3836 Email: vermeulen@smt.zeiss.com.

JAI PULNiX's newest dual-tap AccuPiXEL camera offering, the **TM-6740CL** boasts up to 200 frames per second at full resolution and generates up to 3205 frames per second in partial scan and binning modes. This 1/3" VGA-format progressive scan camera is based on the state-of-the-art Kodak KAI-0340 CCD imager. The camera's 640(H) x 480(V) resolution imager has 7.4 µm square pixels. It also features both analog and digital Camera Link dual-tap output that is 8-bit or 10-bit software selectable. The video is optimized by JAI PULNiX's exclusive, patent-pending built-in look-up table, (8-bit only) which permits maximum dynamic range control. The TM-6740CL features full asynchronous reset with electronic shutter up to 1/64,000 sec or pulse-width exposure control, which allows triggered image capture and processing. Read-out-inhibit control makes multiple-camera applications possible.

The CV-M77, a 1/3" progressive scan RGB color CCD camera from JAI PULNiX, has been upgraded to offer up to 74 frames per second at 1024 x 242 pixels resolution. The camera features a Sony ICX204AK imager and 4.65 µM square pixels. Its frame rate at full 1028 (h) x 770 (v) resolution is 25 frames per second. Other features include a Bayer CFA, fast frame readout of every third line, DSP for excellent color reproduction, asynchronous reset, and internal/external HD/VD selection. For more information please contact: Steve Kinney, Product Manager, JAI PULNiX (800) 445-5444.

JENOPTIK-Gruppe announces **ProgRes™ Capture Basic Software (Version 1.2)** that now provides 'Turbo-Mode' for any user of either a ProgRes™ C10plus or a ProgRes™ C12plus. In the latest software release (Version 1.2), the user can switch to the 'Turbo-Mode' and significantly increase the frame rate of the live image without a loss of image quality. With the current version of the ProgRes™ Capture Basic software, both the ProgRes™ C10plus as well as the ProgRes™ C12plus can be operated. The speed of the live image is of highest priority in the 'Turbo-Mode' so only the very fastest calculation methods are being used.

Henceforth, the user can choose between two different live images. While using the 'HighQuality-Mode' all advanced settings (RGB colour settings, Gamma, Contrast, Brightness and Saturation) remain on hand. In favour of increased speed and higher frame rates in the live image only Gamma and RGB colour settings are available using the 'Turbo-Mode'. In any case, the digital images acquired with ProgRes™ cameras are of excellent quality. Finest details and best colour reproduction of all specimen are to be accentuated. All registered ProgRes™ users can download the new software release free of charge from the Internet (http://www.progres-camera.com). For more information contact: Mr. Simon Schwinger, Phone: +49 (0) 3641 65-2138, E-mail: progres@jenoptik.com, http://www.jenoptik-los.com.

Thermo Electron Corporation introduces the **Nicolet 380**, a reliable, routine analysis FT-IR spectrometer designed to quickly identify, quantify and verify samples. This new, high-performance spectrometer is primarily targeted at QA/QC laboratories within the pharmaceutical, chemical and polymeric industries that need to achieve maximum productivity and efficiency with optimized workflow processes. The Nicolet 380 uses complete system integration, plug-and-play sampling, and computer-based expertise to guide the user through the experiment. A comprehensive spectrometer qualification package is available to verify system performance in compliance with ISO and GLP/cGMP criteria. A dynamically aligned interferometer and a robust design ensure reproducible results. New integrated scan buttons on the spectrometer benchtop allow for easy operation of common FT-IR functions ideal for both industrial and academic laboratories. The spectrometer is available for analysis in the far-, near-, and mid-IR regions and can also be configured with FT-IR microscopes. For more information about the Nicolet 380 FT-IR spectrometer, please call +1 800-532-4752, e-mail analyze@thermo.com or visit www.thermo.com/ftir.

BudgetSensors introduces a new **Silicon Nitride AFM probe** for soft contact mode measurements (Order Code BS-SiNi), which is also perfectly suitable for biological applications. The BS-SiNi has 2 triangular cantilevers on each side of the holder chip – one short and one long cantilever. Each cantilever has a very sharp wedge tip with a tip radius smaller than 15 nm. For more information, please visit www.budgetsensors.com .

Kodak's Scientific Imaging Systems group announces the release of a new and improved version of its **KODAK Electron Microscope Film 4489**. This reformulated product replaces KODAK Electron Microscope Film 4489. Continuing a long tradition of supplying high quality and performance electron microscopy films, this new film features state-of-the-art KODAK T-GRAIN® emulsion technology and delivers improved development uniformity across the entire film plane without modified processing agitation techniques. Customers will benefit from increased speed while maintaining a high signal-to-noise ratio and high image quality. Customers will further benefit from easier processing protocols with greater latitude resulting in improved convenience. The high contrast characteristics of KODAK Electron Microscope Film 4489 make it the product of choice for many biological specimen imaging and X-ray diffraction studies but can also be used for recording other transmission electron micrography investigations. Kodak offers both the new KODAK Electron Microscope Film 4489 and KODAK Electron Image Film SO-163 in a variety of different sizes and formats to meet the needs of today's transmission electron microscope laboratories. For additional information, visit http://www.kodak.com/go/scientificor e-mail sis-support@kodak.com or call toll free in the US 1-877-SIS-HELP.

JEOL is pleased to announce the addition of **Dr. Natasha Erdman to its SEM applications staff.** Dr. Erdman is a specialist in FEG-SEM imaging and cross section preparation. She will be responsible for supporting customer applications and demonstrations at the company's Peabody, Massachusetts and Pleasanton, California facilities. Dr. Erdman joins JEOL from UOP LLC, a supplier to the petroleum industry, where she specialized in morphological work on zeolites, nanomaterials, and investigation of structure/catalytic performance relationships. For more information about JEOL USA, Inc. or any JEOL products, visit www.jeol.com, or call 978-535-5900.

Leica Microsystems introduces the world's first system designed especially for **large field-of-view (FOV), low magnification (macro) fluorescence documentation and digital image stacking** (multifocus or Extended Depth of Field). The Leica MacroFluo™ system is a unique combination of the long working distance and large field of view of a stereomicroscope with the vertical optical path of a classical light microscope. This design is perfect for imaging very large fields and increasing the accuracy of digital image processing, analysis, and measurement. Additionally, the popularity of removing depth of field limitations from digital images via image stacking is increasing, so the on-axis MacroFluo™ will be a welcome addition to those labs wishing to capture publication-quality fluorescence images. With the world's highest zoom ratio (16:1), users can perform a large number of investigations, from low to high magnification, without changing the objective or focus plane with the MacroFluo™, thereby saving time and increasing efficiency. Further, as the zoom magnification increases or decreases, the illuminated fluorescence field automatically adjusts to fit the viewing field so specimens outside of view are not quenched. Finally, APO lens coatings inside the MacroFluo™ system allow imaging that is free from color distortions over the entire zoom range with perfect fluorescence quality. Please contact Molly Lundberg, Leica Microsystems Inc. Tel.: 847/405-7026, news@leica-microsystems.com, www.leica-microsystems.com.

Gatan, Inc. has introduced its **new TEM CCD camera: the ES500W Erlangshen**. The ES500W is an all-purpose CCD camera designed to meet the needs of digital imaging in both life and materials science applications. The ES500W incorporates the advanced CCD interline technology with sophisticated electronics. The ES500W is capable of high speed and high quality imaging with a field of view larger than the traditional TEM films. This advanced CCD electronic design allows users to image intense electron diffraction patterns without the "blooming artifact." With operational speed close to that of TV, the ES500W is also the ideal camera for observing dynamic events inside a TEM (in-situ experiments). The innovative Digital Streaming Video (DSV) feature delivers digital video with unprecedented quality. The ES500W is supported by the well-known industrial standard DigitalMicrograph (DM) software. The simple and intuitive software interface allows the ES500W user to view, record, document, and save high quality images with a few mouse clicks. The software also supports saving images in various, popular formats, such as TIFF, JPEG, etc. The ES500W is a work-horse camera designed to carry out a wide range of TEM applications. This camera offers the best overall value for price versus performance. The ES500W is the ideal choice for upgrading an aging TEM from analog film to a truly digital format with minimal cost. For more information, please contact: GATAN INC. Tel: (925) 463-0200, Contact: info@gatan.com, Website: www.gatan.com.

HREM Research, is pleased to announce an availability of **QPt for Digital Micrograph**,an image processing software for electron microscopy. QPt for DigitalMicrograph provides a digital solution to phase contrast electron microscopy based on the QPI technology developed by IATIA. QPt is fully integrated into DigitalMicrograph, an image acquisition and processing software developed by Gatan Inc. (Pleasanton, CA, USA). Therefore, the user can process images taken directly from an electron microscope using Gatan's high performance CCD camera or images already archived in various formats, and enjoy DigitalMicrograph's image processing capabilities.Using the phase information QPt can generate various imaging modalities, which in the past have been limited to optical microscopy, including Differential Interference Contrast (DIC),Zernike Phase Contrast (ZPC), Hoffman Modulation Contrast (HMC) and Darkfield. Contact: Kazuo Ishizuka, HREM Research Inc. 14-48 Matsukazedai, Higashimatsuyama 355-0055 JAPAN.