

NEW AND/OR INTERESTING IN MICROSCOPY

☛ Leybold Vacuum Products, Inc. announces four **NEW** vacuum pump rebuilding courses for rotary vane pumps, rotary piston pumps and roots blowers. Other standard courses include: Turbopumps and HV; Cryopumps and HV; Pumps/Corrosive Applications; Advanced Vacuum Technology; Introduction to Basic Vacuum; Leak Detection and RGA's. The Pump Rebuilding and High Vacuum courses involve hands-on in the classroom. Course materials and reference guides are included. Pump Rebuilding course material includes videos. In-plant seminars are available. For more information, contact Dave Webb, Leybold Vacuum Products, Inc., 1860 Hartog Drive, San Jose, CA 95131, Tel.: (408)436-2828.

☛ **Ultrastructural Pathology**, published bi-monthly, is the only journal to be devoted entirely to diagnostic ultrastructural pathology. It contains original research papers and concise reviews by leading authorities in the field.

Ultrastructural Pathology focuses on:

- advances in the uses of electron microscopic and immunohistochemical techniques.

- correlations of ultrastructural data with light microscopy, histochemistry, immunohistochemistry, biochemistry, cell, and tissue culturing.

- electron probe analysis and important new investigative, clinical and diagnostic EM methods.

For further information, price and order form, contact Taylor & Francis Inc. 1900 Frost Road, Ste 101, Bristol PA 19007. Tel.: (800)821-8312, Fax: (215)785-5515.

☛ Warren A. Hatch, a schoolteacher, has developed a series of video presentations on microscopy. While intended for younger viewers, Caroline Schooley advises that the series is ".wonderful for all ages." and that "Both the video and the narration are excellent." Common objects are shown at 10-100X. At \$14.00 a unit, the series consists of:

- 1) Video Microscopy II - 120 minutes VHS: 11 spiders and insects, fabrics, zippers, and velcro. 38 minutes of pond microorganisms, a dozen foods (including pizza and potato chips), homegrown microcrystals, color printing methods, and a few seeds.
- 2) Video Microscopy I Revised - 120 minutes: Similar to the above tape, with different examples. There's a collection of sand grains from around the world, and a burger and fries from MacDonalds.
- 3) Spiders and Mites through a Microscope - 89 minutes.
- 4) Sand through a Microscope - 58 minutes: More minerals, more locations.
- 5) Seeds ar Art - 39 minutes: 42 varieties, at 10-20X magnification.

Warren A. Hatch, 123 S. Figueroa St, Apt. 944, Los Angeles, CA 90012, Tel.: (213)687-9722.

☛ Micro Engineering, Inc., to better reflect their Micro Star line of ultramicrotomy products, has changed their corporate name to **MICRO STAR TECHNOLOGIES, INC.** Their address and contact information remains: Rt 2 Box 474 Road 3179, HuntsvilleTX 77340. Tel.: (409)291-6891, Fax: (409)294-9861, eMail: us3snq7n@ibmmail.com

NEW PRODUCT NEWS

☛ Finally an inexpensive digital camera with 35mm film resolution. The MicroLumina captures color images 36 bits deep at up to 2254 x 3380 pixels making it an excellent instrument for micro and macro photography and image duplication. PC and Macintosh software available. Call Electro-Image, Inc.: (516)773-4305.

☛ TopoMetrix Corporation recently announced an exclusive agreement with Peak Instruments, Inc. to design, manufacture, and install interfaces to integrate the TopoMetrix Observer™ scanning probe microscope (SPM) into a broad range of scanning electron microscope (SEMs).

The Observer combines the SPM's ability to provide three-dimensional quantitative measurements of surface features down to the atomic scale with the SEM's ability to offer high scan rates, a larger field of view (several millimeters), a greater depth of field, and a spatial resolution of a fraction of a micron - into one powerful microscope. It offers a range of SPM modes, including scanning tunneling microscopy and atomic force microscopy. Also, because the Observer makes direct vertical (Z) measurements, there is no need to cross-section the sample to obtain height data, a required procedure when imaging with an SEM.

For further information, contact TopoMetrix Corporation at Tel.: (408)982-9700. Fax: (408)982-9751.

☛ Photometrics announces PXL37, a new speed digital camera utilizing a frame transfer CCD with 512 x 512 imaging area to achieve rates of 100+ frames/second. Proprietary camera control script allows the user to program sophisticated imaging modes such as multiple sub-regions, arbitrary binning, TDFI, ratio imaging, and kinetics. Tel.: (602)889-9933, Fax: (602)573-1944.

☛ The MicroSilver Kit from Polysciences, Inc. offers an ammoniacal silver staining procedure for the detection of fungi and *Pneumocystis carinii*. The method is designed to replace methenamine silver methods and offers a silver solution that is more stable at higher temperatures than methenamine silver solutions. The kit also offers a choice of either periodic acid or chromic acid as oxidating agents, to better suit specific specimen types.

The kit features a microwave protocol. All reagents are provided in working concentrations; the ammoniacal silver solution is prepared just prior to use in a calibrated bottle which is provided. The kit stains approximately 500 specimen slides. Positive control slides for *Candida albicans* and *Pneumocystis carinii* are available separately.

Polysciences, Inc.: Tel.: (215)343-6484, Fax: (800)343-3291.

☛ FEI Company's Components Group announces a new 2-lens Electron Column that offers both small spot size for high-resolution imaging (less than 20 nanometers) and high beam currents for surface analysis techniques where signal-to-noise ratios and fast acquisition times are critical. The column operates at beam voltages of 0.5 kV to 25.0 kV with beam currents from less than 50 picoamps to more than 200 nanoamps. It is designed for incorporation in scanning and transmission electron microscopy (SEM and TEM), Auger electron spectroscopy (AES), electron spectroscopy for chemical analysis (ESCA), micro-RHEED, and low-energy electron diffraction (LEED) systems.

The electronically variable aperture gives the operator the flexibility to work at a wide range of beam currents without having to change column setup. For further information, contact FEI Company at tel.: (503)640-7500, fax: (503)640-7509.