New And/Or Interesting in Microscopy at PITTCON '94

For the interest of readers who were not able to attend Pittcon '94, we have attempted to summarize as below some of the new and interesting product announcements. Also listed are several new products not shown at the conference. U.S. readers interested in receiving information on these products may circle the corresponding number on their reader response cards.

1) Carl Zeiss introduced new. . .and economical. . .**motorized SEM stage controls** for their DSM line. This new package uses a joystick controller and is priced at almost one-half the cost for previous capabilities from Zeiss. Carl Zeiss, Inc. Carl Zeiss, Inc.: Tel.: (800)356-3440, Fax: (914)681-7443.

2) Dapple Systems introduced the **PCI: a unique image digitizer** that interfaces both analog and digital SEM's without beam control. Images are acquired as simply as taking a photograph - including all alphanumerics and magnification markers. Archived images can be played back through a microscope high resolution photo CRT to produce photographs that are virtually indistinguishable from an original. Dapple Systems: Tel.: (408)733-3283, Fax: (408)736-2350.

3) For 1994, Diatome's collection of **Diamond Knives**. The ultra-thin 45 degree angle for routine sectioning between 10-150 nm; the ultra-thin 35 degree for less compression when cutting polymers, soft metals and biological specimens between 10-150 nm; the semi-knife for alternating sectioning and HVEM between 0.1-1 µm; the cryo wet and cryo dry 35 degree & 45 degree angle for cutting frozen biological samples, polymers and rubbers between 30 nm-1 µm; the histo-knife 45 degree angle for cutting embedded specimens for Light Microscopy between 0.2-10 µm. For more information on any of our knives or services, please call or write today. DIATOME U.S., PO Box 125, Fort Washington, PA 19034. Tel.: (215)646-1478, Fax: (215)646-8931.

4) Digital Instruments, the world leader in Scanning Probe Microscopy, exhibited its complete line of **NanoScope® Scanning Probe Microscopes (SPMs)**, including the MultiMode™ Atomic Force Microscope (AFM), the world's best selling and highest resolution SPM. Featured at Pittcon this year were the new BioScopeTM AFM and the new Dimension™ 3000 SPM. The BioScope system is the first probe microscope specifically designed for biotechnology and life sciences. Its unique high-rigidity design provides image quality that can not be achieved with less stable platforms. The Dimension AFM offers the complete range of AFM techniques for small or large samples. Digital Instruments, Inc.: Tel.: (800)873-9750, Fax: (805)899-3392.

5) The Electron Microscopy Sciences **Oscillating Tissue Slicer** for cutting fresh or fixed tissue (20 microns and up) with two new features which are not available on any other instrument in the market. The first feature is an enlarged media tray in addition to our standard tray, which now comes as a standard with the base unit and it allows the operator to add ice packs to the buffering solution for temporary cooling. The second feature is an automated manual mode switch which allows the operator to choose from a manual mode sectioning cycle where the tray drive return is activated by the operator after each section is taken or by an automatic sectioning cycle where the unit will repetitively and automatically cut sections of pre-collected thickness until the sequence is terminated. These updates make our Tissue Slicer unique in the market. Electron Microscopy Sciences, PO Box 251, Fort Washington, PA 19034: Tel.: (215)646-1566, Fax: (215)646-8931

COMING EVENTS

✓ April 4/5 '94: **2nd Annual Internat'l Workshop on Modern Methods in Analytical Morphology.** *Cell Vision.* Orlando FL (609)735-0477.

✓ April 5/7 '94: **MRS Spring Meeting.** San Francisco CA. Mary Kaufold: (412)367-3036.

✓ April 5 '94: **1994 Biomaterials Workshop on Cell and Molecular Communication at Interfaces.** (Society for Biomaterials). Boston, MA. (612)927-8108.

✓ April 8/10 '94: **3rd Annual California State Univ. Microscopy Colloquium.** San Bernardino, CA. Klaus Brasch: (909)880-5315.

✓ April 22 '94: **Photomask Japan '94.** (SPIE/BACUS). Kawasaki City, Japan. SPIE: (206)676-3290.

✓ May 7/12 '94: **Food Structure Annual Meeting.** Toronto, Canada. Dr/ Ohm Johari (708)529-6677

✓ May 11/12 '94: **Scanning Probe Microscopy and Analysis** (Northwestern Univ. seminar). Evanston, IL. Allison Ando: (708)491-3365

✓ May 16/17 '94: **High Performance Plastics.** (Northwestern Univ. seminar). Evanston, IL. Allison Ando (708)491-3365.

✓ May 17/19 '94: **Computer-Assisted Image Analysis and Measurement** (North Carolina State Univ. short course). Raleigh, NC. Lorri Toole: (919)515-2261

✓ May 17/20 '94: **SCANNING '94.** (FAMS & SEEMS) Charleston SC. Mary K. Sullivan: (201)818-1010.

✓ May 19/20 '94: **IR-Plan Microscope Training.** Spectra-Tech. Stamford, CT. Debbie Esposito: (800)243-9186.

✓ June 6/10 '94: **Polymer Microscopy.** (Univ. of Michigan). Ann Arbor, MI. (313)936-0253.

✓ **LEHIGH MICROSCOPY SHORT COURSES**
June 13/17 '94: **Basic Course:** SEM and X-ray Microanalysis
June 20/24, 94: **Advanced Courses:**
Advanced Scanning Imaging
Quantitative X-ray Microanalysis
Microcharacterization
AFM, STM and other Scanned Probe Microscopes
June 20/23 '94: **Analytical Electron Microscopy**

For registration & other information, contact Dr. David B. Williams: Tel.: (215)758-5133, Fax: (215)758-4244

✓ June 15/17 '94: **Surface Analysis '94.** (AVS/ASTM). Burlington, MA. Joseph Geller: (508)535-5595.

✓ June 16/18 '94: **Current Trends In Immunocytochemical Protocols.** Geo. Washington Univ. Medical Ctr. Washington, DC. Fred Lightfoot: (202)994-2881.

✓ June 26/30 '94: **10th Annual Molecular Microspectroscopy Short Course.** (Miami University) Oxford, OH. (513)529-2873.

✓ June 26/July 1 '94: **4th European Congress of Cell Biology.** Praha, CR. Dr. Z. Drahota, Tel.: 2-4721151, Fax: 2-4712253.

✓ July 11/15 '94: **Freeze Fracture Course.** Colorado State Univ., Fort Collins, CO. Eileen Dieperbrock, (303)491-5847.

✓ July 11/15 '94: **41st International Field Emission Symposium (IFE '94).** Rouen, France. Prof. D. Blavette and A. Menand. Tel.: (33) 35 14 66 51, Fax: (33) 35 14 66 52.

✓ July 17/22 '94: **13th International Congress on Electron Microscopy.** Paris, France. Secretariat ICEM 13, Case 243 - Universite Paris VI, 4 place Jussieu, 75252 Paris Cedex 05, France. Tel.: (33)144272621, Fax: (33)144272622.

✓ July 18/21 '94: **INTER/MICRO-94.** McCrone Research Institute. Chicago, IL. Nancy Duerr: (312)842-7100, Fax: (312)842-1078.

✓ July 31/Aug 5 '94: **MSA/MAS Conference.** New Orleans LA. (800)538-3672, Fax (508)548-9053.

✓ August 18/20 '94: **Stereology Course.** Yale Univ. School of Medicine, New Haven CT. Paul Webster: (203)785-5072, Fax (203)785-7226.

✓ August 22/26 '94: **Immunocytochemisty and Cryosections Practical Course.** Yale Univ. School of Medicine, New Haven CT. Paul Webster: (203)785-5072, Fax (203)785-7226.

✓ Sept 12/15 '94: **MICRO 94 - International Microscopy and Image Analysis.** London, UK. RMS (U.K.): (0865)248768 Fax: (0865)791237

Readers will note that we are expanding "Coming Events" to major international affairs. The above are published, of course, at no cost.

In addition we will publish "summaries" of upcoming events. Rather than charging for such promotion, we will gladly accept article/material contributions to the newsletter.

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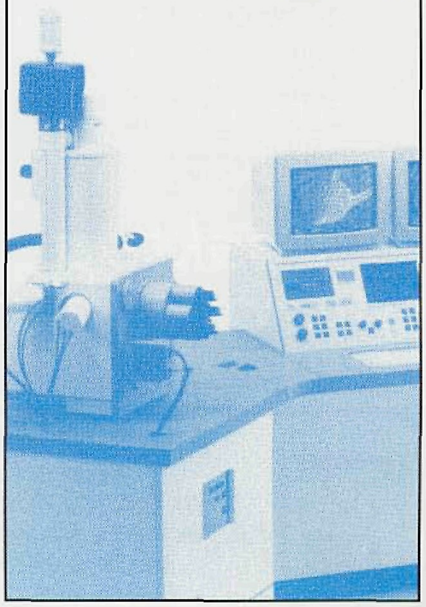

6) The Electron Microscopy Sciences **Precision Pulsed Laboratory Microwave Oven** for many steps in sample preparation prior to either light or electron microscopy including but not limited to staining, fixation, decalcification, impregnation, dehydration and immunohistochemistry. Our new microwave oven has many unique features and enhancements which makes it the most up-to-date unit available on the market. Some of the features of our unit are: an effect control is at the operators fingertips at all times and effect can be changed even in the middle of a run offering ease of use; the entire timing mechanism is set by pushbuttons; the system has a unique continuous run control button for longer procedures over 99 minutes/99 seconds; the unit has a mixing arrangement for up to 5 different containers at once; the unit has a stainless steel compartment so no staining liquid will stain the chamber and scratching of the chamber is impossible; the temperature probe can be adjusted in height to accommodate any size containers. These are only some of the features of our Laboratory Microwave Oven. Electron Microscopy Sciences, PO Box 251, Fort Washington. PA 19034: Tel.: (215)646-1566, Fax: (215)646-8931

7) ETP-USA has announced its **ETP SEM Infrared Chamber View System** - with its diffuse illumination, large depth of field, and priced at $2,950.00 including monitor, it represents a significant value. ETP-USA. Tel.: (800)8 ETP USA, Fax: (510)449-8996.

8) Affordable **EDS and DIGITAL IMAGING for SEM/STEMs!** EDS for TEMs also. Contact 4pi Analysis for an upgrade or to discuss a new system. Remember to ask about the recent improvement in image acquisition time! 4pi Analysis, Inc. Tel.: (919)489-1757, Fax: (919)489-1487.

9) **SPM 30: a fully integrated STM and AFM scanning microscope** with on axis optical microscope, side view viewfinder and vibration isolation is available from Leica, Inc. The system shown at Pittcon '94 demonstrated outstanding analytical poser for a wide range of material surface measurements. Leica, Inc.: Tel.: (800)248-0123, Fax: (708)405-0030.

10) Princeton Gamma-Tech recently announced its **NEW IMIX-XE X-ray Microanalysis System**. This next generation of analyzer coupled with the PRISM Detector with its field-proven digital pulse processor is certainly the most technically advanced system available today. New and unique features of the IMIX-XE include: 1) X-ray detectors with 60 mm^2 area for up to 500% increase in count rate, 2) digital based pulse processing for improved resolution at high count rates, 3) SmartSearch image archival package with sorting, editing and thumbnail image preview capabilities and 4) Micro and Super-SPARC technology with up to 100 MIPS performance. Princeton Gamma-Tech: tel.: (609)924-7310, fax: (609)924-1729.

11) TopoMetrix Corporation announced the **Observer™** at Pittcon '94. The Observer combines the atomic level magnification of SPM with a high-resolution SEM. Also featured was the **Aurora™** near-field scanning optical microscope (NSOM), which breaks the diffraction limit to spatial resolution. TopoMetrix: Tel.: (408)982-9700, Fax: (408)982-9751.

12 The highly successful Nitrogen Purge Technology used in the **SEM-CLEAN** system from XEI Scientific is now available for vacuum XRF spectrometers. The XRF-CLEAN system stops oil backstreaming from coating windows, crystals, and samples which interferes with light element analysis in both WDXRF and EDXRF spectrometers. XEI Scientific: Tel.: (415)369-0133, Fax: (415)363-1659.

13 **FLAME** allows you to obtain results with or without standards. The method of qualitative and.or quantitative analysis is preselected, as well as the form of the results. The results are displayed dynamically in real time, every 10 seconds during the acquisition. This saves time and eliminates the need to focus on the command structure, thus greatly simplifying the analytical process. The benefits are obvious! For the first time, you can focus on the samples, and not on the complexities of the analyses. xk, Incorporated: Tel.: (415)349-1301, Fax: (415)349-1185.