

MICROSCOPY TODAY

Greetings - - -

And thanks to the hundreds of our readers who have provided the names and addresses of their associates who are interested in receiving this newsletter. And a special thanks to the many of you who have contacted us with encouragement.

As the name selected for this newsletter might suggest, we are interested in the broad scope of microscopy. We ask all readers to pass their copy of the newsletter to others in their organizations who hold varying interests in the broad field. We are delighted to learn of others who would like a no cost subscription - by FAX (608-836-1969), by telephone (608-836-1970) or by mail.

Our plans include the development of an extensive data base of manufacturers and suppliers to the broad microscopy field and then to provide an equipment/services "locator" function, at no cost, to our readers. Should readers appreciate this "friendly" service, you are requested to advise manufacturers/suppliers that might call on you of our efforts. More on this subject on Page 2.

- - - The Editors

MAILING LIST UPDATE:

Our initial issue was mailed to 8,344 individuals in the U.S. with an interest in microscopy - from the most current, available sources.

A surprising 2+ % were returned as undeliverable by the P.O. The P.O., fortunately, returned half with forwarding addresses (at 72 cents each).

Our readers have helped in making up the difference by advising the names and addresses of others interested in receiving the newsletter.

Our mailing list currently includes 8,257 individuals with 447 being from suppliers, representing 128 companies.

INDUSTRY NEWS

Our greatest challenge remains in obtaining "news" of interest. Please HELP!

 ★ CORRECTION: The correct telephone number for the toll free EMSA bulletin board is (800)627-3672

○ The National Institute of Standards and Technology (NIST) has issued a new, comprehensive guide to its many research opportunities, facilities and services available to industry. The guide summarizes major research programs that are potential bases for cooperative research and development agreements, describes the major specialized research facilities and lists all available services. Detailed descriptions, project managers and phone numbers are given for each item. Copies of "Research, Services, Facilities" can be obtained by sending a self addressed mailing label to NIST Public Affairs Division, A903 Administration Bldg., Gaithersburg MD 20899.

○ Z-contrast imaging represents a fundamentally new approach to high resolution electron microscopy. A focused probe in a scanning TEM scans a sample and an annular detector collects electrons scattered through large angles. The scattered intensity is proportional to atomic number (Z) squared, so that a sufficiently fine probe maps out the location and scattering power of the materials atomic columns. An incoherent image results, showing characteristics similar to the image seen through a camera, but at atomic resolution. The most important aspect of Z-contrast imaging is the direct correspondence between object and image. For the first time, it is possible to determine the structure directly from the image with no need for any preconceived ideas or likely model structures. New interface structures are being observed leading to new insight into the atomic origin of material properties

and the atomistic mechanisms which occur during growth. The instrument is available from VG Microscopes

○ PITTCON '90 boasted 14 exhibitors in 25 booths and around 800 visitors. PITTCON '90 in New York City had some 34,000 visitors and, this year in New Orleans, almost 1,000 exhibitors will display in nearly 3,000 booths.

○ Tony Abbis, after management, marketing and sales positions with ARL and Hewlett Packard, has joined TopoMetric as Senior V.P., Worldwide Marketing and Sales.

YET ANOTHER ROSE - - -

Link Analytical, Inc. & Ltd., is now Oxford Instruments, Microanalysis Division.

INDUSTRY NEWS CONTINUED:

• We are delighted to announce that Jeff Christonson has joined the staff of Microscopy Today as Associate Editor. With over 16 years of experience in microscopy, Jeff has been previously associated with Nicolet, Tracor Northern and Kevex.

• According to a U.K. newspaper, Medeva (a fast growing, U.K., drug company) is attempting to purchase Fisons. The article advises that Medeva would sell off all of Fisons' non-drug business to assist in the financing.

Fisons Instruments, Inc. now includes ARL, Carlo Erba, Haake, Kevex, VG Instruments and Polaron.

The article further advises that Simon Constantine, of the rapidly growing health care company Life Sciences, has been approached as a buyer of VG Instruments.

• President Bush, in his State of The Union address, stated: "We must make common sense investments that will help us compete long-term in the marketplace. We must encourage research and development. My plan is to make the R&D tax credit permanent and to provide record levels of support - over \$76 billion this year alone - for people who will explore the promise of emerging technologies".

His following budget did include \$76.6 billion for R&D, including facilities, for fiscal 1993. Of interest to this industry is the \$8 billion budget for NSF, DOE and HHS including:

- NSF: \$1.6 billion (17% increase) for investigator-initiated research.
- DOE: \$482 million (11% increase) for university-based basic research.
- HHS: \$5.9 billion (2% increase) for investigator-initiated research (some 24,600 grants)

• Rob Sareen, a founder of Link Analytical, Ltd. and its long term Managing Director, has announced that he will be leaving the Oxford organization to pursue other personal business interests. Mr. Sareen currently manages the Analytical Systems Division of Oxford Instruments.

Mr. Sareen is well known in the U.S., particularly due to his major contributions to Si(Li) and HPGe X-ray detector technology.

With the resulting reorganization, the U.S. headquarters for Link Analytical will be moved to Oak Ridge, TN and will be located with Tennelec/Nucleus, another Oxford Instrument company.

Frank Brown has been appointed President of these Oxford Instrument companies in Oak Ridge.

• The McCrone Research Institute will conduct a symposium, INTER/MICRO-92, at the McCormick Center in Chicago, IL, on 13/16 July '92. It will cover recent advances in instrumentation, techniques in, and applications of both light and electron microscopy. To attend, or to present papers, contact Nancy Daerr at (312)842-7100.

• Scott D. Holt, previously of Lehigh University, has joined South Bay Technology, Inc. at their San Clemente, CA headquarters. Mr. Holt will manage SBT's new laboratory and will continue research into developing new sample preparation products and techniques.

• The ninth edition of the catalog Films and Video for Mathematics and Physical Sciences is available from Audio-Visual Services of the Pennsylvania State University. The catalog lists more than 1000 titles; subjects covered include astronomy, cartography, chemistry, computers, electronics, geology, industrial arts, materials science and sound. In addition to a description and sale/rental price information, each entry contains information on the level of the intended audience. For further information, contact Audio-Visual Services, University Division of Media and Learning Resources, The Pennsylvania State University, Special Services Building, University Park, PA 16802, (800) 826-0132.

P.S. Anyone interested in Z-contrast imaging, our page 1 article, might care to refer to the Dr. S. J. Pennycook article in the February issue of Analytical Chemistry.

SUPPLIER'S DATABASE

As mentioned on Page 1, we are in the process of developing an extensive data base relating to all systems and accessories in the broad microscopy field.

Our intent is to provide a "locator" service to our readers - at no charge to either them or the manufacturers.

Our first major chore is to establish system categories covering all of microscopy, based upon equipment rather than pure application. The following is our initial list of categories:

- Scanning Electron Microscopes
- Transmission Electron Microscopes
- Field Emission SEMs
- Environmental SEMs
- EDX Microanalysis
- WDX Microanalysis
- Confocal Scanning Microscopes
- Fluorescence Microscopes
- Infrared Microscopes
- Infrared Microspectroscopy Systems
- Interference Microscopes
- Inverted Microscopes
- Measuring Microscopes
- Metallurgical Microscopes
- Modulation Contrast Microscopes
- Polarizing Microscopes
- Phase Contrast Microscopes
- Raman Microscopes - Microspectroscopy Systems
- Acoustic Microscopes
- Ion Microprobe Microscopes
- Scanning Tunneling Microscopes
- X-ray Microscopes - Imaging Devices

We would GREATLY appreciate the assistance of any readers in finalizing these categories - remembering that they must be from the equipment manufacturer's viewpoint. Not only do we need any additional categories, but help in improving the logic and efficiency of existing categories.

While not firmly decided, we may initially extend that final category list by simply adding another set identified as "accessories". Then, on an ongoing basis, to further define these "accessories" into specific equipment items.

And, as mentioned on our page 1, we would appreciate each of you advising manufacturers of our "friendly" efforts!

★ ★ ★ ★ ★ ★ ★ ★

MAJOR CONTRACT AWARDS:

• VA Medical Center, Philadelphia, PA: \$300K TEM from Hitachi.

• NIH, Rockville, Md: \$99,500 SPM from Digital Instruments.

• NIH, Rockville, Md: \$157K confocal microscopy attachment from NORAN.

In the future, we will list Major Contract Awards (over \$100K) only as advised by the vendor or the vendee.

★ ★ ★ ★ ★ ★ ★ ★