

MICROSCOPY TODAY

This, our third newsletter issue, is being sent at no cost to some 9,000 individuals in the United States - each with an interest in microscopy. We remain delighted to learn of others wishing a no cost subscription - by FAX (608-836-1969), by telephone (608-836-1970) or by mail.

INDUSTRY NEWS

• The 1992 Resident, Cooperative, and Postdoctoral Research Associateship Programs in science and engineering have been announced by the National Research Council. Research is conducted at 115 research laboratories representing 230 federal agencies and research institutions.

Participating scientists have the opportunity to work on problems largely of their own choosing that are compatible with the interests and goals of the sponsoring facility. Approximately 300 associateships will be awarded in the fields of chemistry; earth and atmospheric sciences; engineering and applied sciences; biological, health, and behavioral sciences and biotechnology; mathematics; space and planetary sciences; and physics.

The annual stipends are from \$27,750 to \$42,000 for recent graduates and senior researchers may receive higher amounts. Relocation, support service, etc. expenses may also be supported. Awards are for one or two years and are renewable for up to three years.

Information on the program may be obtained from Associateship Programs (GR430/D3), Office of Scientific and Engineering Personnel, National Research Council, 2101 Constitution Ave. NW, Washington, DC 20418 (202-334-2760; Fax: 202-334-2759). Applications for July and November awards must be received, respectively, by 15 April and 15 August.

• Dr. Judy A. Murphy, until recently the National Training Director and a Research Scientist with the R. J. Lee Group, has joined the San Joaquin Delta College as Director of their Electron Microscopy Program.

NEWS ???

This note is to advise that we are experiencing serious difficulty in obtaining "news" of appropriate interest to our readers.

While hundreds of our readers have allowed encouragement for this newsletter effort, few have assisted us by submitting news items.

We trust that the objective of the newsletter is obvious. We do not intend, for example, to attempt a "technical" publication. Rather, we wish to present useful and interesting information relating to the broad topic of microscopy to our readers.

In clear attempt to (slightly) motivate a number of our readers to help us, we would like to present a \$25 U.S. Savings Bond for news items accepted for publication. Excluded will be relocations.

Contributors may remain anonymous - or credit will be allowed.

Assistance by each of our readers would be most sincerely appreciated!!!

• The Electric Power Institute (EPRI) is seeking ideas for research into possible approaches to mitigate the potential effects of electromagnetic fields using polymer technology.

They are interested in determining whether current polymer technology can be employed for use in coatings such as paints, fabricated materials such as gloves or masks, or woven systems for clothing.

Proposal information is available from Barbara Braithwaite, Electric Power Research Institute, 3412 Hillview Ave., Palo Alto, CA 94303, Tel: (415)855-2882

• Scientists at Lawrence Livermore Laboratory and Stanford University School of Medicine have, for the first time, utilized scanning tunneling microscopy (STM) to distinguish between adenine and thymine.

The work is considered a key step toward the ultimate goal of being able to sequence DNA by direct STM visualization of bases in complete DNA strands, perhaps in conjunction with spectroscopy.

Although STM has been used before to obtain images revealing the major and minor grooves of DNA, sufficient resolution was not available to identify individual bases.

The work was not done with natural DNA, but with bases dissolved in distilled water and laid out on a heated graphite surface. The adenine and thymine molecules would stick to the graphite surface and form a crystal lattice that is easy to work with - since thymine contains a single hexagonal ring and the adenine molecule has a double ring structure.

• Standard Reference Materials (SRMs) Brochures are available from NIST on the subjects of agriculture and food science, clinical laboratories, environmental laboratories, gases, industrial hygiene, marine science, microprobe and scanning electron microscopy, and spectroscopic analysis.

These eight brochures, part of a set of 16 on select SRMs, are available singly or as a set from the Standard Reference Material Program, NIST, Bldg 202, Rm. 204, Gaithersburg, MD 20899, Tel: (301)975-6776.

• R&D magazine, March issue, has an interesting article relating to Windows software in the laboratory.

