Staying Alive: Another View

Andrew W. Blackwood, Ph.D., Structure Probe, Inc.

Al Soeldner's article in the November issue of this publication entitled "Staying Alive" contains a lot of good, solid advice that all of us who operate service laboratories should take to heart. Whether our laboratories are public or private, his advice on sticking to what we know how to do, understanding how to put the client first in the "service" environment and establish a "user friendly" climate is sound and should be clearly heard by all.

There is, however, one point on which I do not agree with AI, and that is the scope of work which is appropriate for various laboratories. While he does discuss the possible problem of "agency policy" which may conflict with offering services to a broader user base, he might not emphasis that the problem created by the agency policy (if it exists) is probably based on a solid understanding of the legal climate in which we all operate.

If our instruments or other facilities are in any way funded through the government or through an organization which is exempted from taxation by the government, then we are dealing not just with violations of "agency policy" but with violations of the laws from which that agency policy was derived. Probably the best explanation of the "right" and "wrong" of this issue may be found in Important Notice #91 of the National Science Foundation. The principles spelled out in this document apply whether any NSF funding is involved or not.

All of us who do microscopy on a service basis have to deal with the harsh fact that we require expensive equipment to do "our thing". Somebody, somewhere has purchased that equipment. We can group ourselves into two kinds of operation, and all of us have a pretty good idea whether our organization (and therefore the owner of our instruments) is, or is not, organized for profit.

If our organization is for profit, then it is reasonable to consider offering services to outside users for a fee. Before your plans go too far, however,

you might want to look into how many companies over the years have tried this and quickly abandoned the idea. Top management quickly becomes uncomfortable with such questions as 1) corporate liability for professional "errors and omissions", 2) protection of the intellectual property of both the company that owns the laboratory and its outside users and 3) whether you can continue to fulfill your own, internal mission when your outside users are screaming for results.

If you are not organized for profit, however, such as a university or a research foundation, there is another question, which is basically one of fairness. While there are several different ways of looking at the fairness issue, at the core it comes down to taxes.

Taxes are an unpleasant but necessary part of life; they are a burden, but at the core of our national character they are a burden which we share fairly. Through our government, we decide that certain functions are so much in the public interest that we exempt the people who carry them out from some or all of the tax burden the rest of us carry. Most educational, religious and charitable organizations are described as "tax exempt", and many research institutes fall into this same category. Now a "tax exempt" organization is not exempt from all taxes; for example there are payroll taxes that are paid by all employers, whatever their tax status. There are, however, substantial costs that a tax exempt organization does not bear, and these include some or all property taxes, duty on imported equipment and a host of others, as well as the obvious income tax on profit (called "surplus" in the tax exempt sector) at the Federal as well as the state level.

On top of that, the funds to purchase many instruments come from the government, or from tax deductible contributions by tax paying organizations. If the instrument or facility is purchased in whole or in part with funds from NSF, then the institution has committed itself to follow Important Notice #91, which describes how the instrumentation may, and may not, be used. For a laboratory which has taken NSF funding to develop outside business could (repeat, could) lead to an unpleasant confrontation with NSF.

It is sometimes argued, especially for not-for-profit research institutes, that a particular activity falls into the category of "unrelated business income" on which the tax exempt organization does pay taxes, and that this levels the playing field. In fact, however, it does not. IRS records show that little, if any, revenue is collected from the Unrelated Business Income Tax (UBIT) provisions of the tax code; why this is so would take another article.

None of this discussion should be new to any of us, but it is often a surprise to see how few people who work for tax exempt organizations understand the charter under which they operate and how it makes them different from other corporations. There is a clear line between nonprofit, tax exempt organizations and the for-profit sector.

Yes, we all need to get better utilization out of our equipment if we are to survive into the competitive environment of the 1990s, but the way to do this is through the kinds of sharing and streamlining that Al's article outlines so well, not through competing with private firms who already offer similar services in the marketplace.



Our second generation, traceable, magnification reference standard for all types (SEM, Optical, STM, AFM, etc.) of microscopy. Usable from 10X to 50,000X with pitch patterns from 2 μ m ($\pm 0.1\mu$ m) to 8mm ($\pm 0.25\mu$ m). Pattern height traceable to 0.1mm \pm .001 μ m. New patterns for parti-



cle size counting (circles, squares and rectangles) and chemical imaging. Several hundred MRS's have been sold to date.

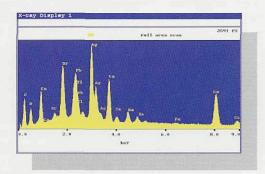
Send for our *free* **RESOURCE GUIDE** which discusses magnification measurement, error determination and calibration procedures.



426e BOSTON STREET • TOPSFIELD, MA 01983 508/887-7000 • FAX: 508/887-6671 • geller@world.std.com



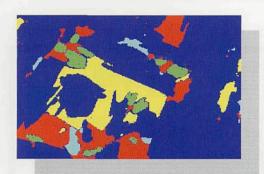
Where Else Can You Get...



Full Area Spectrum



A Map for Every Element



A Spectrum From Each Phase

... All from One Simple Collection...

PGT introduces IMIX-PTS...Position Tagged Spectrometry. This new and revolutionary technique for X-ray microanalysis data acquisition features PGT's patented digital pulse processor. While the Electron Microscope rapidly scans the sample and acquires a high resolution electron image, X rays are processed and encoded with the specimen (x,y) coordinate information. There is no need to perform separate collections for images, maps and spectral data or to decide beforehand what elements to map.

For more information contact PGT or visit us on the World Wide Web.

... Only from PGT



1200 State Road • Princeton, NJ 08540 • Tel: (609) 924-7310 • Fax: (609) 924-1729 • Web Site: http://www.pgt.com