

# Microscopy AND Microanalysis

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## Dear Abbe

### Dear Abbe,

*Could you provide a plausible explanation as to how oil got into the 10× objective on our confocal with an upright stand? Yesterday someone complained about poor imaging through the objective, and I discovered that there was a bubble of oil trapped between internal elements. I'm at a loss as to how someone got oil inside this low magnification, non-immersion lens. Any ideas?*

### Bewildered in Berkeley

### Dear Bewildered,

I sense you have acquired a malicious lab gnome. Madame Dikroic could help to identify and remove the little bugger. It typically involves warm rum, a Bic lighter, and several hours of dancing. It doesn't hurt—much. Alternatively, there is a little-known correlation that explains a mysterious phenomenon with microscope lenses. It involves a perverse, inverse relationship between the viscosity of oil and the resistance of users to follow directions, ask for help, or use common sense. Instead of trying to write several paragraphs on the highly technical permutations of this relationship or the complicated aspects of human laboratory behavior, I'll attempt to explain it through puppetry . . . Ready? . . . Alright then, any questions?

### Dear Abbe,

*As a fellow "old timer" I am hoping that you can offer some sage advice. It seems that nowadays it is all but impossible to buy an electron microscope that is not controlled by some damn computer. At work I am controlled by my department head. At home I am controlled by my nagging wife. At play I am controlled by my grandkids. At church I am controlled, well, by everything. I don't want to be controlled by my microscope. Help me Abbe-Wan Kenobi, you're my only hope!*

### Frustrated in Florence

### Dear Frusto,

I first came to grips with this problem in 1982 when I came back to the lab late one night and caught my Commodore-64 doing "unnatural" things with my first, and only, SEM—a precious young beauty that had been given to me by my good friend Manfred von Ardenne. Right then and there I decided that if one was going to be forced to choose sides, then my allegiance would be to follow the path of righteousness and the left-hand rule of electromagnetism. The abhorrent world of bits, bytes, and Googling was as foreign to me as an A.A. meeting was to Foster Brooks. Seized by the moment, and motivated by the seven pints of Warsteiner I had recently consumed, I picked up a bomb calorimeter and smashed the Commodore to small pieces. I suggest you do the same to any microprocessor that comes between you and your beloved secondary electrons. Come to think of it, you might also consider the same solution for your department head . . . and possibly your wife, but you are on your own on that one.

*Having trouble sleeping at night worrying about technique? Can't seem to find the right words to say to your technicians? Let Abbe have a whack at it. What could go wrong? Send your posers to his assistant at jpshield@uga.edu.*

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Portland, Oregon ❖ August 1 - 5



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