
Microscopy 101 - Continued from Preceding Page

window. Hold pipette with one hand (hand should rest, never work mid-air) near the tip and gently squeeze the bulb. The aim is to 'hit' with little force the upper rim of the Be window - where it is supported. Less force on the window and also slightly better coverage is achieved with the methanol stream directed well away from the perpendicular.

Freehand application is possible with care and a steady hand, but most people would be happier mounting the pipette horizontally in a low "retort" stand, at the Be window's level.

A side benefit of well-tilted detectors is that cleaning is much easier: simply use a suitable vial half filled with solvent and slide the detector snout into this. Slightly swirl and cleaning is done.

Jim Darley, ProSciTech (Australia)

Preventing Curling of Thick Plastic Sections:

I have been doing plastic sectioning for 20+ years, mostly glycol methacrylate (GMA), but I started out with methyl methacrylate (MMA). One to seven micrometer plastic sections do not ribbon, unless you put a dab of rubber cement on the top and bottom of the block, but usually we pick them up one section at a time. Curling is very common, so what I do is start the sectioning but do not finish, keep the section attached to the block, then use a brush or fine forceps and unroll it, pulling at a diagonal (leaving it attached lets you pull without completely pulling the section off). When it is mostly open and flat, complete the sectioning stroke, releasing the section.

I used to slide the MMA section onto a spatula, keeping the section wet with ethanol, and then sliding it off the spatula onto a slide on a hot plate. Keep dropping alcohol onto it, and it should flatten out.

GMA is much easier to pick off the block. Do the same thing, but keep everything very dry, pick up the section with a fine forceps and drop it onto a water bath and it will flatten out. Scoop onto a slide from the water.

Patsy Ruegg, University of Colorado Health Sciences Center

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