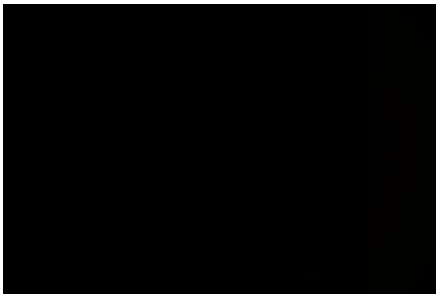
EXPERIENCES WITH CONTEMPORARY HOLOGRAPHIC PLATES, MAY 2012

This Series explores recording materials at 458 nm, and then characterizes Slavich PFG-03C at 532 and 633 nm.

#233: Bayer Photopolymer Batch #2, 3600+ uJ/cm^2 at 458 nm, dramatic polymerization viewed on CCTV, image not very bright.



#234: Bayer Photopolymer Batch #1, 3600+ uJ/cm^2 at 458 nm, not as dramatic of a polymerization viewed on CCTV as above, image not very bright.

#235: Bayer Photopolymer Batch #1, 3600+ uJ/cm^2 at 458 nm, and I do mean plus, as the material was left on the object for over 3 hours! Still not very bright.

I am beginning to think that I don't like this stuff very much! It did photograph better than it looks to the eye, maybe it might give a convincing blue component in a tri-color exposure.

#236: Ultimate U08 Green, 200, 400, 800 1600 uJ/cm^2 at 458 nm, 4' @ 70F Ultimate Developer plus Ultimate Bleach. 800 or 1600 best in shadow test.

The unbleached plate was photographed on the light table and you can see the colloidal red development, except in the most exposed part it looks like bigger, black grains are developed. Also there is density in the unexposed parts, although that might be just object light.

#237: GEO-3, 200, 400, 800 1600 uJ/cm^2 at 458 nm, 30" @ 65F JD-4 + TJ bleach.

#238: PFG-03C, 200, 400, 800 1600 uJ/cm^2 at 458 nm, 30" @ 65F JD-4 + TJ bleach. 1600 was the first "solid" exposure, seems like this material needs more light.

Both of these materials look brighter than the Ultimate! Trying some full plate keepers.

#239: GEO-3, 800 uJ/cm^2 at 458 nm, 30” @ 65F JD-4 + TJ bleach.

#240: GEO-3, 1600 uJ/cm^2 at 458 nm, 30” @ 65F JD-4 + TJ bleach.

#241: GEO-3, 3200 uJ/cm^2 at 458 nm, 30” @ 65F JD-4 + TJ bleach.

#242: PFG-03C, 1600 uJ/cm^2 at 458 nm, 30” @ 65F JD-4 + TJ bleach.

#243: PFG-03C, 3200 uJ/cm^2 at 458 nm, 30” @ 65F JD-4 + TJ bleach.

#244: PFG-03C, 6400 uJ/cm^2 at 458 nm, 30” @ 65F JD-4 + TJ bleach.

Not very bright under white light, but under laser replay their shadows are very opaque!

#245: Ultimate U08 Green, 1200 uJ/cm^2 at 458 nm, 4’ @ 70F Ultimate Developer plus Ultimate Bleach. Not too shabby, but the 2 above still beat it.

#246: PFG-03C, 800, 1600, 3200, 6400 uJ/cm^2 at 633 nm, 30” @ 65F JD-4 + TJ bleach. Since 1600 was the first “solid” exposure at 458 nm, seems like this material needs more light than GEO-3, going with these long exposures.

#247: PFG-03C, 800, 1600, 3200, 6400 uJ/cm^2 at 532 nm, 30” @ 65F JD-4 + TJ bleach.

6400 was the best exposure at both wavelengths. This stuff really is slow; next time I play with it the goal would be to cut down the exposure by longer development times.

#248: PFG-03C, 6400 uJ/cm^2 at 633 nm, 30” @ 65F JD-4 + TJ bleach.

#249: PFG-03C, 12,800uJ/cm^2 at 633 nm, 30” @ 65F JD-4 + TJ bleach.

#250: PFG-03C, 25,600 uJ/cm^2 at 633 nm, 30” @ 65F JD-4 + TJ bleach.

#251: PFG-03C, 6400 uJ/cm^2 at 532 nm, 30” @ 65F JD-4 + TJ bleach.

#252: PFG-03C, 12,800uJ/cm^2 at 532 nm, 30” @ 65F JD-4 + TJ bleach.

#253: PFG-03C, 25,600 uJ/cm^2 at 532 nm, 30” @ 65F JD-4 + TJ bleach.

It was hard to see any difference in brightness or scatter amongst any of them! Under laser light the green ones worked pretty well; but the red plate had some sort of upshifitng in parts of it, maybe a coating defect on one particular plate, as all the 6 above were processed simultaneously and this has not been seen on any previous plate!