

Re: Question re Olympus Universal Condenser

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Dearest Herr Rohringer,

AADD?

I shouldn't really be answering, but as it seems you put a lot of effort in replying, so let me be a good citizen and talk back. I gave you two clear reasons of how an oil immersion objective behaves, or indeed any immersion lens, when used without oil. From the condenser point of view, imho the glare is more of a problem than the introduced spherical aberration. Nevertheless, the effect in the whole is minimal, but sure if you go to very critical side-by-side viewing you might see this effect. I have tried to put this in perspective: slight variations between coverglass/mounting medium thickness have far greater effect on image quality, but very few people bother to take that into account.

You showed us before an Ap image of yours made WITH immersed condenser on your BX. So why can't you do this comparison yourself?

So if I have to answer again a question like this:

"Does this mean that for best results one should always oil the top oil lens on the Olympus universal condenser? "

I can only think of one straightforward answer: Obviously. But if you would ask: Is it worth the trouble of oiling the condenser for $nA < 1$? I would say no, not for me, never seen the difference. In brightfield, that is. But you might have to anyway, if the DIC system needs the top lens oiled, even for $nA < 1$.

R.v.W.

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