Instruction manual for colored IGD

IGD stands for In Glass Darkfield, the material on the slide is mostly illuminated from the side. The thickness of the material therefore determines how the microscope sees the image. Very thin and flat specimens, or those under a cover glass, will yield less results. The IGD is built with two RGB strips, with a set of control knobs. The controls very easily allow a mix of all colors, to recover the original specimen color or making a pleasant display of the sample material possible. Creating the different mixed colors requires some practice, but will quickly become intuitive.





Connect the IGD light module with its plug to the dimmer and connect the dimmer with the USB C cable to a working USB port (charger/PC/laptop etc.). The set turns on with the switch, the indicator light lights up when on and stays dark when off. The rotary knobs of the dimmer control from 0 (and slightly below) to the maximum light output of the strips. The switch on the dimmer does not interrupt the USB connection.



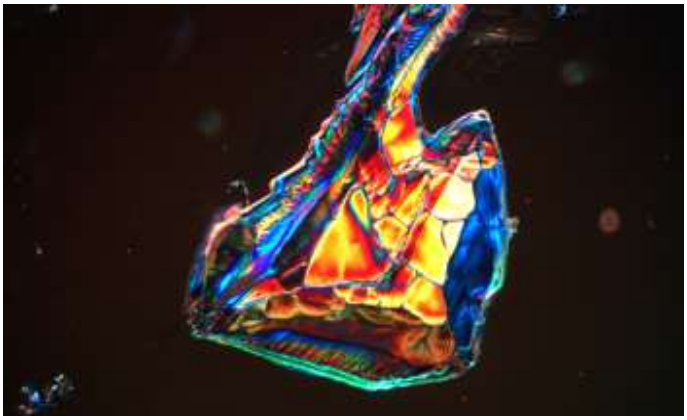
Place the light module in the objective clamp of the microscope (because of its thickness, needs the stage to be lowered first, using the focus knob). Place the specimen between the two strips, and check that the glass is free from the strips (and not on the edge of one of the strips) and lying flat on the holder.

You can now refocus the microscope on the specimen and continue to use the microscope as usual.

If the cord is in your way during use, you can also place the module the other way around in the objective clamp (cord on the other side of the microscope.)

When the microscope's own light is off, the background of the specimen in the IGD will be black, thus dark field. (lowering the condenser, sometimes reduces reflections and makes the background slightly darker.) With a little light from the microscope itself, the image can show a very different result. Using colored filters on the microscope's light output can also give surprising results. Even oblique and polarization in combination with the IGD can be applied well. Phase contrast will not (properly) work due to the elevated position of the specimen (try the effect anyway, you never know?).

The IGD is an idea and construction by TDKK. We have done our best to combine a user-friendly design with an unique image.



(here pol and blue/green from IGD)

The IGD works best with objectives up to and inclusive 20x (but try your other objectives)

Designed and build by TDKK, see tdkk.nl mail info@tdkk.nl