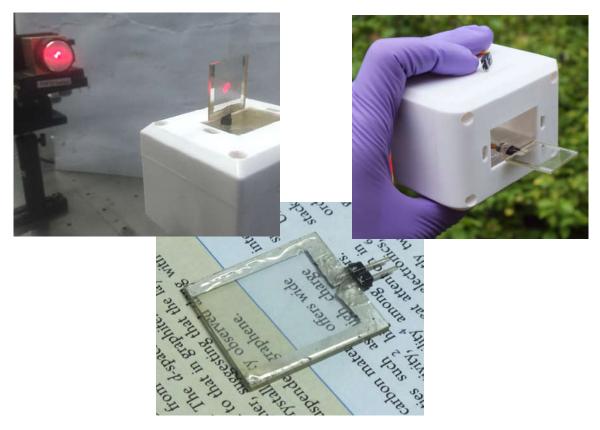
Self-heated Cover Slips



Invisible Metal Mesh (i2M) embedded on glass/PET/quartz plates serve as transparent heating platforms for a variety of applications. Such platforms are ideal in spectroscopy measurements with suitable substrate such as quartz which remains transparent from UV to IR ranges. They can also be used as substrates for microscopy, spectroscopy and diffraction.

The i2M embedded cover slip shown here, finds applications in diagnostic and analytical laboratories etc., where an analyte is required to be heated and optically analyzed. It can take the overlaid sample temperature to above 150 °C within fraction of a minute while being optically highly transparent. Importantly, these cover slip heaters are highly afforable and can be use-and-dispose consumables. Speciality cover slips reaching ~ 550 °C can also be made using toughened glass.



Contributors: G. U. Kulkarni and Sunil Walia