

Schedule for “Optical Microscope, Polarizing optical microscope”

(With heating facility) course

Session	Day – 1	Day – 2	Day – 3
Morning	<p><i>Introduction & theory</i></p> <p>Polarized light</p> <p>Refractive index</p> <p>Birefringence: optical anisotropy</p> <p>Instrument set up</p>	<p><i>Introduction & theory</i></p> <p>Temperature controlled hot stage</p> <p>Basics of Liquid Crystals</p>	<p><i>Evaluation</i></p> <p>Written test: Theory</p>
Afternoon	<p><i>Experiment:</i></p> <p>Identification of optically isotropic and anisotropic samples using polarizing optical microscope.</p> <p>Determination of sample birefringence</p>	<p><i>Experiment:</i></p> <p>Identification of liquid crystal phases</p> <p>Determination of phase transition temperatures.</p>	<p><i>Evaluation</i></p> <p>Lab work: Instrumentation basics of polarizing optical microscope</p>

Instructors:

Dr Shankar Rao

Dr Geetha Nair

Detail about the instrument is provided on the following link:

<http://crf.cens.res.in/facilities/GH-POL/>

