

These two workshops are a reduction from a semester long course crammed into less than 4 hours.

Clearly, much will be removed due to time constraints, but essential components will be briefly covered:

Myths of the Microscope

Light & Optics	Crystallography & Polarized Light Microscopy
Terminology 1 and 2	Using PLM to identify unknowns
Isotropic crystals	Uniaxial crystals
Biaxial crystals	Microcrystal tests
Recrystallization & Fusion melts	

***Terminology 1* and the file *Koehler Illumination and Centering* should be printed or have electronic access to use it at the workshop. Your life will be more difficult without them during the workshop.**

Here are some references to read in advance of the workshop. This list is not comprehensive.

Bloss, Optical Crystallography or Introduction to Optical Crystallography

Delly, Essentials of Polarized Light Microscopy and Ancillary Techniques

McCrone, Polarized Light Microscopy

Carlton, Pharmaceutical Microscopy

Schaeffer, Microscopy for Chemists

Stoiber & Morse, Crystal Identification with the Polarizing Microscope

Workshop 1

Myths of the Microscope

Light & Optics

Crystallography & PLM

Setting up the Polarized Light Microscope

Terminology 1

Using PLM to identify unknowns

Isotropic crystals

Workshop 2

Using PLM to identify unknowns

Refractive index determination of isotropic particles

Microcrystal test example

Terminology 2

Workshop 3

Uniaxial crystals

Biaxial crystals

Using PLM to identify unknowns

Refractive index determination of uniaxial crystals

Fusion melt example