

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

Refractive index determination of isotropic particles

Microcrystal test example

### Workshop 2

Terminology 2

Uniaxial crystals

Biaxial crystals

Using PLM to identify unknowns

Refractive index determination of uniaxial crystals

Refractive index determination of biaxial crystals

Fusion melt example