Optical Microscopy

Principle

Sample surface can be analyzed using reflection mode, while the structure of materials can be studied using transmitted light (samples must be few microns thick).

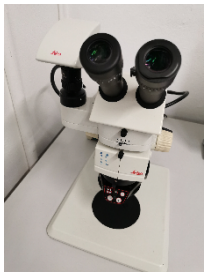
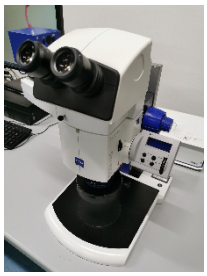
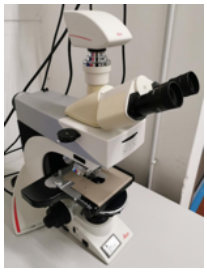
A large variety of contrast modes exist to highlight different aspects of material structures, depending on the information needed.

Samples can be either solids or liquids.

Capabilities

- Fractography
- Dispersion in polymer blends
- Powders, crystal morphologies
- Thickness measurements of multilayered materials, concentricity

Assets

	Asset	Details
	**Stereo Microscope Leica M60**	Observation of surface at low magnifications (x6-x40) in reflection, with integrated annular light and digital camera.
	**Zeiss Discovery V12**	Observation of surface at low magnifications (x6-x40) in reflection, with integrated annular light and digital camera.
	**Optical Microscope Leica DM2700M**	Observation of samples at higher magnifications (x25-x500, limit of resolution 0,5 µm) in reflection or transmission, and digital camera.
	**Photo bench**	Realizing quality pictures of large parts at low magnification, in repeatable conditions of lighting and exposition. Bench and camera support (Kaizer), a reflex camera (Nikon) piloted a software (controlmynikon).

back to Microscopy, Solution and Colloids Lab