

CLA Materials Science Lab

The Materials Science Lab contains equipment needed to evaluate material properties. It houses a scanning electron microscope, an x-ray diffractometer, a tensile test system, a Mossbauer system and various material and sample prep equipment. It also contains several instruments vital to the characterization of luminescent glass and glass-ceramic materials including a Gentech Scientific TU-1901 double beam ultraviolet/visible light spectrophotometer, a Photon Technology International QM-3A luminescent spectrophotometer, a Phillips 3040 x-ray diffractor, SDT Q600 simultaneous TGA and DSC, and a Netzsch 200 F3 Maia.



Philips XPert X-ray Diffractometer

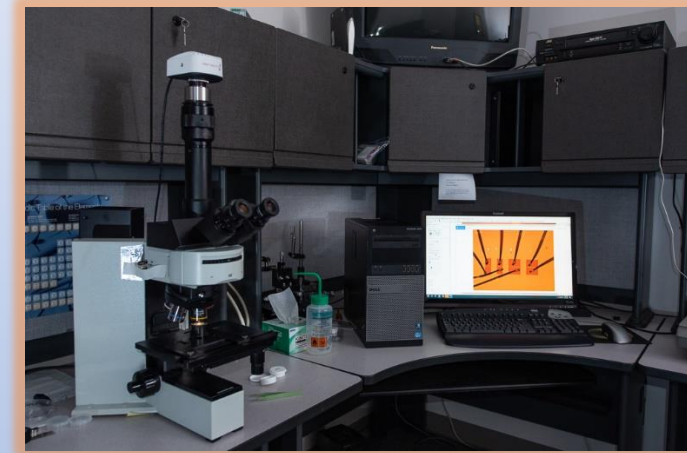
Uses x-rays to probe materials

Can reveal the crystal structure of a material

Can be used to identify a “fingerprint” in unknown materials



**JEOL JSM-6320F
Scanning Electron
Microscope (SEM)**



Materials Analysis Lab



Sample Preparation Lab