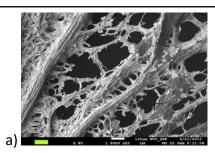
## **ELECTRON MICROSCOPY FACILITIES (EMF)**

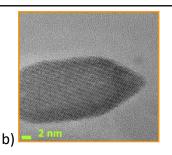




## **OVERVIEW**

The SRF Electron Microscopy Facilities (EMF) are in the Engineering Sciences Building (ESB) on the Evansdale campus. These multiuser laboratories attract people from many different research areas, due to its wide range of capabilities, reasonable costs, and one-on-one hands-on training on the instruments. The EMF is fundamental for structural analyses of different materials, going from bulk samples to biological. The equipment can also perform chemical elemental analysis via energy-dispersive X-ray spectroscopy (EDS) and phase mapping. Sample preparation can be developed on site and experienced staff is available to assist users with all their requirements.







Electron microscopy images: a) SEM image of helicopter leaf from Sycamore tree in WV. b) High resolution TEM image showing the atomic planes of a crystal. c) Large view TEM image of mouse retina epithelium.

## REPRESENTATIVE EQUIPMENT

- JEOL JSM-7600F Scanning Electron Microscope (SEM)
- JEOL JEM-2100 Transmission Electron Microscope (TEM)
- State-of-the-art FIB/SEM multibeam system (Expected by May 2024)
- Denton Desk V sputter and carbon coater
- Allied High Tech multiPrep Polishing system
- Leica UC7 RT ultramicrotome
- Fishione 1050 TEM mill
- Bal-tec CPD030 CO<sub>2</sub> critical point dryer
- BioSample preparation lab for SEM/TEM (fixation, dehydration, staining, resin embedding)

## **CONTACTS**

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