TRANSMISSION ELECTRON MICROSCOPY (TEM) FACILITY

Transmission Electron Microscope is ideal for a number of diverse fields such as life sciences, nanotechnology, medical, biological and material research, forensic analysis, geology and metallurgy as well as industry and education. TEM provides topographical, morphological, compositional and crystalline information. The images allow the researchers to view samples on a molecular level, making it possible to analyze structure and texture. This information is useful in the study of crystals and metals. TEM can be used in semiconductor analysis and the production of silicon chips.

USER FACILITIES

Tissue (Biological) processing for TEM

Sample preparation of non-biological/nanoparticles

Negative staining for TEM

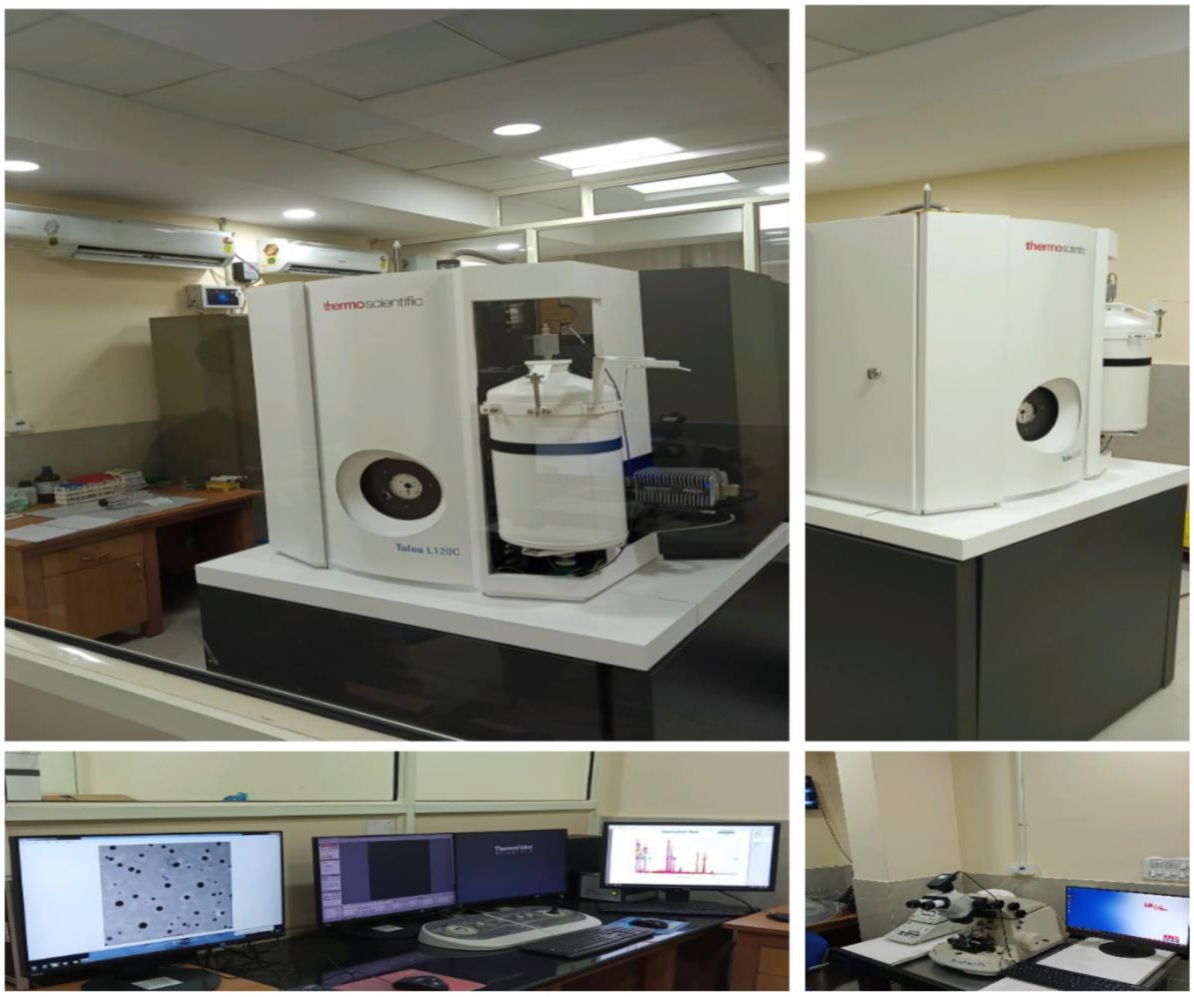
TEM viewing

Elemental analysis by EDAX

Image analysis

About TEM installed in Jamia Hamdard University:

The Thermo Scientific™ Talos L120C TEM is a 20-120 kV transmission electron microscope uniquely designed for performance and productivity across a wide range of samples and applications, such as imaging of cells, cell organelles, polymers, and soft materials, both at ambient and cryogenic temperatures.



Equipments in Facility:

1. **Transmission Electron Microscope**
   - Talos L120C TEM takes imaging to the next level with the optional, motorized, and low-dose technique, producing quality images even for beam-sensitive materials.

2. **Energy-dispersive x-ray spectroscopy (EDAX)**
   -For elemental analysis of biological as well as non biological samples.

3. **Ultramicrotome**
   -For cutting ultrathin sections for TEM

Information for the users:

The facility is open from 9:00 AM till 5:30 PM on all working days from Monday to Friday.

Contact Us

TEM in-charge:

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