

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 metal. 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

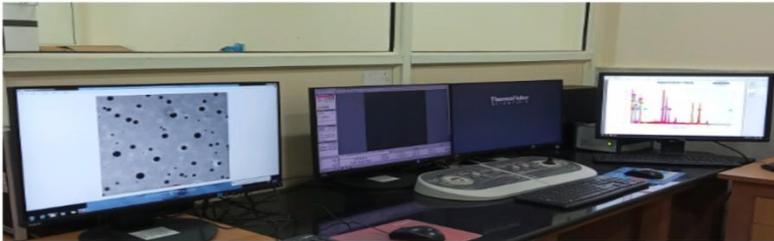
TEM viewing

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:

CIF in-charge:

Prof. Dr. Asif Husain,

Department of Pharmaceutical Chemistry, SPER, Jamia Hamdard, New Delhi-110062.

Email: ahusain@jamiahamdard.ac.in, Mob: 9891116086

TEM in-charge:

Dr. M Aamir Mirza

Assistant Professor, Dept. of Pharmaceutics
SPER, Jamia Hamdard-110062

Email- aamir.mirza@jamiahamdard.ac.in

Mob- +91 9213378765

TEM Operator:

Mohammad Aaqil Shadab

TEM Facility, Jamia Hamdard-110062

Email- aaquilshadab23@gmail.com

Mob- +91 9540555898

Central Instrumentation Facility,

School of Pharmaceutical Education & Research (SPER)

Jamia Hamdard, New Delhi-62

USER CHARGES FOR TEM

w.e.f. 01.03.2022

Facility	Internal (JH)	Academic & Research Institutions	Private Industries/ Laboratories
Sample Preparation for non-biological/nanoparticle	Rs. 400	Rs. 800	Rs. 1500
TEM Viewing Per Sample (Max. no. of images-10)	Rs. 400	Rs. 800	Rs. 2000
Cost per image thereafter	Rs. 40	Rs. 80	Rs. 150
EDX	Rs. 300	Rs. 600	Rs. 1000

TEM Requisition Form:

