VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Advanced Sciences
Vellore Institute of Technology, Vellore

High Resolution Transmission Electron Microscope (HR-TEM)

Name of the Facility:

- High Resolution Transmission Electron Microscope (HR-TEM) Model: FEI –TECNAI G^2-20 TWIN (Operating voltages 200 kV).
  Other Accessories:
  - Bruker EDX with LN_2 free detector.
  - Fischione STEM (Scanning Transmission Electron Microscope) detector.

Capabilities of HR-TEM:

- Morphology, texture and compositional analysis of the materials.
- Selected Area electron Diffraction (SAED) pattern for studying crystalline nature of the samples
- Analysis of elemental composition using Energy Dispersive X-Ray Spectroscopy (EDS)
- STEM for studying morphology and distribution of elements in the sample by STEM-EDS X-ray mapping.
- Measurement of inter-planar separation (d) between parallel planes of crystalline materials
- The interior structure of microorganisms could be studied

Potential users:

- Useful for multiple disciplines of research such as physics, chemistry, material science, metallurgy, biology, nanotechnology and nano-science.

How to Apply:

- The registration and payment for HR-TEM analysis is through online. The user is mandated to book the slot for measurement by making a payment online in advance. The slot is allotted as per queue.
- Link for HR-TEM online registration: http://info.vit.ac.in/events2018/temlab/apply.asp
- Magnetic and hazardous samples are not allowed

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(FEI-TECNAI G2-20 TWIN)

Analysis charges:

For Academia*:

- Result within a day – Rs.4000/sample
- Result within 3 days – Rs.3000/sample
- Result within 10 days – Rs.2500/sample

For Industry*:

- Result within a day – Rs.7500/sample
- Result within 3 days – Rs.6500/sample
- Result within 10 days – Rs.5500/sample

* The rates mentioned include charges for imaging, EDS analysis, SAED pattern and grid.

Contact:

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Payment Portal: http://info.vit.ac.in/events2018/temlab/apply.asp