

## Transmission Electron Microscope (TEM) Unit

### Background

Transmission Electron Unit of ICAR-DFMD, Bhubaneswar was established in the year 2018 at ICFMD, Arugul, Bhubaneswar. TEM unit has 120 kV high resolution transmission electron microscope (JEM-1400 plus, JEOL, Japan). Along with TEM, it has ultramicrotomy (Leica EM UC7) and a knife maker (Leica EM KMR3) for ultra thin sectioning of tissue samples followed by automated tissue processor. TEM is an instrument used to create high resolution, black and white image from the interaction that takes place between prepared samples and energetic electrons in the vacuum chamber. A TEM utilizes energetic electrons to provide morphologic, compositional and crystallographic information on samples.

### Make & Model

JEOL 1400 Plus

### Application

Biological and life sciences, nanotechnology, education.

- **Proforma for External Users**
- **Proforma for Internal Users**
- **TEM Rates**



### User Instructions

#### External Users (Other than ICAR-DFMD):

1. A requisition letter addressed to Director, ICAR-DFMD, ICFMD along with a printout of electronic fund transfer proof should be sent by email or post to office, ICAR- DFMD, Mukteshwar-263138, Nainital, Uttarakhand.
2. Once we receive the requisition letter and advance payment, your appointment will be scheduled as per the queue. The user will be informed about the appointment date and time by e-mail.
3. The sample can be loaded on carbon coated copper grid, 3mm diameter, with a thinned (electron transparency) central area.
4. It is most desirable that the user is present in the TEM lab at the time of appointment for better utilization of the facility.
5. Please send or submit sample details form along with the requisition letter and advance payment. Click here to download sample details form
6. If the information is incomplete the samples will be sent back to the user.
7. Before proceeding further, please review How to Use Facility and Payment Procedure for more information.

#### Internal (ICAR-DFMD) Users:

1. The user should book your slot in advance.
2. An appointment will be given as per the queue and the user will be informed by an email.
3. The new user is requested to contact TEM Lab before registration.

### Contact Details:

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