

**HIGH RESOLUTION TRANSMISSION ELECTRON MICROSCOPE LABORATORY (HR-TEM Lab)**

Department of Metallurgical & Materials Engineering (MMED), IIT Roorkee

E-mail: hrtem.mmed.iitr@gmail.comJob Order No. **HR-TEM User Form** Department / Institute: **(a) Need for using 300kV TEM (kindly give proper justification):**

(b) Sample loading is inclusive of slot duration (2 hours per slot) & pre-meetings are encouraged to discuss the analysis.

| Experiment/ User category (✓) | Type of analysis (Please tick ✓) | Sample Details (disc of 3mm diameter) (Please tick ✓) | Expected Morphology/ Particle size |
|---|--|---|---------------------------------------|
| HR-TEM (JEM3200FS) <u>User category</u> (1) Internal User (Registered in IITR) (i) Institute Fellowship <input type="checkbox"/> (ii) Project Fellowship <input type="checkbox"/> (2) External User (Educational Institute/ Govt.R&D Lab/Industry) <input type="checkbox"/> | HR-image <input type="checkbox"/> BF/DF image <input type="checkbox"/> SAED <input type="checkbox"/> STEM <input type="checkbox"/> EDS/EDX <input type="checkbox"/> EFTEM/EELS <input type="checkbox"/> | Number of slots <input type="text"/> Sample Composition <input type="text"/> Metal/Alloy/Non-metal/ Non-Magnetic/Composite/ Thin-film/Nano particles <input type="text"/> /others: _____ | |

(c) User charges per TWO-HOUR slot (Add: GST@18% to total user charge):

(i) IITR user with Institute Fellowship: Nil, IITR user with Project Fellowship, Rs.100/-

(ii) External users: Educational Institute Rs.5000/-, Government R&D Labs 7,500/-, Industry Rs. 10,000/-

(iii) Charges for each TEM grid, Rs.500/- and TEM sample preparation for thin solids (~ 100µm), Rs.1000/- per sample.

(d) Payment through NEFT/RTGS/UPI (online transfer) to "Dean SRIC, IIT Roorkee" Name of Bank: Punjab National Bank, Branch: IIT Roorkee and Account Number: 4044000100031597, IFSC Code: PUNB0404400, MICR Code: 247024103.

(e) Postal address for sending HR-TEM User Form & samples to "The Head, MMED, IIT Roorkee, Roorkee-247 667, Uttarakhand"

| User Details | Supervisor / Principal Investigator (PI) Details |
|--|--|
| User Name: _____ Designation /Roll Number/course: _____ Mobile Number: _____ Official e-Mail id: _____ Signature of User: _____ Payment Reference Number & Date: _____ (Kindly attach transaction details & payment is non-refundable) | <i>Certified that this work is part of research activity of the user.</i> Name of Supervisor / PI: _____ Supervisor/PIs Signature: _____ Remarks: _____ |
| Forwarding Authority | Approving Authority |
| Head of User Dept./Institute/Lab/Industry (with office seal) | Professor i/c TEM Lab / Head, MMED – IITR (with office seal) |

For HR-TEM Laboratory use only

| | |
|--|---|
| Date of receipt: _____ Initial of O-i/c: _____ Slot allotted, Date: _____ Time: _____ | Remarks (if any): _____ |
| No. of samples analyzed: _____ Logbook Number: _____ | Holder: Single /Double Tilt /Double Tilt "Be" /Heating /Straining HR/BF/DF images /STEM/EDS/SAED/EFTEM/EELS/ _____ |
| Data given through CD/ User's e-Mail on: _____ | Signature of TEM Operator _____ Officer-in-Charge, TEM Lab |

Note: (TEM user form Approving Authority: Prof i/c TEM Lab for MMED users, Head-MMED for N-MMED-IITR & External users)

(a) Kindly drop HR-TEM user form (duly filled) in Box @ TEM Lab (Max. slot per user form: 2 for MMED & 1 for other Dept. of IITR)

(b) Exchange of slots are strictly prohibited. Request for exchange of slot will lead to cancellation of the user form.

(c) One-time postponement is permitted on valid proof/reason with one-day prior notice.

(d) User data will be shared through e-mail. Kindly acknowledge by reply email. All data on system will be erased after 15 days.

(e) Samples not permitted: Magnetic/Biological (protein, lipid, algae, saccharide)/Wet/Air Volatile/Vacuum sensitive/Organic.