**Rules and Regulations for Thermionic SEM/FESEM**

**General rules for all Thermionic SEM/FESEM equipment:**

- FESEMs are restricted to post-graduates and research staff only. Undergraduate users have only access to the thermionic SEMs.
- Users must bear the full responsibility of the instrument for the session they have booked.
- Users must cancel the booking at least 24 hr before their session. Charges apply if users cancel booking thereafter.
- For penalties, please see end of the page.

**Thermionic JEOL SEM 5410, 5310, 6360**

1) Undergraduate users can only use from 8am to 6pm within office hours.

2) All users will also begin basic training from SEM 5410/5310. Post-graduates and research staff who are already trained on the FESEM 6340F may start training on the SEM 6360.

3) JEOL SEM 5410 and 5310 usage is waived only for FYP users. JEOL SEM 6360 usage is chargeable for all users including FYP.

4) Users must cancel the booking at least 24 hr before their session. Charges apply if users cancel booking thereafter.

**After-office hour access to JEOL SEM 5410/5310**

- Post-graduates and research staff users must have 20 hrs of experience during office hour before they have access to after-office hour usage. A brief will be conducted before after office hours access is granted.

**Access to JEOL SEM 6360**

1) Must accumulate 20 hrs of experience on SEM 5310/5410 before they can apply for training to use SEM 6360.

2) Usage of SEM 6360 is chargeable.

**FESEM 6340F and 7600F:**

**After-office hours access criteria for FESEM 6340F**

1) Must have at least 10 hrs of hands-on experience during office hours.

2) User will request for an assessment. Failure in this assessment, user must accumulate another 10 hrs before next assessment.

**Criteria for FESEM 7600F Office Hour Access**

1) Must accumulate a total of 15 hours (10 office hrs, 5 after-office hrs) of hands-on experience with FESEM 6340F.

**After-office hours access criteria for FESEM 7600F**

1) Must Accumulate a total of 30 hrs of hands on experience on JEOL 7600F during office hour.

**Special Request**

1) FACTS will help user to block-book FESEM 7600F if they have the intention to do in depth analytical work. Examples of analytical work are EBSD etc.

2) Normal Charges apply for special requests.
**Penalties for All SEM/FESEM Users**

1) Users must bear the full responsibility of the instrument for the session they have booked. If user allow unauthorized users to operate the instrument during the session that he/she has booked, penalty will be implemented as follows:

**1st time**

i. User will be banned from using all instruments in MSE

ii. On the following month, users will be downgraded to day access to that particular instrument, reassessment will be given before upgrading again

**2nd Time**

i. User will be banned on all instruments in MSE

ii. On the following month, user must apply for retraining with full training cost before accessing to that particular instrument. Training is subjected to availability.

**3rd Time**

i. User will be banned from using all instruments in MSE

ii. On the following month, users must apply for retraining for that cluster of instruments (either SEM cluster; FESEM cluster; XRD cluster 1+2; TEM cluster), with full training costs.

2) In case case of Sample Dropped in Chamber or down the FESEM in some other ways– User will be banned for one month and have to be retrained on that particular instrument. Training is subjected to availability and will be fully chargeable.

3) All users must submit the incident report within 1 working day after the incident. Otherwise, user's access to the instruments will be suspended indefinitely until the incident report have been submitted and the indicated time of access removal will take effect from the time of submission.

**For Users who have not booked and used SEM/FESEM for a long period of time**

1. If users have fulfilled the entire criterion stated above but are unable to use the SEM/FESEM frequently after that, their access might be reverted to office hours usages until he is certified to be able to use the SEM/FESEM proficiently.

2. The FOM will remove the access of the user who have not used the SEM/FESEM for a year. In such event, user have to be re-trained and training cost is fully chargeable.