User Application Form for use of the Sorby Centre electron microscopy facilities

1) First, discuss with your supervisor whether or not you need to be trained to use the instruments. It may be faster, more effective and cheaper to pay the technical staff to collect images and data for you. They can work faster (by up to a factor of 3) – and at higher quality – than a newly trained user. This is the best option if you have only occasional need of electron microscopy.

2) Do not ask to be trained if you do not intend to use the Facility. This sounds obvious, but we train many students only to discover they want to put EM skills on their CV, but they never have any need for EM. We are a research facility, not a teaching facility, and we are very pushed for time to train genuine users.

3) The prospective User (or a User requesting an upgrade) must fill out Section A of this form.

4) Ask your supervisor, or the relevant PI, to fill out Section B of this form.

5) Post this form into the wall folder outside the Sorby Centre Office. The Sorby Centre Office is in room LG04 in the Kroto Research Institute on the North Campus.

6) Fill out and sign the appropriate Health and Safety forms and Risk Assessments, including relevant COSHH forms.

7) Once you have done all the above, you will be able to book your first teaching session.

8) On your second teaching session, you should bring along your own sample, or at least an example of the sort the sample you will be studying.

9) Once trained, you must start using the microscope within 1 month of your last training session. Do not ask to be trained before you are ready with your experiments. We enforce this rule because otherwise people forget what they have learnt and so waste the time of the staff with retraining.

10) If you have been granted unfunded access to the facilities, then after six sessions (including teaching sessions) you will be asked to provide a brief report (2 sides of A4) on your work to date. This should include examples of micrographs you have obtained, what the micrographs represent, what you have discovered about your specimens, and an outline of future work. If the report is unsatisfactory, the Director may ask to talk to your supervisor about the future of your project. Further access may be denied.

Section A

Your name____________________________________________________________

If you are not a member of the University of Sheffield, give affiliation and email:

____________________________________________________________________________

email:____________________________________________________________________________

If you are a member of the University of Sheffield, give the following details:

University email address______________________________________@shef.ac.uk

CICs userid:_____________________________________________________

U-card number:___________________________________________________

Department:_____________________________________________________

Your telephone number:___________________________________________
Are you (please tick) an undergraduate ☐, an MSc student ☐, a PhD student ☐, a research associate (RA) ☐, other ☐

What sort of microscope/FIB do you think you need to use? If possible, give details of required techniques (e.g. secondary or backscattered SEM imaging, EBSD, diffraction contrast in TEM, High resolution TEM, EDX, EELS, CL, etc):

What materials are you looking at, and what do you want to find out about them? What is the scale of the feature you are interested in (nm or µm)?:

If you are new to the Sorby Centre, please describe previous experience of electron microscopy:

I agree to abide by the rules of access to the Sorby Centre (see: http://www.shef.ac.uk/electron-microscopy/materials. I understand that if I book a session but do not attend within ¼ hour of its start I will forfeit the session but my supervisor will still be charged. I understand that any damage I recklessly cause to machines will be reported to the Director and may result in suspension of my access to the facility.

User signature_____________________________________

Date:________________________________________________________
Section B (to be filled out by the supervisor):

First, please think about whether you think it is best for your student/RA to be taught to use the instrument base. If you only need occasional use of the microscopes, it may be cheaper and quicker to pay for one of the technicians to perform the work for you. They can generally process specimens 3 times faster than a newly qualified user and the results will be higher quality. This sort of technical support costs an extra £35/hr.

Please tick appropriately:

A) I do not have a research account with explicit Directly Allocated costs for electron microscopy, but I do have a research account (box below) with funds available for this work ☐.

If you select A above, please note that if in future you write a grant application which will need electron microscope access, you should use the pull down menu for ‘Major Facilities’ under Directly Allocated costs on the URMS form.

B) I have an account (box below) with Directly Allocated costs for electron microscopy ☐

If you select B above, funds will by default be transferred pro-rata quarterly, unless you request otherwise.

C) I do not have funds to cover the cost of this access ☐. If you tick this box, you must fill out a SORBY UNFUNDED ACCESS form, available at: http://www.shef.ac.uk/electron-microscopy/materials.

CHARGE TO ACCOUNT NUMBER:
(e.g. R/******.* , X/*******.* )

If you have selected (A) above, you will be invoiced retrospectively. However, you can choose limit your liability by proposing a credit limit below:

CREDIT LIMIT:

Charges for Internal users: At the time writing (04/07/17), rates are under review, but currently stand at SEM: £30/hour, minimum booking 2 hours. TEM: £25/hr for conventional TEM and £45/hour for FEGTEM with EELS (JEOL 2010): minimum booking between 2-4 hours, depending on microscope. FIB access is £35/hour. Helios £60/hr. Unmanned overnight run of FIB or EBSD: £120; over-weekend run: £300. If you need access to the JEOL R005, please liaise with Dr Ian Ross (i.ross@shef.ac.uk).

If you want the work to be undertaken by Experimental Officer (i.e. you do not want an RA or PhD trained on the machines) there is a further charge of £35 per hour.

Supervisor (print name, please):_____________________________________________________

Supervisor’s email address:________________________________________________________

Signed by Supervisor:___________________________________________________________

Authorization (Sorby staff)________________________________________________________
For Office Use

<table>
<thead>
<tr>
<th>Date received (Name and date)</th>
<th>Training start (date and name)</th>
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<tbody>
<tr>
<td>Microscope used</td>
<td>Training completed:</td>
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<tr>
<td>Job completed</td>
<td>Job number (if payable) and cost</td>
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