

The Sorby Centre for Electron Microscopy

A guide for **supervisors**.

Section 1: Including costs for electron microscopy on a grant application

If you are putting together a grant proposal, it is very important to understand that Sorby Centre costs go under the 'Directly Allocated' heading. The Appendix at the end of this document explains how to do this on the URM system. In the drop-down menu, all you need to do is enter the access time you need to particular types of microscope.

All the URM entries are 'Electron microscopy – Sorby xyz', where 'xyz' is one of:

- **'SEM hrs'** for standard scanning electron imaging, including EDS or CL, charged at £30/hr.
- **'TEM hrs'** for standard transmission electron microscopy (imaging and EDS), charged at £25/hr.
- **'FIB hours'** for Focused Ion Beam milling, charged at £35/hr
- **'High Resolution FEGSTEM'** (JEOL 2010) for high-resolution TEM with EDS or electron energy loss spectroscopy (EELS), charged at £45/hr (don't ask about the 0.01!).
- **'Aberration Corrected TEM/STEM'** (R005), Ultra High resolution TEM/STEM with EDS and EELS, charged at £60/hr.
- **'Supported Aberration Corrected'** (R005), means that the microscope is operated on your behalf by an Experimental Officer, charged at £95/hr.
- The new Helios microscope, charged at £60/hr.

*(Important: these prices apply only for **Internal Users from within the University of Sheffield**)*

Our usual model is for RAs or PhD students to learn to use the microscope themselves. You will need to allow at least 4hrs training on SEM, 3-6 sessions for TEM, and as much as 32 hours for using the high-end microscopes (although a user would normally be expected to learn on a lower end machine to begin with).

Note that you can include access charges for PhD students or RAs in your group if they will contribute directly to the project you are submitting, even if their fees/maintenance/salary are not covered by the proposal itself, provided you include this in the justification of resources.

If you only plan to do a small amount of EM, it may be quicker and ultimately more economic to pay for all the data collection (on whatever

microscope) to be done by the Sorby Centre Experimental Officers. To do this, include £35/hr costs under the 'OTHER' heading in Directly Allocated costs (see end of Appendix 1).

Specimen preparation facilities are free if they are being used to prepare samples for paid access to the Sorby microscopes. If you want to use our preparation facilities for other reasons, please contact the Director for prices.

If in doubt about any of the above, contact the Director (J.M.Rodenburg@shef.ac.uk).

Section 2: For those who have funding, but did not include Directly Allocated costs for electron microscopy in their proposal

If you accidentally or unwittingly entered substantial costs for electron microscopy or other facility services under 'Consumables' (Directly Incurred) on an RCUK grant application, please contact the Director.

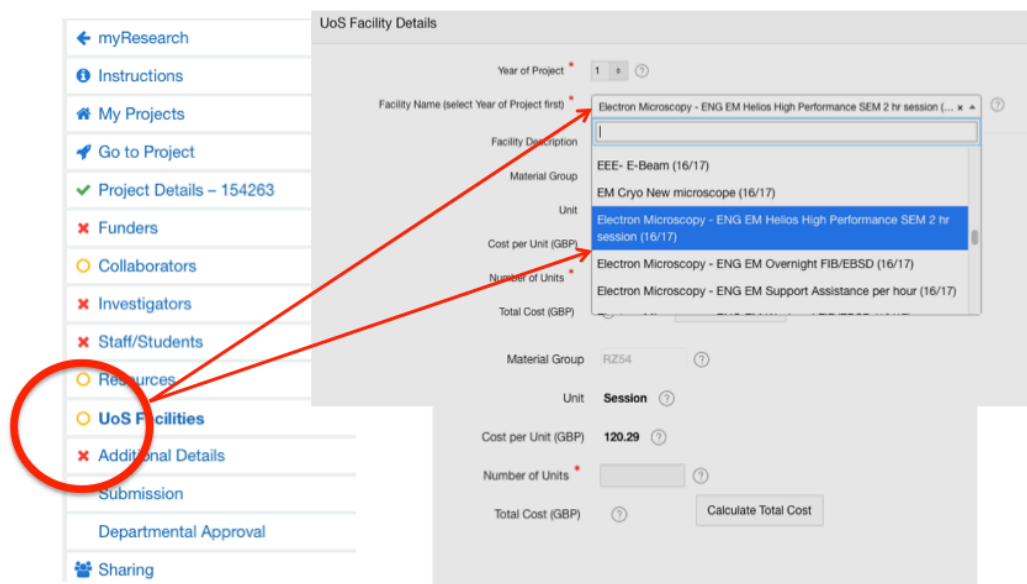
If you have funding, but at the outset of your project you did not anticipate needing any electron microscopy, you can pay for access out of the consumables budget. However, if you need a substantial amount of work to be done (100s of hours of microscope access), please contact the Director.

Section 3: For those who don't have funding for access charges

Free access to the facilities is justified under certain circumstances. Please fill out an UNFUNDED ACCESS FORM. See link from: <http://www.sheffield.ac.uk/electron-microscopy/materials>

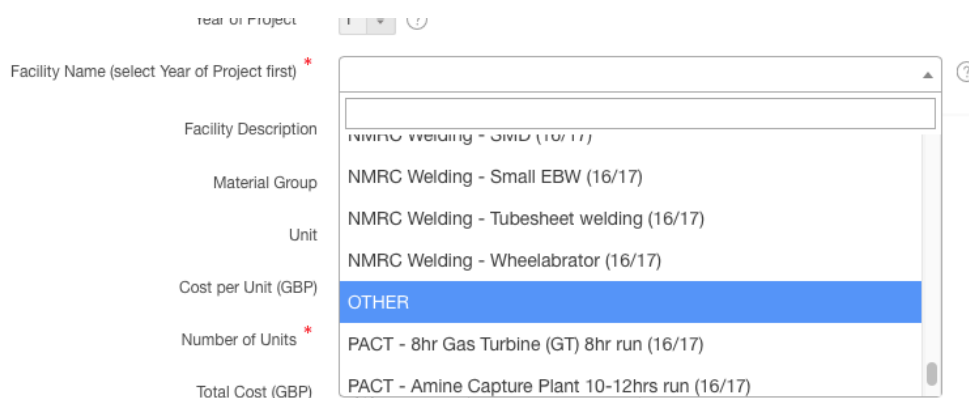
Appendix: how to enter EM costs into the Costing Tool

(If you are still using URMs, see next page)



The screenshot shows the 'UoS Facility Details' form. On the left is a navigation menu with 'UoS Facilities' circled in red. The main form has a dropdown menu for 'Facility Name (select Year of Project first)'. The dropdown is open, showing a list of options. The selected option is 'Electron Microscopy - ENG EM Helios High Performance SEM 2 hr session (16/17)'. Other options include 'Electron Microscopy - ENG EM Overnight FIB/EBSD (16/17)' and 'Electron Microscopy - ENG EM Support Assistance per hour (16/17)'. The form also shows fields for 'Material Group', 'Unit', 'Cost per Unit (GBP)', 'Number of Units', and 'Total Cost (GBP)'. A 'Calculate Total Cost' button is visible at the bottom right.

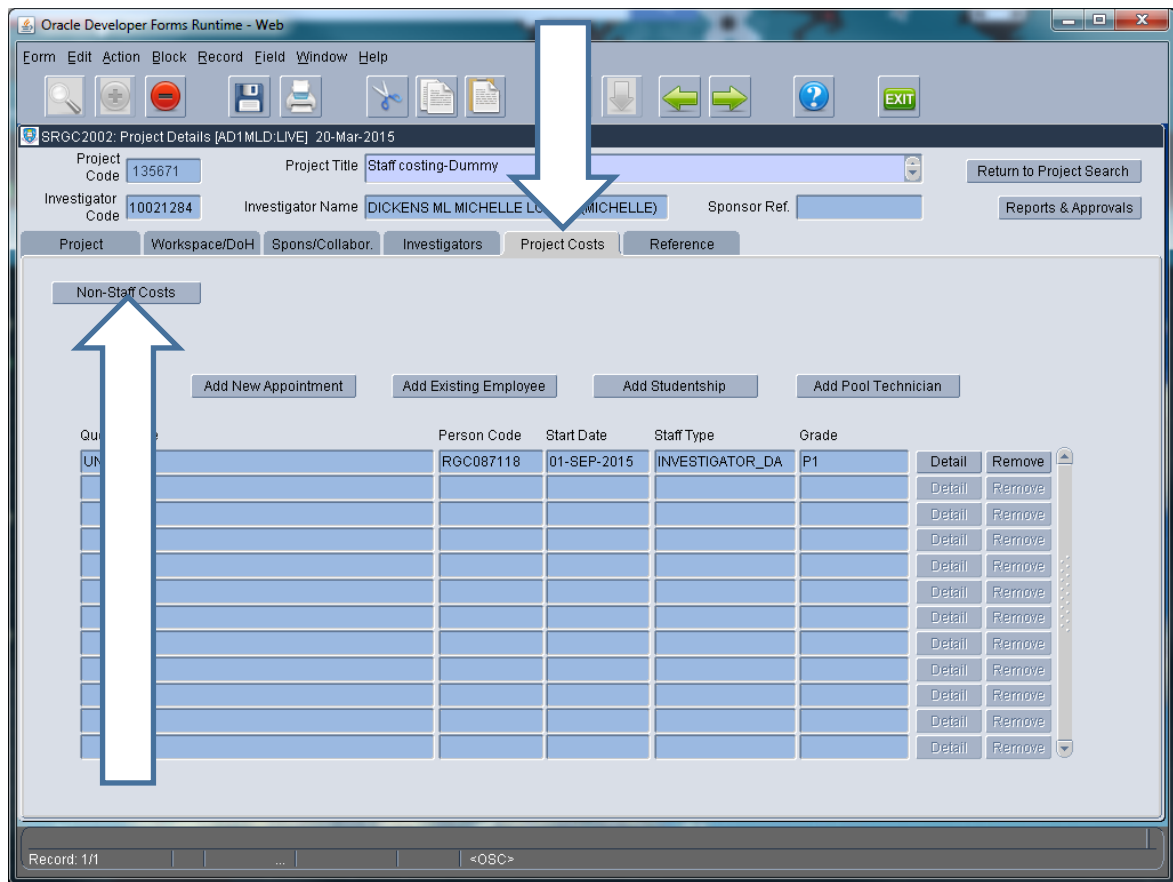
Under UoS Facilities, add a resource: the above screen will appear. On the Facility Name drop down menu, select the microscope you need to use under 'Electron Microscopy ***'. (When it comes to running the project itself, you will have flexibility in what microscope you use, but not in the total funds awarded). Once you enter the number of units (in sessions – in the above example, 2hr sessions), the cost will be calculated automatically.



This screenshot shows a different dropdown menu for 'Facility Name (select Year of Project first)'. The dropdown is open, showing a list of options. The selected option is 'OTHER'. Other options include 'NMRC Welding - Small EBW (16/17)', 'NMRC Welding - Tubesheet welding (16/17)', 'NMRC Welding - Wheelabrator (16/17)', 'PACT - 8hr Gas Turbine (GT) 8hr run (16/17)', and 'PACT - Amine Capture Plant 10-12hrs run (16/17)'. The form also shows fields for 'Facility Description', 'Material Group', 'Unit', 'Cost per Unit (GBP)', 'Number of Units', and 'Total Cost (GBP)'. A 'Calculate Total Cost' button is visible at the bottom right.

If you need an EO to run the microscope for you, add £35/hr for each microscope hour you have requested under the "OTHER" heading (see above).

For URMS users: Open your project proposal in URMS > Find **Project Costs Tab**



Click Non-Staff Costs, the screen opens to a menu of non-staff categories and project years.

- If you are using an old costing – previous years rates will have populated the costing, you may need to scroll in the menu for the correct rate for the financial year. Or use a new costing proposal.
- **If you are using a facility not yet listed in the URMS menu, OR you want to include operator costs), scroll to ‘OTHER’ MISCELLANEOUS facilities rate £1 GBP’ in the facilities menu (see below). This ensures the proposal reflects a Directly Allocated budget for a facility.**

A facility charge is an internal charge and therefore should be *always* be classed as a DA charge

