

UCT ELECTRON MICROSCOPE UNIT: Costing Table (2024)

1. MICROSCOPY IMAGING AND DATA ACQUISITION (excluding EBSD)

1.1 Universities and Research Institutions (all rates per hour):

Operator Mode	NanoSEM	MIRA III (SEM)	Raman	TEM T20	TEM F20	TEM Osiris
Self-operated	R575	R575	R575	R575	R575	R575
EMU operator	R1150	R1150	R1150	R1150	R1150	R1150

1.2 Commercial - direct consultation with industry or university-linked commercial activities (all rates per hour):

Operator Mode	NanoSEM	MIRA III (SEM)	Raman	TEM T20	TEM F20	TEM Osiris
EMU operator	R1800	R1800	R1800	R1800	R1800	R1800
Self-operated	N/A	N/A	R1225	N/A	N/A	N/A

2. SEM-EBSD DATA ACQUISITION (Orientation Imaging) – NanoSEM and MIRA III SEM

2.1 Universities and Research Institutions

2.1.1 Bookings Mon – Fri (08h00-18h00):

- (i) Maximum booking period = 4 hours
- (ii) Charges per map (self-operated): R575 for first hour and R270 for each subsequent hour (e.g. 4-hour map = R1390).
- (iii) For EMU operator, add R280 for setup (if less than 30 mins). *NOTE: Minimum charge of R200 if sample is unsuccessful.*

2.1.2 Bookings Mon-Thurs (18h00-08h00) and weekends:

- (i) Charges per map (self-operated): R575 for first hour and R150 for each subsequent hour (e.g. 10-hour map = R1890). *NOTE: If map run is less than 5 hours, then microscope beam should be switched off immediately when map acquisition terminates.*
- (ii) For EMU operator, add R280 for setup (if less than 30 mins). *NOTE: Minimum charge of R200 if sample is unsuccessful.*

2.2 **Commercial** – direct consultation with industry or university-linked commercial activities:

Same charging scheme as per 2.11 and 2.12 above ***except that rates are doubled.***

3. CRYO-EM DATA ACQUISITION (F20 TEM)

3.1 Universities and Research Institutions

3.1.1 Bookings Mon-Fri (08h00-18h00):

- (i) Cryo-EM screening and data collection (self-operated): R575 per hour for the first hour and R270 for each subsequent hour
- (ii) For EMU operator, add R575 per hour

3.1.2 Bookings Mon-Thurs (18h00-08h00) and weekends:

- (i) Cryo-EM screening and data collection (self-operated): R575 per hour for the first hour and R150 for each subsequent hour

3.2 Commercial – direct consultation with industry or university-linked commercial activities:

Same charging scheme as per 3.1.1 and 3.1.2 above ***except that rates are doubled.***

4. SAMPLE PREPARATION

4.1 TEM Grid Preparation (biological and non-biological):

- 4.1.1 EMU staff service: R575 per hour + R30 per grid (includes minor consumables).
- 4.1.2 Self-service: R30 per grid (includes minor consumables).

4.2 Biological Sample Conditioning:

- 4.2.1 Use of High-Pressure Freezer: R265 per hour*
- 4.2.2 Use of Plunge Freezer: R265 per hour*
- 4.2.3 Use of Microtome: R265 per hour
- 4.2.4 Freeze Substitution: R265 per run*

* excludes EMU operator fee @ R575 per hour.

4.3 Sample Preparation for Electron Beam Lithography (EBL):

4.3.1 EMU staff service: R575 per hour.

4.3.2 Coating charges in consultation with user.

4.3.3 Consumable costs to be determined in consultation with user.

4.4 Evaporative (carbon) or sputter coating (Au):

4.4.1 Per run (multiple samples): R85

4.5 SEM stub preparation:

4.5.1 Per stub: R15