UNSW THE UNIVERSITY OF NEW SOUTH WALES | Mark Wainwright Analytical Centre

Solid State and Elemental Analysis Unit (SSEA Unit)

1. Rates for Access to Powder XRD, X-ray crystallography, micro-XRF and surface analysis by XPS and ToF-SIMS. Rates are in AU$, ex-GST, current for 2023-2024 inclusive. Contact Dr Yu Wang for XRD annual subscription enquiries.

	Internal Rates[a]	**Institutional Rate[b] (ex-GST)**	**Commercial Rate[c] (ex-GST)**
X-ray Diffraction Laboratory **Training, all powder XRD instruments**	Free	Free	Free
Panalytical MPD (Cu) Bulk Powder X-ray Diffractometer Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Panalytical Aeris Benchtop (Cu) Bulk Powder X-ray Diffractometer Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Panalytical MRD (Cu) X-ray diffraction for thin-film, grazing angle, stress, texture measurements Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Panalytical Empyrean 1 (Cu) X-ray diffraction for thin-film, grazing angle, stress, texture measurements Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Panalytical Empyrean 2 (Co) Bulk Powder X-ray Diffractometer Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour

	Internal Rates[a]	Institutional Rate[b] (ex-GST)	Commercial Rate[c] (ex-GST)
Panalytical Empyrean 3 (Ag) Bulk Powder X-ray Diffractometer with position sensitive detector Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Bruker D8 thin-film XRD (Cu) 5kW rotating anode X-ray source with 2D detector and mapping stage for HRXRD, RSM and 2DXRD Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Rigaku Smartlab thin-film XRD (Cu) 9kW Rotating anode X-ray source for HRXRD, fast RSM Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User $35/hour	Trained User $70/hour	Trained User $150/hour Service Rate $250/hour
Mikropack NanoCalc 2000 UV-Vis-NIR thin-film analyser Contact Dr Yu Wang yu.wang@unsw.edu.au	Trained User Free	Trained User Free	Trained User Free
Crystallography Laboratory **Bruker Kappa Apex (Mo) Single-crystal X-ray diffractometer** **Bruker D8 Quest (Mo) Single-crystal X-ray diffractometer** Contact Dr Mohan Bhadbhade m.bhadbhade@unsw.edu.au OR Dr Ruoming Tian r.tian@unsw.edu.au	Co-authorship Rate $140-210 per sample per temperature, (depending on complexity – see below) User training: • $100 for 3-4 sessions • Co-authorship waived Data collection per sample per temperature: • Trained users: $90 • Staff: $130 Structure solution: • General case $50 • Twinning or disorder: $80	Co-authorship Rate $230 per sample per temperature	Service Rate $450/sample

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Surface Analysis Laboratory **Thermo ESCALAB 250Xi X-ray Photoelectron Spectrometer (XPS)** Contact Sonia Yin songyan.yin@unsw.edu.au or Bill Gong b.gong@unsw.edu.au	Service Rate $80/hour Trained User $50/hour	Service Rate $180.00/hour	Service Rate $300.00/hour
IONTOF Time of Flight Mass Spectrometer (ToF-SIMS) Contact Sonia Yin songyan.yin@unsw.edu.au or Bill Gong b.gong@unsw.edu.au	Service Rate $80/hour Trained User $50/hour	Service Rate $180.00/hour	Service Rate $300.00/hour
Alpha-Step D-600 Stylus Profiler Contact Sonia Yin songyan.yin@unsw.edu.au	Trained User Free	Trained User Free	Trained User Free
Polos Spin150i spin coater Contact Sonia Yin songyan.yin@unsw.edu.au	Trained User Free	Trained User Free	Trained User Free
XRF Laboratory **Micro-XRF Mapping** Contact Helen Wang huixin.wang@unsw.edu.au For XRF service see (2) below.	Service rates: • $60 per sample point measured • $250 per XRF map User training $35 per person User data collection $35/hour (8am-5pm) Overnight rate $110 for trained operator Data analysis – no charge.	$70/hour for service measurements	$70/hour for service measurements

(a) Internal rate applicable to all UNSW account holders (including affiliated institutes), ADFA and also LIEF Partners.
(b) Institutional rate is applicable to all other universities, and government institutions including ANSTO, and CSIRO.
(c) Commercial rate covers all other non-government users.

2. Elemental Analysis Rates: ICP, XRF, LC-OCD, IC, combustion analysis for DOC, DIC, and organic solids
Elemental analysis is usually charged per sample. The rate can vary significantly depending on the number of samples, the type of sample preparation, and the number of analytes requested.

A separate pricing sheet is available for services from the **ICP Laboratory** (sample grinding, microwave acid digestion, ICP-MS, ICP-OES, LC-OCD, anion chromatography, combustion analysis for DOC, DIC). For users that have specific enquiries about services from our ICP Laboratory please contact Rabeya Akter (r.akter@unsw.edu.au) or Khorshed Chinu (k.chinu@unsw.edu.au).

A separate pricing sheet for services from the **XRF Laboratory** (XRF and micro-XRF mapping, rock crushing, pressed pellets, CHNSO combustion analysis of solids). For users that have specific enquiries about services from our XRF Laboratory please contact Dr Helen Wang (huixin.wang@unsw.edu.au) or Dr Brit David (brit.david@unsw.edu.au).

3. Research Grant Budgets
When an **in-kind** contribution is requested in your application, please use **$175/hour** to cover MWAC salaries, costs for power, repairs etc provided by the University. If costs are on a per sample basis, assume 1 hour per sample.

4. Enquiries
Dr Christopher Marjo
Head, Solid State and Elemental Analysis Unit
Director (Operations), Chronos 14Carbon Cycle Facility
Room G61, Office M64, Chemical Sciences Building (F10)
University of New South Wales
Sydney NSW 2052 Australia

Tel +61-2-9385 4693 Mobile 0434 181 790
c.marjo@unsw.edu.au
UNSW CRICOS Code No. 00098G