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Australian National Fabrication Facility

Access, Pricing and Client Services Policies

| Document Name | ANFF Access & Pricing Policy |
|-----------------|------------------------------|
| Version | March 2024 |
| | |
| Prepared by | Matthew Wright |
| Approved by | Chris Gourlay |
| Date | 21 June 2024 |
| Date for review | 30 September 2024 |





ANFF Facility Access

Introduction

The Australian National Fabrication Facility (ANFF) provides access to nano and microfabrication facilities to all Australian researchers. The ANFF seeks to encourage collaboration in research. The Access and Pricing Policy is intended to ensure that there are as few barriers as possible to accessing major infrastructure for those undertaking meritorious research.

All Fabrication Nodes will have **Access Committees** charged with oversighting access to the facilities, including implementing the Policy, prioritising use of facilities, and monitoring operating costs and access income.

In the early stage of operations, access to ANFF facilities will be managed by **Facility Managers**, as it is anticipated that Nodes will have excess capacity and that access will be provided on a liberal basis. The full ANFF Access & Pricing Policy will come into operation at the point that each Node is in the position of needing to ration access.

The Policy has been developed to ensure open and transparent access to the facility for all Australian researchers. The Policy will be reviewed by the Nodes on an annual basis to ensure it meets the needs of the growing user base and maximises use of the infrastructure.

Definitions

Facility Manager: The first point of contact at the Node for a new user.

External users: Users external to the host institution.

Assisted access: A Node staff member operates the equipment, is in attendance or must remain nearby to monitor operation.

Unassisted access: A user operates the instrumentation without the assistance of a Node staff member. Users must be preauthorised by the Node.

Core time: The working day in which assisted access can be booked.

Access Committee: Group responsible for prioritising allocation of instrument bookings.

Oversubscribed: A booking on the instrument required is not available within one month.

Accessing a Node

The Access & Pricing Policy outlines the process for allocating available hours if the facilities are oversubscribed, and the rates for using the facilities under the NCRIS program. Once time has been allocated in the facility, the procedure for all users accessing a Node will be the same, regardless of whether the access is funded by the NCRIS program or otherwise. Users must follow the local Node's policies including OH&S and after-hours access.

Access Committees

Access to ANFF Nodes will be managed by an Access Committee for each Node. The role of the committees is to ensure that the ANFF Access and Pricing policy is implemented at





the Node. Typically, the committee at each Node is composed of the Node Director, Facility Manager, and representatives from the major user groups. The ANFF CEO may also attend a Node's Access Committee meetings.

It is anticipated that initially the groups will meet at least quarterly. Additional reviews may take place electronically or by sub-committee. The frequency of meetings is driven by the need to advise potential users of the outcome of their application within one month of submission.

Access Committees membership for each Node is given below.

Application Procedures

It is expected that the first contact with a potential user will be a discussion to determine the feasibility of the project. This will establish the techniques required and enable the user to submit a detailed application.

Initial contact for new users may be:

- direct application to a Node's Facility Manager (telephone / email); or
- via ANFF (website, email, telephone). ANFF will then contact the relevant Node or Nodes to determine availability of instrumentation.

Following initial discussions, the formal application process for accessing the instrumentation will be to complete a short project proposal (less than two pages) describing the work and the expected outcomes. Users will be asked to note any factors influencing the timing of the work, e.g., international travel, commercial production implications or grant / thesis submission dates.

In the first instance, the Facility Manager will review the application, in consultation with the Node Director, if necessary, to allocate a booking. In the event that the instrument is oversubscribed, the Facility Manager will submit the application to the Access Committee for review. Copies of all applications will be lodged with the committee.

Criteria for identifying successful applicants.

When demand for the facility exceeds capacity, access committees will review applications on a regular basis. Priority will be given to meritorious research from the following three groups and the committees will work to balance their needs:

- Early career researchers;
- Other public sector researchers of merit; and
- Researchers from SMEs who are able to pay commercial prices for access.

Meritorious research will include, but is not limited to, those awarded nationally competitive grants. The committee will not duplicate existing review processes. It is anticipated that up to 50% of the NCRIS allocation will be prioritised for commercial users. Spare capacity at a Node may be used to meet overflow in other Nodes.

Each application will be considered by the committee based on the following criteria:

• the suitability of the techniques and facilities available at the Node to contribute to the research outcomes sought;





- the potential outcomes of the research, including knowledge and wealth creation via collaborations, papers, and patents;
- significance and innovation of the program;
- commercial urgency or research submission deadlines;
- travel arrangements for interstate or international users; and
- experience of the applicant in the use of the facility and the requirement for technical support.

Reporting

Users are asked to acknowledge the program in papers as follows:

"This work was performed in part at the [insert name] Node of the Australian National Fabrication Facility. A company established under the National Collaborative Research Infrastructure Strategy to provide nano and microfabrication facilities for Australia's researchers."

The ANFF logo (available from the website) should be included on the acknowledgements slide of a presentation. In addition, users funded by travel grants will need to meet the requirements of the grant.

The Access Committee will report the number and type of users and the access income to the ANFF on a quarterly basis. These metrics will form part of the Node's key performance indicators.

Pricing structure

The ANFF recognises three classes of user:

- PhD students;
- publicly funded researchers, including University researchers; and
- industry users.

Pricing for public sector researchers is based on marginal costs only. A full listing of costs for each Node, including consumables, is given in below.

International researchers will be charged at industry rates.

All prices in this document are exclusive of GST.

Grievances

In the first instance, grievances should be reported to the Node Director for discussion at the Node's Access Committee meeting. In the event that a resolution is not reached, the grievance should be reported to the ANFF.

Jane Fitzpatrick 0439 778 766 jane.fitzpatrick@anff.org.au





Access Committee Membership

The *ANFF CEO* or ANFF COO may attend access committee meetings at each Node. The committees may also be augmented by other local experts.

ACT & WA (combined committee)

- Prof. Hoe Tan, Chair, ACT Node Director (ANU Research School of Physics)
- Dr Horst Punzmann, ACT Node Manager (ANU Research School of Physics)
- Prof. Laurie Faraone, WA Node Director (UWA School of Engineering)
- Prof. Mariusz Martyniuk, WA Node Manager (UWA School of Engineering)
- Prof. Tim Senden (ANU Director, Research School of Physics)
- Dr Tom Ratcliff (ANU Research School of Physics)
- A/Prof. Duk-Yong Choi (ANU Research School of Physics)
- Prof. Larry Lu (ANU College of Engineering, Computing and Cybernetics)
- Prof. Dragomir Neshev (ANU Director, TMOS Centre of Excellence Research School of Physics)
- Prof. Steve Madden (ANU- Hub Director OptoFab ACT Research School of Physics)

Materials

- Prof Gordon Wallace (Node Director)
- A/Prof Stephen Beirne (Facility Manager UoW, IPRI)
- Prof David Officer (UoW)
- Prof Paul Dastoor (UoN)
- Ben Vaughan (UoN)

NSW

UNSW committee:

- Prof. François Ladouceur (Node Director)
- Dr Matt Boreland (Facility Manager)
- Dr Nadia Court
- Prof Andrew Dzurak
- Prof Justin Gooding (UNSW Chemistry)
- Prof Sven Rogge
- Prof Chee Yee Kwok (UNSW Electrical Engineering and Telecommunications)
- Prof Nigel Lovell (UNSW Biomedical Engineering)
- Prof Adam Micolich (UNSW Physics)
- Prof Grainne Moran
- Prof Andrea Morello (UNSW Electrical Engineering and Telecommunications)
- Prof David Reilly (University of Sydney Physics)
- Prof Bram Hoex (UNSW Photovoltaics and Renewable Energy Engineering)
- Prof Michelle Simmons (UNSW Physics)
- Prof Nagarajan Valanoor (UNSW Materials Science and Engineering)





• Prof Darren Bagnall

OptoFab

- Prof Michael Withford (MQ, Chair)
- Dr Ben Johnston (MQ)
- Dr Martin Ams (MQ)
- Prof Simon Fleming (USYD)
- Dr Richard Lwin (USYD)
- Prof Heike Ebendorff-Heidepriem (UoA)
- Mr Luis Lima-Marques (UoA)
- Prof Steve Madden (ANU,PO)
- Dr Blake Reagan (UTS) (to NSW committee next year)
- Prof Igor Aharonovich (UTS) (to NSW committee next year)

QLD

- Prof Justin Cooper-White (Node Director)
- Prof Paul Burn (Deputy Director)
- Prof Nam-Trung Nguyen (Deputy Director)
- Prof Andrew Whittaker
- Mr Anthony Christian (Facility Manager)
- Mr Glenn Walker
- Elle Gardner (Administration Officer)

SA

- Prof Craig Priest, Node Director (UniSA)
- Prof Benjamin Thierry (UniSA)
- Prof David Lewis (Flinders)
- Dr Jason Gascooke (Flinders)
- Prof Karen Reynolds (Flinders MDPP)
- Mr Stephen Blakeney (Flinders MDPP)
- A/Prof Said Al-Sarawi (Adelaide Uni)
- Prof Marta Krasowska (UniSA)
- Mr Shyam Mehta (DST Group)
- Mr Simon Doe, Facility Manager (UniSA)





VIC

- Prof Nicolas Voelcker (MCN)
- Dr Sean Langelier (MCN) Chair
- Mr Michael Imsic (MCN)
- Dr Grant van Riessen (La Trobe)
- Prof Victor Cadarso (Monash)
- Dr Desmond Lau & Huajun Shen (RMIT)
- Dr Mark Bown (CSIRO)
- Dr Karyn Jarvis (Swinburne)
- Dr Dylan Hegh (Deakin)
- Dr Elena Taran (UMelb)
- Prof Daniel Lai (Vic Uni)





ANFF Pricing Structure

The pricing structure for the facility is given below. Note that standard consumables are included in cost price; however, specialised consumables or retooling will be charged to the user at cost. For further details, refer to the Node.

Charges are subject to annual review and may be changed without notice.

ACT Node

| Tool/Equipment/Service | University or PFRA ¹ unassisted/assiste d | Australian Industry (International User ²) |
|---|---|--|
| Flagship Tools: FIB3 and MOCVD (all InP, GaN, GaAs systems) | \$60/\$110 per hour | \$150/\$250 per hour (\$250/\$350 per hour) |
| Major Tools: (EBL3, SEM-CL, EBeam Evap, ICP-CL, ICP-F, Suss MA, NIL/HE, P-ALD, PECVD, Thermal Evaporator, Sputter4) | \$50/\$100 per hour | \$150/\$250 per hour |
| Small Processing Tools: (e.g. Barrel Etcher, Ellipsometer, Rapid Thermal Annealer, Surface Profiler, Vacuum Oven, Wire Bonder, Flip-chip Bonder) | \$20/\$70 per hour | \$70/\$170 per hour |
| General assistance | \$50 per hour | \$100 per hour |
| General consumables: wafers, sample boxes, etc | At cost | At cost |
| Precious metals: in EBeam Evaporator or Sputter: Gold (Au), Platinum (Pt), Palladium (Pd) | \$1.50 per nm | \$1.50 per nm |
| Precious metals in Focused Ion Beam (FIB): Platinum (Pt) | < 20 mins: no charge >= 20 mins: \$90 per hour ⁵ | < 20 mins: no charge >= 20 mins: \$90 per hour ⁵ |
| Materials in P-ALD | \$10/hour | \$10/hour |

- 1) PFRA are Publicly Funded Research Agencies: CSIRO, ANSTO, AIMS and DSTO.
- 2) International users can apply to the node manager for a discount on prepayment of bulk access time. The discount only applies to 'unassisted access' time.
- 3) The FIB and EBL are tools have a minimum booking of 1 hour. If only 0.5 hour is booked, then 1 hour will be charged.
- 4) There is an additional \$20 set up fee for every booking of the sputter tool.





5) The hourly rate is charged pro rata in 1 min increments. Example 45min costs \$67.50 45/60*\$90.00.

Materials Node

Pricing structure for NCRIS-supported equipment or staff time, excluding consumables.

| | Publicly funded per hour | Industry per hour |
|--|--------------------------|-------------------|
| All UoW & UoN NCRIS supported units | \$75 | \$275 |

Access subscriptions can be arranged for long term projects.

Consultancy to be negotiated by each Node member independently, costing of any

consultancy is to follow each Node member's institutional costing/overhead structure.

Material Supply & Device Supply Node members to provide a quotation as required

utilising each Node member's institutional costing/overhead structure.

NSW Node

University of New South Wales

See here for access fees per hour and conditions as 31 March 2024.





University of Sydney Research & Prototype Foundry

Instrumentation funded by the NCRIS program will be available to external users at the ANFF rate for 50% of the core time or as detailed below:

• Access to the Direct Write Lithography at the Sydney Nanoscience Hub will be up to 16 hours per week.

| Equipment group (see table below) | 1 | 2 | 3 | 4 | 5 | 6 |
|--|-------|--------|-------|-------|-------|-------|
| University of Sydney/ANFF supported tools ¹ | \$7.5 | \$22.5 | \$30 | \$2.5 | \$50 | \$100 |
| Australian University (non- ANFF tools) ⁴ | \$7.5 | \$22.5 | \$30 | \$2.5 | \$100 | \$100 |
| Australian Publicly Funded Research Agency | \$45 | \$135 | \$180 | \$15 | \$150 | \$150 |
| Industry/Overseas | \$60 | \$180 | \$240 | \$20 | \$200 | \$200 |

| Equipment group 1 | Equipment group 2 | Equipment group 3 | Equipment group 4 |
|---|--|--|--------------------------------------|
| *Coater Brewer Science CB-200 Dicing Saw ADT *Die Bonder Fine Tech Lambda Dry Film Laminator Fortex FL-0305-01 Ellipsometer JA Woollam M2000 *Fibre Draw Tower Lamp Annealer ULVAC MILA 5000 *Microscope Nikon Eclipse LV100ND O2 Plasma Asher Glow Parametric Analyser & Nano Probe *PDMS Process Tools *Probe Station Suss PM 5 *Reactive Ion Etcher South Bay RIE3000 *Spin Dryer Delta 15 *Sputter Coater DC Emitech K550 Stylus Profilometer DekTak XT | 3D Microscope Leica DCM8 Atomic Force Microscope Bruker Icon Atomic Layer Deposition Picosun R200 E-Beam Thermal Evaporator AJA ATC- 1800-E ICP RIE Oxford Plasmalab 100 *Laser Writer Heidelberg DWL 66+ Mask Aligner EVG 610 Maskless Aligner Heidelberg MLA100 *Rite Track SVG88 Sputterer AJA ATC-2000- UHV *Wet Benches PECVD Plasma Pro 100 3D Nano Printer Nanoscribe | EBL Elionix ELS-F125 Not available at ANFF subsidised rates: NanoFab Helium Ion Beam Zeiss | 3D Printer: Filament Funmat HT |





| Wire Bonder TPT HB 100 | | |
|---------------------------|--|--|
| | | |
| | | |
| | | |
| | | |

Equipment group 4: *Prototyping^{2,}* **Equipment group 5:** *Training* and **Equipment group 6:** *Staff Assistance*³

Notes:

1. Hourly rate applies to both University of Sydney users and other Australian university academics on ANFF supported tools;

2. Special introductory pricing for new capability; minimum booking time of 1 hour applies to *Prototyping tools;*

3. Includes work done on behalf of the user and user assistance; and

4. Most non-ANFF supported tools are available at ANFF subsidised rates to Australian University users 20% of the time.

Further: Precious metals and some other consumables are charged at cost to users.





| University of Sydney & ANFF Academic rate | e |
|---|---|
|---|---|

| Mask blank | Size | Resolution | Standard write area | Price |
|------------|-------------|------------|---------------------|-----------|
| Soda lime | 4" by 0.06" | Standard | 75mm by 75mm | \$ 315.00 |
| Soda lime | 5" by 0.09" | Standard | 100mm by 100mm | \$ 381.00 |
| Soda lime | 6" by 0.09" | Standard | 125mm by 125mm | \$ 480.00 |
| Soda lime | 7" by 0.12" | Standard | 150mm by 150mm | \$ 772.00 |
| Quartz | 5" by 0.09" | Standard | 100mm by 100mm | \$581.00 |

Non-Academic & Industry rate

| Mask blank | Size | Resolution | Standard write area | Price |
|------------|-------------|------------|---------------------|------------|
| Soda lime | 4" by 0.06" | Standard | 75mm by 75mm | \$476.00 |
| Soda lime | 5" by 0.09" | Standard | 100mm by 100mm | \$575.00 |
| Soda lime | 6" by 0.09" | Standard | 125mm by 125mm | \$716.00 |
| Soda lime | 7" by 0.12" | Standard | 150mm by 150mm | \$1,009.00 |
| Quartz | 5" by 0.09" | Standard | 100mm by 100mm | \$775.00 |

- Quoted prices do not include GST, delivery and handling costs;
- All prices are based on standard lead time of 10 working days; additional labour charges apply for faster turnaround;
- Low reflective chrome is the default chrome type;
- Quoted quartz is standard low reflective chrome; quartz is available in other sizes and with high reflective chrome where applicable – please contact us for details & pricing;
- High- and ultra-high resolution is available for critical dimension below 2um please contact us for details & pricing;
- All designs must meet our design guidelines to qualify for standard pricing additional design charges based on staff labour rates may be incurred if this is not the case; and
- Prices are subject to change.





OptoFab Node

University of Sydney fibre facilities

Please refer to the pricing tabled under the NSW node section above.

Macquarie University

The Macquarie facilities in the table below are now based on *half day (4-hour blocks)*. Equivalent hourly rates may be negotiated where appropriate.

| | PhD | Publicly funded | Industry |
|--|---|---|---|
| Precision laser fabrication* Micromachining or photonic inscription facilities (per system basis).* Chaperoned access only. | \$400 per 4 hours | \$400 per 4 hours | \$800 per 4 hours |
| Photonic characterisation facilities* Competent trained user | \$25 per 4 hours | \$25 per 4 hours | \$50 per 4 hours |
| CVD Facility* By Arrangement with James Downes | \$120 per 4 hours (\$30 per hour) Cap \$2000 per quarter (3 months) | \$120 per 4 hours (\$30 per hour) Cap at \$2000 per quarter (3 months) | \$60 per hour Cap at \$4000 / quarter (3 months) |
| Design / Preparation / Characterisation ANFF Staff / Assisted | \$60 per hour | \$60 per hour | \$120 per hour |

*Materials costs may be added if sourced/supplied by the facility. Custom tooling/jigging may also require for some jobs, and users may be required to cover workshop costs for custom fixtures.

The Macquarie Facilities in the table below are available on *6-month subscription fee for unassisted use after training.* Hourly rates may be negotiated for small, assisted access projects where appropriate.

| | PhD Subscription | Publicly funded | Industry |
|------------------------------------|-----------------------|-----------------------|----------------|
| Chameleon laser facility | \$250 per 6 months | \$250 per 6 months | \$100 per hour |
| Ball Milling Facility** unassisted | \$250 per 6 months | \$250 per 6 months | \$60 per hour |





| Sample preparation/Microscopy – | \$250 per 6 | \$250 per 6 | \$60 per hour |
|---|-----------------------|-----------------------|----------------|
| unassisted | months | months | |
| JEOL Cross-section Polisher and Bench | \$300 per 6 | \$300 per 6 | \$60 per hour |
| SEM – unassisted | months | months | |
| JEOL Cross-section Polisher and Bench | \$300 per 6 | \$300 per 6 | \$120 per hour |
| SEM – ANFF staff assisted | months | months | |
| JEOL CP shield plate - one-off expense may apply for frequent users | \$1000 | \$1200 | \$1200 |
| FESEM and Kleindiek - unassisted | \$60 per hour | \$60 / hr | Please enquire |
| FESEM and Kleindiek – ANFF staff assisted | \$900 per 6 months | \$900 per 6 months | Please enquire |

**Milling balls may be additional for specific projects or frequent users.

The FESEM and Nano Assembly facility is housed at Macquarie Microscopy and is available on a subscription basis after training, or at an hourly rate for assisted users.

Enquiries: Dr Ben Johnson benjamin.johnston@mq.edu.au

University of Adelaide

Fabrication services:

Given the diversity of requests for specific products (glass, preform, fibre) of differing materials and structures, we will provide individual quotes for each specific request. These quotes will be based on the anticipated requirement for operator time, equipment, custom tooling and consumables. For the operator time, the labour costs in the table below apply.

| | PhD per hour | Publicly funded per hour | Industry per hour |
|----------------------|--------------|--------------------------|----------------------|
| Fabrication services | \$75 | \$75 | \$200 |

Pricing structure for access to the EIF funded SNOM Housed at Adelaide Microscopy.

| | PhD per hour | Publicly funded per hour | Industry per hour |
|-----------------------------|--------------|--------------------------|----------------------|
| SNOM* - unassisted | \$100 | \$100 | \$260 |
| SNOM* - ANFF staff assisted | \$150 | \$150 | \$350 |
| SNOM* - training | \$150 | \$150 | \$150 |

*Please note that a \$30 charge will apply per tip.

Enquiries: Luis Lima-Marques luis.lima-marques@adelaide.edu.au





Australian National University – Precision Optics

Price listing TBC.

Enquires: Prof Stephen Madden. stephen.madden@anu.edu.au

University of Technology Sydney

Access Fees – Hourly rates

| | Academic host/external per hour | Industry per hour | Staff member assistance – Academic user (2) per hour | Staff member assistance – Industry user (2) per hour |
|------------------------------------|---------------------------------------|----------------------|---|---|
| Diamond CVD | \$30 | \$60 | \$90 | \$120 |
| Reactive Ion Etching | \$60 | \$120 | \$90 | \$120 |
| Cathodoluminescence ^(a) | \$60 | \$120 | \$120 | \$180 |

- 1. minimum usage 2 hrs.
- 2. Estimate training on Diamond and RIE ~ 2 hrs. 1 hr training + certification; 1 additional hour first use with staff member.

Access subscriptions can be arranged for long term projects.

Consultancy To be negotiated independently, costing of any consultancy is to follow UTS's costing/overhead structure.

Material Supply to be negotiated independently to follow UTS's institutional costing/overhead structure.

Tool availability:

- Diamond CVD 80% (4 full days/week)
- Cathodoluminescence on request. Preference to external users.
- Reactive Ion Etching 20% (1 full day/week)

Enquires: Prof. Igor Aharonovich igor.aharonovich@uts.edu.au





QLD Node

Instrumentation funded by the NCRIS program will be available to external users at the ANFF rate for 50% of the core time or as detailed below:

• University of Queensland: A maximum of five hours may be booked in one core period.

| Category | Туре | Rate per hour |
|--|---|------------------|
| Publicly funded research. For example: | Standard access rate | \$25 |
| NHMRC Project Grants, ARC Discovery Grants, State Grants | Assisted access rate± | \$80 |
| Publicly funded research with industry | Standard access rate | \$25 |
| contribution. For example: NHMRC Development Grants, ARC Linkage Grants | Assisted access rate± | \$80 |
| Research contracts. <i>For example: Industry funded contract research</i> | Australian client without assistance±(access only) | \$61 |
| | Australian client with assistance± | \$167 |
| | International client with assistance± (access only) | \$182 |
| | International client with assistance± | \$288 |
| Contract services. For example: Single | Australian client with assistance± | \$288 |
| assays, characterisation, one-off jobs | International client with assistance± | \$409 |

± Assisted access rates are charged when ANFF-QLD personnel perform the work with you or on your behalf. Training is charged at standard facility access rates.

As of 1st January 2022, ANFF-QLD has revised the standard facility access rate for Australian publicly funded researchers from \$55.00 p/hr (excl. GST) to \$25.00 p/hr (excl. GST). We hope this price change will be welcome news to current users and encouraging for users new to ANFF-QLD Facility and its resources.

ANFF-QLD has also removed the ANFF-QLD annual membership tier-model, effective 31st December 2021.

Current ANFF-QLD clients with an existing membership will have their hours balance from 31st December 2021 converted to an account credit.

ANFF-QLD general pricing policies

- 1. ANFF-QLD Public Research-funded hourly Facility access rate is \$25.00 (excl. GST), effective 1st January 2022.
- 2. ANFF-QLD Staff-Assistance hourly rate is \$80.00 (\$25.00 + \$55.00, excl. GST), effective 1st January 2022.





- Assistance and specialist help from ANFF-QLD Staff is available to users with their Facility usage. (Staff-Assistance rates are when ANFF-QLD personnel perform the work for you or on your behalf).
- ANFF-QLD Staff-Assistance rates do not apply to new ANFF-QLD User training sessions. New users are only charged for the instrument time.
- ANFF-QLD Staff-Assistance involving unsupervised instrument running time (e.g., an 8-hour run on the Nanoscribe) will only charge Users for the "active" Assistance time from ANFF-QLD Staff with the instrument. All other time will be charged at the standard facility access rate.
- 3. ANFF-QLD Industry hourly Facility access rate is \$61.00 (excl. GST), and Industry-Assistance rate is \$167.00 (\$61.00 + \$106.00, excl. GST), effective 1st January 2022.
- 4. All ANFF-QLD Users must nominate a Supervisor for the ANFF-QLD Booking System, for account management and billing.
 - Supervisor Accounts will receive a monthly statement for their users' charges.
 - Supervisor Account queries should be directed to ANFF-QLD Admin (anff@uq.edu.au)
 - Prepayments are available for Supervisor Accounts through ANFF-QLD Admin.
- 5. ANFF-QLD requests that all Public Research-funded Users acknowledge the Queensland node of the Australian National Fabrication Facility in their academic publications. A \$200 account credit will be applied for each publication that acknowledges ANFF-QLD. (Account credit applied to Users' Supervisor's account.)
- 6. The ANFF-QLD Pricing Policy will be reviewed and updated annually in December.

3D printers at ANFF-QLD

ANFF-QLD operates several 3D printers including the Konica Minolta Figure 4 and ProJet MJP 2500, Ultimaker 2 Extended+, and a FormLabs Form 3. ANFF-QLD's 3D printers can be accessed through ANFF-QLD Staff. Please contact ANFF-QLD to arrange a custom quote for any 3D printing work.

Other Costs

Other costs that are not included in the hourly rates are ANFF-QLD Consumables (charged at cost + 10%), any legal fees (if required), and GST if applicable.





SA Node

UniSA

Training and consumables

All training shall be at a flat rate of \$100 per item of equipment (e.g., SEM) or process (e.g., lithography). Consumables for lithography, deposition, and printers are charged based on usage.

| ANFF-SA Labour | Students and Publicly Funded Researchers | Industry |
|----------------|---|----------|
| | \$80/ph | \$170/ph |

| Unassisted Use | Students and Publicly Funded Researchers | Industry |
|-------------------------------------|---|----------|
| Tier 1 (Characterisation equipment) | \$15/ph | \$60/ph |
| Tier 2 (Fabrication equipment) | \$40/ph | \$120/ph |

| Assisted Use | Students and Publicly Funded Researchers | Industry |
|-------------------------------------|---|----------|
| Tier 1 (Characterisation equipment) | \$95/ph | \$140/ph |
| Tier 2 (Fabrication equipment) | \$210/ph | \$290/ph |

- Capped at \$6000 per calendar year per user for unassisted access.
- AFM 35/ph capped at \$6000 per calendar year.
- Nano/MicroXCT scanning \$40/ph (up to 8 consecutive hours per session per instrument) then \$10 per hour (each consecutive hour over 8 hours per session per instrument)
- CNC Micro Mill: unassisted \$60/ph (Up to 8 consecutive hours) then \$30 per hour (each consecutive hour).





Flinders

Training

Training will be charged at \$60 per hour and is in addition to instrument hourly usage charges. Costing for training sessions longer than 4 hours is made on a case-by-case basis.

| Instruments | Students and Publicly Funded Researchers (Unassisted use) | Industry |
|--|---|--|
| Tip Enhanced Raman Spectrometer (TERS) | \$20 per hour | Assisted use: \$230 per hour Unassisted use: \$170 per hour |
| Confocal Raman Microscope | | |
| Profilometer | | |
| Glove Boxes | \$40 per session (4 hours) | |
| Tube Furnace | \$20 per hour | |
| Electrospinner | \$20 first hour, \$10 per hour thereafter | |
| Tensile Testing Stage | \$10 per hour | |
| Metastable Induced Electron Spectroscopy (MIES) | \$50 per hour | |
| Laser Cutter | \$60 per hour | |

| Services | Students and Publicly Funded Researchers per hour | Industry per hour |
|---|---|-------------------|
| Medical Devices and Prototyping Facility | \$65 | \$230 |
| ANFF Staff Assistance | \$60 | |





Supplementary Notes

- Unassisted use is only available to persons who have completed the required training programme. Assisted use will be charged at the ANFF Staff Assistance rate in addition to the instrument rate.
- Access subscriptions can be arranged for long term projects.
- Hourly rates cover basic costs and small volumes of standard consumables. However, larger volumes or specialised consumables shall be charged at cost.
- Unassisted use is only available to persons who have completed the required training programme.





Victorian Node

ANFF-VIC: GENERAL POLICIES

- All training requests are conducted at the sum cost of ANFF-Vic staff assistance plus the relevant tool costs.
- All job requests for independent completion by a process are conducted at the sum cost of staff assistance plus the relevant tool costs.
- Small volumes of basic consumables are included in the price for major and minor equipment; however, large volumes or specialised consumables (e.g. substrate materials) will be at full cost to the user and must be arranged with a process engineer. Any retooling will be charged to the user at cost.
- In addition to all other induction, operational health and safety and training requirements, researchers who wish to gain unassisted status must complete (and be assessed for competency against) application-specific training provided by the ANFF-Vic process engineers.

Discounts are available at MCN through setup of non-refundable pre-paid accounts for instrument utilisation. Discounts do not apply to residencies, consumables or staff assistance.

| PRE-PAID PURCHASE | DISCOUNTS TO BE APPLIED | |
|---------------------------|-------------------------|--|
| \$2,000 pre-paid account | 15% discount | |
| \$5,000 pre-paid account | 20% discount | |
| \$10,000 pre-paid account | 25% discount | |
| \$25,000 pre-paid account | 30% discount | |

Melbourne Centre For Nanofabrication (MCN)

| FLAGSHIP EQUIPMENT | Academic/Publicly funded | | Industry (per hour) | |
|---|-----------------------------|-----------|---------------------|-----------|
| | Rate per hour | Cap 24hrs | Rate per hour | Cap 24hrs |
| Vistec Electron Beam Lithography** | \$97 | \$766 | \$243 | \$1,916 |
| Direct Write Lithography (excluding chrome mask) | \$43 | \$344 | \$107 | \$856 |
| Seki Diamond Deposition Systems | \$76 | \$608 | \$190 | \$1,520 |
| Nanofrazor: Thermal Scanning Probe Lithography** | \$76 | \$608 | \$190 | \$1,520 |





| PRICING | Academic/Public funded Industry | |
|----------------------|---------------------------------------|---------------------------------|
| | \$76 per hour | \$190 per hour |
| Characterisation | Atomic Force Microscope (Bruker D | Dimension Icon) |
| | Bio Atomic Force Microscope (JPK | Nanowizard II) |
| | FEG-SEM (FEI NovaNano SEM 43 | 0) |
| | FIB-SEM (FEI Helios Nanolab600 L | Dual Beam FIB-SEM) |
| Etching | Etcher 1 (Oxford DRIE – Bosch) | |
| | Etcher 2 (Oxford RIE – General) | |
| Lithography | Mask Aligners (SUSS MA6 and EVG6200) | |
| | Nano Imprint System (EVG 520 IS) | |
| | Phabler (PhabeR-100C | |
| | Nanoscribe (GT2) | |
| Thin Film Deposition | ALD Systems (Cambridge Nanotec | h ALD FijiF200 & Savannah S100) |
| | Electron Beam Evaporator (Intlvac | Nanochrome II e-beam) ** |
| | Furnace Stack Tube #4 (Silicon Nitr | ride LPCVD) |
| | Furnace Stack Tube #1 & #2 (Phos | phorus/Boron Bubbler Doping) |
| | Nickel Electroplating (Digital Matrix | SA1000) |
| | PECVD (Oxford Plasmalab 100 PE | CVD) |
| | Sputter Systems (Intlvac Nanochron | me & Anatech Hummer BC-20) ** |

| PRICING | Academic/Public funded | Industry | |
|------------------|---|----------------|--|
| | \$48 per hour | \$121 per hour | |
| Bio Capabilities | 3D Printer (Stratasys J826)** | | |
| Characterisation | Hyperspectral Imaging (Cytoviva Hyperspectral Imaging System) | | |
| | Laser Doppler Vibrometers (Polytec MSA-400 & UHF-120) | | |
| | Laser Confocal Scanning Microscope (Leica Stellaris 5) | | |
| | Microspectrometer (Nikon Instrument with Ti-U and Princeton Lightfield) | | |





| | Near-field scanning optical microscope (NeaSNOM) | |
|-------------------------|---|--|
| | Optical Profilometer (Bruker Contour GT-I) | |
| | Spectroscopic Ellipsometer (J.A.Woolam M-2000DI) | |
| | Tabletop SEM (Hitachi TM3030 SEM with Oxford EDX) | |
| | Confocal Raman Microscope (Witec Alpha300 M+) | |
| Etcher Anodic HF Etcher | | |
| Packaging | Dicing Saw (DiscoDAD321)** | |
| | Scriber/Breaker (Dynatex DTX) | |
| | Wire Bonders (K&S 4524 and 4526, F&S Bondtec 5832 Ball/Wedge) | |
| Thin Film Deposition | Hitech Oxidation Furnace (\$250 Academic / \$625 Industry caps/run) | |
| | Furnace Stack Tube #1 & 2 (Phosphorus/Boron solid source Doping) | |
| | Furnace Stack Tube #3 (general purpose) | |

| Tier 3 Equipment (Sorted by capability area) | | | |
|--|---|---------------|--|
| PRICING | Academic/Public funded | Industry | |
| | \$33 per hour | \$83 per hour | |
| Bio Capabilities | Zeta Potential (Anton Parr SurPASS) | | |
| | Zetasizer (Malvern Zeta Sizer Nano) | | |
| Characterisation | 3D Scanner | | |
| | DSA Mass Spectrometer (Perkin Elmer DSA-TOF) | | |
| | Four-point probe station (Signatone WL- 1160) | | |
| | MALDI imaging (Bruker Ultra-flextreme MALDI) | | |
| | Mapping Stage Filmetrics System | | |
| | Keithley Parameter Analyser | | |
| Etching | Metal Wet Etching Station (KOH, Cr,Au) | | |
| | Plasma Barrel Asher | | |
| | Fumehood for HF Etch | | |
| | Fumehood for Piranha Etch | | |





| Lithography | Flood Exposure Unit (ABM UV Flood Light Source) | |
|----------------------|---|--|
| | Dual Track Robotic spin/bake/developer | |
| | Automated spin developer** | |
| | Robotic wet bench and IPA dryer | |
| Rapid Prototyping | CNC Milling | |
| | 3D Printer (Autodesk Ember)** | |
| Thin Film Deposition | Cr Sputter Coating (Quorum Q300TT) | |

| Tier 4 Equipment (Sorted by capability area) | | | |
|--|---|---------------|--|
| PRICING | Academic/Public funded | Industry | |
| | \$21 per hour | \$53 per hour | |
| Lithography | Fumehood for Photo-Lithography Processing** | | |
| | Spinner SUSS 6-inch wafer** | | |
| Spinner/Hotplate SUSS Delta 90** | | | |
| Characterisation | Stylus Profiler (Ambios) | | |
| | UV-VIS Spectrophotometer (Agilent Cary 60) | | |
| General Lab Equipment | HG Programmable Hotplate | | |
| | UV/Ozone Cleaner Samco UV | | |
| | PC for EBL Data Preparation | | |
| Laboratories | General laboratories | | |
| | PC2 Laboratory (10k annual recoveries cap per supervisor) | | |
| | PDMS Laboratory | | |
| | Cleanroom Laboratory (bespoke arrangements) | | |

** Denotes that linked consumables surcharges may apply - see table below

Please note that:

- All tools require bookings in ACLS in order to schedule all users effectively.
- Academic/public funded rate is only available to Australian academics. Users from academic institutions outside of Australia will be subject to industry pricing.





| OTHER CHARGES | Academic/Public Funded | Industry |
|--|------------------------|------------------|
| MCN Staff Time – assisted work | \$80 per hour | \$200 per hour |
| MCN Staff Time - Training | \$50 per hour | \$124 per hour |
| General Residency (by arrangement) *See details below* | \$536 per month | \$1340 per month |
| Full Access Residency (by arrangement) *See details below* | \$2143 per month | \$5358 per month |
| Private Industry Laboratory (by arrangement) See details below | \$5000 per month | \$5000 per month |

General Residency includes:

- allocation of dedicated desk and laboratory space at MCN and access to all tier 3 equipment and laboratory use;
- it does NOT include use of any tier 2, tier 1 or flagship equipment; and
- all residencies must be for a minimum of 3 months at each interval and paid in advance.

Full Access Residency includes:

- general residency plus access to all Tier 1-3 Equipment;
- It does NOT include use of any Flagship equipment; and
- all residencies must be for a minimum of 3 months at each interval and paid in advance.

Private Industry Laboratory includes:

- 30sm;
- FOB-accessible laboratory with dedicated fume cupboard;
- essential services;
- bench space for 3-6 staff and ample storage;
- prospective tenants commit to a minimum 12-month lease and must maintain at least one Full Access Residency for term of lease; and
- additional charges related to facility modifications and/or consumables may apply depending on nature of proposed activity.

Contact MCN's Infrastructure and OHS Manager for further details.

*Prospective commercial residents must be adequately insured for liability/indemnity. Dedicated laboratory space allocations within a shared lab – for Residential package holders is subject to availability. Limited private office space may also be available for Full Access Residency clients at a 10% premium (minimum of 12-month commitment required).





| LINKED CONSUMABLES CHARGES | |
|--------------------------------------|--|
| PVD precious metals (Au, Ag, Pt, Pd) | Market rate per \$/nm (see staff or ACLS for details) |
| Photoresist (per sample) | AZ series \$7, SU8 series \$12 |
| Standard EBL resist (per sample) | PMMA/MMA \$3/piece; \$6 per 4" wafer; \$13 per 6" wafer |
| Specialty EBL resist (per ml) | ZEP \$50, HSQ \$18; see staff for purchase |
| Nanofrazor TSPL (resist per ml) | PPA \$113; see staff for purchase |
| Stratasys J826 3D printer (per g) | FullCure 706 (\$0.14 per g); Vero Clear/Colour (\$0.48/g) Vero Contact/Clear (\$0.56/g) |

Variations to published access rates MCN reserves the right to periodically modify tier pricing from those listed in this policy. In these instances, and for a defined period, an updated pricing schedule will be advertised with advanced notice (e.g., seasonal sale).

| Biointerface Facility (Swinburne) – <u>link</u> | |
|---|--|
|---|--|

| DESCRIPTION | ACADEMIC/PUBLIC FUNDED (per hour) | INDUSTRY (per hour) |
|--|--------------------------------------|---------------------|
| Variable Angle Spectroscopic Ellipsometer (JA Woollam 2000XI) | \$90 | \$225 |
| Quartz Crystal Microbalance with Dissipation (QSense E4) [#] | \$90 | \$225 |
| Plasma Polymer Reactors (Custom) | \$40 | \$100 |
| Multivessel Dip Coater (KSV-NIMA) | \$40 | \$100 |
| Biointerface Staff Assistance | \$60 | \$150 |
| Doppler Velocimetry | Quote on request | Quote on request |
| Mask Aligner (AOI) | \$90 | \$225 |
| Swinburne NanoLab Facilities | \$50 (internal) | \$125 |
| Electron Beam Lithography (Raith 150two) | \$100 (external) | |
| Ion Beam Lithography (Raith IonLiNE) | | |
| Reactive Ion Etching (Samco RIE-101iPH) | | |
| Physical Vapour Deposition (K.J. Lesker AXXIS) | | |
| Nano-imprint Lithography (Nanonex NXB200) | | |
| Swinburne Biological Facilities | Quote on request | Quote on request |
| Confocal Microscopy | | |
| Cell culture biocabinets | | |





| Epi-Fluorsescence | |
|-------------------|--|
| Plate Reader | |
| Spectrophotometer | |

#Additional consumables costs will apply

Centre For Materials & Surface Science (La Trobe) – link

| Flagship Equipment (Sorted by capability area) | | | |
|--|--|------------------|--|
| PRICING | Academic/Public funded | Industry | |
| | \$150 per hour | Quote on request | |
| Surface Analysis | ToF-SIMS (DSC/GCIS) | | |
| | XPS Nova/Ultra | | |
| | Scanning Auger Nanoprobe (PHI 710 Auger Nanoprobe) | | |

| PRICING | Academic/Public funded | Industry | |
|------------------|---|----------|--|
| | \$50 per hour Quote on request | | |
| Surface Analysis | Scanning Probe Microscopy (Asylum Research MFP-3D-SA and BIO) | | |
| | SEM (Zeiss Leo 1455) | | |
| Characterisation | Contact Angle Meter (DataPhysics OCA20) | | |
| | XRD D2 Phaser | | |
| | pXRF | | |

| | Academic/Public funded (per hour) | Industry |
|---------------------------|---------------------------------------|------------------|
| | \$250 / hour (\$1200 cap >5 hours) | Quote on request |
| X-ray µCT – scan > 5hr | \$1000/scan | Quote on request |
| La Trobe Staff Assistance | \$65 / hour | Quote on request |





| LTCC (Low Temperature Co- Fired Ceramics) | Academic/Public funded | Industry | | |
|--|------------------------------------|--------------------------|--|--|
| | \$35 per hour | Quote on request | | |
| Custom Green Tape Ceramics | Ball Mill (micro powder) | Ball Mill (micro powder) | | |
| | Ball Mill (nano powder) | | | |
| | Polymer Binder Preparation | | | |
| | Tape Caster | | | |
| | Laser Machining System | | | |
| | Silk Screening | | | |
| | Green Tape Stacker/Aligner/Trimmer | | | |
| | Isostatic Press | | | |
| | Firing Furnace | | | |

LTCC & Micro Nano Research Facility (RMIT) – link

| Micro Nano Research Facility (MNRF) Capabilities | | | |
|--|---|------------------|--|
| | Academic/Public funded | Industry | |
| | \$50 per hour | Quote on request | |
| Lithography/Thin Film Deposition | Heidelberg MLA 150 – direct write laser lithography | | |
| | Suss RC8 Gyrosett Spinner | | |
| | Lesker Electron Beam Evaporator | | |
| | Lesker Sputterers | | |

| | Academic/Public funded per hour | Industry per hour |
|-----------------------|------------------------------------|-------------------|
| MNRF Staff Assistance | \$60 | |
| Training | \$60 | |





| MCFP Capabilities | | | |
|-----------------------------------|---------------------------------|------------------|--|
| Instrument | Academic/Public funded per hour | Industry | |
| Contact Angle Measurement | \$30 | Quote on request | |
| Cypher AFM | \$25 | Quote on request | |
| MFP3D AFM – Acoustic Hood | \$25 | Quote on request | |
| NanoSight NS300 | \$50 | Quote on request | |
| Nikon A1R+ Confocal Microscope | \$50 | Quote on request | |
| Reinshaw RM 1000 | \$30 | Quote on request | |
| He Ion Microscope | \$80 | Quote on request | |
| Hitachi FlexSEM | \$30 | Quote on request | |

Materials Characterisation & Fabrication Platform (Univ of Melbourne) — see link

Institute For Frontier Materials Hub (Deakin) – link

| Instrument | Academic/Public funded per hour | Industry per hour |
|----------------------------------|---------------------------------|-------------------|
| 2-Meter Electrospinning Line | \$50 | \$100 |
| Holmark Electrospinning Rig | \$10 | \$20 |
| Dissol Wet Spinning Line (Large) | \$20 | \$20 |
| Dissol Wet Spinning Line (Small) | \$10 | \$20 |
| Lab Designed Spinning Rig | \$10 | \$20 |
| Porometer 3GZH Quantachrome | \$25 | \$50 |
| Wayne Single-Screw Extruder | \$20 | \$40 |
| Uster Tensorapid-4 | \$20 | \$40 |





| Aglient UTM150 Fibre Tensile | \$30 | \$60 |
|----------------------------------|------|------|
| Tester | | |
| Favimat – Fiber Tester | \$30 | \$60 |
| Sifan 4 – Fibre Analyser | \$20 | \$40 |
| Ahiba IR Pro | \$20 | \$40 |
| Burst Tester; Direct Cover/Twist | \$20 | \$40 |
| Lab Miniextruder | \$10 | \$20 |
| OFDA | \$20 | \$40 |
| Sweating Guarded Hotplate | \$20 | \$40 |
| 30kN Instron | \$20 | \$40 |
| | | |

Biomedical Materials Translation Facility Hub (CSIRO) – link

| BMTF Capabilities | | | |
|--|---|------------------|--|
| Instrument | Academic/Public funded | Industry | |
| Parylene Coater | \$500 per run* | Quote on request | |
| Aerosol Spray Coater | \$50 per hour | Quote on request | |
| X-ray <i>µ</i> CT Scanner (ZEISS Xradia 515 Versa) | \$250 per hour (\$1200 cap >5 hours) | Quote on request | |
| X-ray <i>µ</i> CT Scanner (ZEISS Xradia 515 Versa) scan > 5hr | \$1000 per scan | Quote on request | |
| Staff Support | \$250 per hour | Quote on request | |





WA Node

All users (academic, industry, internal or external to MRG or UWA) of the facility are being charged for the use of the facility and equipment therein. WACSOM forms part of the Western Australian Node of the Australian National Fabrication Facility (ANFF-WA) and access to the facility is available at the ANFF-WA rates (Table 1)

Table 1. Pricing (\$/hour) for use of WACSOM facilities via the ANFF-WA initiative.

| Facility | | PhD student, University or other publicly funded researcher | Industry user |
|----------|------------|--|---------------|
| UWA | unassisted | \$50 | \$250 |
| UWA | assisted | \$100 | \$300 |

Alternatively, an annual rate for unlimited hours access can be negotiated on a case-by-case basis, based on the level of facility usage (Table 2).

Table 2. Annual subscription pricing structure (\$/year) for unlimited hours use of WACSOM facilities via the ANFF-WA initiative.

| Facility | Access type | PhD student, University or other publicly funded researcher | Industry user |
|----------|---------------|--|---------------|
| UWA | minimal use | \$5,000 | \$15,000 |
| UWA | minor use | \$10,000 | \$30,000 |
| UWA | major use | \$30,000 | \$90,000 |
| UWA | intensive use | \$50,000 | \$150,000 |





ANFF Client Service Charter

1. INTRODUCTION

The Australian National Fabrication Facility (ANFF) was founded in 2007 to overcome hurdles to R&D success by providing open access to micro and nanofabrication equipment, essential to Australia's scientific and economic future. It was one of nine original research infrastructure facilities established under the Commonwealth's National Collaborative Research Infrastructure Strategy (NCRIS).

The ANFF network provides access to more than 500 individual pieces of equipment across 21 sites and is home to more than 130 experts employed under the ANFF banner who assist approximately 3,000 clients a year.

ANFF's primary value proposition is providing clients open access to world class research infrastructure and the staff that enable its use. Customer service that delights and allows clients to focus on their research, development and commercialisation programs will only enhance their engagement with ANFF resulting in novel products, services and jobs of the future.

Regardless of which Hub is engaged, ANFF is committed to providing the highest form of customer service to all its clients. This commitment is expressed through this publicly available service charter, is attached to ANFF's <u>Access and Pricing Policy</u>.

2. PURPOSE AND AIM

The *ANFF Client Service Charter* sets the expected standards for all staff, across all Nodes, Hubs and headquarters who engage with internal/external clients. Policies outlined in this document are designed to provide clients with a uniform and high-quality level of customer service regardless of which node/Hub(s) they engage.

Specifically, adherence to the ANFF Client Service Charter will result in:

- Increased client retention and return business;
- New client recruitment with indirect marketing (word-of-mouth amongst satisfied users);
- New client recruitment from direct marketing and Client Engagement Facilitator engagement; and
- Increased engagement with client base which can lead to stronger justifications for future investment in novel research infrastructure.

3. HIERARCHY OF CLIENT VALUE

At ANFF, and through a culture of continuous improvement, there are four levels of customer service providing a hierarchical structure of client value and expectation. These are as follows:

• **Basic Customer Service:** Provision of elements that are fundamental to providing value to the client.





- **Expected Customer Service:** Provision of elements that a client has come to take for granted.
- **Desired Customer Service:** Provision of elements that the client does not necessarily expect but values highly and appreciates.
- **Remarkable Customer Service:** Provision of a service with elements that exceed the expectation and desire of the client, a "going above and beyond" mentality.

ANFF aims to understand and exceed client expectations to ensure current and past clients will serve as fully active references for the organisation. As opposed to the typical hierarchy of client value and expectation, and embedded with staff individual performance plans, ANFF will provide at least a desired customer service.

| Basic Service | Expected Service | Desired Service | Unanticipated Service |
|--|---|---|--|
| Complete client project and return deliverable. | Return completed deliverable with a report on process. Recommendations are provided for possible improvements in future runs. | Return completed deliverable with a report on process. Recommendations are provided for possible improvements in future runs. A meeting is held to obtain feedback on the just completed project and discuss how to be of assistance to the client. | Return completed deliverable with a report on process. Recommendations for possible improvements are provided in future runs. A meeting is held to obtain feedback on the just completed project and discuss how to be of assistance to the client. Introductions are provided to collaborators and/or other organisations who may also be able to add value. |

Below is an example of the ANFF standard for creating optimal customer value:

4. ANFF STAFF EXPECTATIONS FOR CLIENT CARE

4.1. Principles of Client Care

1. To external clients, all ANFF staff represent the organisation.

At every engagement with an external client, any employee of ANFF and its Nodes/Hubs represents the organisation. We ensure ANFF's culture, mission and vision can be easily identifiable from our conduct.

2. We show clients the value they bring to ANFF.

We take a direct approach when dealing with clients and present information in a manner that is appropriate to the audience. We make it clear that we are delighted to be assisting them with their research, development and commercialisation activities.





3. Internal collaborative relationships are as important as external customers.

There is a direct link between our organisation's internal relationships between Nodes/Hubs and its external relationships. Open collaboration between our Nodes and Hubs reflects on the customer service provided by the organisation as a whole.

4. Employee satisfaction directly impacts client care.

ANFF understands that having satisfied and motivated employees results in optimal customer service. From 2023, employee satisfaction surveys will be conducted for all ANFF employees at least once a year. This will not only be an opportunity to address employee concerns but obtain a clear understanding of how we can improve on our internal and external client engagement.

5. Continuous skills development in customer service and accountability

Written into each employee's individual performance plan is the expectation of delivering excellent customer service. Regular training will be provided to all ANFF staff to ensure that the highest levels of customer service are adhered to, best practise is shared, and a consistent approach is undertaken across all Nodes and Hubs.

4.2. Client Engagement Process

Each client engagement is unique. It may be with an existing or prospective client, an academic or start-up or multinational, a simple request or one that pushes the limits of what's possible, etc. Regardless of the nature of the request, each engagement should be professional and reflect positively on ANFF.

Enquiries, whether coming from outside or within ANFF, should be dealt with as a priority. <u>Phone calls and emails should be responded to within 24 hours</u>. There may be circumstances that prevent a full and timely response. At those times, a *timely* response should be sent that:

- Acknowledges receipt of the enquiry;
- Apologises that a full response is not currently possible; and
- Commits to a specific date by which a full response will be sent; that date should be as soon as possible.

If a full response is not possible within a week, then an attempt will be made to escalate or transfer the request to another individual within the ANFF network to respond. A warm introduction will then be made for the client.

The above process and response time expectations apply to all client enquiries – regardless of the stage of engagement.

Any ongoing large projects will have an appointed project manager, responsible for delegation of tasks between Process Engineers and quality management after each critical step to maintain overall functionality of the project.

If a staff member is unable to answer an enquiry, every effort will be made to refer the client to the person best capable of helping them. This direction will involve complete handover and briefing of the new staff with pertinent details about the customer/enquiry. The initial staff member is expected to follow up with the customer of the new changes and provide contact details of the delegated staff member. In the event of any information transfer within





the organisation; customer privacy, data protection and confidentiality policies should be adhered to.

Staff are also expected to seek solutions within their network to solve any complex customer enquiry, if and when applicable. Capabilities from outside ANFF should also be considered and offered if in the client's best interest. This is to provide the "unanticipated" customer value for increased customer satisfaction.

ANFF exists to help researchers and companies innovate. Clients should come away from their interactions with ANFF feeling that it did all it could reasonably do to help them achieve their objective.

4.3. Client Communication

By the nature of its operations and the services it offers, ANFF is involved at the very cutting edge of research, development, and commercialisation activities.

As such, ANFF commits to communicating with its clients in simple, easy to understand language whether verbally, email or in its written reports. We present information in a manner that is appropriate to the audience.

When engaging with clients ANFF staff aim to be active listeners, ask thoughtful and well considered questions in order to obtain an intimate understanding of what the core opportunity is and how it fits into the client's overall strategy. Staff should ask questions as needed to clarify requirements and repeat their understanding for confirmation.

ANFF staff are well presented and will conduct themselves professionally at all times. Telephone, video call and email client engagements will mirror the same professionalism expected in a face-to-face meeting.

ANFF has in place a post engagement survey system for all clients, this is in addition to the annual customer satisfaction survey. The Account Manager in charge will contact the client within three weeks of project completion.

4.4. Dealing with Client Complaints

When raised, ANFF welcomes the opportunity to engage with clients about their complaints and concerns. Not only is this an opportunity to identify opportunities for improvement but to re-establish the relationship.

To make sure client complaints and constructive criticisms are managed in a healthy manner ANFF staff members will utilise the **H.E.A.T** principles to assist in settling any disputes they may face with customers:

Hear: Hear the client out, and actively listen to their concerns

Empathise: Empathise with their situation via reiterating your understanding of the key issue or concern

Apologise: Apologise for their current predicament.

Take action: Advise the client on what action you will be taking to address/investigate their concern.





If a client has a complaint or constructive criticism to provide, they can do so via the contact form found at <u>https://www.anff.org.au/contact.</u>

Where the client is in the process of being supported in their engagement by a Client Engagement Facilitator, the complaint will be escalated to the <u>Chief Executive Officer</u>.

Where the client is in the process of undertaking work at one of ANFF's Nodes or Hubs, their complaint will be escalated to the relevant Facility or Hub Manager.

4.5. Other

Minimal tool downtime and staff availability

ANFF aims to have the instruments available with <1% downtime. All equipment undergoes proactive and routine maintenance/service to minimise any unexpected tool downtime.

This is to optimise and cater for all users' needs. If equipment is under maintenance or repair, all the certificate holders for that specific equipment will be contacted, informing steps taken to rectify the problem and expected completion date.

ANFF's Refund Process

Across all of ANFF's Nodes/Hubs our intent is to provide the highest calibre fabrication services and technical assistance available in the market at an affordable price. Initial customer quotations will encapsulate specifications of the designs and margins for error due to the experimental nature of the research conducted in our laboratories and cleanrooms.

However, in an event of any dissatisfaction from the provided service, clients will be asked to:

- 1. Discuss the issue with staff; and
- 2. Upon discussion, fill out the Customer complaint/suggestion form on the ANFF website.

To ensure consistency, any refund credit, or non-charge should be discussed and approved by the relevant Facility Manager or Node Director. In addition, ANFF HQ should be notified.

