

**THE AUSTRALIAN
NATIONAL
FABRICATION
FACILITY**

**ANFF
SNAPSHOT**

ENABLED BY
NCRIS
National Research
Infrastructure for Australia
An Australian Government Initiative



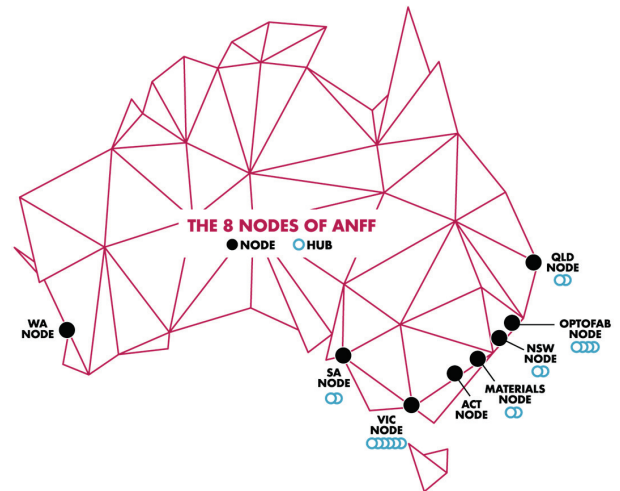
SA Leaders Lunchbox Chat

13 September 2022

What is the Australian National Fabrication Facility?



- ANFF provides R&D communities with open access to micro and nano fabrication capabilities.
- Established by the Australian Government's NCRIS program in 2007.
- The network is made of 21 sites organised into eight specialist Nodes.



ANFF Node and Hub Locations



ANFF Supports Industry



- Provides access to leading edge nanofabrication facilities and expertise
- ANFF helps:
 - Develop new or innovate existing products
 - Trial advanced techniques/technologies
 - Overcome manufacturing challenges
 - Characterisation
 - Relocate advanced manufacturing from abroad



ANFF Capabilities



- Modelling and Device Design
- Materials Synthesis and Modification
- Manufacturing and Machining
- Lithography
- Etching
- Deposition
- Packaging
- Testing and Validation



SNAPSHOT OF ANFF



ANFF

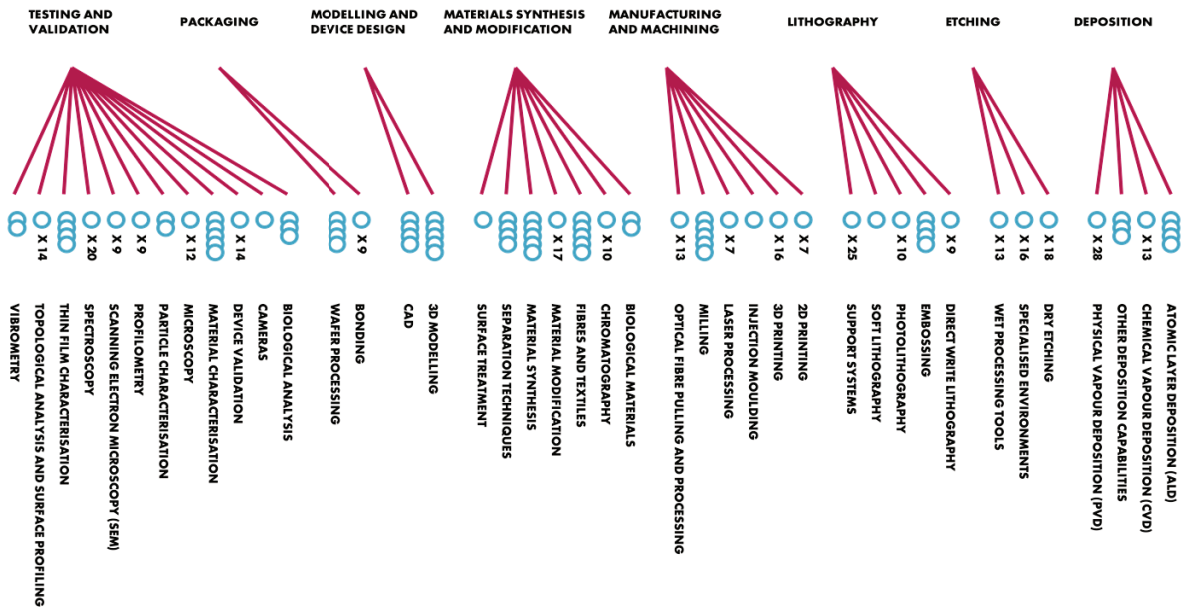
CAPABILITY CATEGORY

TOOL COUNT

CAPABILITY

We offer affordable access to:

- More than 500 individual capabilities
- 130+ expert engineers



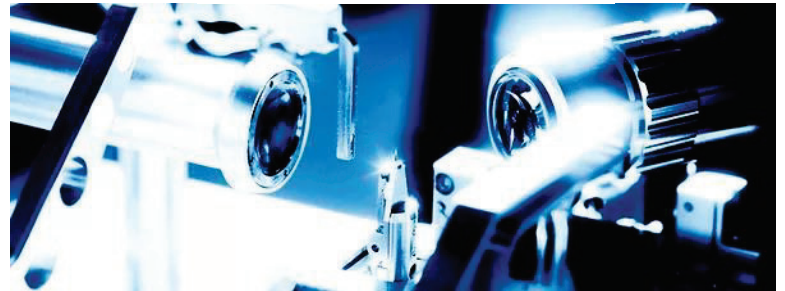
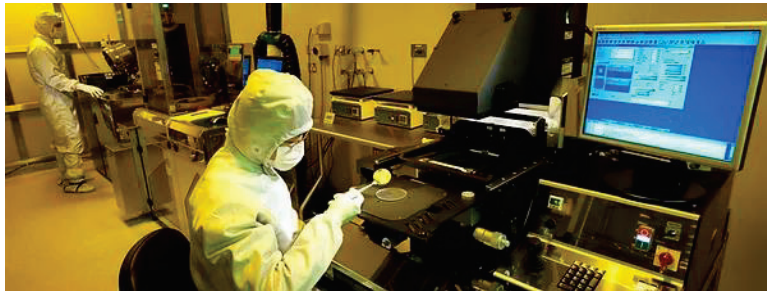
ANFF-SA



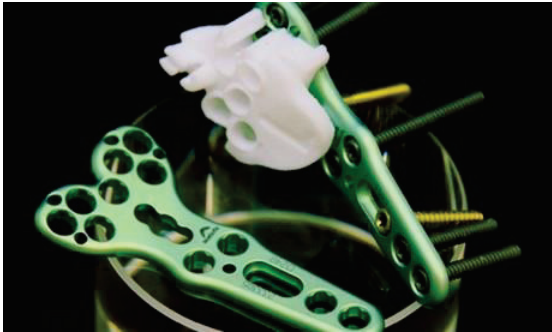
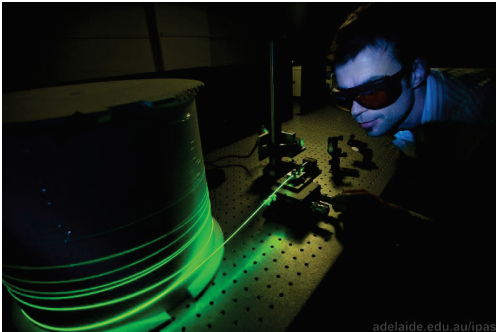
**University of
South Australia**



**Flinders
University**



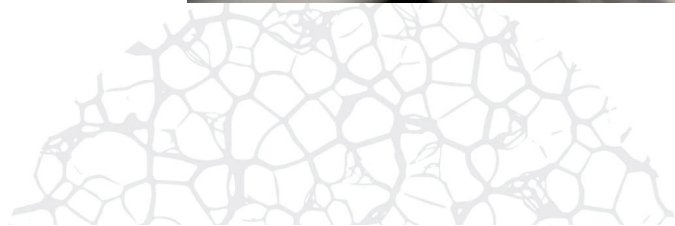
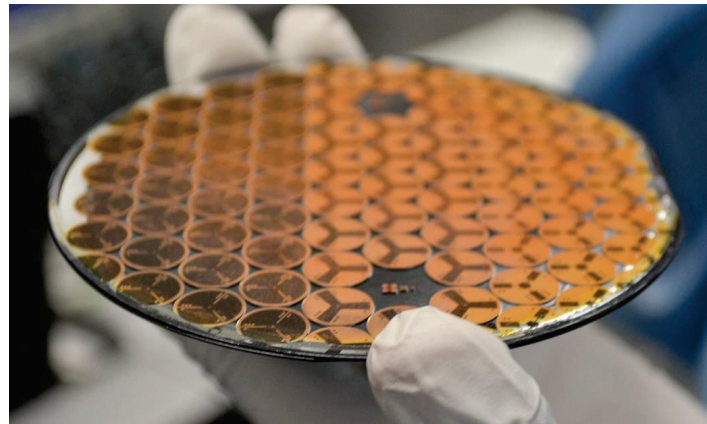
Optofab Adelaide



ANFF-C



- A new program offering commercialisation support for projects born of ANFF
- Provide expertise and funding to advance an idea toward market
- A free service; ANFF will not take a stake in equity or IP





Options in Engaging ANFF



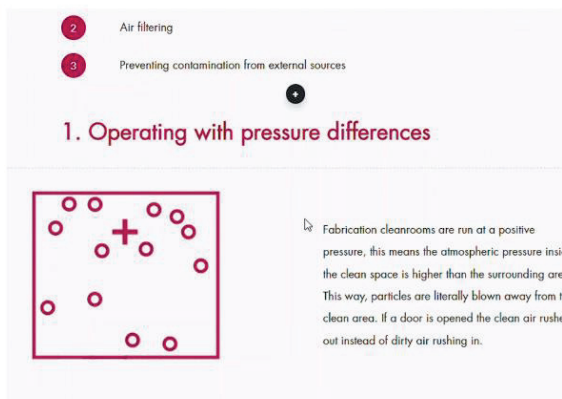
- Access ANFF for:
 - Direct access to tools and processes
 - Fee-for-service work
 - Training
 - Project advice and consultancy



Online learning resources



ANFF Enlightened: An open access library of free nanofabrication courses



A screenshot of a course page from ANFF Enlightened. At the top, there are three numbered steps: 2. Air filtering, 3. Preventing contamination from external sources, and 4. Operating with pressure differences. The current step is 4, which is highlighted in red. Below the step number is a diagram of a cleanroom. The diagram shows a rectangular room with a red border. Inside the room, there are several small red circles representing particles. A red cross is in the center of the room. A mouse cursor is pointing at the text to the right of the diagram. The text explains that cleanrooms are run at a positive pressure, meaning the atmospheric pressure inside is higher than the surrounding area. This way, particles are blown away from the clean area. If a door is opened, the clean air rushes out instead of dirty air rushing in.

2 Air filtering

3 Preventing contamination from external sources

4 **1. Operating with pressure differences**

Fabrication cleanrooms are run at a positive pressure, this means the atmospheric pressure inside the clean space is higher than the surrounding area. This way, particles are literally blown away from the clean area. If a door is opened the clean air rushes out instead of dirty air rushing in.

Introducing ANFF Enlightened: a free library of nanofab courses

ANFF's learning platform, called ANFF Enlightened, will give you the micro and nanofabrication knowledge to take your projects further, faster.

It's completely free, and absolutely anyone can access this new learning tool, even if you're not one of our clients. Go ahead and sign yourself up to enroll on any course that takes your fancy.

[Click here to create your account](#)





Connect to explore how ANFF can help

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