

# Equipment Listing

An alphabetical list of equipment available in the Australian Centre for Neutron Scattering laboratories:

## Analytical balances (4)

Balance

## Centrifuge, refrigerated - Eppendorf 5810R

Temperature range: -9°C to +40°C

Fitted with a fixed angle rotor (max. 12000 rpm) and a swinging bucket rotor (max. 4000 rpm)

Tube sizes supported:

- 1.5mL (available)
- 2mL
- 10mL (available)
- 15mL (available)
- 50mL
- 85mL

Further technical information is available on the Eppendorf website.

## Desiccators

## Dishwashers

**Drying cabinets** (6, programmable humidity settings, 20% to 60% RH)

**Drying ovens** (clean glassware only)

**Freezer** (-18°C, 2 under bench)

**FT-IR spectrometer** (Nicolet iS10) (**for trained persons only**, contact the Lab Manager). Please inform Lab Manager in advance if nitrogen purge is required (two day purge is recommended).

## Fume cupboards

Conditionaire Safe-tee 2000 fume cupboards

Available in the Biology and Chemistry labs

## Plumbed services:

- Oxygen
- Nitrogen
- Argon
- Helium
- Water (hot, cold)
- Air

The use of these must be booked as part of your proposal via the ACNS Customer Portal

## Furnaces:

- High temperature furnace (1500°C maximum, B-type thermocouple)
- High temperature vacuum tube furnace (1600°C maximum, B-type thermocouple, inert atmospheres)

## Glove boxes:

- Helium glove box (for air and moisture sensitive samples; no solvents - SOLID MATERIALS ONLY; training is required, contact the Lab Manager)
- Argon glove box (for air and moisture sensitive samples with solvents; training is required, contact the Lab Manager)
- Nitrogen glove box (for air and moisture sensitive samples, can be used with other gasses (He, Ar) if required; training is required contact the Lab Manager)

## Heat sealer

## Hot plate stirrers (4)

## Hydraulic Press (Atlas Manual 15T)

This manual laboratory press is ideal as an FTIR press, KBr press and XRF press. The press is intended for a wide range of laboratory press applications. 15 ton and 25 ton configurations.

- Polycarbonate safety guards
- Adjustable upper bolster
- Adjustable pressure control valve
- Vacuum ports
- Pressure release valve
- Low pressure conversion gauges
- Ideal for FTIR, KBr and XRF sample preparatio

**Ice machine** (2)

**Liquid Nitrogen storage** dewar (suits 2mL cryovials)

**Milli-Q Academic water purification system** (3)

**Milli-Q Gradient A10 water purifier**

**Milli-Q Symplicity for heavy water**

**Ovens:**

- 2x Small fan forced (maximum 200°C)
- Large convection (maximum 200°C)
- Vacuum oven (maximum 200°C)

**Ozone cleaner** (for trained persons only, contact the Lab Manager).

**pH meters** (3) and buffer solutions

**Pipettes** - Gilson, Finnpiquette and Eppendorf (2µL to 10mL)

**Refrigerators** (3, underbench)

**Spin coater** (for trained persons only, contact the Lab Manager)

**Ultralow temperature** (-80°C) freezer (access on consultation with the Lab Manager)

**Ultrasonicator** with sound abating enclosure

**Ultrasonic baths** (3)

**UV-VIS spectrophotometer** (Varian Cary 50) (for trained persons only, contact the Lab Manager)

**Vortex mixer**