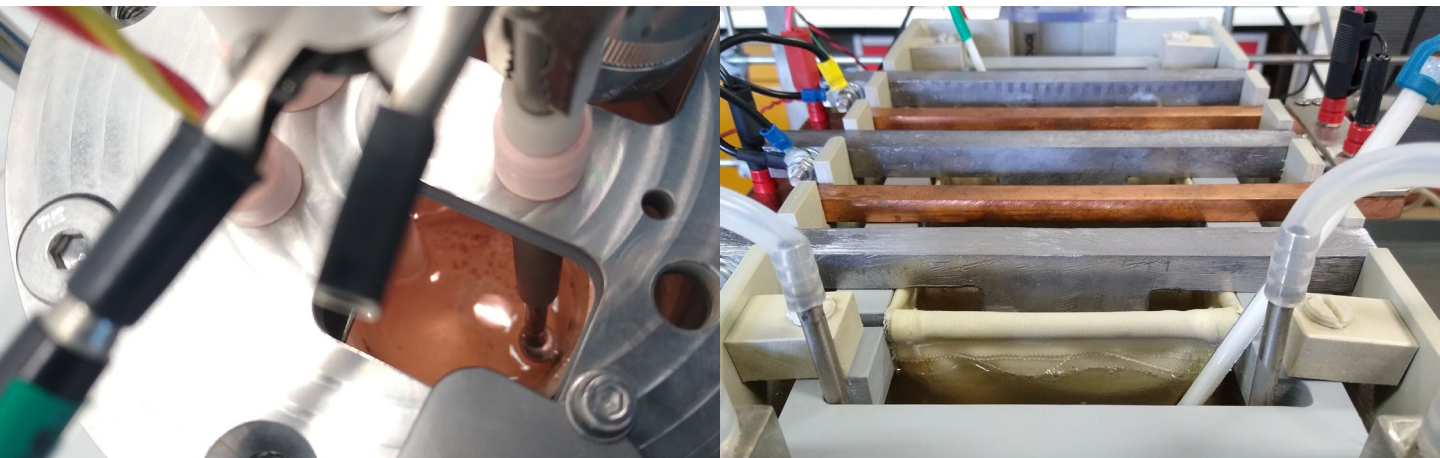


Electrometallurgy Lab

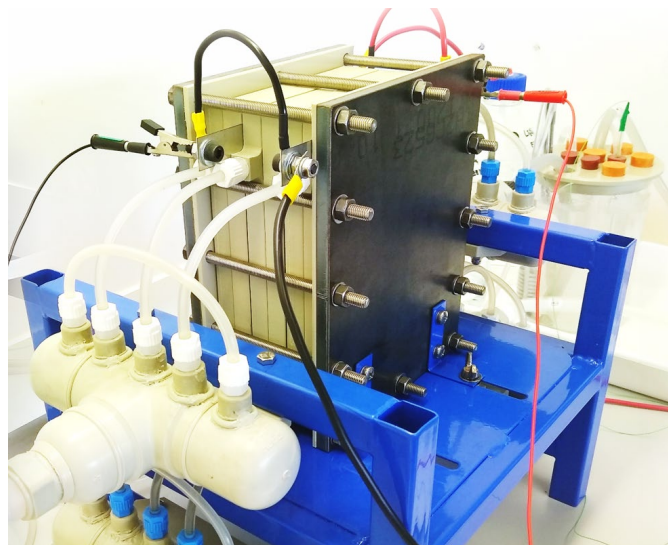


Molten salt electrolysis
for lithium metal production

Diaphragm electrowinning
of electrolytic manganese metal

Key Capabilities

- Recovery of base metals such as copper and zinc from aqueous solutions through conventional electrowinning and electrorefining.
- Diaphragm electrowinning of metals such as cobalt, nickel and manganese, where separation of the anolyte and catholyte is required.
- Molten salt electrowinning of metals with high oxygen affinity, including lithium, titanium, aluminium and iron.
- Recovery of metal salts such as sodium hydroxide, lithium hydroxide and vanadium compounds, as well as salt splitting by electrodialysis using ion-selective and bipolar membranes.
- Investigation of the oxidation and reduction behaviour of materials using three-electrode electrochemical systems.



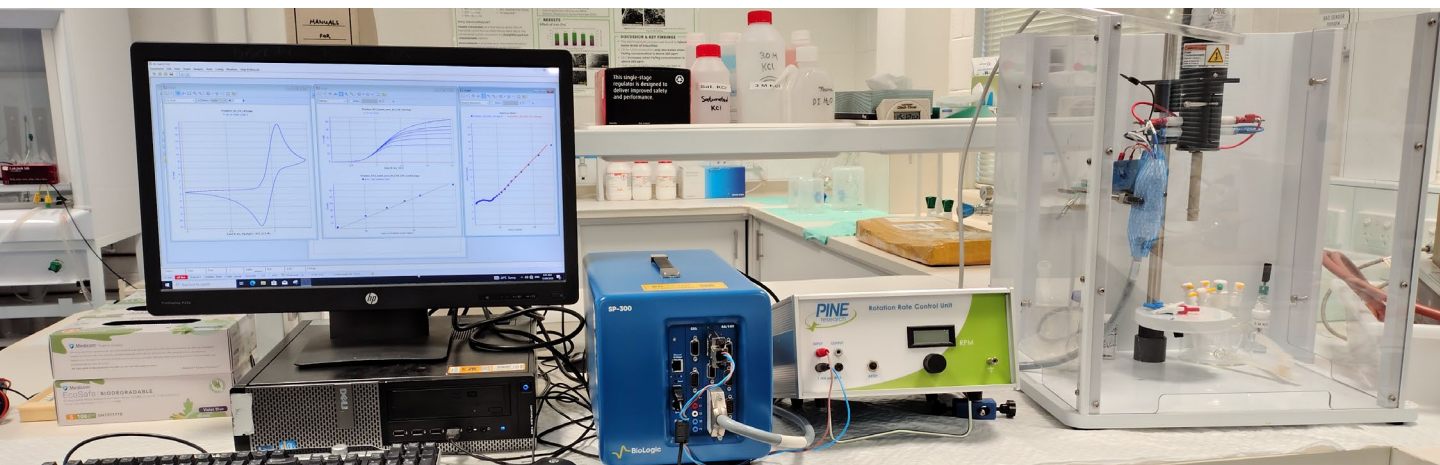
Electrodialysis production
of lithium hydroxide precursors



Contacts

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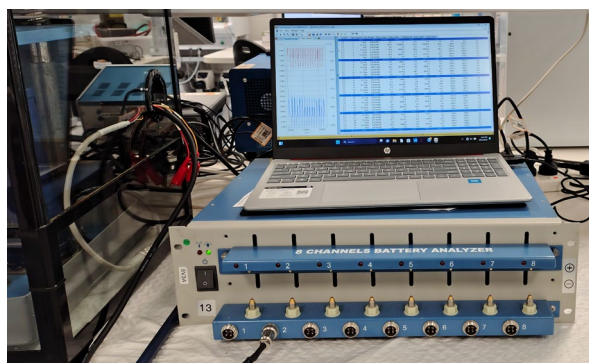
Electrometallurgy Lab



BioLogic SP-300 advanced potentiostat
leading high-performance instrument in
electrochemical research

🔑 Key Features & Capabilities

- Electrochemical stations (Potentiostat & Galvanostat Functionality)
- Supports comprehensive data analysis, including Tafel slopes, cyclic voltammetry (CV), Electrochemical Impedance analysis (EIS), etc.
- Modular Design, Low Current Option & High Precision



Battery cycler
repeatedly charges and discharges batteries

Pine Research MSR rotator

used with Rotating Disk Electrodes (RDE),
Rotating Ring-Disk Electrodes (RRDE), and
Rotating Cylinder Electrodes (RCE)

📊 Key Applications

- Applied Electrochemistry
- Stationary and Flow Battery Research such as Vanadium Redox Flow Battery (VRFB)
- Corrosion Studies
- Fuel Cells
- Electrocatalysis
- Sensors
- Supercapacitors
- Material synthesis
- Environmental monitoring

📌 **Past Sponsors ---** BHP, QNi, Rio Tinto, FBICRC, MRIWA, Livent, Neometal, Thorion Energy, AIS.

🖨️ Contacts

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