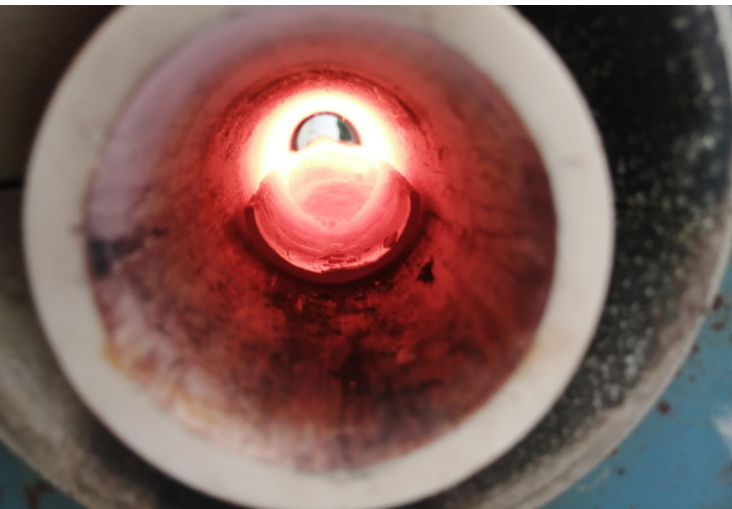
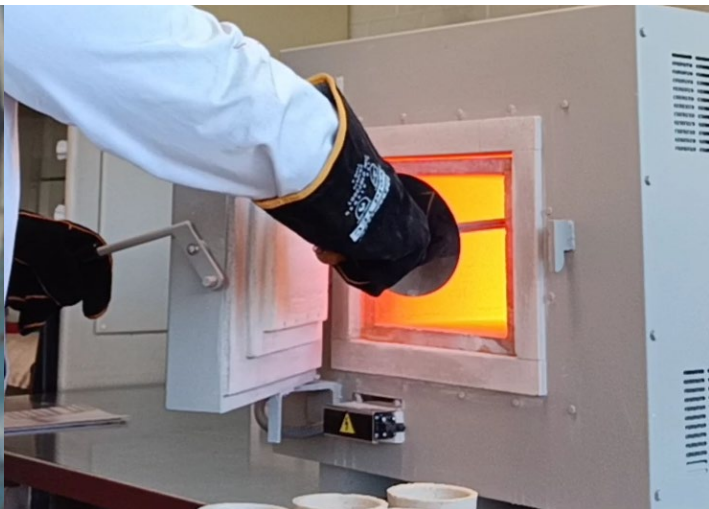


Pyrometallurgy Laboratory



Roasting studies

Tube furnaces capable of operating open or closed with inert, reducing, or oxidising atmospheres



Calcination studies

Muffle furnaces for calcination, roasting, and acid baking testwork

Key Features & Capabilities

- Muffle furnaces
- Rotary tube furnaces
- Microwave furnace
- X-ray fluorescence disc fusion machine
- Sample fusion for ICP analysis
- Gas plumbing including hydrogen for direct reduction of iron (green steel production)

 **Past Sponsors ---** Lithium Australia, Venus Metals Corporation, MRIWA, Atlantic Resources, King River Resources, Podium Minerals, LKAB (Sweden), FBI CRC

Key Applications

- Process and flowsheet development for lithium, vanadium, and other commodities
- Laboratory and pilot scale trials of high temperature processes
- Kinetic and thermodynamic studies at temperatures up to 1,300°C
- Process optimisation and by-products recovery
- Variability studies
- Studies on alternative pyrometallurgical processes including green steel production

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