



UNSW
SYDNEY

Nuclear Engineering and Materials

Specialists in nuclear engineering and nuclear materials and their application to protection against nuclear and radiological threats.

Competitive advantage

As Australia's leading research group in nuclear engineering, we offer vital expertise to government and industry sectors, including:

- Radiation-hard materials
- Radiation safety response
- Radiation impact modelling
- Uranium metallurgy and uranium chemistry
- Virtual reality, human-machine interfaces and remote handling

Impact

- Safer materials and systems for protection against radiation threats

Successful applications

- The highest possible melting-point refractory high-entropy alloy (CrMoVW), containing chromium for oxidation protection
- Tungsten-vanadium carbide alloys for hard facing, Broco/Rankin Vanotung™
- Nuclear engineering of components and systems in the OPAL reactor

Capabilities and facilities

- UNSW radioactive material research facilities
- Discretionary access to Australian nuclear infrastructure
- Experience in accessing international facilities, with demonstrated outcomes

Our partners

- Westinghouse Electric
- ANSTO
- Broco/Rankin

More Information

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