Grenew® Ti and V Microfactory

Centre for Sustainable Materials Research and Technology (SMaRT)

Competitive advantage

Cost effective and environment friendly

This innovative and economical new approach marries industry demands for more cost-effective and sustainable source for Ti and V with global imperatives to address resource depletion and environmental degradation through the recovery of resources from waste.

Recent research projects

- In this research, Ti and V in the waste materials will directly transform to high value added components through innovative selective thermal transformation. This approach is an innovative and effective way to produce Ti and V based components such as TiN and Vanadium steels with enhanced properties at low cost.

Successful applications

- This technique has been used to directly transform automotive shredded residue to TiN ceramic which can be used for coating of cutting tools.

Facilities and infrastructure

- UNSW’s SMaRT Centre is an internationally recognised pioneer into the transformation of complex waste into value-added resources and is equipped with purpose-built state of the art laboratories, specialist furnaces, dedicated analytical equipment are the best available in Australia.

More information

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Our experts

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