CASE STUDY

Developing high temperature superconductor materials with Robinson Research Institute and Commonwealth Fusion Systems

OVERVIEW: Wellington UniVentures manages the relationship between Robinson Research Institute and Commonwealth Fusion Systems, enabling critical work in the fusion sector.

THE CLIENT

Commonwealth Fusion Systems is a US start-up spun out of Massachusetts Institute of Technology's Plasma Science and Fusion Centre to commercialise the development of fusion energy. There are a number of challenges that come with developing fusion technologies, so collaborating on efforts to accelerate the process and share data is crucial to the success of a project.

In the last decade, advances in high temperature superconductor (HTS) materials has meant that new smaller HTS based magnets with high fields are now possible. As a result, the opportunity is now ripe to build smaller but more powerful fusion devices with higher field magnets.



THE OPPORTUNITY

Commonwealth Fusion Systems first connected with Robinson Research Institute in 2018 to request help in measuring the performance of various HTS wires they proposed to use in their demonstration fusion device, SPARC.

Wellington UniVentures was able to facilitate the agreement with an international party and navigate the contractual obligations to ensure successful project outcomes.

THE OUTCOME

Wellington UniVentures' expertise and consulting services led to the development of a successful Department of Energy Contract in the US.

Commonwealth Fusion System has since used Robinson's SuperCurrent Facility to conduct measurements, acquire significantly more data and quickly get results, whilst engaging the expertise of Robinson's researchers.

WELLINGTON

Te Paewai

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Read more about this project <u>here</u>.