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# Radiation test of Rad-Hard ICs for space applications

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Conventional Integrated Circuits (IC) are highly sensitive to radiation effects and can operate only in environments with a very low level of radiation. High radiation environments such as space need custom-designed ICs with dedicated radiation-hardened architectures. Our research is focused on the development and test of radiation-hardened ICs in nanoscale and ultra-low-power semiconductor technologies for high radiation environments such as in space and particle physics experiments. The University of Melbourne and Ansto developed a strategic collaboration to enable the ANSTO's heavy ion microprobe beamline for radiation test of custom-designed ICs for space applications. In our presentation, we provide an overview of our collaboration outcome and our roadmap for further developments in future.

## **Level of Expertise**

Expert

#### **Presenter Gender**

Man

#### **Pronouns**

## Which facility did you use for your research

Centre for Accelerator Science

Students Only - Are you interested in AINSE student funding

Do you wish to take part in the Student Poster Slam

### Condition of submission

Yes

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