



UNSW
SYDNEY



Highly-Efficient Thin Crystalline Silicon Solar Cells and Flexible Solar Modules

UNSW's School of Photovoltaic and Renewable Energy Engineering, a global centre of excellence in photovoltaic research, is leading the development of highly-efficient thin crystalline silicon solar cells and flexible solar modules.

Competitive advantage

- Unmatched expertise from over 30 years of world record breaking silicon solar cell development
- Advanced surface and contact passivation technology allows for high-efficiency thin silicon solar cells
- Crystalline silicon technology has proven reliability and longevity, and offers the best compromise between cost and efficiency
- Thin silicon solar cells are flexible, allowing for implementation in lightweight and foldable solar modules that can be used to charge equipment in the field or incorporated into other equipment

Impact

- Cheaper, silent and more efficient in-field power generation for personnel, minimising the need for batteries
- Reduced fuel requirements for deployments

Capabilities and facilities

- Solar Energy Research Facility (SERF)—an on-campus R&D pilot line for silicon wafer solar cells
- State-of-the-art labs for cutting edge academic research in silicon wafer fabrication and characterisation

More Information

Associate Professor Bram Hoex

School of Photovoltaic and Renewable
Energy Engineering

T: +61 (0) 2 9385 7934

E: b.hoex@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008