



UNSW
SYDNEY



Solar Powered Remote Sensors for the IoT

Solar powered hybrid devices with on-board energy storage can enable compact remote sensing devices that collect and transmit field data to the cloud to support 24/7 monitoring and surveying applications.

Competitive advantage

- Expertise in photovoltaics and energy storage
- Practical experience in fabrication of hybrid devices
- Expertise in durable device encapsulation
- Circuit and device modelling/simulation expertise

Impact

- Self-powered sensors and devices to enable monitoring and/or survey data to be collected from remote areas and assimilated via cloud computing into historical and/or predictive models
- Hybrid photovoltaic and storage functionality for solar-powered devices and tools, and medical implants

Successful applications

- Demonstrated hybrid device based on a commercially-produced silicon solar cell

Capabilities and facilities

- Extensive expertise in both photovoltaics and energy storage research
- State-of-the-art laboratory facilities for both photovoltaics and energy storage research and fabrication of hybrid devices

More Information

Associate Professor Alison Lennon

School of Photovoltaic and Renewable
Energy Engineering

T: +61 (0) 2 9385 7942

E: a.lennon@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008