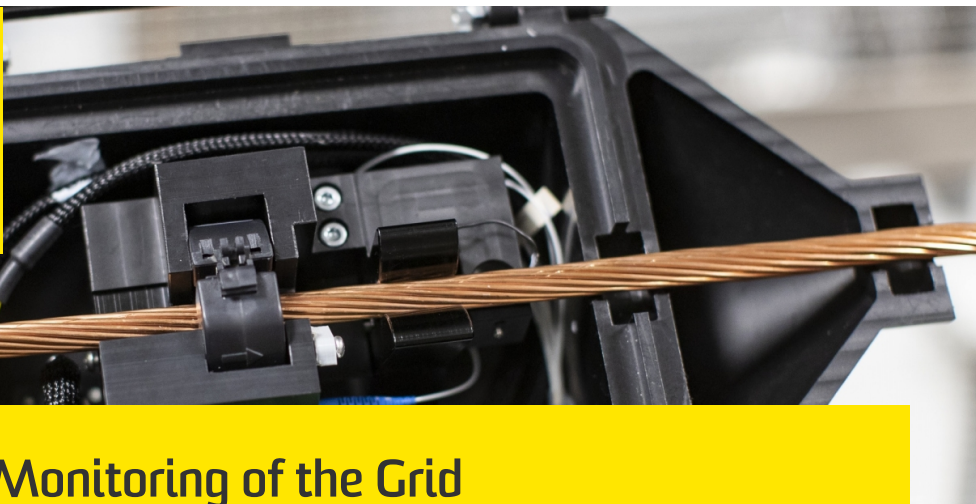




**UNSW**  
SYDNEY



## Toward Ubiquitous Monitoring of the Grid

**Photonics technologies developed at UNSW promise to greatly enhance the ability to cost-effectively monitor power at strategic network locations, in order to address the challenges of new grid architecture.**

### Competitive advantage

- Cutting-edge, affordable, scalable and intrinsically safe monitoring technology that can be applied to all aspects of the electricity grid
- World-class photonics that are adaptable to all current voltage ranges and to hazardous environments like mines, refineries and smelters
- Know-how and intellectual property related to design, fabrication and production

### Impact

- The successful in-situ implementation of the technology would provide a powerful tool to enable preventive monitoring of the grid and address topical issues such as system strength, dynamic line rating and other important issues related to the changing nature of the grid. All of these are vital to help the grid adapt to the steady, ongoing development of renewable energy sources and the emergence of new network architectures.

### Successful outcomes

- The technology is currently in use in the University's high-voltage laboratory
- It has also been applied in other areas such as mine and ocean monitoring

### Capabilities and facilities

- Access to UNSW high-voltage laboratory
- Access to UNSW node of the Australian National Fabrication Facility
- Access to commercially-ready, patented technology

### Our partners

- Zedelef Pty Ltd
- Tyree Transformers (through their Foundation)
- Ampcontrol
- Schneider Electric

### More Information

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