



Richard (Rich) Mildren

Rich Mildren who is an Australian Research Council Future Fellow 2010-2014 is a Professor in the Department of Physics and Astronomy. His research is in the development of novel and versatile photonic sources, instrumentation and applications.

Rich's PhD and early postdoctoral research was in the plasma kinetics of high power metal vapour lasers and has studied ultrafast lasers at the National Research Council in Pisa, Italy.

For 3 years (2005-2008) he led R&D for a University spin-off company in wavelength-switchable medical lasers, during which time he brought several medical laser products through to the stage of medical device regulatory approval.

Rich's most recent focus, conducted in the MQ Photonics Research Centre, is in the nonlinear optical phenomena in advanced optical materials including in synthetic diamond.

He was recipient of the 2017 Eureka Prize for Outstanding Science in Safeguarding Australia.

Research interests include

- Diamond optics, lasers and quantum phenomena
- High power lasers and applications
- Laser-induced phenomena on diamond surfaces