

**The Canadian Light Source (CLS):
Finding Solutions with Synchrotron Techniques**

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The Canadian Light Source (CLS), Canada's national synchrotron facility, is located in Saskatoon, SK. The CLS is a 3rd generation synchrotron source, providing intense light spanning the spectrum from far infrared to hard X-rays. Synchrotrons provide many advantages compared to standard laboratory techniques, such as shorter data collection times, smaller spot sizes, deeper sample penetration, improved spectral resolution and better detection limits. Many of these benefits make the synchrotron ideal for *in situ* and *operando* experiments. This talk will introduce the CLS, our Industrial Services Group (ISG) and illustrate a variety of synchrotron techniques including diffraction, spectroscopy and imaging, using examples drawn from both fundamental and industrial work.