

About Canadian Light Source Inc.

The Canadian Light Source is Canada's national centre for synchrotron research and a global centre of excellence in synchrotron science and its applications. Located at the University of Saskatchewan in Saskatoon, the CLS is a world-class, state-of-the-art facility that is advancing Canadian science, enhancing the competitiveness of Canadian industry and contributing to the quality of life of people around the world.

The synchrotron is one of the largest science projects in Canadian history and was the product of an unprecedented collaboration of federal, provincial and municipal governments and agencies, universities from across the country and industry.

CLS operations are funded by Canada Foundation for Innovation, Natural Sciences and Engineering Research Council, Western Economic Diversification Canada, National Research Council of Canada, Canadian Institutes of Health Research, the Government of Saskatchewan and the University of Saskatchewan. To date, the CLS has hosted 1,700 researchers from academic institutions, government, and industry from 10 provinces and territories; delivered over 26,000 experimental shifts; received over 6,600 user visits; and provided a scientific service critical in over 1,000 scientific publications, since beginning operations in 2005. CLSI employs more than 200 people including scientists, engineers, technicians and administrative and business personnel.

What's a Synchrotron?

A synchrotron is a source of brilliant light that enables scientists to study the microstructure and chemical properties of materials. Extremely bright synchrotron light is produced by using radio frequency waves and powerful magnets to accelerate electrons close to the speed of light. The light—spanning the spectrum from infrared light to high energy X-rays—is shone down beamlines to laboratory endstations where researchers select specific wavelengths of light to observe matter down to the atomic level.

Synchrotrons can be used to analyze a host of physical, chemical, geological and biological processes. Information obtained by researchers can be used to develop ways to help reduce greenhouse gases and clean up mining wastes, examine the structure of surfaces to develop more effective paints and motor oils, design new drugs, develop new materials for products ranging from solar panels to safer medical implants and build more powerful computer chips. New applications are being thought of all the time - synchrotron experiments are even helping with the search for other life in the universe.

A Unique Mission

The mission of the Canadian Light Source encourages excellence in both basic and applied science, with the mandate to grow the Canadian synchrotron research community and promote the use of synchrotron techniques to industry. Part of this mandate is a globally-unique focus on commercial partnerships with industry, with a target of 25 percent industrial usage.

How do I get to the CLS?

The CLS is located at 44 Innovation Boulevard, and we are located on the University of Saskatchewan Campus: <http://www.lightsource.ca/about/location.php>

For more information please visit the following sites:

http://www.lightsource.ca/about/brochure/pdf/CLS_General_Brochure.pdf

http://www.lightsource.ca/about/brochure/pdf/Industrial_Science_Solutions.pdf