



PHOTONIC/OPTOELECTRONIC SERVICES: DESIGN, FABRICATION, TEST

**Are you interested in designing, prototyping and testing photonic/optoelectronic devices?
Are you seeking a comprehensive, reduced-cost service with onsite expert support?**

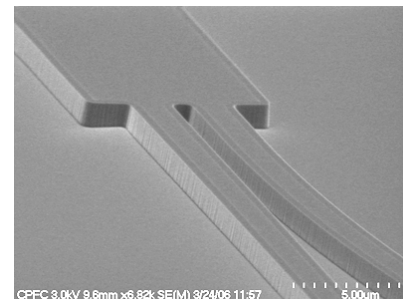
Through services provided by CMC, Canadian university researchers can benefit from:

- **Access to design tools** for physical layout and verification of optical components.
- **Industry-class prototyping services** provided in partnership with the Canadian Photonics Fabrication Center (CPFC), at a significantly reduced cost (through a peer-reviewed process). Alternatively, a pay-for-fab service is also available.
- **Extensive test resources**, with one of the most advanced and complete photonics test labs in the country, available remotely and onsite through the Advanced Photonic Systems Lab of the National Microelectronics and Photonics Testing Collaboratory.

Design and Prototype

Products and Services: Access and support for:

- **Physical layout and verification tool dw-2000** from Design Workshop Technologies.
- **III-V prototyping:** Epitaxy on InP or GaAs substrates, wafer processing, singulation and coating.
 - More frequent photonic 'epitaxy-only' service to be announced soon.
- **Silicon-based prototyping:** Silica on Si (low index contrast), Silicon on Insulator (high index contrast).



Above: SOI Waveguides

Getting Started: Once you have registered with CMC (below), view a complete list of photonic design and prototyping resources at <https://www1.cmc.ca/subscribers/design/optoelectronics.php>

Your design should follow the guidelines described at the above Web page. Once you have drafted your design, contact CMC for prototyping support. If your design cannot meet these guidelines, please contact CMC to discuss your research needs.

Contact: Design tools: Dr. Dan Deptuck, Staff Scientist, Optoelectronics Engineering, deptuck@cmc.ca, 613.530.4670. Prototyping: Maxime Poirier, Optoelectronics Design Engineer, poirier@cmc.ca, 613.530.4782.

Test

Products and Services: The Photonic Lab located at Queen's University offers on-site or remote access to state-of-the-art optical transmitters and receivers; equipment for component-level test; optical transmission system components; test equipment for chirp test, optical network analysis, and more; and a 43.5 Gbit/s bit error ratio tester (BERT).

Getting Started: Once you have registered with CMC (below), view a complete list of photonics test equipment at: <https://www1.cmc.ca/clients/collaboratory/photonic/>

To ensure your research project will benefit from the test resources available through the Photonic Lab, and to build testability into your design, contact CMC early in the design process.

Contact: Patricia Greig, Photonics Lab Engineer, greig@cmc.ca, 613.530.4662.

**To access these products and services, Canadian university researchers
can register with CMC at: <https://www1.cmc.ca/registration/>**