

CCSIP Collaborative Event: Developing Green-Manufacturing Processes for Organic Electronics to Help Canada and California to Capitalize on a Multi-Billion Dollar Global Market

As traditional electronics are composed of many chemicals, inorganic silicon and metals, current manufacturing processes are resource and energy-intensive, and often generate toxic byproducts that threaten our ecosystem and human health.

A Canada-California research team aims to tackle this challenge by collaborating on the R&D and manufacture of 'organic' or carbon-based electronics that reduce the negative impact on our environment.

With support from CCSIP and leadership from the University of Western Ontario and the University of California Berkeley, the team will host bilateral workshops to explore the development of environmentally friendly manufacturing processes for organic electronics.

More specifically, the team will exploit its recent invention in cross-linking organic molecules that consume virtually no chemicals and thermal energy, to develop 'green' manufacturing processes for organic electronics.

As the global market is expected to reach \$300 billion by 2025, there are many potential applications for this technology—from the production of roll-up displays for computers and cell phones, supple solar panels to power portable equipment, and flexible sensors for health care products that can be worn.

This bilateral initiative will increase the global competitiveness of Canada and California in this market by enabling the creation of new R&D, education and training strategies, and supporting the development of highly qualified personnel with the expertise required by organic electronics companies.

