

# CARI YEAR IN REVIEW 2022/2023

APRIL 1, 2022–MARCH 31, 2023

**RESEARCH STAFF  
AND LABS**      **51** staff  
                         **18** labs  
                         **\$36M** equipment  
                         **37,000** sq ft lab space

**FACULTY AND  
STUDENTS**      **220** students engaged  
                         **23** student researchers

**EXTERNAL FUNDING**      **43** faculty engaged  
                         **6** courses developed  
                         **\$380,000** Government  
                         **\$330,000** Industry  
                         **\$710,000** Total

**INDUSTRY LIAISON**      **29** industry projects

**PROJECTS**              **50** active projects  
                         **375** prototypes

**RECOGNITION**        **4** awards  
                         **62** media highlights  
                         **31** publications/presentations  
                         conferences

Applied research at BCIT is exciting. It creates practical learning opportunities for BCIT's students, provides innovative solutions to industry challenges, and produces new, commercially relevant technology products and applications.

BCIT researchers and research groups have been working with industry clients for more than 30 years helping companies and organizations develop new technologies, products and services.

For more information visit [bcit.ca/applied-research](https://bcit.ca/applied-research)



The Centre for Applied Research and Innovation [CARI] is home to MAKE+, NRG, SMART, the Centre for the Internet of Things, and the Applied Research Liaison Office that provides support to researchers across BCIT.

For over 30 years, CARI is helping companies produce new, commercially relevant technology products and applications. In addition to the work with industry, CARI is proud of its work with students and faculty across BCIT, the province and beyond.

The **Centre for Internet of Things** will keep BCIT at the forefront of this emerging technology and digital transformation with advanced hands-on education and training, industry collaboration, and research.

**MAKE+** is an interdisciplinary research group focused on product development, applied research, and education. The team optimizes the functionality, user experience, value, and commercial success of emerging health, consumer, and industrial products. This team is capable of taking complex projects and ideas from requirement discovery and concept development.

**Natural Health and Food Products Research Group (NRG)** concentrates on issues related to natural health and food product quality, process improvement, and human health. NRG's goal is to ensure that all Canadians can achieve the potential health and economic benefits offered by natural health products, medicinal plants, and food products.

**The Smart Microgrid Applied Research Team (SMART)** converges expertise in the information technology, communications engineering, and energy management fields to develop prototypes and solutions for complex applied research problems. SMART has a reputation for unique experience in three strategic research themes: smart microgrid and energy management systems, electric vehicle infrastructure, and critical infrastructure cybersecurity.

## A FEW 2022/2023 HIGHLIGHTS

- [YVR and BCIT sign MOU to collaborate on innovative applied research projects](#)
- [BCIT and Teck announce opening of Teck Copper Innovation Hub](#)
- [BCIT welcomes Dr. Vidya Vankayala as Director for Smart Microgrid Applied Research Team](#)
- [BCIT students collaborate with YVR Innovation Hub to develop IoT water monitoring station](#)
- [BCIT celebrates retirement of Hassan Farhangi, SMART Director](#)
- [Dr. Jaimie Borisoff inducted into the BC Sports Hall of Fame](#)
- [BCIT SMART researchers expand with electric vehicle education globally](#)
- [Tips on buying an electric vehicle from BCIT experts](#)
- [BCIT researchers develop blueprint to retrofit EV chargers into multi-unit residential buildings](#)
- [BCIT recognized for outstanding contributions by international federation](#)
- [Fiercely competitive projects win big at the 2022 BCIT Student Innovation Challenge](#)



This year CARI opened the Teck Copper Innovation Hub. Made possible by a \$1.75 million donation from Teck, the facility helps BCIT researchers and students explore the use of copper in a variety of healthcare devices, including prosthetics and orthotics. The facility will advance industry projects, research projects and education focused on 3D printing.

### BCIT CENTRE FOR APPLIED RESEARCH AND INNOVATION

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[bcit.ca/applied-research](http://bcit.ca/applied-research)

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