## TECHNOLOGY ACCESS CENTRES

## Tech-Acces Canada

CTA CENTRE TECHNOLOGIQUE EN AÉROSPATIALE	AGRIN®VA	BTAC
Affiliated with Cégep Edouard-Montpetit	Affiliated with the Collège d'Alma	<sup>8luewoter Technology Access Centre</sup> Affiliated with Lambton College
BELACC BUILDING ENVELOPE TECHNOLOGY ACCESS CENTRE	CAMOSUN	
Affiliated with Red River College	Affiliated with Camosun College	Affiliated with Holland College
<b>Canadian Food &amp; Wine Institute</b> Innovation Centre Affiliated with Niagara College	Affiliated with Fleming College	CENTRE DE DÉVELOPPEMENT ET DE RECHERCHE EN IMAGERIE NUMÉRIQUE Affiliated with Cégep de Matane
Centre d'experise et de transfert en Centre d'experise et de transfert en Affiliated with the Cégep de Victoriaville	FIRSt FOOD INNOVATION & RESEARCH STUDIO Affiliated with George Brown College	Affiliated with the Cégep de Chicoutimi
Comparison       Image: Comparison         National Bee Diagnostic Centre       Technology Access Centre         Affiliated with Grande Prairie Regional College	Affiliated with the Southern Alberta Institute of Technology	Affiliated with Cégep de Trois-Rivières
Innovative Vehicle Institute Affiliated with Cégep de St-Jérôme	Affiliated with Collège Ahuntsic	MINOHAUK IDEAWORKS MHEALTH & eHEALTH DEVELOPMENT AND INNOVATION CENTRE Affiliated with Mohawk College
reinventing the sea Affiliated with Cégep de la Gaspésie et des îles	CENTRE FOR SENSORS AND SYSTEM INTEGRATION Affiliated with the Northern Alberta Institute of Technology	Affiliated with Shawinigan College
Affiliated with the Cégep de Thetford	Quebec Metallurgy Center Centre de métallurgie du Québec Affiliated with the Cégep de Trois-Rivières	Screen Industries Research and Training Centre Affiliated with Sheridan College
Technology Access Centre AEROSPACE & MANUFACTURING	OLDS COLLEGE Technology Access Centre for Livestock Production	CENTRE D'ACCÈS À LA TECHNOLOGIE EN BIO-INNOVATION
Affiliated with Red River College	Affiliated with Olds College	Annualed with La Cite
Trans Blotech Centre de recherche et de transfert en biotechnologies	Walker Advanced Manufacturing Innovation Centre	WEIRING TECHNOLOgies Access Centre in Healthcare
Affiliated with Cégep de Levis-Lauzon	Affiliated with Niagara College Canada	Affiliated with Centennial College

## TECHNOLOGY ACCESS CENTRES

### Tech-Acces\Canada

#### ENABLING CANADIAN INNOVATION FROM COAST TO COAST

Technology Access Centres (TACs) help Canadian businesses – especially SMEs – advance their products, processes and services by:

- conducting **applied research** and development projects focused on company problems;
- offering specialized **technical services** and objective advice; and
- providing training related to new types of equipment and processes



### TECHNOLOGY ACCESS CENTRES (TACs)

- **01.** Aerospace Technology Access Centre (CTA) - Saint-Hubert, QC
- **02.** Agrinova Center for Research and Innovation in Agriculture Alma, QC
- **03.** Bluewater Technology Access Centre (BTAC) - Sarnia, ON
- 04. Building Envelope Technology Access Centre (BETAC) - Winnipeg, MB
- **05.** Camosun Technology Access Centre (CTAC) - Victoria, BC
- **06.** Canada's Smartest Kitchen (CSK) - Charlottetown, PEI
- **07.** Canadian Food & Wine Institute Innovation Centre (CFWI) - Niagara-on-the-Lake, ON
- **08.** Centre for Advancement of Water and Wastewater Technologies (CAWT) - Lindsay, ON
- **09.** Centre for Digital Imaging Research and Development (CDRIN) Matane, QC
- **10.** Centre of expertise and transfer in organic and local agriculture (CETAB+) Victoriaville, QC
- 11. Food Innovation & Research Studio (FIRSt) - Toronto, ON
- 12. Geomatics Centre of Quebec (CGQ) Saguenay, QC
- **13.** GPRC National Bee Diagnostic Centre (NBDC)
- Beaverlodge, AB 14. Green Building Technologies (GBT) - Calgary, AB
- 15. Innofibre Center for the Innovation of Cellulosic Products - Trois-Rivières, QC
- 16. Innovative Vehicle Institute (IVI) Saint-Jérôme, QC

#### Tech-Access Canada is the national network of Canada's TACs. The 30 TACs provide clients and partners from across Canada access to:

- expertise and experience of over 1,000 business innovation and applied R&D experts;
- over 2.4 million square feet of innovation and applied research space; and
- over \$250 million worth of highly-specialized equipment and facilities.



- 17. Institute for Graphic Communications and Printability (ICI) - Montréal, QC
- **18.** MEDIC Technology Access Centre for Digital Health Hamilton, ON
- Merinov The Québec Centre for Innovation in Aquaculture and Fisheries - Gaspé, QC
- 20. NAIT Centre for Sensors and System Integration (CSSI) - Edmonton, AB
- **21.** National Center for Electrochemistry and Environmental Technologies (CNETE) Shawinigan, QC
- 22. OLEOTEK Thetford Mines, QC
- 23. Quebec Metallurgy Center (CMQ) Trois-Rivières, QC
- 24. Screen Industries Research & Training Centre (SIRT) - Toronto, ON
- 25. Technology Access Centre for Aerospace and Manufacturing (TACAM) - Winnipeg, MB
- 26. Technology Access Centre for Livestock Production (TAC-LP) - Olds, AB
- 27. Technology Access Centre in Bio-Innovation (TAC-B) - Ottawa, ON
- 28. TransBIOTech Lévis, QC
- 29. Walker Advanced Manufacturing Innovation Centre (WAMIC) - Welland, ON
- **30.** Wearable, Interactive and Mobile Technologies Access Centre in Health (WIMTACH) - Toronto, ON

### AEROSPACE TECHNOLOGY ACCESS CENTRE (CTA)

Proud member of Tech-Acces Canada



CTA

CENTRE TECHNOLOGIQUE EN AÉROSPATIALE



SERVICES OFFERED IN: English and French



ADDRESS: 5555 place de la Savane Saint-Hubert, Québec J3Y 8Y9



WEBSITE: http://www.aerospatiale.org



### POINT OF CONTACT:

Maya Dagher Assistant Director of Administrative Services (450) 678-3561 poste 4682 maya.dagher@cegepmontpetit.ca **CTA** is a college centre specializing in applied research and technology transfer, affiliated with Cégep Édouard-Montpetit. CTA's mission is to support the aerospace industry and provide customers and partners, mainly SMEs, with applied research services to increase their knowledge, productivity and competitiveness, and the quality of their products, processes and services.

#### AREAS OF INNOVATION EXPERTISE

- Aeronautics
- Composites
- Inspection (metal and composites) NDT
- Transportation
- Machining
- Robotization

Affiliated with Cégep Edouard-Montpetit

### **AEROSPACE TECHNOLOGY** ACCESS CENTRE (CTA)

#### TECHNICAL AND BUSINESS SERVICES

- Components/parts fabrication
- Concept ideation & design review
- Customized machining (including laser machining)
- **Design Services** •
- Early-Stage Business Development
- Fabrication, Prototyping and Installation Services •
- Facilitation service (introduction) •
- Field trials/Simulation •
- Ingredient selection and recommendations •
- Non-destructive inspection (NDI)
- Performance Monitoring and Management •
- Proof of concept •
- Rapid prototyping / 3D printing •
- Regulatory guidance •
- Scientific report writing
- Technical assistance (consultation, comparative analysis of technologies, tests and analysis)
- Technology Validation and Transfer
- Provincial and federal grant proposal development •

### APPLIED RESEARCH AND DEVELOPMENT

- 3D Scanning
- Coaching
- Composite tooling design and manufacturing
- Concept validation
- Design of Experiment
- Laboratory/industrial/pilot scale protoyping
- Non-destructive inspection •
- Performance monitoring and analysis •
- Provincial and federal grant proposal development •
- Regulatory guidance ٠
- Report preparation on R&D results
- **Reverse Engineering** •
- Robotics and automation and imaging •

### TRAINING

- Composite Parts Manufacturing Processes
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Skills assessment/Competency evaluation
- Train the trainer

### **TECHNOLOGY DIFFUSION**

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia

- Literature review
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature •
- Rental of space & equipment •
- Seminars and Workshops
- **Technical publications**

### INVENTORY OF SPECIALIZED EQUIPMENT

- Halt & Hass laboratory
  - Laboratory for Composite Development
  - Molding press 400 tons 200 ° C 3x2.5 m
  - Molding press 150 tons 800 ° C .7x.7 m
  - Oven AMS2750E Type 1 Class A 260 ° C 3x2.5 m
  - Casting autoclave 14 bar 400 ° C .6x1.2 m
  - Automated cutting table
  - Sample cutting machine, polisher and microscope 2500x
  - Projection laser for rolling
  - Fatigue test system 100 kN
  - Automated Injection Piston 14 bar 200 ° C 6 L
  - Portable laminating room with controlled environment
  - Large-format 3D Plastic Engineering Printer
  - Electrical or water temperature control systems.
  - Keyence VHX-2000E Digital Microscope
- Non-destructive testing laboratory
  - Conventional Ultrasound
  - Phased-array Ultrasound
  - 5-axis automated inspection tank
  - Active Infrared Thermography
  - Robotic Thermography
  - Bond-Tester
  - Shearography
  - Advanced analysis software
- Robotics laboratory
  - Robots KUKA KR 500-F-MT, KUKA KR 300, R2500 ultra, Fanuc M-710iC / 50S, Fanuc M710iC / 70
  - PRO CMM Optical Tracker from NDI
  - CREAFORM system
  - ABB IRB140 and ABB IRB4600
  - C-Track: stereoscopic camera
  - Handy probe
- Metrology laboratory
  - Mitutoyo CMM 3-D measuring machine
- Machining laboratory
  - Makino a81M 5-axis machining centre for titanium, Inconel and Waspaloy®
  - Mori Seiki NT 4200/1500 SZ machining and turning centre
  - Huron K2X8 5-axis machining centre

🚯 MeetTheTACs.ca 🖾 info@tech-access.ca 🕓 613.366.3239 🕥 @TechAccessCDA 💽 Ottawa, ON

### AGRINOVA - CENTER FOR RESEARCH AND INNOVATION IN AGRICULTURE

Proud member of **Tech-Acces** Canada





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**SERVICES OFFERED IN:** French and English



ADDRESS: 640, rue Côté Ouest Alma, Québec G8B 7S8



WEBSITE: www.agrinova.qc.ca



#### POINT OF CONTACT:

Gérard Landry Director of Research – Dairy Production Tel.: 418 480-3300, ext. 226 Email : info@agrinova.qc.ca Agrinova, the Center for Research and Innovation in Agriculture, is a Technology Access Centre located in Alma, Quebec, providing services throughout the province to improve dairy companies' access to new technologies and assisting them with the adoption of innovative new technologies and practices. Agrinova's technology support focuses primarily on consumer concerns (milk quality); reducing greenhouse gas (GHG) emissions; organic or natural products; comfort and well-being of animals; digital adoption; and the economic efficiency of companies.

### AREAS OF INNOVATION EXPERTISE

- Dairy production
- Vegetable production

Affiliated with the Collège d'Alma

### **AGRINOVA - CENTER FOR RESEARCH** AND INNOVATION IN AGRICULTURE

# Tech-Accès\Canada

### **TECHNICAL AND BUSINESS SERVICES**

- Field trials/Simulation
- Ingredient selection and recommendations
- Literature reviews
- Performance Monitoring and Management
- Problem solving
- Product testing
- Proof of concept
- Regulatory guidance
- Sample analysis & testing
- Scientific and technological monitoring •
- Scientific report writing •
- Technical assistance (consultation, comparative analysis of technologies, tests and analysis)
- Technology & workflow consultation •
- Technology development
- Technology evaluation / validation
- **Testing Services**

### APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Design of Experiment
- Process optimization
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Regulatory guidance
- Report preparation on R&D results
- Technology validation and transfer

### TRAINING

- Corporate on-site & in-house training
- Design, development, and delivery of customized training

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia
- Literature Review
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops
- Technical publications

### INVENTORY OF SPECIALIZED EQUIPMENT

- Ag Bag: silage bagger
- Bolus at ruminal pH
- Grain dryer
- Grain screen
- Growth chamber
- Heater
- Oven for drying samples
- Ration mixer

#### **POINT DE CONTACT :**

**Gérard Landry** Director of Research – Dairy Production Tel.: 418 480-3300, ext. 226 Email : info@agrinova.qc.ca

www.agrinova.qc.ca

### BLUEWATER TECHNOLOGY ACCESS CENTRE (BTAC)

# Proud member of Tech-Acces Canada



Bluewater Technology Access Centre



SERVICES OFFERED IN: English



#### ADDRESS:

1086 Modeland Road Building 1010, Sarnia ON N7S 6L2



WEBSITE: www.lambtoncollege.ca/BTAC



### POINT OF CONTACT:

Rick Williston BTAC Project Manager Phone: (226) 778-0045 Rick.Williston@lambtoncollege.ca

Affiliated with Lambton College

**Bluewater Technology Access Centre (BTAC)**, is a specialized research and development centre that collaborates with Canadian businesses (specifically small and medium-sized enterprises – SMEs) through contract or grant funded projects to advance products, processes, technologies and services. BTAC's areas of expertise are advanced manufacturing and 3D printing. BTAC services include engineering design, prototyping, reverse engineering, metrology, process improvement, and product development and testing, as well as market analysis, technology transfer and commercialization consulting.

### AREAS OF INNOVATION EXPERTISE

- Additive manufacturing (laser sintering and fused deposition modeling) including printing prototypes and end use parts
- Precision metrology (including reverse engineering, inspection, and alignment) with portable metrology equipment
- Manufacturing process
   design and improvement
- Advanced materials
   engineering
- Process design, control and optimization
- Fire exposure and heat testing (largest site in Canada)

### TECHNICAL AND BUSINESS SERVICES

- Business Mentorship referrals
- Commercialization referrals
- Competitive assessments
- Concept ideation & design review
- Consumer focus groups

### BLUEWATER TECHNOLOGY ACCESS CENTRE (BTAC)

- Fabrication, Prototyping and Installation Services
- Facilitation service (introduction)
- Field trials/simulation
- Ingredient selection and recommendations
- IP Protection facilitation
- Literature reviews
- Marketing Advisory Services referrals
- Performance Monitoring and Management
- Project management
- Proof of concept
- Sample analysis & testing
- Scientific and technological monitoring

### APPLIED RESEARCH AND DEVELOPMENT

- 3D design & rapid prototyping
- Composite manufacturing
- Design of Experiment
- Human Factors Studies
- Industrial scale prototyping
- Laboratory/pilot scale prototyping
- Manufacturing process design and development
- Measurement inspection and alignment
- Performance monitoring and analysis
- Pre-commercialization
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Robotics and automation and imaging
- Technology transfer
- Technology validation

### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design and delivery of customized training
- Needs assessment and gap analysis
- Skills assessment/Competency evaluation

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Advanced Manufacturing & 3D Printing Lab
  - Additive Manufacturing EOS Formiga P110 SLS 3D

Printer (selective laser sintering)

- Additive Manufacturing Stratasys uPrint SE Plus 3D Printer (fused deposition modeling)
- Additive Manufacturing UP 3D Printer
- FARO Edge Armm, FARO Laser Line HD Scanner, and FARO Vantage Laser Tracker with Track Arm
- Advanced Material Processing Lab
  - Xplore Micro Compounder
  - Leistritz Twin Screw Extruder, pilot scale
  - Kawaguchi KM 50 Injection Molder
  - PHI Press
- Advanced Material Testing Lab

   Scanning Electron Microscopy (SEM) with associated Energy-dispersive X-Ray (EDX) SEM - HITACHI S-3700N Variable Pressure SEM with EDX
  - Atomic Force Microscopy (AFM)
  - Thermal Analysis Units (DSC-TGA)
  - Scanning Electrochemical Microscopy (SECM)
  - Advanced Goniometer/Tensiometer
- Electrochemical and Nano Material Lab
  - Mercury Instrusion Porosimeter
  - 3 AUTOLAB Potentiostat/Galvanosat
  - Princeton Applied Research Potentiostat/Galvanostat (models 263 and 283)
  - Rigaku, Miniflex 600 X-Ray Diffractometer
  - Battery Analyzer BA420
  - Nuvant, Ezlab Fuel Cell Test Station
  - Electrochem, MTSA-NL Fuel Cell Test Station
  - Shimadzu, GC2014 Gas Chromatograph
- Bioanalytical Lab
  - KOEHLER Cloud/Pour Point Tester, Standards & Constant Temp. Utility Bath, Flash Point Tester, KV 3000 viscosity bath and viscometers, and Automated Ash Fusion System
  - Parr 1271 Unit with Bomb Calorimeter, Controller and Water handling system
  - Leco CHN-1000
  - Potentiometric Automatic Titrator AT-500N & Bomb Calorimeter
- Hydrogen Lab
  - GC600 Hydrogen Generator (Electrolyser), Proton Energy Systems
  - HOGEN S10 Hydrogen Generator (Electrolyser), Proton Energy Systems
  - NEXA 1200 PEM Fuel Cell, Helicentris
- Water Analysis Lab
  - High-Performance Liquid Chromatography (HPLC)
  - (ICP) Inductively Coupled Plasma
  - NEOMet (istek®) Multi Meter P DC-700L
  - Phipps & Bird Inc. Floc Illuminator Jar Tester
  - Optic IvyMen System 2100-C
  - Pharmacia Biotech Ultrospec 3000 UV-Visible Spectrophotometer

### BUILDING ENVELOPE TECHNOLOGY ACCESS CENTRE (BETAC)

Proud member of Tech-Acces Canada



BUILDING ENVELOPE TECHNOLOGY ACCESS CENTRE



SERVICES OFFERED IN: English



ADDRESS: A1-34 2055 Notre Dame Ave, Winnipeg, MB R3H 0J9



WEBSITE: http://www.rrc.ca/betac



**POINT OF CONTACT:** Rob Spewak Centre Manager Phone: (204) 632-2357

Email: rspewak@rrc.ca

The Building Envelope Technology Access Centre (BETAC) enables organizations in the building construction industry to access Red River College's capability, equipment, assets and expertise. BETAC's services address the inherent challenges with designing and constructing a durable, energy efficient building envelope in Manitoba's unique climate.

### AREAS OF INNOVATION EXPERTISE

- Building construction
- Building airtightness
- Building envelope
   test methods
- Commercial and
   institutional buildings
- Building envelope testing
- Building commissioning

Affiliated with Red River College

### **BUILDING ENVELOPE TECHNOLOGY** ACCESS CENTRE (BETAC)

#### TECHNICAL AND BUSINESS SERVICES

- Assistance with building products approvals and commercialization
- Business development & market research services
- Commercialization referrals
- Competitive assessments
- Components/parts fabrication
- Concept ideation & design review
- Construction Consultation Services
- Early-Stage Business Development •
- Fabrication, Prototyping and Installation Services •
- Field trials/Simulation •
- IP Protection facilitation
- Literature reviews
- Market analysis
- Non-destructive inspection (NDI)
- Performance Monitoring and Management •
- Problem solving
- Product testing
- Proof of concept
- Regulatory guidance
- Sample analysis & testing
- Scientific and technological monitoring •
- Scientific report writing
- Technology & workflow consultation
- Technology development •
- Technology evaluation / validation
- Whole wall testing thermal, moisture, structural

### APPLIED RESEARCH AND DEVELOPMENT

- Coaching
- Concept validation
- Cost avoidance
- Design of Experiment
- Industrial scale prototyping
- Laboratory/pilot scale protoyping
- Non-destructive inspection
- Performance monitoring and analysis
- Process optimization
- Product Re-design & Improvement
- · Provincial and federal grant proposal development
- Regulatory guidance
- Report preparation on R&D results
- Technology validation and transfer

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- Corporate on-site & in-house training
- Building envelope modelling training
- Curriculum development

- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Large building airtightness training
- Needs assessment and gap analysis
- Qualitative & quantitative research •
- Skills assessment/Competency evaluation
- Training planning
- Train the trainer

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature •
- Rental of space & equipment
- Seminars and Workshops

### INVENTORY OF SPECIALIZED EQUIPMENT

- Building envelope sensors temperature, moisture, relative humidity, heat flux
- Field site product demonstration
- Industry-specific events & symposia
- Miscellaneous building envelope diagnostic tools mini-lab for window and door testing in field; infrared thermography cameras; video boroscope for wall investigations; moisture meters
- Participation at trade shows & other venues with or on behalf of partners
- Rental of space & equipment
- Seminars and Workshops



POINT OF CONTACT:

**Rob Spewak** Centre Manager Phone: (204) 632-2357 Email: rspewak@rrc.ca

http://www.rrc.ca/betac

🚯 MeetTheTACs.ca 🖾 info@tech-access.ca 🕓 613.366.3239 🕥 @TechAccessCDA 💽 Ottawa, ON



### CAMOSUN TECHNOLOGY ACCESS CENTRE (CTAC)

Proud member of Tech-Acces Canada







SERVICES OFFERED IN: English and French



#### ADDRESS:

Enterprise Point, Camosun College 4461 Interurban Road Victoria BC V9E 2C1



WEBSITE: camosun.ca/technologyaccess



#### POINT OF CONTACT:

Sean McConkey Manager, CTAC 250-370-4688 mcconkeys@camosun.bc.ca **Camosun's Technology Access Centre** provides product development and process improvement services to Vancouver Island based manufacturers. We help companies adopt advanced manufacturing technologies and are a key link between the manufacturing sector and Camosun's students and faculty.

### AREAS OF INNOVATION EXPERTISE

- Advanced Manufacturing
- Rapid Prototyping
- 3D Scanning
- Composites Tooling
   and Parts Manufacturing
- Productivity Enhancement & Automation
- Technology and Human Performance

Affiliated with Camosun College

### CAMOSUN TECHNOLOGY ACCESS CENTRE (CTAC)

### TECHNICAL AND BUSINESS SERVICES

- Advanced welding support for product development
- Components/parts fabrication
- Concept ideation & design review
- Customized machining (including laser machining)
- Design Services
- Digital Media & Web Solutions
- Fabrication, Prototyping and Installation Services
- Facilitation service (introduction)
- Field trials/Simulation
- Literature reviews
- Problem solving
- Product testing
- Project management
- Proof of concept
- Rapid prototyping / 3D printing
- Scientific and technological monitoring
- Scientific report writing
- Technology & workflow consultation
- Technology development
- Technology evaluation / validation
- Testing Services

#### X APPLIED RESEARCH AND DEVELOPMENT

- 3D design & rapid Prototyping
- 3D Scanning
- Automation
- Coaching
- Composite part manufacturing
- Composite tooling design and manufacturing
- Concept validation
- Cost avoidance
- Design of Experiment
- Human Factors Studies
- Industrial scale prototyping
- Laboratory/pilot scale prototyping
- Manufacturing process design and development
- Non-destructive inspection
- Performance monitoring and analysis
- Pre-commercialization 3D Printing services
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Reverse Engineering
- Robotics and automation and imaging
- Technology validation and transfer

### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Training planning
- Train the trainer

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Seminars and Workshops

### INVENTORY OF SPECIALIZED EQUIPMENT

- ABB IRB 120 Robot with Cognex vision system
- ABB IRB 140 Welding Robot with
   Fronius Cold Metal Transfer (CMT) welder
- Carbon Fibre printer
- CMS
- Condor VC Weiler High Precision Toolroom Lathe
- Fortus 400MC FDM Rapid Prototyping machine
- GoScan 20, GoScan 50, Creaform laser scanner
- Manual Fronius CMT Aluminum Welder
- Matsuura MX-520 5-Axis CNC Machining Centre
- MVP Tooling Compound Applicator for Composites
- Omax 60120 5-Axis waterjet cutter
- TROTEC SP1500 200W CO2 Laser Cutter
- Universal Robot UR10 arm
- Viper Si2 SLA Rapid prototyping machine
- White Light Scanner
- Miscellaneous testing equipment
  - Infrared camera, tensile tester

### CANADA'S SMARTEST KITCHEN (CSK)

## Proud member of Tech-Acces Canada





SERVICES OFFERED IN: English



#### ADDRESS:

4 Sydney Street Charlottetown, PEI C1A 1E9



WEBSITE: http://www.smartestkitchen.ca



#### POINT OF CONTACT:

Peter Crooks Executive Director (902) 566-9583 rpcrooks@hollandcollege.com **Canada's Smartest Kitchen (CSK)** is a recognized leader in food product development and leading-edge food innovation in Atlantic Canada and around the globe. Located on the beautiful Charlottetown waterfront in Prince Edward Island, CSK's team of chefs and scientists develop customized solutions to create better-tasting food products tested by consumers.

#### **AREAS OF INNOVATION EXPERTISE**

- Corporate chef services
- Food product development
- Recipe development
   and food styling
- Market intelligence
- Consumer and sensory science

Affiliated with Holland College

### CANADA'S SMARTEST KITCHEN (CSK)

## Proud member of **Tech-Acces** Canada

### TECHNICAL AND BUSINESS SERVICES

- Access to partnerships
- Business development & market research services
- Business Mentorship referrals
- Competitive assessments
- Competitive market analysis
- Concept ideation & design review
- Consumer focus groups
- Fabrication, Prototyping and Installation Services
- Ingredient selection and recommendations
- Market analysis
- New ingredient sell sheet development
- Problem solving
- Product styling & photography
- Product testing
- Proof of concept
- Retail product label & packaging review
- Sample analysis & testing
- Strategic business review
- Technology evaluation / validation

#### X APPLIED RESEARCH AND DEVELOPMENT

- Calculated Nutritional Labeling
- Concept validation
- Process/product optimization
- Prototype development
- Recipe/Formula development
- Regulatory Expertise
- Report preparation on R&D results
- Sensory research facilities

### TRAINING

- Corporate on-site & in-house training
- Design, development, and delivery of customized training
- Internship placement opportunities
- Needs assessment and gap analysis

### TECHNOLOGY DIFFUSION

- Evening speaker series
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Rental of space & equipment
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Beverage Carbonation equipment
- Blast freezer
- Brining, Curing, and Smoking equipment including brine injection
- Cheese Vat (Small Scale)
- Convection Steam equipment
- Demonstration kitchen with overhead camera and plug & play equipment capabilities
- Environmental chambers for accelerated shelf life testing
- Food Dehydrators
- Food Service and Household Cooking equipment
- Food styling lab with backdrops and lights
- Ice Cream Machine
- Impingement Conveyer Oven
- Merry Chef/Turbo Chef Ovens
- Pasta Extruder
- Presentation boardroom with SMART board and conference line
- Sensory analysis lab meeting ASTM and ISO standards
- Table Top Vacuum Tumbler
- UHT and HTST pasteurization
- Vak Pak and Tray Sealing equipment
- World-Class R&D facility housed adjacent to The Culinary Institute of Canada



#### POINT OF CONTACT:

Peter Crooks Executive Director (902) 566-9583 rpcrooks@hollandcollege.com

http://www.smartestkitchen.ca

### CANADIAN FOOD & WINE INSTITUTE (CFWI) INNOVATION CENTRE

Proud member of Tech-Acces Canada





SERVICES OFFERED IN: English



#### ADDRESS:

135 Taylor Road, S.S. #4 Niagara-on-the-Lake, ON LOS 1J0



#### WEBSITE:

ncinnovation.ca/specializations/ canadian-food-wine-instituteinnovation-centre



#### POINT OF CONTACT:

Lyndon William Ashton Innovation Centre Manager Phone: (905) 641-2252 x 4273 Email: lashton@niagaracollege.ca **The Canadian Food & Wine Institute (CFWI) Innovation Centre** offers recipe and new product development; food and beverage safety and regulatory assistance; laboratory services; sensory analysis and consumer testing; and nutritional labelling services. Our resources include a microbiology lab; chemistry lab; food quality lab; a shelf-life lab; brewery; winery; and commercial kitchens.

### AREAS OF INNOVATION EXPERTISE

- Recipe and New Product
   Development
- Food and Beverage Safety and Regulatory Assistance
- Sensory Analysis and Consumer Testing
- Laboratory Services (microbiology, chemistry, food quality and shelf-life testing)
- Nutritional Labelling Services

Affiliated with Niagara College

### CANADIAN FOOD & WINE INSTITUTE (CFWI) INNOVATION CENTRE

### TECHNICAL AND BUSINESS SERVICES

- Assistance with building products approvals and commercialization
- Business development & market research services
- Business Mentorship referrals
- Commercialization referrals
- Competitive assessments
- Competitive market analysis
- Concept ideation & design review
- Consumer focus groups
- Digital media & web solutions
- Facilitation service (introduction)
- Field trials/simulation
- Food and beverage safety and regulatory assistance
- Ingredient selection and recommendations
- Laboratory services (microbiology, chemistry, food quality and shelf-life testing)
- Literature reviews
- Nutritional labelling services
- Problem solving
- Project management
- Proof of concept
- Recipe and new product development
- Regulatory guidance
- Retail product label & packaging review
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Sensory analysis and consumer testing
- Technology evaluation / validation
- Testing Services

### APPLIED RESEARCH AND DEVELOPMENT

- Coaching
- Concept validation
- Design of Experiment
- Human Factors Studies
- Laboratory/pilot scale prototyping
- Product design & development
- Product re-design & improvement
- Regulatory guidance
- Report preparation on R&D results
- Sensory research facilities

### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training

- Interactive workshop Sessions
- Needs assessment and gap analysis
- Qualitative & quantitative research
- Skills assessment/Competency evaluation
- Training planning
- Train the trainer

### TECHNOLOGY DIFFUSION

- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Open houses testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Seminars and Workshops

### INVENTORY OF SPECIALIZED EQUIPMENT

- Chemistry Lab:
  - U-HPLC; UV-VIS Spectrophotometer; Gas Chromatograph; Automated Titrator; Distillation equipment
- Food Quality Lab:
  - FTIR Wine Analyzer; Beer Analyzer; DO Meter; Non-destructive CO2 Laser Detector; Density Meter; Texture Analyzer; Colorimeter; Water Activity Meter; Rheometer; Moisture Analyzer; Viscosity Meter; Refractometer
- Microbiology Lab:
  - Biohazard Level 2 Certification; Biosafety Cabinet; CO2-Incubator; Cryo-centrifuge; Spiral Plater; Colony Counter; Kinetic Microplate Reader; Real-time PCR; Electrophoresis;
- Niagara College Teaching Brewery:
  - Small-scale commercial brewery and Research Hop Yard
- Niagara College Teaching Winery:
   Small-scale commercial winery; 40 Acre vineyard for production and research
- Niagara College Culinary Labs:
  - Full-scale commercial kitchen
- Shelf-life Lab:
  - Modified Atmosphere Packaging Unit; Bulk Tray Dryer; Walk-in Refrigerator/ Freezer; Freeze-drying Unit; Humidity Chambers; Thermal Validation Equipment

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### CENTRE FOR ADVANCEMENT OF WATER AND WASTEWATER TECHNOLOGIES

Tech-Acces Canada





SERVICES OFFERED IN: English, Mandarin, Polish, German



#### ADDRESS:

WEBSITE:

http://www.cawt.ca

Fleming College 200 Albert Street S. PO Box 8000, Lindsay ON K9V5E6 **Technologies (CAWT)** strives to become a leader in the research, development, improvement, and commercialization of new water-related technologies and solutions. Working with industry partners from emerging concepts to real world applications, it is our goal to turn innovative ideas into market advantage for a cleaner world.

#### **AREAS OF INNOVATION EXPERTISE**

Centre for Advancement of Water and Wastewater

- Water treatment
- Wastewater treatment

Affiliated with Fleming College



#### POINT OF CONTACT: Jenn Paul Manager, Projects & Partnerships (705) 324-9144 x. 3068 jenn.paul@flemingcollege.ca

### CENTRE FOR ADVANCEMENT OF WATER AND WASTEWATER TECHNOLOGIES

## Tech-Accès\Canada

### TECHNICAL AND BUSINESS SERVICES

- **Business Mentorship referrals**
- Commercialization referrals
- Design Services
- Facilitation service (introduction) •
- IP Protection facilitation
- Logistics
- Marketing Advisory Services referrals
- Performance Monitoring and Management
- Problem solving •
- Product testing •
- **Project Management** •
- Proof of concept
- Regulatory guidance
- Sample analysis and testing
- Scientific and technological monitoring
- Scientific report writing •
- Scientist/Engineer/Technologist Labour
- Technology development
- Technology evaluation / validation •
- **Testing Services**
- Venture Capital referrals

#### X APPLIED RESEARCH AND DEVELOPMENT

- Design of Experiment
- Laboratory/pilot scale protoyping
- Performance monitoring and analysis
- Pre-clinical development (chemistry & analytical biochemistry, metabolomics, pharmaceutical science, cell biology & microbiology)
- Process optimization
- Regulatory guidance
- Report preparation on R&D results •

### TRAINING

Customized corporate on-site & in-house training

### **TECHNOLOGY DIFFUSION**

- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 1800 UV Vis (double beam spectrophotometer)
- 20 ponds used for lagoon trials.
- Bactron IV-900 (Anaerobic Chamber)
- Bx-43f (microscope with digital camera)
- CAP 7400 DUO (Inductively Coupled Plasma Optical **Emission Spectrometry (ICP-OES)**
- Environmental chamber that simulates precise climate conditions.
- EVOQ Cube (Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS))
- FLASH 2000 Elemental Analyzer (Carbon, Nitrogen and Sulfur analyzer (CNS))
- FLUOstar Omega (Luminometer)
- ICS-1600 & IC DX-120 (Ion chromatographs)
- Indoor greenhouse research facility for projects and mid-scale pilot studies.
- Level 2 Biological Containment Hood
- NSF Certified lab
- On-site college wastewater source that can be modified to suit project needs.
- PeCOD (automated COD analyzer) •
- PF-8000 Respirometer
- Six modifiable research test cells that allow for treatment and testing of completely separate wastewater sources.
- SmartChem 200 Discrete Wet Chemistry Analyzer (Automated Colorimeter PC Titrate/PC BOD (BOD Autosampler/Titrator)
- State-of-the-art analytical laboratory (ISO 17025 certification pending).
- TOC CPH-V (total organic carbon analyzer)
- Trace 1300 MS 110V with FID detector and SSL injector module (Gas Chromatography Mass Spectroscopy (GC/MS)
- Ultimate 3000 series (Ultra-High Performance Liquid Chromatography (HPLC))
- Wet chemistry/sample preparation area.



### POINT OF CONTACT:

Jenn Paul Manager, Projects & Partnerships Phone: (705) 324-9144 x. 3068 Email: jenn.paul@flemingcollege.ca

http://www.cawt.ca

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### CENTRE FOR DIGITAL IMAGING **RESEARCH AND DEVELOPMENT (CDRIN)**

Tech-Acces\Canada



**CENTRE DE DÉVELOPPEMENT ET DE RECHERCHE** EN IMAGERIE NUMÉRIQUE



**SERVICES OFFERED IN:** French



ADDRESS:

608, avenue St-Rédempteur, Matane, Québec G4W 0E1

WEBSITE: http://cdrin.com



#### POINT OF CONTACT: Isabelle Cayer

**Executive Director** Office: (418) 562-1240 poste 4013 Email: cayer.isabelle@cdrin.com

CDRIN is a Technology Access Centre conducting digitalimaging research and technology transfer with small, medium-sized and large companies, particularly in the areas of motion capture and augmented reality. CDRIN also addresses the need for skills and workforce development in this constantly evolving sector.

### **AREAS OF INNOVATION EXPERTISE**

- Motion capture
- 2D and 3D animation
- Special effects (VFX)
- Video games
- Mobile applications
- 3D digitization

Affiliated with Cégep de Matane

### **CENTRE FOR DIGITAL IMAGING RESEARCH AND DEVELOPMENT (CDRIN)**

Tech-Accès\Canada



#### TECHNICAL AND BUSINESS SERVICES

- Concept ideation & design review
- Design Services
- Digital Media & Web Solutions
- Field trials/Simulation
- Literature reviews
- Sample analysis & testing
- Technology & workflow consultation

### X APPLIED RESEARCH AND DEVELOPMENT

- 3D design & rapid Prototyping
- Automation
- Concept validation
- Cost avoidance
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Reverse Engineering
- Technology validation and transfer

### 

- Corporate on-site & in-house training
- Interactive Workshop Sessions

#### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Networking events
- Open houses Testing facility & personnel
- Rental of space & equipment

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 3D scanner
  - Viuscan 3D laser by Creaform
  - Photogrammetry system featuring Canon DSLR cameras and Raspberry Pi
- Depth-map cameras
  - 2 Microsoft Kinect sensors
  - 2 Microsoft Kinect One sensors
  - Asus Xtion Pro Live sensor
  - Carmine PrimeSense sensor
- Motion capture systems using reflective markers
  - Vicon T160 system, featuring 72 16-megapixel cameras
  - Vicon Bonita 3 system, featuring 8 0.3-megapixel cameras

- Vicon Bonito 10 system, featuring 8 1-megapixel cameras
- 2 wireless virtual cameras for cinematography of motion capture scenes
- Motion capture system using active markers
  - BlackTrax development set, featuring 4 OptiTrack Flex 3 USB cameras
  - Motion capture system without markers
  - Organic Motion system, featuring 18 video cameras
- Other motion capture systems
  - SPS 1000 radio-frequency positioning system by Quattrium
  - Gypsy 7 exoskeleton by Animazoo
  - IGS-190 inertial gyroscopy system from Animazoo, using 19 IMUs
  - Perception Neuron
  - Leap Motion
  - Thalmic Labs MYO
- Virtual reality headsets
  - Oculus Rift
  - HTC Vive
  - Samsung Gear VR



#### POINT OF CONTACT:

**Isabelle** Cayer Executive Director. Office: (418) 562-1240 poste 4013 Email: cayer.isabelle@cdrin.com

http://cdrin.com

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### CENTRE OF EXPERTISE AND TRANSFER IN ORGANIC AND LOCAL AGRICULTURE (CETAB+)

Proud member of Tech-Acces Canada





SERVICES OFFERED IN: French



ADDRESS: 475 rue Notre-Dame Est Victoriaville, QC G6P 4B3

WEBSITE: http://www.cetab.org



#### **POINT OF CONTACT:** Murielle Bournival

Coordinator, Consulting Services and Consultant, Organic Crop Production Office: (819) 758-6401 poste 2784 Email: murielle.bournival@cetab.org **CETAB+** is a Technology Access Centre with a team of 25 employees including agronomists, agro-economists, biologists and technicians conducting applied research and technology transfer in organic crop production, providing consultation on technical, management and marketing issues, disseminating information and delivering training and coaching.

### AREAS OF INNOVATION EXPERTISE

- Organic farming
- Crop production
- Soil management
- Agro-economics
- Local food systems

Affiliated with the Cégep de Victoriaville

### CENTRE OF EXPERTISE AND TRANSFER IN ORGANIC AND LOCAL AGRICULTURE (CETAB+)

## Tech-Accès\Canada

### TECHNICAL AND BUSINESS SERVICES

- Business development & market research services
- Competitive assessments •
- Competitive market analysis
- Concept ideation & design review •
- Design Services •
- Digital Media & Web Solutions
- Field trials/Simulation
- Problem solving
- Project management •
- Retail product label & packaging review •
- Sample analysis & testing •
- Scientific and technological monitoring •
- Scientific report writing
- Technical assistance (consultation, comparative • analysis of technologies, tests and analysis)
- Technology & workflow consultation •
- Technology evaluation / validation
- **Testing Services** •

### X APPLIED RESEARCH AND DEVELOPMENT

- Automation
- Concept validation •
- Cost avoidance
- Human Factors Studies
- Manufacturing process design and development
- Process optimization
- Product Design & Development •
- Product Re-design & Improvement
- Provincial and federal grant proposal development •
- Report preparation on R&D results •
- **Reverse Engineering** •
- Technology validation and transfer •

### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Design, development, and delivery of customized training
- Interactive Workshop Sessions

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia
- Literature review
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Rental of space & equipment •
- Seminars and Workshops
- Technical publications



#### POINT OF CONTACT:

Murielle Bournival Coordinator, Consulting Services and Consultant, Organic Crop Production Office: (819) 758-6401 poste 2784 Email: murielle.bournival@cetab.org

http://www.cetab.org

### FOOD INNOVATION & RESEARCH STUDIO (FIRSt)

Proud member of **Tech-Acces** (Canada



#### FOOD INNOVATION & RESEARCH STUDIO



SERVICES OFFERED IN: English and French



ADDRESS: 215 King St East, 4th Toronto, ON M5A1J9



WEBSITE: http://www.gbcfirst.ca



**POINT OF CONTACT:** Michelle Kienitz Manager, Industry Liaison & Business Development Phone: (416) 415-5000 x. 5575 Michelle.kienitz@georgebrown.ca FIRSt helps food and beverage businesses in Ontario grow profitably through product innovation. FIRSt accelerates new food and beverage ideas "from concept to commercialization", by offering industry access to strategic and technical resources, state of the art culinary research facilities, and high-value networking opportunities.

### AREAS OF INNOVATION EXPERTISE

- Food Science
- Process Optimization and
- Quality Systems DesignMarket analysis & business

plan development

- Culinary Arts
- Regulatory & labelling
- Culinary and Technical Training

Affiliated with George Brown College

### FOOD INNOVATION & RESEARCH STUDIO (FIRSt)

### TECHNICAL AND BUSINESS SERVICES

- Assistance with building products approvals and commercialization
- Business development & market research services
- **Business Mentorship referrals** •
- Commercialization referrals
- Competitive assessments
- Competitive market analysis
- Concept ideation & design review
- Consumer focus groups
- Early-Stage Business Development •
- Ideation Workshop •
- Ingredient selection and recommendations
- Literature reviews
- Market analysis •
- Marketing Advisory Services referrals •
- Problem solving •
- Product styling & photography
- Product testing
- Project management •
- Proof of concept
- Regulatory guidance
- Retail product label & packaging review •
- Sample analysis & testing
- Technology evaluation / validation
- **Testing Services**

### APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Laboratory/pilot scale protoyping
- Industrial Formulation/Manufacturing Scale-up
- Nutritional Facts Table development
- Pre-clinical development (chemistry & analytical biochemistry, metabolomics, pharmaceutical science, cell biology & microbiology)
- Product Design & Development
- Product Design Review
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Regulatory guidance
- Report preparation on R&D results
- Sensory research facilities
- Sensory research facilities
- Shelf Life Testing

### 

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Design, development, and delivery of customized training

- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Qualitative & quantitative research

### TECHNOLOGY DIFFUSION

- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Rental of space & equipment
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 1 metal detector
- 6 burner foodservice stove / oven
- A 4000 square foot facility with a large kitchen that can accommodate up to three clients simultaneously with: a private kitchen for proprietary research, a state of the art sensory testing area, and a prototyping area.
- Accelerated shelf life oven with Ro-tap sieve shaker
- Beverage carbonators •
- **Blast Chiller** .
- Bostwick consistometers
- Colourimeter
- Compusense Cloud sensory evaluation software
- **Consumer Testing Infrastructure** •
- Dehydrator
- Digital buret
- ESHA Genesis nutritional database software
- Food emulsifier/ Robot Coupe mixer
- Food portioning scales
- Hobart mixer
- Homogenizer •
- Ice Cream Maker
- Mintel / GNPD database
- Moisture meter
- . Packaging sealer
- Pacojet
- Precision scales (analytical, lab, factory sizes) •
- Refractometers •
- Table top Convection oven
- Vacuum sealer
- Viscometer
- · Water activity meter

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## GEOMATICS CENTRE OF QUEBEC (CGQ)

Proud member of Tech-Acces Canada





SERVICES OFFERED IN: English and French



#### ADDRESS:

534, Jacques-Cartier Est Bâtiment G Saguenay (Québec) G7H 1Z6



WEBSITE: http://www.cgq.qc.ca



#### POINT OF CONTACT:

Josée Dallaire Executive Director Office: (418) 698-5995 poste 1622 Email: joseedallaire@cgq.qc.ca **CGQ** is a college centre for technology transfer affiliated with the Cégep de Chicoutimi. It leverages organizational performance and innovation by using and developing geomatics through applied research, technical assistance, specialized training and the dissemination of information.

#### AREAS OF INNOVATION EXPERTISE

- Airborne and terrestrial multisensor imaging systems for various applications
- Protocols for acquiring and processing geospatial data by photogrammetry
- Real-time tracking and traceability
- Geographic Information
   Systems (GIS)
- Open source/open data geomatics infrastructure
- Web cartography and mobile applications

Affiliated with the Cégep de Chicoutimi

## GEOMATICS CENTRE OF QUEBEC (CGQ)

#### TECHNICAL AND BUSINESS SERVICES

- Competitive market analysis
- Concept ideation & design review
- Design Services
- Digital Media & Web Solutions
- Facilitation service (introduction)
- Field trials/Simulation
- Problem solving
- Product testing
- Project management
- Proof of concept
- Rapid prototyping / 3D printing
- Regulatory guidance
- Scientific and technological monitoring
- Scientific report writing
- Technical assistance (consultation, comparative analysis of technologies, tests and analysis)
- Technology evaluation / validation
- Web-based and mobile application mapping

### X APPLIED RESEARCH AND DEVELOPMENT

- 3D Scanning
- Concept validation
- Pre-commercialization 3D Printing services
- Process optimization
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Regulatory guidance
- Report preparation on R&D results
- Robotics and automation and imaging
- Technology validation and transfer

### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
  Design, development, and delivery
- Design, development, and delivery of customized training
- Interactive Workshop Sessions

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia
- Literature reviews
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners

- Rental of space & equipment
- Presentation of results at conferences
- Seminars and Workshops
- Technical publications

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Applanix APX-15 Trimble and AP15 Trimble
- ArcGis Data Interoperability Esri
- ArcGIS Esri
- ArcGIS Voyager Analyst Single Esri
- AsteRx-m GEOPOD Septentrio
- Autocad Map 3D 2011
- Autopano Giga 2.0 Kolor
- BlueGPS RoyalTek
- B RICOH
- Correlator 3D Simactive
- eCognition Developer 8.0 (NPO)
- EnsoMosaic UAV and Rapical Pro MosaicMill
- Envi 4.7 Envi
- ERMapper Pro InterGraph
- FLIR ResearchIR MAX Software FLIR
- Garmin Rino 530, Oregon 55, eTrex 20, eTrex Venture, Nüvi 350, Nüvi 2597LMT, Forerunner 305
- Georeg FLIR
- Geo XH 2008 Trimble
- Global Mapper 15 Bluemarblegeo
- HERO 2 GoPro and HERO 3 Silver Edition GoPro
- Jmap K2 Geospatial
- Manifold GIS Manifold
- MapInfo Professional MapInfo
- MAPublisher and Geographic Imager
- Match-AT Lite Inpho
- PCI Geomatica
- PhotoModeler Scanner 2012 PhotoModeler
- Photoscan Pro Agisoft
- Pix4Dmapper Pix4D
- PurVIEW Esri
- Quantum GIS Open Source Geospatial (OSGeo)
- Spot Spot GPS Tracker
- Summit Evolution Professional Datem
- SX-Blue I and SX-Blue II GPS GENEQ
- Terrasync Prof sw 05 Trimble
- ThermoVision SDK FLIR
- Tracker GPS Queclink
- Tracker GPS Spark Nano Lightning GPS
- Tracker GPS TELTONIKA
- Tracker Super Trackstick Telespial Systems
- TRIMBLE business center Trimble
- TRIMBLE RealWorks Trimble
- Vertical Mapper 3.7 MapInfo

### GPRC - NATIONAL BEE DIAGNOSTIC CENTRE (NBDC)

Proud member of Tech-Acces Canada



**IGPRC** National Bee Diagnostic Centre Technology Access Centre



SERVICES OFFERED IN: English, Spanish, Portuguese



#### ADDRESS:

1 Research Road Beaverlodge, AB T0H 0C0



**WEBSITE:** gprc.ab.ca/research/initiatives/nbdc



#### POINT OF CONTACT:

Dr. Carlos Castillo Applied Scientist/Manager Phone: (780) 357-7735 Email: ccastillo@gprc.ab.ca The GPRC NBDC-TAC provides critical diagnostic services to beekeepers, researchers, Provincial and Federal agencies and Industry as its contribution towards a healthy, sustainable and profitable apiculture industry in Canada. We employ microbiology, microscopy and molecular techniques in order to identify pests, pathogens and parasites affecting honeybees.

### AREAS OF INNOVATION EXPERTISE

- Molecular diagnostics
- Expression analysis
- Next Generation Sequencing
- Sperm/Spore Viability tests
- In-Situ Hybridization
- High Resolution
- Melting analysis

Affiliated with Grande Prairie Regional College

### **GPRC - NATIONAL BEE DIAGNOSTIC** CENTRE (NBDC)

#### TECHNICAL AND BUSINESS SERVICES

- Project Management
- Sample analysis & testing
- Scientific and technological monitoring
- Technology development

### S APPLIED RESEARCH AND DEVELOPMENT

- Design of Experiment
- Specialized molecular analysis on bees
- Technology validation and transfer

### TRAINING

- Connections to co-op placement opportunities
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Qualitative & quantitative research

### TECHNOLOGY DIFFUSION

- Evening speaker series
- Industry-specific events & symposia
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences •
- Publishing in Peer Reviewed Literature
- Seminars and Workshops

### INVENTORY OF SPECIALIZED EQUIPMENT

- Fluorescent Microscope and compound microscopes
- Hybridization Oven •
- Image Analyzer
- Incubators for anaerobic conditions
- Microtome Cryostat
- Next Generation Sequencer
- Real Time Quantitative Thermocycler and end-point thermocycler
- Spectrophotometer



**POINT OF CONTACT:** Dr. Carlos Castillo Applied Scientist/Manager Phone: (780) 357-7735

Email: ccastillo@gprc.ab.ca

gprc.ab.ca/research/initiatives/nbdc





## GREEN BUILDING TECHNOLOGIES (GBT)

Proud member of Tech-Acces Canada





SERVICES OFFERED IN: English



#### ADDRESS:

Aldred Centre - CA416 1301 – 16 Avenue NW Calgary, AB T2M 0L4



#### WEBSITE:

sait.ca/applied-research-andinnovation/research-areas/ green-building-technologies



#### POINT OF CONTACT:

David Silburn General Manager/Research Associate Phone: (403) 284-7058 Email: david.silburn@sait.ca **Green Building Technologies** researchers work with industry partners and students through SAIT's Applied Research and Innovation Services department and through support of the NSERC Technology Access Centre grant. The objective is to help small-to-medium-sized enterprises to develop new technologies and processes, enhancing the commercialization of green technologies in Canada.

### AREAS OF INNOVATION EXPERTISE

- Net-Zero Energy and Energy-Positive Design
- Building-Integrated
   Renewable Energy
- Energy Management and Monitoring
- Architectural Ecology
- Materials and Advanced
   Component Assembly
- Education and Industry Transformation

Affiliated with the Southern Alberta Institute of Technology

## Proud member of Tech-Acces Canada

### TECHNICAL AND BUSINESS SERVICES

- Assistance with building products approvals and commercialization
- Business development & market research services
- Competitive assessments
- Components/parts fabrication
- Concept ideation & design review
- Construction Consultation Services
- Customized machining (including laser machining)
- Design Services
- Early-Stage Business Development
- Fabrication, Prototyping and Installation Services
- Field trials/Simulation
- IP Protection facilitation
- Literature reviews
- Market analysis
- Marketing Advisory Services referrals
- Performance Monitoring and Management
- Problem solving
- Product testing
- Project management
- Proof of concept
- Rapid prototyping / 3D printing
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Technology & workflow consultation
- Technology development
- Technology evaluation / validation
- Testing Services
- Whole wall testing thermal, moisture, structural

#### X APPLIED RESEARCH AND DEVELOPMENT

- 3D Scanning
- Composite part manufacturing
- Concept validation
- Cost avoidance
- Laboratory/pilot scale protoyping
- Manufacturing process design and development
- Performance monitoring and analysis
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Reverse Engineering
- Technology validation and transfer

### TRAINING

- Building envelope modelling training
- Connections to co-op placement opportunities
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Train the trainer

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Seminars and Workshops

### C INVENTORY OF SPECIALIZED EQUIPMENT

- ASTM Structural Compression & Racking Jig
- Biofiltration, Living Wall, Green roof, Solar Aquatic and constructed wetland testing
- Cold Climate Mechanical System Test Stations
- Energy Management, Monitoring and Building Information Management controls
- Floor, Column and Beam Testing Jig
- High performance wall assembly training bay
- Hygrothermal, Guarded Hot Box Test Station
- Hygrothermal, Insitu Advanced wall testing stations
- Modular assembly construction and lifting equipment
- Net Zero energy high performance commercial lab
- Net Zero water application and treatment lab
- Photovoltaic Design, Installation and Testing Roof
- Rain/ Hail lifecycle Damage testing
- Solar Electric Vehicle charge and dissipation test port
- Solar Thermal, High pressure solar & Seasonal heating and cooling storage

### INNOFIBRE – CENTER FOR THE INNOVATION OF CELLULOSIC PRODUCTS

Tech-Acces Canada







**SERVICES OFFERED IN:** French and English



ADDRESS: 3351, boulevard des Forges Case Postale 97 Pavillon CIPP Trois-Rivières, QC G9A 5E6

WEBSITE: http://innofibre.ca



### POINT OF CONTACT:

Sylvain Duquette Project Director 819-376-5011 poste 4524 sylvain.duquette@cegeptr.qc.ca **Innofibre** contributes to the technological positioning and sustainable development of the pulp, paper, and biorefinery industry in Quebec by supporting innovation and diversification of biomass products, and by adapting emerging paper technologies.

### AREAS OF INNOVATION EXPERTISE

- Pulp, paper, cardboard and thermoformed fibers
- Pretreatment of
   lignocellulosic biomasses
- Bio-refining and thermochemical conversion (biochar)
- Development of processes and treatments
- Development of special
   paper products, custom-made
- Bioactive paper products

Affiliated with Cégep de Trois-Rivières

### INNOFIBRE – CENTER FOR THE INNOVATION OF CELLULOSIC PRODUCTS

## Proud member of Tech-Acces Canada

### TECHNICAL AND BUSINESS SERVICES

- Components/parts fabrication
- Fabrication, Prototyping and Installation Services
- Ingredient selection and recommendations
- IP Protection facilitation
- Pilot trials and mini productions (incubation of products)
- Printability testing and analysis
- Problem solving
- Production of pre-commercial batches
- Regulatory guidance
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Technical assistance (consultation, comparative analysis of technologies, tests and analysis)
- Technical feasibility of process, product
- Technology development
- Technology evaluation / validation
- Testing Services
- Validation of processes, equipment, performance tests

#### X APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Design of Experiment
- Laboratory/industrial/pilot scale protoyping
- Performance monitoring and analysis
- Process optimization
- Product Design & Development
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Technology validation and transfer

### TRAINING

- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Qualitative & quantitative research
- Skills assessment/Competency evaluation
- Training planning
- Train the trainer

### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Industry-specific events & symposia
- Literature Review
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops
- Technical publications

### INVENTORY OF SPECIALIZED EQUIPMENT

- ANALYTICAL APPARATUS
  - Analysis of wet pastes
  - Chemical and environmental analysis
  - Gas sampling system
  - Image analysis and microscopy
  - Paper and board analyzes
  - Portable gas analyzer
  - Rheology
  - Wood chip analysis
- BIOREFINING EQUIPMENT
  - Biomass boiler
  - Mechanical Fragmentation
  - Reactive fractionation
  - Roaster
  - Washing / Pressing
- LABORATORY TESTS
  - Bleaching of pulp
  - Manufacturing of pulp
  - Manufacturing of sheets
  - Recycling and deinking
  - Surface treatment
- PULPING EQUIPMENT
  - Chemical pulp
  - Mechanical pulp
- PULP TREATMENT EQUIPMENT Innofibre's experimental PAPER MACHINE consists of the following parts:
  - SLEEPING / CONTROLLED PILOT UNIT
  - SUPERCALANDER
  - THERMOFORMING PILOT UNIT

### **INNOVATIVE VEHICLE INSTITUTE (IVI)**

## Tech-Acces\Canada





Innovative Vehicle Institute



SERVICES OFFERED IN: **English and French** 



ADDRESS: 25. Boulevard Maisonneuve Saint-Jérôme Québec, J5L 0A1



WEBSITE: http://www.ivisolutions.ca



POINT OF CONTACT: Véronique Lamy Manager, Business Development

Tel. : 450 431.5744 Ext. 234 Email : vlamy@ivisolutions.ca

Bringing together state-of-the-art expertise and equipment, the IVI is at the heart of the electric and autonomous vehicle ecosystem. Its mandate is to assist companies towards innovation through applied research, technical assistance, training and information, with the ultimate goal of reducing the transportation sector's environmental footprint.

### **AREAS OF INNOVATION EXPERTISE**

- Flectric vehicles
- Batteries
- Vehicular intelligence
- Energy efficiency
- Autonomous and
- semi-autonomous vehicles

Affiliated with Cégep de St-Jérôme

### **INNOVATIVE VEHICLE INSTITUTE (IVI)**

## Tech-Acces\Canada

### TECHNICAL AND BUSINESS SERVICES

- Concept ideation & design review
- **Design Services** •
- Fabrication, Prototyping and Installation Services
- Field trials/Simulation
- Rapid prototyping / 3D printing •
- Regulatory guidance
- Technical feasibility of process, product
- Technology development
- Testing Services

### S APPLIED RESEARCH AND DEVELOPMENT

- 3D design & rapid Prototyping
- Automation
- Concept validation
- Manufacturing process design and development
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Reverse Engineering
- Technology validation and transfer

### 

- Corporate on-site & in-house training
- Interactive Workshop Sessions

### **TECHNOLOGY DIFFUSION**

- Customized technology demonstrations
- Industry-specific events & symposia
- Networking events
- Testing facility & personnel

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 3D Handy Scan Creaform Scanner
- AV-900 Direct current Source
- Data acquisition systems LMS, DataQ, **ISSAQ** instruments
- DC current source ABC-150
- Battery impedance measurement Hioki BT3563
- Thermographic camera Jenoptik VarioCAM
- Li-lon battery packs
- Simulation software LMS Imagine.Lab AMESim, Siemens NX Advanced Simulation
- Motohawk Controller
- Motor Dynamometer Mustang
- Roller Dynamometer Mustang •
- Portable Opacimeter Red mountain Engineering
- Ultracapacitors
- Ultrasonic welding and fusion machine Stapla Ultrasonics
- Vector CAN / Flexray system
- Glycol cooling system NeslaB
- Ultrasonic splicer and welder Vitrek 952i
- Flow meter Kisler
- Electrical harness design Software
- Power accuracy analyzer Yokogawa WT3000



#### POINT OF CONTACT:

Véronique Lamy Manager, Business Development Tel. : 450 431.5744 Ext. 234 Email: vlamy@ivisolutions.ca

http://www.ivisolutions.ca

### INSTITUTE FOR GRAPHIC COMMUNICATIONS AND PRINTABILITY (ICI)

Proud member of Tech-Acces Canada





**SERVICES OFFERED IN:** French, English, Spanish



ADDRESS: 999 avenue Émile-Journault Est Montréal (Québec) H2M 2E2 ICI is an integrated centre of innovation and expertise in graphic communications and printability that actively supports businesses in their technological and commercial development. ICI is a resource centre for the industry. Regardless of your line of business, we partner with you to develop innovative printing applications!

### AREAS OF INNOVATION EXPERTISE

• Applied research and development

Consultation

- Printability tests
- Public or customized training for the industry
- Conferences
- Laboratory analyses

#### POINT OF CONTACT:

WEBSITE:

http://www.i-ci.ca

André Dion Executive Director Office: (514) 389-5061 ext. 240 Email: andre.dion@i-ci.ca Affiliated with Collège Ahuntsic

#### TECHNICAL AND BUSINESS SERVICES

- Concept ideation & design review
- Design Services
- Fabrication, Prototyping and Installation Services
- Facilitation service (introduction)
- Field trials/Simulation
- Ingredient selection and recommendations
- Logistics
- Performance Monitoring and Management
- Printability testing and analysis
- Problem solving
- Project management
- Proof of concept
- Reverse engineering
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Technology & workflow consultation

### INSTITUTE FOR GRAPHIC COMMUNICATIONS AND PRINTABILITY (ICI)

## Tech-Acces Canada

- Technology development
- Technology evaluation / validation
- Testing Services

#### APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Cost avoidance
- Laboratory/industrial/pilot scale protoyping
- Manufacturing process design and development
- Measurement inspection and alignment
- Performance monitoring and analysis
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Sensory research facilities
- Technology validation and transfer

### TRAINING

- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Qualitative & quantitative research
- Skills assessment/Competency evaluation
- Training planning
- Train the trainer

#### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Literature reviews
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops
- Technical publications

### INVENTORY OF SPECIALIZED EQUIPMENT

#### Analytical laboratory of papers and prints:

- 60° glossmeter
- Cobb water absorption
- Dynamic water penetration measuring (IGT)
- Lint measuring (paper linting)
- Micrometres
- Spectrodensitometer by ATS and eXact by X-Rite
- Static meter
- Taber Abraser and Ink Rub Tester (resistance to abrasion)
- Technibrite (whiteness and brightness, opacity)
- Verity image scanner and analyser

#### Printability testing and prototyping:

- Aquaflex flexographic printing machine, 6 units, 10" width, IR or UV drying
- Ekra Series X1 semi-automatic silk-screen printer, 13.5" x 17", with possibility for hot-air or UV drying
- Heidelberg SM 74 offset sheet press, 5 units
- Rotary Harris M110 offset, 4 recto/verso units, 26" width, coldset or heatset mode
- Varyflex VF 430 press (unique in Canada) 17" width, 5 units with mobile processes: 4 flexo stations / 2 rotogravure stations / 1 rotary silk-screen station, mobile drying: hot air or UV, mobile UV coating, explosion-proof press for rolling water-, solvent- or UV-based inks, out-feed in rolls, sheets or die-cutting

#### Ink analysis laboratory:

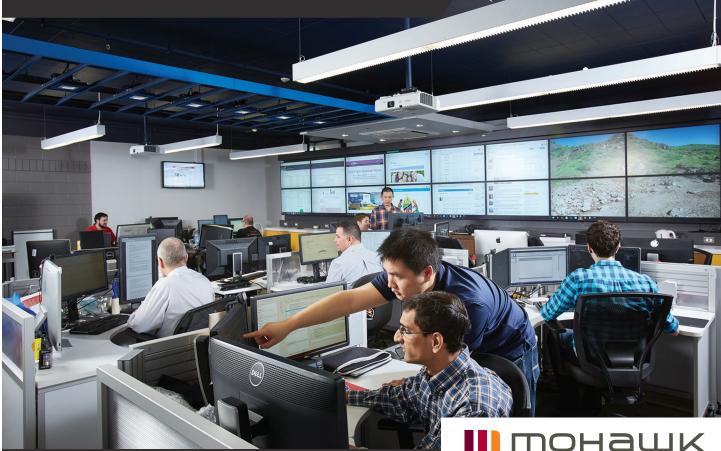
- ATS rheometer
- Datacolor spectrophotometer
- IGT (offset ink use and trapping analysis, paper absorption)
- Inkometer (measuring ink tack)
- K Printing proofer (laboratory rotogravure printing)
- MB3000 infrared spectrometer (ABB), IR close and IR medium)
- Other: Water intake, grind (particle size), gallon weight of viscose or liquid inks
- RK Flexiproof 100 (laboratory flexographic printing, hot-air or UV drying) and Phantom proofer

#### Ink preparation laboratory:

- 6" UV laboratory dryer with conveyor (mercury, gallium and iron lamps)
- Bhuler FPML2-EX dispenser and shredder
- Liquid-ink mixer
- Mastersizer M3000 diffraction particle-size analyzer (Malvern), 0.01 3,500 microns

# MHEALTH AND EHEALTH DEVELOPMENT AND INNOVATION CENTRE (MEDIC)

Tech-Acces Canada



# 

mHEALTH & eHEALTH DEVELOPMENT AND INNOVATION CENTRE



SERVICES OFFERED IN: English



#### ADDRESS:

Room E103 – Medic Lab 135 Fennell Ave W, Hamilton, ON L9C 1E9



WEBSITE: www.mohawkcollege.ca/MEDIC



#### POINT OF CONTACT:

Paul Brown General Manager, MEDIC (905) 575-1212 x. 4075 paul.brown9@mohawkcollege.ca The Centre helps to bridge the gap between the needs of the healthcare system and innovative small and medium enterprises (SMEs) that can address these needs. The Centre assists SMEs to overcome the technical, regulatory and relationship barriers to market entry that often impede product and service development. The Centre works with SMEs and public and private sector organizations on developing innovations in health IT; digital health; mobile health; consumer and patient solutions; regional health authority solutions; personal health records; mobile applications; interoperability and more.

#### AREAS OF INNOVATION EXPERTISE

- Consumer and Patient Solutions
- Regional/Jurisdictional Health
   Authority Solutions
- Personal Health Records
- Digital Health
- Mobile health
- Privacy and Security

# MHEALTH AND EHEALTH DEVELOPMENT AND INNOVATION CENTRE (MEDIC)

Proud member of **Tech-Acces** Canada

#### TECHNICAL AND BUSINESS SERVICES

- Concept ideation & design review
- Design Services
- Field trials/Simulation
- Problem solving
- Project management
- Proof of concept
- Technology & workflow consultation
- Technology development
- Technology evaluation / validation
- Testing Services

#### SAPPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Cost Avoidance
- Process Optimization
- Product Design & Development
- Product Re-design & Improvement
- Technology Validation and Transfer

#### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Design, development, and delivery of customized training
- IHE Connectathon Preparation
- Interactive Workshop Sessions
- Needs assessment and gap analysis

#### TECHNOLOGY DIFFUSION

- Industry-specific events & symposia
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Consumer and commercial grade medical devices
- Mobile computing devices
- Online, sandboxed versions of various eHealth ecosystems
- Open IHE sandbox infrastructure (Cross Enterprise Document Exchange (XDS), Patient Identity Cross Referencing (PIX), Patient Demographic Query (PDQ), Auditing (ATNA), OpenHIE)
- Simulators suitable for large scale testing,



#### POINT OF CONTACT:

Paul Brown General Manager, MEDIC Phone: (905) 575-1212 x. 4075 Email: paul.brown9@mohawkcollege.ca

www.mohawkcollege.ca/MEDIC

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# MERINOV - THE QUÉBEC CENTRE FOR INNOVATION IN AQUACULTURE AND FISHERIES

Tech-Acces Canada







SERVICES OFFERED IN: English and French



#### ADDRESS: 96, montée de Sandy Beach Bureau 2.05 Gaspé (Québec) G4X 2V6



WEBSITE: http://www.merinov.ca



#### POINT OF CONTACT:

David Courtemanche Executive Director Office: 418 368-6371 ext. 1603 Email: david.courtemanche@merinov.ca

Merinov - the Québec Centre for Innovation in Aquaculture and Fisheries - is Canada's largest integrated Technology Access Centre for applied research, innovation and technology transfer in the areas of fisheries, aquaculture, processing, biomass and marine biotechnology.

#### AREAS OF INNOVATION EXPERTISE

- Fisheries and Aquaculture
- Industrial processes and seafood processing
- Adding value to biotechnology products and processes
- Development of ingredients and food products
- Support and technologies for marine environmental monitoring

Affiliated with Cégep de la Gaspésie et des îles

# MERINOV - THE QUÉBEC CENTRE FOR INNOVATION IN AQUACULTURE AND FISHERIES

#### Proud member of Tech-Acces (Canada

#### TECHNICAL AND BUSINESS SERVICES

- Assistance with building products approvals and commercialization
- Concept ideation & design review
- Design Services
- Early-Stage Business Development
- Fabrication, Prototyping and Installation Services
- Field trials/Simulation
- Marketing Advisory Services referrals
- Performance Monitoring and Management
- Pilot trials and mini productions (incubation of products)
- Problem solving
- Production of pre-commercial batches
- Product testing
- Project management
- Regulatory guidance
- Scientific and technological monitoring
- Scientific report writing
- Technology & workflow consultation
- Validation of processes, equipment, performance tests

#### APPLIED RESEARCH AND DEVELOPMENT

- Automation
- Concept validation
- Laboratory/industrial/pilot scale protoyping
- Manufacturing process design and development
- Performance monitoring and analysis
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Report preparation on R&D results
- Reverse Engineering
- Robotics and automation and imaging
- Technology validation and transfer

# TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Referral to continuing education services
- Skills assessment/Competency evaluation
- Training planning
- Train the trainer
- Qualitative & quantitative research

#### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Literature Review
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops
- Technical publications

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Specialized Laboratories
  - Aquaculture and wet laboratories (Magdalen Islands and Grande-Rivière) with intake and freshwater intakes. These facilities are capable of raising fish, crustaceans and molluscs according to various production parameters. All the laboratories have a quarantaine unit
  - Fishing gear design laboratory
  - Laboratories for analysis of images on microscopic observations or video sockets
  - Laboratory for the production of macro algae.
  - Laboratory of analytical and preparatory chemistry
  - Laboratory of Microbiology on Food Pathogens
  - Laboratory of microbiology on the marine environment (ISO 17025)
  - Laboratory of rheology (temperature, analysis of texture, color or viscosity)
  - Multifunctional laboratories for biological analyzes of organisms and their conservation
  - Sensory and organoleptic evaluation laboratory
- Aquaculture Monitoring equipment (oxygen, temperature, etc.)
- Equipment for environmental monitoring (current meter, multi-parameter probes, etc.)
- Equipment for producing macro and micro algae.
- Fleet of nine research vessels ranging from the 5-meter inflatable to the 15-meter versatile research vessel.
- Food development platform (408 m2), equipped with three multipurpose rooms, houses pilot equipment for the development of prototypes
- Underwater video equipment

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# NAIT CENTRE FOR SENSORS AND SYSTEM INTEGRATION (CSSI)

Tech-Acces Canada





CENTRE FOR SENSORS AND SYSTEM INTEGRATION

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SERVICES OFFERED IN: English



**ADDRESS:** 11762 – 106 St. NW Edmonton, AB T5G 2R1



WEBSITE: http://www.nait.ca/cssi



**POINT OF CONTACT:** Murali Pai Sreenivasan Industry Liaison Phone: (780) 471-8741

Email: muralip@nait.ca

**CSSI** helps industry partners develop prototype devices that address sensor-based challenges in resource extraction, agriculture, biomedical, and advanced technology enterprises. We work with both established sensor devices and new or innovative devices; our team uses engineering technology to produce and evaluate prototypes for a field trial. Our full-time technical staff and well-equipped labs enable us to move innovations from proof-of-concept to demonstration ready prototypes. We work collaboratively with other service providers, and we do not retain any Intellectual Property.

#### AREAS OF INNOVATION EXPERTISE

- Nanotechnology
- Embedded systems
- Remote monitoring
- Industrial controls
- Sensors
- System integration

Affiliated with the Northern Alberta Institute of Technology

# NAIT CENTRE FOR SENSORS AND SYSTEM INTEGRATION (CSSI)

#### TECHNICAL AND BUSINESS SERVICES

- Business Mentorship referrals
- Components/parts fabrication
- Concept ideation & design review
- Construction Consultation Services
- Design Services
- Early-Stage Business Development
- Fabrication, Prototyping and Installation Services
- Field trials/Simulation
- Funding assistance on applied research projects.
- Integrations
- Literature reviews
- Non-destructive inspection (NDI)
- Performance Monitoring and Management
- Problem solving
- Project management
- Proof of concept
- Sample analysis & testing
- Technology & workflow consultation
- Technology development
- Technology evaluation / validation
- Test and Characterization

#### APPLIED RESEARCH AND DEVELOPMENT

- 3D Design & Printing
- Applied Engineering
- Automation
- Concept validation
- Cost Optimization
- Design of Experiment
- Industrial scale prototyping
- Laboratory/Pilot scale prototyping
- Manufacturing process design and development
- Measurement inspection and alignment
- Non-destructive inspection
- Pre-commercialization
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Sensory research facilities

#### TECHNOLOGY DIFFUSION

- Rental of space & equipment
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Industry-specific events & symposia
- Field site product demonstration

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Advanced Material Development and Characterization Facility: 5000 SqFt of dedicated space for advanced material development in pipeline and energy sector. The test service includes characterization equipment required in testing materials for abrasion and wear testing. Equipment includes G65, Micro-Vickers, and metallographic characterization systems.
- Class 4 certified laser testing facility
- Electronic, Optical, Micro and Nanotechnology test and characterization facility including SEM, electronic test instruments, spectral characterization equipment, and profilometer.
- Facility for microelectronics development: PCB design and fabrication facility, pick & place system, and reflow ovens for mounting components.
- Micro and Nanotechnology Integration Facility: Class 1000 clean room, lithography, etch systems, sputtering & evaporation systems for deposition.
- Test facility for optical photonics integration
- Unique fabrication facility:
  - 5-axis waterjet system,
  - 3D metal sintering system
  - Thermatron environmental chamber.



#### POINT OF CONTACT: Murali Pai Sreenivasan Industry Liaison

Phone: (780) 471-8741 Email: muralip@nait.ca

http://www.nait.ca/cssi

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# NATIONAL CENTER FOR ELECTRO-CHEMISTRY AND ENVIRONMENTAL TECHNOLOGIES (CNETE)

Tech-Acces Canada





SERVICES OFFERED IN: English and French



#### ADDRESS:

CNETE inc. 2263, avenue du Collège Shawinigan (QC) G9N 6V8



WEBSITE: http://www.cnete.qc.ca



#### **POINT OF CONTACT:** Nicholas Berrouard

R&D – TAC manager Tel.: 819-539-8508, x 104 Email: nberrouard@cnete.qc.ca **CNETE** conducts applied research in the fields of bioprocesses and membrane technologies, applied to industrial molecules, environmental technologies and bioenergy production, contributing to the improvement and development of environmental friendly processes and products. The center has a large fleet of high level analytical and processing equipment, ranging from laboratory scale to pilot scale, and the center's work creates spillover effects that benefit college education.

#### AREAS OF INNOVATION EXPERTISE

- Industrial bioprocesses
- Analytical chemistry and nanotechnology
- Membrane technologies
- (membrane filtration and electrochemistry)
- Gas and GHG treatment
- Biomethanization

Affiliated with Shawinigan College

# NATIONAL CENTER FOR ELECTRO-CHEMISTRY AND ENVIRONMENTAL **TECHNOLOGIES** (CNETE)

# Tech-Accès\Canada

#### TECHNICAL AND BUSINESS SERVICES

- Commercialization referrals
- Early-Stage Business Development
- Facilitation service (introduction)
- Ingredient selection and recommendations
- IP Protection facilitation •
- Market analysis
- Marketing Advisory Services referrals
- Problem solving
- Product testing •
- Regulatory guidance •
- Reverse engineering •
- Scientific and technological monitoring •
- Scientific report writing
- Technology development
- Technology evaluation / validation
- Testing Services

#### X APPLIED RESEARCH AND DEVELOPMENT

- Design of Experiment
- Performance monitoring and analysis
- Pre-clinical development (chemistry & analytical biochemistry, metabolomics, pharmaceutical science, cell biology & microbiology)
- Regulatory guidance
- Report preparation on R&D results

#### 

- Curriculum development
- Design, development, and delivery of customized training
- Training planning

#### TECHNOLOGY DIFFUSION

- Literature Review
- Presentation of results at conferences
- Seminars and Workshops
- Technical publications

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Agarose and polyacrylamide gel electrophoresis system
- Anaerobic chamber
- Atomizer (spray dryer)
- Autoclave
- Automatic Titrator
- Biological Hood
- Centrifuge 5424R

- Centrifuges
- Ceramic filtration systems from 1 to 21 membranes (from 0.35 to 7.35 m2 surface area)
- Corrosion chamber
- Densitometer
- Digester and distiller Kjeldahl
- Digesters 300L (5), 7L (6) •
- Electronique scanning microscope
- **Elementary Analyzer**
- Exclusion chromatograph
- Fermenter 700L, 40L, 1L, 10L, 2L
- Four Hybridization
- Freeze dryer 12L and 50L
- Gas and hydrocarbon analyzer
- Gas purification system (HTGS)
- GC-FID
- GC-MS
- GC-TCD
- Hollow fiber production system
- Homogenizers
- HPLC-UV/RI
- ICP-OES (2)
- Ion ChromatographFTIR
- Laboratory-scale electrochemical bank (7,5 kW)
- LC-MS
- Metalliser •
- Multipurpose
- Nanosight
- Organic filtration systems ranging from 1 \* 2 "to 2 \* 8" (ranging from 2.6 to 74 m2 surface)
- PCR
  - PCR gradient
  - Photocatalyst industrial (2)
  - Pilot scale electrochemical bank (25kW)
  - **q**PCR
  - Rotoevaporator
  - Sonicator
  - Spectrometer, grinder and fluorescence press X
  - Static Incubators (3)
  - Stirring incubators (6)
  - Thermogravimetric Analyzer (TGA-MS)
  - Thermomixer
  - Titler Karl Fisher
  - Total organic carbon
  - UV / Visible Spectrophotometer
  - UV loudspeaker
  - Vacuum Furnace
  - Viscosimeter
  - Drying oven for dry matter
  - Furnace for volatile suspended and ash

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# **OLEOTEK**

# Tech-Acces\Canada





SERVICES OFFERED IN: English and French



ADDRESS: 835 rue Mooney Ouest Thetford Mines (Québec) G6H1M4



WEBSITE: http://www.oleotek.org



#### POINT OF CONTACT:

David Berthiaume **Executive Director** Office: (418) 338-1318 poste 223 Email: dberthiaume@oleotek.org **OLEOTEK** helps businesses innovate in the areas of renewable chemistry, green chemistry and the piloting of processes. We work with businesses to support them in developing more environmentally friendly industrial products.

# **AREAS OF INNOVATION EXPERTISE**

- Green chemistry
- Piloting of processes
- Renewable chemistry
- Oleochemistry
- Pre-commercial production
- Formulation

Affiliated with the Cégep de Thetford

# OLEOTEK

#### TECHNICAL AND BUSINESS SERVICES

- Business Mentorship referrals
- Commercialization referrals
- Concept ideation & design review
- Early-Stage Business Development
- Field trials/Simulation
- Ingredient selection and recommendations
- IP Protection facilitation
- Literature reviews
- Market analysis
- Marketing Advisory Services referrals
- Problem solving
- Production of pre-commercial batches
- Project management
- Proof of concept
- Regulatory guidance
- Reverse engineering
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Technical assistance (consultation, comparative analysis of technologies, tests and analysis)
- Technology & workflow consultation
- Technology development
- Technology evaluation / validation
- Testing Services
- Venture Capital referrals

#### X APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Cost avoidance
- Design of Experiment
- Laboratory/industrial/pilot scale protoyping
- Manufacturing process design and development
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Regulatory guidance
- Report preparation on R&D results
- Technology validation and transfer

# TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Design, development, and delivery of customized training
- Referral to continuing education services

# TECHNOLOGY DIFFUSION

- Field site product demonstration
- Industry-specific events & symposia
- Literature reviews
- Networking events
- Open houses Testing facility & personnel
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops
- Technical publications

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 20, 120, 200, 400, and 800-litre reaction vessels
- Automatic mechanical cleaning filter
- Automatic titrator
- Automatic viscometer
- Brookfield viscometer
- Carbon Residue
- Cloud point flow point
- Decanting funnel
- Differential scanning calorimetry (DSC)
- Doigt distiller
- Flash point
- Fractionation pilot
- Friction measurement system (Four-Ball Wear)
- Gas chromatography with direct injection (COC-GC–FID)
- GC-MS (Gas chromatography-mass spectrometry)
- Infrared spectrophotometer (FTIR)
- Kugelrohr
- Multi-bag filter
- Nuclear magnetic resonance (NMR) spectroscopy
- Penetrometer
- Pilot plant
- Press filter
- Rancimat0
- Reaction vessels
- Rotary evaporator with 20-litre capacity
- Rotovap
- RPVOT
- Seed press
- Single-stage wiped-film evaporator
- Thermogravimetric analysis (TGA)
- Ultrasound probe
- UV-visible spectrophotometer
- Vertical pressure leaf filter

# QUEBEC METALLURGY CENTER (CMQ)







SERVICES OFFERED IN: English and French



ADDRESS: 3095 rue Westinghouse Trois-Rivières Québec, G9A 5E1



WEBSITE: http://cmqtr.qc.ca



#### POINT OF CONTACT:

Nicolas Giguère, Ph.D., ing. Director - Centre for Advanced Alloys Office: (819) 376-8707 poste 5025 Email: nicolas.giguere@cegeptr.qc.ca **CMQ** helps Canadian manufacturing companies specialized in metal processing through applied research and development services, technology transfer, technical assistance and specialized training. Main areas of research are advanced alloy development, additive manufacturing, welding, casting, non-destructive testing, heat treating, corrosion and thermal spraying.

#### AREAS OF INNOVATION EXPERTISE

- Additive Manufacturing
- Non-destructive testing
- Advanced alloys
- Thermal spraying
- Welding
- Foundry

Affiliated with the Cégep de Trois-Rivières

Proud member of Tech-Acces Canada

#### TECHNICAL AND BUSINESS SERVICES

- Advanced welding support for product development
- Competitive assessments
- Competitive market analysis
- Field trials/Simulation
- Non-destructive inspection (NDI)
- Production of pre-commercial batches
- Product testing
- Project management
- Proof of concept
- Rapid prototyping / 3D printing
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Technology & workflow consultation
- Technology development
- Technology evaluation / validation
- Testing Services

# S APPLIED RESEARCH AND DEVELOPMENT

- Advanced welding (including laser and arc processes)
- Concept validation
- Manufacturing process design and development
- Non-destructive inspection
- Pre-commercialization 3D Printing services
- Process optimization
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Reverse Engineering
- Technology validation and transfer

# TRAINING

- Corporate on-site & in-house training
- Interactive Workshop Sessions
- NDT training leading to certification ONGC

#### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Evening speaker series
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Additive Manufacturing : Directed energy deposition, binder jetting and ultrasonic additive manufacturing
- Corrosion testing
- Hot isostatic pressing
- Mechanical testing (tensile, hardness, impact)
- NDT equipment (real-time X-ray, digital radiography, phased array ultrasound testing, Eddy current testing, penetrant testing, magnetic particles testing)
- Sand molding
- Scanning electron microscopy (EDS, WDS, EBSD)
- Thermal spraying (plasma and HVOF)
- Vacuum heat treatment
- Vacuum induction furnace
- Welding (all types)

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#### POINT OF CONTACT:

Nicolas Giguère, Ph.D., ing. Director - Centre for Advanced Alloys Office: (819) 376-8707 poste 5025 Email: nicolas.giguere@cegeptr.qc.ca

http://cmqtr.qc.ca



# SCREEN INDUSTRIES RESEARCH & TRAINING CENTRE (SIRT)

Tech-Acces\Canada



# Sheridan

Screen Industries Research and Training Centre



SERVICES OFFERED IN: English



#### ADDRESS:

SIRT, Pinewood Toronto Studios 225 Commissioners St. Suite 200b /Stage 10 Toronto, ON M4M 0A1



WEBSITE: http://www.sirtcentre.com



#### POINT OF CONTACT:

David Dexter **Operations and Business Development Lead** (905) 815-4170 x. 8407 david.dexter@sheridancollege.ca SIRT established at Pinewood Toronto Studios, supports technology and content production innovation within Ontario's screen industries including film, television, gaming, interactive media and virtual reality. With partnerships and support from Ontario's screen industries, SIRT is Canada's leading innovation and technology support centre for the screen industries.

#### **AREAS OF INNOVATION EXPERTISE**

- Digital Cinema -Stereoscopic 3D, High Frame • Remote and Real-time Rate (HFR), High Dynamic Range (HDR), 4k/8k
- Virtual Production Virtual Reality, Motion Capture, Camera Tracking
- Industry Training fully equipped training centre and

program for the industry

- Collaboration and shared services
- Software Integration within emphasis on industry solution
- Virtual Reality/Augmented **Reality Innovation Lab**

# SCREEN INDUSTRIES RESEARCH & TRAINING CENTRE (SIRT)

#### TECHNICAL AND BUSINESS SERVICES

- Business development & market research services
- Commercialization referrals
- Competitive assessments
- Competitive market analysis
- Concept ideation & design review
- Consumer focus groups
- Design Services
- Digital Media & Web Solutions •
- Field trials/Simulation •
- Literature reviews
- Problem solving
- Product testing
- Project management
- Proof of concept
- Sample analysis & testing •
- Technology & workflow consultation •
- Technology development
- Technology evaluation / validation
- Testing Services
- Web-based and mobile application mapping

#### APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Content Creation Proof of Concept/Prototypes
- Process optimization
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Technology validation and transfer

#### TRAINING

- Building envelope modelling training
- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Qualitative & guantitative research
- Skills assessment/Competency evaluation •
- Training planning
- Train the trainer

#### **TECHNOLOGY DIFFUSION**

- Customized technology demonstrations
- Evening speaker series •
- Industry-specific events & symposia
- Networking events •
- Open houses Testing facility & personnel •
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 2D and 3D digital cinema cameras; ARRI Alexa, Sony F65
- 4K projection/3D/HFR projection capabilities
- A full suite of motion capture, virtual camera and camera tracking technology; Vicon, OptiTrak, SolidTrack, General Lift Encodacam, Ultimatte, Sony / ARRI professional cameras
- Dedicated and secure high-speed fibre optic connectivity to offsite storage and render
- Dedicated Virtual Reality footprint with Oculus Rift, HTC Vive, Gear VR and related software applications
- DVS Clipster
- On-site workstation-based teaching facility with a range of available software
- World-Class Facility (10,000 sq. ft. sound stage at • Pinewood Toronto Studios) with Global Accessibility.

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#### POINT OF CONTACT:

David Dexter **Operations and Business Development Lead** Phone: (905) 815-4170 x. 8407 Email: david.dexter@sheridancollege.ca

#### http://www.sirtcentre.com

# **TECHNOLOGY ACCESS CENTRE FOR AEROSPACE AND MANUFACTURING** (TACAM)

# Tech-Acces\Canada



# **Technology Access Centre** AEROSPACE & MANUFACTURING



SERVICES OFFERED IN: English



ADDRESS: B-100-2055 Notre Dame Ave, Winnipeg, MB R3H 0J9

TACAM supports Manitoba's aerospace and manufacturing sectors by providing enhanced access to RRC's technological assets, specialized facilities and equipment, and subject matter expertise. Industry benefits through training, knowledge and technology transfer, technical services, and applied research engagements.

#### AREAS OF INNOVATION EXPERTISE

• Advanced materials processing • Imaging (including high-(Metals and Composites)

• Robotics and automation

- speed imaging)
- Non-destructive investigation
- Laser and advanced arc welding
- · Physical and computerbased simulations

#### TECHNICAL AND BUSINESS SERVICES

- Advanced welding support for product development
- Assistance with building product approvals and commercialization
- Components/parts fabrication
- Concept ideation & design review
- Customized machining (including laser machining)
- Design Services
- Fabrication, Prototyping and Installation Services
- Facilitation service (introduction)
- Field trials/Simulation
- Non-destructive inspection (NDI)
- Performance Monitoring and Management
- Printability testing and analysis
- Proof of concept
- Scientific and technological monitoring
- Scientific report writing
- Technology & workflow consultation
- Technology evaluation / validation

WEBSITE: http://www.rrc.ca/tac



#### POINT OF CONTACT:

Dele Ola Manager, TAC for Aerospace and Manufacturing Phone: (204) 631-3430 Email: oola@rrc.ca

Affiliated with Red River College

# TECHNOLOGY ACCESS CENTRE FOR AEROSPACE AND MANUFACTURING (TACAM)

Proud member of Tech-Acces Canada

### APPLIED RESEARCH AND DEVELOPMENT

- 3D Design, Rapid Prototyping, & Scanning
- Advanced welding (including laser and arc processes)
- Automation
- Composite part manufacturing
- Composite tooling design and manufacturing
- Design of Experiment
- Industrial scale prototyping
- Laboratory/pilot scale prototyping
- Manufacturing process design and development
- Measurement inspection and alignment
- Non-destructive inspection
- Performance monitoring and analysis
- Process optimization
- Product Design & Development
- Provincial and federal grant proposal development
- Report preparation on R&D results
- Reverse Engineering
- Sensory research facilities
- Robotics and automation and imaging
- Technology validation and transfer

### TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized training
- Interactive Workshop Sessions
- Needs assessment and gap analysis
- Training planning
- Train the trainer

#### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Field site product demonstration
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences
- Publishing in Peer Reviewed Literature
- Rental of space & equipment
- Seminars and Workshops

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Model Factory Machine Shop:
  - 3D Printing: Stratus (2) and Stratus Fortus
  - Manual Machining: Lathes, Milling Machines, Surface Grinders, Cylindrical Grinders
  - Gas High Heat Furnace, Gas Tempering Furnace
  - Inspection: Coordinate Measuring Machines (CMM): Mitutoyo CMM & Profile Projector, Brown & Share CMM Optical comparator
  - Computer Numerical Control (CNC): TL Lathes, SL20 Bar Feeder, SL20 APL, SL20, SL10
  - Haas Vertical CNC Mill: Mini Mill, vf1, vf2, Horizontal
- Composites Model Factory:
  - Contamination Controlled Area Shop
  - AGFM CNC Cloth Cutter
  - CNC 5-axis router
  - Ovens (curing composite parts)
  - Heated Platen Press
  - Environmental Booth
  - Paint Booth for all paint applications
  - Non-destructive Inspection: Ultrasonic, Liquid Penetrant Inspection (LPI), Magnetic Penetrant Inspection (MPI), and Laser Ultrasonic Testing (LaserUT)
  - Optical Layup Template Projector (OLT)
  - Metal/Engine specific: Sheet Metal Shop, Gas Turbine Repair & Overhaul Shop, Avionics Shop, large aircraft hangar, stores, etc.
- Centre for Aerospace Technology & Training
  - Advanced Robotic CMT Welder
  - Lasers: Manual Nd: YAG Laser, Robotic CO2 Laser, Laser-MIG Hybrid Welder, Diode Laser, Plastic Laser Welding System
  - Micro TIG welder
  - Industrial Robots
  - Digital X-ray Tomography
  - Fortus 3D Printer
  - Chemical Vapour Deposition / Flouride ion Cleaning
  - Metallurgy Lab
- Centre for Non-Destructive Inspection
  - 5-Axis Gantry LaserUT NDI System
- Industrial Automation & Robotic Facilities:
  - Automation lab (FMS 200 System)
  - Robotics Lab: Dedicated Motoman Training Robots, Fanuc; Robot Cell in a Box, Dual Arm Motoman Robot
  - MIG Robotic Welding Training Cell
  - Research Robots : Baxter, Eddie Robot Platform
  - High Speed Imaging Systems
  - Particle Image Velocimetry

🚯 MeetTheTACs.ca 🖾 info@tech-access.ca 🕓 613.366.3239 🕥 @TechAccessCDA 📀 Ottawa, ON

# TECHNOLOGY ACCESS CENTRE FOR LIVESTOCK PRODUCTION (TACLP)

Proud member of Tech-Acces Canada





SERVICES OFFERED IN: English



#### ADDRESS:

4500 – 50th St. Olds, Alberta T4H 1R6



#### WEBSITE:

oldscollege.ca/research-innovation/ livestock-meats



#### POINT OF CONTACT:

Shannon Argent Manager Phone: (403) 556-8314 Email: sargent@oldscollege.ca The Olds College Technology Access Centre for Livestock Production (TACLP) focuses on meeting the needs of the Canadian livestock industry by providing access to new technologies that increase industry sustainability and producer viability. With a focus on beef cattle and sheep, TAC assists producers in enhancing production efficiency and promoting herd health and welfare. In serving as a knowledge, networking and technology transfer hub for the region, TAC is a valuable resource to the livestock industry, and will enhance the learning experience for our students, the future leaders in agriculture.

#### AREAS OF INNOVATION EXPERTISE

- Feed Efficiency Testing
- Early Disease Detection
- Metabolic Packaging for Efficiency Selection
- Product Demonstration
- Integrated Applied
   Research Infrastructure
- Student Interaction with Applied Research

# **TECHNOLOGY ACCESS CENTRE FOR** LIVESTOCK PRODUCTION (TACLP)



#### TECHNICAL AND BUSINESS SERVICES

- Field trials/Simulation
- Sample analysis & testing
- Technology & workflow consultation



#### APPLIED RESEARCH AND DEVELOPMENT

Technology validation and transfer

# TRAINING

- Corporate on-site & in-house training
- Interactive Workshop Sessions

#### E TECHNOLOGY DIFFUSION

- Networking events
- Open houses Testing facility & personnel
- Rental of space & equipment

#### INVENTORY OF SPECIALIZED EQUIPMENT

- GrowSafe<sup>™</sup> Feed Efficiency Testing equipment
- Infrared Thermography Scanning Station
- Integrated Program Infrastructure for integrated applied research projects
  - Constructed wetlands
  - Meat cutting lab



#### **POINT OF CONTACT:**

**Shannon Argent Acting Manager** Phone: (403) 556-8314 Email: sargent@oldscollege.ca

oldscollege.ca/research-innovation/ livestock-meats





# **TECHNOLOGY ACCESS CENTRE IN BIO-INNOVATION (TAC-B)**

# Tech-Acces\Canada



**TECHNOLOGIE EN BIO-INNOVATION** 





SERVICES OFFERED IN: English and French



#### ADDRESS:

WEBSITE:

Room B3160.33, 801 Aviation Parkway Ottawa, ON K1K 4R3

The TAC in Bio-Innovation supports Canadian businesses in realising applied research projects leading to the creation of new products and processes or the optimization of existing technology in the areas of industrial biotechnology, biopharmaceuticals and agri-food.

#### **AREAS OF INNOVATION EXPERTISE**

- Agri-food
- Analytical Chemistry
- Bioinformatics
- Bioprocesses
- Biotechnology
- Genetic Engineering

#### **POINT OF CONTACT:**

Charles-André Massebeuf Partnership Development Advisor Phone: (613) 742-2483 x. 2239 Email: ChMasse@lacitec.on.ca

recherche.collegelacite.ca/en/

fields-of-research/bio-innovation

Affiliated with La Cité

# TECHNOLOGY ACCESS CENTRE IN BIO-INNOVATION (TAC-B)

#### TECHNICAL AND BUSINESS SERVICES

- Advanced welding support for product development
- Assistance with building products approvals and commercialization
- Business Mentorship referrals
- Early-Stage Business Development
- Facilitation service (introduction)
- Literature reviews
- Problem solving
- Product testing
- Proof of concept
- Scientific report writing

#### X APPLIED RESEARCH AND DEVELOPMENT

- Coaching
- Concept validation
- Design of Experiment
- Laboratory/pilot scale prototyping
- Manufacturing process design and development
- Pre-clinical development (chemistry & analytical biochemistry, metabolomics, pharmaceutical science, cell biology & microbiology)
- Process Optimization
- Product Design & Development
- Product Re-design & Improvement
- Technology Validation and Transfer

# 

- Corporate on-site & in-house training
- Design, development, and delivery of customized training

#### TECHNOLOGY DIFFUSION

- Industry-specific events & symposia
- Rental of Space and Equipment

#### INVENTORY OF SPECIALIZED EQUIPMENT

- Analytical chemistry:
  - Mass spectrometer MS MS AB Sciex (3200 Q Trap) Coupled with HPLC-UV/VIS LC Shimadzu (LC-20AD, DGU-20A3R, SIL-20ACHT)
  - HPLC-UV/VIS Varian (920-LC)
  - Ion chromatograph Thermo Scientific (Dionex ICS-5000 DC, Dionex ICS-5000 SP Dionex AS-AP)
  - Atomic absorption spectrometer Varian (AA240)
  - GC-MS (with head space) Agilent (6890N/5975C)
  - GC-FID Agilent (7890A)
  - Capillary electrophoresis Agilent (HP 3D CE)
  - Differential scanning calorimeter (DSC)

PerkinElmer (JADE)

- Near-Infrared (FT-NIR) Bruker (TANGO spectrometer)
- Cell culture BSL2 facilities:
  - Laminar Flow Hoods
  - CO2 incubators
  - Inverted microscopes
  - Fluorescence microscope OLYMPUS (BX53F)
  - Stereomicroscope OLYMPUS (SZX-16)
  - Growth chamber VWR
- Elemental analysis:
  - Kjeltec digestor and distillator (N) FOSS (Kjeltec 8000)
  - Combustion Dumas (CNS) LECO (TruSpec CN,TruSpec S)
- Genetic suite:
  - PCR BIO-RAD (S1000 Thermal Cycler)
  - PCR DNA Engine (3) MJ Research (PTC 200)
  - Gel imager BIO-RAD (Molecular Imager Gel doc XR +)
  - DNA sequencer ABI 3500
  - RT-PCR BIO-RAD CFX 96
  - DNA Extraction EZ1 robot
- Microbiology BSL2 facilities:
  - Biolog GEN III OmniLog Combo Plus System
  - Anaerobic chamber Plas Labs
  - Incubator shaker Fisher (MaxQ)
- Nutritional analysis:
  - Fiber analyzer Ankom (A-200)
  - Soxhlet extraction unit Foss (Soxtec 2045)
  - Rancimat Metrohm (892 Rancimat)
  - Water activity meter Neutec (Lab Master.aw)
- Particules analysis:
  - Multisizer Z4 (20, 30, 50, 100 et 2 000 μm aperture) Beckman Coulter (Multisizer 4)
- Recombinant protein production and purification BSL2 facilities:
  - Bioreactors 1-L (3) Applikon (Z61101C004)
  - Bioreactors 7.5-L (2) Labfors (Infors)
  - Photobioreactor 1.9-L Lux 5 flat panel (Infors)
  - Photobioreactor 2-L Labfors 4 + labfors Lux module (Infors)
  - FPLC BIO-RAD BioLogic
- Sample preparation:
  - Grinder Retsch (Zm 200)
  - Freeze-dry System (Lyophilizer): Labconco (FreeZone)
- Spectroscopy/Fluorescence:
  - Spectrophotometer BioTek (SynergyMx)
  - Spectrophotometer Varian (Eclipse)

# TransBIOTech

# Proud member of **Tech-Acces** (Canada







SERVICES OFFERED IN: English and French



#### ADDRESS: 201 rue Mgr Bourget Lévis (Québec) G6V 6Z3



WEBSITE: http://tbt.qc.ca



# POINT OF CONTACT:

Christina Juneau Ph.D. Scientific Director Office: (418) 833-8876 poste 3041 Email: christina.juneau@tbt.qc.ca **TransBIOTech** is a center for research and transfer of biotechnology for companies working in life sciences and biotechnology. The center provides services primarily for research but also technical assistance services to small enterprises up to multinationals. The activities of TransBIOTech primarily involve the development of proof of concept and innovation projects aimed at improving health in pharmaceuticals; functional foods; natural health products; cosmetics & cosmeceuticals; and other related fields.

#### AREAS OF INNOVATION EXPERTISE

- Biotechnology Pharmaceuticals
   Natural Health Products
  - Natural Health Proc & Cosmeceuticals

Metabolomics

• Agri-food

- Pre-clinical R&D
- & CosmeceuticalsFood fraud detection
- Affiliated with Cégep de Levis-Lauzon

# **TransBIOTech**

#### TECHNICAL AND BUSINESS SERVICES

- **Business Mentorship referrals**
- Commercialization referrals
- Early-Stage Business Development
- IP Protection facilitation
- Literature reviews
- Market analysis
- Marketing Advisory Services referrals
- Problem solving
- Product testing
- Project management
- Regulatory guidance
- Sample analysis & testing
- Scientific and technological monitoring
- Scientific report writing
- Technical assistance (consultation, comparative analysis of technologies, tests and analysis)
- Technology development •
- Technology evaluation / validation
- **Testing Services** •

#### X APPLIED RESEARCH AND DEVELOPMENT

- Concept validation
- Design of Experiment
- Pre-clinical development (chemistry & analytical biochemistry, metabolomics, pharmaceutical science, cell biology & microbiology)
- Process optimization
- Product Design & Development
- Product Improvement
- Provincial and federal grant proposal development
- Regulatory guidance
- Report preparation on R&D results
- Technology validation and transfer

# 

- Customized Training
- Design, development, and delivery of customized training
- Qualitative & quantitative research

#### **TECHNOLOGY DIFFUSION**

- Conferences and Symposia
- Customized technology demonstrations
- Field site product demonstration
- Networking events
- Open houses Testing facility & personnel
- Presentation of results at conferences

# INVENTORY OF SPECIALIZED EQUIPMENT

- APGC
- Cytometer
- Fast-GC
- Fluorescence microscope
- HPLC
- Individual vented cages for rodents
- In vivo imaging system (IVIS)
- Metabolic cages
- MS:SQ
- Prep-LC •
- QQQ
- UPC2
- UPLC



**POINT OF CONTACT:** 

Christina Juneau Ph.D. **Scientific Director** Office: (418) 833-8876 poste 3041 Email: christina.juneau@tbt.gc.ca

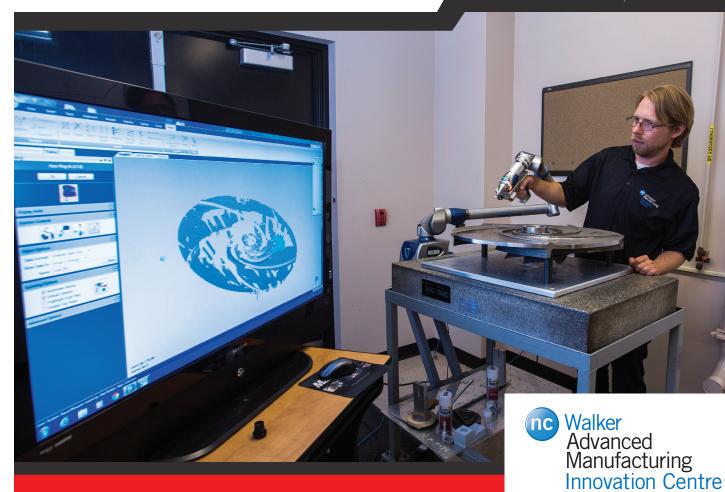
http://tbt.qc.ca

🚯 MeetTheTACs.ca 🖾 info@tech-access.ca 🕓 613.366.3239 🕥 @TechAccessCDA 💽 Ottawa, ON



# WALKER ADVANCED MANUFACTURING INNOVATION CENTRE

Proud member of **Tech-Acces** (Ca<u>nada</u>





SERVICES OFFERED IN: English



#### ADDRESS:

100 Niagara College Boulevard Welland, ON L3C 7L3



#### WEBSITE:

ncinnovation.ca/specializations/ walker-advanced-manufacturinginnovation-centre



#### POINT OF CONTACT:

Jim Lambert, C.E.T. Centre Manager Phone: (905) 735-2211 x. 7177 Email: jlambert@niagaracollege.ca Niagara College's Walker Advanced Manufacturing

**Innovation Centre** team specializes in engineering design, 3D laser scanning technologies, lean manufacturing processes and additive manufacturing. We work with Southern Ontario businesses to bring ideas to life, from concept through to developing working prototypes, utilizing leading-edge technology, including equipment and software.

#### AREAS OF INNOVATION EXPERTISE

- Additive Manufacturing
- Product design and development
- Process Improvement and Automation
- Reverse Engineering
- Product re-design and improvement
- Canada's only material beta testing facility for Stratasys

Affiliated with Niagara College Canada

# WALKER ADVANCED MANUFACTURING **INNOVATION CENTRE**

- TECHNICAL AND BUSINESS SERVICES
- Business development & market research services
- Commercialization referrals
- Competitive market analysis
- Components/parts fabrication
- Concept ideation & design review
- Design Services
- Fabrication, Prototyping and Installation Services •
- FDM Materials testing •
- Field trials/Simulation •
- Ingredient selection and recommendations •
- Non-destructive inspection (NDI) •
- Performance Monitoring and Management •
- Printability testing and analysis •
- Problem solving •
- Product testing •
- Project management •
- Proof of concept
- Rapid Prototyping / 3D Printing & Laser Scanning
- Technology & workflow consultation
- Technology development / evaluation / validation

# APPLIED RESEARCH AND DEVELOPMENT

- Automation
- Coaching
- · Composite part manufacturing
- Composite tooling design and manufacturing
- Concept validation
- Cost avoidance
- Design of Experiment
- Human Factors Studies
- Industrial scale prototyping
- Laboratory/pilot scale prototyping
- Manufacturing process design and development
- Measurement inspection and alignment
- Non-destructive inspection
- Process optimization •
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development
- Reverse Engineering
- Technology validation and transfer

# TRAINING

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Curriculum development
- Design, development, and delivery of customized
- Interactive Workshop Sessions

- Needs assessment and gap analysis
- Qualitative & quantitative research
- Skills assessment/Competency evaluation
- Training planning

#### TECHNOLOGY DIFFUSION

- Customized technology demonstrations
- Evening speaker series
- Field site product demonstration •
- Industry-specific events & symposia
- Networking events
- Open houses Testing facility & personnel
- Participation at trade shows & other venues with or on behalf of partners
- Presentation of results at conferences •
- Publishing in Peer Reviewed Literature
- Rental of space & equipment •
- Seminars and Workshops
- **Technical Service Bulletins**

#### INVENTORY OF SPECIALIZED EQUIPMENT

- 3D Systems Geomagic Control X: 3D GD&T inspection software used to compare as-is to nominal
- 3D Systems Geomagic Design X: Conversion of scan data to intelligent CAD models
- Autodesk Inventor Fusion, Factory Design Suite, AutoCAD, Revit, CFD
- Autodesk ReCap 360: Conversion of photographs to point-clouds (photogrammetry), basic stitching of point cloud data
- Very versatile 3D GD&T inspection tool
- Connex 1 Objet 260
- DJI Inspire 1 Unmanned Aerial Vehicle (UAV)
- EdgeWise: Advanced feature recognition from pointcloud data for BIM applications
- Faro CAM2 Measure 10
- Faro Edge (probe), Faro Scene, Faro Laser Line Probe (Blue LLP), Faro Tracker Vantage, Faro Focus 3DS 120
- Fortus 400mc & Fortus 900mc
- InnovMetric Polyworks: Very versatile 3D GD&T inspection tool
- Insight/Control Centre: tool path creation/ optimization, and printer management for Fortus machines
- Objet Studio (3D print optimization / management for Connex machines
- PTC Mathcad
- SimCAD Pro
- Timer Pro

# WEARABLE, INTERACTIVE AND MOBILE TECHNOLOGIES ACCESS CENTRE IN HEALTH (WIMTACH)

Tech-Acces Canada





SERVICES OFFERED IN: English



#### ADDRESS:

941 Progress Ave Room D2-02 Toronto, ON M1G 3T8

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WEBSITE: wimtach.centennialcollege.ca



#### **POINT OF CONTACT:** Jeziel Vidad Innovation Program Manager Phone: (416) 289-5128 x 8594

Email: JVidad@centennialcollege.ca

WIMTACH at Centennial provides unique proposition of a mobile, wearable, and interactive research facility and fieldbased usability testing framework. It brings together proven multi-disciplinary faculty experience, diversity and depth of students, state-of-the-art facilities across four Centennial campuses, international reach, robust project management, and an extensive innovation ecosystem to benefit Canada's health technologies industry.

#### AREAS OF INNOVATION EXPERTISE

- Digital health technology
- Mobile technology

• Interactive technology

• Wearable technology

- Electronics and
   mechanical technology
- Hackathons

Affiliated with Centennial College

# WEARABLE, INTERACTIVE AND MOBILE TECHNOLOGIES ACCESS **CENTRE IN HEALTH (WIMTACH)**

# Tech-Acces\Canada

#### TECHNICAL AND BUSINESS SERVICES

- Business development & market research services
- Competitive market analysis
- Concept ideation & design review
- Design Services
- Digital Media & Web Solutions
- Field trials/Simulation
- Project management
- Technology & workflow consultation

#### APPLIED RESEARCH AND DEVELOPMENT

- 3D design & rapid Prototyping
- Concept validation
- Pre-commercialization 3D Printing services
- Product Design & Development
- Product Re-design & Improvement
- Provincial and federal grant proposal development •
- Regulatory Research in Health •
- Reverse Engineering
- Technology validation and transfer

### 

- Connections to co-op placement opportunities
- Corporate on-site & in-house training
- Interactive Workshop Sessions

### **TECHNOLOGY DIFFUSION**

- Industry-specific events & symposia
- Networking events •
- Open houses - Testing facility & personnel
- Rental of space & equipment



#### INVENTORY OF SPECIALIZED EQUIPMENT

- In-House Server for Testing
- Mobile Devices Library from Wavefront

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