

InnoTech Alberta is a research and innovation organization, with a range of technologies available for licensing. Our focus is on the growth and development of technology-based sectors and the commercialization of technology in Alberta. We provide business and technical services, and initiatives that encourage a strong science, technology and entrepreneurial culture in Alberta.

LICENSING OPPORTUNITY

Solid Oxide Fuel Cells

LEVERAGE OUR TECHNOLOGY

InnoTech Alberta has a variety of technologies available for licensing. We will work with companies, from small to large, to set up mutually beneficial licensing deals. With more than 90 years in applied research and development, we are an experienced commercialization partner. InnoTech's licensing opportunities are the result of our world-renowned research programs. Contact us to explore these opportunities.

TECHNOLOGY OVERVIEW

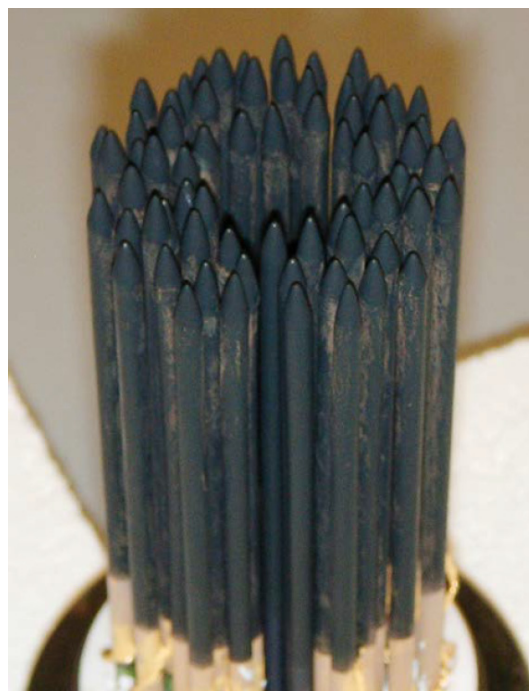
An extensive research program on tubular Solid Oxide Fuel Cells (SOFCs) and related concepts has resulted in a suite of technologies that are now available for licensing. From novel methods of manufacturing, advantageous designs, optimized operating procedures, and complementary technologies, InnoTech Alberta has a broad intellectual property portfolio and vast technical expertise.

In addition, the underlying technology platform in hollow fibre ceramic membranes has applications outside of fuel cells.

ADVANTAGES

- » **High Volumetric Power Density:** Ability to manufacture cell with diameter from sub-millimeter to centimeter sizes. Smaller diameter cells can be used for high power density applications.

- » **Innovative Electrode Design:** Unique electrode design reduces the electrode thickness to micron level, simplifies the manufacturing process, and enhances cell performance.
- » **Robust Cell:** Our traditional anode-supported cell has high thermal shock resistance (TSR). The next generation porous electrolyte-supported cell has high TSR, as well as redox cycling capability.



60-Cell Micro-SOFC stack

Solid Oxide Fuel Cells

COMMERCIAL APPLICATIONS

Solid oxide fuel cells

- » Stationary power, including combined heat & power
- » Micro-SOFCs can be used for portable power applications

Hollow fibre ceramic membranes

- » Membrane reactors
- » Fluid separation

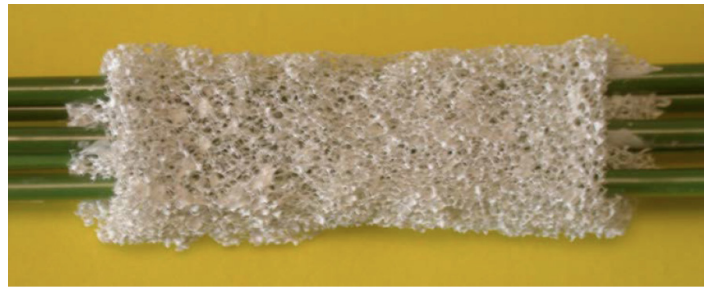
STATUS

InnoTech Alberta has numerous SOFC patents in multiple jurisdictions. Below is a selection of our US patent portfolio:

- » US 6,607,645 / US 7,182,848
- » US 6,824,907 / US 7,736,772 / US 8,709,674
- » US 8,349,510

Contact us for a full list of the SOFC patent portfolio.

These technologies are available for licensing.



Next generation foam embedded micro-tubular fuel cell bundle

WANT TO EXPLORE THIS OPPORTUNITY?

Licensing@albertainnovates.ca

Our province is blessed with abundant natural resources, world-class infrastructure and research institutions, a highly skilled workforce, and a dynamic, entrepreneurial business community. Alberta Innovates harnesses these strengths by acting as the catalyst between government, industry and academia, to solve some of the biggest challenges facing our province.

TECHNICAL SERVICES

Helping organizations develop their technologies faster and smarter through a subsidiary, InnoTech Alberta.

- » 100,000 m² of product/process development and scale-up facilities in the areas of petroleum, environment and carbon management, bio and industrial technologies
- » 300 hectare research farm, three greenhouses, and 36 growth chambers

FUNDING PROGRAMS

- » Fostering an entrepreneurial culture and increasing Alberta's critical mass of innovation talent
- » Post-secondary investment programs offer a broad range of support to researchers at all stages of their careers, from graduate students to the world's top researchers

- » Industry investment programs offer support to Alberta-based SMEs in a variety of ways to help accelerate their growth and success

REGIONALLY ACCESSIBLE COMMERCIALIZATION SUPPORT

- » Making connections and pointing businesses and entrepreneurs in the right direction
- » Alberta Regional Innovation Network System - an integrated province-wide system ensuring SMEs and innovators have access to vital services and resources to help them succeed

LICENSING SERVICES

- » Managing the translation of Alberta Innovates intellectual property into business solutions
- » Facilitating licensing deals with industry anywhere in the world