

*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

# Antimicrobial Wear Coating

## LEVERAGE OUR TECHNOLOGY

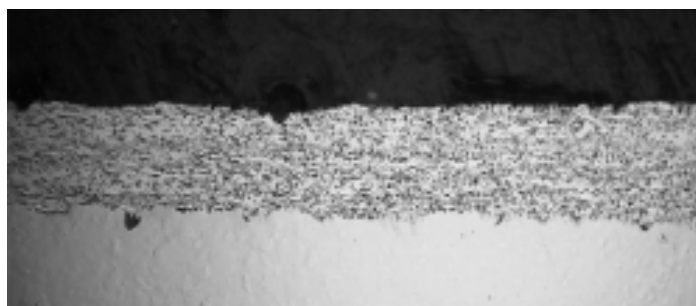
AITF has a variety of technologies available for licensing. We will work with companies, from small to large, to set up mutually beneficial licensing deals. With more than 90 years in applied research and development, we are an experienced commercialization partner. AITF's licensing opportunities are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

## TECHNOLOGY OVERVIEW

The recent development of drug- and sanitizer-resistant bacterial strains has led to the food and medical industries seeking new solutions to combat contamination. Many existing antimicrobial surface coatings are not suitable for applications that experience high wear. To address this need, AITF has developed a novel, metal-based composite coating that is designed to combine both wear resistance and antibacterial properties.

## ADVANTAGES

- » Antibacterial activity against multiple strains: Initial tests have shown activity against *Listeria*, *E. coli*, *Salmonella* and *S. aureus*.
- » Superior wear resistance: Wear tests have shown approximately 25% better performance than uncoated stainless steel.
- » Cost savings: Lower cost is predicted compared to pure metal coatings.
- » Wide variety of applications: Potential uses in both food and health-based industries. See Commercial Applications below.



*Micrograph of AITF metal-composite coating*



# Antimicrobial Wear Coating

## COMMERCIAL APPLICATIONS

- » Food processing equipment and facilities
- » Deli counters
- » Hospital surfaces
- » Pharmaceutical manufacturing
- » Medical devices

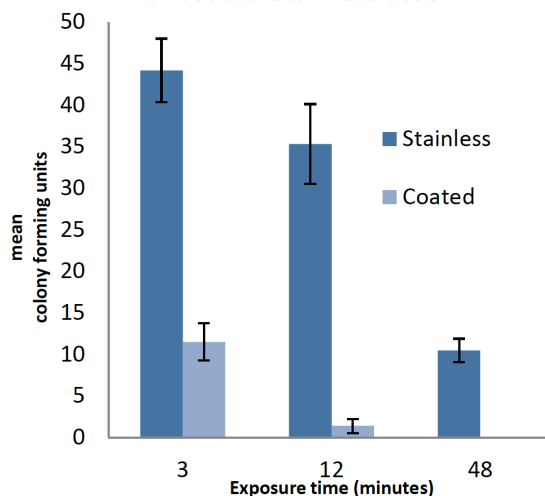
## STATUS

A U.S. provisional patent application has been filed for this technology. This technology is available for licensing.

## WANT TO EXPLORE THIS OPPORTUNITY?

[Licensing@albertainnovates.ca](mailto:Licensing@albertainnovates.ca)

*Listeria monocytogenes*  
Survival on AITF Coating vs.  
Uncoated Stainless Steel



Result of bar immersion test. After exposure, samples re-plated at a 25X dilution and mean colony forming units counted after 48 hours.

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