

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

Residual Solvent Analyzer

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.

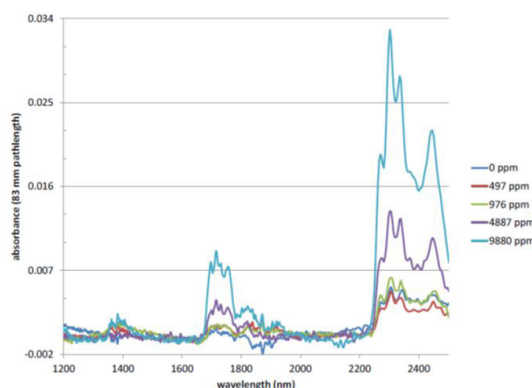
TECHNOLOGY OVERVIEW

InnoTech Alberta has developed an on-line analyzer to provide an amount and a liquid-vapor phase transfer rate for low molecular weight solute in a solvent. The device was initially designed for detecting small amounts of residual pentane in bitumen during bitumen processing operations. Accurate measurement of residual pentane can be used to optimize and control solvent recovery operations to minimize loss of pentane in the product or to the environment.

The on-line analyzer will also be useful for a variety of industrial applications where the removal rate or amount of a solute is an important engineering functional requirement or design parameter.

ADVANTAGES

- » Ability to detect low levels of residual solvent: Current methods for measuring pentane at low concentrations cannot be done with suitable accuracy or reproducibility
- » On-line operation: Easily integrated into industrial processes
- » Cost-effective: Increases solvent recovery and reduces loss of solvent to the product or environment
- » Environmentally friendly: Reduces release of solvents to the environment
- » Wide variety of applications: Initially developed for detecting pentane in bitumen, the analyzer could also be used for a variety of oil & gas purposes, as well as the paints & coatings industry, and flavor & fragrance applications.



Spectra at 273 seconds for pentane in bitumen

Residual Solvent Analyzer

COMMERCIAL APPLICATIONS

- » Residual pentane in bitumen
- » Residual low mass components in refinery products and intermediates, including high vacuum gas oil and diesel
- » Gas-to-oil ratios for live oils
- » Flavors and fragrances – measurement of the amount of a flavor or fragrance emitted
- » Paints and coatings – information on drying rates and skinning

STATUS

A US provisional patent has been filed.

This technology is available for licensing.

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