

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

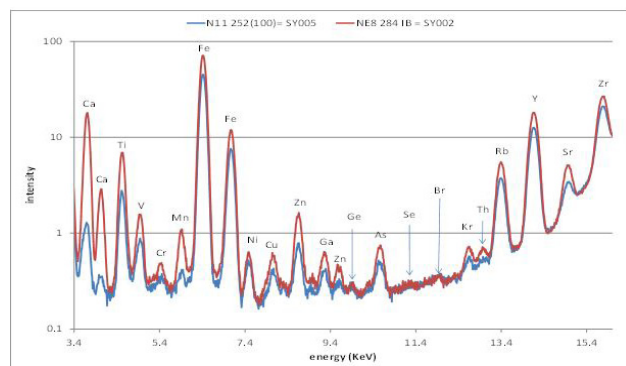
XRF Analysis of Oil Sands

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

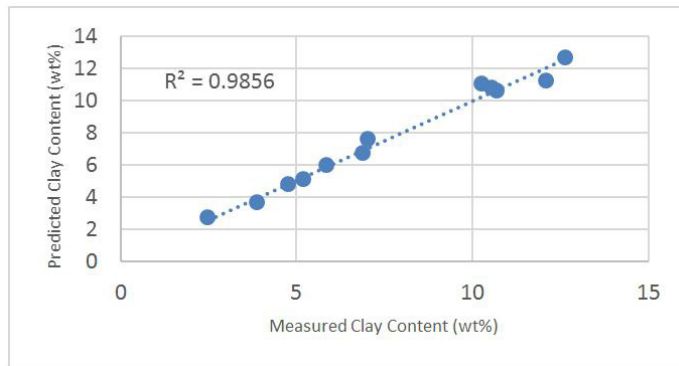
InnoTech Alberta has developed a novel process for prediction of oil sands process variables. X-ray fluorescence (XRF) can provide a rapid analysis of many constituent elements of both solid and slurry samples, and is also suitable for online analysis. The InnoTech process uses XRF measurements of select elements to predict process variables for oil sands or oil sands tailings.



Example XRF spectra from a high quality sample (SY005) and a low quality sample (SY002) with Mo target (1747 KeV)

ADVANTAGES

- » Accurate prediction of multiple process variables:
The InnoTech process can be used to predict kaolinite content, illite content, total clay minerals, methylene blue index (MBI), fines content, clay content, and bitumen content.
- » Improved operational efficiency for surface mining:
Good estimates of the clay-related variables and the bitumen content are important for selective mining as well as for determining the caustic addition rate and ore blending strategies.
- » Improved tailings treatment: An estimation of process variables (e.g. sand to fines ratio) is important for optimizing oil sands tailings treatment, including determining the amount of coagulant and/or flocculant to be added.



Measured values for clay content compared to predicted values by InnoTech method

XRF Analysis of Oil Sands

COMMERCIAL APPLICATIONS

- » Oil sands processing
- » Tailings treatment

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