Measuring to manage: Spectroscopy can serve the industry

Authors:
Calvin Bewsky, P.Eng. and Tony Shaw, PhD
National Research Council Canada
Winnipeg, MB
Corresponding author: calvin.bewksy@nrc-cnrc.gc.ca

Abstract:
NRC is fostering a healthy, resilient and sustainable future of agri-food production, by promoting measurement:

- Spectroscopy is measurement modality that uses optical energy to analyse the composition of matter.
- It provides a means for quantitative and qualitative analysis of agricultural and agri-food products across the supply chain, including soil.
- It is particularly useful for making routine measurements and enabling instant, on-the-spot decisions in the lab or at a process line.
- Digital spectroscopic repositories can support longer-term tracking (e.g. condition of soil) and production history.
- NRC Winnipeg is focused on the priorities of the Canadian ag-tech communities and is set up to de-risk the adoption of this technology where it will create business and economic benefit.

“Imagine: A healthy and holistic agri-food production system, one in which all important points along the supply chain involve simple measurement, thus creating a traceable, information- and value-based system of our products and processes”