



Integrating Spectral Mineralogy and Geochemistry for Exploration Success

Mineral identification with infrared spectrometry is commonly used in exploration and mining. Portable high-resolution spectrometers allow quick and straightforward collection of large volumes of hyperspectral data in the field, core shack, or lab. The interpreted data can be used to semi-quantitatively identify **fine grained alteration minerals** that are often missed or incorrectly named, including clays, carbonates, sulfates and others.

But accessing **fast and robust hyperspectral interpretation** in a format that can be combined with other exploration data remains a challenge. New techniques and products such as aiSIRIS™, developed by AusSpec International, seek to bridge this gap, regardless of the project scale or commodity. The **reliable and standardized output** from aiSIRIS™ means hyperspectral data can be accurately interpreted, easily imported to databases and readily exported to modelling software in the same timeframe as geochemical assays.

This workshop is geared towards non-experts, particularly project geologists and managers who need to **understand and work with spectral mineralogy** as part of an overarching geological program.

Agenda includes:

- A complete introduction to hyperspectral mineralogy
- Explanation of the most common pitfalls around interpretation of hyperspectral data
- Demonstration of aiSIRIS™, a new tool that can be used in the normal project workflow to quickly and easily integrate spectral mineralogy to the project database
- Discussion of techniques to assess hyperspectral mineralogy in combination with geochemistry and other exploration data using geostatistical and 3D modelling software

Dates and Locations

Toronto ON
November 13

King Gallery
One King West Hotel
1 King St. West

8:00am - 2:00pm

Registration fee is \$80.

Morning coffee and lunch will be provided.

Contact Janet Lagacé to register:
janet.lagace@alsglobal.com

Dr. Sasha Pontual has worked in spectral geology for 25 years, finishing her doctorate in 1990 and going on to work for the CSIRO (an Australian research organization) developing applications for portable spectrometers in exploration and mining. In 1992 she started AusSpec International Limited to provide hyperspectral field, drilling and mapping support for the exploration and mining industry. Sasha and her colleagues at AusSpec developed the aiSIRIS™ hyperspectral interpretation system in response to the difficulties that industry clients faced in accessing and utilizing expert hyperspectral interpretation on a large scale.

Sarah Rice is Senior Geochemist with ALS Geochemistry. She works with industry clients to design custom-fit analytical solutions to geochemical problems and works on the development of cutting-edge analytical methods in exploration. Sarah graduated in 2012 with an M.Sc. in geochemistry and previously worked as a research assistant in the Queen's Facility for Isotope Research at Queen's University, Canada.

ASD-PANalytical representatives will be present at some workshops, locations TBD.