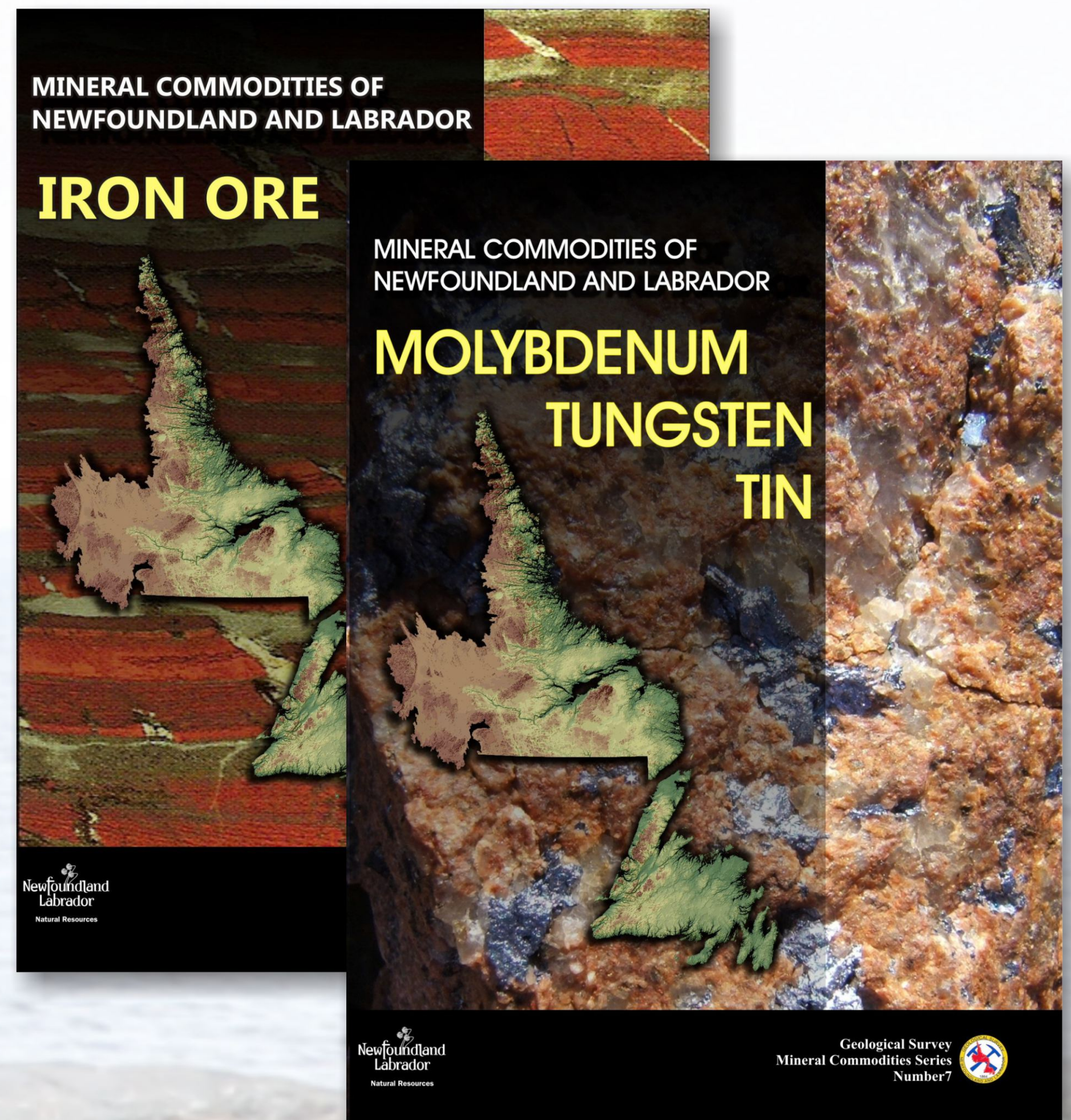


# COMMODITY SERIES REPORTS PROJECT

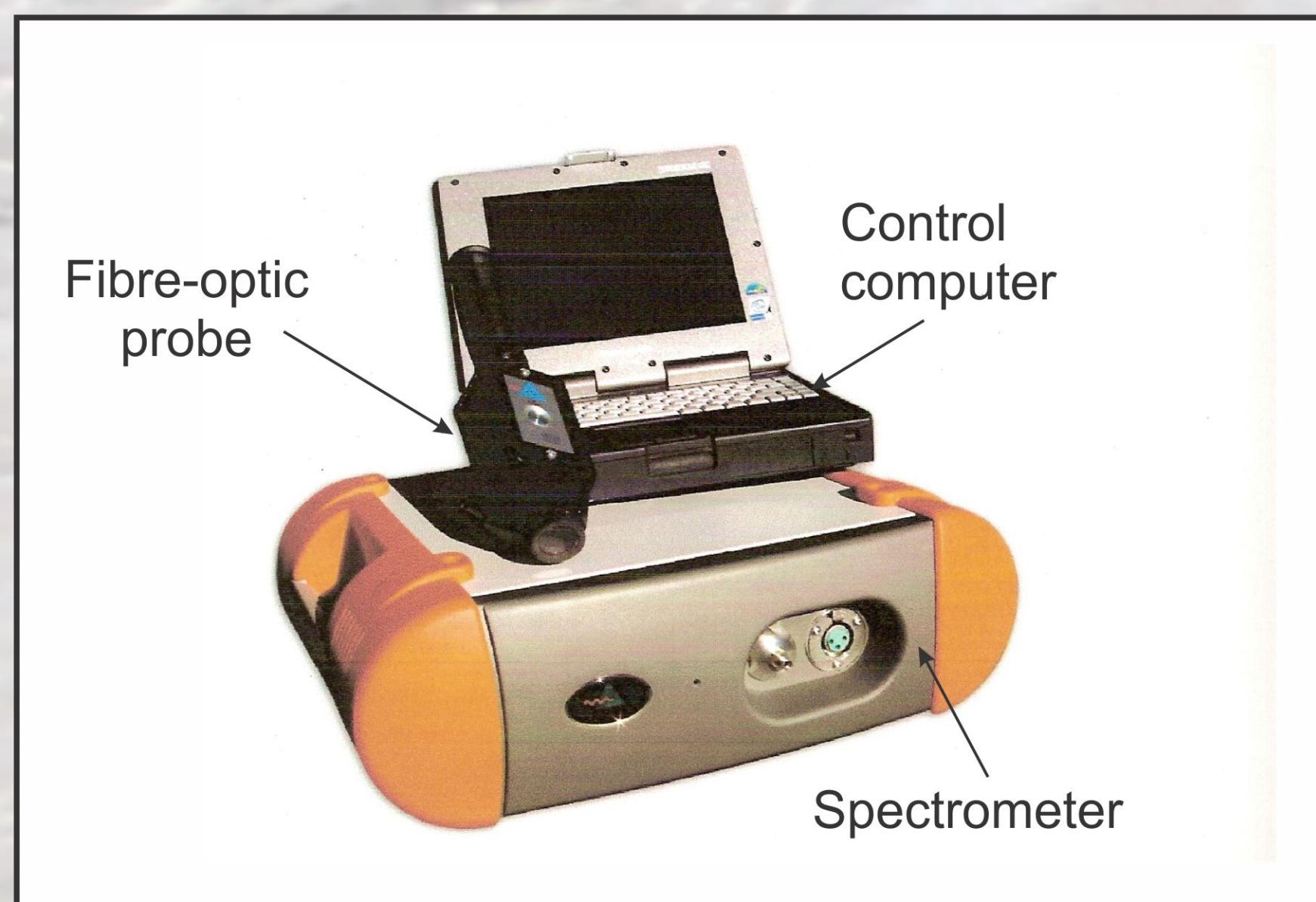
## Bridging the Gap in Publications

The *Commodity Series Reports Project* provides brochures intended as introductory technical publications that can bridge the gap between promotional literature and scientific material presented in *Current Research*.

The reports assist the exploration community, where they are aimed at senior-level technical staff responsible for project generation. They also have significant value as educational documents. In 2012, we were pleased to complete the report on iron ore, mostly related to Labrador. The availability of this report is a useful step in view of increased demand, significant exploration interest, new discoveries, and the launch of a Geological Survey research project on iron ore. The next contribution to this series will be a report on molybdenum, tungsten and tin, for which several significant deposits are now known. Reports on barite and fluorite, and also evaporite commodities (salt, potash, gypsum) are also in the pipeline. The report on iron ore is now available in digital form, and will soon be in printed format.



# APPLICATIONS OF OPTICAL SPECTROMETRY IN MINERAL DEPOSITS RESEARCH AND EXPLORATION



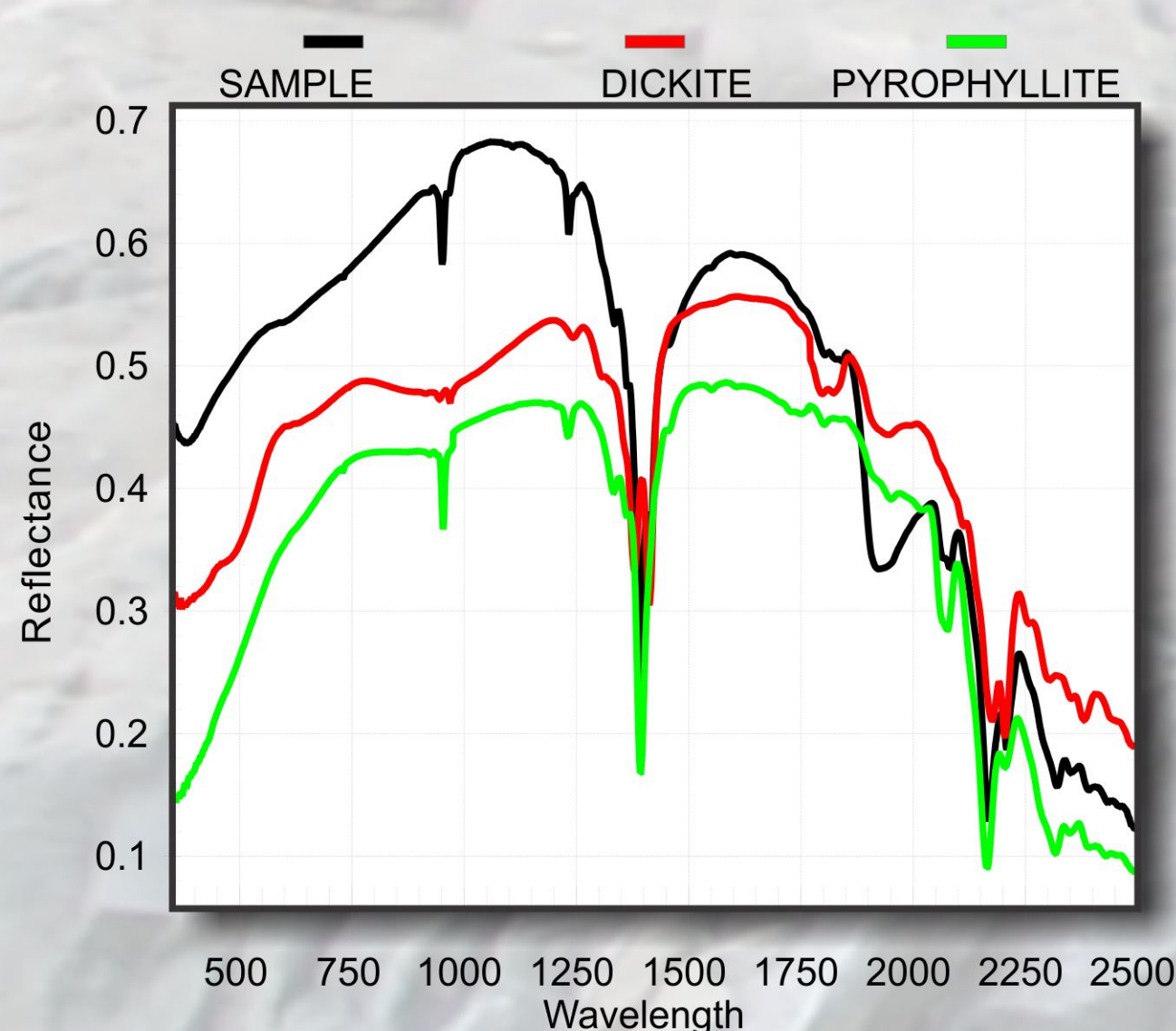
The TERRASPEC spectrometer

The identification and mapping of alteration patterns related to mineralization are critical in providing vectors for exploration and understanding deposit genesis. There is now growing industry use of visible / near-infrared (VNIR) optical spectrometry to resolve alteration assemblages and map their distribution. In 2008, we invested in a Terraspec™ portable VNIR spectrometer.

The Terraspec™ has added new dimensions to our projects. The instrument is currently being used on projects aimed at epithermal gold mineralization and volcanogenic massive sulphides, and also has application in mineralogical studies of iron ores.



Greg Sparkes using the TERRASPEC spectrometer.



Altered sample from epithermal gold mineralization at Rattle Brook, northern Burin Peninsula, showing the spectrometer identifications of key alteration minerals such as illite and dickite.

