

All are invited to attend the monthly meeting of the
Nittany Mineralogical Society
Wednesday, April 20, 2011 - Program at 8:00 p.m.
114 Earth & Engineering Sciences Building

On the Trek toward the Tricorder: Portable X-ray Fluorescence Analysis

by
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Our April meeting will be held Wednesday the 20th in the room 114 auditorium of Earth & Engineering Sciences Building on the west side of the Penn State campus in State College, PA. Maps may be found on our web site.

6:30 to 7:30 p.m.: Social hour, refreshments in the lobby

*7:30 to 8:00 p.m.: announcements, questions, answers;
door prize drawings*

about 8:00 p.m.: featured program

*The event has free admission, free parking, and free refreshments, and is open to all – **Bring your friends and keep up with fascinating developments in analysis of minerals.** -Editor*

Portable x-ray fluorescence (XRF) units are now available and have a wide range of applications. They can be very helpful in identifying unknown minerals because the apparatus yield data about the major elements in a specimen. The Bruker portable XRF unit allows direct testing of samples without any sample preparation (in other words, you don't have to grind up the specimen). The manufacturer has loaned its Tracer III model to Penn State, and we will have it set up at the April meeting. For more information on the instrument, see www.bruker-axs.com/traceriiiiv.html.

We'll be demonstrating the unit and analyzing specimens brought in by those attending the meeting. The area of a specimen to be analyzed needs to be at least about 1/4" square. Bring some unknown minerals, or if you have a specimen which has already undergone analysis, bring that and we will see how well the results match. We'll also explain the theory and the basics of X-ray fluorescence analysis.