



Nuclear Safeguards

Course open to seniors and graduate students

The course will include a description of the history of nuclear safeguards methods, international safeguards policy, techniques for nuclear safeguards measurements of neutrons and gamma rays, and hands-on training on nuclear safeguards instrumentation. Students enrolled in the course will attend weekly lectures at UM, taught by UM faculty and invited guest speakers. Then, they will take part in the week-long training at the Safeguards Laboratory (SL) at Oak Ridge National Laboratory (ORNL).

We are looking for talented and motivated students who are interested in the areas of

- History of nuclear safeguards
- International safeguards policy
- General nondestructive assay techniques
- Safeguards instruments for neutron and gamma-ray detection
- Data analysis for nuclear material identification and characterization

Textbooks and course materials:

1. G. F. Knoll, Radiation Detection and Measurement, 4th Ed.
2. US NRC, Passive Nondestructive Assay of Nuclear Materials (available online)
3. Course handouts and notes

Course Format:

Weekly lectures, Wednesdays 09.00 - 10.00

One week will be spent at the SL at ORNL performing hands-on experiments with a variety of nuclear safeguards instruments. Funding for this trip has been secured to cover travel and lodging expenses for each student. Group travel to and from ORNL will be organized. Tentative dates for the trip are Nov. 8 - 13, 2015.

Space is limited; please register early!

Please contact us for additional information!

Prof. Sara Pozzi

2937 Cooley Building

Phone: 734-615-4970

E-mail: pozzisa@umich.edu

