

Wesley D. Frey

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Academic Positions

2009- Instructor in Oregon State University Department of Nuclear Engineering and Radiation Health Physics.

Education

Ph.D. in Radiation Health Physics, Oregon State University, Corvallis Oregon.
Dissertation: *Use of BC-523a Liquid Scintillator for Simultaneous Neutron Spectroscopy and Gamma Ray Counting with the Implementation of a Neutron History Reconstruction Algorithm.* Advisor David Hamby. March 2009.

Master of Science in Radiation Health Physics, Oregon State University, Corvallis Oregon
Thesis: *Investigation into the Effects of Subsurface Ice Deposits on the Shielding of a Fast Spectrum Nuclear Reactor using Martian Regolith.* November 2005.

Bachelor of Science in Nuclear Engineering, University of California, Berkeley California.
December 2001.

Publications

Frey, W., Hamby, D. (Submission pending). Improvement of the Boron Gated Liquid Scintillation Technique Using A Neutron History Reconstruction Algorithm. *Nuclear Instruments & Methods in Physics Research, Sections A: Accelerators, Spectrometers, Detectors and Associated Equipment.*

Frey, W., Hamby, D. (Submission pending). Use of MCNP to Quantify Neutron Energy Losses that do not Produce Measurable Scintillation Photons in BC-523a. *Nuclear Instruments & Methods in Physics Research, Sections A: Accelerators, Spectrometers, Detectors and Associated Equipment.*

Frey, W., Hamby, D., Farsoni. (Submission pending). Use of BC-523a Liquid Scintillator for Simultaneous Neutron Spectroscopy and Gamma Counting with the Implementation of a Neutron History Reconstruction Algorithm. *Nuclear*

Instruments & Methods in Physics Research, Sections A: Accelerators, Spectrometers, Detectors and Associated Equipment.

Frey, W. (Submission pending). Phoswich Design to Achieve Low Pulse Magnitude Discrimination of Neutrons and Gamma-Rays in a Plastic Scintillation Material. *Nuclear Instruments & Methods in Physics Research, Sections A: Accelerators, Spectrometers, Detectors and Associated Equipment.*

Frey, W. (Submission pending). Use of Positron Birth Location Probability Distribution Function to Increase Intrinsic Resolution of Positron Emission Tomography Images. *Nuclear Instruments & Methods in Physics Research, Sections A: Accelerators, Spectrometers, Detectors and Associated Equipment.*

Presentations

Frey W. (July 2009). Use of BC-523a Liquid Scintillator for Simultaneous Neutron Spectroscopy and Gamma Counting with the Implementation of a Neutron History Reconstruction Algorithm. National Health Physics Society Meeting, Minneapolis Minnesota.

Affiliations

National Health Physics Society (HPS)

College Teaching Experience

Spring 2010 (pending) External Dosimetry and Radiation Shielding, Oregon State University. Instructor.
Winter 2010 (pending) Societal Aspects of Nuclear Power, Oregon State University. Instructor.
Fall 2009 (pending) Nuclear Rules and Regulation, Oregon State University. Instructor.
Fall 2009 (pending) Radiation Protection, Oregon State University. Instructor.
Summer 2009 Advanced Nuclear Instrumentation, Oregon State University. Instructor.
Spring 2009 External Dosimetry and Radiation Shielding Oregon State University. Instructor.
Summer 2008 Internal and External Dosimetry, Oregon State University. Instructor.
Spring 2007 Nuclear Instrumentation, Oregon State University. Instructor.