

*Idaho Accelerator Center
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Professional Preparation

Portland State College	Physics	B.S. 1963
University of Wyoming	Physics	M.S. 1965
University of Wyoming	Physics	Ph.D. 1968
University of Utah	Physics	1968-1969

Appointments

2007-present	Emeritus Professor of Physics, Senior Scientist IAC	Idaho State University
1981-2007	Professor of Physics	Idaho State University
1994-2007	Director, Idaho Accelerator Center	Idaho State University
1983-1997	Chairman of Department of Physics	Idaho State University
1972-1977	Chairman of Department of Physics	Idaho State University
1973-1980	Associate Professor of Physics	Idaho State University
1969-1973	Assistant Professor of Physics	Idaho State University

Peer Reviewed Publications Since 2005

Electron linac based mixed-field transmutation of 129I

Mayir Mamtimin, Frank Harmon, Valeriia Starovoitova
Nuclear Instruments and Methods in Physics Research Section B Beam Interactions with Materials and Atoms 02/2015; 344.

Linac-Based Photonuclear Applications at the Idaho Accelerator Center

Mayir Mamtimin, Valeriia N. Starovoitova, Frank Harmon
International Journal of Modern Physics: Conference Series. 01/2014; 27.

Neutrons and Photons in Nondestructive Detection

J. Frank Harmon, D.P. Wells, A.W. Hunt
Reviews of Accelerator Science and Technology 04/2012; 04(01).

Sensitivity Upgrades to the Idaho Accelerator Center Neutron Time of Flight Spectrometer

S.J. Thompson, M.T. Kinlaw, J.F. Harmon, D.P. Wells, A.W. Hunt
AIP Conference Proceedings. 10/2007; 947(1).

Utilization of actively-induced, prompt radiation emission for nonproliferation applications

B.W. Blackburn, J.L. Jones, C.E. Moss, J.T. Mihalcz, A.W. Hunt, F. Harmon, S.M. Watson, J.T. Johnson
Nuclear Instruments and Methods in Physics Research Section B Beam Interactions with Materials and Atoms 08/2007; 261:341-346.

Time-dependent delayed signatures from energetic photon interrogations

Daren R. Norman, James L. Jones, Brandon W. Blackburn, Kevin J. Haskell, James T. Johnson, Scott M. Watson, Alan W. Hunt, Randy Spaulding, Frank Harmon
Nuclear Instruments and Methods in Physics Research Section B Beam Interactions with Materials and Atoms 08/2007.

Measuring the 20.2-ms half-life of the 472keV line from the isomer Na24m with pulsed photons at the Idaho Accelerator Center

P. L. Cole, J. L. Farley, E. T. E. Reedy, R. Spaulding, J. F. Harmon, D. P. Wells
Nuclear Instruments and Methods in Physics Research Section B Beam Interactions with Materials and Atoms 08/2007; 261(1):822-826.

Electron radiography

Frank Merrill, Frank Harmon, Alan Hunt, Fesseha Mariam, Kevin Morley, Christopher Morris, Alexander Saunders, Cynthia Schwartz
Nuclear Instruments and Methods in Physics Research Section B Beam Interactions with Materials and Atoms 08/2007; 261:382-386.

Status of the prototype Pulsed Photonuclear Assessment (PPA) inspection system

James T. Jones, Brandon W. Blackburn, Daren R. Norman, Scott M. Watson, Kevin J. Haskell, James T. Johnson, Alan W. Hunt, Frank Harmon, Calvin Moss
Nuclear Instruments and Methods in Physics Research Section A Accelerators Spectrometers Detectors and Associated Equipment 08/2007; 579:353-356.

The utilization of high-energy neutrons for the detection of fissionable materials

S.J. Thompson, M.T. Kinlaw, J.F. Harmon, D.P. Wells, E.B. Farfan and A.W. Hunt
Applied Physics Letters **90**, 074106 (2007).

Detection of shielded nuclear material in a cargo container

J.L. Jones, D.R. Norman, K.J. Haskell, J.W. Sterbentz, W.Y. Yoon, S.M. Watson, J.T. Johnson, J.M. Zabriskie, B.D. Bennett, R.W. Watson, C.E. Moss and J.F. Harmon
Nuclear Instruments & Methods in Physics Research A **562**, 1085 (2006).

Laser-Compton scattering as a tool for electron beam diagnostics

K. Chouffani, F. Harmon, D. Wells, J. Jones and G. Lancaster
Laser and Particle Beams **24**, 411 (2006).

Accelerator-based radiation sources for next-generation radiobiological research

L.C. DeVeaux, D.P. Wells, A. Hunt, T. Webb, W. Beezhold and J. F. Harmon
Nuclear Instruments & Methods in Physics Research A **562**, 981 (2006).

Inspection applications with higher electron beam energies

D.R. Norman, J.L. Jones, W.Y. Yoon, K.J. Haskell, J.W. Sterbentz, J.M. Zabriskie, A.W. Hunt, F. Harmon and M.T. Kinlaw
Nuclear Instruments & Methods in Physics Research B **241**, 787 (2005).

Gamma-induced positron annihilation spectroscopy and application to radiation-damaged alloys

D.P. Wells, A.W. Hunt, L. Tchelidze, J. Kumar, K. Smith, S. Thompson, F. Selim, J. Williams, J. F. Harmon, S. Maloy and A. Roy
Nuclear Instruments & Methods in Physics Research A **562**, 688 (2006).

Defect imaging of structural objects using positron annihilation spectroscopy

A.W. Hunt, R. Spaulding, J. Urban-Klaehn, J.F. Harmon and D.P. Wells
Nuclear Instruments & Methods in Physics Research B **241**, 362 (2005).

Investigation of shock wave effects on positron annihilation in copper and tungsten

F.A. Selim, J. Williams, D.P. Wells and J.F. Harmon
Nuclear Instruments & Methods in Physics Research B **241**, 253 (2005).

Development of accelerator-based γ -ray-induced positron annihilation spectroscopy technique

F.A. Selim, D.P. Wells, J.F. Harmon and J. Williams
Journal of Applied Physics **97**, 113539 (2005).

Positron lifetime measurements by proton capture

F.A. Selim, D.P. Wells and J.F. Harmon
Review of Scientific Instruments **76**, 33905 (2005).