

University of Notre Dame
College of Science
Department of Physics

NUCLEAR SEMINAR

Isotopes for the Nation's Future

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Monday, August 30, 2010 4:00 p.m. NSH 124
(Refreshments will be served prior to the seminar in 124 NSH)

Isotopes are vital to the science and technology base of the US economy. Isotopes, both stable and radioactive, are essential tools in the growing science, technology, engineering, and health enterprises of the 21st century. The scientific discoveries and associated advances made as a result of the availability of isotopes today span widely from medicine to biology, physics, chemistry, and a broad range of applications in environmental and material sciences. Isotope issues have become crucial aspects of homeland security. Isotopes are utilized in new resource development, in energy from bio-fuels, petrochemical and nuclear fuels, in drug discovery, health care therapies and diagnostics, in nutrition, in agriculture, and in many other areas.

The development and production of isotope products unavailable or difficult to get commercially have been most recently the responsibility of the Department of Energy's Nuclear Energy program. In FY09, this program was transferred to the Department of Energy's Office of Science in Nuclear Physics and renamed the Isotope Development and Production for Research and Applications Program (IDPRA). In preparation for this, the Nuclear Science Advisory Committee (NSAC) was requested to establish a standing subcommittee, the NSAC Isotope Subcommittee (NSACI), to advise the DOE Office of Nuclear Physics.

I will discuss the recommendations of this NSACI subcommittee with regards to the most compelling research opportunities and the suggested priorities to the office of science at DOE with regards to the future of isotope production.

1. "Isotopes for the nation's future", D. Geesaman and A. Aprahamian, to be published, Physics and Society (April 2010).

ALL INTERESTED PERSONS ARE CORDIALLY INVITED TO ATTEND