

Woodruff Nuclear & Radiological Engineering and Medical Physics  
Programs Seminar

# "Research and Development Activities to Support the Expansion of Nuclear Energy"

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Technology Integration Manager (Nuclear Science and Technology Division)

Oak Ridge National Laboratory

Thursday, February 19, 2009

Molecular Science & Engineering (MS&E, Room 3201A)

(901 Atlantic Drive – directly across from Neely)

11:00am to 12:00 Noon

*REFRESHMENTS WILL BE SERVED*

## Abstract

According to a recent survey of the nuclear power industry, the future expansion of nuclear energy will need research and development support to help meet a set of ambitious

goals. In a similar analysis of radioisotope production, industrial representatives highlighted the need for access to isotopes for commercial and medical uses. These research needs revolve around radioisotope production, radiochemical separations, and purification. In many cases, these R&D programs require specialized facilities similar to those found at Oak Ridge National Laboratory (ORNL) as well as many cross cutting educational disciplines. Ongoing research efforts in these areas at ORNL will be highlighted during this talk.

## Biosketch

**Robert (Bob) Wham** is heavily involved with radioisotope production and radiochemical separations including recycle of used nuclear fuel.

He currently serves as Technology Integration Manager and is responsible for six groups within the Nuclear Science and Technology Division. The groups cover diverse areas such as radiochemical processing, robotics, stable isotope production, radioisotope production, and design of remotely operated equipment.

Previously he was program manager for several radiochemical processing programs at the Radiochemical Engineering Development Center (REDC). The REDC is the production and distribution center for the DOE Heavy Element Program. The Californium-252 Sales and Loan program is also located at the REDC. He has led recent efforts to evaluate options for reestablishing domestic  $^{238}\text{Pu}$  production.

He obtained his BS in Chemical Engineering from the University of Illinois and his PhD in Chem. Engr. from University of Tennessee.