

## GREGORY J. HIRTZ

1 Bethel Valley Road, Oak Ridge TN 37831 | 865-574-8536 | hirtzgj@ornl.gov

---

### EDUCATION

University of Missouri - Columbia  
**MS Nuclear Engineering** 1991  
Thesis: Heating Measurements with a Lead Isothermal Calorimeter at the University of Missouri Research Reactor, June 1990, Edited by Dr. Das Kutikkad

University of Missouri - Columbia  
**BS Physics** 1989  
Chapter President Society of Physics Students (1987)  
Arts and Science Dean's list (1983)

### EMPLOYMENT

Oak Ridge National Laboratory June 1992 – Present

#### **Experimenter Interface, High Flux Isotope Reactor (HFIR)**

Design authority experiment compliance 10 CFR 830. Direct experiment facility use strategy and improvements for in-vessel, Neutron Activation Facility, Hydraulic Tube system and Gamma irradiation facility. Reactor contact for development and production of Se-75, Mo-99, Ac-227, Pd-109, Ir-192, W-188, Pu-238, and Cf-252. System engineer and safety basis support for experiments, facility cranes, pool system, gaseous and liquid waste, radiation protection, and experiments.

#### **Transportation Coordinator, HFIR**

Oversee activity of process, procedures, scheduling for all on-site and off-site RAM shipments originating from HFIR. Participant in developing ORNL transportation procedures, DOE and DOT audits.

Design authority and contractor contact, certificates 9228 (DOE) and 5797 (NRC), Task lead for shipping services for ORNL using Model 2000 cask in design, maintenance, and costing.

Subcommittee member, American Nuclear Standards Institute (ANSI N 14)

University of Missouri – Research Reactor 1990 – 1992

#### **Graduate Research Assistant**

Characterized MURR irradiation facilities

Author, *Guideline/Training Manual for Preparing a Reactor Utilization Request*, First Edition July 1992

University of Missouri – Research Reactor 1989 – 1990

#### **Student Lab Assistant**

Authored MURR Reactor Utilization Request for experiment installations

University of Missouri 1986 – 1988

#### **Student Technical Assistant**

Assisted Dr. Fred Ross in an NRC supported study of MURR graphite reflector radiation induced-swelling using X-ray diffraction, assisted in construction of crystallography preparation facility

University of Missouri – Biological Science Division 1982 – 1986  
**Student Lab assistant**  
 Laboratory equipment maintenance and support myoblast research for Dr. John David

#### PUBLICATIONS AND PRESENTATIONS

Safety Analysis Report for Packaging: GE-2000 HFIR Irradiated Fuel Element Transport Package, ORNL/RRD/INT-161 2021

Presenter, Discussion on Advanced Materials used for Safety Components, Isotope Target Design and Fabrication Workshop, Oak Ridge National Laboratory 2017

Modeling and Depletion Simulations for a High Flux Isotope Reactor Cycle with a Representative Experiment Loading, ORNL/TM-2016/23, David Chandler, Ben Betzler, **Greg Hirtz**, Germina Ilas, Eva Sunny 2016

Neutron Flux Characterization of a Peripheral Target Position in the High Flux Isotope Reactor, *Applied Radiation and Isotopes*, (59), M. A. Garland, S. Mirzadeh, C. W. Alexander, **G. J. Hirtz**, R. W. Hobbs, and F. F. Knapp Jr. 2003

Presenter, *Experience with ANSI N14.30 for In-Service Inspections of Semi-Trailer Used for Spent Fuel Shipments*, Sixth International Conference on Nuclear Engineering, San Diego, CA, May 13 1998

#### RECOGNITION

UT-Battelle Awards Night – Mission support in resumption of HFIR Spent Fuel shipping 2018

Significant Achievement Award (monetary) – Subject matter expert contribution to the Readiness Assessment for resumption of spent fuel shipment. 2017

Engineering support recognition from ORNL in the synthesis of element Ts-117. 2017

Significant Achievement Award (monetary)- Support to Preparation and Loading of RTGs in GE 2000 Cask For the Miscellaneous Facilities Disposition Project, Safety and Ecology Corporation (SEC) 2013

Significant Achievement Award (monetary) – Installation of improved hydraulic operated irradiation facility in the HFIR 2009

Significant Achievement Award (monetary) – Spent fuel inventory reduction, related to a cost saving of 11 \$M per year 2008

Accommodation for leading development, fabrication, and delivery of a reactor start-up source 2005

Annual Performance rating Distinguished Contribution - *“Performance has been consistently far beyond expectations and is so high as to uniquely differentiate him/her from virtually all others performing similar work at the Laboratory”* 2004

Research Reactors Director recognition for coordination of semi-trailer repairs 2002

Significant Achievement Award (monetary) - Chapter leader for the HFIR SAR 1999

Lockheed Martin Energy Research World Class Team Award in the area of spent fuel transportation 1998

Employee of the Month - Corrective actions for the repair of cask trailer 1997

Employee of the Month - Expedious off-site repair of spent fuel cask 1996

Significant Achievement Award (monetary) - Resumption of spent fuel shipments 1996

Letter of Commendation from U.S. Department of Energy Oak Ridge Operations for design resolution for spent fuel tools	1996
Team member for "Industry Best Procedure program" Halburin NUS	1995
Appointment to the ORNL Transportation Safety Committee	1995
Employee of the Month - Task leader staff training Model 2000 cask	1995
Appreciation luncheon by ORNL Compliance Assessment Team – Defense Nuclear Facility Safety Board Audit	1994
Significant Achievement Award (monetary) - Resumption of iridium production	1994
Operations and support award by ORNL Director - Contributions to cleanup of RAM	1994
Employee of the Month RRD - Expediting target removal from reactor pool	1994
Letter of Commendation by Research Reactors Division Director - Contributions to HFIR SAR	1993
Graduate Professional Council, Research and Creative Activities Forum, 2nd place finish	1991