

Robert Anthony Joseph III

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Experience

July 2008- present

Oak Ridge National Laboratory Oak Ridge, TN
R&D Staff

- Participate in various areas of the Nuclear Fuels Storage and Transportation Planning Project
- Perform systems analyses on the integrated waste management system
- Work package manager of Centralized Used Fuel Resource for Information Exchange (CURIE)
- Currently Hold DOE “Q” Clearance

May 2007- July 2008

B&W Y-12 National Security Complex Oak Ridge, TN
Criticality Safety Engineer

- Performed reviews of fissile material processes
- Performed NCS evaluations of fissile material processes
- Approved implementing documents and created models in KENO and MCNP

May 2006-May 2007

University of Tennessee Nuclear Engineering Department Knoxville, TN
Graduate Research Assistant working at ORNL

- Helped implement arbitrary polyhedral mesh capability into a S_N code
- Programmed significantly in FORTRAN 90
- Collaborated with experts in the field of computational geometry

June 2004-August 2005

Oak Ridge National Laboratory Oak Ridge, TN
Intern Working on Space Nuclear Power Safety

- Estimated radiation doses to astronauts on a mission to Mars
- Helped write a nuclear launch safety plan
- Studied active vs. passive reactivity control systems for a space reactor

May 2004-June 2004

UT/ORNL Chancellor’s Summer Internship Knoxville, TN
Research Assistant for Dr. Ronald Pevey, UT Nuclear Engineering Professor

- Created integration code in FORTRAN
- Worked with SCALE computing codes

Education

June 2007- present

Ph.D. in Nuclear Engineering
University of Tennessee, Knoxville
GPA: 3.94/4.0
Passed Ph.D. qualifying exam

June 2005-May 2007

M.S. in Nuclear Engineering
University of Tennessee, Knoxville
GPA: 3.95/4.0

August 2002-May 2006

B.S. in Nuclear Engineering
University of Tennessee, Knoxville

Publications:

R. A. Joseph III, R. L. Howard, and M. Nutt. "System Architecture Interaction Matrix." WM Symposia 2016, Phoenix, Arizona, USA, March 06—10, 2016.

J. J. Jarrell, R. A. Joseph III, Riley M. Cumberland, G. M. Petersen, J. Fortner, E. Kalinina, T. Severynse, "An Evaluation of Standardized Canisters in the Waste Management System," Proc. WM2016, Phoenix, AZ, March 6-10, 2016.

R. A. Joseph III, R. E. Hale, G. M. Petersen, R. L. Howard, and M. Nutt. "Process Flow Diagrams and Node Descriptions (PFDNDs) for the Waste Management System ." International High Level Radioactive Waste Management (IHLRWM) 2015, Charleston, South Carolina, USA, April 12—16, 2015.

J. Jarrell, R. A. Joseph III, J. Fortner, R. Hale, R. Howard, E. Kalinina, G. Petersen, R. Wilkerson, "Initial Evaluation of Standardized Canisters in the Waste Management System," Proc. ANS International High-Level Radioactive Waste Management Conference, Charleston, SC, April 12 – 16, 2015.

W. Nutt, E. Morris, F. Puig, R. Howard, J. Jarrell, R. Joseph III, and T. Cotton, "Waste Management System Architecture Evaluations," Proc. Waste Management 2014, Phoenix, AZ, March 2-6, (2014).

J. McFarlane, J. R. Bell, D. Felde, R. A. Joseph III, A. L. Qualls, and S. P. Weaver. "Performance of a Thermally Stable Polyaromatic Hydrocarbon in a Simulated Concentrating Solar Power Loop ." *AIMS Energy* 2, no. 1, 41—70, (2014).

B. B. Bevard, R. J. Ellis, R. L. Howard, S. E. Fisher, and R. A. Joseph III. *The Use of MOX Fuel in the United States: Bibliography of Important Documents and Discussion of Key Issues*. ORNL/LTR-2012/315. Oak Ridge, TN: Oak Ridge National Laboratory.2012.

A. L. Qualls, R. A. Joseph III, C. S. Chadwell, and E. F. Hancock. "The Fission Power System Control Drive Motor Testing." Nuclear and Emerging Technologies for Space, The Woodlands, Texas, USA, March 21—23, 2012.

R. A. Joseph III, C. O. Slater, T. M. Evans, S. W. Mosher, and J. O. Johnson. "Sensitivities and Uncertainties Related to Numerics and Building Features in Urban Modeling." *Nuclear Technology* 175, no. 1, 286—300, (2011).

Technology Skills:

- Proficient in Matlab, Fortran90, and AUTOCAD
- Proficient in TSL-CALVIN, TOM, KENO.V, KENO.VI, TSUNAMI and MCNP
- Working knowledge of TSM, HEATING 7.0 and Fault Tree Plus

Activities/ Awards:

- American Nuclear Society
- Tau Beta Pi, Omicron Delta Kappa, Phi Eta Sigma, National Society of Collegiate Scholars
- Bicentennial, Haensler, and Pasqua Nuclear Engineering Scholarships
- SASEF Judge 2009-2014