

Summary

BS and MS in Nuclear Engineering with nearly 22 years experience in various aspects of Shielding Technology applications; including Radiation Transport Methods, Nuclear Data Methods, Neutron Damage and Gamma Heating, Design Automation and Process Improvement, Materials Development and Evaluation, Scientific and Parallel Programming, Computer Code Quality Assurance, Fleet Shielding Support, and Shield Acceptance Testing. Technical liaison between working group and various other design organizations, National Labs, and Commercial Vendors. Responsible for significant mentoring, training, and recruiting activities.

Professional Experience

Oak Ridge National Laboratory

3/26/2012 – Present

Senior R&D Staff, Radiation Transport Group

3/26/2012 – Present

- Perform Design Analyses for Various Sponsors
- Perform Independent Technical Peer Reviews

Knolls Atomic Power Laboratories

3/90 – 3/2012

Senior Engineer, Office of Special Studies

2010 – Present

- Perform various tasks associated with foreign nuclear technology assessments
- Part time consultations for Shielding and Core Design groups

Engineer, Shielding Technology

1998 – 2009

- Lead Developer for improved nuclear data processing methods
- Cognizant Engineer/Developer for various design automation tools
- Cognizant Engineer for development, procurement, deployment, testing, training, and QA of numerous proprietary and/or 3rd party commercial radiation transport, source generation, activation and Curie content, and post-processing codes
- Technical liaison between work group and various other design organizations, National Labs, and Commercial Vendors
- Advanced Deterministic Transport Engineering Support Team member
- Perform shield acceptance testing
- Develop and present technical/business practices mentoring modules
- Support inter-lab and inter-agency design reviews
- Support laboratory recruiting programs

Engineer, Fleet Shielding

1994 – 1998

- Perform activation and Curie content analyses to support decommissioning projects
- Perform shielding calculations to support multiple transportation and disposal documents
- Implement use of new radiation transport tools for fleet support analyses
- Perform shield acceptance testing
- Provide technical guidance in radiation detection and measurement techniques
- Qualified member of Technical Assistance Team

Engineer, Shielding Methods Development

1990 – 1994

- Team member for development of design automation tools
- Cognizant Engineer for development, deployment testing, training, and QA of numerous proprietary and/or 3rd party commercial radiation transport, source generation, activation and Curie content, and post-processing codes
- Evaluate long term shielding material development data
- Perform shield acceptance testing
- Develop and present technical mentoring modules
- Support intra-lab design reviews

USNRC – Advisory Committee on Reactor Safeguards

7/89 – 2/90

Inter Fellow

- Perform independent research on a wide variety of topics of interest to Committee members

Education

- Master of Science in Nuclear Engineering – University of Missouri-Rolla 8/89
 - Thesis Topic: Flow Analysis of a Pressurized Water Reactor Core
- Bachelor of Science in Nuclear Engineering – University of Missouri-Rolla 12/83

Computer Skills

- Proficient in FORTRAN programming and the UNIX/Linux operating systems with working knowledge of X11/Motif and OpenGL graphics, MPI parallel programming, Perl, C, Java, HTML, Windows shell scripting, and Posix Thread parallel programming
- Proficient with numerous computational analysis tools, including: PARTISN, DORT/TORT, ATILA, NJOY TRANSX, ORIGEN, VIPRE, Pro/E, Ensign, and PVWAVE as well as a wide variety of proprietary computer codes and MS Office tools

Collateral Duties

- Member of various laboratory-wide committees, including:

Physics Functional Overseers Committee, Cross Section Users Committee, High Performance Computing Resource Council, High Performance Computing Users Group, Fleet Business Area Leadership Team
- Member of various intra-office self-directed teams, including:

Computer Procurement Team, Office Environment Team (founder), Web Development Team (founder), Training and Seminars Team, Shield Survey Engineer Qualification Board

Personal Development Courses

- Process Review Facilitation
- Project Management
- High Performance Organizations
- Covey 7 Habits
- Franklin Time Management
- Meyers-Briggs Personality Type Indicator

Professional Society Memberships

- American Nuclear Society
 - National Member since 1979
 - North East New York Local Member since 1990
 - Member of M&C2009 Organizing Committee
 - Chairman of M&C2009 Workshops Committee

Other

- Active DOE “Q” Clearance

References

- Professional and Personal References Available on Request