

EXPERIENCE

04/2013-present

**Reactor Engineer
Oregon State University – Corvallis, OR**

- Assist the Reactor Administrator and Reactor Supervisor with various experimental analyses of the OSTR
 - Neutronic analyses involving criticality and flux calculations
 - Burnup calculations to determine fuel depletion and plutonium production
 - Molybdenum production analyses
- Increase efficiency of OSTR operation through neutronic analyses (e.g. creating new CLICIT irradiation facility)
- Instruction of the spring-term Reactor Lab class (NE457/557)
- Supervise and schedule reactor operator trainees
- Perform the duties of Senior Nuclear Reactor Operator as listed below

03/2009-04/2013

**Senior Nuclear Reactor Operator
Oregon State University – Corvallis, OR**

- Safely operate 1 MW TRIGA research reactor in accordance with NRC technical specifications and license limits
- Create the weekly operating schedule and adjust schedule accordingly to ensure flexibility of operations to accommodate research projects
- Maintain operating records and ensure adherence to procedures and regulations
- Handle special nuclear material (SNM) and irradiated samples with assistance of radiation health physicists
- Maintain senior reactor operator license through license requalification program as well as consistent fitness-for-duty
- Interact with NRC inspectors, as well as state agencies (Oregon State Police, Oregon Department of Energy, etc.)
- Perform the duties of Reactor Supervisor when regular supervisor is not on duty, including the approval of irradiation requests, approval of fuel movements and approval of access to the protected area of the Reactor Building
- Perform the duties of Nuclear Reactor Operator as listed below

03/2008-03/2009

**Nuclear Reactor Operator
Oregon State University – Corvallis, OR**

- Operated reactor under the supervision of the Reactor Supervisor
- Conducted tours for classes and visitors
- Approve any design changes in accordance with 10 CFR 50.59
- 24-hour on-call emergency response in conjunction with Oregon State Police
- Obtained reactor operator license within 4 months of initial employment
- Assisted with reactor fuel conversion from HEU fuel to LEU fuel in fall 2008

10/1999-4/2005

**Assistant Unit Operator
Tennessee Valley Authority – Watts Bar Nuclear Plant – Spring City, TN**

- Assisted control room operators with plant operations, local operation of plant equipment and installing clearance orders
- Manipulated and examined different types of equipment including pumps, valves, electrical breakers, storage tanks
- Diagnosed equipment problems as part of the Fix-It-Now (FIN) team
- Inspected, received and handled Westinghouse PWR fuel
- Met and maintained requirements for unescorted nuclear plant access, including successful completion of physical and psychological examinations (MMPI) given by TVA medical department, as well as consistent fitness-for-duty

EDUCATION

Oregon State University, Corvallis, OR

M.S. in Nuclear Engineering, 2012

Thesis: Comparison of HEU and LEU Neutron Spectra in Irradiation Facilities at the Oregon State TRIGA Reactor

Member of Alpha Nu Sigma Society

University of Florida, Gainesville, FL

B.S. in Chemical Engineering, 1999

COMPUTER PROGRAMS/APPLICATIONS

MCNP

MATLAB

STAY'SL

Microsoft Office Suite – Excel, Word, Powerpoint, Outlook, Vizio

ACTIVITIES AND ABILITIES

- Taught NE 457/557 Reactor Lab Spring 2014/2015/2016
- Co-taught NE 457/557 Reactor Lab, Spring 2012 and 2013
- Training, Research and Test Reactor (TRTR) annual conferences in 2009, 2011, 2014 and 2016
- American Nuclear Society (ANS) conference in November 2016
- ATR NSUF Users Week - 2010
- First Aid/CPR trained since 2009