

### INSTRUCTORS

#### Al Jarvis – Senior Associate

Al Jarvis has over 40 year's experience in the nuclear industry. In 21 years with Structural Integrity/Finetech (Finetech was acquired by Structural Integrity in 2015), his main responsibilities include a variety of utility-direct and EPRI projects, assessments and conceptual designs related to water chemistry (for both BWR and PWRs), source term (for both BWRs and PWRs), condensate polishing, reactor water cleanup, radwaste processing, and makeup water. Al worked at the FitzPatrick power plant for 14 years in the Chemistry Department as the Senior Engineer and Chemistry Manager. Additional plant roles included Shift Outage Manager and Refuel Floor Coordinator. Al has a BS in Chemical Engineering.

#### Michelle Mura –

Technical Director, Operational Support Services  
Michelle Mura has over 24 years of experience in the nuclear industry. She recently joined SI, after working at EPRI as a Senior Technical Lead in the Water Chemistry Control Team. Before that, Michelle worked for Exelon Nuclear and served as the selected EPRI BWR Fuel Reliability Program Technical Advisory Committee Vice Chairperson, Co-Chair of the Mitigation Monitoring Focus Group, Industry Lead for the PWR, BWR, and Fossil Condensate Polishing Sourcebook, and served on several other committees. Michelle received her ANSI 3.1 Senior Reactor Operator Certification from Peach Bottom Atomic Power Station in 2012 and obtained her B.S. in Chemistry from the State University of New York at Oswego in 1996.

#### Leah Whiteker – Associate

Leah has over 18 year's of experience in the nuclear industry. She joined Structural Integrity in 2024 after serving in her previous role as a Senior Chemist at Xcel Energy's Monticello Nuclear Generating Plant. In that position, Leah led several significant projects for the chemistry department, including the EPRI inline HPGE smart chemistry pilot, the replacement of the online reactor water ion chromatograph, and the installation of the groundwater remediation demineralizer. Additionally, she managed the fuel monitoring program and implemented EPRI's mitigation and boiling water chemistry guidelines. Leah has a BS in Chemistry and an MBA.

### COURSE DESCRIPTION

This course provides practical, hands-on information and techniques for personnel responsible for operational chemistry analysis, corrosion prevention, and system diagnostics. Attendees are encouraged to bring plant data for group discussion and analysis. Common topics will be covered as well as reactor coolant chemistry and radiochemistry, condensate chemistry, balance of plant chemistry, demineralizer and filtration performance, start up and shutdown chemistry, corrosion concerns, and data evaluation techniques.

### WHO SHOULD ATTEND

Chemists and Engineers who desire a practical knowledge of Boiling Water Reactor operational water chemistry. This core course is designed for chemistry personnel that have a basic understanding of plant operation and plant systems, focusing on the essentials of reactor water, condensate and processing equipment used in BWR water chemistry operations.

### EVENT DETAILS

**Event Date:** Monday August 18<sup>th</sup> - Friday August 22<sup>nd</sup>, 2025

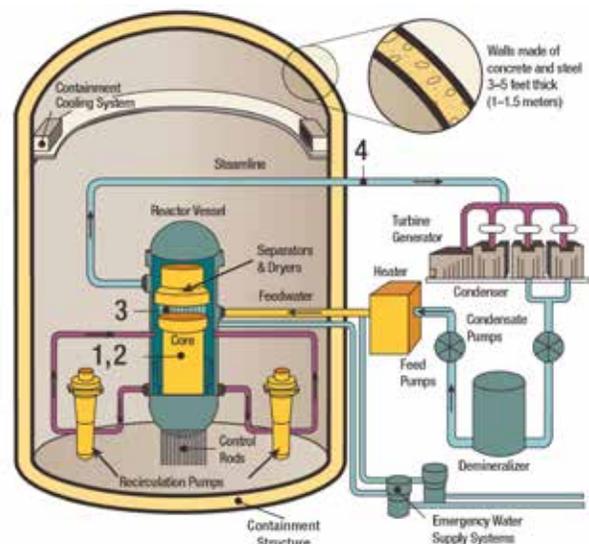
**Duration:** 8:00 a.m. to 4:30 p.m.; Friday 8:00 a.m. to 12:00 p.m.

**Individual Price:** \$2,400 (Includes light breakfast and lunch)  
Includes BWR Operational Chemistry Handbooks

**Location:** Hatch Energy Education Building  
11028 Hatch Pkwy N, Baxley, GA 31513

### REGISTRATION

[www.structint.com/bwr-operational-chemistry](http://www.structint.com/bwr-operational-chemistry)



## COURSE TOPICS

- Radiochemistry fundamentals
- Primary system overview
- RCS metallurgy
- RCS corrosion mechanisms
- RCS chemistry environments
- EPRI guidelines and requirements for RCS chemistry
- Corrosion product formation
- HWC and OLNC
- Shutdown and Startup chemistry practices
- Fission products and activation products
- Fission, fission yield, and fission decay chains
- BWR Systems including RWCU and Condensate
- Resin properties, structure, and performance evaluation
- Resin performance topics
- Fuel defects, the types of defects, and effects on radionuclides
- Gas removal in BWRs
- Factors that influence corrosion
- Impurity influence on corrosion
- Water and steam properties as they relate to steam generation
- Transient conditions

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