

TRAINING COURSE AUGUST 20-24, 2018

TESTING & TROUBLESHOOTING OF I&C SYSTEMS FOR NUCLEAR FACILITIES

WHO SHOULD ATTEND?

The course is designed for utilities, vendors, educators, and regulators involved with nuclear power plants, research reactors, fuel fabrication facilities, national and international laboratories, and universities.

LOCATION AND DATE

The course will be held over the week of August 20 – 24, 2018, at the AMS campus in Knoxville, Tennessee, USA.

HANDS-ON DEMONSTRATIONS

All course modules include hands-on demonstrations with state-of-the-art test equipment, hardware, software demonstrations, or interactive discussions.

INSTRUCTORS

The course is conducted under the direction of AMS President, Dr. H. M. Hashemian, who is assisted by senior AMS engineers with 10 to 20 years of experience in nuclear power plant I&C and related topics. In addition, Mr. David Lillis, former Senior I&C Engineer at Sizewell Nuclear Power Plant in the U.K., will be a guest lecturer in the course.

AREA ATTRACTIONS

AMS is located less than 1 hour from the beautiful Smoky Mountain National Park, the country's most visited national park. The resort city of Gatlinburg is less than an hour away and the Music City of America, Nashville, Tennessee, is only 3 hours away.

COURSE FEE

The first day you attend is \$500, each additional day is \$100.

GROUP DISCOUNT

For every two registered attendees from the same organization, the third is half price, and any additional attendees are at no additional cost.

PAYMENT

Payment can be made with credit card, check, cash, money order, or company purchase order.

WHERE TO STAY

There are many hotels near AMS; Country Inn & Suites is located within walking distance of the AMS campus: www.countryinns.com/knoxville/ams

REGISTRATION INFORMATION

Please contact Kate Davy at kate@ams-corp.com or call 865-691-1756, ext. 151.

COURSE WEBSITE

www.ams-courses.com

EXAMPLES OF COURSE CONTENT

DAY 1: I&C Fundamentals

- Temperature Instrumentation (RTDs and Thermocouples)
- Pressure, Level, and Flow Instrumentation
- Calibration and Response Time Testing of Temperature Sensors and Pressure **Transmitters**

DAY 2: Automated I&C Maintenance

- · On-line Calibration Monitoring of Temperature Sensors and Pressure, Level, and Flow Transmitters
- In-situ Response Time Testing of Temperature Sensors and Pressure **Transmitters**
- Operating Experience from Testing Temperature Sensors and Pressure Transmitters in Nuclear Power Plants

DAY 3: EMC and Wireless Technologies

- Overview of Electromagnetic Compatibility (EMC) of Digital Equipment
- EMI/RFI Considerations for Wireless Technology Implementation
- EMC Testing and EMI/RFI Troubleshooting

DAY 4: Cable Condition Monitoring and Aging Management

- · Fundamentals of Cable Testing **Technologies**
- · Testing and Troubleshooting of Nuclear Instrumentation Systems, Rod Control, Electrical, and I&C Circuits
- · Cable Insulation Aging Management and **Condition Monitoring**

DAY 5: Rod Control System Testing

- Rod Position Indication (RPI) System Overviews (ARPI and DRPI)
- · RPI System Diagnostics, Health Monitoring, and Operating Experience
- Rod Control System Overview (CRDM and CEDM)
- · Rod Control System Diagnostics, Health Monitoring, and Operating Experience