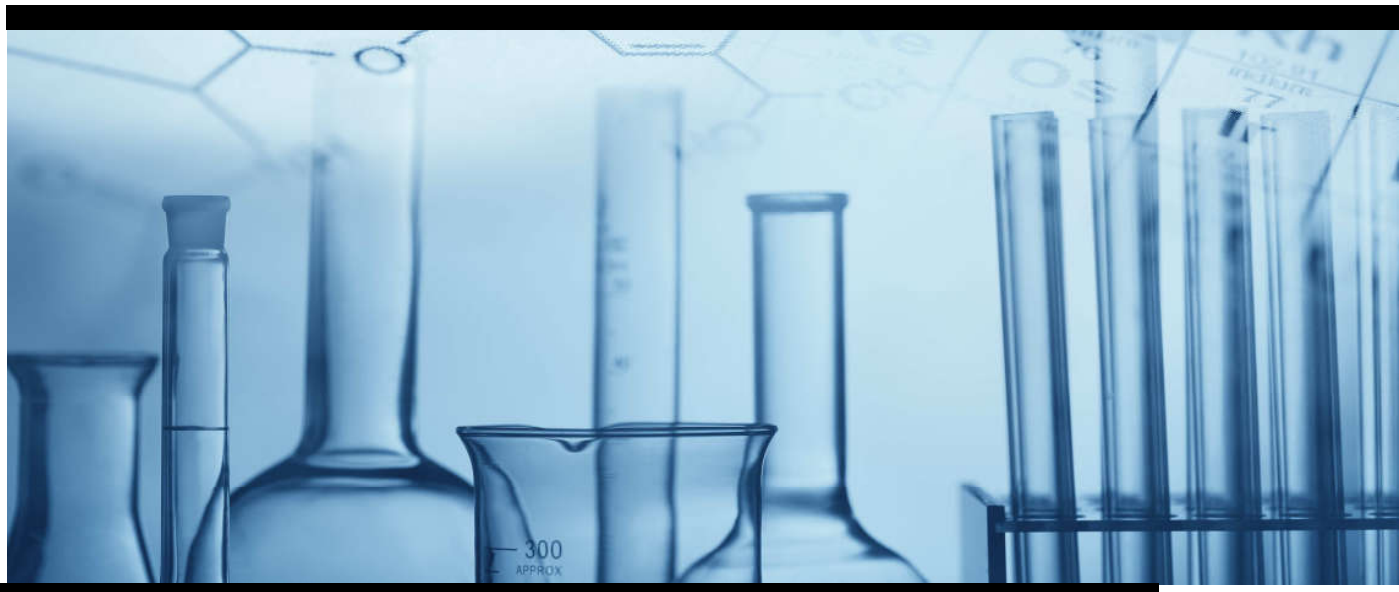
CURTISS-WRIGHT

Nuclear Division | Scientech



Advanced Laboratory QA/QC Practices

A Scientech Training Course

April 3-7, 2017
Clearwater, Florida

Course Overview

This is an intensive five-day laboratory QA/QC practices course featuring the information and techniques you need to establish and maintain a successful power plant laboratory QA/QC program. You will take home the tools andinformation you need to:

Develop your own defensible laboratory QA/QC program...
by satisfying the requirements of:

- ASTM
- Standard Methods
- INPO
- ISO 9000
- A2LA
- NVLAP
- EPRI
- EPA

Evaluate your existing laboratory QA/QC program...
by performing a detailed assessment to determine:

- how your program stacks up to the requirements
- specific case-study data for in-class lectures
- specific areas in need of improvements

Support your existing QA/QC program...
by developing statistically-based protocols for the:

- determination of significant bias (shifting mean)
- determination of persuasive bias (seven consecutive points)
- determination of significant trends (patterns)

Answer those difficult QA/QC questions once and for all...
by specifying detailed methodologies for:

- calibration of instruments
- precision checks of analytical methods
- accuracy checks for analytical methods
- certification of analytical competence
- analysis of external standards

Who Should Attend

This course is appropriate for laboratory personnel that are responsible for the implementation and execution of a successful laboratory QA/QC program. It focuses on an evaluation of your existing laboratory QA/QC program and an understanding of the statistics necessary to establish a successful laboratory QA/QC program.

This Course Covers

- Basis for a laboratory QA program
- Management considerations
- Administration and review of the program
- Quality control practices for the analytical laboratory
- Basis for control charts
- Recommended control chart practices for analytical chemistry laboratories in power plants
- Use of control charts
- Controls for establishing instrument performances
- On-line instrumentation
- QA/QC practices program overview
- Characterization of uncertainties
- Central tendency and dispersion
- Statistical models
- Stating uncertainties
- Propagation of uncertainties
- Tests for non-normal data
- Comparative laboratory testing
- Statistical basis for detection limits in analytical chemistry
- Other definitions of LLD or MDL

For a detailed course outline, call Rose Kieffer at 727.669.3055 or e-mail rkieffer@curtisswright.com

About the Instructor

Mr. David Russell has over 20 years experience in nuclear power plant chemistry. At San Onofre Nuclear Generating Station he held positions as Laboratory Technician and Laboratory Supervisor (7 years), Root Cause/Apparent Cause Analyst (5 years), Chemistry Instrumentation Specialist (4 years), and Chemistry QMS Program Manager (6 years). He also served as liaison with Internal/External Auditors (INPO, NRC, ELAP, etc.).

Dave has extensive experience with Lab Stats Pack. He was the Lab Stats Administrator for six years at San Onofre, a PWR. He oversaw five labs including Primary Chemistry, Secondary Chemistry, Condensate Polishers, Effluent Chemistry, and ELAP. He also oversaw the Lab Stats conversion from Access-based (version 7) to SQL-based (version 9) to SQL Win 7 64 bit (version 11) - approximately 125 control charts primarily statistically based, including charts for inter/intra laboratory check sample programs.

Dave has participated in many industry chemistry quality assessments including an INPO/WANO assessment at British Energy.

Dave has been an active member of the Power Plant Chemistry Advisory Group for six years and has served as both Chairman and Vice-Chairman.

Education and Professional Qualifications

Kean University, Bachelor's Degree
22 years experience in nuclear power plant chemistry
6 years experience as a Lab Stats Pack Administrator overseeingfive labs

Note: Attendees are encouraged to submit plant-specific QC data that can be used for in class examples and discussions.

Course Schedule

Monday through Friday Schedule, April 3-7 2017

M: 04/03	1:00 pm	—	5:00 pm	Course w/afternoon break
TWT: 04/4-6	7:30 am	—	8:00am	Continental breakfast in training room
	8:00 am	—	12:00 noon	Course w/ morning break
	12:00 noon	—	1:00 pm	Lunch at Sheraton's Island Grille Café
	2:00 pm	—	5:00 pm	Course w/afternoon refreshment break
F: 04/07	7:30 am	—	8:00am	Continental breakfast in training room
	8:00 am	—	12:00 noon	Course w/ morning break

Registration Information

Advanced Laboratory QA/QC Practices

The registration fee is $3885.00 per attendee and includes all course materials; continental breakfast each day; full lunch in Sheraton's Island Grille Café each day; afternoon refreshment breaks each day, and a Certificate of Educational Achievement for each student that successfully completes the course.

Register on-line at our secure web site:
www.chemistryapplications.scientech.com

1. In the menu in the middle of the screen, click **Event Schedule**
2. Under the 2017 heading, click **Advanced Laboratory QA/QC, April 3-7**
3. Click **Registration** in the menu box on the left side of the screen
4. Enter the registrant's e-mail address and leave the ID Code Box blank
5. Click **Continue** to complete the registration
6. A confirmation will be sent to you via e-mail

Register Today!

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The latest information on all Scientech Chemistry training courses and meetings is available on our Web site at *www.chemistryapplications.scientech.com*

Cancellation Policy

Scientech reserves the right to cancel this course at any time and refund the full amount of all registration fees paid. Scientech must have a minimum number of students to hold this course. When the minimum number of attendees is reached, Scientech will send a notice (21) days prior to the course start date, that the required quota has been met or the course has been cancelled. Any cancellations made after the date of the notification e-mail, the attendee will be charged a 75% cancelation fee.

Please do not make any non-refundable travel reservations until we tell you that the course will definitely be held as scheduled. Substitutions can be made at any time.

Hotel

A block of rooms has been reserved at the Sheraton Sand Key Resort at the rate of $224 per night. Please make your hotel reservations directly with the Sheraton by calling 727.595.1611. Be sure to specify that you are attending this Scientech course to receive the reduced rate. The room block will be released 30 days before each course. After that, the Sheraton cannot guarantee rate or availability.

Contact Information:

For general information contact Rose Kieffer at:
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