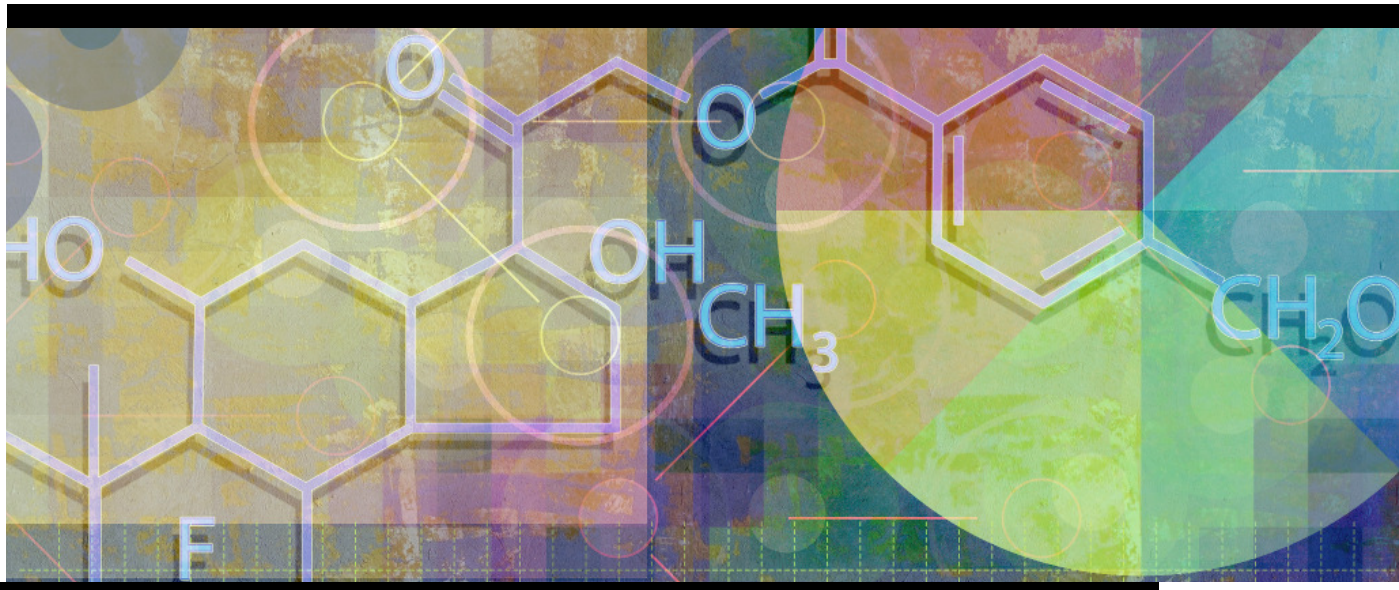
CURTISS-WRIGHT

Nuclear Division | **Scientech**



Power Plant Chemistry
Instrument Theory & Essentials

A Scientech
Training Course

May 6-10, 2019
Clearwater, Florida

Course Overview

Attend this ONE training course and get in-depth training on the Theory and Essentials of all the major power plant chemistry laboratory on-line and bench-top instruments!

- Gain a thorough understanding of theory and essentials to get the best results from your instruments at your plant.
- Bring new hires and recently promoted personnel up to speed and reduce the learning curve.
- Improve over-all job performance.
- **BONUS!** Your paid registration includes a User ID and Password to access Scientech's Chemistry Applications Web site. This site is a great source of information for power plant chemists. The most popular feature is the Question and Answer forum where any member can submit a question and it is automatically sent to all other members who can then respond to the question. Literally thousands of hours of on-the-job experience are reflected in their answers.
- **ADDITIONAL BONUS!!** Access to Chemistry Applications' Instrument Supplier Web-based portal. This site contains instrument-supplier populated information related to all their chemistry instrumentation. Suppliers can continuously update this resource center to provide the most current and relevant information to their clients.

Who Should Attend

This course is appropriate for power plant chemistry laboratory personnel responsible for sample analyses and instrument calibration, verification, and maintenance.

This Course Covers

This course combines dynamic teaching methods with cuttingedge and relevant information targeted to power plant chemistry personnel. Following is an abbreviated list of the topics covered:

- **Theory of Measurement**
- **Applications**
- **Requirements**
- **Interferences**
- **Temperature Effects**
- **Calibration**
- **Verification**
- **Limitations**
- **Maintenance**
- **QC Checks**

For all of the following:

— Total Organic Carbon
— pH
— X-Ray Fluorescence
— Particle Counting
— Atomic-Absorption Spectroscopy (AA)
— UV-VIS Spectroscopy
— Dissolved Oxygen - Diffusion Method
— Dissolved Oxygen - Equilibrium Method
— Dissolved Oxygen - Luminescent Sensor Method
— Ion Chromatography
— Oxidation-Reduction Potential (ORP)
— Gas Chromatography
— Inductively Coupled Plasma (ICP)
— Chloride
— Sodium
— Conductivity

Plus a Bonus Section on Chemistry Laboratory QA/QC Practices

About the Instructor

In his 14 years at Florida Power Corporation's Crystal River facility, Mr. Witherow held positions as Laboratory Supervisor, Plant Chemist, and Head of Corporate Fossil Chemistry. He also served as Corporate Quality Control Officer for the State of Florida COMPQA program.

- Over 30 years experience in industries including:
  - Organic feedstock production
  - Coal gasification pilot plant research
  - Environmental laboratory direction
  - Electric utility operation
- Utility experience includes:
  - Oversight of corporate chemistry program
  - Technical support to simple cycle combustion turbines and combined cycle CT/HRSG plants
- High purity water production processes includes:
  - Cold lime softening
  - Demineralization
  - Evaporation
  - Reverse osmosis
- Cooling tower experience includes:
  - Hyberbolic and mechanical draft salt water systems using dispersants, penetrants, and biocides for fill deposition control
- Central laboratory oversight includes:
  - Fuel analyses (oil and coal)
  - Transformer oil analyses
  - Water analyses using AA, HGA, ICP, automated and manual bench testing
  - Field sampling and analyses protocols
- Coal gasification pilot plant experience includes:
  - High-pressure sampling
  - Chemical analyses of synthesis gas and waste streams
  - Analyses of fuels, slags, ashes, and chemical deposits

Course Schedule

Monday through Friday Schedule, May 6-10, 2019

M: 5/6	1:00 pm	—	5:00 pm	Course w/afternoon break
TWT: 5/7-9	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: 5/10	7:30 am	—	8:00am	Continental breakfast in training room
	8:00 am	—	12:00 noon	Course w/ morning break

Registration Information

Power Plant Chemistry Instrument Theory & Essentials

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 2019 heading, click **Power Plant Chemistry Instrument Theory & Essentials, May 6-10**
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 $189 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:

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