



# PERDC

PROCESS ENGINEERING RESEARCH  
& DEVELOPMENT CENTER

TEXAS A&M ENGINEERING EXPERIMENT STATION

Formerly "Food Protein Research & Development Center"

## Practical Short Course on

### **Water Quality Management: Municipal, Industrial, and Environmental Applications July 14-16, 2019**

Organized by the  
Process Engineering Research & Development Center  
Separation Sciences Program  
Texas A&M Engineering Experiment Station  
The Texas A&M University System  
College Station, Texas 77843-2476 U.S.A

#### SCHEDULE

##### **Sunday, July 14, 2019**

5:00 pm Registration, Welcome and Announcements- Hyatt Place  
College Station Lounge

##### **Monday, July 15, 2019**

8:00 am *Welcome and Introduction to course.* **Carl Vavra, Rich Clough**

8:15 am *Overview of Technologies for Water & Wastewater Treatment.* **Peter Cartwright**

9:30 am *Basics of Bag & Cartridge Filters for Liquid Applications.* **Jason Reed & Lance Hinojosa**

##### **10:15 am Break**

10:30 am *New Ceramic Membranes & Their Applications.* **Grady Coberly**

11:15 am *Threat Assessment from Water Borne Hazardous Materials: Wearable Field Devices for First Responders & Emergency Management Personnel.* **David Burnett**

12:00 pm Lunch

1:15 pm *Cleaning & Sanitizing.* **Ed Sylvester**

2:10 pm Bus departs for TEES PERDC RELLIS Campus facility for equipment demonstration

2:30 pm Bus arrives at TEES PERDC RELLIS Campus facility

##### **Demonstrations:**

1. *Review of Membrane Materials & Examples of Membrane Filters.* **Peter Cartwright**
2. *Review of Types of Bag filters & other Pre-treatment Technologies for Liquids.* **Jason Reed & Lance Hinojosa**
3. *Ceramic Membrane Filter Demo.* **Grady Coberly**
4. *Review of Membrane Filtration Systems.* **Steve Shiner**

4:00 pm Bus returns to hotel

##### **Tuesday, July 16, 2019**

8:00 am *Water Deionization for Agricultural Uses.* **Dewitt Dees**

8:45 am *New Aeration Technology for Treating Wastewaters.* **Todd Vlasak**

9:30 am Refreshment Break

9:45 am *Sizing Membrane Systems from Pilot Test to Production Scale.* **Steve Shiner**

10:30 am *Advanced Analytics for Your Water Analysis.* **Keith McLeroy**

11:15 am Break

11:30 am *TOC - Total Organic Carbon, TPH - Total Petroleum Hydrocarbon & Grease Monitoring.* **Gary Erickson**

12:15 pm Lunch

1:30 pm *Chlorine Dioxide Disinfection in Drinking Water.* **John Robinson**

2:15 pm Bus departs for EcoLyse facility equipment demonstration

2:30 pm Bus arrives at EcoLyse facility

##### **Demonstrations:**

1. *Retego Analytical.* **Keith McLeroy**
2. *TOC Total Organic Carbon.* **Gary Erickson**
3. *Aeration Technology.* **Todd Vlasak**
4. *Disinfecting Drinking Water.* **John Robinson**

4:00 pm Bus returns to hotel

#### GENERAL INFORMATION

This day and a half course will be a "hands-on" experience covering pretreatment technologies, membrane filtration operations, post treatment technologies, and integration of best practices in processing facilities and municipal systems.

#### OBJECTIVES OF SHORT COURSE

- To provide practical and theoretical training on the application of membranes and other separation technologies to water reclaim and reuse in manufacturing and municipal applications, which includes cost/benefit analysis.
- To provide training in water quality analytics and application to industrial, environmental, and municipal water.
- To demonstrate the operation of actual equipment commonly seen in the field and review the practical aspect of their operation.

#### WHO SHOULD ATTEND

Personnel from the food, feed, or fuel production facilities. Any manufacturer with a municipal water discharge.

#### ACCOMMODATIONS

Reservations for lodging should be made directly by attendee. A block of rooms has been reserved at the Hyatt Place College Station for short course participants at the special rate of \$89/night plus tax for single or double occupancy. Ask for the rate specifically and mention the Group Code "Water Technology Short Course." Hotel reservations must be received before July 1, 2019 in order to get special rate. You can make your reservation by telephone, fax, or the internet:

##### **Hyatt Place College Station**

1100 University Drive E  
College Station, Texas 77840, USA  
Tel: 979-846-9800; FAX: 979-846-9801

<https://www.hyatt.com/en-US/hotel/texas/hyatt-place-college-station/clzc>

When faxing or emailing hotel reservations, please include a credit card number to confirm your reservation, and also include your departure and arrival dates.

You can register online at <https://perdc.tamu.edu/short-courses/>

## TRANSPORTATION

Easterwood Airport at College Station is easily reached by about 10 flights daily. From Dallas/Ft. Worth International Airport connect via American Airlines. From Houston Intercontinental Airport connect via Continental Airlines. The airport code for Easterwood Airport is CLL. To get to the hotel in College Station, participants can call the Hyatt Place (979-846-9800) 24 hours in advance before arrival at Easterwood Airport for courtesy van service or schedule a pickup with GroundShuttle.com (855.303.4415) from George Bush Intercontinental airport (IAH) or Houston Hobby airport (HOB)

## REGISTRATION

The registration fee for the short course and pilot plant demonstrations includes daily lunch, refreshments at breaks, local transportation, a short course eBook manual, and certificate of completion. **Registration fee is \$599. Registration fees are not refundable**, but substitute personnel may be sent by the same firm. Space is limited; therefore, applications will be accepted on a first-come, first-served basis. Rights to substitute speakers, change topics and schedules as necessary to expedite the course are reserved. Participants must be pre-registered before arrival in College Station.

You can register online at

<https://perdc.tamu.edu/short-courses/>

You can pay by credit card (American Express, Visa, or Master Card) online.

If paying by check, make payable to **TEES (Texas A&M Engineering Experiment Station) and mail to TEES Fiscal Office c/o TEES Edge Program 7607 Eastmark Dr., Suite 250 D College Station, TX 77840.**

**For registration inquiries, contact:**

**Cyndi Casanova**

Short Course Coordinator

Process Engineering R&D Center

2476 TAMU

College Station, Texas 77843-2476 U.S.A.

Tel: 979.845.2741

Fax: 979.845.2744

Email: [shortcourse@tamu.edu](mailto:shortcourse@tamu.edu)

## LOCATION AND FACILITIES

All lectures will be held at Rudder Tower, Texas A&M University Campus College Station temperatures in July are around 75-95 °F (24-35 °C). Manuals and lectures will be in English. Participants will be taken by bus to the Texas A&M RELLIS Campus as well as the EcoLyse facility for afternoon demonstrations.

## SHORT COURSE CONDUCT

All short course sessions will be informal. Insurance policies do not allow non-university personnel, other than original manufacturers, to operate equipment. Questions are encouraged during the lectures, breaks, and social periods. **Laptops are allowed in the classroom to follow the presentations in the short course eBook manual.** If you require WiFi access during the conference, please inform the Short Course Coordinator when you register (the hotel has its own WiFi access and is separate from the conference). Rights to cancel this course with refund, to deny service, to substitute speakers, and to change schedules, as necessary to expedite the course, are reserved. Texas A&M University System policy does not allow inclusion of alcoholic beverages in registration fees.

## INSTRUCTORS

**Carl Vavra**, Senior Research Associate, Separation Sciences Program, Process Engineering R&D Center, Texas A&M University  
**Dr. Rich Clough**, Interim Head, Separation Sciences Program, Process Engineering R&D Center, Texas A&M University  
**Peter Cartwright**, President, Cartwright Consulting  
**Jason Reed**, Filtration Product Manager, Hatfield & Company  
**Lance Hinojosa**, Director of Sales, Hatfield & Company  
**Grady Coberly**, Director of Sales, Nanostone Water  
**David Burnett**, Associate Research Scientist, TEES Texas Center for Applied Technology, Texas A&M University  
**Ed Sylvester**, Director of Filtration, Ion Exchange, and Membrane Technologies, ChemTreat  
**Steve Shiner**, Executive VP Engineering, Energy Water Solutions  
**Dewitt Dees**, Chief Sales Officer, Voltea  
**Todd Vlasak**, President & CEO, Aeromax Systems  
**Keith McLeroy**, Consultant, Retego Labs & Water/Wastewater Consultant  
**Gary Erickson**, Senior Marketing Manager, SUEZ Water Technology Solutions  
**John Robinson**, District Sales Manager, Evoqua Water Technologies, LLC

## UPCOMING PRACTICAL SHORT COURSES

For details, visit <https://perdc.tamu.edu/short-courses/>

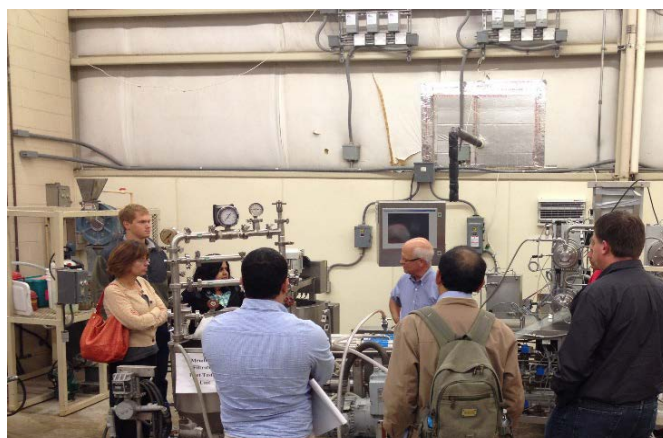
**For additional technical information, contact:**

Dr. Rich Clough

Process Engineering R&D Center

Texas A&M University System

Tel: 979.862.2262 Email: [rclough@tamu.edu](mailto:rclough@tamu.edu)



You can register online at <https://perdc.tamu.edu/short-courses/>