



# Environmental Measurement Symposium

*“The Environment in 2020:  
Past, Present and Future”*

**Preliminary Program**

Virtual Event  
August 3 – 21, 2020

# SYMPOSIUM SPONSORS



**Agilent Technologies**



A Waters Company

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**SIGMA**



Pure Chromatography



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S C I E N T I F I C

# WELCOME

The 2020 Environmental Measurement Symposium, which is typically the combined meeting of the Forum on Environmental Accreditation and the National Environmental Monitoring Conference (NEMC), will be held as a virtual event this year and will focus on the technical presentations of the NEMC portion of the meeting. The Symposium is co-sponsored by The NELAC Institute (TNI) under cooperative agreement with the U.S. Environmental Protection Agency (USEPA). This year, the Symposium's theme is "The Environment in 2020: Past, Present and Future." Some of the highlights for the week include:

- A **Technical Program** featuring over 130 oral presentations, a special half-day general session with a keynote speaker focused on the conference theme and updates from EPA program offices, two special keynote lunch presentations on the conference theme, and 6 vendor luncheon presentations,
- A **Virtual Poster Session** with 39 poster presentations,
- A **Virtual Exhibit Program** showcasing the latest innovations in environmental monitoring, and
- An **Innovative New Technology Showcase**.

For detailed information, visit the website at <https://nemc.us>.

## The Benefits of Attending

All Symposium attendees have the valuable opportunity to share new monitoring approaches and technologies and contribute to discussions regarding regulatory issues and initiatives. As an attendee, you are able to:

- Obtain the information you need to better plan for future capital purchases, research, and staffing levels;
- Learn how to save time and money when performing sampling and analysis techniques;
- Improve the quality and efficiency of your analyses; and
- Learn about new technologies and regulations.

## What is the NEMC?

The National Environmental Monitoring Conference (NEMC) is the largest conference focused on environmental measurements in North America! The conference brings together scientists and managers from federal and state agencies, the regulated community, academia, and laboratory and engineering support communities. NEMC features presentations, posters, training, exhibits, and networking opportunities.

The technical program is organized by a committee of environmental experts from government, academia, and private industry to bring together a balance of technical and policy topics for each year's symposium that are of interest to all. The conference was initiated in 1985 as part of EPA's efforts to foster a partnership among the Agency, the regulated community, the public, state regulatory agencies, and the other members of the monitoring community.

For more information, go to <https://nemc.us> or [#nemcus #NEMC2020](https://twitter.com/nemcus).



# TECHNICAL PROGRAM

The NEMC Technical Program is organized into 31 breakout sessions in four separate tracks, a plenary session, and 8 luncheon presentations. Attendees have the ability to view each presentation live or view a recorded version that will be made available shortly after the presentation. Registration is by specific track or by full conference. All times are Eastern Daylight Time. The plenary session, lunch speakers, poster session, and Innovative New Technology Showcase are included with any registration. Be sure to check <https://nemc.us> for session details.

## POSTER SESSIONS

**August 3 and August 21, 2020**

Visit the Poster Session on the 2020 NEMC Conference website between **August 3 and August 21, 2020** to view and comment on over 40 virtual posters. Presenters will be available during each week to respond to comments on their posters!

## INNOVATIVE NEW TECHNOLOGY SHOWCASE

**Thursday, August 13, 2020**

**3:15 – 4:45 pm (EDT)**

The Innovative New Technology Showcase allows up to twelve (12) organizations to showcase innovative new technologies such as sensors, sampling devices, personal monitoring devices, and other new or innovative approaches to environmental monitoring.

The Showcase will feature:

- A five-minute virtual presentation for all those attending the Showcase to hear about each technology; and
- A virtual Q & A session with attendees following the presentations.

# TECHNICAL PROGRAM

## ANALYTICAL CHEMISTRY TRACK

All times are Eastern Daylight Time

### Monday, August 3

- 9:55 – 10:00 Welcome to NEMC 2020  
10:00 – 12:15 Advances in High Resolution Mass Spectrometry and its Emerging Environmental Applications  
12:30 – 1:15 Keynote Lunch Presentation

*Present at the Creation:*

*The 50-year Evolution Environmental Instrumentation and Methodology*

Dave Kennedy, Phenomenex

- 1:30 – 3:30 Challenges and Opportunities for Solid Phase Extraction

### Tuesday, August 4

- 10:00 – 12:15 Air Methods, Monitoring and Technology (Session 1)  
12:15 – 1:00 Lunch Break  
1:00 – 4:45 Air Methods, Monitoring and Technology (Session 2)

### Wednesday, August 5

- 10:00 – 12:30 Plenary Session
- The Environment in 2020: Past, Present, and Future
  - EPA Clean Water Act (CWA) Methods Activities
  - Safe Drinking Water Act (SDWA) Updates and Current Activities
  - EPA's SW-846 Methods Program: Current Activities and Path Forward
- 12:30 – 1:15 Lunch Break  
1:15 – 5:00 Drinking Water

### Thursday, August 6

- 10:00 – 12:15 Wet Chemistry Automation (Session 1)  
12:30 – 1:15 Lunch Presentation:
- A History of EPA Regulations and  
How They Created the Environmental Testing Industry*  
Jerry Parr, The NELAC Institute, and  
Judy Morgan, Pace Analytical

- 1:30 – 3:30 Wet Chemistry Automation (Session 2)

### Friday, August 7

- 10:00 – 12:15 Environmental Forensics  
12:15 – 1:00 Lunch Break  
1:00 – 4:15 Metals Analysis and Remediation

# TECHNICAL PROGRAM

## ENVIRONMENTAL MONITORING TRACK

All times are Eastern Daylight Time

### Monday, August 10

- 9:55 – 10:00 Welcome to NEMC 2020
- 10:00 – 12:45 50 Years of Progress in Environmental Monitoring
- 12:45 – 1:30 Lunch Break
- 1:30 – 3:00 Advances in Field Sampling, Measurement, and Sensor Technologies
- 3:15 – 4:45 Shale Oil and Gas

### Tuesday, August 11

- 10:00 – 12:15 Academic Research Topics in Environmental Measurement and Monitoring
- 12:15 – 1:00 Lunch Break
- 1:00 – 3:00 Citizen Science
- 3:15 – 4:45 Current Topics in Microbiology

### Wednesday, August 12

- 10:00 – 12:15 Collaborative Efforts to Improve Environmental Monitoring (Session 1)
- 12:30 – 1:00 Lunch Presentation:  
*Microplastics Analysis: Simplified Workflows for Comprehensive Characterization in the Environment*  
Dr. Jeff Prevatt, PIMA County Wastewater Reclamation Dept.,  
and Dr. Tarun Anumol, Agilent Technologies
- 1:15 – 4:30 Collaborative Efforts to Improve Environmental Monitoring (Session 2)



**Agilent Technologies**

### Thursday, August 13

- 10:00 – 12:15 New Organic Monitoring Techniques (Session 1)
- 12:30 – 1:15 Lunch Presentation:  
*Analysis of Underivatized Glyphosate and Other Polar Contaminants by LC-MS/MS*  
Restek Corporation
- 1:30 – 3:00 New Organic Monitoring Techniques (Session 2)
- 3:15 – 4:45 Innovative New Technology Showcase



# TECHNICAL PROGRAM

## LABORATORY OPERATIONS AND MANAGEMENT TRACK

All times are Eastern Daylight Time

### Friday, August 14

- 9:55 – 10:00 Welcome to NEMC 2020  
10:00 – 11:45 Identifying and Combatting Inappropriate Laboratory Practices  
12:30 – 1:15 Lunch Presentation

*Discover Innovative Solutions for the Environment in 2020*  
Shimadzu Scientific Instruments



- 1:30 – 4:15 Public and Private Environmental/ Public Health Laboratory Partnerships

### Monday, August 17

- 10:00 – 12:45 Best Management Practices for Environmental Laboratories  
1:00 – 1:30 Lunch Presentation

*Leveraging Instrument Sensitivity - Customers, Laboratories,  
and Regulators Benefiting From Evolving Lab Practices*  
Brian Pike, Pace Analytical IDEA Laboratory, and Agilent Technologies



**Agilent Technologies**

- 1:45 – 4:30 Building Consensus Methods to Support Environmental Laboratories

### Tuesday, August 18

- 10:00 – 12:15 Laboratory Informatics  
12:30 – 1:15 Lunch Presentation

*What Else or What is Next After Dioxins?*  
Coreen Hamilton, SGS-AXYS, and  
Waters Corporation



- 1:30 – 4:45 Data Quality, Management, and Review

### Wednesday, August 19

- 10:00 – 11:30 Operational and Advocacy Issues Impacting the Environmental Laboratory Industry  
12:15 – 1:00 Lunch Presentation

*New Product: Determination of Per- and Polyfluorinated Alkyl  
Substances (PFAS) in Drinking Water using Automated  
Solid-phase Extraction and LC-MS/MS*  
ThermoFisher Scientific



# TECHNICAL PROGRAM

## PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) TRACK

All times are Eastern Daylight Time

### Wednesday, August 19

- 1:25 – 1:30 Welcome to NEMC 2020  
1:30 – 4:45 Polyfluoroalkyl Substances (PFAS) in the Environment (Session 1)

### Thursday, August 20

- 10:00 – 12:45 Polyfluoroalkyl Substances (PFAS) in the Environment (Session 2)  
12:45 – 1:30 Lunch Break  
1:30 – 4:15 Polyfluoroalkyl Substances (PFAS) in the Environment (Session 3)

### Friday, August 21

- 10:00 – 12:45 Polyfluoroalkyl Substances (PFAS) in the Environment (Session 4)  
12:45 – 1:30 Lunch Break  
1:30 – 4:15 Polyfluoroalkyl Substances (PFAS) in the Environment (Session 5)



# KEYNOTE LUNCHEON PRESENTATIONS

All times are Eastern Daylight Time

Monday, August 3, 12:30 – 1:15

*Present at the Creation: The 50-year Evolution Environmental Instrumentation and Methodology*  
Dave Kennedy, Phenomenex

Thursday, August 6, 12:30 – 1:15

*A History of EPA Regulations and How They Created the Environmental Testing Industry*  
Jerry Parr, The NELAC Institute, and  
Judy Morgan, Pace Analytical

Wednesday, August 12, 12:30 – 1:00

*Microplastics Analysis: Simplified Workflows for Comprehensive Characterization in the Environment*  
Dr. Jeff Prevatt, PIMA County Wastewater Reclamation Dept and Dr. Tarun Anumol, Agilent Technologies

Thursday, August 13, 12:30 – 1:15

*Analysis of Underivatized Glyphosate and Other Polar Contaminants by LC-MS/MS*  
Restek Corporation

Friday, August 14, 12:30 – 1:15

*Discover Innovative Solutions for the Environment in 2020*  
Shimadzu Scientific Instruments

Monday, August 17, 1:00 – 1:30

*Leveraging Instrument Sensitivity: Customers, Laboratories, and Regulators  
Benefiting From Evolving Lab Practices*  
Brian Pike, Pace Analytical IDEA Laboratory, and Agilent Technologies

Tuesday, August 18, 12:30 – 1:15

*What Else or What is Next After Dioxins?*  
Coreen Hamilton, SGS-AXYS, and  
Waters Corporation

Wednesday, August 19, 12:15 – 1:00

*New Product: Determination of Per- and Polyfluorinated Alkyl Substances (PFAS)  
in Drinking Water using Automated Solid-phase Extraction and LC-MS/MS*  
ThermoFisher Scientific

# EXHIBITORS

## (Preliminary List)

Agilent Technologies	Phenomenex
Biotage	Phenova, A Phenomenex Company
CEM Corporation	PRōMIUM
CTL Scientific	Qualtrax, Inc.
DSP Systems	Restek Corporation
Environmental Express	SampleServe, Inc.
ERA, A Waters Company	SEAL Analytical, Inc.
FIALab Instruments, Inc.	Shimadzu Scientific Instruments
GFS Chemicals, Inc.	Skalar, Inc.
HORIZON Lab Systems, LLC	SUEZ–Sievers Instruments
INFICON	Teledyne Tekmar
International Accreditation Service, Inc.	Teledyne Leeman Labs
LGC Standards	Teledyne CETAC Technologies
MACHEREY-NAGEL	ThermoFisher Scientific
ManSci, Inc.	Timberline Instruments
Markes International	UCT, Inc.
Metrohm USA	Waters Corporation
MilliporeSigma	Wellington Laboratories
PerkinElmer	

Visit our Virtual Exhibit Hall filled with instrument manufacturers, laboratory suppliers, LIMS providers, and other laboratory service providers. See the latest developments in measurement technology, proficiency testing, sample preparation, and laboratory automation.

### Virtual Exposition Dates

August 3 – August 21

For more information about exhibiting, contact the NEMC Exhibit Coordinator

**Joel Holtz**

[joel.holtz@nelac-institute.org](mailto:joel.holtz@nelac-institute.org)

# CONFERENCE REGISTRATION

To Register, go to <https://iattend.net/EventHome?id=ems20>  
You can register on-line or complete the registration form below and send it to

The NELAC Institute  
PO Box 2439  
Weatherford, TX 76086  
FAX: 817-423-6777  
Phone: 817-598-1624

Email: [suzanne.rachmaninoff@nelac-institute.org](mailto:suzanne.rachmaninoff@nelac-institute.org)

## REGISTRATION FORM

National Environmental Monitoring Conference / August 3 – 21, 2020

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

### Classification

Pick the Category that best describes your organization

- Academic
- Engineering or Consulting Firm
- Government Agency (non-laboratory)
- Laboratory, Commercial
- Laboratory, Government (Municipal, State, Federal)
- Regulated Industry
- Vendor/Supplier (LIMS Providers, PT Providers, etc.)
- Other

TRACK	Full Conference
Analytical Chemistry	<input type="checkbox"/> \$100
Environmental Monitoring	<input type="checkbox"/> \$100
Laboratory Operations and Management	<input type="checkbox"/> \$100
Per and poly fluorinated substances (PFAS)	<input type="checkbox"/> \$100
Register me for all four tracks	<input type="checkbox"/> \$300

**\*Notes:** Registration for any track includes access to all keynote, plenary, lunch and poster presentations, the Virtual Exhibit Hall, and the Innovative New Technology Showcase.

### Payment Options

Purchase Order #: \_\_\_\_\_

Check: Make payment to [The NELAC Institute](#)

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Print name as it appears on the card

Tax ID #: 81-0554715

### Send Payment & Registration to:

The NELAC Institute  
P. O. Box 2439  
Weatherford, TX 76086-0822  
TEL 817-598-1624  
FAX 817-423-6777

or email to:

[suzanne.rachmaninoff@nelac-institute.org](mailto:suzanne.rachmaninoff@nelac-institute.org)