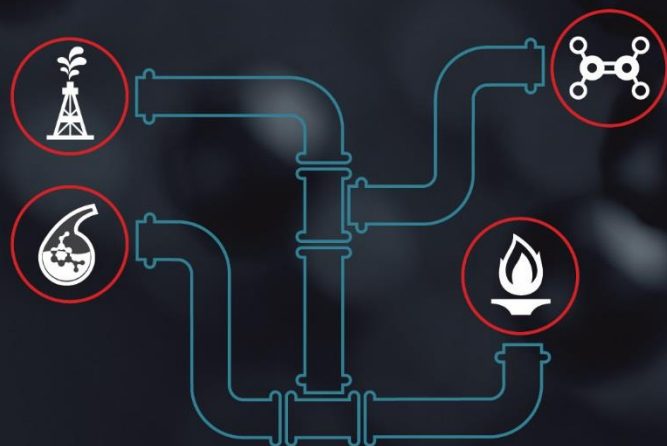


Innovative solutions for oil,  
chemical & polymer analysis

## Seminar Tour 2020



# St. Paul, MN • April 16, 2020

DoubleTree by Hilton St. Paul East

Time	Topic
8:00 AM	Registration and Continental Breakfast
8:30 AM	Welcome and Introduction to Thermo Fisher Scientific
8:45 AM	<b>Viewing the Industry from a Thermo Fisher Scientific Perspective</b> Advances in fracking and favorable regulations have driven unprecedented growth in the oil, gas, petrochemical, and polymer industries. Currently, there are over \$50 billion in planned or approved new projects in the United States. We will explain how Thermo Fisher Scientific can support those investments and offer our vision for the markets.
9:00 AM	<b>Distilling it Down – Integrated Analytical Solutions for the Laboratory</b> This presentation will provide examples of Thermo Fisher Scientific solutions that support analytical testing across the entire supply chain, from exploration and extraction of crude oil to producing final materials.
9:30 AM	<b>Building Confidence in Quality Assurance</b> Throughout the manufacturing process, routine analytical techniques are used to ensure production optimization and product quality. This presentation explores various quality control applications in the chemical and polymer industry.
10:15 AM	Break
10:30 AM	<b>Modularity - The Power of Innovation in GC Architecture</b> Instant connect modules offer unparalleled flexibility to change configurations in minutes to meet evolving lab requirements. All without a service call, special tools, training, or a manual. Yeah, it's that simple.
10:35 AM	<b>Supporting Process Water Management in the Analytical Lab</b> Water is a vital resource for refineries, petrochemical plants, and polymer units. To keep processes moving forward, each requires many measurements for multiple analytes. We will discuss a variety of topics including: which technology provides the best measurement for your needs; where automation can be applied to reduce error, hazards, and tedious wet techniques; and when you should use ion chromatography versus titration.
11:00 AM	<b>Pushing the Boundaries in Material Research</b> The development of next-generation advanced materials requires analytical tools that cover multiple hyphenated techniques to save material usage while gaining additional analytical insight from the sample. We will explore various applications across R&D.
11:30 AM	<b>It's ELEMENTary - Managing Challenges in Inorganic Analysis</b> Inorganic species, metals, gases, and organometallics play an important role in the research and analytical lab. Learn how ICP-OES, ICP-MS, and ICP-MS/MS can help protect expensive catalysts, prevent process fouling or off-spec product, and meet environmental regulations.

Time	Topic
12:00 PM	Lunch
1:00 PM	<b>Breakout Session: Tips and Tricks for Troubleshooting Chromatography and Spectroscopy Instruments</b> Our experts will share tips for instrument maintenance and troubleshooting, discuss analytical challenges, and address common workflow issues. This is a great opportunity to have your specific questions answered by our service and applications specialists in GC, GC-MS, IC, AA, ICP-OES, ICP-MS, automated photometers, Raman, FTIR, NIR, UV-Vis, XRD, XRF, rheology, extrusion, software, and consumables.
2:00 PM	<b>Sweating the Small Stuff - Spectroscopy on the Micro Scale</b> Research and quality assurance labs often must analyze materials on the micro level. Combining optical microscopy with vibrational spectroscopy can provide a holistic view of the structure and functional relationship of the material and can be used for identifying foreign materials and defects.
2:30 PM	Break
2:45 PM	<b>Thermo Scientific™ Nicolet™ Summit FTIR Spectrometer and Thermo Scientific™ OMNIC™ Anywhere Cloud-based App</b> Share your data anywhere, anytime to enhance collaboration within your group or across the globe.
2:50 PM	<b>Where Did All the Helium Go? Implementing Alternative GC Carrier Gases.</b> Helium is the most widely used carrier gas for capillary GC. However, severe shortages are impacting availability and driving up costs. Our experts will provide their insights and discuss the pros and cons of using hydrogen as a viable, sustainable, and affordable alternative.
3:15 PM	<b>Improving Manufacturing Quality and Efficiency via Process Analytical Techniques</b> This presentation will focus on how to get real-time chemical information for tighter process control, lower manufacturing costs, and managing product quality. We will review use cases for the implementation of near infrared spectroscopy and multivariate analysis in process control and monitoring.
3:45 PM	Wrap-up and Adjourn



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