

# Thermo Scientific Productivity Series

Bring your analytical challenges to our Interactive Applications Workshop

**A Three-Track Learning Opportunity**  
Feel free to move between tracks.

## 3 liquid chromatography and mass spectrometry

New UHPLC and UHPLC-MS solutions offer significant improvements in throughput, analytical sensitivity, cost per sample and chromatographic resolution. Learn how new options for sample preparation, multiplexing and chromatographic data handling further improve lab productivity. Find out how **high-resolution, accurate mass** (HRAM) deliver more confident detection, identification and quantitation. This session is for you if you are working with HPLC and LC/MS in a pharmaceutical, clinical research, forensic toxicology, environmental, or food laboratory in an industrial, research or academic setting.

Each program track features interactive sessions with our application experts to help you solve your analytical challenges. A range of application topics will be available for discussion after lunch. The exact program will be adjusted to match the needs of the group.

There is no charge to attend. Breakfast and lunch are provided.

See page 2 for Workshop abstracts

**1** ion chromatography and atomic spectroscopy

**2** gas chromatography and GC/mass spectrometry

**3** liquid chromatography and LC/mass spectrometry

collaborate with the experts to **solve** your toughest analytical **challenges** at a city nearby!

### agenda

**8:00 am** Registration, continental breakfast, and informal mixer

**8:30 am** Opening Session – Thermo Scientific Product Solutions

**9:00 am** Select your track of interest – feel free to move between tracks

**9:00 am** LC Solutions for All Analytes

Thermo Scientific offers the most comprehensive portfolio of UHPLC-compatible solutions. Find the one that is right for you. Explore the possibilities of UHPLC for all analytes. Learn about your options for sample preparation and multiplexing to further improve your productivity.

**9:45 am** Introduction to LC Mass Spectrometry for Everyone

Mass spectrometry offers additional information to chromatographers and powerful solutions to a number of analytical challenges. Analysts may screen for both known and unknown compounds, quantify known target compounds, or elucidate the structure of unknown molecules. This is your opportunity to understand and compare the different strengths of ion trap, quadrupole, and Thermo Scientific Orbitrap mass spectrometers.

**10:30 am** Break

**10:45 am** Chromeleon 7.1 Chromatography Data System: Operational Simplicity for the Enterprise

Operational simplicity is a key concept in the industry-leading Thermo Scientific Dionex Chromeleon Chromatography Data System (CDS) software version 7.1, which offers the fastest path from samples to results. This presentation will discuss some of the key workflow enhancements for chromatographic data handling, plus tools and features for wide-scale enterprise deployment.

**11:30 am** High-resolution, Accurate Mass (HRAM) for Qualitative and Quantitative Workflows

Orbitrap™ technology has raised the bar of HRAM to separating any interferences that occur around the mass of interest. This allows extremely high levels of accuracy in screening, as well as quantification. Learn the benefits of HRAM for applications from food safety to pharma.

**12:15 pm** Lunch

**1:15 pm** Hot Application Topics

**2:15 pm** Break

**2:30 pm** Hot Application Topics

**3:30 pm** Informal Discussions and Close

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## liquid chromatography and mass spectrometry

### hot application workshop topics

These interactive workshops will be driven by attendee preference. A variety of topics will be available for discussion including development of new methods, simplifying workflows, increasing throughput, and important applications. Pick the option that best suits your needs.

A variety of Hot  
Application Workshop  
Topics available

Register  
today!

### Benefits of UHPLC and UHPLC/MS in Environmental, Food Safety, and Pharmaceutical Applications

UHPLC and UHPLC/MS solutions offer improvements in throughput, sensitivity, cost per sample and chromatographic resolution. Learn how you can simplify your workflows and accelerate method development. Specific examples across multiple applications will be presented.



Thermo Scientific TSQ Vantage LC-MS  
with Dionex UltiMate™ 3000 RSLC system

### New Techniques for Targeted and Non-targeted Residue Analysis in Environmental and Food Safety Laboratories

Detection of known, as well as unknown, contaminants is now being given attention by many government and regulatory agencies. Orbitrap technology allows extremely high levels of accuracy in screening, as well as quantification. In addition, the introduction of large volume injection for environmental samples allows the detection of contaminants at very low concentrations with little to no sample preparation. The combination of the two techniques can benefit the finding of non-targeted compounds or contaminants at unmatched levels.



Thermo Scientific Dionex UltiMate 3000  
RSLC system

### Forensic Toxicology\* – Automated High Throughput Multiplexed LC-MS Solutions for Forensic Toxicology Laboratories for Pain Management and Drugs of Abuse Testing

This talk will present elegant cost effective solutions for analysis of opiates, benzodiazepines, synthetic opioids, synthetic cannabinoids and EtG/EtS. The discussion will compare and contrast multiplexed online Turboflow chromatography based triple quadrupole MS with Orbitrap high resolution accurate mass spectrometry for quantitation and qualitative analysis of drugs of abuse.

\* For forensic toxicology only.



Thermo Scientific Velos Pro LC-MS  
with Dionex UltiMate 3000 UHPLC

### New LC and MS Tools for Researchers Characterizing Biopharmaceuticals

Learn about developments in LC-based analytical tools that help increase performance, throughput, and productivity of monoclonal antibody (MAb) characterization to reduce cost and development time as well as HRAM spectrometry for characterization of intact proteins and glycans.



Thermo Scientific Q Exactive benchtop mass  
spectrometer with Dionex UltiMate 3000 UHPLC

### Clinical Research\*\* – Automated High-throughput Multiplexed LC-MS Solutions for Endocrine Research Testing Labs

This talk will discuss the challenges in quantitative analysis of endogenous steroids, Vitamin D and peptide hormones, and present elegant cost-effective solutions. The LC-MS workflows presented will include immunoaffinity sample preparation for the analysis of PTH and 1,25-dihydroxy Vitamin D; automated online sample preparation with TurboFlow™ technology for analysis of plasma metanephrines; and multiplexed analysis of 25-hydroxy Vitamin D and steroids.

\*\* For research use only. Not for use in diagnostic procedures.



Thermo Scientific Dionex  
Chromeleon software



Thermo Scientific Accucore  
HPLC columns

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To view the complete agenda, abstracts and extended list of applications for customizing your workshop visit

[www.thermoscientific.com/productivity](http://www.thermoscientific.com/productivity)

This is a **FREE** event!