SCIEX Now Learning Hub



Agenda for 3 day advanced LC-MS/MS quantitation: method development and troubleshooting at SCIEX

SCIEX training courses follow the proven spaced learning approach to maximize learning retention. The training process includes a blend of instructor-led training, hands-on laboratory exercises and self-paced eLearning provided at a SCIEX location.

Course goals and outcome

This course is intended for those who have completed a Success Program and have at least one year of operational experience with SCIEX LC-MS systems. It is focused on small molecule quantitation and is designed to provide experienced users with the knowledge necessary to successfully perform LC-MS method development and troubleshoot common MS and HPLC issues. It provides a variety of hands-on exercises, best practices and finishes with a Troubleshooting Challenge. It is delivered at a SCIEX location by an experienced SCIEX instructor.

Upon completion of the course, you should be comfortable with performing instrument tuning and calibration, optimizing a compound in ESI and APCI mode, understanding how to build a robust LC-MS method, troubleshooting common issues with method development and your LC-MS system, understanding quantitation parameters, and identifying issues with your processed results.

This course offers a workflow certificate upon completion of a final knowledge assessment.

Course agenda

DAY 1: 9.00 - 17:00*

Lecture: Welcome and LCMS introduction

Lab exercise: ESI/APCI compound and source optimization

Lab exercise: Optimizing difficult compounds

Lab exercise: Instrument tuning and PPG drift test

DAY 2: 9.00 - 17:00*

Knowledge review and discussion

Lecture: HPLC method development

- Lab exercise: Method optimization (FIA, polarity switching, low resolution)
- Lecture: Advanced method parameters
- Lab exercise: Scheduled MRM method creation

DAY 3: 9.00 - 17:00*

- Knowledge review and discussion
- Lab exercise: Matrix effects
- Lecture: LC-MS best practices, troubleshooting and maintenance
- Lab exercise: Charging test
- Lab exercise: Troubleshooting challenge
- Knowledge evaluation

*Timings are approximate and may vary

The SCIEX clinical diagnostic portfolio is For In Vitro Diagnostic Use. Rx Only. Product(s) not available in all countries. For information on availability, please contact your local sales representative or refer to www.sciex.com/diagnostics. All other products are For Research Use Only. Not for use in Diagnostic Procedures.

Trademarks and/or registered trademarks mentioned herein, including associated logos, are the property of AB Sciex Pte. Ltd. or their respective owners in the United States and/or certain other countries (see www.sciex.com/trademarks).

© 2021 DH Tech. Dev. Pte. Ltd. GEN-CST-05-9374-C

