

Fundamentals of Karl Fischer Titration

The Fundamentals of Karl Fischer Titration is a comprehensive, hands-on course designed to introduce participants to the principles, applications, operation, and maintenance of Metrohm Karl Fischer Titration systems. Through interactive presentations, Q&A sessions, and practical lab exercises attendees will gain a solid foundation in KF titration techniques. No prior experience with titration instrumentation is required.

This three-day course is ideal for new users within six months of a KF system installation or for those looking to enhance their expertise at any time. By the end of the training, participants will have a thorough understanding of Karl Fischer titration, including system operation, standardization, troubleshooting, and maintenance to ensure optimal performance.

Agenda

***Please note this agenda is a general overview & may vary slightly from session to session based on instructor discretion, available instruments and customer needs.**

Day One:

- Power Point presentations (Titration & Data Management with Tiamo and TiTouch Software, KF Titration: Theory & Method Parameters).
- Lab practical: Tiamo overview, assembling and connecting a KF titration system.
- Volumetric vs. Coulometric overview, range and limitations.
- 852 Titrando, 917 TiTouch and related instrumentation.
- Co-solvent recommendations.
- Reporting procedure and options.

Day Two:

- Power Point presentation (Karl Fischer Applications & Special Systems).
- Sample preparation, side reactions, solid/liquid/gas extractions for KF titration.
- Lab practical: method development, import/export methods, data export.
- 860/874 ovens, 885/899 automated systems and related instrumentation.
- Polytron 1300D for solid samples.
- Reprocessing data in Tiamo and TiTouch.

Day Three:

- Power Point presentation (KF Titration Review & Troubleshooting).
- Discussion of analysis and hardware troubleshooting.
- General Q&A.