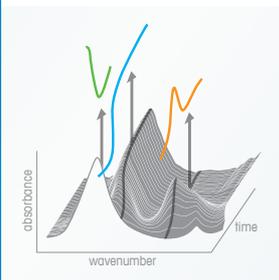


## Comprehensive User Training For *In Situ* Reaction Analysis



### Theory Introduction

Learn how ReactIR *in situ* chemical reaction monitoring provides comprehensive information about reaction components and their rate of change, enabling understanding of the behavior of molecules under actual reaction conditions. Learn about the principles behind the technology and how to get the most from them.



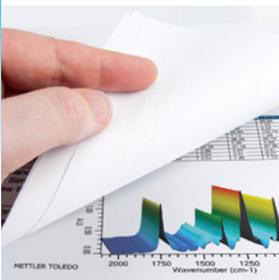
### Collect High-Quality Data

Simple strategies will be presented to ensure scientists can consistently obtain the highest quality data from ReactIR reaction monitoring technology. Attention will be paid to proper data collection to ensure that the system is performing optimally, including probe cleaning and characterization of reference materials.



### Data Analysis Skills

By following simple steps scientists can quickly understand how molecules behave under real reaction conditions, and how process parameters influence key factors such as initiation, rate of change, and end-point. Data treatments to enhance understanding will be introduced, and vital tips to get the most from advanced software will be presented.



### Report Generation

Multiple options for generating reports will be presented. From simple cut-and-paste tools to full report generation. The most appropriate report generation tool will be identified and reviewed. Software tools make reporting simple, and integration with common presentation packages will be discussed.



### *In Situ* Reaction Monitoring Ensuring Success

Training and familiarization with ReactIR™ will ensure that users across an organization can walk up to this technology, and immediately bring value to their process research and development activities. A certified *in situ* reaction analysis expert will guide multiple users through classroom and laboratory hands-on training in order to prepare scientists to obtain, analyze, and report high-quality information that supports their research.

# Comprehensive User Training

## For *In Situ* Reaction Analysis

Available Courses Include:

### ReactIR Introductory User Training

A combination of hands-on and classroom based training will prepare scientists to obtain high-quality reaction data, analyze it correctly, and report meaningful results that support their research efforts.

#### Topics Include:

- Mid-FTIR Basics
- ReactIR Method of Measurement
- Acquiring High-Quality Reaction Data
- Analyzing ReactIR Data Using Common Data Treatments
- Using iC IR™ Software
- Probe Cleaning & Care
- Common Reaction Monitoring Questions

### ReactIR Data Analysis Training

This advanced training focuses on the use of advanced analysis features to convert data into information for a better understanding of chemical reactions.

#### Topics Include:

- Review of Common Data Treatments
- Introduction to Advanced Data Treatments
- Integrating Offline Analytic Data
- Advanced Find Trends Functionality
- Creating Spectra Sets
- Creating Trend Sets
- Integrating Data from iControl™, iC IR™, iC FBRM™ and iC PVM™

### ReactIR Quantitative Analysis Workshop

An advanced workshop using both laboratory and classroom settings focusing on the use of ReactIR to predict the absolute concentration of molecules in real-time.

#### Topics Include:

- Fundamentals of Quantitative Analysis Using iC Quant™
- Calibration Model Design
- Calibration Model Maintenance
- Using iC Quant Diagnostics to Improve Calibration Models
- Application Examples of Quantitative Analysis Using iC IR
- Common Quantitative Analysis Questions



### Your Scientific Partner

Our global Technology and Application Consultant (TAC) team transfers their academic and industry experience to scientists who utilize ReactIR instrumentation. Comprehensive technology and applications training ensure scientists are prepared to obtain the highest possible return on investment from their instruments.

[www.mt.com/ReactIR-Training](http://www.mt.com/ReactIR-Training)

For more information

#### METTLER TOLEDO Group

Automated Reactors and *In Situ* Analysis  
Local contact: [www.mt.com/contacts](http://www.mt.com/contacts)

Subject to technical changes  
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