

Residual Gas Analysis & Mass Spectrometry

Réf. MS117 21 hours (3 days)

COURSE OBJECTIVES

- To understand outgassing
- To become familiar with mass spectroscopy, and especially with a residual gas analyser (RGA).
- To acquire the knowledge of the limits of how to use a RGA
- To learn how to analyse spectra in mass spectroscopy.

AUDIENCE

Technicians and engineers who use a residual gas analyser and who want to acquire an ease in understanding phenomenon under vacuum, depending on time and/or temperature, the limits of the use of a RGA and spectrum analysis.

INNOVATIVE TEACHING RESOURCES

- Lectures and «hands-on» exercises.
- Custom training manual.
- Prior interview with the trainees possible in order to qualify their needs.
- Multiple choice questions at the start and end of the training.
- Training centers integrated with 40-30 workshops.
- Maximum 6 persons per group.

MAIN TRAINERS

Michel THIAM: PhD in Physics (Strong Experience in Surface Physics and Surface Chemistry under UHV Conditions), from 40-30 Engineering Department.

DATE & LOCATION

November 23-25 – Grenoble (France)

For other dates, please, contact us.

Can be also held in your premises for a specific training.

PRICE per person

1450 € ex.VAT

We need 3 registrations to open a session.

PROGRAM

1- Outgassing

- Definition
- Physical chemistry phenomenon linked to outgassing
- Outgassing effects
- Thermal outgassing
- Not baked metallic materials
- Baked metallic materials
- Non-metallic materials (Elastomers, ceramics...)
- Outgassing Induced

2. Mass spectroscopy

- Theory
- Different kinds of mass spectroscopy
- Principle of a residual gas analyser (RGA):
- Functional units
- Spectrum interpretation
- Baking of a RGA: Care
- Existing equipment and their comparison
- Limits of the use of a RGA

3. Applications

- Humidity
- Organic contamination
- Spectrum analysis
- Temperature Programmed Desorption (TPD)

This training can be customised according to your work situations as well as the initial skills of the participants