

instrument

Training Catalogue



setara



Our Training Catalogue is for laboratory managers or users of Setaram Thermal Analyzers, Calorimeters or Manometric Instruments.

You will find a training session whatever your need whether that is understanding the basics of measurements or becoming an advanced user of a specific technique or instrument.

To support you with your Setaram instrument we have developed specific training programs.

They include :

- Overview of theory and measurement principles
- Detailed description of the instrument and its accessories
- Explanation of the operational conditions and tips to optimise user experience
- Experiments and data treatment of at least one analysis
- Predictive and curative maintenance

Dedicated training on the use of Calisto software (signal acquisition and processing) can be performed :

- On your site
- In our laboratory
- Online

Easily improve your skills by trying our new online 2 hour training sessions:

- Good measurement practices
- Enthalpy calibration and temperature correction
- Heat capacity determination
- Heat of reaction

Customized sessions can be developed with you. These can be focussed on instrument, technique or specific applications with training on thermal data interpretation.



Can't find your instrument in the list or need to know more about a specific training session?

Email us at setaram@kep-technologies.com We will get back to you within 72 hours



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THERMAL ANALYSIS APPLIED TO THE SETLINE RANGE



Instruments SETLINE DSC/DSC+ SETLINE STA/STA+ SETLINE TGA

Price 2100€

Duration 1.5 days

Highlights

- Training room
- Laboratory for hands-on practice
- Experienced trainers

- EMEA Laboratory
- On your site



- Theoretical presentation of thermal analysis techniques
- Instrument : equipment and its key parts, preventive and curative maintenance
- Calibrations and corrections: energy calibration and temperature correction
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications
- Presentation of the autosampler



- Blank measurement
- Standard sample measurement
- Calisto software utilization
- Implementation of an option (<u>read more in the</u> <u>SETLINE brochure</u>)







SETLINE DSC / DSC+

1.5 days $2100 \in (\$2100)$ Calibration and checking of the instrument

SETLINE STA / STA+

1.5 days 2100€ (\$2100) Calibration and checking of the instrument



THERMAL ANALYSIS APPLIED TO THE THEMYS RANGE



Instrument

THEMYS THEMYS HP THEMYS DUO THEMYS LV THEMYS H2 THEMYS FLASH THEMYS ONE

Price

From 2100€

Duration From 1.5 to 3 days

Highlights

- Training room
- Laboratory for hands-on practice
- Experienced trainers

- EMEA Laboratory
- On your site



- Principles of thermal analysis : DTA, DSC, TGA, TMA
- Instrument : equipment and its key parts, preventive and curative maintenance
- Calibrations and corrections
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications



- Blank measurement
- Standard sample measurement
- Calisto software utilization
- Change of measurement configuration or accessories installation
- Implementation of an option (<u>read more in</u> <u>the THEMYS brochure</u>) including coupling options like MS, FTIR, GC/MS





CALORIMETRY APPLIED TO THE CALVET RANGE



Instruments

CALVET CALVET CRYO CALVET HT CALVET LV CALVET LV 4C CALVET DC ALEXSYS CALVET PRO CALVET DC

Price From 2100€

Duration From 1.5 to 3 days

Highlights

- Training room
- Laboratory for hands-on practice
- Experienced trainers

- EMEA Laboratory
- On your site



- Principles of calorimetry
- Instrument : equipment and its key parts, preventive and curative maintenance
- Calibrations and corrections: energy calibration and temperature correction
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications



- Standard sample measurement
- Calisto software utilization
- High pressure or mixing cell set-up
- Implementation of an option (<u>read more in the</u> <u>CALVET brochure</u>)





MICRO CALORIMETRY APPLIED TO THE MICROCALVET RANGE



Instruments MICROCALVET MICROCALVET ULTRA MICROCALVET ULTRA 4C

Price From 2100€

Duration From 1.5 to 2 days

Highlights

- Training room
- Laboratory for hands-on practice
- Experienced trainers

- EMEA Laboratory
- On your site



- Principles of calorimetry
- Instrument : equipment and its key parts, preventive and curative maintenance
- Calibrations and corrections: energy calibration and temperature correction
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications



- Standard sample measurement
- Calisto software utilization
- High pressure or mixing cell set-up
- Implementation of an option (<u>read more in the</u> <u>MICROCALVET brochure</u>)





Microcaliver ultra

MICROCALVET

from 1.5 to 2 days from 2100€ (\$2100) Calorimetric method optimization

MICROCALVET ULTRA

from 1.5 to 2 days from 2100€ (\$2100) Calorimetric method optimization



MICROCALVET ULTRA 4C

from 1.5 to 2 days from 2100€ (\$2100) Calorimetric method optimization

MANOMETRY APPLIED TO THE GASPRO RANGE



Highlights

- Training room
- Laboratory for hands-on practice
- Experienced trainers

Location

• On your site



- Reminder on sorption phenomena
- Principles of Sievert's method
- Instrument : equipment and its key parts, preventive and curative maintenance
- Description of PCT and Kinetic Measurements
- Description of calibration methods of dead volume
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications



- Measurement of a standard sample: Pretreatment, Calibration of dead volume, PCT or kinetics measurement
- Hy-data and Hy-Analysis Software
- Implementation of an option (<u>read more in the</u> GASPRO brochure)





ACCESSORIES : FLEXI LINE



Instruments

FLEXI HYCO FLEXI HP MS FLEXI HP 1000 FLEXI BALANCE FLEXI WET 50 FLEXI WET 200

Price

200€

Duration 1 hour

Highlights

Experienced trainers

- By Teams video
- EMEA Laboratory



- Principles of operation
- Instrument : equipment and its key parts, preventive and curative maintenance
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications



- Practical operation
- Programming (if available)
- Parameters set-up
- Coupling to an adapted instrument





SPECIALIZED ANALYZERS FOR PROCESS SAFETY TESTING

Instruments RSC 400 AS

TAC 500 AS

Price 2100€

Duration

1.5 days

Highlights

- Training room
- Laboratory for hands-on practice
- Experienced trainers

- EMEA Laboratory
- On your site



- Principles of calorimetry
- Instrument : equipment and its key parts, preventive and curative maintenance
- Temperature calibration
- Optimization of key experimental parameters
- Review of key applications and discussion around customer applications



- Standard sample measurement
 - Acquisition and processing softwares utilization
- High pressure cell set-up







SOFTWARE : CALISTO



Sessions

On your site In our laboratory Online

Price 700€

Duration 0.5 day

Highlights

- Training room
- Teams visioconference
- Experienced trainers

Location

- EMEA Laboratory
- On your site
- By Teams video



- Calisto Acquisition: direct programming and programming of an experiment
- Main tools of Calisto Processing
- Calculations of temperature correction and sensitivity coefficients
- Processing a HeatFlow curve (DSC/DTA)
- Processing a mass variation curve (TGA)
- Processing a displacement curve (TMA)

• Review of advanced tools: calculation of heat capacity (Cp), peak separation, crystallinity rate, MS/FTIR/GCMS data imports...



- Importing an experiment
- Curve processing
- Exporting data or graphs





On your site

0.5 day 700€ (\$700) Calisto use optimization



EMEA laboratory

0.5 day 700€ (\$700) Calisto use optimization



Online

0.5 day 700€ (\$700) Calisto use optimization

SHORT TRAINING SESSIONS

Sessions

- •TGA measurement practice
- DSC measurement practice
- Calorimetric measurement
- practice
- TMA measurement practice
- Enthalpy calibration and
- temperature correction
- Heat capacity (Cp)
- determination
- Heat mixing/reaction

Price 400€

Duration

2 hours

Highlights

- Teams visioconference
- Experienced trainers

Location

• By Teams video



- Measurement practice
- Instrument checking
- Configuration choice
- Experimental parameters optimization
- Sample set-up
- Calibration
- Enthalpy calibration principle
- Temperature correction principle
- Experimental parameters optimization according to the sensor
- Cp determination
- Heat capacity definition
- Different calculation methods
- Experimental parameters optimization
- Heat of mixing/reaction
- Presentation of the
- different mixing cells
- Experimental parameters optimization
- Results interpretation



- Calibration
- Step by step set-up of a calibration
- Use of Calisto to process a measurement
- Use of Calisto to calculate coefficients
- Cp determination
- Step by step set-
- up of a heat capacity determination
- Data processing and Cp calculation using Calisto
- Heat of mixing/reaction
- Step by step set-up of a heat of reaction
- measurement
- Data processing using Calisto



TGA measurement practice

2 hours 400€ (\$400) TGA measurement optimization



DSC measurement practice 2 hours 400€ (\$400) DSC measurement optimization



Calorimetric measurement practice

2 hours 400€ (\$400) Calorimetric measurement optimization







Heat capacity (Cp) determination

2 hours 400€ (\$400) Cp measurement

TRAINING SUMMARY

TRAINING	PRICE / PERSON (*)	DURAT. (from)**	DATES
SETLINE DSC/DSC+	2100€	1.5 days	Contact us
SETLINE STA/STA+	2100€	1.5 days	Contact us
THEMYS	2800€	2 days	Contact us
THEMYS ONE	2100€	1.5 days	Contact us
THEMYS HP	2800€	2 days	Contact us
THEMYS LV (TG96)	2800€	2 days	Contact us
THEMYS DUO (TAG)	2800€	2 days	Contact us
THEMYS H2	2800€	2 days	Contact us
THEMYS FLASH	2800€	2 days	Contact us
CALVET (C80)	2100€	1.5 days	Contact us
CALVET PRO (SENSYS)	2100€	1.5 days	Contact us
CALVET CRYO (BT215)	2100€	1,5 days	Contact us
CALVET LV (MS80)	2100€	1.5 days	Contact us
CALVET LV 4C	2100€	1.5 days	Contact us
CALVET DC (MHTC)	2100€	1.5 days	<u>Contact us</u>
CALVET DC ALEXSYS	2100€	1.5 days	Contact us
CALVET HT (C600)	2100€	1.5 days	<u>Contact us</u>
MICROCALVET (µDSC7)	2100€	1.5 days	Contact us
MICROCALVET ULTRA (µSC)	2100€	1.5 days	Contact us
MICROCALVET ULTRA 4C (µSC)	2100€	1.5 days	Contact us
GASPRO (PCTPro)	2100€	1.5 days	Contact us

FLEXI HYCO	200€	1 hour	Contact us
FLEXI HP MS	200€	1 hour	Contact us
FLEXI HP 1000	200€	1 hour	Contact us
FLEXI BALANCE	200€	1 hour	Contact us
FLEXI WET 200	200€	1 hour	Contact us
FLEXI WET 50	200€	1 hour	Contact us
SETSYS evolution (Old instrument)	2100€	1.5 days	Contact us
Labsys evo (Old instrument)	2100€	1.5 days	Contact us
DSC131 evo (Old instrument)	2100€	1.5 days	Contact us
µDSC3 evo (Old instrument)	2100€	1.5 days	Contact us
CALISTO	700€	0.5 day	<u>Contact us</u>
SHORT TRAINING SESSIONS (Online)	400€	2 hours	<u>Contact us</u>

*For on site training, transport and living costs are charge extra ** Option only available coupled with an instrument training session. Duration and price vary depending on the options (All prices exlude tax)



Switzerland – France – China – United States – India – Hong Kong For contact details: <u>www.setaramsolutions.com</u> or <u>setaram@kep-technologies.com</u>