Thank you for your interest in **TA Instruments’ Training Courses**. Enclosed please find the detailed program, practical information and a registration form.

Two types of TGA training courses are available.
The **practical** TGA training is mainly hands-on, and is designed for the operator of the instrument. Focus is on optimum use of the equipment; calibration and maintenance are major topics.
The **theoretical** TGA training is lecture based. It is designed to help the researcher / lab manager in choosing optimum measurement conditions and performing interpretation of the results. Moreover, a general overview of the use of TGA in multiple fields is presented.

**Practical TGA Training**

*This training is mainly hands-on and designed for the operator to get the most out of his TGA. Equipment covered: Q5000IR, Q500, Q50, 2950, 2050 TGA.*

09.15 – 09.30 Registration – coffee

09.30 – 12.30 Introduction technique and instrumentation
   - Calibration of mass, temperature, autosampler & verification
   - Optimisation and importance of baseline
   - Choice of purge gas, flow rate, pan type
   - Design of experimental method
   - Tips for optimum use of data analysis software

12.30 – 13.30 Lunch

13.30 – 16.30 Maintenance of the TGA:
   - Removing and cleaning a dirty furnace
   - Replacing the hangdown wire and hangdown loop
   - Replacing the thermocouple
   - Maintaining the heat exchanger
   - Installing the EGA interface

16.30 – ….  Question session
Theoretical TGA Training

This training is lecture based and designed to provide a general review on the importance of experimental parameters, different applications and operating modes of the TGA. This training is to a big extent brand independent.

09.15 – 09.30 Registration – coffee

09.30 – 12.00 Introduction technique and instrumentation
   - Calibration: theory
   - Optimisation of experimental conditions
   - Typical applications (thermal stability, compositional analysis)

12.00 – 13.00 Lunch

13.00 – 16.00 Hi-Res™ TGA:
   - Introduction
   - Different modes and their application domain
   - Choice of parameter settings
   - Applications

Modulated™ TGA, Kinetics:
   - Theory
   - Choice of experimental conditions
   - Applications

TGA-EGA:
   - Principle (coupling to MS, FTIR)
   - Applications
   - Tips for optimum use of data analysis software

16.00 – …. Question session
Practical Information

Location: Application lab TA Instruments
Zellik (B)

Language / notes: The course language is English.
Notes are provided at the start of the day.

Registration fee: Registration fee is 500 Euro per day per person.
Lunch is included.
Participation is free of charge for users who recently bought new equipment, with a maximum of 2 persons (excluding optional hotel fare). Participation is also free of charge for customers with an Academic or Premium Support Plan.
Universities / schools receive 100 Euro discount on the registration fee.
An invoice for course registration (if applicable) will be send after the course.

Hotel: If desired we can make a hotel reservation for you or provide you with information of hotels located close to our office. Hotel expenses are additional and to be paid directly at the hotel reception.

For all additional questions please contact Nadia Rassart at:

B: +32-2-7060080 or
NL: +31-76-5087270
Registration Form

Mail to { HYPERLINK mailto:belgium@tainst.com } or { HYPERLINK mailto:netherlands@tainst.com }
or fax to +32-2-7060081 or +31-76-5087280

Name:

Company:

Department:

Address:

ZIP Code: City:

Phone: Fax:

E-mail:

I want to register for the theoretical TGA training on ☐ February 4, 2009, in Zellik

I want to register for the practical TGA training on ☐ October 6, 2009, in Zellik

Note that the indicated course location might be subject to changes.

Please make hotel reservation on …………………... (indicate date)

Registration fee for the course:

☐ Free of charge (user of new equipment)

☐ Free of charge (academic or premium support plan)

☐ 500 Euro

☐ 400 Euro (University / school only)

As a confirmation of your registration you will receive at latest a week prior to the course a road description to our application lab, and if applicable more details with respect to the hotel.
Thank you for your interest in **TA Instruments’ Training Courses**. Enclosed please find the detailed program, practical information and a registration form.

**Software Training**

*This training is designed to help the operator in using the more advanced features of TA Instruments’ Universal Analysis software, including the use of Macro’s for autoanalysis of data files, creation of custom reports, and many other features. Universal Analysis software is used for analysis of DSC, MDSC, TGA, SDT, TMA and DMA data.*

09.15 – 09.30  Registration – coffee

09.30 – 12.00  Instruction of UA software capabilities

12.00 – 13.00  Lunch

13.00 – 15.30 Hands-on of UA software capabilities
**Practical Information**

Location: Application lab TA Instruments  
Zellik (B)

Language: The course language is English.

Registration fee: Registration fee is 400 Euro per day per person. 
Universities / schools receive 100 Euro discount on the registration fee.  
Lunch is included.  
An invoice for course registration will be send after the course.

For all additional questions please contact Nadia Rassart at:

B: +32-2-7060080 or  
NL: +31-76-5087270
Registration Form

Mail to  belgium@tainstruments.com or netherlands@tainstruments.com
or fax to  +32-2-7060081 or +31-76-5087280

Name :

Company :

Department :

Address :

ZIP Code :  City :

Phone :  Fax :

E-mail :

I want to register for UA Software Training on  September 9, 2009, in Zellik

Note that the indicated course location might be subject to changes.

Registration fee for the course:

☐ 400 Euro

☐ 300 Euro (University / school only)

As a confirmation of your registration you will receive at latest a week prior to the course a road description to our application lab.
Thank you for your interest in **TA Instruments’ Training Courses**. Enclosed please find the detailed program, practical information and a registration form.

Two types of Modulated DSC training courses are available. The basic MDSC training is mainly hands-on, and is designed for the operator of the instrument. The advanced MDSC training is lecture based. It is designed to help the researcher/lab manager in choosing optimum measurement conditions and performing interpretation of the results. Examples of the use of MDSC for various applications and to study different types of transitions are covered.

**Modulated DSC Basic Training (hands-on)**

09.15 – 09.30  Registration – coffee

09.30 – 12.00  Introduction instrumentation  
  MDSC calibration  
  Design of an experimental method  
  Sample preparation and set-up of experiments

12.00 – 13.00  Lunch

13.00 – 16.00  Interpretation of the results  
  Use of data analysis software

16.00 – ….  Question session

There is a fair chance for participants to measure their own samples during this hands-on training.
Modulated DSC Advanced Training (theory)

09.15 – 09.30  Registration – coffee

09.30 – 12.00  Advantages of MDSC in comparison with conventional DSC
Calibration of Modulated DSC
Optimisation of experimental conditions for MDSC (purge gas, sample preparation, choice of pan type, modulation parameters and heating rate)

12.00 – 13.00  Lunch

13.00 – 16.30  MDSC data interpretation
   - glass transition region
   - influence of experimental conditions in the melting region

   Special measuring conditions and data analysis
   - thermal conductivity
   - stepwise quasi-isothermal
   - phase angle
   - Lissajous figures

16.30 – ….  Question session
**Practical Information**

**Location:** Application lab TA Instruments
Zellik (B) or Etten-Leur (NL)

**Language / notes:** The course language is English.
Notes are provided at the start of the day.

**Registration fee:** Registration fee is 500 Euro per day per person.
Lunch is included.
Participation is free of charge for users who recently bought new equipment, with a maximum of 2 persons (excluding optional hotel fare).
Universities / schools receive 100 Euro discount on the registration fee.
An invoice for course registration (if applicable) will be send after the course.

**Hotel:** If desired we can make a hotel reservation for you or provide you with information of hotels located close to our office. Hotel expenses are additional and to be paid directly at the hotel reception.

For all additional questions please contact Nadia Rassart at:

B: +32-2-7060080 or
NL: +31-76-5087270
Registration Form

Mail to   belgium@tainstruments.com or netherlands@tainstruments.com
or fax to  +32-2-7060081 or +31-76-5087280

Name :

Company :

Department :

Address :

ZIP Code :    City :

Phone :     Fax : 

E-mail :

I want to register for Advanced Modulated DSC Training on

☐ February 3, 2009, in Zellik

☐ November 23, 2009, in Zellik

I want to register for Basic Modulated DSC Training on

☐ May 12, 2009, in Zellik

Note that the indicated course location might be subject to changes.

Please make hotel reservation on  ..................  (indicate date)

Registration fee for the course:

☐ Free of charge (user of new equipment)

☐ 500 Euro

☐ 400 Euro (University / school only)

As a confirmation of your registration you will receive at latest a week prior to the course a road description to our application lab, and if applicable more details with respect to the hotel.
Thank you for your interest in **TA Instruments’ Training Courses**. Enclosed please find the detailed program, practical information and a registration form.

Two types of DSC training courses are available.
The 1-day basic DSC training is mainly hands-on, and is designed for the operator of the instrument.
The 2-days advanced DSC training is mainly theoretical, with a brief hands-on session. It is designed to help the researcher / lab manager in choosing optimum measurement conditions and performing interpretation of the results. Moreover, a general overview of the use of DSC in multiple fields is presented.

**DSC Basic Training (hands-on), 1 day**

09.15 – 09.30  Registration – coffee

09.30 – 12.00  Introduction instrumentation

  -  Calibration
  -  Design of an experimental method
  -  Sample preparation and set-up of experiments

12.00 – 13.00  Lunch

13.00 – 16.30  Interpretation of the results

  -  Use of data analysis software

16.30 – ….  Question session

There is a fair chance for participants to measure their own samples during this hands-on training.
DSC Advanced Training (theory and some hands-on), 2 days

Part 1

09.15 – 09.30 Registration – coffee

09.30 – 12.00 Introduction technique and instrumentation
   Thermodynamic principles
   Design of an experimental method
   Calibration

12.00 – 13.00 Lunch

13.00 – 16.30 Optimisation of experimental conditions
   (purge gas, sample preparation, choice of pan type, heating & cooling rate, maintenance)

16.30 – …. Question session

Part 2

09.15 – 09.30 Registration – coffee

09.30 – 12.00 Measuring conditions for typical material classes
   The glass transition temperature
   Melting and crystallisation

12.00 – 13.00 Lunch

13.00 – 16.30 How to measure heat capacity?
   Hints for optimum use of data analysis software
   Introduction to Modulated DSC

16.30 – …. Question Session
**Practical Information**

**Location:** Application lab TA Instruments  
Zellik (B) or Etten-Leur (NL)

**Language / notes:** The course language is English.  
Notes are provided at the start of the first course day.

**Registration fee:** Registration fee per person is 900 Euro for the 2-days course and 500 Euro for the 1-day course.  
Lunch is included.  
Participation is free of charge for users who recently bought new equipment, with a maximum of 2 persons (excluding optional hotel fare).  
Universities / schools receive 100 Euro discount on the registration fee per day.  
An invoice for course registration (if applicable) will be send after the course.

**Hotel:** If desired we can make a hotel reservation for you or provide you with information of hotels. Hotel expenses are additional and to be paid directly at the hotel reception.

For all additional questions please contact Nadia Rassart at:

B: +32-2-7060080 or  
NL: +31-76-5087270
**Registration Form**

Mail to  belgium@tainstruments.com or netherlands@tainstruments.com  
or fax to  +32-2-7060081  or  +31-76-5087280

Name :

Company :

Department :

Address :

ZIP Code :  
City :

Phone :  
Fax :

E-mail :

I want to register for Advanced DSC Training on  
- January 21-22, 2009, in Zellik  
- June 3-4, 2009, in Etten-Leur  
- November 9-10, 2009, in Zellik  

I want to register for Basic DSC Training on  
- March 31, 2009, in Etten-Leur  
- September 8, 2009, in Zellik  

Note that the indicated course location might be subject to changes.

Please make hotel reservation on  

Registration fee for the course:  

- Free of charge (user of new equipment)  
- 900 Euro (2-days course)  
- 500 Euro (1-day course)  

University / school discount

As a confirmation of your registration you will receive at latest a week prior to the course a road description, and if applicable more details with respect to the hotel.
Thank you for your interest in **TA Instruments’ Training Courses**. Enclosed please find the detailed program, practical information and a registration form.

**DMA Basic Training**

*This training provides an introduction to the DMA technique and its applications. It is designed for the new operator to get the most out of his DMA. It is mainly lecture based but includes also a practical part.*

09.15 – 09.30  Registration – coffee

09.30 – 12.00  Terminology, introduction to linear viscoelastic theory
   Instrument design
   Modes of operation and when to use them
   When to use a particular clamping configuration
   Experimental considerations

12.00 – 13.00  Lunch

13.00 – 17.00  Calibration: instrument and temperature
   Applications with various types of clamps
   Tips for optimum use of data analysis software

17.00 – ….  Question session
Practical Information

Location: Application lab TA Instruments Zellik (B)

Language / notes: The course language is English. Notes are provided at the start of the day.

Registration fee: Registration fee is 500 Euro per day per person. Lunch is included. Participation is free of charge for users who recently bought new equipment, with a maximum of 2 persons (excluding optional hotel fare). Universities / schools receive 100 Euro discount on the registration fee. An invoice for course registration (if applicable) will be send after the course.

Hotel: If desired we can make a hotel reservation for you or provide you with information of hotels. Hotel expenses are additional and to be paid directly at the hotel reception.

For all additional questions please contact Nadia Rassart at:

B: +32-2-7060080 or
NL: +31-76-5087270
Registration Form

Mail to  belgium@tainstruments.com or netherlands@tainstruments.com
or fax to  +32-2-7060081 or +31-76-5087280

Name :

Company :

Department :

Address :

ZIP Code : City :

Phone : Fax :

E-mail :

I want to register for Basic DMA Training on  ■ April 1, 2009, in Zellik
     ■ October 7, 2009, in Zellik

Please make hotel reservation on .................. (indicate date)

Registration fee for the course:

■ Free of charge (user of new equipment)
■ 500 Euro
■ 400 Euro (University / school only)

As a confirmation of your registration you will receive at latest a week prior to the course a road description, and if applicable more details with respect to the hotel.
Thank you for your interest in TA Instruments’ Training Courses. Enclosed please find the detailed program, practical information and a registration form.

Rheology Basic Training (theory and hands-on), 2 days

This training is designed for the user to get a maximum out of his rheometer. It is a mixture between theory and practice.

Day 1

09:45 – 10:00  Registration - Coffee

10:00 – 13:00  Introduction to rheology

Introduction to flow and viscometry

Practical Session

• Setting up an instrument
• Review of calibrations

Introduction to viscoelasticity and creep

Practical Session – flow and creep

13:00 – 14:00  Lunch

14:00 – 17:00  Introduction to dynamic techniques

• Linear Viscoelasticity
• Frequency sweeps

Remaining dynamic techniques

• Structure and structure recovery
• Cures (time and temperature ramps)

Practical session – dynamic tests
Day 2

This day is dedicated to delegates putting into practice what they have learnt.

08:45 – 09:00  Registration - Coffee

09:00 – 13:00  **Practical session – dynamic tests continued**
Designing experiments and practical tips
- Choosing the right geometry
- Interrogating the process to simulate
- Simulation or microstructure? What’s of interest?
Informal Q&A session based on customer’s own type of samples
- what are the tests you should use?
Preparation for practical – selection of products

**Practical session**

13:00 – 14:00  Lunch

14:00 – 15:30  **Practical session**
Practical Information

Location: Application lab TA Instruments
Zellik (B) or Etten-Leur (NL)

Language / notes: The course language is English.
Notes are provided at the start of the day.

Registration fee: Registration fee is 900 Euro per person for the 2 days.
Lunch is included.
Participation is free of charge for users who recently bought new equipment, with a maximum of 2 persons (excluding optional hotel costs).
Universities / schools receive 200 Euro discount on the registration fee.
An invoice for course registration (if applicable) will be send after the course.

Hotel: If desired we can make a hotel reservation for you or provide you with information of hotels located close to our office. Hotel expenses are additional and to be paid directly at the hotel reception.

For all additional questions please contact Nadia Rassart at:

B: +32-2-7060080 or
NL: +31-76-5087270
Registration Form

Mail to  belgium@tainstruments.com or netherlands@tainstruments.com
or fax to  +32-2-7060081  or  +31-76-5087280

Name :

Company :

Department :

Address :

ZIP Code :  City :

Phone :  Fax :

E-mail :

I want to register for Basic Rheology Training on

☐ April 1-2, 2009, in Etten-Leur

☐ October 14-15, 2009, in Zellik

Note that the indicated course location might be subject to changes.

Please make hotel reservation on  .......................  (indicate date)

Registration fee for the course:

☐ Free of charge (user of new equipment)

☐ 900 Euro

☐ 700 Euro (University / school only)

As a confirmation of your registration you will receive at latest a week prior to the course a road description to our application lab, and if applicable more details with respect to the hotel.
Thank you for your interest in **TA Instruments’ Training Courses**. Enclosed please find the detailed program, practical information and a registration form.

**Sorption Analysis Basic Training**

This training is designed for the operator to get the most out of their Q5000SA. The majority of the course is lecture based, however, it also includes a practical overview.

09.15 – 09.30  Registration and Coffee

09.30 – 12.00  Introduction to Technique and Instrumentation

  Calibration and Verification
  - Weight
  - Temperature
  - Humidity

  Experimental Conditions
  - Sample Preparation
  - Sample Holders
  - Instrument Preferences
  - Test Templates and Custom Methods

12.00 – 13.00  Lunch

13.00 – 16.30  Practical Overview (at Instrument)

  Applications Overview

  Analysis Software

16.30  Question session
**Practical Information**

**Location:** Application lab TA Instruments Crawley or Manchester

**Language / notes:** The course language will be English. Notes will be provided at the start of the day.

**Registration fee:** Registration fee is £320 per day per person.
Lunch is included.
Participation is free of charge for users who recently bought new equipment, with a maximum of 2 persons (excluding optional hotel fare).
Universities / schools receive £50 discount on the registration fee.
An invoice for course registration (if applicable) will be sent after the course.

**Hotel**

If desired we could make a hotel reservation for you or provide you with information of hotels located close to our office. Hotel expenses are additional and to be paid directly at the hotel reception.

For all additional questions please contact Olivia Gibson at:

TA Instruments Ltd
The Fleming Centre
Fleming Way
Manor Royal
Crawley
West Sussex
RH10 9NB
Tel: 01293 658902
Email: Olivia.gibson@taeurope.co.uk
Registration Form

TA Instruments – Office Based Training Courses

Mail to : Olivia Gibson – olivia.gibson@taeurope.co.uk
or fax to : 01293 658901

Name:

Company:

Department:

Address:

Post Code: City:
Phone: Fax:
E-mail:

I want to register for the Sorption Analysis Basic Training on _____________
(Please specify required date/location)

Please make hotel reservation on ______________________
(Please indicate dates required)

Registration fee for the course:

☐ Free of charge (users of new equipment Warranty No.: _______________ )
☐ £320 per person + VAT @ 17.5% (£376 inc. VAT)
☐ £270 per person + VAT @ 17.5% (£317.25 inc VAT) – Academic Discount
☐ Free of charge (Premium Service Contract No.: _______________ )

*Payment Method
☐ Cheque (Enclosed) ☐ Purchase Order Number : ______________________

As confirmation of your registration you will receive, at least a week prior to the course, a road description to our application laboratory and, if applicable, more details with respect to the hotel.