

MicroCal™ Training Courses

Advanced Differential Scanning Calorimetry

European Training Center Munich, Germany or Amersham, UK

Introduction

Differential scanning calorimetry (DSC) measures heat changes that occur in biomolecules during controlled changes in temperature. MicroCal DSC instruments use this principle to measure the enthalpy (ΔH) of unfolding due to heat denaturation, providing a powerful tool with which to monitor and understand the stability of biological systems. MicroCal DSC systems are widely used in areas such as pharmaceutical drug discovery, antibody characterization, biotherapeutic development and manufacture, and throughout life science research.

Course description

The course is designed to allow users with some experience of DSC to fulfill the potential of this powerful technique. It consists of a series of seminars and practical sessions designed to give the participants a good understanding of experimental design, data analysis and to introduce a range of applications of DSC in macromolecular stability studies and in biopharmaceutical industry. Participants will have the chance to work with the VP-DSC™ and automated VP-DSC™ instrument.

The course will cover the following:

- Introduction to Differential Scanning Calorimetry and thermodynamics
- Instrumentation, cleaning procedures, practical considerations and applications
- Experimental set-up (VPViewer™ features) and data interpretation
- Data analysis using Origin™ for DSC software
- Frequently asked questions/troubleshooting
- Real time experiments and data analysis: **the first 2 registrants** will have the chance to bring along their sample for analysis

All registrants may bring their DSC data for data analysis and discussions.

All courses will be performed in English.

Who should attend?

The structure of the course allows new users to get familiar with the technology very quickly. Users having at least one month of hands-on instrument will get more benefit from the course, as they may have many questions to be answered.

Learning Objectives

By the end of the course, the participants will have a clear understanding of DSC technology and thermodynamics and will have gained a profound understanding of analysis of DSC data. After the course the DSC experimental set-up should become merely a routine and less of a challenge.

Course Content

Day 1 (12:00 am – 5:00 pm)	Day 2 (9:00 am – 5:00 pm)	Day 3 (9:00 am – 1:00 pm)
<ul style="list-style-type: none"> • Introduction to Differential Scanning Calorimetry and thermodynamics • Practical considerations • Instrument introduction and experiment start-up (customer sample) 	<ul style="list-style-type: none"> • VPViewer™ features • Data interpretation and FAQs • Introduction to Origin for DSC software • Customer data analysis using Origin for DSC software 	<ul style="list-style-type: none"> • Irreversible unfolding • DSC applications in biopharmaceutical industry • Questions and answers session

European Training Center Munich

Equipped with modern laboratories for protein separation, detection and analysis, we provide training courses for the best outcome and optimal use of your GE Healthcare Life Sciences equipment. Further course offerings in Munich include our Fast Trak™ program for Process chromatography/filtration, protein purification in lab scale with ÄKTA™ and UNICORN™, label free interaction analysis with Biacore™ systems and Ettan™ 2D-DIGE and DeCyder™ 2-D courses. We also offer customized courses and/or on-site training on request.

Contact Details	Contact Details	Course Calendar 2010
<p>Munich, Germany GE Healthcare Europe GmbH European Training Center Oskar-Schlemmer-Strasse 11 80807 München, Germany</p> <p>T +49 89 96 281 631 F +49 89 96 281 640 E PSCourses.Europe@GE.com</p>	<p>Amersham, UK GE Healthcare UK Ltd St. Georges Industrial Estate Unit 9 White Lion Road HP7 9LL Amersham, United Kingdom</p> <p>T +44 792 027 3384 F +44 1494 542 018 E MicroCalScientificSupport@GE.com</p>	<p>March 23 – 25 (Amersham) June 16 – 18 (Munich) October 20 – 22 (Amersham)</p> <p>Course Fee € 1.250,00 plus German VAT Order No. 94-0130-72 £ 1.230,00 plus British VAT Order No. 94-0130-81 Including course fee and lunch Excluding travel and accommodation costs</p>

To register please use the registration form.

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