

SciMed Open Days 2015

SciMed are pleased to announce their fourth annual open days. This event is designed to give customers a better understanding of the full suite of laboratory equipment that SciMed have to offer. In the last year we have seen our Analytik Jena product line become an integral part of our business and we are holding a specific day after the 2 open days that will see the official launch of the Plasma Quant ICP-MS. This will look at the unique features of the PQ-MS along with our other elemental techniques from Analytik Jena. We have also taken over Rigaku's powder XRD business in the UK which opens a new exciting chapter for SciMed and we will highlight what sets out this range of equipment from other XRD suppliers.

On the following pages you will find more information about the event including the technical program and a list of the equipment we will have on display for demos.

We look forward to seeing you in our new home.

Dates: Open Days: Tuesday 6th and Wednesday 7th October 2015

PlasmaQuant ICP-MS launch : Thursday 8th October 2015

Start Time: Registration from 9:30 with the first talks at 10:00.

Location: Unit B4, The Embankment Business Park, Vale Road, Heaton Mersey, Stockport, SK4 3GN.

Travel:

By Car: We are 10minutes from J1 of the M56 and 10 minutes from J1 of the M60.

Air: We are 15mins from Manchester airport.

Train: We are 10 minutes by taxi from Stockport rail station (main London-Manchester line) and 10 minutes walk from both East Didsbury rail station and tram stop.

Lunch : A buffet lunch will be served.

Accommodation : We have teamed up with The Didsbury House Hotel which is conveniently located near the office. <http://www.electichotels.co.uk/didsbury-house>. Please let us know if you need accommodation and we will book it for you. Current SciMed customers are entitled to a complimentary nights' accommodation.

Evening Meal on the Tuesday evening: Those people attending both open days are welcome to join us for dinner on the Tuesday evening.

9:30 Registration and coffee.

10:00-10:30 What's new at SciMed? Adam Rucklidge

This talk will give a brief overview of what new techniques we offer at SciMed and also what developments there have been in our existing product range.

10:30-10:50 The myths about dust explosions. Dave Dale

Dusts in many industries represent a major explosion hazard. This presentation will show the devastating consequences of either being unaware of or ignoring such threats and what must be done to address these issues. A live demonstration of a small scale dust explosion will be used to supplement the discussion.

10:50-11:10 Ultrasound as a destructive tool.

From dispersion and mixing to milling and grinding, ultrasound is now being applied to industries previously unfamiliar with ultrasound. From simple cell disruption, to nano particle dispersion and disintegration of metal oxides and pigments, the destructive forces of ultrasound are being harnessed in exiting new ways.

11:10-11:30 Coffee Break

11:30-12:00 Powder Flow Characterisation using Shear testing, Paul Vanden Branden

Most processes involving powders face issues from poor flow and this is particularly true for cohesive powders where issues will occur in silos hoppers, when filling devices etc. The Jenike method has been the benchmark method not only for the determination of flow properties, but also in applying the Quality by Design approach to powder handling systems thus avoiding all flow related issues.

12:00-12:30 Many angles in one square box - why you need to be flexible in particle sizing, Dan Clarke

Dynamic Light Scattering is evolving. Higher resolution, larger size range, more techniques; all in the same box. Brookhaven now offer the complete particle characterisation solution in one instrument

12:30-13:00 Food Integrity- You are what you eat, but what are you eating? Darren Machen.

Food integrity and fraud is of key concern for obvious reasons. Technology is available to quickly determine that the food and drink that we consume is safe and what it should be. How can we prove what is claimed on the bottle. NIR and RAMAN can offer a quick and powerful tool to scrutinise the food in question.

13:00-14:00 Lunch

14:00-14:30 Feeling the pressure under flow?, Adam Rucklidge

As chemists and chemical engineers are put under increasing pressure to make their chemical processes more cost effective more and more investigation is being carried out on flow chemistry. This presentation will show how operating chemical processes requiring pressure and flow can be carried out on the lab scale.

14:30- 15:00 The safe scale up of phenol formaldehyde reactions and scale up calculations. Dave Dale

The scale of chemical reactions requires the use of calorimetry data to assess the implications of both the desired, and the undesired chemistry. Here we show by use of a real life example what this data looks like and how it can be used practically to aid safe scale up design.

15:00-16:30 Coffee - with discussions and product demonstrations.

Wednesday 7th October 2015

9:30 Registration and coffee

10:00-10:30 XRF: a spectroscopic method for the analysis of major, minor or trace inorganic components? Garry Smith

Looking for an analytical technique with the flexibility to measure inorganics from sub-ppm to 100% concentration range, on almost any specimen type? This talk will introduce X-ray fluorescence spectrometry in general and show, with example applications, the wide range of analytical possibilities that this technique can bring to the table.

10:30-11:00 Analysis of volatile elements by XRF using borate fusion sample preparation. Malcolm Haigh

In XRF analysis, sample preparation is an important step in the analytical procedure. A borate fusion is frequently used for the determination of main components but the high temperatures involved can lead to problems for light elements such as sulphur, fluorine and chlorine. This talk will examine how this issue is negated with the new Fluxana electric fusion system

11:00-11:20 Thermogravimetric Analysis – The balance between low & high mass techniques. Dave Dale

Thermo gravimetric analysis (TGA) has a wide application range and here we will introduce this technique & show examples of the information that can be obtained both on small and large samples. Particular focus will be on highly automated high mass TGA that has uses in industries (e.g. coal, food, waste, flour, biomass, soil etc.) that require, for example, high sample throughput for moisture loss, volatile content, and ash content analysis.

11:20-11:40 Coffee Break

11:40 - 12:10 Supercritical CO₂: an overview and latest developments. Prof Ray Marriot, Bangor University

The extraction, optimisation and separation of valuable compounds from waste and biomass utilising CO₂. The tuneability of CO₂, whereby the density of the solvent can be altered by strict control of both temperature and pressure allows for a wide range of products to be selectively extracted, be that with liquid or supercritical CO₂

12:10 - 12:50 Introduction to Rigaku's range of Powder XRD and X-Ray tomography equipment. Oleksandr Slipeniuk

This talk will give a broad overview of the range of XRD and X-Ray tomography equipment available from Rigaku, to give the audience an understanding of what can be achieved using these powerful techniques.

12:50-13:50 Lunch

13:50-14:10 UV-VIS - not just for use with a 10mm cuvette. Rene Nowka, Analytik Jena

Most people's exposure to UV-VIS spectrometry is coloured liquids in a 10mm cuvette. This talk will look at some of the many accessories available with the AJ Specord range of UV-VIS spectrometers and the different application avenues that this opens up for both R&D and QC testing.

14:10-14:30 Automated solutions for TOC. John Hall.

This talk will look at the options available for carbon analysis. We will cover how both liquid and solid samples can be handled and what information can be obtained with little operator sample preparation

14:30-15:00 Listen to your oil - it might tell you something you really need to know. Malcolm Haigh

We don't change tyres or brakes without first inspecting them, but in many cases we change our oil without inspecting it at all. Now, with the development of Spectro Scientific's range of portable analysers, lab quality data in real time - right at the point of sampling - can be obtained, resulting in reducing the cost of new oil purchases (and used oil disposal) as well as gaining early indications of critical asset failures.

15:00-16:30 Coffee - with discussions and product demonstrations.

Official UK launch of the PlasmaQuant MS ICP-MS from Analytik Jena

analytikjena

After the purchase of the Bruker ICP-MS range in 2014, Analytik Jena have launched a new suite of ICP-MS Spectrometers : The PlasmaQuant MS and the PlasmaQuant MS Elite ICP-MS.

The PlasmaQuant[®] MS series offers two high-performance, high sensitivity models with the lowest operating costs of any ICP on the market. A number of innovative technologies make this instrument a leader in its class and through a number of presentations and discussions we will highlight these and what difference that makes to the modern day analyst.



PlasmaQuant MS Elite and PlasmaQuant MS from Analytik Jena

As part of this exciting day we will also delve in to Analytik Jena's other unique metal analysis spectrometers : PlasmaQuant PQ9000 ICP-OES and ContraAA High Resolution Atomic Adsorption Spectrometers. With these and the other AAS from Analytik Jena (ZEE nit and NovAA series) we will look at what makes this fleet both unique and robust spectrometers. Specific focus will be given to direct solid sampling AAS which is only possible with an AJ AAS.

The talks will be given by Rene Chemnitzer the ICP-MS specialist at AJ and Rene Nowka who is the sales manager responsible for the UK.

10:00 Registration – Welcome

10:30 – 10:45 PQMS brief overview and headlines

10:45 – 11:00 Analytik Jena and it's Spectroscopy Product Range

11:00 – 11:45 PlasmaQuant MS: The World's most Sensitive and Cost Saving ICPMS on the Market - details

11:45 – 12:00 Coffee Break

12:00 – 12:30 PQMS Application Examples (Environment, Geology, Nuclear, LIBS)

12:30 – 13:30 Lunch Break

13:30 – 14:15 PlasmaQuant PQ 9000: Unmatched Robustness and Sensitivity for Matrix Samples

14:15 – 15:15 Summary of AJ AA, ICP range – chance to mention ContraAA, etc

Equipment on display

During the day we will have our demo equipment on display which will give attendees the chance to better familiarise themselves with our products. If you are interested in running some of your samples on the equipment please let us know in advance and we will ensure we make time for this.

XRF Spectrometers and sample prep

- Rigaku Nex-CG XRF Spectrometer
- Rigaku Nex-QC+ XRF Spectrometer
- Rigaku Supermini 200 WD-XRF
- Fusion Station

Ultrasonic Processors

- Hielscher UP1000 Ultrasonic
- Hielscher lab scale Ultrasonic
- Hielscher Vial Tweeter

Calorimeters

- Parr 6050 Oxygen Bomb calorimeter
- Parr 6100 Oxygen Bomb calorimeter
- Parr 6400 Oxygen Bomb calorimeter
- Hitachi 7000 TGA/DTA
- Fauske ARSST
- Fauske VSP
- Navas High Mass TGA2000

Electrochemistry

- Gamry Reference 600 Potentiostat
- Gamry Interface 1000 Potentiostat
- Gamry Reference 3000 Potentiostat

Molecular Spectroscopy

- Rigaku Progeny Handheld Raman Spectrometer
- JDSU MicroNIR Spectrometer
- Foster and Freeman Benchtop Raman Spectrometer
- AJ Specord 210 UV-VIS

Pressure Vessels

- Parr 4566 Benchtop pressure vessel
- Parr 5513 Compact Lab Reactor
- Parr 4871 Process Controller
- Waters Supercritical CO₂ Systems

TOC Analysers

- AJ Multi-NC 3100
- AJ Multi NC UV-HS

Other Analysis techniques

- Sherwood 926 Chloride Analyser
- Sherwood Flame Photometer
- Brookhaven Omni Particle Size Analyser
- Dietmar Schulze Shear Tester

Registration form for
SciMed 2015 Open Days and ICP-MS launch day

PLEASE FILL ONE FORM PER PERSON

Contact Name:

Company:

Address:

Town/City:

Postcode:

Telephone:

Email:

PLEASE COMPLETE:

I will be attending the:

Open Day 1, Tuesday 6th October

Open Day 2, Wednesday 7th October

ICP-MS launch day, Thursday 8th October

If you attend both open days, you are entitled to a free evening dinner on the 6th October - if you wish to join us then please select here:

Do you have any special dietary requirements (buffet lunch or dinner):

If you require us to book accommodation for you please specify your requirements:

Comments and specific interest in the days: