

# Chromatographic characterisation and purification techniques for BioPharm.

## Focusing on monoclonal antibody derived drugs



GlaxoSmithKline

**GLAXOSMITHKLINE STEVENAGE HERTS UK**

**14 & 15 March 2012**

Monoclonal antibodies, proteins and biomolecules as therapeutics are enjoying very high growth in the biologically active molecules armoury of the Pharmaceutical industry.

The characterisation and purification of these complex molecules are a major challenge facing scientists in the industry.

This symposium will focus on solutions to these problems and discuss the unique issues presented by structurally complex, large molecular weight, biologically active molecules. An exhibition of tools necessary to address these problems will augment the lecture presentations.

Experts from within the pharmaceutical industry and from instrumentation and consumable suppliers will present their latest innovations.

The two day symposium will be held at the GSK R&D site at Stevenage, Herts, UK, and will facilitate delegate and exhibitor access to GSK's in-house scientists.

The afternoon of March 15th will feature two specialist workshops run by expert analysts from within GSK and from companies with proven solutions to the many analytical and preparative challenges incurred in characterising and purifying complex biomolecules. The aim will be to inform you with as much freedom of discussion as possible to ensure your questions and problems are addressed professionally with state of the art knowledge.

In addition to chromatographic and electrophoretic separation science techniques our presenters will include mass spectrometry, NMR and structural methods to enable a more complete characterisation of these complex biomolecules.

## SCIENTIFIC LECTURE PROGRAMME FOR MARCH 14<sup>TH</sup> AND 15<sup>TH</sup> 2012

SPEAKER	PROGRAMME	COMPANY	STARTING TIMES
	<b>MARCH 14TH 2012 . GSK opens for DAY1 registration and exhibition stand set up: Juice, Tea and Coffee available</b>		<b>08:15</b>
Chris Bevan	<b>DAY 1 opening welcome remarks</b>	CHROMSOC	10:00
Mike Molloy	Analytical Chromatography of Protein Therapeutics, "Does size matter?"	GSK	10:05
Ken Cook	High Resolution methods for speeding up Bio-Therapeutic protein analysis	THERMO (DIONEX)	10:40
Heikki Lanckreit	Sticky Proteins: Analysis and Discovery" NVoy technology, fractionation systems and novel chromatography techniques.	EXPEDEON	11:00
Patrick Boyce	Improved Method Development Workflows for Ion Exchange and Size Exclusion Chromatography of Biotherapeutics	WATERS	11:10
	<b>15 MINS MORNING TEA BREAK</b>		<b>11:30</b>
Judith Vajda	A new approach for mAb aggregate detection – HIC with nonporous resin	TOSOH	11:45
Thomas Knapman	High resolution MS and MSMS strategies for the characterisation of biomolecules	ABSCIEX	12:00
Richard Kay	Challenges in quantifying monoclonal antibodies in biological matrices by LC-MS/MS	QUOTIENT	12:15
	<b>LUNCH AND EXHIBITION OPENS FOR 90 MINS</b>		<b>12:45</b>
Achim Treumann	Identification and characterisation of proteins	NEPAF	02:15
Ashley Sage	Advanced Analytical Workflows for Characterisation of Biological Entities – from intact mAbs to N-Glycans	AGILENT	02:55
Mitul Patel	Characterization of therapeutic protein at early development stages	GSK	03:15
Joanna Freeke	Porous Graphitic Carbon vs Strong Cation Exchange: Which is best in a 2D proteomics workflow?	THERMO FISHER SCI	03:55
Mark Potheary	Characterisation of antibodies and other proteins using a variety of characterisation techniques, including SEC	MALVERN	04:05
James Walford	Bio-Pharm Purification Challenges at GSK	GSK	04:35
	<b>END OF DAY 1 TEA AND COFFEE</b>		<b>05:00</b>

ALL INVITED	<b>Ten pin bowling competition at Hollywood bowl Stevenage 6:30pm start for 2 games and buffet</b>	BMG LABTECH	<b>06:30</b>
	<b>MARCH 15TH 2012. GSK opens for Day 2 registration:</b>		<b>09:00</b>
Chris Bevan	<b>DAY 2 Opening remarks</b>	CHROMSOC	09:30
Alistair D. Kippen	Analytical Development of Biopharmaceuticals and Assessment of Modification sites	MEDIMMUNE	09:40
Fiona Greer	Characterisation and Comparability of Antibody Products	SGS M-SCAN	10:15
James Rudge	Aeris: Core-Shell Technology for Proteins and Peptides	PHENOMENEX	10:35
Marcus Mreyen	Back to the Future with improved Edman Sequencing	SHIMADZU	10:55
Catherine Wark	Microplate screening approaches for measuring solubility and aggregation of proteins	BMG LABTECH	11:05
Paul Clarke	The benefits of multi-detector SEC as a method for characterising the absolute molecular weight, size and structure of proteins	MALVERN	11:20
George Tranter	Chiroptical Methods for Biopharmaceutical Characterisation	CHIRALABS	11:30
	<b>LUNCH DAY 2 and EXHIBITION OPENS FOR 85 MINS</b>		<b>12:05</b>
ALL INVITED	WORKSHOP 1 Chromatographic method development for BioPharms (Mike Molloy et. al)	GSK	01:30
	Change around for second workshop		02:40
ALL INVITED	WORKSHOP 2 Characterisation techniques for Biopharms  (A. Edwards, S. Barry, Cecilia Reid, Chun-wa Chung, A. West, M. Smith and G. Tranter)	GSK	02:50
	<b>END OF DAY 2 CLOSING REMARKS AND TEA</b>		<b>04:00</b>
	<b>Symposium closes and exhibition cleared away</b>		<b>05:00</b>

#### WORKSHOP TOPICS

##### WORKSHOP 1 Analytical Methods development/characterisation:

Review and discuss some of the challenges in these areas.

1. Size exclusion chromatography
2. Capillary electrophoresis
3. Other techniques

**WORKSHOP 2: Characterisation of macromolecules  
covering:**

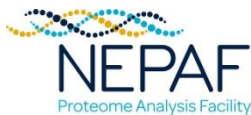
4. Ion mobility spectroscopy/mass spectrometry (IMS/MS)
5. Pin-pointing post translational modifications and protein adducts
6. MALDI in source decay (ISD) to sequence proteins,
7. Chiroptical spectroscopy
8. Applications of x-ray crystallography



The Chromatographic Society acknowledges the support of the following companies



Agilent Technologies



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ThermoFisher  
SCIENTIFIC



In order to encourage social networking between delegates, presenters and exhibitors, a 10 pin bowling event with a buffet will be organised for the evening of March 14<sup>th</sup> at the Stevenage Hollywood bowl.



The Chromatographic Society website [www.chromsoc.com](http://www.chromsoc.com) will publish updates of the symposium programme as it develops.

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#### **How to secure your place at the symposium:**

Correspondence and bookings should be addressed to:

Meeting Makers Ltd, Crawford Building, 76 Southbrae Drive, Glasgow G13 1PP

Tel: 00 44 (0) 141 434 1500 Fax: 00 44 (0) 141 434 1519 <http://www.meetingmakers.co.uk>

Here are the electronic registration links for you to register as a sponsoring company and/or as a delegate:

Link for registering as sponsors/exhibitors :

[https://www4.eventsinteractive.com/mm/getdemo.ei?id=170193&s=\\_37O0LSN7V](https://www4.eventsinteractive.com/mm/getdemo.ei?id=170193&s=_37O0LSN7V)

Please use the link below to register as a delegate:

<https://www4.eventsinteractive.com/mm/getdemo.ei?id=170193&s=2I00QVON3>

If you wish to register and do not wish to use the electronic links then please e-mail

Matthew Gilmour at Meeting Makers [matthew@meetingmakers.co.uk](mailto:matthew@meetingmakers.co.uk)

#### **Delegate admission prices:**

Chromatographic Society members = £250 Non-members = £300

Members of the BMSS and Royal Society of Chemistry are admitted at members prices = £250

Students, unwaged and retired = £100

#### **EXHIBITOR AND SPONSORSHIP OPPORTUNITIES AND ADMISSION CHARGES**

### **GOLD LEVEL SPONSORSHIP £1750**

Table top exhibition stand & 20 mins lecture time integrated into the programme

3 free delegate admission places

### **SILVER LEVEL SPONSORSHIP £1250**

Table top exhibition stand & 10 mins lecture time integrated into the programme

2 free delegate admission places

### **BRONZE LEVEL SPONSORSHIP £750**

Table top exhibition stand and 1 free delegate admission place

*NOTE: VAT at 20% is additionally charged on all prices*

### **HOTELS IN THE STEVENAGE AREA**

**For your information the following hotels are close to the GSK Medicines Research centre site:**

**NOVOTEL, Knebworth Park , SG1 2AX STEVENAGE**

Tel (+44)1438/346100 , Fax (+44)1438/723872 , E-mail [H0992@accor.com](mailto:H0992@accor.com)

**BEST WESTERN Roebuck Inn**, London Road, Broadwater, Stevenage, Herts, SG2 8DS  
08457 76 76 76

**Premier Inn Stevenage Central**

Six Hills Way, Horizon Technology Pk,, Stevenage, Hertfordshire , SG1 2DD, United Kingdom

0871 527 9034

**Ramada Cromwell Stevenage**

High St, Stevenage, Herts SG1 3AZ, United Kingdom

01438 779954

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The Chromatographic Society founded in 1956 is an internationally connected organisation and UK registered charity devoted to the promotion and dissemination of knowledge on all aspects of chromatography and related separation techniques.



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