



## THE JOINT PHARMACEUTICAL ANALYSIS GROUP

<[www.jpag.org](http://www.jpag.org)>

# Chemometrics and multivariate statistics in pharmaceutical development

A one-day symposium in partnership with  
the Royal Society of Chemistry Chemometrics Group

at the Royal Pharmaceutical Society of Great Britain

**Thursday 22 April 2010**

### Scope

Chemometrics and multivariate statistics are becoming essential tools within pharmaceutical development as we seek to gain a deeper understanding and control of our processes to meet regulatory demand and deliver our products more efficiently and faster to the market.

This symposium will introduce some of the basic statistical and chemometric principles and will explore how they are being employed within the pharmaceutical industry. Applications will include multivariate analysis, design of experiment and real time release including process trouble shooting and monitoring.

### Who should attend

This symposium will be of interest to analytical and pharmaceutical scientists involved in manufacturing optimisation, process design, analytical method development and data interpretation through multivariate methods.

It will also be of interest to those wishing to gain a deeper understanding of how statistics and chemometrics can aid efficient pharmaceutical development and manufacture and provide tools to better understand product design space.

*A customised certificate attesting four hours credit for Continuing Professional Development will be included in the delegate pack for all registrants*

## Programme

**09.30**      **Registration and coffee**

**Session 1: Chairman: Ken Leiper**  
*Joint Pharmaceutical Analysis Group*

**10.00**      **Introductions**

**Ken Leiper and Vicki Woodward, Chair RSC Chemometrics sub-group**

**10.10**      **An introduction to multivariate analysis in pharmaceutical development**

**Dr Tony Walmsley, *Department of Chemistry, Hull University***

**10.50**      **The use of optimisation, confirmatory and robustness studies in analytical R&D**

**Patrick Jackson, *GlaxoSmithKline***

**11.30**      **Using multivariate data analysis for process troubleshooting; how to interrogate and interpret process signals – a case study**

**Dr Theodora Kourti, *GlaxoSmithKline***

**12.10**      **Lunch and Exhibition**

**Session 2: Chairman: Vicki Woodward, *RSC Chemometrics sub group***

**13.40**      **Improving method capability of a drug-substance HPLC assay.**

**Dr Bieke Dejaegher, *Department Analytical Chemistry and Pharmaceutical Technology (FABI), Vrije University Brussel***

**14.20**      **The application of multivariate analysis to salt and polymorph screening data**

**Dr Olof Svensson, *AstraZeneca R&D, Molndal, Sweden***

**15.00**      **Tea break**

**15.20**      **New approaches to multivariate statistical process control in the pharmaceutical industry using one class classifiers**

**Professor Richard Brereton, *Chemometrics Centre, Bristol University***

**16.00**      **FTIR and Raman multivariate spectroscopic imaging: an overview and case applications in transdermal drug delivery studies.**

**Dr John Tetteh, *Analytical Informatics and Chemometrics, Greenwich University***

**16.40**      **Closing remarks**

**16.45**      **Close**

**Joint Pharmaceutical Analysis Group**  
**“Chemometrics and predictive tools in pharmaceutical development”, Thursday 22 April**

**Registration form**

Please send completed registration forms (one per person; fax or photocopies are accepted) to the Secretariat: Ms Julie Churchill, 3<sup>rd</sup> floor, Royal Pharmaceutical Society of Great Britain, 1 Lambeth High Street, London SE1 7JN

**Delegate fees** (*include registration, documentation, lunch and refreshments*). Please tick the appropriate box:

JPAG members	£149	<input type="checkbox"/>
Other members of RSC or RPSGB **or APSGB	£199	<input type="checkbox"/>
<i>Bona fide</i> students, retired or unemployed members of RSC or RPSGB	£34	<input type="checkbox"/>
Not members of JPAG, or RSC or RPSGB	£249	<input type="checkbox"/>

[\*\***Details** on how members of RPSGB and RSC can join JPAG are on the JPAG website.]

I enclose payment of £..... [Please note that there is no charge for VAT]

**Details of delegate:**

SURNAME: \_\_\_\_\_ (BLOCK CAPITALS PLEASE)

TITLE (Miss/Mrs/Mr/Dr/Professor) \_\_\_\_\_ FORENAME \_\_\_\_\_

ORGANISATION \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_  
POSTCODE \_\_\_\_\_

TEL: \_\_\_\_\_ FAX \_\_\_\_\_ e-mail \_\_\_\_\_

**Payment of delegate fee:** Fees are payable to “The Joint Pharmaceutical Analysis Group” [NOT Royal Pharmaceutical Society]. Please indicate method of payment:

- ☐ Cheque in GB pounds sterling payable to “**The Joint Pharmaceutical Analysis Group**”
- ☐ Bank Transfer: use Sort Code: 30-99-93. Account Number: 00779842 at Lloyds TSB Bank, 41-43 South Street, Worthing, West Sussex, BN11 3AU **Quote reference: 0410**

**Delegate fees** are payable upon registration and are not refundable. E-mail confirmation of registration will be sent within 5 working days – please notify if you do not receive confirmation from the Secretariat. Notified substitution is allowed at any time

**Enquiries** should be addressed to the Secretariat: Ms Julie Churchill. Tel 020 7572 2640; Fax: 020 7572 2506; E-mail: <events@rpsgb.org>

**Information** on the programme, submission of abstracts for Poster presentation, location of the venue and local hotels and JPAG membership is available on the JPAG website at: [www.jpag.org](http://www.jpag.org)

**Keeping you informed:** The contact details you have provided may be used to keep you informed about future JPAG, RPSGB and RSC events, products and services. If you do not wish to receive such information by any of the methods listed below please indicate by ticking the corresponding box:

Mail ☐ Email ☐ Telephone ☐

## **JPAG symposium and conference programmes 2009 - 2010**

**Thursday 4 March 2010**

Royal Pharmaceutical Society, London

**Quality by Design for analytical methods**

**Wednesday 17 March 2010**

Particle Characterisation Interest Group of the Royal Society of Chemistry  
Royal Pharmaceutical Society, London

**Characterisation of sub-micron and nano-sized materials**

**Thursday 22 April 2010**

In partnership with the Chemometrics Group of the Royal Society of Chemistry  
Royal Pharmaceutical Society, London

**Chemometrics and predictive tools in pharmaceutical development**

**Thursday 10 June 2010**

Royal Pharmaceutical Society, London

**Current issues in the stability of products designed for specialist populations**

**For current information see the JPAG website: <[www.jpag.org](http://www.jpag.org)>**

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**For some events, block bookings** for students (to include documentation but not lunch) can be made by Academic supervisors; please ask for details from the Secretariat.