# X-Ray Fluorescence (XRF) Sessions. British Crystallographic Association Spring Meeting

12-14<sup>th</sup> April 2005 - Loughborough, UK.

PLEASE HELP US BY DISTRIBUTING
THIS FLYER TO ANYONE WHO IS
INTERESTED IN X-RAY
FLUORESCENCE. Our mailing list does not
extend to XRF users!

Our aim, through the Industrial Group, is to bring together a UK forum for all XRF users and combine it with a commercial exhibition of equipment and consumables. There are 24 presentations, a workshop, a discussion session, a poster session and dedicated commercial presentations from exhibitors. Please check out the XRF web page at <a href="http://www.crystallography.org.uk/ig/meet5xrf.htm">http://www.crystallography.org.uk/ig/meet5xrf.htm</a> for more information and to download a registration form. There is still time to present a poster at the meeting so send in an abstract now and you may win the prize!

NOTE: Day registration is only £65 if you book before 14<sup>th</sup> March and 3 days fully inclusive of registration, meals, two nights basic accommodation and conference dinner is less than £ 240. Fully inclusive rates are available for less than £155 for students and £200 other concessions. Register your interest in the XRF sessions online and you will be given a unique code to cover the £25 BCA non- member registration surcharge!

Overview of the XRF Sessions.

Tuesday 12/4/05	Wednesday 13/04/05	Thursday 14/04/05
Travel to Loughborough	Liquid samples.	Standards & Calibration.
Registration	Chair: David Beveridge	Chair: Dave Taylor
Coffee & Exhibition		
Exhibition Opening & Plenary Session	WORKSHOP  Awkward Samples.  Contact: David Beveridge	EDXRF Applications Chair: Graham Oliver
Lunch & Exhibition		
Plenary Session Including: XRD,XRF Industrial Plenary. Herbert Pöllmann, Halle Univ. Germany.	WDXRF Applications Chair: Mark Ingham	Combined XRF/XRD applications Followed by Discussion Forum  Chairs: David Beveridge & Dave Taylor
Tea & Exhibition		
XRF Exhibitors Session.  Presentations on state of the art equipment and consumables.  Chairs: David Beveridge & Dave Taylor	WDXRF cont. including Light Element Analysis. Chair: Margaret West.	
Posters & Exhibition	Conference Dinner	

#### **Individual Session Details.**

## **Tuesday 12th April 2005**

PLENARY: XRD,XRF and in-situ investigations on anhydrous and hydrous cementious materials - Some examples. *Herbert Pöllmann, Halle Univ. Germany.* 

15:30-18:00 XRF Exhibitors Session. Chairs David Beveridge, ILFORD Imaging UK Ltd. & Dave Taylor.

15:30 Introducing XRF – what is it and what can it do? Dave Taylor, BCA.

16:00 What XRF for which Job? Phil Russell, PANalytical

**16:30 Exhibitor presentations**: Short commercial presentations by exhibitors will give delegates a chance of updating their product knowledge and prioritise their visits in the exhibition.

XRF Exhibitors include: Analysco, BrukerAXS, Hiltonbrooks, Horiba Jobin Yvon, PANalytical, Rigaku, Socachim Xrf Scientific, Spectro and Spex Certiprep. For the latest complete list including crystallographic exhibitors please check our web pages!

Tuesday Evening - Poster and Exhibition Session with buffet and wine.

# XRF Sessions at the BCA 2005 Spring Meeting continued:

### Wednesday 13th April 2005

08:30-10:00 Liquid samples.

Chair David Beveridge, ILFORD Imaging UK Ltd

**08:30** Overcoming cobalt interference in sulphur analysis. *Siân Shore, Shell Global Solutions.* 

**08:50** Ultra Carry filter, allowing ppb detection levels by WDXRF, *Al Martin, RigakuMSC*.

**09:10** Film 2005. A review of thin films used in XRF Analysis of Liquid Samples. *Gaetan Deshais, BrukerAXS.* 

**09:30** Using Activated Alumina for Heavy Metal Contaminants Analysis. Steve Davies, PANalytical

# 10:30 - 12:00 WORKSHOP - Awkward Samples. Chair David Beveridge, ILFORD Imaging UK Ltd

What are your awkward samples like? Do they decompose under irradiation?

Are they sticky messes that sediment given half a chance? If you've got a good tip for getting round a problem, spend a few minutes telling the rest of us about it.

If you've got a difficult sample and you can't see how to analyse it by XRF, tell us about it and see if the collective wisdom of the rest of us can help you.

This will be an informal session where we share problems and solutions.

I hope we'll have brief discussions on a good range of topics - at least six for preference.

If you can contribute, contact David Beveridge as soon as possible (e-mail is easiest –details on the web page).

### 13:00 - 14:30 WDXRF Applications.

Chair Mark Ingham. British Geological Survey.

**13:00 Keeping it Clean,** Margaret West, West X-ray Solutions Ltd.

13:30 Determination of sulphur and chlorine in organic compounds by XRF. David Beveridge, ILFORD Imaging UK Ltd.

**14:00 Fusion for better analytical results in XRF analysis.** *Michel A. J. Davidts, Socachim-XRF Scientific.* 

15:00 - 16:30 WDXRF cont. including Light Element Analysis. (Li-F or  $\lambda$ >1.3nm).

Chair Margaret West, West X-ray Solutions Ltd

**15:00** Fusion technology for XRF Sample preparation. *Rainer Schramm, FLUXANA.* 

15:20 Light Element Analysis - the benefits of using a 30 micron tube window for B – O, Al Martin, RigakuMSC.

**15:40 Status of WDXRF in Ceramic Analysis.** *Graham Oliver, CTE, Ceram.* 

16:10 Close

Wednesday Evening - Conference Dinner.

### Thursday 14th April 2005

Standards & Calibration. 08:30 - 10:00

Chair Dave Taylor, BCA

**08:30 Setting the Standards for Calibrations.** *Margaret West, West X-ray Solutions Ltd.* 

09:00 An improved analytical methodology using synthetic standards, fused beads and X-ray fluorescence spectrometry for cements and associated materials. Neil Eatherington, British Geological Survey.

09:30 Use of disparate materials for the calibration of an EDXRF spectrometer for the analysis of waste packaging material. Ken Field, Oxford Instruments Analytical

10:30 - 12:00 EDXRF - Applications.

Chair Graham Oliver, CTE, Ceram.

**10:30** How does mobile XRFS measure up to contaminated land assessment? *Mark Ingham, British Geological Survey.* 

11:00 Field Portable XRF for On-site Screening and Analysis of Prohibited Substances in Plastics.

Stanislaw Piorek, R&D Niton, LLC

**11:20 EDXRF applications in the pharmaceutical industry.** *Martin J Teasdale, GlaxoSmithKline* 

11:40 Micro-EDXRF and its applications - non-destructive elemental mapping. Simon Fitzgerald, HORIBA Jobin Yvon Ltd.

13:00 - 15:00 Combined XRF/XRD applications.

#### Chairs David Beveridge and Dave Taylor

This session is for applications where the combined power of XRF and XRD is needed to resolve materials science applications and will be of interest to all Industrial Group members.

13:00 Combining XRF, powder XRD and structural modelling techniques: application to plastic clays and kaolins. *Noel Thomas, WBB Minerals, Germany.* 

13:30 XRD and XRF Studies on GaMnAs Thin Films. Chris Staddon, University of Nottingham.

**14:00 Discussion Forum -** We will wind up the programme with an informal discussion session which will allow you to ask all the questions that haven't been answered so far in the sessions. Finally, we will seek your views on the future of XRF within the BCA.

### 15:00 Close.

We hope to see you in Loughborough! David Beveridge & Dave Taylor - session organisers.