



## The use of Statistics for the Control of Analytical Methods in Accredited Laboratories

# National Measurement & Regulation Office, Teddington 20 October 2015

## Chairman -Jeff Llewellyn, BMTA President and Chief Executive

## A BMTA Seminar presented in conjunction with CSols

Speakers at this event will discuss the use of Statistics for the Control of Analytical Methods in Accredited Laboratories. Topics will include UKAS include the proposed redrafting of ISO 17025 and the implementation of ISO 15189 which affects medical laboratories. Discussions will also cover the need for a consistent audit approach across sites and across the water, environmental, food and medical sectors. Presentations will include understanding measurement uncertainty, key statistical tools that can be used in method validation, controlling your AQC/IQC charts and AQC/IQC exceptions management and reporting. Coupled with talks by speakers from the water/environmental and medical laboratories this promises to be both an interesting and informative meeting to attend.

09.30	Registration	& Coffee
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## 10.00 Chairman's Introduction – Programme for the Day

## 10.10 UKAS Presentation

## Jon Murthy, Marketing Manager, UKAS

Jon will give an overview of latest developments at UKAS including the proposed redrafting of ISO 17025 and the implementation of ISO 15189 which affects medical laboratories. He will also discuss the need for a consistent audit approach across sites and across the water, environmental, food and medical sectors. Finally, the presentation will consider what UKAS observe goes wrong and the corrections required to maintain the control of analytical methods in accredited laboratories.

## 10.40 Understanding Measurement Uncertainty

## **David Galsworthv**. Animal & Plant Health Agency (APHA)

Measurement Uncertainty - What is it? Why do we need it? How do we use it? A brief outline of the reasons for (and benefits of) determining the uncertainty in our day-to-day measurements and UKAS expectations on establishing uncertainty budgets.

### 11.10 Coffee Break

## 11.30 Use of Statistics for Control of Analytical Methods in Accredited Laboratories

## Water Industry Focus

## 12.00 Demonstrating the fitness for purpose of Analytical Methods – a Practical guide for Laboratories

**Vicki Barwick,** Head of Commercial Training, Science & Innovation, LGC Ltd Statistics play an important role in the validation of analytical methods. This presentation will outline some of the key statistical tools that can be used in method validation, as described in the 2<sup>nd</sup> edition of the Eurachem Guide 'The Fitness for Purpose of Analytical Methods – A Laboratory Guide to Method Validation and Related Topics'.





## 12.30 Lunch & Networking

## 13.30 Does Proficiency Testing Improve Laboratory Performance?

Tracey Noblett, Head of Microbiology, LGC Ltd

The presentation will look at how proficiency testing works, the meaning of PT performance scores, and discuss how PT can be used to monitor and improve laboratory performance.

## 14.00 Controlling your AQC/IQC charts

Claire Parker, Implementation Manager, CSols

A laboratory has many rules and procedures to follow to ensure that their Stewart / Levey Jennings charts stay in control. Using software can help laboratories interpret their charts, record and track investigations and standardise the limit review procedure, including the F & T tests.

#### 14.30 Brief Tea Break

## 14.40 External Quality Assessment for Clinical Trace Element Laboratories

Chris Harrington, Principal Healthcare Scientist, Surrey Pathology Services.

External Quality Assessment (EQA) is the cornerstone of quality assurance and method validation in clinical testing laboratories in the UK, ensuring that the results of patient investigations are reliable and comparable wherever they are produced. In this talk we focus specifically on EQA (ISO 17043:2010) for laboratories performing trace element measurements, although many of the points are applicable to the wider pathology areas.

## 15.10 Method Validation using Six Sigma

**Craig Webster,** Consultant Clinical Scientist at Birmingham Heartlands Hospital, Heart of England NHS Trust

Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects in any process. It is a valuable tool for the development and validation of new assays and services in the laboratory. It can guide the use and development of appropriate quality control systems in addition to the appropriate use of laboratory resources.

### 15.40 Final Discussion

## 16.00 Close

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## Booking Form – 20 October 2015 - Teddington

<u>Use of Statistics for the Control of Analytical Methods in Accredited Laboratories</u>



## Please complete this form and return it to BMTA (see below)

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		BMTA Members £100
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the Park Hotel	ou would like to be sent information about th l, Teddington.	e hotel rates for the night of 19 October
Names of attendees:		
Name of contact if different:		
Name of Company / Organisation:		
Address:		
	Post Co	ode:
Telephone:	Fax num	ber:
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BMTA, for the attention of Carol Smith	E-mail to: enquiries@bmta.co.uk
East Malling Enterprise Centre	Fax to: 01732 897453
New Road, East Malling, Kent ME19 6BJ	Telephone enquiries to: 01732 897452

With effect from 1.9.15 online bookings can be made on the BMTA website - www.bmta.co.uk

The organisers reserve the right to amend the programme if necessary

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