



Eurachem

A Focus for Analytical Chemistry in Europe

**EURACHEM Workshop on
Quality Assurance of
Measurements from
Field to Laboratory,
MIKES, Espoo Finland, 20-21 May 2013
Organised by MIKES, Eurachem
Finland and Eurachem**



Eurachem

A Focus for Analytical Chemistry in Europe

Content

- Presentation of Eurachem
- Introduction to workshop



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Eurachem

*a focus for analytical
chemistry and quality related
issues in Europe*



Eurachem

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Introduction

- Eurachem aims and membership
- Eurachem activities to date
- Recent and forthcoming activities
 - Guidance documents
 - Workshops



What is Eurachem?

- A network of national and other organisations
- A focus on analytical quality
 - Validation
 - Uncertainty
 - Traceability
- Providing authoritative guidance documents
- Organising Workshops and training events
- Primary audience:
 - Laboratories for analytical measurement
 - Accreditation bodies and related organisations

Scope & rules - Memorandum of Understanding www.eurachem.org

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Eurachem membership 2012



We welcome
Estonia 2013

Members not
shown on map



European
Commission



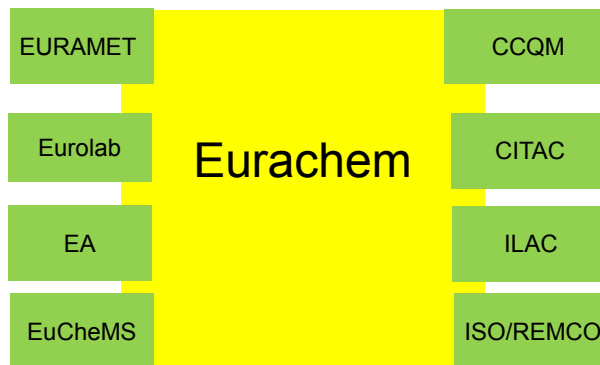
Cyprus

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Major cooperations



Activities

- Workshops and Training
 - International workshops on analytical QA issues
 - Hosted by members
- Guidance documents
 - Prepared by working groups
 - Disseminated via web and Secretariat
 - Translation and publication by members permitted



Workshops since year 2000

- Validation, Traceability and Measurement Uncertainty (2000, 2012)
- Education & Training (2004)
- Proficiency Testing (2000, 2003, 2005, 2008, 2011)
- Measurement Uncertainty (2000, 2002, 2008, 2011)
- Reference Materials (2000)
- Sampling (2001, 2008)
- Metrology and QA (2008, 2009, 2010)
- Decision making (2008, 2010)
- Internal Quality Control (2012)
- *Quality Assurance of measurements from Field to Laboratory* Espoo, Finland 20-21 May 2013

...as well as QA and training events in conjunction with General Assembly meetings and in collaboration with other organisations



Future Eurachem Workshops

- *Measurement Quality* in conjunction with celebration of 25 year of Eurachem
 - Detailed scope to be decided
 - Lisbon 19-20 May 2014
- *8th Eurachem workshop on proficiency testing in analytical chemistry, microbiology and laboratory medicine: current practices and future directions*
 - Berlin 6-9 October 2014





More recent Guidance Documents

- Use of uncertainty information in compliance assessment (2007)
The guide is applicable to decisions on compliance with regulatory or manufacturing limits where a decision is made on the basis of a measurement result accompanied by information on the uncertainty associated with the result
- Measurement uncertainty arising from sampling (2007)
This Guide aims to describe various methods that can be used to estimate the uncertainties arising from the processes of sampling and the physical preparation of samples.
- Terminology in Analytical Measurement: Introduction to VIM 3 (2011)
This Eurachem Guide discusses a selection of the concepts in VIM 3, focusing on those most likely to be encountered in analytical laboratories
- Selection, Use and Interpretation of Proficiency Testing (PT) Schemes (2nd edition, 2011)
- Quantifying Uncertainty in Analytical Measurement (3rd edition, 2012)
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More Guidance Documents

- The Fitness for Purpose of Analytical Methods – A Laboratory Guide to Method Validation and Related Topics (1998)
- Quality Assurance for R&D and Non-routine Analysis (1998)
- Selection, Use and Interpretation of Proficiency Testing (PT) Schemes by Laboratories (2000)
- Common Position Paper for the Use of Proficiency Testing as a Tool for Accreditation in Testing (2001)
- Accreditation for Microbiological Laboratories (2002)
- The Selection and use of Reference Materials (2002)
- Accreditation for Chemical Laboratories (2002)
- Traceability in Chemical Measurement (2003)

All Guides are currently available free of charge from www.eurachem.org and several translations are available at national Eurachem websites. Guides were prepared by Eurachem or in cooperation with e.g. CITAC

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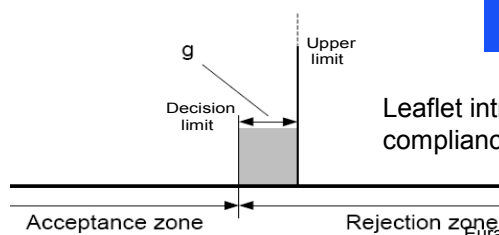
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Eurachem information leaflets

Leaflets are short briefing documents on a specific topic intended to inform a wide audience, including laboratory staff, managers and laboratory customers. Examples: traceability, proficiency testing, quality (uncertainty), compliance.

Leaflet introducing the traceability guide



Leaflet introducing the compliance guide

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Current guidance activities

- Qualitative analysis
 - Guide in preparation on assessing performance in qualitative analysis
- Validation – revision of the current guide
 - 2013 minor revision, update of terminology and references
 - 2015 a new version with additional examples

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Administration

- Change of Chairs (2-year cycle)
 - Chair: Bertil Magnusson (Sweden)
 - Vice chair: Wolfhard Wegscheider (Austria)
 - Past chair: Miloslav Suchanek (Czech republic)
- Secretariat
 - Eurolab/Eurachem Sweden 2012-2014,
secretary@eurachem.org
- Website
 - www.eurachem.org



Summary

- Continuing development of guidance
 - Latest new guide: Quantifying Uncertainty in Analytical Measurement (3rd edition, 2012)
- International workshops
 - *Measurement Quality* in conjunction with celebration of 25 year of Eurachem Lisbon 19-20 May 2014
 - *8th Eurachem workshop on proficiency testing in chemistry, microbiology and laboratory medicine practices and future directions* - Berlin 6-9 Oct 2013



Eurachem
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Home

Welcome to Eurachem

Welcome to Eurachem, a network of organisations in Europe having the objective of establishing a system for the international traceability of chemical measurements and the promotion of good quality practices. It provides a forum for the discussion of common problems and for developing an informed and considered approach to both technical and policy issues. It provides a focus for analytical chemistry and quality related issues in Europe.

Task Views

Check the Task Views to find all the Eurachem resources for particular topics:

- > Measurement Uncertainty
- > Proficiency Testing

Forthcoming Events

- 20 May 2013 Quality Assurance of Measurements from Field to Laboratory
- 23 May 2013 Eurachem General Assembly 2013
- 6 Oct 2014 8th International Workshop on Proficiency Testing

[View Full Calendar](#)

Recent News

Eurachem News No. 30 issued

The latest Eurachem Newsletter is now available to download in PDF format. Printed copies will also be available through National members. Previous newsletters can be found on the Newsletter page.

Pre-Post PT guide now available in 12 languages

The Eurachem PT working group has released 11 new translations of the information leaflet "Pre- and Post-analytical PT" to accompany the English edition. The translations can be downloaded here. Other information leaflets can be found under "Information leaflets".

Eurachem Workshop on Quality Assurance of Measurements from Field to Laboratory - Registration open

The Eurachem Workshop on Quality Assurance of Measurements from Field to Laboratory will be held in Finland on 20-21 May in 2013. The topics of the workshop focus on two main subjects: on challenges of measurements related to nanotechnology and on challenges related to on-site/on-line measurements. Further information and registration details can be found on the workshop page or the conference website.

Quick Links

Frequently requested

- > Eurachem Guides
- > Eurachem Publications
- > The Fitness for Purpose of Analytical Methods (1998)
- > Quantifying Uncertainty in Analytical Measurement, 3rd Edition (2012)
- > Terminology in Analytical Measurement: Introduction to VM 3

Recent updates

- > Page not found
- > Eurachem Guides
- > Eurachem Publications
- > Validation, Traceability and Measurement Uncertainty (2012)
- > Measurement Uncertainty in Sampling and Compliance (2008)
- > Key Challenges in Internal Quality Control (2012)

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We have an on-going development in techniques and new areas of measurement

Will development in chemical measurements give better quality?



EURACHEM Workshop on Quality Assurance of Measurements from Field to Laboratory,

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Workshop focus

The workshop will cover

Quality Assurance

Challenges of measurements in
chemical analysis related to

- on-site/on-line measurements
- nanotechnology



What is quality assurance

quality assurance is all those planned and
systematic actions necessary to provide
adequate confidence that an entity will fulfil
requirements for quality

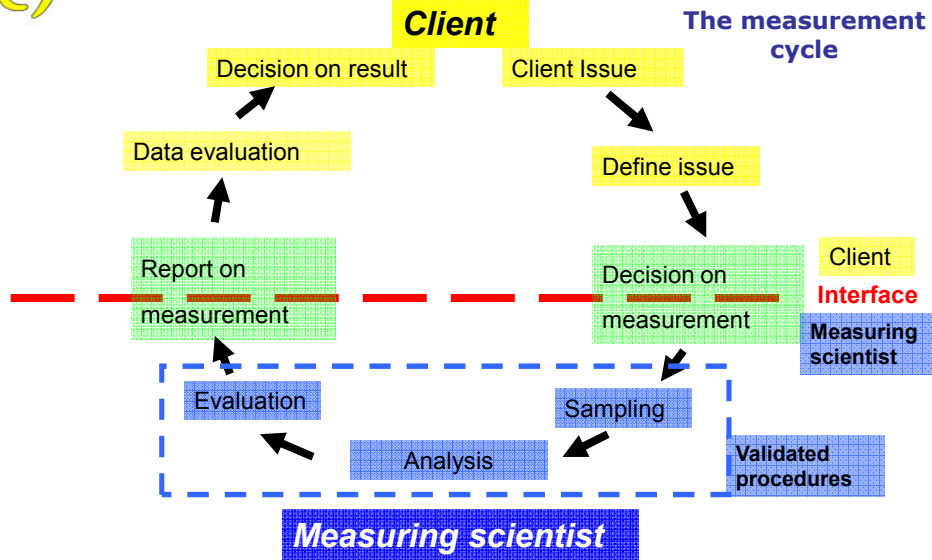
The ISO definition

***part of quality management (3.2.8) focused
on providing confidence that quality
requirements will be fulfilled***



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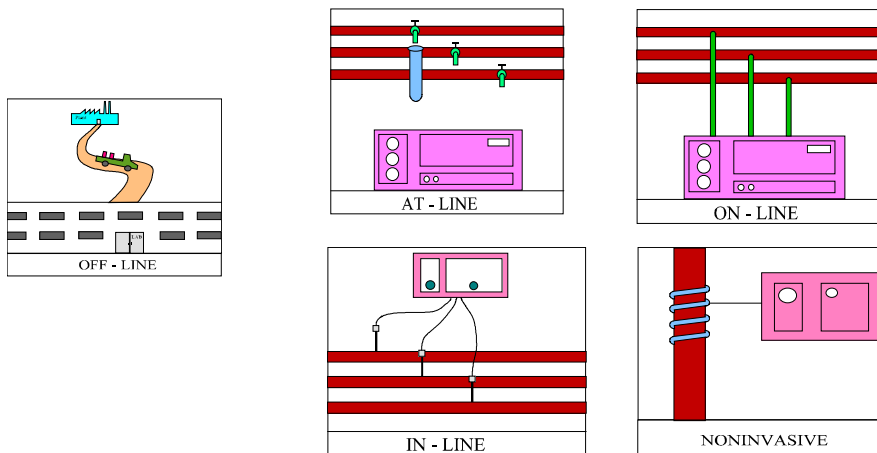


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Off site

On site



EURACHEM Workshop on Quality Assurance of Measurements from Field to Laboratory,



Challenges in on line/on site measurements

- Education *Part of analytical chemistry education?*
- Water – Aquatic monitoring
- Air – *Exhaust Emission and Air Quality and Industrial and Environmental On-Line Measurement*
- Industry – *Measurement solutions for advanced mining and energy industry*
- General - *Ion-selective electrodes: challenges and opportunities for measurements and Analytical method development and validation of sample processing methods and Advances in chemical sensing using supercontinuum light*



Tomorrow

- Challenges of measurement related to nanotechnology

We wish you welcome...

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Risto Oikari, Anna-Liisa Pikkarainen, Markus Sillanpää,
Eugenia Eftimie Totu, Wolfhard Wegscheider,

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