



Eurachem

A Focus for Analytical Chemistry in Europe

Eurachem



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

Updated May 2023



Introduction

- What is Eurachem
- Eurachem aims and membership
- Eurachem activities
 - Guidance documents
 - Workshops
 - Future activities

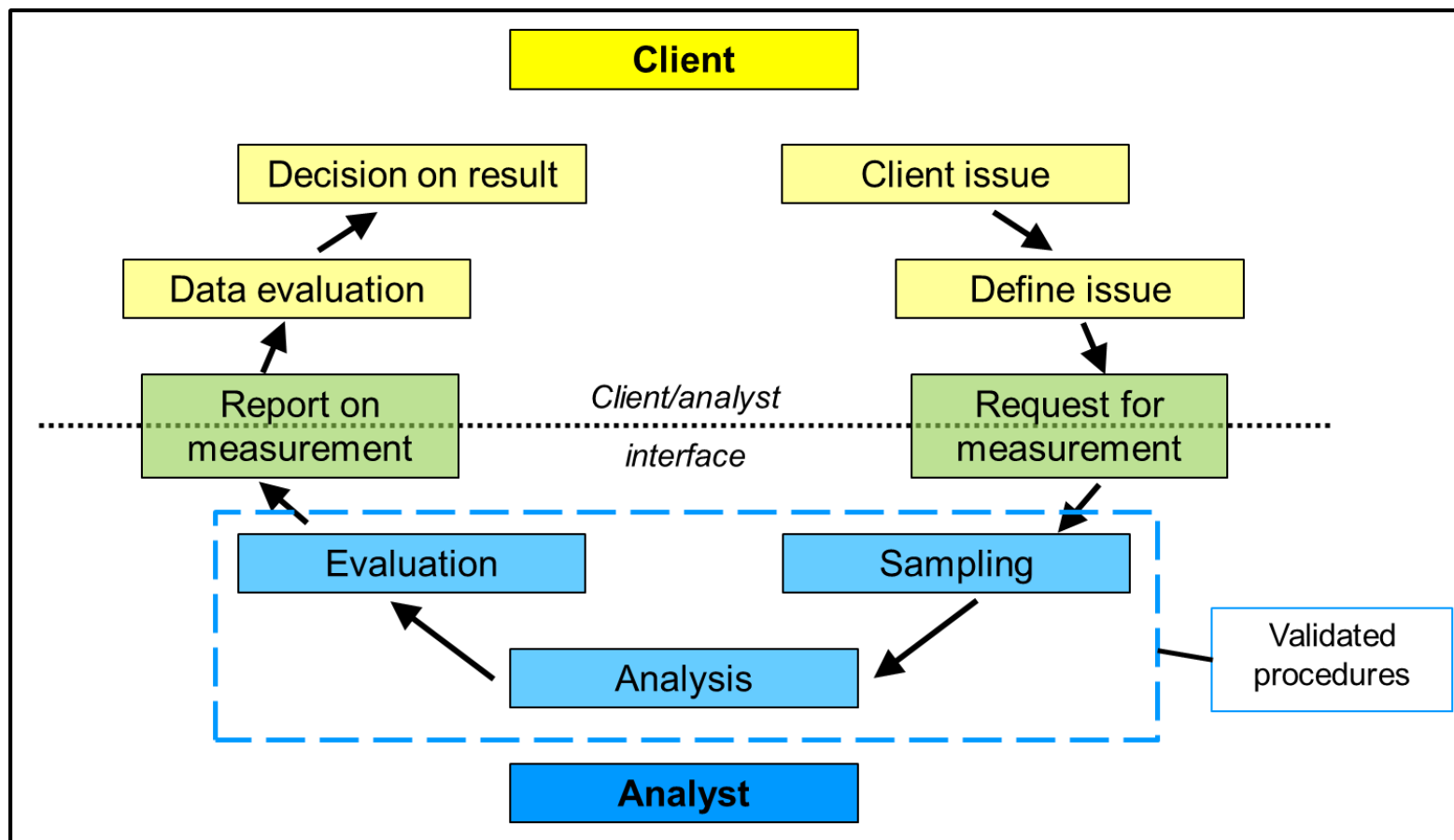
Scope & rules - Memorandum of Understanding see www.eurachem.org



The measurement cycle

Eurachem's focus is measurement quality...

...from client issue to decision on results



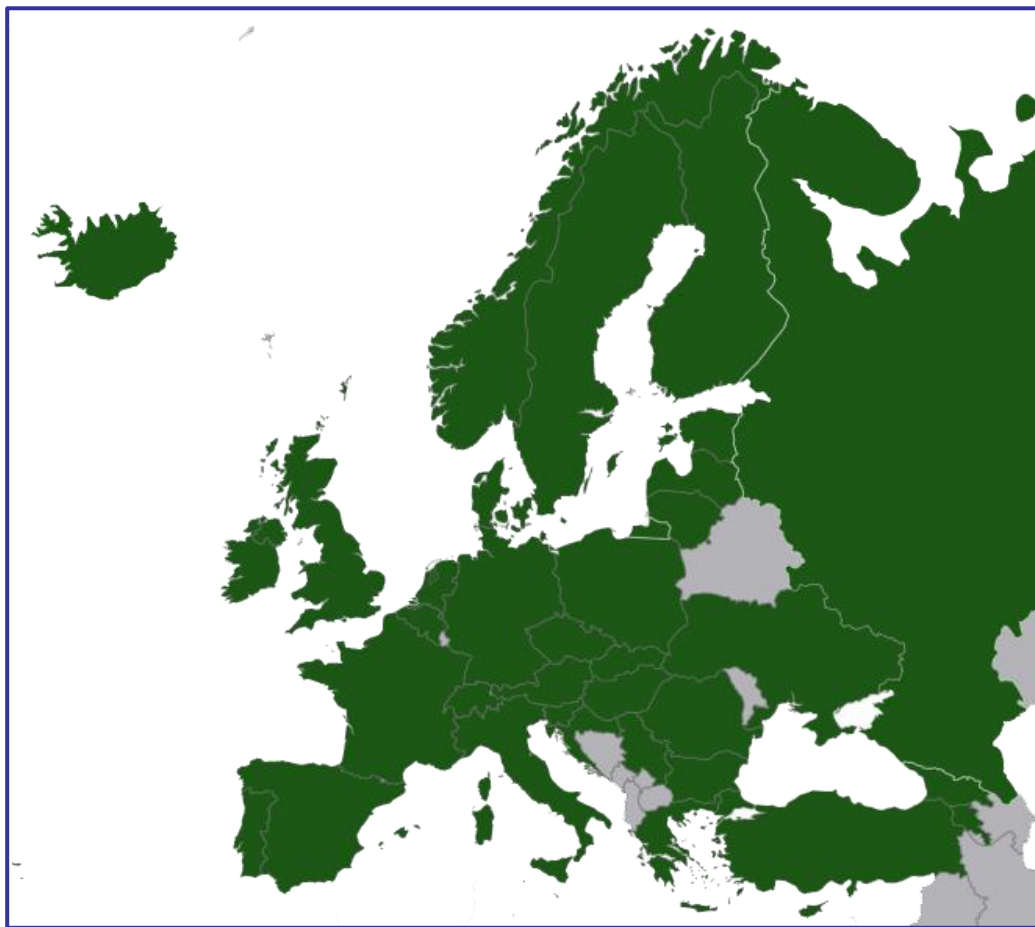


What is Eurachem?

- A network of national and other organisations
- Founded in 1989
- A focus on analytical quality:
 - Traceability of Measurement Results
 - Method Validation
 - Measurement Uncertainty
- Providing guidance documents
- Organising workshops and training events
- Primary audience:
 - Laboratories for analytical measurement
 - Accreditation bodies and related organisations



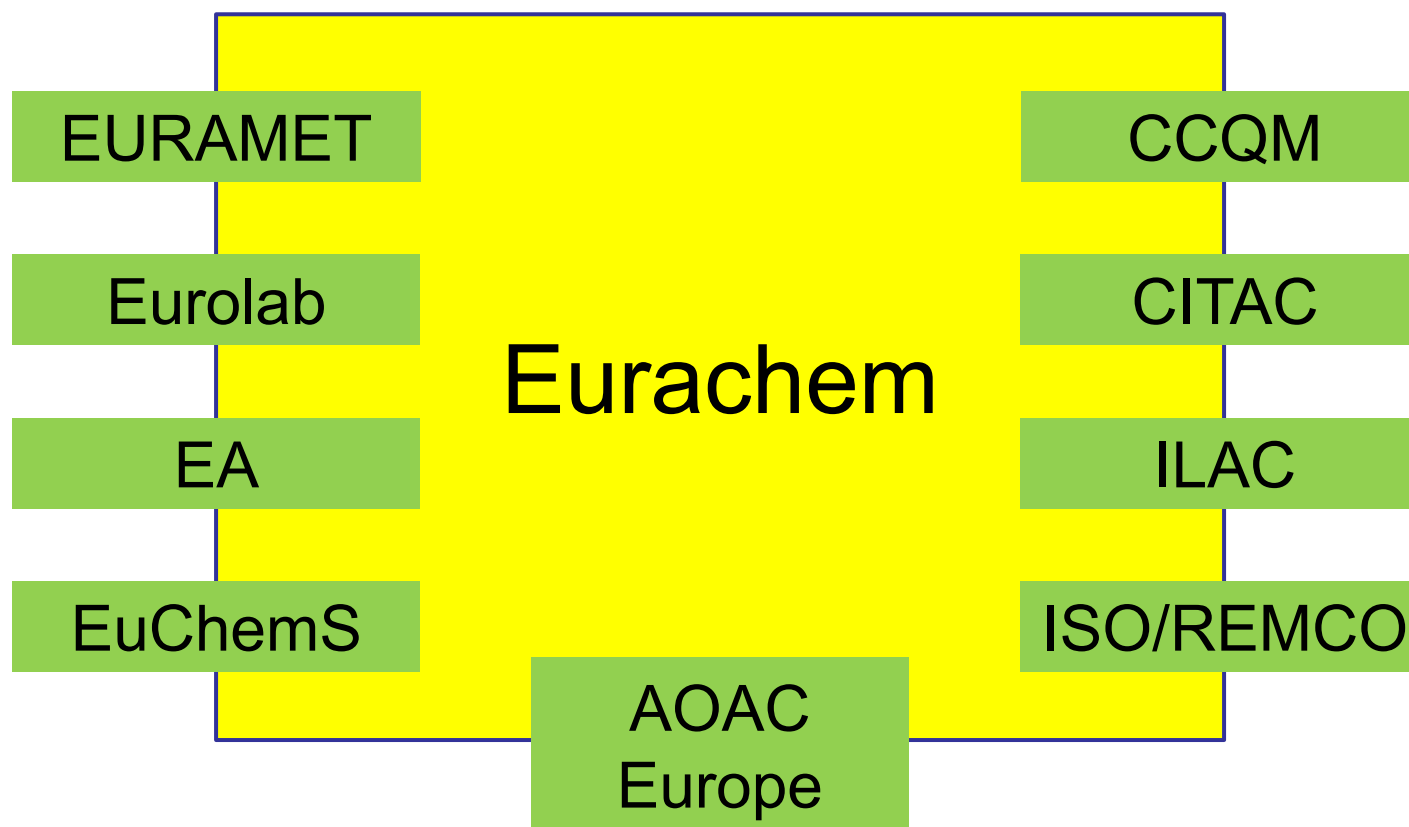
Eurachem membership



- 36 members
- Full membership
 - Countries within EU and EFTA, European Commission
 - EU accession states
 - Countries with Association Agreement with EU
- Associate membership
 - Other European countries with good analytical chemical infrastructure



Major cooperations





Activities

- **Workshops and training**
 - International workshops on analytical QA issues
 - Hosted by members
- **Guidance documents & leaflets**
 - Prepared by working groups
 - Disseminated via web
 - Translation and publication by members permitted



Workshops since year 2010

- Method Validation (2016, 2019)
- Validation, Traceability and Measurement Uncertainty (2012)
- Measurement Uncertainty (2011, 2017, 2019, 2022)
- Data – Quality, Analysis, Integrity (2018)
- Accreditation Issues (2019, 2020, 2021, 2022)
- Qualitative analysis (2022)
- Proficiency Testing (2011, 2014, 2017)
- Internal Quality Control (2012)
- Metrology and QA (2010, 2014)
- QA of measurements from Field to Laboratory (2013)
- QA in the university curriculum (2020)
- Decision making (2010)

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



Eurachem activities in 2023

- **Training event on ISO 15189:2023**
 - 16-17 March 2023, Nicosia, Cyprus
- **Eurachem week 2023**
 - Bern, Switzerland
 - Workshop (22-23 May): Ensuring reliable and accurate results of analytical processes
 - General Assembly (24-26 May) with discussion forum on Equipment Qualification
- **10th Eurachem Workshop on Proficiency testing in analytical chemistry, microbiology & laboratory medicine**
 - 25-28 September 2023, Windsor, UK





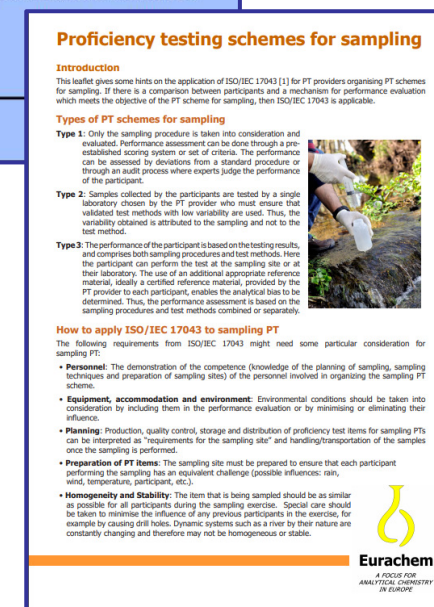
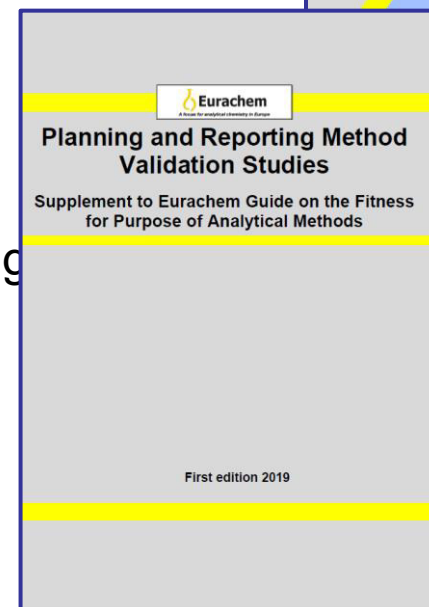
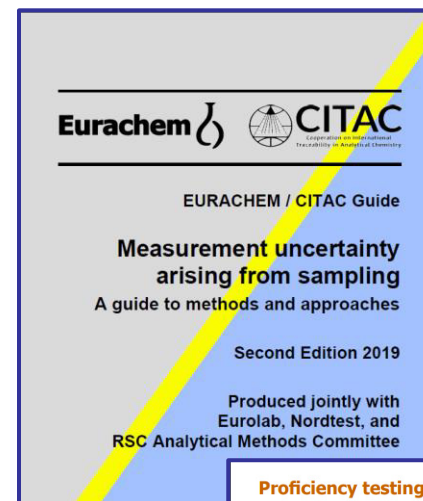
Currently active working groups

- Education and Training
- Measurement Uncertainty and Traceability
- Method Validation
- Proficiency Testing
- Qualitative Analysis and Testing
- Reference Materials
- Sampling Uncertainty



Guidance documents Available at www.eurachem.org

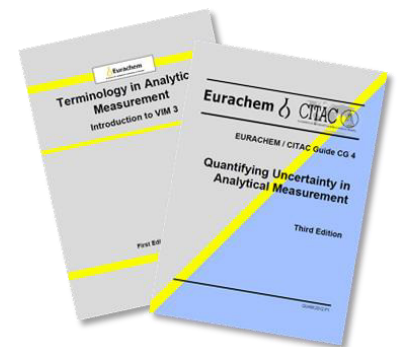
- Eurachem guides (translations available)
 - Recommendations on good practice
- Supplementary guidance
 - Recommendations on good practice illustrating/amplifying Guide topics
- Information leaflets (translations available)
 - 2 page document, introducing a Eurachem Guide or providing information on a topic of interest
- Reading list (ETWG)
 - to provide references to a selection of websites, standards, guides and books





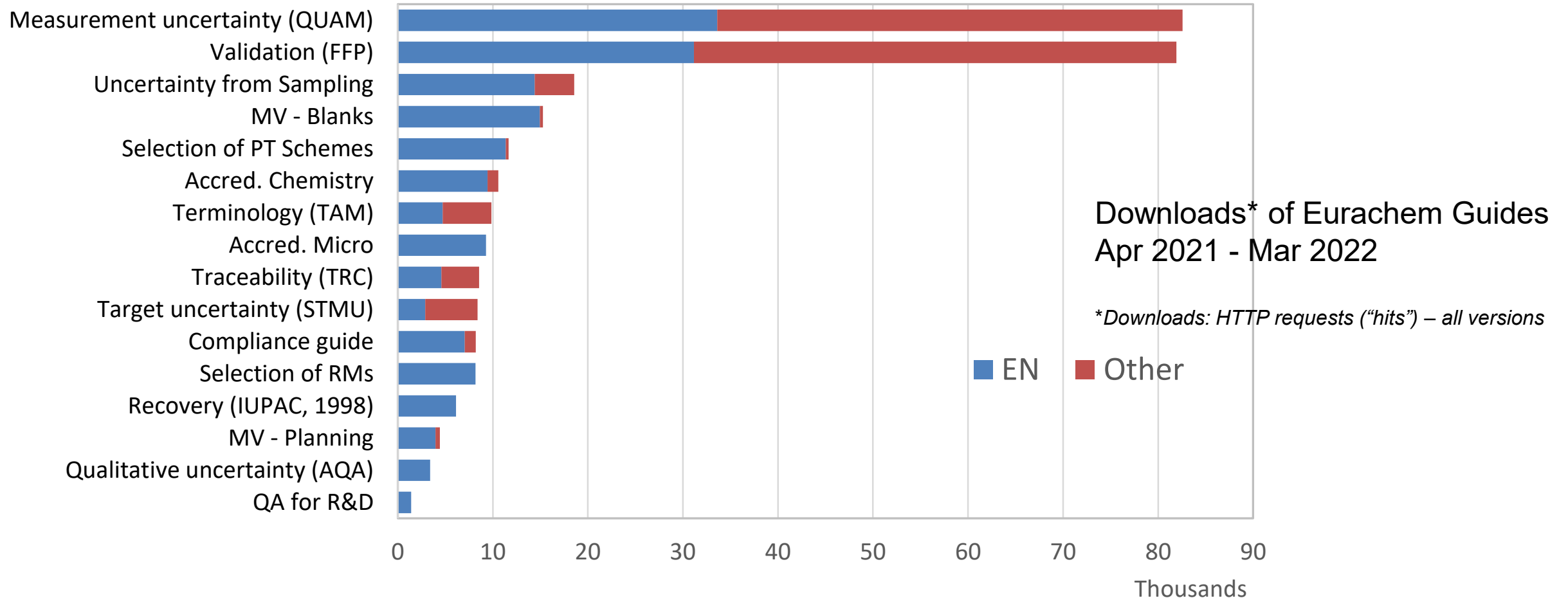
Guidance documents

- Assessment of performance and uncertainty in qualitative chemical analysis (1st ed, 2021)
- Use of Uncertainty Information in Compliance Assessment (2nd ed, 2021)
- Selection, Use and Interpretation of Proficiency Testing (PT) Schemes by Laboratories (3rd ed, 2021)
- Traceability in Chemical Measurement (2nd ed, 2019)
- Measurement Uncertainty Arising from Sampling (2nd ed, 2019)
- Guide to Quality in Analytical Chemistry: An Aid to Accreditation (3rd ed, 2016)
- Setting Target Measurement Uncertainty (1st ed, 2015)
- The Fitness for Purpose of Analytical Methods: A Laboratory Guide to Method Validation and Related Topics (2nd ed, 2014)
- Accreditation for Microbiological Laboratories (3rd ed, 2023)
- Quantifying Uncertainty in Analytical Measurement (3rd ed, 2012)
- Terminology in Analytical Measurement: Introduction to VIM 3, (2nd ed, 2023)





Downloads of guides

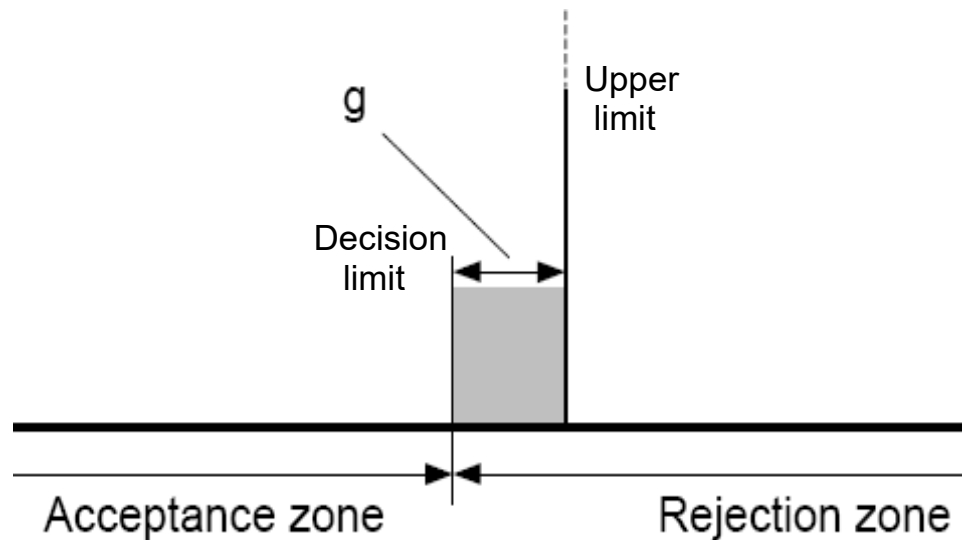




Eurachem information leaflets

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 compliance guide



Leaflet introducing the traceability guide



Information leaflets & supplements

- Proficiency testing (PT)
 - Let's call PT scheme a PT scheme (2022)
 - PT schemes for sampling (2020)
 - How to investigate poor performance in proficiency testing (2022)
 - Use of surplus Proficiency Test items (2022)
 - Proficiency testing - How much, and how often? (2021)
 - Selecting the right PT scheme for my laboratory (2022)
 - How can PT help my laboratory? (2022)
 - Pre- and post-analytical PT (2022)
 - PT Schemes and other interlaboratory comparisons (2022)

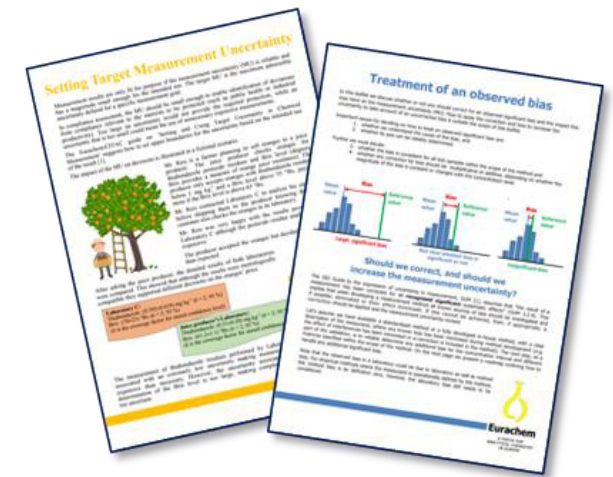
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Information leaflets & supplements

- Measurement uncertainty and traceability
 - Use of uncertainty information in compliance assessment (2021)
 - Setting target measurement uncertainty (2018)
 - Treatment of an observed bias (2017)
 - Using repeated measurements to improve the standard uncertainty (2015)
 - Traceability of Analytical Results (2005)
 - Measurement uncertainty for laboratory customers (2000)
 - What is the uncertainty factor? (2021)





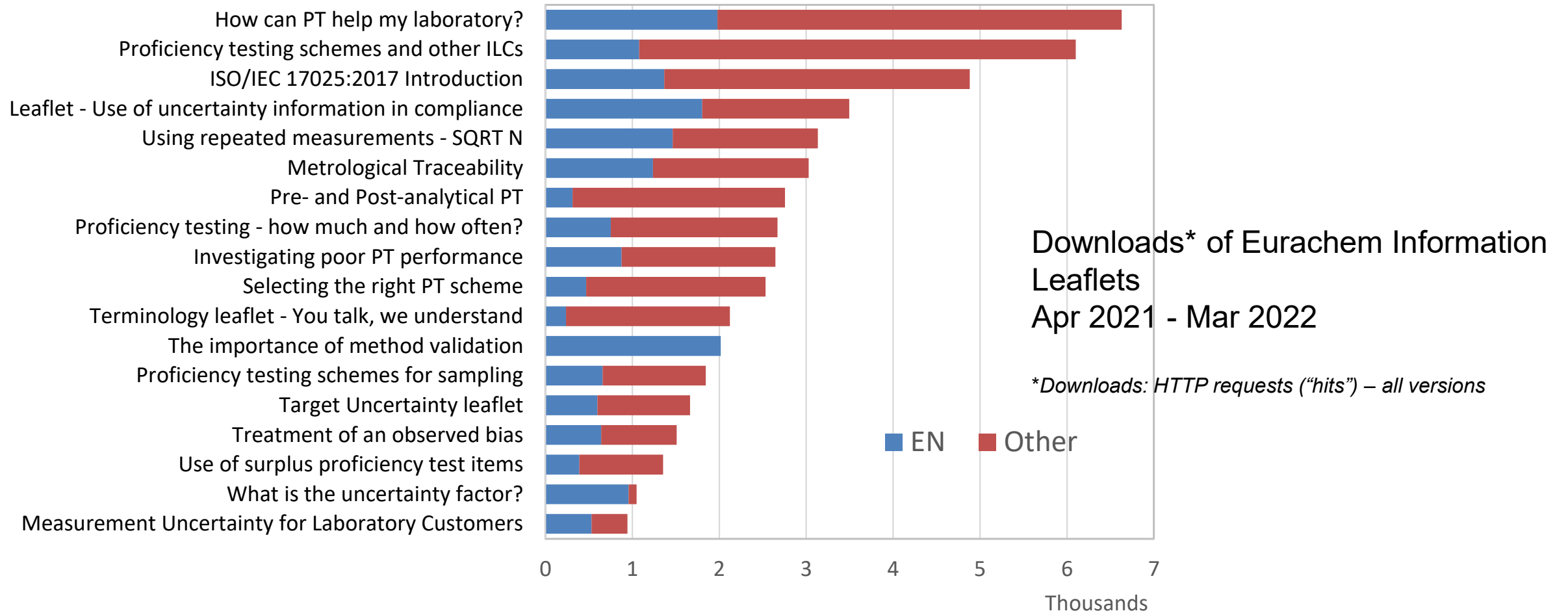
Information leaflets & supplements

- Accreditation
 - ISO/IEC 17025:2017 - A New Accreditation Standard (2018)
- Terminology
 - You talk, we understand – The way out of the tower of Babel (2016)
- **SUPPLEMENTS TO GUIDES**
 - Blanks in Method Validation (2019)
 - Planning Method Validation Studies (2019)





Downloads of information leaflets





Current guidance activities

- **Guides in preparation:**
 - Evaluation of measurement uncertainty from in-house precision and trueness tests
- **Guides under revision:**
 - The Selection and Use of Reference Materials (2002)
 - Quality Assurance for R&D and Non-routine Analysis (1998)
 - The Fitness for Purpose of Analytical Methods: A Laboratory Guide to Method Validation and Related Topics (2014)
 - Guide to Quality in Analytical Chemistry: An Aid to Accreditation (2016)



Administration 2022-2024

- Change of Chairs (2-year cycle)
 - Chair: Isabelle Vercruysse (Belgium)
 - Vice chair: Eugenia Eftimie Totu (Romania)
 - Past chair: Vicki Barwick (UK)
- Secretariat
 - Belab, Belgium – Philippe Maesen
 - secretariat@eurachem.org
- Website: www.eurachem.org



Eurachem social media channels

Twitter



@EurachemEurope
@EurachemEvents
@EurachemPT

YouTube



www.eurachem.org/youtube

LinkedIn

- LinkedIn page

www.eurachem.org/linkedin





Eurachem blog, e-News and Newsletter

Eurachem Blog

Topical articles on a range of topics.

How chemical measurement supports the global food system

Published: Thursday, 18 May 2023 17:37



The theme for World Metrology Day 2023 is "Measurements supporting the global food system". Here, we take a look at some of the many ways in which chemical measurement supports the food chain, including

- > Food safety and Quality.
- > Nutritional Analysis.
- > Food Authentication and Traceability.
- > Process Monitoring.
- > Shelf-Life Determination.
- > Allergen Detection.
- > Climate and environment monitoring.

Spring 2023

[View online version](#)



Eurachem

A Focus for Analytical Chemistry in Europe

Eurachem news, Spring 2023

Eurachem e-News provides news updates and information on forthcoming events, new Eurachem guidance and other Eurachem initiatives. We hope you find it useful.

Event news

Eurachem Workshop - Ensuring reliable and accurate analytical processes



NEWS
SPRING 2023 | ISSUE 40



Words from the Chair

Isabelle Vercausse

It is a great honour for me to have been elected as Eurachem Chair for the next two years and to work closely together with all members and liaisons to further strengthen the mission of Eurachem.

The past two years, everyone was affected by the Coronavirus pandemic. Despite this, the Eurachem community continued to actively navigate its path and quickly adapted from in-person meetings to online meetings.

This is the result of the expertise and drive of the motivated Eurachem members who are ready on a day-to-day basis to continue supporting

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Eurachem e-News

For email updates about Eurachem, you can subscribe to our mailing list.

[Subscribe to our News mailing list](#)

Last but not least...Eurachem is people

General Assembly, May 2022
Virtual meeting hosted by
Eurachem Georgia

