



Eurachem

A focus for analytical chemistry in Europe

Words from the Chair....

Dear Eurachem members,

Ten years ago, I joined a Eurachem meeting for the first time as a newcomer and a young metrology in chemistry enthusiast. I happened to be there because at the very last moment I had replaced a colleague of mine as a new national delegate from the Czech Republic. Since then, my involvement in Eurachem has been a beneficial education in the wide field of quality in measurement. Let me offer a personal observation about measurement quality. During my university studies of analytical chemistry, I considered all the statistical and metrological issues as flaws in the beauty of analytical science. I included some measurement uncertainty estimation and results from the analysis of CRM in my diploma thesis, but these passages were the least favourite part of my work. Fortunately, I changed my opinion many years ago and my

familiarity with all Eurachem activities played an important role in it. Today I proudly belong to those who spread the message about the importance of good quality practices in analytical chemistry in my country and beyond. It is both great honour and great challenge for me to chair an organisation like Eurachem for the next two years. I have been gaining new knowledge from workshops, breakout sessions and discussion forums since my first "Eurachem Week" in Istanbul in 2006. I am sure that even during my chairmanship, Eurachem will stay focused on its main activity – education. During 2017, for instance, we will hold two workshops, one dedicated to measurement uncertainty and the other to proficiency testing. All the details can be found inside this issue. Currently, we are planning our activities for the following years as part of the preparations of our new strategic plan. These preparations will definitely be influenced by changes in many important documents that are currently in progress. You are probably aware of the fact that a revision of ISO/IEC 17025, the standard for the accreditation of laboratories, is under way. On the other hand, you may not know that The Guide to the Expression of Uncertainty in Measurement (GUM) and The International Vocabulary of Metrology (VIM) are also undergoing substantial revisions. These days ISO/REMCO



Handover of chairmanship (David Milde thanked Wolfhard Wegscheider for a thriving chairmanship and commended Alexandra Meixner for transferring all documents in perfect order). Photo: Pascal Laevens

News

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Committee on Reference Materials is about to finish changes in all guides that are dealing with reference materials. Last November, the conversion of ISO Guide 34 to a full standard entitled General Requirement for the Competence of Reference Material Producers was completed. All these documents significantly influence everyday work of all analytical chemists. Eurachem experts gathered in working groups carefully monitor all proposed changes in order to be helpful to the analytical community with guides, leaflets and workshops as soon as the revisions are completed. In the near future, we intend to pay more attention to the topic of reference materials. In this issue of the newsletter, you can find more detailed information about our recent and upcoming activities. You can also obtain new information about reference materials and current status of ISO/IEC 17025 revision. As usual, all the work of individual national organisations and our working groups is also presented.

Enjoy your reading!

David Milde

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Report from the General Assembly 2016



All GA delegates. Photo: Pascal Laevens

Information from our organisation

Eurachem held its 32nd General Assembly on 12th and 13th May 2016 at Novotel Gent Centrum hotel in Belgium. This time we had 43 participants from 25 member countries. Bulgaria, Croatia, Estonia, Georgia, Greece, Hungary, Latvia and Serbia were not represented at this year's GA. After welcoming the delegates, the chair, Wolfhard Wegscheider (Austria), commemorated Paul de Bièvre, one of the founders of Eurachem who recently passed away. The chair, Wolfhard Wegscheider (Austria), handed over the chairmanship to the vice chair David Milde (Czech Republic) and new vice chair Marina Patriarca (Italy), was elected. Then two seats on the Executive Committee became vacant. Bertil Magnusson from Sweden and Eugenia Eftimie Totu from Romania were elected and will serve until 2019. The secretary Alessandra Meixner handed over the secretariat to Joanna Znaleziona-Hadrová (Czech Republic). Joanna was also appointed as a treasurer for the period 2016-2017. Anna Liisa Pikkarainen from Finland was appointed as auditor for next year.

Discussion forum

The discussion forum consisted of three parts. The first part was devoted to a proposed update of our guide on reference materials. The document about the selection and use of reference materials is dated on 2002

and was prepared by three groups (Eurachem, Eurolab and EA). The General Assembly agreed that Eurachem should put effort into updating this guide, inline with current developments of the ISO/REMCO guidance on this issue. Secondly, a brief comparison of CD 2 ISO/IEC 17025 with the ISO/IEC 17025:2005, focused on proposed changes, was presented and discussed. Finally, current trends in electronic documentation in laboratories were mentioned.

Progress on Eurachem work items

Eurachem has a new website privacy policy. Currently there are two guides under revision („Quality Assurance for Research and Development and Non-routine Analysis” and „Traceability in Chemical Measurement”). Based on Eurachem policy to review its guides for the need of revision every 5 years, plans are in place to review the following two guides: „Terminology in Analytical Measurement, Selection” and „Use of Reference Materials”. The second edition of the Eurachem/ CITAC Guide to "Quality in Analytical Chemistry: Aid to accreditation" has just been published. A new guide on "Qualitative Analysis" is under development. We are forming a working group devoted to the revision of the Guide on „Selection and Use of Reference Material”.

Presentations from stakeholder/liaison organisations

This year we enjoyed presentation

from the following organisations:

- Consultative Committee for Metrology in Chemistry and Biology (CCQM)
- Laboratory Committee of EA
- European Association for Chemical and Molecular Sciences (EuCheMS)
- EURAMET Technical Committee of Metrology in Chemistry (TC-MC)
- EUROLAB
- EA-EUROLAB-Eurachem Proficiency Testing Working Group (EEE-PT)
- NMKL Nordic Methods Committee on Foods
- Cooperation on International Traceability in Chemistry (CITAC)
- Laboratory Committee of International Laboratory Accreditation Cooperation (ILAC/LC)
- ISO-REMCO Committee on Reference Materials
- Joint Committee for Traceability in Laboratory Medicine (JCTLM) at BIPM

Our big thanks belong to local organizers, mainly Pascale Laevens for an excellent organisation and a heart-warming care for all of us. At the end of our report we would like to mention that Gent is a beautiful historical city with an interesting statue "The Man Measuring the Clouds" by Jan Fabre. This piece of art is a metaphor for art, science and poetry. We are used to measuring analytes daily, we validate the methods, we calculate the measurement uncertainty... but mostly we forget to measure the clouds. Next GA will be held in Cyprus, on 31st May to 2nd June 2017.

David Milde
Isabelle Vercruysse



"The Man Measuring the Clouds",
Photo: Isabelle Vercruysse

Eurachem Workshop on Method Validation in Analytical Chemistry. Gent (Belgium), 9-10 May 2016

FULL HOUSE!



120+ participants from all over the world gathered in the inner yard of the venue in Gent. Photo: Pascal Laevens

...and even 2 months before the start of the event!
The international workshop on ***“Method Validation in Analytical Science - Current Practices and Future Challenges”*** in Gent 9th to 10th May 2016 was a success!

Not only quantitatively (full house) – but also qualitatively.

Apparently the subject announced for this Eurachem event 2016 created high expectations and attracted analytical scientist from around the world, proving (hopefully) the amazing efforts within the local organizing committee being worthwhile.

Isabelle Vercruysse and the Belgian organizing committee assembled by her (not least Pascal Laevens and members from the Belgian BELAB organisation) did an amazing work in taking care of every thinkable practical detail of the arrangement making the program run smoothly and all participants feel comfortable. They

had even arranged for a number of social events for the participants – like e.g. a boat trip around the canals of the beautiful city of medieval Gent.

The planning of the program for the workshop had started in the Eurachem Method Validation Working Group (MVWG) almost 2 years before at the WG meeting in June 2014, to be gradually intensified (in close cooperation with the organizing committee) over the following bi-annual meetings (and some telephone meetings in between). The Scientific Committee for the workshop (mainly consisting of members of the WG) had been keen on arranging such event, as a follow-up on the recently published 2nd version of the Eurachem Guide on "The Fitness for Purpose of Analytical Methods" in order to collect comments and feedback from the users. At the same time, the workshop was also aimed to point forward by giving room for discussing any new trends in relation to method validation and identify possible new subjects.



The WS participants enjoying some relaxing time on the beautiful canals of Gent. Photo: Lorens Sibbesen

Eurachem Workshop on Method Validation in Gent

All the planning and preparation resulted in a program divided into two parts “Current Practices” on Day 1 and “Future Challenges” on Day 2 – both parts with a number of lectures illustrating the theme of the day followed by working groups giving the participants the opportunity to discuss the subjects (and give ideas for future tasks to be handled in the MVWG):

	Day 1 Current Practices	Day 2 Future Challenges
Lectures	International guidance	Chemometrics in Method Validation – Why?
	Setting method performance requirements	Future developments - Accreditation Body view
	Extent of validation/verification studies	Validation of microbiological methods
	Planning effective validation studies	Validation of multiparameter methods
	Analysis of validation data	In-house validation vs. Interlaboratory studies
	Examples of best practices in different fields	Implementing principles of Quality by Design (QbD)
Working Groups	Setting requirements for a method to be validated	Determination of trueness / bias
	Planning of validation studies	Working range – from LOD/LOQ to upper limit of the measuring range
	Validation of qualitative/semi-quantitative methods	Validation in microbiology
	Challenges in validation of multiparameter methods	Method validation under flexible scope of accreditation

Furthermore, 27 posters prepared by scientists from around the world, were presented during the two days of the workshop. As a part of the preparation for the workshop, the Scientific Committee had made an effort on evaluating abstracts for invited poster presentations, securing that the content fitted in to the overall theme of the workshop. A competition had been launched among poster authors; that the best abstract by a so-called “Early Career Scientist” would be given the opportunity to present his/her work orally (morning day 2).

After careful evaluation of the many interesting poster abstracts the opportunity was given to Ms. Jone Omar from the European Commission, Institute for Reference Materials and Measurements (EC JRC IRMM, Geel, Belgium) with her presentation “Chemometrics in Method Validation – Why?” A prize for “Best Poster” was given to Marius Kostakis (University of Athens).

The full program (including lecturers and copies of presentations, abstracts of posters and reports from working groups) can be found on the workshop website, <http://www.belab-eurachem2016.com> - and on the Eurachem website www.eurachem.org

The working groups served the intended purpose of



Participants in one of the working groups. Photo: Lorens Sibbesen



Steve Ellison elaborating on the extent of a validation study. Photo: Lorens Sibbesen

giving participants the opportunity to discuss issues related to the various subjects presented in the lectures – and bring in a lot of interesting experiences and examples from the many different fields of analytical chemistry. Many of the issues have later on been taken up for further discussion in the Method Validation Working Group (MVWG) with regard to possible inclusion in a future version of the Method Validation Guide.

The evaluation survey, carried out electronically after the Workshop, provided interesting replies to the question: “According to you which were the MOST beneficial aspects of the workshop?”, such as “Excellent keynotes [lectures] and very enthusiastic work group discussions”, “The variety of the issues of the presentations”, and “The most beneficial aspect were the working groups because of the opportunity given to discuss issues, where difficulties are encountered in common laboratory practice”.

So mission accomplished by the Scientific and Organizing Committee – including a lot of learning for the next Eurachem events.

Thank you to participants, hosts and the hard working committees.

*Lorens Sibbesen
MVWG Chair*

OBITUARY PROF. PAUL DE BIÈVRE



Prof. Paul de Bièvre.

It is with great sadness that Eurachem and all of the scientific community have learned about the death of our colleague and friend Prof. Paul de Bièvre. As Eurachem members we would like to offer our condolences to his wife Lieve and all of his large family. Paul has been and will always remain a great source of inspiration to our community of chemical metrologists. He had a bright mind, a witty and inquisitive nature and a big heart for metrology in any culture of the world. This can best be seen from his widespread cooperations with diverse international groups and through his contributions to the work of these groups. His good command of numerous languages made him a perfect initiator and moderator of many discussions about technical issues overcoming the communicational difficulties in worldwide cooperation. It was through his spirited queries that he encouraged so many of us to join the debate and thereby constantly widening the constituency interested in quality matters in chemical measurement. The conduction of workshops that he liked to call “thinkshops” became legendary. It can be stated without exaggeration that more than a handful of today’s leading figures in the field of metrology-in-chemistry were first exposed and “caught fire” for this subject while working in his laboratory at the EC JRC IRMM in Geel. As the first Editor-in-Chief of a new Journal, Accreditation and Quality Assurance <http://link.springer.com/journal/769> (ACQUAL), he was able to reach an even wider audience. His numerous Editorials, “food for thought” as he himself chose to call them, remain legendary and inspirational to all of us. It is

with the pledge to keep working in “his” field that we all are fondly cherishing his memory for the times to come. Might this be a little consolation to Lieve and to all his family. R.I.P.

Wolfgang Wegscheider

NEWS * NEWS * NEWS * NEWS

Reference Materials guidance from ISO REMCO

Eurachem is a liaison member of ISO/REMCO, the ISO Committee for Reference Materials, and contributes to the development of guidance for both the production and use of certified reference materials.

ISO/REMCO is a large and active committee with over 70 ISO members and 16 international organizations in liaison and is responsible for nine published documents. ISO/REMCO held its 39th meeting in June 2016 in Ekaterinburg. The main activities for ISO/REMCO in 2016 have been the ongoing revision of ISO Guide 35, giving detailed methods for Reference Material (RM) certification, and the conversion of ISO Guide 34 to an ISO Standard.

ISO Guide 35 “Reference materials - General guidance for the assignment of property values” has received a DGUIDE circulation and strongly positive vote; the accompanying, extensive, comments were discussed in detail at the June ISO/REMCO meeting. The meeting agreed action on the main points and agreed to proceed to publication subject to a final review of the amended document. The working group has now provided the final draft for review; if the response is positive, an amended Guide 35 will be published in 2017. The new version adds a number of useful experimental designs for homogeneity testing, covers different methods for stability testing in more detail and adds new material on metrological traceability and value assignment methods. Importantly for producers, the new version also provides more detail on repeated production of materials, reducing homogeneity and stability testing requirements where there is evidence of a stable production process.

The related project to convert ISO Guide 34 to a full Standard, as a joint activity with CASCO, has progressed very well and is now complete. ISO 17034, “General requirements for the competence of reference material producers” was accordingly published in October 2016 and harmonization via CEN adoption is in hand. This will help European accreditation bodies provide harmonised accreditation for reference material producers through Europe. Accreditation to ISO 17034 will, in turn, provide an increased range of reference materials from accredited suppliers, making it easier for laboratories to satisfy their assessors for ISO/IEC 17025 of the reliability of calibration and QA materials.

Other recent ISO/REMCO guides of interest to laboratory managers and staff include ISO Guide 80, “Guidance for the in-house preparation of quality control materials (QCMs)”, which was published in 2014, and the more recent revision of ISO Guide 33, “Reference materials -- Good practice in using reference materials”, which was published in late 2015. Both provide useful guidance for laboratories. The new Guide 33 has been adopted by the international accreditation body ILAC as superseding ILAC G9, on selection and use of RMs, since Guide 33 now includes additional guidance on selection of RMs.

Steve Ellison
EURACHEM/REMCO liaison

The revision of ISO/IEC 17025: What is expected?

After a series of meetings of the ISO CASCO WG 44 responsible for the preparation of the revision of the accreditation standard ISO/IEC 17025:2005, the framework of the expected changes is almost clear. However, bearing in mind the procedure for the revision of standards and the steps to be followed as from now, it is only the general changes that could be listed and these not in detail. The current picture may be different from that at the time this Newsletter reaches you. The on-going procedure needs some more time before the DIS is out for voting by the end of December 2016; voting will be concluded by the 22nd March 2017. Main changes expected are listed below:

- The structure of the standard is to be extensively changed in line with the format of the ISO 17000 series.
- It is stated that the following verbal forms are used:
 - “shall” indicates a requirement;
 - “should” indicates a recommendation;
 - “may” indicates a permission;
 - “can” indicates a possibility or a capability.
- Following the new ISO Directives (as from 1st May 2016), normative references will be moved to bibliography.
- Reference is made to definitions given in ISO/IEC 17000 and JCGM 200:2012. However, a series of terms and definitions are added, namely impartiality (according to ISO/IEC 17021), complaint (ISO 17000), interlaboratory comparison (ISO/IEC 17043), intralaboratory comparison, proficiency testing (ISO/IEC 17043), laboratory and decision rule.
- Laboratories' activities are classified as calibration, testing and sampling, associated with subsequent calibration or testing. Based on this, the term “the laboratory” is to be used throughout the text without any distinction, except in cases of different/additional requirements.
- “Laboratory management” is used instead of “top management”. No use of the term “quality manager”; relevant responsibilities are to be assigned to competent personnel.
- A quality manual, as such, is not required.
- The provisions of clauses 4 (management requirements) and 5 (technical requirements) are now further detailed and are expected to come under four clauses, namely:
 - 4 General requirements
 - 5 Structural requirements
 - 6 Resource requirements
 - 7 Process requirements and
 - 8 Management requirements.
- Quite a few of the provisions appear in a more detailed form.
- The issue of liability is more elaborated; some of its aspects are addressed under confidentiality.
- Most of the other provisions currently under clause 4

will now appear under clause 8, while most of the ones currently under clause 5 will now appear under clauses 6 and 7.

- Specific subclauses under the new clause 4 will now provide for independence and impartiality. They are more detailed compared with relevant references in the existing standard.
- Externally provided products and services cover both services and supplies and subcontracting.
- Risk management: According to a general statement in the introduction, the Standard requires the laboratory to plan and implement actions to address risks and opportunities. This is reflected in a number of subclauses namely the ones dealing with impartiality, statements of conformity, management of nonconforming work, management reviews etc.

No reference is made to preventive actions; risk management related provisions as well as improvement cover the needs.

- Improvement now includes feedback from the customer.
- Assuring the quality of results provides for monitoring the validity of laboratory activities in a wider way; many more tools to be used are listed. ISO 17034 for the producers of reference materials and ISO/IEC 17043 for proficiency testing are referred to.
- Additional provisions are now included under control of data – Information management.
- With regard to management requirements an important change has been introduced. It refers to two alternative options, A and B. Option A refers to the need of all provisions of clause 8 of the Standard to be implemented by the laboratory; these include those requirements of ISO 9001 which are relevant to a laboratory. Option B is of interest to laboratories implementing a management system in accordance with ISO 9001 which need to comply with clauses 4-7 of ISO/IEC 17025 as well.
- Two Annexes, both informative and dealing with different issues from the current ones, are included, namely
 - Annex A - Metrological traceability
 - Annex B - Management system.
- The new standard is expected to be published before the end of 2017; an appropriate period will be provided to ensure its smooth transition its full implementation by all interested parties.
- It is noted that, following its Scope, the Standard remains as it is with regard to its applicability to all organizations regardless of the number of personnel performing laboratory activities.
- It seems that, in the meaning of the Standard, sampling is not accepted as a “stand alone” activity (see above the reference to “sampling, associated with subsequent calibration and testing”).

*Kyriacos Tsimillis
20th November 2016*

Membership News

Caroline Laurent is now representing France at the GA.

Slovakia is newly represented by Dušan Kordík.

Anders Karlsson is the new national delegate for Sweden.

David Milde from the Czech Republic is Eurachem's new Chairman.

Dr. Milde has been active in Eurachem since 2006.

Marina Patriarca from Italy is now a Vice Chair and will take over Chairmanship in 2018.

Wolfhard Wegscheider from Austria has finished his Chairmanship and will be a Past Chair till 2018.

Joanna Znaleźiona-Hadrová from the Czech Republic will serve as a secretary and treasurer until 2018.

Bertil Magnusson and Eugenia Eftimie Totu will remain members of the Executive Committee for another 3 years.

Working Group Reports

Eurachem Education and Training Working Group

The Education and Training Working Group held a successful meeting during the General Assembly week in Gent in May. A key task for the group during the year has been the revision of the Eurachem/CITAC 'Guide to Quality in Analytical Chemistry: An aid to accreditation'. A Task Group of the Education and Training Working Group has been working to bring the Guide into line with ISO/IEC 17025 requirements and ensure that the terminology is consistent with current international vocabularies. The Guide was sent to Eurachem General Assembly and CITAC members for approval during April-June. A number of comments were received which have been addressed by the Task Group. The revised Guide was submitted to the Eurachem Executive and CITAC for final approval in October. The 3rd edition of the Guide will be published early in 2017.

The working group has prepared a leaflet 'You talk, we understand! The way out of the tower of Babel', which aims to highlight the importance of consistent terminology in analytical science, and raise awareness of the VIM and the Eurachem guide on terminology in analytical measurement. The leaflet is available on the Eurachem website and has been translated into several languages.

The working group is also responsible for the 'Reading list' that is published in the publications area of the Eurachem website. The list is reviewed annually and an updated version was published in October. 2016 marked 5 years since the publication of the Guide 'Terminology in analytical measurement: Introduction to VIM 3'. In line with Eurachem policies, the Working Group initiated a new work item to review the Guide to identify what revisions (if any) are required. To assist with this process a short survey was launched in May to seek opinions of users of the guide. The survey closed at the end of October and the group is currently reviewing the responses.

During the year I have been pleased to welcome a number of new members to the Working Group. The current members are listed on the Education and Training Working

Group page on the website. If you are interested in joining the group, please get in touch!

Vicki Barwick

Method Validation Working Group

2015-16 has been the year where the Working Group has mostly been focusing on preparation of the Eurachem Workshop in Gent (Belgium) 9th to 10th May 2016 on "Method Validation in Analytical Science – Current Practices and Future Challenges".

With 11 lectures to fulfil the two themes of the workshop and 8 working groups providing space for a lot of engaged discussions among participants various aspects under those themes – and about the total of 125 participants from 25 different countries (full house), the WG pretty much sees this mission as accomplished, although it couldn't have been done without an extraordinary support from the local organizing committee in Belgium (rooted in the national BELAB organization).

Two meetings were held (in February 2016, Rome, and shortly, in Gent, after the Workshop), both mainly focused on the organization of the Workshop. Afterwards, the activities of the WG were resumed at the 1½ day meeting in Prague, from 5th to 6th of October 2016, where the participants took a good step forward in discussing (and taking action on) a number of relevant subjects to deal with in the future.

Among a long list of subjects for potential further elaboration within the WG, the following was taken in to action in a first step:

- Verification of test kits/automated analysis
- Extent of validation (/verification)
- Handling of bias – to correct or not to correct
- Instrument Qualification in relation to Method Validation
- Planning of validation studies
- Use of blanks/standard addition

Any final documents on the subjects above will be taken through the normal approval process for Eurachem guidelines and then published as "Intermediate Supplement to "The

Method Validation Guide" – to be incorporated in next version of Guide", as the group wants to have the items out for benefit of users on a current basis. Another initiative in relation to gathering input to the next revision of the guideline is the establishing of a comment form on the website, where all users can give their comments on the guide.

Furthermore the WG is working on identifying a number of illustrative examples on application of the various principles in the guide – also for eventual up-load on the website. The MVWG is also planning to prepare a leaflet to promote the MV Guide. Posters for both (to be exposed at various events) are also available.

Lot of challenging and interesting work to deal with, and luckily the WG has also got quite some new members lately (4- 5 at the workshop in Gent), who already has proven very active in contributing to the work. The WG has now 25 members (more or less active) from 13 different countries.

Lorens P. Sibbesen

Measurement Uncertainty Working Group and related topics

The Eurachem working group on Measurement Uncertainty and Traceability is responsible for four current Eurachem guides; "Quantifying Uncertainty in Analytical Measurement", the well-known guide to uncertainty evaluation last updated in 2012; a guide to the use of uncertainty information in compliance assessment, the more recent guide on "Setting target Measurement Uncertainty", and the Eurachem guide "Traceability in Chemical Measurement", originally published in 2003.

The 2003 traceability guide is undergoing a modest revision.

Working Group Reports

Measurement Uncertainty Working Group and related topics c.d.

The changes are expected to be minor, largely focused on ensuring that the guide is consistent with current terminology and that references to other documents are properly up to date. The revision is expected to be available in mid-2017, following Eurachem GA consultation. Since most of the measurement uncertainty guides are relatively recent, the working group is working on a number of short information leaflets and additionally examining new, or unresolved, technical issues for future guidance. The group has recently published a short leaflet on improving uncertainty using averaging, which gives additional guidance on the surprisingly difficult question of when it is valid to divide a variance by the number of observations in evaluating measurement uncertainty. Other information leaflets in hand include a short introduction to target measurement uncertainty, and a guidance note on the treatment of known bias in analytical methods. Further technical topics under consideration include the general problem of handling uncorrected bias in uncertainty evaluation, and the use of Bayesian and other methods for evaluation of uncertainty. The use of Bayesian methods has become particularly topical following the issue of the draft JCGM 100 document in 2015, proposing a new methodology to replace the existing ISO Guide to the Expression of Uncertainty in Measurement ("the GUM"). The Eurachem working group commented on the draft and has been following international developments closely. Comments on the JCGM draft showed that end users did not welcome the change in approach and calculation methods. As a result, JCGM-WG1 is considering a wider range of options for moving forward. Replacement of the existing GUM is not envisaged in the short term. One option under active consideration is an approach whereby JCGM guidance on uncertainty is issued in multiple separate documents which differ in scope, complexity and field of application. This approach would preserve the existing GUM approach for applications within its scope, while

providing for a wider range of approaches applicable to more challenging circumstances. For example, the present GUM does not deal well with severely non-normal distributions and cannot take account of prior information, such as the fact that a true concentration cannot be negative or that purity cannot exceed 100%. Bayesian methods can provide useful alternatives in these circumstances. While this may not affect testing laboratories greatly, the additional capabilities may be important for future calibration or reference material certification. The Eurachem working group also welcomed a number of translations of Eurachem guidance in 2016, including Spanish, Ukrainian, Greek and German translations of the leaflet "Using repeated measurements to improve the standard uncertainty", and Farsi translations of both the Eurachem guides on Sampling Uncertainty and on Setting Target Measurement Uncertainty. All the translations, as well as all the present Eurachem guides related to measurement uncertainty and metrological traceability, are available from the Eurachem website.

Steve Ellison

Qualitative Analysis

The Qualitative Analysis Working Group is currently working towards a guide on "The Expression of uncertainties in qualitative analysis and testing". Recognising that the state of the art in this field is not very advanced, the working group had circulated an early draft widely for comment to determine the direction for development. A new drafting group has since been formed to progress the document, and the working group hope to provide a draft for Eurachem member consultation in 2017. The present draft focuses on approaches for assessing and summarising the reliability of qualitative test results and on the requirements for managing uncertainty in any stipulated test conditions and quantitative measurements that contribute to classification.

Steve Ellison

Proficiency Testing Working Group

The Eurachem working group on proficiency testing provides a forum within the European chemical measurement community for pursuing excellence in the development and implementation of proficiency testing. During the past year the working group has continued to work on a number of educational leaflets aimed at helping laboratories in the selection and use of proficiency testing, which can be downloaded from the Eurachem website in various languages:

How can proficiency testing help my laboratory – available in Croatian, Czech, English, Estonian, Finnish, French, German, Hungarian, Italian, Serbian, Slovakian, Spanish, Swedish, Turkish and Ukrainian. Selecting the right proficiency testing scheme for my laboratory – available in Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Spanish and Swedish. Additional leaflets will be available soon.

One of the key activities of the working group during the year has been the organisation of the 9th Eurachem PT workshop, which will be held in St Bernardin Resort, Portorož, Slovenia, 9th to 12th October 2017. Full details of the workshop can be found on the workshop website (www.eurachempt2017.eu/).

Brian Brookman

National Reports

The work within our national Eurachem organisations is one of the most important channels to convey our message to the laboratories and our stakeholders. Below you will find reports about activities in the national organisations.

BELGIUM

BELAB is the association of Belgian Laboratories and organizations involved in accreditation. BELAB is member of Eurachem and Eurolab. The association has an Executive Board with 9 members and counts 60 members in the GA. Members of the Executive committee of BELAB are represented in several advisory boards of BELAC (Belgian accreditation authority). Since 2012, BELAB is has been lead by Isabelle Vercruysse (chair) and Philippe Dewolfs (vice-chair). In 2015, a BELAB seminar was organized in March in Brussels in French and Flemisch. About 134 persons (77 Flemish and 70 French speaking people) from very different fields (pharmacy, textile, water, food, medical labs ...) attended the seminar. The seminar was organized in cooperation with BELAC. The topics of the seminar were: internal audit, different documents of BELAC, ILAC and EA. In the introduction given by the president en vice president of BELAB, the work of BELAB, Eurachem and Eurolab was presented. BELAB organizes in Gent on the 9th and 10th May 2016 together with the Method Validation Working Group of Eurachem, a workshop "Method Validation in Analytical Science- Current Practice and Future Challenge". About 130 persons are registered. Gent is also the venue for the Executive Committee and General Assembly of Eurachem and for the Eurachem working group "Education and Training", "Uncertainty&Traceability" and the Working Group "Qualitative Analysis. BELAB will organize on the 24th of November 2016 in Brussels a seminar on the new ISO 17025 for their members. Every year the activities and information of Eurachem is diffused in a presentation on the General Assembly and through the website. The Eurachem Informative Bulletin is distributed between the members. BELAB distribute also a newsletter

twice a year by mail among the members with the latest news from BELAB and Eurachem.

Isabelle Vercruysse

CYPRUS

During the last year, the Division of Quality Assurance operating under the Pancyprian Union (PUC) has been focused both on organizational work and training activities. It has cooperated with the Division of Young Chemists in order to efficiently address their needs and expectations. This is quite important, bearing in mind the difficult situation with the unexpectedly high figures of unemployed youngsters, especially among university graduates. The Secretariat of the Division consists of Dr Constantina Kapnissi-Christodoulou (University of Cyprus), Dr Despina Charalambous (Frederick University) and Dr Kyriacos Tsimillis.

Training Activities

Recent developments on the on-going procedure for the revision of ISO/IEC 17025 were the reason for the organisation of an open discussion on the 23rd of November. The main changes included in the current draft were presented. The main task was to inform accredited laboratories so that they would start preparing for the new challenges they are expected to face



Photo: Eleni Kakouri

as soon as the revised standard is in place. The event was quite successful with 25 colleagues participating. Further to this, a half day seminar on Food Safety was organised on the 31st May, in cooperation with the Division of Young Chemists.

Supporting teaching of QA in the academia

For a second year, the Division supported teaching QA in the University of Cyprus (Department of Chemistry, 4th year students). Further to this, the Frederick University (Department of Pharmacy) invited the Division for lectures on QA. It is expected that this cooperation will be further widened and extended to other universities as well.

Involvement in the work of Eurachem

There was an active involvement in the work of the EC and the ETWG. This includes, among others, the contribution to the revision of the Guide for Analytical Laboratories and the follow-up of the revision of the ISO/IEC 17025. Furthermore, emphasis was given to the translation into Greek of recently published Eurachem leaflets. This new activity with the involvement of students, is mostly oriented to their familiarization with the terminology both in English and Greek. It is expected that more colleagues are to express their interest to participate in WGs. The Division is also participating in the work of the Division of Analytical Chemistry of EuCheMS.

Organisation of the Eurachem Week 2017: 29 May to 3rd June 2017

On the occasion of the 20th Anniversary of its membership in Eurachem (Dublin, May 1997), the PUC has the honour to host the "Eurachem Week" in Nicosia (Lefkosia), for a second time after May 2002. During this Week, and in connection with Eurachem General Assembly 2017 and related activities, a two-day Workshop on "Uncertainty in Qualitative and Quantitative Analysis" will take place in cooperation with the Europe Section of AOAC International. The Workshop is dedicated to the memory of Dr Paul De Bièvre (1933-2016) in appreciation of his overall contribution to Metrology in Chemistry and Eurachem activities and, in particular, of his support of training activities in Cyprus. The Organising Committee has been working since December 2015 for these events. All activities will be hosted in the Campus of the University of Cyprus.

Website information on the activities

The activities of the Division can be found on the website of the PUC (<http://chemistry.org.cy>).

Kyriacos Tsimillis

CZECH REPUBLIC

In the Czech Republic Eurachem-CZ is an independent organisation with about 70 members, mainly analytical laboratories. Our main activities are focused on education and training. In April 2016 we arranged in Prague a national PT workshop with more than 50 participants, some of them came even from Slovakia. This event was held in cooperation with two local PT providers and covered chemical and clinical laboratories. The translation of recently published Setting and Using Target Uncertainty in Chemical Measurement into Czech language was finished. This guide will be published together with a guidance focused on reference materials as a new issue no 21 of series of our monographs called Qualimetrics this year. Our organisation issued two Newsletters with 8 pages of text for our members. The first edition provided readers, along with news from our organisation, with information about current situation in the field of references in clinical laboratories and the second one addressed challenges in the determination of volatile substances in water by GC/MS and LC/MS. Our members can find up-to-date information about our activities as well as many freely accessible leaflets on our webpage – www.eurachem.cz. Members of the Executive Committee of Eurachem-CZ have closely cooperated with Czech Institute for Accreditation, Czech Metrological Institute, and EUROLAB-CZ within association called 4E-CZ.

David Milde

DENMARK

The number of members of Eurolab Denmark (nesting Eurachem activities in Denmark) has been more or less constant over the last 2-3 years (around 65). The activities in Eurolab Denmark, directly related to Eurachem issues, are arranged in a specific network for Analytical Chemistry (and partly a parallel network for Microbiology). Around 100 and 60 persons from the various member laboratories are connected to the two networks respectively. Also in 2015 Eurachem/Eurolab Denmark has been very much focused on the up-coming revision of the ISO/IEC 17025 standard as most of our members among analytical and microbiological laboratories are accredited. The possible impact of the

changes in such laboratories has been discussed at member meetings. An issue heavily debated (especially in relation to environmental and food laboratories) during the year has been bias-related measurement uncertainty. The Danish Accreditation Body, DANAK, is requesting accredited laboratories to include a bias contribution in their uncertainty estimation, and the debate in Eurachem on these issues has been followed intensely in an attempt to have the right arguments in place in discussions with the assessors from DANAK.

Another Eurachem guide, which is very much in focus among Danish laboratories is the "Fitness for Purpose Guide" on Method Validation. Generally, Eurolab Denmark is representing the accredited laboratories in Denmark in relation to DANAK (appointing/supporting members for the various advisory groups within DANAK). Especially the discussions in the advisory groups related to Environmental Testing and another related to Food Testing are followed closely in the Network for Analytical Chemistry, as well as in the board for Eurolab Denmark.

Lorens P. Sibbesen

FINLAND

Eurachem Finland belongs to Finntesting Association that has the sections of Eurachem Finland, Eurolab Finland and the Laboratory Management. The association has 50 members, half of which is companies and another half individuals. There are nine members in the executive board of the association. The association has nominated members in Eurachem General Assembly and Eurachem Working Groups. In 2015 Finntesting Association organized two seminars and annual meetings during which there were also discussions about further activities and needs. Topics of seminars focused on measurement uncertainty via MUKIT programme that is utilised in the evaluation of quality of measurements, and challenges of quality assurance in the environmental measurements in the future.

Finntesting Association maintained web pages to inform the members about quality issues. Traditionally, two students were encouraged by delivering them awards based on student's meritorious thesis where quality assurance aspects had been

taken into account.

Plans for the year 2016 include arranging a seminar on FINAS accreditation that has 25th anniversary and a renewal of the standard ISO/IEC 17025:2005 on general requirements for the competence of testing and calibration laboratories.

Eurachem Finland Finntesting Association

FRANCE

BIPEA took part of the activities of the PT WG and translated in French all the leaflets available produced by the group.

Caroline Laurent

GREECE

The actual Steering Committee of EEX has been elected November 2015, for a term of three years 01/01/2016-31/12/2018. During 2016 the following initiatives – among others – have been taken:

1. A series of actions against the escalating degradation of the role of chemistry in the Greek educational system have been undertaken from the Steering Committees of EEX during the last four years. Our position is that chemistry must remain one of the pillars of our educational system and in this direction we will continue to strive.

2. Acknowledging the importance of accreditation in the everyday work of a lot of our members, we have launched during 2016 – as in the past also – a series of two days' seminars in various cities across Greece, presenting the requirements of ISO 17025. The seminars were very successful and our intention is to continue this activity for the following year too.

3. In an effort to present to the general public unknown aspects of chemistry used in everyday life, we have taken part in the "Athens Science festival"



„Athens Science festival” Photo: Anna Stefanidou

event, as well as in the “night of the researcher” event. Both events had a huge success and photos from them indicating the participation of the public, and especially that of young people, are attached.



„Night of the researcher” Photo: Anna Stefanidou

4. As a continuation to the presentation of ISO 17025 we have decided to highlight specific technical issues, starting with a seminar on calculation of uncertainty and QC in microbiological testing. The event has gathered also a lot of interest from scientists of various disciplines working in the field of food and water microbiology.

5. In the island of Spetses and during the 17th Congress of Medicinal Chemistry on 29-31/08/2016, EEX has awarded Nobel nominated professor James Watson for his contribution in the science in general and chemistry in particular through his research achievements.

6. The Association of Greek Chemists (EEX) is also one of the founding members of SusChem Greece which is the Greek Technology Platform for Sustainable Chemistry, that was accepted on June 15th, 2016, from the corresponding European platform. From behalf of the EEX Steering Committee

Anna Stefanidou

GERMANY

The Committee on Chemical Analysis of EUROLAB-D which mirrors the European Eurachem activities met only once in 2015 to receive the reports of the German delegates, to provide input to the Eurachem working groups and to discuss issues

with national importance. The second meeting had to be postponed to January 2016.

Recently the translation of the leaflets on “Selecting the right PT scheme for my laboratory”, “Using repeated measurements to improve the standard uncertainty” and “You talk, we understand – The way out of the tower of Babel” could be finalized. The latter two ones will be sent to the respective working group shortly. The translation of the Validation Guide, which was extensively discussed in Gent, into German is also under way.

Michael Koch

ICELAND

EuroIab-Iceland (<http://icelab.123.is/>) is the association of Icelandic laboratories. EuroIab-Iceland is a member of Eurachem and EuroIab. The association has a board with 5 members. The 16 members are testing, analytical and pharmaceutical laboratories.

The main activity is organizing a yearly visit to one of our members companies. The quality manager of the company will give us insight into their quality system and if possible show us their organization. In parallel professional speaker will give the EuroIab-Iceland members lecture of different topics of good quality practices and standards.

Elisabet Solbergssdottir

IRELAND

Activities May 2015 – April 2016

The Eurachem Ireland committee was active during the year with some new members joining. The committee comprises people interested in analytical chemistry from the public sector, private sector and the academic sector.

The committee held a successful call for members of Eurachem Working Groups and there are now members from Ireland on most Working Groups. The committee supports the TrainMiC® programme and publicised the training event organised by the JRC in autumn 2016. Three people from Ireland attended and there are now five TrainMiC® Trainers in Ireland. Eurachem Ireland organised TrainMiC® Workshops in June 2015 and April 2016, both of which were well attended.

The main method of communication with Eurachem Ireland members is the mailing list along with the website (www.statelab.ie/eurachem.html) and LinkedIn group. The Eurachem Ireland committee actively publicised Eurachem Ireland throughout the year including posters and presentations at the Conference of Analytical Sciences Ireland (CASI) in April 2016; the introduction of a new feature in Irish Chemical News: Eurachem Ireland Spotlight on Analytical Chemistry; and development of a new logo. Eurachem Ireland sponsored a prize for the best Flash Presentation at CASI. The winner was Niamh Creedon, Tyndall National Institute, for a presentation entitled "Soda can templated flexible polymer SERS substrates for multiple sensing applications".

The popular Eurachem Analytical Measurement Competition (EAMC) took place on 15th April 2016. The EAMC is held annually and the event is organised and run by EAMC Committee, Eurachem Ireland Secretariat and by the host Institute of Technology/University.

This year's EAMC competition was hosted by Athlone Institute of Technology. 23 teams from 12 colleges took part. The teams had to carry out two different experiments using separate analytical techniques to determine the presence of a specified component.

The winning team was from Limerick Institute of Technology and the joint runners up were from University College Dublin and Dublin City University.

This year's judges were Ray Leonard formerly of Henkel Ireland Ltd., Tom Hannigan from Forensic Science Ireland and Darragh Cunningham from the Environmental Protection Agency.

The winners received engraved glass plates on a wooden plinth, featuring the Neolithic Newgrange light box logo that is allied to the competition. Sponsors include Institute of Chemistry of Ireland, Royal Society of Chemistry Analytical Trust Fund, EPA, Masontech, Pharmacchemical Ireland and local chemical companies associated with the host college. The expenses for the teams and their mentors are paid with support of the Association of Heads of Schools of Science. The student bursaries are paid by Eurachem Ireland.

Barbara O'Leary

ITALY

Eurachem in Italy is jointly supported by: the National Institute for Research in Metrology (INRiM), the National Institute of Health (ISS) and the National Institute for Environmental Research and Protection (ISPRA). Activities are aimed to promote the implementation of metrology concepts by analytical scientists and include dissemination of relevant information, organization of training events, contribution to guidance documents and their translation into Italian, collaboration with the European Commission Joint Research Centre, Institute for Reference Materials and Measurements Programme TrainMiC "Training in Metrology in Chemistry" (www.trainmic.org).

As part of the efforts in place to improve the promotion of Eurachem to Italian laboratories, widening and focusing the audience to be reached, the opportunity to present Eurachem activities at the 2nd Workshop organized by the National Reference Laboratory (NRL) for Polycyclic Aromatic Hydrocarbons for the official control laboratories in that area (Rome, ISS, 23rd June 2015) was exploited. In addition, a specific presentation of the latest leaflet produced by the Eurachem Proficiency Testing Working Group (PTWG) "Selecting the right proficiency testing scheme for my laboratory", aimed to promote the Eurachem Guide "Selection, Use and Interpretation of Proficiency Testing (PT) Schemes by Laboratories" (2nd ed. 2011), was given at the Annual Workshop organized for its Network of NRLs by the European Union Reference Laboratory for Chemical Elements in Food of Animal Origin (ISS, Rome, 5th to 6th October 2015). Given the international audience of this workshop, it was highlighted that the leaflet is currently available in 6 languages (Czech, English, French, Italian, Spanish and Swedish). An update on the latest developments in Eurachem has become a regular item in the program of the Joint Workshop organized by the NRLs for Heavy Metals in Food, Heavy Metals in Feed and Additives in Feed, which 5th edition was held in Rome on 19th and 20th November 2015. The status of Eurachem Guides and leaflets was addressed, including completed projects (the leaflet "Selecting the right proficiency testing scheme for my laboratory" and the Eurachem/ CITAC Guide "Setting and using target uncertainty in chemical measurement") and on-going revisions

(The "Guide to Quality in Analytical Chemistry: An Aid to Accreditation"). Printed copies of the latest Eurachem Newsletter and of Eurachem leaflets were made available during the event. Following the latest Eurachem Proficiency Testing Workshop in Berlin, 2014, which included training on the revised ISO 13528, Eurachem Italy was addressed by the Italian Custom Agency to provide training on this issue. This was accomplished as a two days course on "Advanced statistical elaboration applied to Proficiency Testing", held in Rome, at the Italian Custom Agency premises, on the 18th and 21st December 2015. Coming Eurachem workshops (Method Validation, Gent, Belgium, 9th to 10th May 2016; Proficiency Testing, Portorož, Slovenia, 9th to 12th October 2017) were promoted through the distribution of announcements and links to mailing lists and through their publication on the websites of the contributing organizations. The relevant information was presented to the participants in the above-mentioned events, as well as distributed to participants in the:

- V National Congress: "Micotossine nella Filiera Agro-Alimentare, 28th to 30th September 2015, organized by ISS and the National Council of Chemists,
- XVII Italian National Congress of the Chemists "Il chimico: risorsa e tutela per nutrire il pianeta" Milan, EXPO, 2nd to 4th October 2015.

Following the event held in January 2015 in Rome, beside the meeting of the Eurachem Method Validation Working Group (MVWG), to present the revised Eurachem guide "The fitness for purpose of analytical methods" (2nd Edition 2014) to an audience of Italian laboratories, a working group was established to carry out the translation of the Guide into Italian. This project has now reached its final stage and the document will be available shortly. In addition, the leaflets "Selecting the right proficiency testing scheme for my laboratory" and "You talk, we understand – The way out of the tower of Babel" were translated into Italian and are available from the Eurachem website.

Eurachem Italy contributes to the Eurachem Working Groups on: Education&Training, Proficiency Testing and Method Validation and to the joint EA-Eurolab-Eurachem WG Proficiency Testing and Accreditation. A meeting of the MVWG was hosted again at ISS (Rome), in January 2016.

Marina Patriarca

POLAND

Presently, 68 laboratories are members of the Eurachem-PL, Section of Polish Chemical Laboratories in Club of Polish Testing Laboratories POLLAB. Since 18.12.2013 Eurachem-PL has been lead by Andrzej Brzyski (chair), Ewa Bulska (vice-chair), and the section secretariat is hosted by secretariat POLLAB.

Members of the Section are involved in organization of symposia organized every year by POLLAB. The main topic at XXI POLLAB Symposium (2015) was "Tests results - quality assurance of measurements, their importance for activities laboratories". In two rounds of the symposium was attended by over 440 participants. We organized also a special section's meetings, including invited lectures dedicated to selected subjects. In 2015 there was one meeting, where participants discussed about "PT/ILC programs and requirements of accreditation". In 2015 we organized 2 rounds ILC programs. Eurachem-PL will be continue present policy to support laboratories, in 2016. Our members will be attend in Symposium POLLAB, section meetings and new ILC/PT programs.

Andrzej Brzyski

PORTUGAL

In 2015, the Portuguese delegates of Eurachem have been actively involved in the activities of the "Measurement uncertainty and traceability" working group. A Eurachem-PT working group was set up that will translate some Eurachem documents to Portuguese (<http://ciencias.ulisboa.pt/pt/conferencia/eurachem>). The dissemination of Eurachem activities and guidance have been performed in teaching Metrology in Chemistry at the University of Lisbon, Euromaster on "Measurement Science in chemistry", Erasmus Mundus on "Quality in Analytical Laboratories" and in TrainMiC training events. The publication of various papers on Analytical Chemistry and Metrology has also been used to publicize Eurachem guidance.

Ricardo Bettencourt da Silva

ROMANIA

EURACHEM Romania Association as a non-profit professional organization continuously improved its policy to support various laboratories enlarging their participation to different actions organized by EURACHEM Romania, jointly with its partners: universities or research institutes with the support of national and local agencies for public health, water and air quality control and environmental monitoring.

EURACHEM Romania Association is attempting to maximize access to its scientific datasets through interactive use of web-based portals. In some cases, new streams and ever-increasing volumes of data and information and user demands have proven to be barriers to unrestricted data access. Our implemented data management systems are evolving to meet these challenges.

As a partner in various national projects, EURACHEM Romania also receives, processes, archives and disseminates all the data reported within such projects.

Following the previously discussed plan of EURACHEM Romania Association for a continuous support of the students' professional activity, and for organizing short courses on specific issues on metrology in analytical chemistry, after the National Annual Forum, in a synthetic overview, the main changes that have occurred in EURACHEM Romania activities are the following:

- Definition of long-term and short-term training programs;
- Making training programs more flexible, by offering optional paths;
- Participating as observer for setting national standards for temporary authorization and institutional accreditation;
- Internal and external evaluation of training programs in view of temporary authorization and accreditation by National Agencies, as well as periodical evaluation.

EURACHEM Romania Association in 2015 was organizer and sponsor of the Professional Students' Contest on Analytical Chemistry and Coordinative Chemistry "Petru Spacu" 2015 Edition - www.petruspacu.ro.

Gabriel-Lucian RADU

RUSSIA

The Association of Analytical Centers of Russia "ANaLiTiCa" - the main conveyor of ideas and tasks of Eurachem into Russian region, is the hero of 25th anniversary in 2016. The Association brings together experts in the field of applied analytical chemistry, metrological assurance of analytical measurements and operates under the auspices of the Scientific Council on Analytical Chemistry of Russian Academy of Sciences. The Association is not only a consolidator over 200 Russian laboratories but also is the Accreditation Body. The Association of Analytical Centers "ANaLiTiCa" actively cooperates with international organizations- CITAC (International Cooperation for Traceability in Analytical Chemistry), and since 2004 the Association is an associate member of ILAC (International Laboratory Accreditation), and since 2007 - member of APLAC (Asia-Pacific cooperation for laboratory accreditation).

During the anniversary "ANaLiTiCa" conference round table discussions on the reference materials producing, accreditation of PT providers, metrological support of water analysis, analytical control and standardization in the precious metals industry, the Workshop "Features of quality management systems in food testing laboratories" were organized. The report on the Current and Future Activities of Eurachem had attracted interest from colleagues – analysts and metrologists. Report "International methodological cooperation in the field of metrology in analytical measurements- Eurachem in Russia" also caught the interest of participants of another event- III International Scientific Conference "Reference Materials in Measurement and Technologies" (Ekaterinburg, Russia, 2015)

In addition to joyful anniversary event in 2016 for the first time at the Russian Academy of Sciences, Scientific Council on Analytical Chemistry established a Committee on Metrology in Chemical Analysis (CMCA). This Committee was headed by Acad. Prof. Yury Karpov, CITAC member, President of the Association "ANaLiTiCa". The tasks of this Committee are coordination of research in the field of metrology of chemical analysis, discussion of main trends in this area, contribution to publishing the monographs and regulations in chemical metrology, international cooperation, participation in conferences and seminars, drawing

attention to the metrology of chemical analysis as an integral part of the analytical chemistry. National representatives Russia in Eurachem entered to Managing Executive Committee of Association "ANaLiTiCa" and became members of CMCA.

With the support of the Association "ANaLiTiCa" in 2016 the Publishing House "Profession" published two Eurachem guides in Russian "The Fitness for Purpose of Analytical Methods", 2014 and "Quantifying Uncertainty in Analytical Measurement", 2011 (transl. by the D.I.Mendeleev All-Russian Institute for Metrology, St.Petersburg, VNIIM) in hard covers.

This year Russian translations of Eurachem Guides and Leaflets (transl. by M.Medvedevskikh, Ural Institute of Metrology, UNIIM) are planned to be published on the Eurachem website.

*Vasilisa Baranovskaia
Maria Medvedevskikh*

SLOVAKIA

Activities of EURACHEM - Slovakia (ES) were oriented in this period as follows:

- transfer of information from the Eurachem resources to the analytical working-sites in the Slovak Republic (SR) and increasing the professional level of the analytical workplaces in the SR,
- organized new series of in house training in SLOVNAFT, a.s. in April 2015, which covered interpretation of following standards:
 - STN EN ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories,
 - STN EN ISO 19011:2012 Guidelines for Auditing Management Systems,
 - STN EN ISO/IEC 17020:2012 Conformity assessment - Requirements for the operation of various types of bodies performing inspection,
- co-organized the workshop 'Trends and Progress in Analytical Chemistry' for participants from practice and academic areas in 3rd to 4th June 2015,

continued on page 14

- ES was a co-organizer of the national scientific conference 'Metrology and Reference Materials' in October 2015 which was postponed and shifted to the future due to lack of participants in the end,
- organizing workshop: 'Experience in preparing of graduates of Faculty of Chemical and Food Technology STU for chemical and food industry' in April 29, 2016,
- co-organizing the 14th International Conference 'Present State and Perspectives of Analytical Chemistry in Practice' in May 3rd to 6th, 2016.

Pavel Majek

SLOVENIA

EuCheMS Slovenia is a section of the Slovenian Chemical Society (<http://www.chem-soc.si/about-society/Branches%2C%20Commissions%20and%20Sections>). In recent months we were working mostly on translations of key VIM3 terms and definitions and on organisational issues for the 9th workshop on Proficiency Testing, which will take place in October 2017 in Portorož (<http://www.eurachem2017.eu>). As for training activities, experts on quality in analytical chemistry are invited as speakers by the Slovenian Institute of Quality and Metrology, SIQ (http://www.siq.si/eng/seminars/index.html?no_cache=1), which organises one day courses (validation, measurement uncertainty) and a five day Quality School.

Nineta Hrastelj

SPAIN

During 2015, Eurachem Spain has been involved in the following activities:

- 1.Spanish translation of several documents from Eurachem:
 - Guide: Quantifying Uncertainty in Analytical Measurement, 3rd Edition (2012)
 - Leaflets:
 - i.How can PT help my laboratory?
 - ii.Selecting the right proficiency testing scheme for my laboratory
 - iii.Traceability of Analytical Results

2.Working Group of Education and Training: collaboration in the revision of 'Guide to Quality in Analytical Chemistry: An Aid to Accreditation'.

3.New general section of EURACHEM into the Eurolab Spain Newsletter.

4.Start of Spanish translation of guide 'The Fitness for Purpose of Analytical Methods: A Laboratory Guide to Method Validation and Related Topics (2014)'.

5.Training courses performed (18):

- Management and Technical Requirements of ISO 17025:3
- ISO 17025 audits: 2
- Quality Assurance: 1
- Uncertainty estimation: 6
- Equipment calibration: 3
- Validation of methods: 2
- Reference materials: 1

6.Spread the Guide 'The Fitness for Purpose of Analytical Methods: A Laboratory Guide to Method Validation and Related Topics' in the Máster de Cromatografía – Universidad de Alcalá – Madrid.

*Alfonso González del Rey
Pedro Pablo Morillas*

SWEDEN

In Sweden we have a joint national Eurolab and Eurachem organisation with 26 members representing over 100 companies and the Swedish Chemical Society.

We take active part in the following work:

- Eurachem and Eurolab working groups
- The laboratory committee of EA and ILAC
- The ILAC accreditation committee
- The advisory board of the Swedish accreditation body, Swedac
- Swedish ISO committees on Food and feed – SIS/TK435 and IOS/IEC 17025.
- Validation – follow-up of the new Eurachem Guide 2014

*Bertil Magnusson
Magnus Holmgren*

TURKEY

During 2015, Eurachem Turkey has been involved in the following activities:

Training events were organized in TUBITAK UME facilities in Gebze/Kocaeli, covering the following topics; Analytical Chemistry and Statistics, Chemical Metrology, Method Validation and Uncertainty in

Chemical Analysis, in February, June, October and November 2015.

ISO/IEC 17043 training were organized in Ankara in September 2015, in Mongolia in October 2015 and in Istanbul in February 2015.

The training courses included lectures, practical exercises and learning evaluation.

Eurachem Turkey is a member of TURKAK PT committee, and has been involved in the activities within the committee.

Consultancy on Method Validation and Estimation of Measurement Uncertainty in Chemical Analysis was provided to different organizations in Turkey.

Reviews and comments for the "Guide to Quality in Analytical Chemistry, An Aid to Accreditation", "Eurachem Reading List", "Review of Terminology Guide - User Survey" in Education and Training Working Group.

The translation of the "The Fitness for Purpose of Analytical Methods" guide was done by the Turkish Method Validation Team members and the review of the translated document is ongoing.

The translation of the leaflets on "You talk, we understand- the way out of the tower of Babel" and "Using repeated measurements to improve the standard uncertainty" was performed.

Eurachem Turkey contributed to the Eurachem Education&Training Working Group, Method Validation Working Group and to Measurement Uncertainty and Traceability Working Group.

Mine Bilisel

UNITED KINGDOM

Eurachem activity in the UK is coordinated between the Analytical Methods Committee of the Royal Society of Chemistry (AMC), and through LGC, who lead the UK Chemical and Biological Measurement programme.

The AMC (<http://www.rsc.org/AMC/>) has sub-committees concerned with sampling uncertainty/sampling quality, statistical methods and validation of analytical methods, all of which complement interests and concerns of Eurachem. The AMC publishes Reports and Technical Briefs which are available via the AMC web page: Six new technical Briefs have been published in the year; topics included

Raman Spectroscopy for Heritage Science, Outlier tests, 'fit for purpose' criteria for proficiency testing, a guide to precision, sampling theory and an introduction to AMC data sets. The AMC data sets are a collection of data sets useful for illustrating data handling methods, and vary from simple univariate data to multivariate data sets and structured experiments. Members of the AMC and its parent body, the Analytical Division Council, regularly receive the Eurachem Newsletter and information on Eurachem activities.

Activity within the UK Chemical and Biological Measurement programme can be found on the LGC website at <http://www.lgcgroup.com/our-science/national-measurement-institute/>. Activities in the year 2015-2016 included courses on measurement uncertainty, analytical method validation, method validation for biologists, statistics for analytical chemists and design of experiments. The programme also provides guidance documents and reports which can be found on the website above by following the "Publications

and Resources" links. Eurachem UK members have also contributed actively to the Eurachem PT working group, E&T working group, Measurement Uncertainty and Traceability and Validation working groups.

Steve Ellison

UKRAINE

Eurachem-Ukraine has continued working on translation of Eurachem guides and related documents. The major work was the translation of the Eurachem guide The Fitness for Purpose of Analytical Methods - A Laboratory Guide to Method Validation and Related Topics (2nd ed. 2014) into Ukrainian and Russian languages.

We have also translated the Eurachem leaflet Using repeated measurements to improve the standard uncertainty. Ukrainian translations of the documents have been placed on the Eurachem website.

The Eurachem guide The Fitness for Purpose of Analytical Methods - A Laboratory Guide to Method Validation and Related Topics was a core topic of the one-day seminar Metrology in Chemistry. Validation of chemical analysis methods organized by Ukrmetteststandart and Eurachem-Ukraine on 20th April 2016. The seminar has attracted a lot of attention, and about 120 professionals working in various sectors, including pharmacy, health care, food and feed control, natural gas industry, as well as students have taken part in it. Among the reasons for so much interest in the topic are the new Ukrainian Law on Metrology that came into force on 1st January 2016 and an increasing number of laboratories applying for accreditation. Thus, a demand in Ukraine for the Eurachem documents on all the aspects of analytical measurement quality is expected to grow.

*Mykhail Rozhnov
Ovsiy Levbarg*

Upcoming meetings

Eurachem Week 2017: 29th May to 3rd June Nicosia Cyprus



Photo: PIO

The Pancyprrian Union of Chemists (PUC) is hosting the "Eurachem Week" in Nicosia (Campus of the University of Cyprus), during which the following events will take place (all information can be found at <https://www.ucy.ac.cy/eurachem2017>):

- Eurachem Workshop on „Uncertainty in Qualitative and Quantitative Analysis”, 29th to 30th May 2017. This two-day Workshop is organised in cooperation with the Europe Section of AOAC International. Further to plenary lectures on key issues, parallel and breakout sessions dealing with specific fields will take place. Sessions with poster presentations and related contributed communications will also be held.

- Eurachem WG Meetings, 31st May
- Eurachem 33rd General Assembly (GA) and Eurachem 54th Executive Committee (EC) Meeting, 1st to 2nd June
- Trip to Pafos – European Capital of Culture 2017 Saturday, 3rd June, 08.00–18.00.

9th International Workshop on Proficiency Testing and 55th Executive Committee Meeting 9th to 12th October 2017, St. Bernardin Resort, Portorož,



Slovenia

The workshop will be organized by the Eurachem Proficiency Testing Working Group in association with EQALM and CITAC. This international PT workshop, building on the success of previous workshops, will enable delegates from around the world to come together to discuss a wide range of key issues across the three disciplines of analytical chemistry, microbiology and laboratory medicine.

For more information, registration and abstract submission please visit: <http://www.eurachem2017.eu>



WORKSHOP
IN CONNECTION WITH EURACHEM GENERAL ASSEMBLY 2017

"Uncertainty in Qualitative and Quantitative Analysis"



University of Cyprus
Nicosia (Lefkosia), Cyprus
29-30 May 2017

Pancyprrian Union of Chemists  Division of Quality Assurance

In cooperation with  EUROPE SECTION OF AOAC INTERNATIONAL

hosted at  Hellenic Republic
University of Cyprus

For details and registration to the Workshop visit:
<https://www.ucy.ac.cy/eurachem2017>
For general correspondence, email:
eurachem2017cy@gmail.com

 

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