

Eurachem

A focus for analytical chemistry in Europe

20th Anniversary

Report from the General

Assembly in Bratislava

News

Issue 27

Autumn 2009

The 25th meeting of the Eurachem General Assembly was held on 26 and 27 May 2009 in Bratislava, Slovakia. The meeting featured lively discussion on many issues of interest. A total of 19 National Members with 25 representatives participated in this meeting. Eurachem Working Group Chairs and representatives from the Stakeholder Organizations also participated.

Following the Decision of the General Assembly, elections were held for a number of places on the Executive Committee. M. Walsh (Ireland) and Robert Kaarls (The Netherlands) were re-elected as Members of the Executive. A new face, Dr Marina Patriarca (Italy), was also elected.

Address by the Chair



Dear members of the Eurachem Family,

It is my great honour to address all of you through this special issue of our Newsletter; despite the delay in its publication, the 2009 Newsletter reminds us of the 20th Anniversary of the establishment of Eurachem in 1989. During these two decades, Eurachem contributed extensively to the increase of awareness of quality issues and the reliability of analytical work in laboratories as well as the better understanding by the users of laboratory services. We respect the hard work by the pioneers; we remember the ones who have retired. We try to make best use of the knowledge and experience of the ones who are committed to serve the tasks of Eurachem.

At the end of the year 2009 Eurachem is faced with new challenges; the legislative framework in Europe is changing with regard to the accreditation and other quality issues. The task of this development is to safeguard the quality of life and the protection of the environment and, at the same time, facilitate the free movement of goods and services. Eurachem is on the way to review its Strategy drafting its new 5-year plan; having realized some weaknesses in its operation, during the last

... continued on page 2



Delegates at the 25th Eurachem General Assembly in Bratislava, May 2009

Eurachem News is published by:
The EURACHEM Secretariat, Panepistimiopolis
Zografos, Athens, 15771, GR
T: + 30 210 7274154 E: secretary@eurachem.info
www.eurachem.org

Editor: Evangelos Bakeas
Production of this newsletter was supported by national Eurachem organisations

No liability is accepted for the accuracy of information and the views expressed are not necessarily those of the editors or Eurachem Secretariat, nor the official policy of member countries' governments.

Education & Training

Working Group (E&T WG)

Activities of the Working Group

The EURACHEM Education and Training Working Group (E&T WG) has been very active this year with a number of projects progressing well. Most of its work takes place electronically as the WG only meets formally once a year during the week of the General Assembly. The greatest effort of the E&T WG has been producing a first draft of a Guide to help analytical scientists interpret the terms and concepts in ISO/IEC Guide 99, International Vocabulary of Metrology – Basic and General Concepts and Associated Terms- 3rd edition. The work has been carried out by members of the WG and additional metrologists co-opted for the project. This proved a considerable challenge and there is a great deal more to be done. Comments on the draft are being made by Members of the WG and GA members. A copy of the first draft and comment form may be obtained from the Secretariat.

One of the other tasks of the E&T WG is to ascertain the state of education and training in metrology within member states. A draft questionnaire was produced by WG members and discussed at the May meeting in Bratislava; once finalised this will be circulated to all GA and WG members. We urge Country Representatives to distribute this questionnaire widely to universities, colleges, professional bodies, training companies and accreditation bodies as well as others known to them who are interested in this topic. The completed questionnaires will inform EURACHEM of the needs of analytical scientists and the extent to which the teaching of metrology is part of the curriculum for chemistry and biology students.

The E&T WG members have been working with LGC (UK) in preparing some web-based quality assurance training resource. The role of the WG was in reviewing the material which was developed under the UK's Chemical and Biological Metrology Programme. The resource contains sections on quality standards and accreditation, method validation, measurement uncertainty, traceability, reference materials, quality control, quality documentation, proficiency testing and essential statistics. In addition to web pages there are short PowerPoint presentations. The material is freely available on the Chemical and Biological Metrology website (www.nmschembio.org.uk) in the Resources section. This could be an extremely valuable asset for those interested in improving their knowledge by self learning and to those about to start teaching aspects of metrology.

The E&T WG endeavours to maintain contacts with other organisations involved in analytical science, currently this is mainly, but not exclusively, through the TrainMiC and AcadeMiC programmes and the Division of Analytical Chemistry of the European Association for Chemical and Molecular Sciences (DAC-EuCheMS).

The Working Group wishes to attract new members and we urge Country Representatives to encourage suitable persons from their own Countries to join us. Several of the member states are not represented but the good news is that two new members have joined the Working Group since the meeting in Bratislava – a promising start.

Elizabeth Prichard
Chair

Proficiency Testing Working Group

Activities of the Working Group

The EURACHEM Proficiency Testing Working Group (PTWG) has continued to make progress on a number of work activities since the last Executive meeting:

The 6th EURACHEM Workshop on Proficiency Testing in Analytical Chemistry, Microbiology and Laboratory Medicine was held during October 2008 in Rome, in association with CITAC and EQALM. It was a great success with 244 participants from 47 countries attending the Workshop which led to beneficial discussions in the various Working Groups. In addition there were 74 accepted poster contributions. The half-day training courses, "Statistics for Proficiency Testing" and "Selection, use and interpretation of PT/EQA Schemes" that preceded the Workshop were subscribed by 140 and 130 trainees. The PT WG is grateful to the Italian organisations, including the public research institutes devoted to public health, metrology, environmental protection and innovative technologies, as well as the accreditation bodies and the standardisation body for chemical industry, who supported this event. The proceedings of the event will be published as a special issue of the journal 'Accreditation and Quality Assurance (ACQUAL)', which will be published during 2009.

A new information leaflet has been prepared on pre- and post- analytical proficiency testing. This takes the same format as the general PT leaflet previously produced. The approved English version will shortly be issued. The WG will then arrange for translation of the leaflet into a number of European languages.

The WG has continued to provide comment on the drafts of ISO/IEC 17043.

Initial work is now underway for the organisation of the next PT Workshop which will be held during September/October 2011 in Istanbul.

Brian Brookman
Chair

Method Validation Working Group

Activities of the Working Group

There was a meeting the day before in Bratislava where there was a discussion about the scope and the workplan. The WG also asked from the IUPAC to have a joint meeting; as yet there was no reaction. The WG has set as a target the revision of the existing –Guide as soon as possible and the production of a new Guide in the future. The major part of this work is focused on the validation of the in-house methods. A list of the parts of the Guide to be revised will be finalized by the end of July.

Lorens Sibbesen
Chair

Address by the Chair

continued from front page

General Assembly hosted in Bratislava, Slovakia Eurachem has revised its Memorandum of Understanding.. It has also been realized that some documents prepared by Eurachem and others in cooperation with Eurolab and EA need to be reviewed to reflect changing needs and relevant developments both at the European and global levels.

Our next General Assembly will be hosted in Copenhagen, on the 27th-28th May 2010. We are looking forward to welcoming there many delegates from all national Eurachem Committees. We hope that more scientists will join the very important work carried out by the Working Groups. We will be happy to welcome younger colleagues who are expected to undertake the roles of the more experienced ones.

All success to Eurachem and its National Committees

Dr Kyriakos C.Tsimillis
Eurachem Chair

In memory of Professor Zbigniew Dobkowski



It is with deep sadness that we heard of the sudden death of Professor Zbigniew Dobkowski, following a heart attack on Sunday 6 September during preparations for the Symposium of POLLAB. Professor Dobkowski was an active and respected member of Eurachem since its formation, participating both in the General Assemblies and in the Education and Training Working Group up to our last meetings in Bratislava and during the summer period dealing with specified tasks. He had a passion for Training! He was a very active member of EURACHEM-PL and EUROLAB. Zbigniew was a very kind man and a dedicated and professional colleague. After the announcement of his death, POLLAB and EURACHEM-PL declared their commitment to continue Prof. Dobkowski's work in EUROLAB and EURACHEM. It is good to hear that his enthusiasm will be carried forward by his colleagues. However he will be deeply missed in our laboratory society.

Communication within Eurachem

Following decisions of the Executive Committee meeting held in Rome in October 2008, a serious effort is being made to encourage some not very active national Eurachem Committees to reactivate. The Chair communicated with a number of committees and delegates with whom Eurachem lost contact for a long period. The good news comes from Spain, Romania and Russia. It is understood that global and regional economic problems cause main difficulties. It is expected that, following some structural changes in Eurachem (as reflected in the new MoU) and the interest of our colleagues in all national committees, the new tasks of Eurachem to be dealt with in existing and newly established Working Groups represent an additional incentive for a wider participation all over Europe.

Eurachem is committed to enhance its efforts in supporting local activities and encourage some developments. We all understand that Eurachem has its own restrictions due to the lack of economic resources which, anyway, are only the fees of the national committees.

Cooperation with neighbouring countries

Further to earlier discussions on the need to establish links with Mediterranean and other neighbouring countries, an effort was made during the last months to promote this task. To this end communication was made with colleagues in a number of neighbouring countries.

In this effort, existing links via either EA networks or the recently completed Euromed Quality Programme (2004-2008), are being used. There are some encouraging indications for further developments; however the economic problems, especially during the last difficult months, do not contribute to a more supportive atmosphere. However, it is considered that there is indeed room for cooperation with some of our neighbours.

Microbiological Laboratories: Is a revision of EA 4/10 necessary?

During the last two meetings of the Laboratory Committee of EA, a discussion was carried out on the needs of laboratories in correlation with the approach of accreditation bodies. The discussion which was held in a number of small groups covered a wide range of issues of interest to both analytical and microbiological labs. In this framework, it seems that there is an interest for the revision of EA 4/10 "Accreditation of Laboratories Performing Microbiological Testing". A detailed questionnaire was distributed earlier and concluded on the existing needs for such a revision. Since the said document was prepared by a joint WG EA/Eurachem, EA LC has asked whether Eurachem would be interested in participating in this effort. The response by the Executive Committee was in favor of the involvement of Eurachem. To this end, colleagues who could contribute are encouraged to contact the Secretariat accordingly.

National reports

Bulgaria

The section has been established since 2007 as BULCHEM, section of BULLAB (EUROLAB Bulgaria). The section has been working in close cooperation with BULLAB and Bulgarian Institute of Metrology. In the past year BULCHEM has concentrated on issues concerning accreditation of laboratories according ISO 17025.

In March 2008 the workshop "Traceability of measurements in field of chemical measurements" was organized in Sofia in cooperation with BULLAB.

In the past year was translated three of EURACHEM Guides, including new EURACHEM/CITAC Guides on Uncertainty in Compliance assessment and Uncertainty in Sampling.

Czech Republic

In the Czech Republic EURACHEM-CZ continued its publication and education activities. The translation of two latest EURACHEM guides (*Use of uncertainty information in compliance assessment* and *Measurement uncertainty arising from sampling*) was the major task that was completed in the year 2008. The publication of translations as QUALIMETRICS 15 was introduced at one-day seminar in Prague held in October 2008. Members of EURACHEM-CZ executive committee cooperated also on the translation of VIM 3 to the Czech language. People from different working fields set now accepting the final "give-and-take" translation.

EURACHEM-CZ issued three new Newsletters in last year (23 pages of text) using EURACHEM-CZ Newsletter as a tool for disseminating 'hot topics' on issues of the quality of analytical measurements. The website www.eurachem.cz serves as broad public forum for analytical and laboratory medicine community. A new project called *Methodical leaflets* was started. The Leaflets bring concise information (1-2 pages) on basic terminology, uncertainty evaluation, or PT in Czech language and are published on the web page with a possibility to download from EURACHEM-CZ website at no cost. Up to now five leaflets has been published.

EURACHEM-CZ has been working as an independent organisation with own legal identity since its establishment in 1992. Such arrangement allows us to compete for financial support from different public sources. For example we succeeded to receive grants from national Programme for Metrology Development from the Czech Office for Standards, Metrology and Testing in 2008 and 2009. The grants obtained covered publication activities of EURACHEM-CZ in Czech for introducing new uncertainty guides to laboratory community. The Ministry of Education, Youth and Sports also helps within its INGO programme to cover travel costs for national representatives participating on the General Assemblies and Executive Committees.

Eurachem-CZ is one of the founders of 4E-CZ activity in the Czech Republic, the Association serving with philosophy similar to that of EEEE working groups. It is seen as important tool to join forces of Czech Institute of Accreditation, Czech Metrology Institute, Eurolab-CZ and Eurachem-CZ and strengthen their cooperation on solution of common problems in the field of terminology, quality issues and accreditation.

Cyprus

The Cyprus Eurachem Committee has been involved in a number of activities and took some important initiatives during the said period. A number of them was organized in cooperation with CyprusLab and/or the Cyprus Accreditation Body (CYS-CYSAB) as well as the University of Cyprus. A very important activity referred to a training programme for the personnel of medical laboratories. New trends and new requirements in the field have resulted in an increasing interest among medical laboratories to become accredited against ISO 15189. The main development in the field is the expected inclusion of medical laboratories in the National Health System which is to be soon operational under the condition that they are accredited. A series of training courses were organised in June and November by CYS-CYSAB, with the active involvement of Cyprus Eurachem Committee and the cooperation of the Association of Medical Laboratories.

During Philip Taylor's visit (IRMM) in Cyprus (December 2008) meetings were arranged with the Accreditation Body, the Metrology Service, CyprusLab and the Department of Chemistry of the University. The latter supported the efforts being made to introduce metrology in Chemistry issues in the syllabus of both under- and post-graduate programmes of the Department of Chemistry.

The Committee contributed to the publication of the Newsletter of the Pancyprian Union of Chemists.

The Committee has been actively involved in the organization of various events, e.g. a Regional Conference on Metrology in spring 2010. Cyprus Eurachem Committee is being prepared to host the autumn Eurachem in Cyprus in November. A 2-day workshop is to be organized on that occasion where delegates from neighbouring countries will be invited to attend. Colleagues from other countries are also welcome.

Denmark

Eurolab Denmark has at present 60 members in total (i.e. all types of testing and calibration laboratories and also a few companies dealing with laboratory related activities such as vendors of equipment, training companies/institutions etc.). 3 out of the 60 members are so-called "Personal memberships" i.e. membership for a single person (something new we have started in 2008) whereas the remaining 57 "Company memberships" enjoy the benefit of being allowed to sign up as many employees as they want to for the different activities and networks within our organisation. The network for Analytical Chemistry mentioned above has 77 contact persons signed up covering 25 of the member companies.

In the beginning of 2009 we finally succeeded in establishing a new network group for microbiological laboratories and so far 33 people from the member companies have signed up for that group (with some overlap to the analytical chemistry network). The first meeting was arranged around the theme of water microbiology, but a lot of good ideas for subjects for future meeting were suggested.

Network for Analytical Chemistry have had 3 meetings during the period:
- "Measurement Uncertainty in Analytical Chemistry – Revisited". MU was dealt with heavily some years back but based on the Eurolab Report "MU Revisited – Alternative approaches..." and the Eurachem guide on "MU in Sampling" a.o. we had a very interesting meeting with enthusiastic responses from the participants..

National reports (cont.)

- "Standards relevant for laboratories" (joint meeting with our Network for QA and Accreditation) where we tried to get an overview of what is there – and what is relevant?

- "Statistical tools for handling of analytical data". This subject had an overwhelming attendance and some very good discussions about basic statistics in the laboratory but also an introduction to chemometrics.

In addition to the network activities Eurolab Denmark also arranges 2 – 3 meetings a year with a more general content for all our members.

Last summer (2008) Eurolab Denmark carried out a survey on training needs among our members and based on the results from that our board has lately decided to increase the member benefits in terms of good and fairly priced trainings. That is basically accomplished in 3 different ways: ¹⁾ Negotiation with existing training providers for achieving discount for Eurolab Denmark members; ²⁾ Achieving offers for in-house trainings from existing training providers and then inviting a group of members for the training (the group must be big enough to reach at a fair price for the single participant); and ³⁾ Developing and arranging special trainings within our organisation on subjects which cannot be found already in the market.

About 1½ years ago Eurolab Denmark established a permanent part-time secretariat which we think gives an increased service to our members by fulfilling the decisions taken at board meetings etc., giving support to the different networks. The secretariat also distribute relevant documents to our members (mainly by uploading them on our website). That is both draft documents for hearing/voting and approved documents for guidance (e.g. the Eurachem Guidelines and the so-called "Cook Books" from Eurolab TCQA) Eurolab Denmark is in current and good contact with the Danish Accreditation Board (DANAK). Our chairman has an annual meeting with the director of DANAK for an open discussion of subjects/problems of common interest/concern and in addition to that we often invite DANAK officers to our network activities for discussion of specific subjects.

During this year Eurolab Denmark has been invited by the Ministry of the Environment as a representative for analytical laboratories in Denmark to a working group on formulating a new law on storage of poisonous chemicals (as a part of the strengthened preparedness against potential terror activities) Eurolab Denmark has a contact to a representative for Eurachem in Norway and try currently to keep them informed on all relevant issues. Hopefully we will also be able to help our colleagues in Norway to establish some Eurolab/Eurachem activities again.

Finland

Eurachem-Finland and Eurolab-Finland have merged as Finntesting Association. By merging these activities more effective use of resources will be achieved. Association was also natural way to proceed after many years' collaboration in organizing mutual training events and seminars. In year 2008 two seminars were arranged. One was dealing with measurement uncertainty and presenting new Finntesting Association. The other one dealt with education e.g. in quality management.

Finntesting Association has executive board with 8 members. In year 2008 executive board assembled four times for a meeting. Association has 35 company members and 45 individual members. Information related to quality assurance as well as Eurachem and Eurolab activities has been distributed through our website and emails.

Members of Finntesting Association participate in working groups of Eurachem and Eurolab. In Eurachem working groups we have representatives in Education & Training WG, Measurement Uncertainty and Traceability WG, Proficiency Testing (EEE-PT) WG, Proficiency Testing WG and Qualitative Analysis WG. Eurachem Finland chairman and vice-chairperson attended also Eurachem General Assembly in 2008 in Athens.

Finntesting Association honoured in year 2008 two awards of encouragement. One award was honoured for influential person in the field of laboratory testing and quality assurance. The other one was honoured for a student having polytechnic or university thesis with new innovation to laboratory sector or thesis affecting to economic efficiency and/or quality in laboratory.

Greece

The EURACHEM Greece represented by the Association of Greek Chemists continued during this period its activities. Two of the Association's Scientific Departments, those of Analytical Chemistry and Food Chemical Analysis organized four (4) events. Three of the events were training courses on Accreditation of Chemical Testing Labs according to EN ISO/IEC 17025. The participation was successful. These courses which are held the last years have become very popular in Greece. The 4th event was a training course on Gas Chromatography and Quality Assurance issues. During this event for the first time a cooperation between the Association of Greek Chemists and the TrainMic Hellas was established and implemented. A new plan for the coming year has already been discussed and decided including mainly short term courses on specific issues on metrology in analytical chemistry.

Romania

The EURACHEM Romania Association has 83 active members from different institutions:

- teaching staff from universities (University of Bucharest, Politehnica University of Bucharest, Transilvania University of Brasov, Ovidius University of Constanta, University of Iasi, Technical University of Iasi etc.)
- researchers from research institutes (INCDSB, ICECHIM, INMR etc.)
- specialists from national and/or local agencies for environmental monitoring, for public health, etc.
- practitioners from specialized and accredited laboratories

The main activities of the EURACHEM Romania Association was in 2009:

- events: the annual FORUM, the General Assembly, workshop
- publications: EURACHEM Informative Bulletin and specific books or booklets

Some details regarding the activities organized during the last year are given:

- the 7th EURACHEM Romania FORUM "Analytical measurements quality", July 5, 2008, Brasov, Romania, linked to the Conference on Sustainable Energy, (CSE 2008)
- EURACHEM Romania Association General Assembly
- EURACHEM Informative Bulletin, no. 12, July 2008, ISSN 1582-9057 (20 pages)
- David I.G., Radu G.L., VALIDATION OF THE (BIO)ANALYTICAL METHODS, Printech, Bucharest, ISBN 978-973-718-568-6; Romanian language (published under Eurachem-Romania auspice).
- Tanase, I.Gh., Radu, G.L., Pana, A., Buleandra, M., ANALITICAL METHODS

VALIDATION – THEORETICAL PRINCIPLES AND CASE STUDIES, Printech, Bucharest, ISBN 978-973-718-784-0; Romanian language (published under Eurachem-Romania auspice)

- Participation to the works of the Specialised Technical Committee and of the Accreditation Council of the national accreditation organism (RENAR).

- Students contests "Gheorghe Spacu", organized by the Politehnica University of Bucharest for the students from Chemistry and Related Sciences Curricula, January, 2008 with financial support of the EURACHEM Romania Association.

Russia

Five years passed away from the decease of Russian representative Dr. Gregory Fridman. All this time Russia didn't attend Eurachem activities keeping active member of such International Organization as CITAC, ILAC and some others. National Russian organizations concerned with analytical measurements, analytical laboratories and the system of traceability establishing are Science Council of Analytical Chemistry of Russian Academy of Sciences and Association of Analytical Centers "Analitica". Even more, Association "Analitica" past year has become associated member of ILAC. Within Russia there are more than 20 thousand laboratories concerned with analytical measurement. More than 5 thousand laboratories are accredited according to requirements of ISO 17025 and System of Analytical Laboratories Accreditation (SAAL). Nowadays SAAL covers laboratories operating with determination of composition, structure and properties of substances and materials, operating in different areas (metallurgy, extractive industry, geology, mechanical engineering, agriculture, food, chemical, pharmaceutical industry, medicine, water-supply, ecology and so on). In their activity the Russian analytical laboratories are guided by the requirements of international documents

UK

In the UK, Eurachem activities are shared between the Royal Society of Chemistry through its Analytical Methods Committee, and LGC as the UK designated NMI for analytical chemistry and molecular biology. Activities during 2008-9 included:

- Approximately 10-15 training course per year (depending on applications) on statistics, quality assurance, laboratory management and measurement uncertainty.
- Seminars and workshops on: Biometrology for Microfluidics, Validation of analytical methods, interpreting analytical results in food regulation (aimed at official analysts and lawyers); measurement uncertainty;
- National working groups on Proficiency testing, and Reference Materials and, via the Royal Society of Chemistry Analytical Methods Committee, Statistics for analytical chemistry and Validation issues. The RSC additionally runs a wide range of workshops and seminars in topics across analytical chemistry.

Ukraine

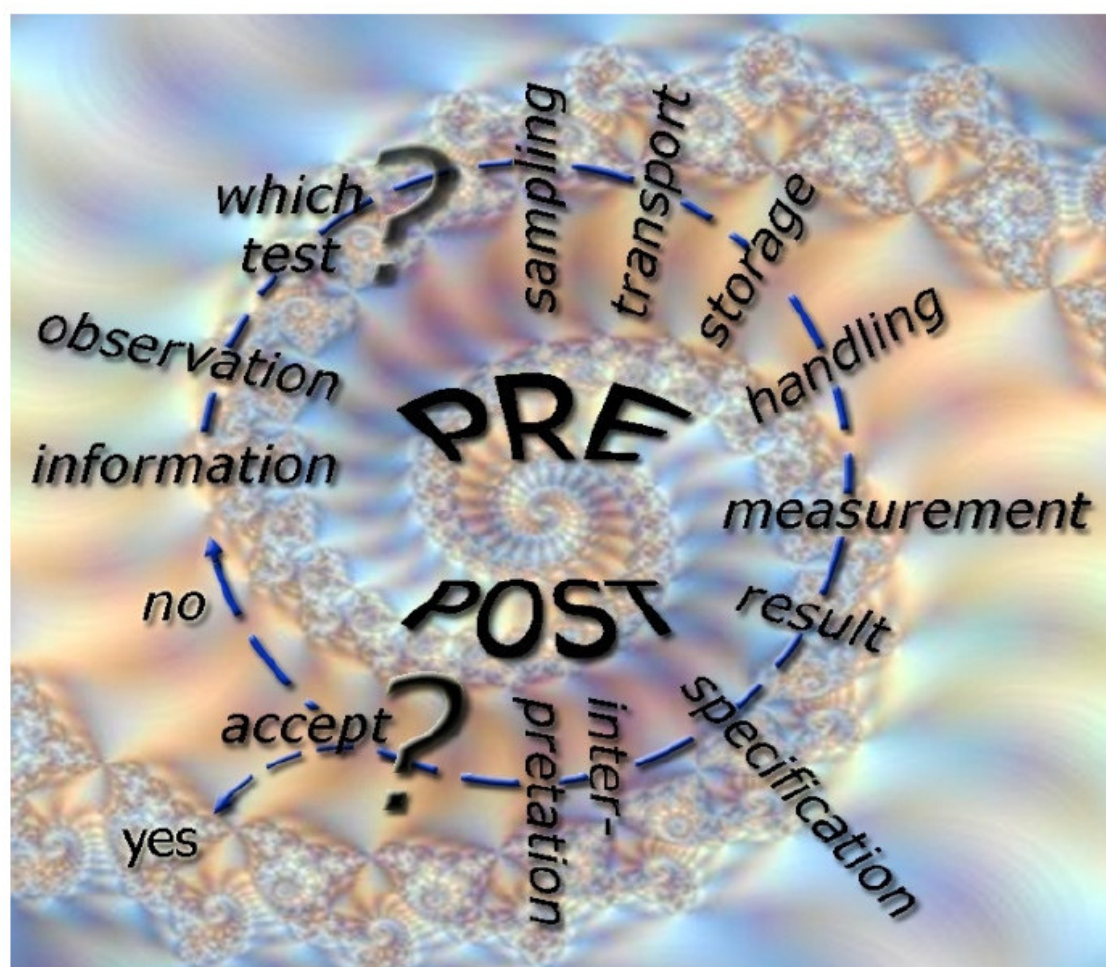
In 2008 two conferences have been organized by Eurachem-Ukraine together with metrological institutions, research institutes, universities, and others:

1. "Quality and safety. Problems of competence and proficiency testing of personnel of testing laboratory", Odessa, May 26-28, 2008.
2. The Third International Conference "Traceability assurance in physico-chemical and optico-physical measurements" (CHEMMET-3-2008), Kyiv, November 11-13, 2008, with the participation of speakers from Byelorussia, Germany, Hungary, Italy, Russia, and Ukraine.

Pre- and post-analytical proficiency testing

Introduction

Routine chemical analysis typically involves several steps, e.g. selection of procedure, sampling, sample preparation, measurement, result calculation, uncertainty estimation, and reporting to customer. Based on the result, important decisions and actions are taken. The steps before and after the measurement are often referred to as “pre- and post-analytical”. There are many sources of uncertainty associated with this work, some of which can actually limit the overall quality.



Proficiency testing (PT) and external quality assessment (EQA) schemes are effective means of assessing the quality of routine analyses. However, if there are specific procedures, either before or after the measurement, which are applied to the routine samples, but not to the PT test sample, the result reflects only the quality of part of the measurement process.

Pre- and post-analytical PT/EQA schemes are already widely used in laboratory medicine. The standard ISO 15189, that underpins accreditation of medical laboratories, stresses that EQA schemes should “... have the effect of checking the entire process including pre- and post-examination procedures ...”

The examples in this leaflet illustrate their potential and importance of pre- and post-analytical PT/EQA. They are intended as an inspiration for the providers to further develop their external quality control activities.

Pre-/post-analytical PT/EQA – a means for harmonisation

By illustrating, e.g. lack of adherence to guidelines, or variation in sample preparation, or inconsistency in interpretation, pre- and post-analytical PT/EQA schemes pinpoint problems not apparent in other schemes. This may lead to improved harmonisation and changes to guidelines and standards.



Eurachem

A FOCUS FOR
ANALYTICAL CHEMISTRY
IN EUROPE

Example 1: Interpreting clinical chemistry information

Patient background information together with analytical results can be used to check agreement of interpretational advice given by medical doctors. This type of scheme can, therefore, include both pre- and post-analytical aspects. The provider, e.g. through an expert group, ranks the quality of participants' response and suggestions, and presents them in the report with comments.



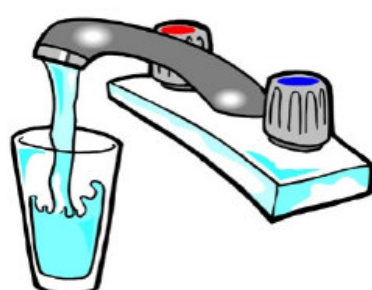
Example 2: Sampling requests in microbiology



Using the scenario of food poisoning, pre- & post-analytical aspects of sampling requests in a microbiology scheme can be highlighted. The provider gives information about food type, symptoms, and incubation time with a simulated sample. Participants choose which organism(s) to test for. The associated laboratory work involves examination of samples, report on method(s) of choice and results. Participants could, e.g. be asked to specify which toxins or pathogens are likely to cause the food poisoning and state whether or not they will disseminate information, e.g. to hospitals or food suppliers. The feedback report would then show the results of each participant together with the comments of the provider.

Example 3: Toy testing

Faulty design, usage and chance play a role in injury and death incidents related to children's toys. Toy safety is the practice of ensuring that toys are safe, usually through the application of set safety standards. The PT provider sources a toy, performs visual assessment of its homogeneity, and distributes the samples. Participants are requested to assess the toy against the European standard EN 71 and they have to decide which clauses of the standard apply. The clauses chosen define the test(s) to be carried out. The feedback report will contain a "model answer" including clauses, tests and labeling requirements (when applicable).



Example 4: Monitoring drinking water quality

A post-analytical application can be underpinned by legislation and national regulations (Directive 98/83/EC). Participants receive a synthetic drinking water sample with properties close to one or more limiting values. They are requested to deliver results, uncertainties and a "pass/fail" recommendation to the customer. The recommendations of the provider are listed in the feedback report for educational purposes. Information can be fed back also to regulators to serve, e.g. as basis for further discussions.

More information

Information about PT providers and schemes can be obtained from your national accreditation body, from the EPTIS website (www.eptis.bam.de) or from international organisations such as Eurachem, Eurolab, and EQALM.

Introduction to Uncertainty and Uncertainty for Compliance Assessment

Eurachem Workshop in Nicosia, Cyprus

During the Accreditation Week 2009, the Cyprus Accreditation Body (CYS-CYSAB) organised on the 18th and 19th November, a two-day Workshop with invited speakers including some members of the Executive Committee of Eurachem who visited Nicosia on the occasion of their autumn meeting on the 20th November. Thirty assessors and technical experts of CYSAB as well as members of its Technical Committees attended the Workshop which was very successful and interactive. The participants had varied backgrounds, the majority were chemists and the other disciplines represented were microbiology, veterinary science and engineering.

The topics covered and speakers appear in the table.

• Measurement uncertainty (Part 1) -Basic rules of measurement uncertainty	<i>Elizabeth Prichard</i>
• Measurement uncertainty (Part 2) - Other approaches for evaluating uncertainty: Use of precision and bias data and the results from collaborative studies	<i>Vicki Barwick</i>
• Break out session: Establish an uncertainty budget and estimate uncertainty from validation data	
• How legislators interpret specifications within the food sector with respect to measurement uncertainty	<i>Roger Wood</i>
• Principles of the EURACHEM/CITAC Guide "Use of uncertainty for compliance assessment"	<i>Steve Ellison</i>
• Break out session: Application of decision rules for the assessment of compliance to specifications and regulations	
• Uncertainty, asymmetry and constraints: coverage intervals for large uncertainties	<i>Steve Ellison</i>
• Overview of quality management: Introduction to the International Standards used in laboratories	<i>Kyriakos Tsimillis</i>
• Different requirements of Standards used in different sectors : Certification, accreditation and compliance - subtle differences	<i>Kyriakos Tsimillis</i>
• Vocabulary of terminology in metrology-Eurachem Guide to ISO/IEC Guide 99	<i>Elizabeth Prichard</i>
• Frequency of PT participation	<i>Brian Brookman</i>
• Update on ISO/IEC 17043	<i>Brian Brookman</i>



Contact points

Eurachem Secretariat Association of Greek Chemists c/o National and Kapodistrian University of Athens, Chemistry Department, Panepistimiopolis, 15771 Zografos Athens, GREECE
+ 30 210 7274154
secretary@eurachem.info

www.eurachem.org

Chair	Dr Kyriakos Tsimillis (Cyprus Organisation for the Promotion of Quality (CYS))
Vice Chair:	Prof Miloslav Suchanek (Institute of Chemical Technology, CZ)
Past Chair:	Dr Steve Ellison (LGC, UK)
Secretary:	Dr Evangelos Bakeas (National and Kapodistrian University of Athens, GR)

Eurachem member nations

Albania	Greece	Romania
Austria	Hungary	Russia
Belgium	Iceland	Slovakia
Bulgaria	Ireland	Slovenia
Croatia	Italy	Spain
Cyprus	Lithuania	Sweden
Czech Republic	Luxembourg	Switzerland
Denmark	Malta	Turkey
European Commission	The Netherlands	Ukraine
Finland	Norway	United Kingdom
France	Poland	
Germany	Portugal	

To get involved with Eurachem in your nation, contact the Eurachem Secretariat or your national representatives and visit the Eurachem website.