

Report from the General Assembly in Vilnius

## Bulgaria joins the Eurachem family

The 23rd General Assembly of Eurachem was held in Vilnius, Lithuania, on 24 and 25 May 2007. The organisation of the event by Eurachem Lithuania was excellent, and they even managed to arrange for hot and sunny weather, unusual for May.

The General Assembly covered many important issues, with many discussions covering a forward look and considering how Eurachem will evolve and change to continue to be highly relevant in the field of chemical measurements for many years to come, and to continue to serve the analytical chemistry community across Europe.

The highlight of the meeting, however, was the agreement of the General Assembly to accept the application from Bulgaria to join Eurachem.

Dr Katerin Katerinov, Director of the Bulgarian Institute of Metrology (BIM) is seen below signing the Eurachem Memorandum of Understanding, and shaking hands with the Eurachem



Chairman, Dr Steve Ellison. Dr Katerinov told the General Assembly that Eurachem Bulgaria had a good relationship with BULLAB (the Eurolab member organisation in Bulgaria) and that he had a strong desire for Bulgaria to become fully involved in the Eurachem family.

The Measurement for Sampling Working Group, under the Chairmanship of Dr Mike Ramsey, also met in Vilnius. The Working Group had received the votes for the Eurachem/EUROLAB/CITAC/Nordtest /AMC Guide: Measurement uncertainty arising from sampling: a guide to methods and approaches. All votes except one were in favour. A few minor changes will be made to the voting draft, taking into account comments received during the voting process, and the final version will then be published. The Guide will be available to download from the Eurachem Homepage.

The General Assembly also discussed the issues of copyright and membership contributions. A paper presented by the Secretariat on copyright issues was adopted as policy subject to some minor amendments. This policy asks for all working groups to agree their copyright policy before commencing work on any guide or document. The normal approach will be to assign copyright to individual contributors (Eurachem itself can not hold any copyright as it is not a legal entity), except where agreed otherwise with the Executive. Working Groups will also grant permission to the Executive to allow publication by third parties, provided that appropriate controls of integrity and liabilities are exercised.

There was a lively discussion on membership contributions, which arose

## Also in this issue:

*Eurachem General Assembly in Lithuania*

*Measurement uncertainty for compliance*

*A new organisation to serve European metrology*

*Focus on Proficiency Testing*

from the fact that approximately one-third of Eurachem member countries did not pay their contribution in 2006. This money goes towards the payment of subscriptions to organisations of which Eurachem is a stakeholder member, the production of newsletters, the upkeep of the website, as well as a small contribution to the work of the Secretariat. There was general agreement that the payment of these contributions was a moral obligation, at least, and that some sanctions could be taken in future against those who do not pay. This subject will be considered by the Executive in more detail, and a proposed amended Memorandum of Understanding will be prepared for discussion at the next General Assembly, which will be held in Athens on 22 and 23 May 2008.

# Focus on Proficiency Testing in Analytical Chemistry, Microbiology and Laboratory Medicine

Marina Patriarca, Nineta Majcen, Brian Brookman and Antonio Menditto

The EURACHEM Proficiency Testing Working Group promotes and organises workshops addressing current practice, problems and future directions of inter-laboratory comparisons in chemical and biological analyses. These events are structured as key-note lectures followed by lively discussions in working groups, enabling interactive participation and cross-fertilization of ideas. The last event (Portoroz, Slovenia, 2005), held in association with EQALM and CITAC <sup>(1)</sup>, and supported locally by the Ministry of Higher Education, Science and Technology of the Republic of Slovenia-Metrology Institute (MIRS), Slovenian Accreditation (SA), Slovenian Chemical Society-EURACHEM Slovenia and SILAB, was attended by 120 delegates from 28 countries, providing an excellent opportunity for providers, users and

regulatory bodies to come together and share their views. In addition, training for the practical implementation of uncertainty in PT/EQA was provided in a course attended by over 60 delegates. A special issue of Accreditation and Quality Assurance <sup>(2)</sup> has been devoted to the lectures, posters and reports from the working group discussion, addressing in particular new trends, such as virtual EQA/PT and the wider use of Internet; pros and cons of accreditation of PT/EQA providers; the assessment of performance and its comparability between schemes; views of regulatory bodies on the contribution of PT/EQA data to laboratory assessment and applications of PT/EQA to pre and post analytical steps.

Following continuing and growing interest in the role of PT/EQA to assure the

quality of chemical and biological tests, another workshop will take place in Rome, 5-7 October 2008 <sup>(3)</sup>. The main topics to be addressed will include developments of PT/EQA in the wider EU and in developing countries; newer fields of application such as microbiology and molecular biology; key aspects of PT/EQA such as quality of test items, frequency of testing and monitoring of performance over time; the proposed ISO 17043 and end-user perspectives. In conjunction with the Workshop two training courses will be addressed specifically at PT/EQA providers or end-users.

- (1) Ulf Örnemark, Nineta Majcen, Eurachem workshop in Slovenia, Focus on accreditation of PT providers. CITAC News, February 2006, 21.
- (2) Accred. Qual. Assur. 2006: 11(8-9), 371-484.
- (3) See elsewhere in this issue of the EURACHEM Newsletter.

## The diary

Event	Venue & date	Contact
EuroAnalysis XIV	University of Antwerp 9-14 Sept 2007	EUROANALYSIS-XIV Conference Secretariat University of Antwerp Tel/Fax: + 32 3 820 23 43 luc.vantdack@ua.ac.be www.euroanalysisxiv.ua.ac.be
Nuclear PT 2007	Bucharest, Romania 6-9 Oct 2007	Dr. Emanuela Cincu "Horia Hulubei" National Institute for Physics and Nuclear Engineering IFIN-HH Tel: +40 21 404 2300 activa-n@nipne.ro http://nuclearpt-2007.nipne.ro
Use of reference materials and estimation of measurement uncertainty	IRMM, Geel, Belgium 10 - 11 Oct 2007	Thomas Linsinger IRMM Tel: + 32 (0)14 571 956 thomas.linsinger@ec.europa.eu www.irmm.jrc.be
Measurement Quality in Chemistry	Talinn, Estonia 25-26 Oct 2007  Borås, Sweden 8-9 Nov 2007	Dr Bertil Magnusson SP Technical Research Institute of Sweden Tel: + 46 10 516 5275 bertil.magnusson@sp.se www.sp.se/conf
Statistics for analytical chemists	LGC, Teddington, UK 19 Sept 2007	Lorraine Didinal LGC Training Centre Tel: + 44 20 8943 7631 training@lgc.co.uk www.lgc.co.uk/training.asp (Click on 'Analytical Quality')
Principles and practice of measurement uncertainty in chemical testing laboratories	LGC, Teddington, UK 9-10 Oct 2007	
Implementing ISO/IEC 17025 in testing laboratories	LGC, Teddington, UK 14 Oct 2007	
Method validation	LGC, Teddington, UK 4-6 Dec 2007	
Uncertainty for Sampling; Uncertainty in Compliance	BAM, Berlin, Germany 14-15 April 2008	Manfred Golze BAM Tel: +49 30 8104 1943 Manfred.golze@bam.de
6th Eurachem workshop on PT Proficiency testing in analytical chemistry, microbiology and laboratory medicine	Rome, Italy 6-7 Oct 2008	Brian Brookman LGC, UK Tel: + 44 20 8943 7448 brian.brookman@lgc.co.uk

# International reports

## EURAMET

New organisation formed to serve metrology in Europe

More than 70 metrologists, representatives of ministries and the European Commission gathered at PTB in Berlin on 11 January 2007 for what will become a memorable date for European metrology. On that day EURAMET was born, a new organisation to serve European metrology. Also in Berlin, signatories from 26 European states signed the byelaws of EURAMET, an association of public utility under German law.

EURAMET for the first time forms a legal entity for European metrology. Being a legal entity allows the organisation to negotiate with the European Commission (EC) for funding. Consequently, One of EURAMET's prime purposes will be to negotiate a contract with the EC for a European Metrology Research Programme (EMRP), to be jointly financed by participating countries and the EC. Initially, the EMRP is expected to be supported with 'ERA-NET Plus' funding from the 7th EU Framework Programme. However, EURAMET hopes to negotiate a separate grant agreement on the basis of Article 169 of the EC treaty.

EURAMET will also serve as the association for European metrology institutes and this way become a successor

to EUROMET, which operated for 20 years. The transfer of responsibilities from EUROMET to EURAMET will be agreed at the next EUROMET General Assembly in June 2007.

## Eurolab

New Eurolab report revisits measurement uncertainty

Eurolab has published a new technical report on measurement uncertainty. Entitled 'Measurement uncertainty revisited - Alternative approaches to uncertainty evaluation' (Eurolab Technical Report No. 1/2007), the report was prepared with significant input from Eurachem experts and was based around the Eurachem/ CITAC guide, 'Quantifying uncertainty in analytical measurement'.

This report focuses on reviewing and comparing the currently available approaches for evaluating measurement uncertainty. In recent years, the more traditional 'modelling approach' to uncertainty evaluation has been joined by an increasing number of strategies, which have been classified as 'empirical approaches'. Ideally these different approaches will give the same results but both have their 'flaws'.

Therefore, it is now widely recognised that uncertainty estimates using data produced from both modelling and empirical

approaches, should be compared and combined to ensure that all effects accounted for are taken into account. This procedure is by no means straightforward! This report will show readers how to do this.

This new report summarises the current main approaches for uncertainty and discusses and compares the uncertainty data that can be obtained. It discusses the technical issues pertinent to the comparison, validation and revision of uncertainty estimates and contains a wide range of case studies covering various testing fields.

Eurolab Technical Report No. 1/2007 is now available from the Eurolab website, [www.eurolab.bam.de](http://www.eurolab.bam.de).

## EuCheMS - DAC

New web directory of educational institutes under preparation

A 'European Association for Chemical and Molecular Sciences, Division of Analytical Chemistry (EuCheMS - DAC)' Task Force is currently laying the foundations for a new online directory, 'European Analytical Chemistry on the Web', containing a collection of website addresses of institutions educating analytical chemists. This collection will provide comprehensive information on the field. The directory will list the details for institutions as opposed to individual scientists, in an attempt to provide a sustainable and reliable source of information requiring minimal updating.

Task Forces within EuCheMS - DAC are established to undertake discrete, short term projects. For longer - term activities, such as history and education, the division has established specific Study Groups.

As part of the preparations leading up to EuroAnalysis XIV, due to take place at the University of Antwerp on 9-14 September, the History Study Group is planning to publish a review article on the development of analytical chemistry in the host country, Belgium. The Group also hope to publish a history of the continued on page 7.



Delegates at PTB, Berlin, witnessing the launch of EURAMET.

# Assessment of Compliance

## A new Eurachem/CITAC Guide

Alex Williams Chairman, Eurachem/CITAC Measurement Uncertainty and Traceability Working Group

We are all aware that measurement uncertainty has to be taken into account in the assessment of compliance with a specification or a regulation and how to do this is an issue, which has been of concern to Eurachem/CITAC for a number of years. When making an assessment of compliance, because of the measurement uncertainty, there is a risk of making incorrect decisions, i.e. of accepting a batch of material which is outside the specification or rejecting one that is within. The probability of making a wrong decision obviously depends both upon the size of the measurement uncertainty and on how the uncertainty is taken into account when assessing compliance.

We discussed this in the second edition of our guide “Quantifying Uncertainty in Analytical Measurement”<sup>1</sup> where we considered the assessment of compliance for the results shown in Figure 1.

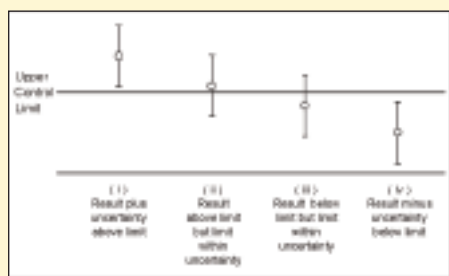


Figure 1: Uncertainty and compliance limits

We concluded that case (i) clearly implies non-compliance, case (iv) compliance and that cases (ii) and (iii) require individual consideration in the light of any agreements with the user of the data. Our compliance guide takes cases (ii) and (iii) further and on the basis of an ASME guide<sup>2</sup> recommends the use of Decision Rules. A decision rule gives a prescription for the acceptance or rejection of a product based on the measurement result, its uncertainty and the specification limit or limits, taking into account the acceptable level of the probability of making a wrong decision. On the basis of the decision rule, an “Acceptance Zone” or a “Rejection Zone” is determined (Figure 2), such that if the measurement result lies in the acceptance zone the product is accepted or if in the rejection zone it is rejected. Our guide

gives examples of a number of decision rules and also provides advice on the design of decision rules to meet the requirements of the regulation or specification.

### Decision rules

One decision rule that is currently widely used is that a result implies non-compliance with an upper limit if the measured value exceeds the limit by the expanded uncertainty. With this decision rule, then only case (i) in Figure 1 would imply non-compliance.

Another very simple decision rule is that a result equal to or above the upper limit implies non-compliance and a result below the limit implies compliance, provided that uncertainty is below a specified value. This is normally used where the uncertainty is so small compared with the limit that the risk of making a wrong decision is acceptable.

In general the decision rules may be more complicated. They may include, for example, that for cases (ii) and (iii) in Figure 1, additional measurements should be made, or that manufactured product be compared with an alternative specification to decide whether or not to accept the test item are:

1. A specification giving upper and/or lower permitted limits of the characteristics (measurands) being controlled.
2. A decision rule that describes how the measurement uncertainty will be taken into account with regard to accepting or rejecting a product according to its specification and the result of a measurement.
3. The limit(s) of the acceptance or rejection zone (i.e. the range of results), derived from the decision rule, which leads to acceptance or rejection when the measurement result is within the appropriate zone.

The relevant product specification or regulation should ideally contain the decision rules, but if this is not the case

then they should be drawn up as part of the definition of the analytical requirement (i.e. during contract review).

### Acceptance zones, rejection zones & guard bands

The decision rule is used to define an acceptance zone and a rejection zone as shown in a) in Figure 2. The start of the rejection zone is at the specification limit  $L$  plus an amount  $g$  (called the Guard band<sup>3</sup>). The value of  $g$  in a) is chosen so that for a measurement result greater than or equal to  $L + g$  the probability of false rejection is acceptable; that is, a low probability that the permitted limit has not been exceeded. In b),  $g$  has been chosen to provide low risk of false acceptance.

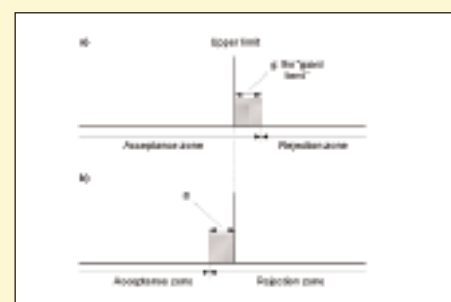


Figure 2: Acceptance and rejection zones for an Upper Limit

The figure shows the relative positions of the acceptance and rejection zones for a) high confidence of correct rejection; b) high confidence of correct acceptance. The distance  $g$  is often called the ‘guard band’.

### Setting acceptance and rejection zone limits

The guide also provides advice on setting acceptance and rejection zone limits. The size of the guard band  $g$  depends upon the value of the uncertainty and is chosen to meet the requirements of the decision rule. For example if the decision rule states that for non-compliance, the observed value should be greater than the limit plus  $2u$ , then the size of the guard band is  $2u$ . If the decision rule states that for non-compliance that the probability  $P$  that the value of the measurand is greater than the limit  $L$ , should be at least 95%, then  $g$  is chosen so that for an observed value of  $L+g$ , the probability that the value of the

measurand lies above the limit  $L$  is 95%. Similarly, if the decision rule is that there should be at least a 95% probability that the value of the measurand is less than  $L$ , then  $g$  is chosen, so that for an observed value of  $L-g$ , the probability that the value of the measurand lies below the limit is 95%. In general the value of  $g$  will be a function of or a simple multiple of  $u$  where  $u$  is the standard uncertainty. In some cases the decision rule may state the value of the multiple to be used. In others the guard band will depend upon the value of  $P$  required and the knowledge about the distribution of the likely values of the measurand. For the case where the distribution of the likely values of the measurand is approximately normal, a value of  $1.64u$  will give a probability of making a wrong decision of 5% and a value of  $2.33u$ , a probability of 1%. Some typical cases are described in the guide.

A particularly important case covered in the guide is when the uncertainty is proportional to the analyte concentration. This can lead to considerable asymmetry in the distribution of values attributable to the measurand if the uncertainty is large. In this case considerable care is needed in designing the decision rule, as can be seen from consideration of the three decision rules and schematic illustrations shown in Figure 3.

Decision rule 2 requires a much larger measured value for non-compliance than does decision rule 1. There has been considerable discussion on which of these two decision rules to use when evaluating the results of analyses used to test for abuse of drugs in sport, where the uncertainty is large and proportional to the concentration of the analyte. Decision rule 3 gives the correct

interpretation of a regulation requires that there must be high probability  $1 - \alpha$  that the limit is exceeded to establish non-compliance. However in practice the use of decision rule 1 is appropriate since it gives the same as the use of more detailed decision rule 3.

The full version of the compliance guide is now available to download from the Eurachem website.

#### References

1. "Quantifying uncertainty in analytical measurement", Eurachem/CITAC, 2000.
2. "Guidelines for Decision Rules: Considering Measurement Uncertainty in Determining Conformance to Specification", American Society of Mechanical Engineers (ASME).
3. There is a large amount of literature on compliance assessment, mainly on electrical and mechanical products, which uses the concept of guard bands. See the ASME guide for information about some of this literature.


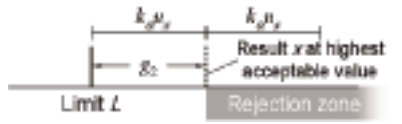

<p>1. The result will be taken as indicating non-compliance if the measured value <math>x</math> is greater than the limit value <math>L</math> by more than <math>k_a u_L</math> where <math>u_L</math> is the value of the uncertainty at the limit. This gives a guard band <math>g_1</math> of <math>L \cdot k_a u_{rel}</math> where <math>u_{rel}</math> is the relative uncertainty.</p>	
<p>2. The result will be taken as indicating non-compliance if the measured value <math>x</math> is greater than the limit value <math>L</math> by more than <math>k_a u_x</math> where <math>u_x</math> is the value of the uncertainty at the measured value. This gives a guard band <math>g_2</math> of <math>L \cdot k_a u_{rel} / (1 - k_a u_{rel})</math>.<sup>Note 1</sup></p>	
<p>3. The result will be taken as indicating non-compliance if, for a measured value <math>x</math>, the probability of the value of the measurand being less than the limit is less than <math>\alpha</math>.<sup>Note 2</sup></p>	
<p>Note 1: The "Result <math>x</math>" for rules 2 and 3 is shown at the highest acceptable value deduced by applying the particular decision rule.</p> <p>Note 2: The distribution shown is the probability density function for the values attributable to the measurand on the basis of the observed value <math>x</math>.</p>	

Figure 3: Different decision rules with uncertainty dependent on the value of the measurand

# National reports

## Italy

### Rome to host Eurachem PT workshop in 2008

At the 2006 meeting in Istanbul, the Eurachem General Assembly accepted a proposal from Eurachem in Italy to host the 6th Eurachem workshop on 'Proficiency testing in analytical chemistry, microbiology and laboratory medicine - Current practice and future directions'. The workshop, organised by the Eurachem PT Working Group, will be held in Rome on 6 and 7 October 2008, preceded by training courses addressed to either PT organisers or PT users. The local organising committee comprises representatives from INRIM (Istituto Nazionale di Ricerca Metrologica, based in Turin), ISS (Istituto Superiore di Sanità, based in Rome), APAT (Agenzia per la Protezione dell'Ambiente e per i Servizi Tecnici), ENEA (Ente per le Nuove tecnologie, l'Energia e l'Ambiente) and the accreditation bodies, SINAL, SINCERT and SIT.

Eurachem activity in Italy is mainly carried out by INRIM, in partnership with other national institutions, including ISS and APAT. These same institutions carry out training courses on metrology in chemistry, aimed mainly at field laboratories involved in food control, clinical and environmental analyses. Special sessions on metrology in chemistry are held at national congresses.

In such activities, the Eurachem's guides are promoted as important reference documents and are used as a basis for training course material. In particular, the Italian translation of Eurachem's uncertainty guide, which was edited jointly by ISS and INRIM, 'Quantifying Uncertainty in Analytical Measurement', has proven to be a success and this document is now widely used by laboratories throughout Italy.

## Sweden

### Delegates discuss the pros and cons of flexible scope

"There is an agreement in principle on the need and the benefit of a flexible scope in accreditation but no consensus

on how to interpret the term 'flexible scope' and how to use it in the daily activities of laboratories, clients and accreditation bodies."

That was the conclusion reached by delegates at the end of a workshop entitled, 'Flexible scope of Accreditation; Experience and future prospects', held in Borås, Sweden, in May last year. Organised jointly by EA, Eurolab and Eurachem, the workshop highlighted views on and experiences with flexible scope, from accreditation bodies, laboratories and industry.

Central to the workshop was a letter from Jacques McMillan expressing the view of the European commission. In it, Mr McMillan wrote: "[Flexible scope] means that the accreditation bodies must adapt their scopes of accreditation to allow room for modifications and adaptations to the scope as of activity of the conformity assessment bodies. Laboratories and certification bodies should be able to adapt their test methods and measurement programmes to the needs of the products, manufacturers and conformity assessment procedures as well as to the technology involved."

Full proceedings are available at the Eurolab website at [www.eurolab.org](http://www.eurolab.org).

Since 2004, Eurachem and Eurolab ([www.eurolab-sverige.org](http://www.eurolab-sverige.org)) have worked jointly in Sweden. Their main focus has been to support testing laboratories in Sweden with regards to accreditation regulatory issues surrounding measurement quality. The joint organisation maintain strong links with SWEDAC, Sweden's national accreditation body, and hope that they will recognise Eurachem/Eurolab as the Swedish natural discussion partner concerning issues associated with laboratory accreditation.

## Slovakia

### Eurachem Slovakia looks at method validation and sampling

Over the past 12 months, Eurachem-Slovakia's activities have continued to focus on providing information about new

trends in chemical metrology and quality assurance for Slovak chemical laboratories staff.

In June last year a one-day seminar in Bratislava focused on the validation of analytical measurement methods, with reference to the requirements under ISO/IEC 17025. Attended by approximately 70 delegates, the seminar looked various different approaches to validation, studying the theory behind each approach and their applications.

In February this year Eurachem-Slovakia organised another seminar entitled 'Sampling in chemical testing', the purpose of which was the discussion of sampling problems in a variety of areas of chemical testing. The 45 delegates from individual accredited testing laboratories of the Slovak Republic participated on the seminar were also given sight of the Slovak transcription of the new Eurachem/CITAC/NORDTEST document 'Estimation of measurement uncertainty arising from sampling'.

As well as these seminars, members of Eurachem-Slovakia were active participants in various conferences and workshops organised by the European laboratory community.

## Cyprus

### Busy year for Eurachem Cyprus

Co-operation with other Cypriot organisations

In an attempt to improve the links between the members of the Pancyprian Union of Chemists (PUC) and Eurachem, the Eurachem Cyprus Committee has decided to become a Division of the PUC. The committee has also continued to strengthen links with other stakeholders, including Cypruslab and the Cyprus Organisation for the Promotion of Quality (CYS) and organised several joint events and workshops including in March this year, 'Workshop on Traceability of measurements and Metrology aspects - Particular needs in the sectors of food and health care' (picture), the guest



Quality Assurance in Bioanalysis

speaker being Dr Robert Kaarls (CCQM). Eurachem Cyprus also organised events with Turkish Cypriot chemists, looking at various quality assurance issues and possible future activities.

Eurachem Cyprus has made contact with several potential partners from laboratories, institutes and the University of Cyprus, to promote a new Eurachem project looking at bioanalysis. As part of this activity, a representative attended a Eurachem bioanalysis event in the UK in November.

#### Education and Training

As a signatory to the 'Rogaska Declaration', which aims to promote and widen access to analytical chemistry and metrology courses in Europe, Eurachem Cyprus has been in contact with the University of Cyprus, the State Laboratory and CYS, with the aim of implementing the declaration locally.

EUROMED Quality Programme Eurachem Vice Chair, Kyriakos Tsimillis has been actively involved in the activities organised within the EUROMED Quality Programme, acting as the coordinator for Cyprus. Among a series of activities, he was one of two speakers at the workshop 'Training on ISO 17011 on general requirements for bodies providing assessment and accreditation of Conformity Assessment Bodies', along with Vagn Andersen from DANAK.

## Czech Republic

### High activity from EURACHEM-CZ

Since its establishment in 1992, the national Eurachem organization in the Czech Republic - EURACHEM-CZ - has

been very active both nationally and internationally in the promotion of quality in analytical chemistry. Within Eurachem, they have played host twice to the Eurachem General Assembly, and have organised a workshop entitled 'Teaching Quality and Metrology in Chemistry'. In the Czech Republic, EURACHEM-CZ's main focus is the education and training of analytical chemists, through:

- The organisation of at least one one-day seminar/workshop per year;
- Regular training courses for quality managers;
- The preparation of guidance documents and translation of Eurachem and CITAC guides.

EURACHEM-CZ maintains strong communications with its members via its regular newsletter and website. The newsletter serves as a tool for disseminating information on issues affecting the quality of analytical measurements both nationally and internationally, including references to working group activities, seminars and courses in preparation. The website ([www.eurachem.cz](http://www.eurachem.cz)) acts as a national forum for promoting valid analytical measurements.

In 2002 EURACHEM-CZ brought the Czech Institute of Accreditation, Czech Metrology Institute, and EUROLAB-CZ together in a forum similar to that of the EEEE working groups. The aim of 4E-CZ ([www.4e.cz](http://www.4e.cz)) is to co-operate on finding solutions to common problems and obtain further support by lobbying government bodies and other Czech institutions.

continued from page 3.

EuroAnalysis conference in the 35th issue of the European Analytical Column, which will appear in numerous international journals and newsletters and on the DAC website ([www.dac-euchems.org](http://www.dac-euchems.org)).

## ILAC

### ILAC Continues to co-operate closely with Eurachem

ILAC values its close liaison with Eurachem. This cooperation has enabled us to continue our efforts in strengthening the links between accreditation and metrology (particularly in chemistry) - an essential link to assist accreditation bodies and accredited laboratories in delivering traceable and reliable measurement results, which are fit for their intended use.

An example of recent activity on this is the current Eurachem/CITAC work on developing a guide on compliance with limits (taking measurement uncertainty into consideration). A meeting was held in November 2006 at LGC (UK) and a final draft was subsequently circulated to CITAC and Eurachem members for vote/comment. The document is now approved and ILAC will review and publicise it on its website for the use of members (and may adopt this guide as a replacement for ILAC document G8-1996).

Other issues of common interest include metrological traceability, proficiency testing, reference materials and further applications of measurement uncertainty (including qualitative analysis).

ILAC was represented at the May 07 Eurachem General Assembly in Vilnius by Dr Maire Walsh, who was appointed as the Chair of the ILAC Laboratory Committee at the last ILAC General Assembly (Cancun, Mexico - October 2006).

ILAC looks forward to the continuation of the strong ties with Eurachem.

# Contact points

Eurachem Secretariat  
LGC, Queens Road, TEDDINGTON, Middlesex, TW11 0LY, UNITED KINGDOM

T: +44 (0)20 8943 7311 E: [secretary@eurachem.info](mailto:secretary@eurachem.info) [www.eurachem.org](http://www.eurachem.org)

Chair: Dr Steve Ellison (LGC, UK)  
Vice Chair: Dr Kyriacos Tsimillis (Cyprus Organisation for the Promotion of Quality (CYS))  
Past Chair: Dr Wolfhard Wegscheider (Technical University of Graz, Austria)  
Secretary: Nick Boley (LGC, UK)

## Eurachem member nations

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

To get involved with Eurachem in your nation, contact the Eurachem Secretariat for details on how to contact your national representatives or visit the Eurachem website.

© LGC Limited, 2007. All rights reserved.

Subject to Crown licence, no part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any retrieval system, without the written permission of the copyright holder.