



# APLAC NEWS NOTES

ASIA PACIFIC LABORATORY ACCREDITATION COOPERATION

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**The Asia Pacific Laboratory Accreditation Cooperation (APLAC)** is an organization of laboratory accreditation bodies in the Asia Pacific area that have expressed a desire to cooperate in fostering the development of competent laboratories in member countries.

Cooperation is to include:

- Exchange of information
- Joint training programs
- Proficiency testing
- Harmonization of requirements
- Mutual recognition of systems meeting harmonized requirements

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APLAC also maintains an Internet site at [www.aplac.org](http://www.aplac.org).

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The next issue will be published in April by KOLAS.

***The International Code Council  
Launches International Accreditation  
Service, Inc.***



INTERNATIONAL  
ACCREDITATION SERVICE, INC.

*Leading Accreditors Since 1975*

**A Short History**

The International Accreditation Service, Inc., (IAS) has assumed responsibility for all testing laboratory and inspection body accreditation operations previously performed by the ICBO ES Field Services Group. IAS is a subsidiary corporation of the International Code Council (ICC) and operates under its own board of directors that consists of governmental representatives. The management, technical and administrative staff that operated under the ICBO ES program remains the same under the new organization. The decision to establish IAS as an independent organization was made to ensure complete separation from any other activities that might be perceived as posing a potential conflict of interest. The forming of IAS coincides with the consolidation of the U.S. Model Code Organizations (MCOs), namely, Building Officials and Code Administrators International (BOCA), the International Conference of Building Officials (ICBO) and the Southern Building Code Congress International, Inc., under the ICC. IAS was incorporated as a nonprofit, public-benefit corporation and provides accreditation services that are used by International Code Council (ICC) members and other parties having an interest in accreditation.

The transfer of accreditation responsibilities from ICBO ES to IAS is essentially only a change in name, and IAS is seeking the transfer of ICBO ES recognition under ILAC and APLAC to itself. IAS quality system documentation and documentation on legal status, reflecting its new name, has been forwarded to the respective accreditation cooperations for their consideration.

## Accreditation Services Available

IAS accreditation provides users of the services of IAS accredited laboratories, inspection agencies, and fabricator inspection programs with confidence that they have been examined by trained and qualified assessors and technical experts.

Accreditation to ISO/IEC 17025 is applicable for both testing laboratories and calibration laboratories. The requirements for accreditation are essentially the same except they are applied to different functions, depending on the type of laboratory. For example, documented procedures must be used for each test or calibration; management must review the quality system; results must be reported properly; personnel must be trained; the laboratory must service the customer; and measurement uncertainty must be available.

Testing laboratories are accredited under ISO/IEC 17025 for specific types of tests, such as tensile tests of steel or flexural strength of plastics. Items to be tested must be controlled and handled in such a way that the specimens can be properly prepared and are not contaminated. ISO/IEC 17025 requires that test laboratories be able to calculate measurement uncertainty. Laboratory accreditation indicates that test data from different laboratories is equivalent (within the stated uncertainties) and can be accepted as meeting the test method requirements. The ultimate goal of accreditation is to facilitate acceptance of test reports worldwide.

Calibration laboratories are also accredited under ISO/IEC 17025 for disciplines within their fields of expertise. Examples of calibration disciplines include dimensional, mass and time/frequency. Calibration laboratories also must calculate their measurement uncertainties, which, in turn, are factored into the uncertainties of the test laboratories.

IAS accreditation under ISO/IEC 17020 is available for inspection agencies. These are first-, second- or third-party agencies that perform assessments of products at the factory or in the field, as evidence of code compliance or for product certification purposes. Accreditation requirements for an inspection agency include documentation of procedures, management review, reporting of results, and training of personnel. Also, the inspection agency must have methods for effective review of inspection results and inspection reports. For determination of code compliance, only independent third-party agencies are used. During their on-site assessments, IAS assessors evaluate the technical competence of inspectors, including their hands-on knowledge of the product or process being inspected.

IAS also accredits fabricator inspection programs. Under this program, inspection bodies accredited by IAS perform unannounced audits of the inspection programs of concrete, steel and wood fabricators. The fabricator's approved signatories are assessed for their technical competence in the construction discipline (structural steel, concrete, wood) and for their ability to effectively implement and monitor the inspection program.

Other accreditation capabilities will likely be added as IAS continues to change and grow into a "full-service" accrediting body.

Training will be an important part of the future services available from IAS. Training will be offered on a variety of subjects, such as measurement uncertainty and ISO/IEC 17020/17025 accreditation requirements. Some courses may be offered on-line in the future, through ICC Campus on-line.

## International and National Presence

Currently, ICBO ES is the accreditation body recognized internationally for testing laboratories, through several Mutual Recognition Arrangements (MRAs). IAS is in the process of taking the necessary steps with these (MRA) organizations to transfer the ICBO ES accreditations to its name. This will permit IAS to continue the international recognition as a signatory to the MRAs of the Asia Pacific Laboratory Accreditation Cooperation, the International Laboratory Accreditation Cooperation, and the National Cooperation for Laboratory Accreditation. IAS is also a full member of the Inter-American Accreditation Cooperation, which covers North and South America.

IAS staff participates in national and international committees that influence accredited organizations and the types of activities they perform. The representation includes membership on ANSI and ASTM committees, sponsorship status for the Measurement Science Conference, and liaison status with the National Conference of Standards Laboratories International.

## Partners with our Clients

IAS strives to foster beneficial relationships with its clients. IAS success, after all, is dependent on the success of its clients. For more information about IAS, please visit our web site at [www.iasonline.org](http://www.iasonline.org).

## The IAS Staff

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## **CNLA Conducts Symposium on Laboratory Accreditation**

The Chinese National Laboratory Accreditation (CNLA) conducted a symposium on Laboratory Accreditation and Quality Management on December 13, 2002, at Taipei. Jointly hosted by many governmental authorities including the Bureau of Standard Metrology and Inspection, the Department of Health, the Council of Labor Affairs and the Environment Protection Agency, the symposium was attended by more than six hundred participants. Around 75 papers were presented in the eleven technical sessions. The event was chaired by CNLA Council Chairman Mr. Lin Neng-Jong, and included special invitees like Mr. Ien Chi-Ming, Vice Minister of Economic Affairs; Ms. Chang Kwei-Fern of the Singapore Accreditation Council; and Mr. Chua Teck-Hock, Director of the Center for Analytical Science/Health Science Authority.

## **HKAS Extends its Accreditation Scope to Cover Construction Materials Inspection and Medical Testing**

In 2002, the Hong Kong Inspection Body Accreditation Scheme extended its scope of accreditation to cover accreditation of construction products inspection and welding inspection. New HKAS Supplementary Criteria Nos. 2 & 3 pertaining to these two inspection programs have already been published.



The Executive Administrator of the Hong Kong Accreditation Service, Dr. L H Ng (left), signs a Memorandum of Understanding on the Accreditation Program for Medical Testing with the President of the Hong Kong College of Pathologists, Dr. Robert Collins, on December 17, 2002.

In another effort, HKAS extended its accreditation scope to cover medical testing, as of December 17, 2002. A formal Memorandum of Understanding (MoU) was signed by Dr. L.H. Ng, Executive Administrator of HKAS, and Dr. R.J. Collins, President of the Hong Kong College of Pathologists, on the Accreditation Program for Medical Testing. The accreditation program on medical testing will be administered by HKAS, while the Hong Kong College of Pathologists will provide professional inputs to the

accreditation process and details on technical advances in medical laboratory practices, and will guide HKAS on matters concerning technical accreditation criteria.

## **News from NABL**

The National Accreditation Board for Testing and Calibration Laboratories, India, offers the following news items:

- NABL, in close cooperation with the Indian Statistical Institute, New Delhi, conducted a training program on Uncertainty in Measurement for Chemical and Mechanical Testing Laboratories from January 15-18, 2003. NABL expects many of the participating laboratories to become model laboratories for NABL and help conduct proficiency testing programs.
- NABL also organized a two-day training program on Uncertainty of Measurement for Chemical Testing Laboratories. The course was conducted by Dr. Bernard King, past Director at the Laboratory of the Government Chemist in the UK and the National Analytical Reference Laboratory of Australia.
- NABL conducts several awareness programs on the importance of accrediting Clinical Laboratories, in different parts of India. NABL has already accredited 25 multidisciplinary clinical laboratories, and hopes to accredit another 50 by the end of 2003.
- NABL successfully completed its third Assessors Conclave, August 16 & 17, 2002, at the India Habitat Center, New Delhi. The Assessors Conclave was originally established to provide feedback to lead assessors and other technical assessors about the assessment process in general, to help improve the assessment process.
- As part of NABL's participation in World Standards Day, organized by the Bureau of Indian Standards, the NABL Director addressed a gathering on the Relevance of NABL Accreditation Towards One Standard, One Test and Global Acceptance. The NABL presentation emphasized the relevance of technical competence of laboratories towards fulfilling the objectives of export promotion and meeting WTO requirements.
- NABL has signed an MoU with the National Physical Laboratory, New Delhi, for conducting the second round of interlaboratory comparisons for calibration laboratories in areas such as dimensional, mass, pressure, electro-technical and thermal.
- NABL, in association with the Small Industries Testing and Research Centre (SiTARC), Coimbatore, conducted a one-day NABL Appreciation program for laboratories on the 11th of January, 2003, at Coimbatore. Topics covered included uncertainty of measurement, traceability of measurement, importance of the use of reference materials, internal audits, and documentation requirements.

**SCC Partners Canadian Association  
for Environmental Analytical  
Laboratories to Accredit Environmental  
Testing Laboratories**

In Ontario, Canada, legislation (O.Reg 459/00) has already been introduced making accreditation-independent verification of a laboratory's competence to conduct specific tests accurately and reliably-mandatory in order for these labs to receive licensing. In Canada, more than 350 labs are accredited by the Standards Council of Canada's (SCC) PALCAN program. In partnership with the Canadian Association for Environmental Analytical Laboratories (CAEAL), the Standards Council has established a rigorous program for the accreditation of environmental testing laboratories. In fact, on the topic of the SCC/CAEAL program, Justice Denis O'Connor, head of the Walkerton inquiry, stated that he "was impressed by the thoroughness of the verification process and the capacity to identify areas for improvement at individual laboratories."

The SCC/CAEAL program is an effective vehicle for the Ontario government to implement components of its proposed legislation in a cost-effective manner. Leveraging the expertise of the Standards Council and CAEAL in proficiency testing and quality management is a gainful means of ensuring that the infrastructure to support healthy water resources is maintained. "The province can continue to rely on the SCC/CAEAL program to satisfy the comprehensive requirements of the Ontario Ministry of the Environment," said Peter Clark, SCC Executive Director.

**JAB conducts Assessor Seminars and  
Assessor Training Programs**

On December 26, 2002, 82 JAB laboratory assessors, including lead assessors, technical assessors and technical experts, gathered for the yearly assessor seminar. The first session included discussions on the technical competence necessary for assessment. Presentations on traceability and uncertainty of measurement were followed by a question-and-answer session. The seminar provided valuable information and was very helpful for assessors and technical experts who often encounter difficulties in dealing with measurement uncertainty issues.

JAB also held a Laboratory Assessor Training Course, to train new technical experts, from January 15 to

17, and from January 23 to 24. The main purpose of this training program was to provide an overall understanding of the laboratory accreditation scheme and also to familiarize the technical experts with various aspects of the ISO/IEC 17025 Standard. The five-day program was well attended and concluded with a written examination.

**APLAC Ensures Greater Certainty about  
Measurement Uncertainty**

APLAC has developed a guidance document to aid testing laboratories on the issue of measurement uncertainty in testing. A number of guidance documents on the estimation of uncertainty, for the various fields of testing, were developed following a meeting of several technical experts in Hong Kong; these documents have been incorporated into a single document entitled "Interpretation and Guidance on the Estimation of Uncertainty of Measurement and Testing," which has been approved by the APLAC General Assembly for publication. These guidelines have been made available to all and would also form the basis of a paper, which would feature in the next issue of the Association of Official Analytical Chemists (AOAC) journal.

**U.S. Department of Agriculture  
Recognizes IAS President**

C.P. Ramani, President of International Accreditation Service, Inc. (IAS), was recently recognized by the United States Department of Agriculture (USDA) for displaying outstanding teamwork during the successful negotiation of two complex equivalency agreements between the governments of the United States and Japan. Ramani was selected to be a recipient of the International Relations Committee, Organic Trade Association for the Administrator's Trade Policy Teamwork Award. The award is part of the USDA's Foreign Agricultural Service (FAS) 2002 Employee Recognition Program. The FAS recognizes employees and other members and contributors to the agricultural community, for their excellence throughout the year. Ramani was involved in developing equivalency agreements between the U.S. and Japan that will enable significant export growth for U.S. organic and wood products.

## **Why We Need a World Accreditation Mark**

by

Dr. L. H. Ng, Executive Administrator of HKAS and the convenor of  
the ILAC Task Force on the World Accreditation Mark

Now that the ILAC and IAF multilateral arrangements have been successfully established and there are 42 signatories to the ILAC MRA and 29 signatories to the IAF MRA, have we achieved our goal of “one test, one certification, one inspection, one accreditation, accepted everywhere”? The answer is “only partly.” Why? Because regulators, buyers and consumers who look to accreditation for assurance of technical competence are neither familiar with overseas accreditation marks nor aware of the intent and scope of the MRAs. Moreover, a signatory cannot simply tell specifiers of accreditation to accept certificates or reports with the accreditation mark of MRA partners, because a signatory’s participation in the MRAs may be restricted to certain technical scopes. We therefore urgently need a world accreditation mark which can be used by accredited organizations to declare to their clients that the conformity assessment provided is recognized within the MRAs. The question currently hotly debated is whether we should have separate ILAC and IAF accreditation marks or a joint ILAC/IAF Mark.

### **Pros of separate marks**

- The world accreditation mark is for use by accredited organizations to show that their conformity assessment is recognized under the MRAs, and not for accreditation bodies’ use or even the use of ILAC or IAF. Hence, even if ILAC and IAF should merge, separate marks should be maintained if we wish to emphasize the difference between the two types of accreditation. Laboratories (as represented by the ILAC Laboratory Committee) and the national measurement institutes have made it known that they strongly wish to have an ILAC mark and not a joint mark.
- Separate ILAC and IAF marks would facilitate users’ recognizing the difference between accreditation of laboratories and accreditation of certification bodies.

- A joint mark could be easily used by rogue bodies to deliberately blur the distinction between accreditation of laboratories and certification of laboratories.
- The cost of registering a mark is only a few hundred U.S. Dollars and hence the benefits of having two separate marks outweigh the costs.
- There is strong need for a world accreditation mark. More deliberations on separate marks versus a joint mark would delay the implementation of a world accreditation mark, limit the effectiveness of the MRAs and lead to the need for cross-border accreditation.
- A joint mark would need words or symbols within the mark to differentiate between different types of accreditation. This would defeat the purpose of having a symbol instead of words to indicate the MRAs, and cause complexity in implementation of the mark.

### **Pros of a joint ILAC/IAF Mark**

- There are already too many marks on the market. For promotional purposes, a joint mark would be more effective and efficient.
- Many accreditation bodies accredit both laboratories and certification bodies, and do not want to register two marks.
- The cost of registration is a consideration.
- As ISO/IEC 17011, the common standard for accrediting laboratories, certification bodies and inspection bodies, will soon be published, it would be sensible to have a common mark.

The issue of separate marks versus a joint mark will be voted upon through a postal ballot by ILAC Members.