Letter from the President

It’s been a whirlwind year for IAS and our partners so far. In particular, our international activities and our participation in technical committees has strengthened considerably. From workshops in the Gulf region to our celebration of World Accreditation Day, we’re continuing to build a standard—in the way of people, education, and programs—that directly affects global public safety and welfare.

I’m particularly proud of our staff involvement with professional forums such as NCSLI, MSC, ASTM, ISO TC Committee, TNI AFDO, ACIL. Beyond providing a voice for recognized standards and quality as well as professional competence, our involvement ensures that we are able to continually improve assessor competency and technical expertise. Along with that involvement, the global IAS assessor pool continues to increase and we are extremely proud and thankful to all of our assessors for their far-flung travels and willingness to bring their technical expertise to our valued customers.

As well, we see an increased need from all sectors of accreditation for more rigorous training as the work force continues to age and the new incoming force looks to be better prepared for the future. IAS has stepped up to answer this challenge in our business sector, with more tools and access to expertise through training. (cont. on page 2)
LETTER FROM THE PRESIDENT (CONT.)

programs and other customer outreach efforts. In 2018, IAS reached more than 300 participants and offered over 20 courses through our training department.

In terms of programming, we have added more accreditation programs to our current suite to ensure that customers have the necessary range of conformity programs to help them meet certification and market needs.

For instance, the Cannabis Testing Laboratory Accreditation and Management System Certification Body Accreditation programs have gained prominence recently with diverse market demands. In addition, we added expertise in information management security systems, anti-bribery management systems, asset management systems as well as energy management systems. Of course, these new programs will require additional technical experts including participation in specific domestic and international arenas.

The IAS senior management have participated in the ILAC-IAF mid-year meeting held in Mexico City April 4-8, 2019. This meeting had some vigorous discussions especially regarding product certification schemes and the process for evaluation of scheme owners.

As part of the Mexico meeting, a number of technical work groups meetings were held including database committee on management system certification bodies and tracking of the Conformity Assessment Bodies (CABs) and their certified customers; product certification schemes and scheme owners evaluation; Halal certification; Sampling issues in testing and inspection; etc. I would urge our stakeholders and our customers to pay closer attention to ILAC-IAF as well other regulators and participate vigorously in the technical document drafting and approval process. The draft ‘evaluation of scheme owners’ document is expected to generate further debate at the ILAC-IAF meeting in Frankfurt scheduled October 2019.

The IAS Portal is rolling out for assessments and scheduling of selected programs. IAS customers can schedule and confirm IAS assessments directly through the portal, assessors can provide assessment agendas through the portal, and all post assessment processes (report creation, response to findings, decision making) can be completed through the portal. This should reduce email traffic and the need to search for and find attachments when conducting post assessment activities. IAS decision making process should be improved, with expected decreases in time needed to complete decision reviews, contributing to shorter accreditation certificate processing times for our customers. The portal should enable IAS to provide customers with revised accreditation certificate/scopes sooner than later!

IAS has been diligently working on building a 21st century digital infrastructure to serve not only our customers but ensure a seamless communication internally to ensure that the core functionality of accreditation process are available 24/7 globally. With the advent of App-based transactions, e-commerce applications, etc., IAS is clearly on a march to address this thru our online tools. Please watch for communication in the near future from our IT team as we roll-out these new features.

On behalf of IAS Board and IAS Management and Staff, we wish you continued success and quality journey forward!

Raj Nathan
President

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"..."
If anyone understands the importance of quality, it is Khaled Awad. An internationally recognized authority on concrete construction, he has overseen the proportioning, delivery, placing, testing and analysis of over 100 million cubic meters of concrete over his 30+ year career. This winner of the American Concrete Institute’s (ACI) prestigious Henry Kennedy Award is a fellow in the ACI as well as the Institute of Concrete Technology (ICT) associations. He served in 2017-2018 as the first non-American president of ACI.

Awad says that the materials testing market plays an important role in assuring quality in the construction sector. “The testing sector is evolving in many ways and its progress reflects the sector it serves,” he says. “In construction, the evolution has been slow to embrace technology and digitization. The significant change I am seeing is the need for stronger financial resources in this sector and the importance of integrating technical knowledge about the product or material tested in the testing process.”

His philosophy on quality in the workplace is influenced through active participation in accreditation programs.

“There are two sides for accreditation,” Awad explains. “One being a requirement by the authorities that we should comply. Another is a corporate requirement that we must respect.”

In his firm, all the labs, including the ones on-site, are accredited to ISO/IEC 17025, even in countries or on projects where this is not a requirement.

“We consider accreditation an essential prerequisite to operating any of our labs for many reasons,” he says. “It is first a message to our employees and customers that we take quality very seriously. It is also a risk management measure we implement to reduce errors and maintain our reputation for integrity, accuracy and reliability. Further, it is a way to homogenize our policies, processes and procedures in different countries, different regions and different cultures.”

Awad explains that, for the past several years, IAS has been the principal accreditation body for his firm’s labs in the Middle East and Africa for ISO/IEC 17025 and ISO/IEC 17020. “IAS has shown a high level of reliability when it comes to accreditation,” he says, “and they have always efficiently attended to our accreditation schedules, even in remote areas and during holiday periods.”

He now sits on the board of IAS. “This appointment has given me a lot of insight in the testing, inspection and certification sector, in different disciplines and not just in construction,” he says. “It also confirmed to me that the quality and effectiveness of IAS services come from the top and is well embedded in the company culture.”

Awad understands that quality is immensely impacted by the environment in which it is executed and he cautions that companies have varying expectations when it comes to implementing quality assurance programs. “Quality starts with the corporate culture and the values of the company,” he explains. “The definition of quality is dependent on the overall vision and mission of the company and should be embedded in those documents. If not well defined, it may mean different things for different people within and outside the company.”
FIRST RIDE ON THE DOHA METRO

The Doha Metro, with the help of accredited testing laboratories, welcomed its first set of commuters earlier this month.
The Doha Metro welcomed its first set of commuters earlier this month. Eager residents and citizens were thrilled to hop on board and be part of a momentous occasion that marks the opening of the highly-awaited mode of transportation within the country.

The Doha Metro is a rapid transit system in Doha, Qatar’s capital city. When finalized next year, it will consist of four lines with an approximate overall length of 300 km and 100 stations. The service is provided by 75 three-car driverless trainsets. It is an integral component of the larger Qatar Rail network, which will include a long-distance rail for passengers and freight, linking Qatar to the GCC. Capable of reaching 100km/h, the Doha Metro is one of the fastest driverless trains in the world. Doha Metro has been officially recognized by Guinness World Records for having “The Largest Number of Tunnel Boring Machines Operating Simultaneously in a Single Project”. Daily excavation quantity was over 600m³, with an estimated total excavation quantity of over 5,000,000 m³.

The testing laboratories involved in the construction of the Doha Metro have been accredited to ISO/IEC 17025 by IAS with the close cooperation and supervision of the local regulatory body for public works ASHGHAL.

IAS is the major accreditation body offering its accreditation services in Qatar for more than 10 years.
Helga Alexander, Manager of the IAS Calibration Laboratory Accreditation Program, gave a presentation at the 8th Manufactured Food Regulatory Program Alliance Meeting and 5th Governmental Food and Feed Laboratory Accreditation Meeting, April 10, in Houston, Texas. The Value of Calibration in Testing presentation defined calibration, and discussed metrological traceability, the calibration hierarchy, common misconceptions and the importance of specifying your calibration needs and more. Attendees included state food safety program managers and program coordinators, FDA personnel, laboratory professionals performing testing in state and local food and feed laboratories, quality managers or laboratory directors.

FOOD SAFETY TECHNICAL ADVISORY COUNCIL MEETING IN BERLIN

In a world where food safety issues makes the headlines on a daily basis, accreditation of Conformity Assessment Bodies needs to be more responsible than ever.

IAS’s 1st Food Safety Technical Advisory Council (TAC) met in Berlin on June 1 to discuss food safety trends, worldwide certification schemes and technical issues related to IAS Accreditation programs. This TAC consists of multi-disciplined professionals from different regions (USA, Canada, Europe, Middle East) that share the same food safety for consumer values. A number of action items were decided from this meeting that will support food safety and IAS as a global leader in accreditation.

IAS currently operates the following food safety related programs:

- Management System Certification Body Program (ISO 22000, FSSC 22000)
- Product Certification Accreditation Program (GLOBALG.A.P - IFS – Food Cargo inspections, HALAL)
- FDA/FSMA Program (ISO/IEC 17021-1 or 17065)
- Personnel Certification Body Program (Certification of persons related to food, e.g. Food Safety Management System auditors).
- Testing Laboratory Program (Food Testing laboratories)

More information about these initiatives will be available this year from IAS.

ASSESSORS WORKSHOP HELD IN GREECE

Dr. George Anastasopoulos, IAS VP, Global Development & Compliance, conducted a workshop and meeting for assessors in Athens, Greece, on April 23.

Issues discussed during the meeting included presentation of IAS activities (structure/relation to ICC/programs), recent accreditation developments (new IAS organizational chart/responsibilities/liaisons), update on new IAS food related programs, assessment instructions emphasizing new ISO/IEC 17025 transition programs and a general discussion related to suggestions/questions/problems/issues raised by local assessors.

CALIBRATION PRESENTATION GIVEN AT FOOD AND FEED REGULATORY MEETINGS

Helga Alexander, Manager of the IAS Calibration Laboratory Accreditation Program, gave a presentation at the 8th Manufactured Food Regulatory Program Alliance Meeting and 5th Governmental Food and Feed Laboratory Accreditation Meeting, April 10, in Houston, Texas. The Value of Calibration in Testing presentation defined calibration, and discussed metrological traceability, the calibration hierarchy, common misconceptions and the importance of specifying your calibration needs and more. Attendees included state food safety program managers and program coordinators, FDA personnel, laboratory professionals performing testing in state and local food and feed laboratories, quality managers or laboratory directors.
IAS Deputy Program Manager for the MSCB program, Patrick McCullen, attended and delivered a short presentation on Accreditation, Risk and Stakeholder Management on May 29 in Seoul, S. Korea.

The conference was hosted by IAS accredited MSCB, G-Certi Co. Ltd.. Attendees included Korea Accreditation Board Representatives, Exemplar Global Representatives, and G-CERTI agent representatives from around the world. Various presentations were delivered to conference attendees and updates regarding G-CERTI operations and control strategies were communicated. Particularly of interest was G-CERTI’s strategy for compliance with IAF MD23:2018 - Control of Entities Operating on Behalf of Accredited Management Systems Certification Bodies.

The conference served as a tangible example of global cooperation for provision of conformity assessment services in line with the principles laid out by ISO and the IAF.

Inaugural Asia Pacific Accreditation Cooperation (APAC) Annual Meeting, hosted by Enterprise Singapore and the Singapore Accreditation Council (SAC), was held June 15-22. As a signatory member of APAC, IAS participated in the meetings to represent its accreditation programs for testing and calibration laboratories, inspection agencies, and certification bodies.

APAC’s primary role is to manage and expand a mutual recognition arrangement (MRA) among accreditation bodies in the Asia Pacific region. The MRA facilitates the acceptance of conformity assessment results (e.g. test reports, test certificates, inspection reports, and certification) across the region and with other regions around the world.

Conformity assessment results that are produced by conformity assessment bodies (CABs) that have been accredited by one APAC MRA signatory are accepted by all the other APAC MRA signatories. This mutual recognition and acceptance of conformity assessment results reduces the need to undertake duplicate testing, inspection or certification, thus saving time and money, increasing economic efficiency and facilitating international trade.

APAC members include accreditation bodies, accreditation focal points and other organizations that have an interest in accredited conformity assessment results.

APAC is recognized by the Asia Pacific Economic Cooperation (APEC) as one of four APEC Specialist Regional Bodies (SRBs) that support the work of the APEC Sub-committee on Standards and Conformance.
REDEFINITION OF THE INTERNATIONAL SYSTEMS OF UNITS & WORLD METROLOGY DAY

World Metrology Day, which is celebrated on May 20 every year, has a special significance for measurement professionals in laboratories worldwide this year. On this day, professionals celebrate the anniversary of the 1875 Metre Convention in Paris, which formed the Bureau International des Poids et Mesures (BIPM). BIPM was the first step toward the eventual adoption of our International System of Units (SI) by BIPM Member states. The United States was one of the original 17 member states of BIPM, and it may come as a surprise to many that the US has been “metric” since the adoption of the first version of a metric system in 1889. This year, in addition to the usual celebration of the anniversary of the Metre Convention, we also celebrated the historical overhaul of the SI, an event that we are not likely to witness again any time soon.

The SI is currently based on the definition of the 7 base units: meter (m), kilogram (kg), second (s), ampere (A), candela (cd), kelvin (K) and mole (mol).

As of May 20, 2019, the new SI will be based on the exact definition of the numerical value of 7 natural constants, which can then be used to realize the 7 base units of the SI.

Three of the existing base units, namely the second, the meter and the candela, have already been defined by constants of nature, so their definitions will not change.

The other 4 base units will be redefined. In the new SI, the kilogram will be defined in terms of the Planck constant, h, the kelvin in terms of the Boltzmann constant, k, the ampere in terms of the elementary charge, e, and the mole in terms of the Avogadro constant, Nₐ.

By tying all the base units to fixed natural constants, allows them to be realized independently anywhere in the world with smaller uncertainties. Due to the redefinition of the kilogram in terms of the Boltzmann constant, the platinum iridium artefact known as the International Prototype Kilogram (IPK), which has been used to define the kilogram and kept in a vault in Paris since 1889, can finally be retired. As science and technology advances, realization of the base units will likely be improved resulting in smaller and smaller uncertainties, without necessitating any further redefinition of the SI.

So what will happen to your existing calibration certificates after May 20? Will the metrological traceability of your laboratory’s reference standards still be valid? Fortunately, the answer is a definite yes. Great care was taken by the BIPM in the redefinition of the SI to ensure that measurements made with the previous definition of the base units will remain valid within their measurement uncertainties event after May 20, and that the change will have no impact on daily life. For most laboratories, there will be no need to do anything.

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Electricity and Magnetism
- No action required if **voltage** related uncertainties are larger than 0.25 ppm
- No action required if **resistance** related uncertainties are larger than 0.05 ppm
- Josephson Voltage Junction standards and Hall Resistance Effect standards will have to have their constants updated

Mass
- NMI standards traceable to the IPK will have an increased uncertainty (about +10 µg added via RSS to existing uncertainties)
- Labs with primary standards calibrated by NMIs should be notified of an increase of the uncertainties of previously issued calibration certificates
- Increased uncertainties for mass, force and pressure should amount to no more than a **few parts in 10^8**

Temperature
- No change in the fixed values of the ITS-90 (but change likely in the future)
- No change in the assigned value of the triple point of water (TPW = 216.73 K)

Amount of substance
- Due to Avogadro’s Constant (N_A) now becoming exact, the molar mass constant M_u (1 g/mol) will no longer be exact but instead have an uncertainty
- CCQM’s Draft *mise en pratique* (June 2018) puts the uncertainty of the best realization of the molar mass constant at 4.5 x 10^{-10}

Review of IAS accredited calibration laboratories’ uncertainties listed on their scopes of accreditation showed that none of our labs should have to take any action. In conclusion, while there is great excitement about this in the worldwide measurement community, most of us will not be noticeably affected by the redefinition of the SI and should just sit back and enjoy the celebration of this historic event. For those of you interested in learning more about the new SI, we encourage you to explore the following websites:

https://www.bipm.org/en/measurement-units/rev-si/

https://www.nist.gov/si-redefinition

https://www.ncsli.org/i/c/a/SI.aspx

Note that the NCSLI website has links to several links to videos suitable for future scientists/engineers in the making.

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**Special Inspection Agency Accreditation – Program Highlight**

Special Inspection Agency Accreditation is a common approach used by building departments across the country to regulate special inspections based on requirements in the building code.

The accreditation requirements line up with International Building Code (IBC) Chapter 17, and ISO/IEC 17020: 2012 Conformity Assessment Requirements for the Operation of Various Types of Bodies Performing Inspection, and similar sections in codes adopted by jurisdictions. IAS created the Special Inspection Agency Accreditation program to help building departments assess and approve special inspection agencies anywhere in the country.

IAS also works with jurisdictions such as the New York City Department of Buildings to customize the accreditation program to meet additional requirements.
Accreditation: Adding Value to Supply Chains

IAS held a World Accreditation Day event, June 7, in the Brea, California office. The theme of this year’s World Accreditation Day was “adding value to the supply chain.”
World Accreditation Day was established by the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum.

As part of the celebration, IAS held a special event at its headquarters in Brea, California. Guest speakers included Jeff Gust, IAS Board Member and Chief Metrologist for Fluke and Sam Palmer, Assistant Director, Clark County Nevada Department of Building Fire Prevention. The event included networking with industry professionals and lunch.

The World Accreditation Day theme, focused on the supply chains that provide a vital role in delivering products and services for consumers, business and the public sector in a timely, cost-efficient and quality manner. Accreditation and, with it, other quality infrastructure tools such as standards, metrology and conformity assessment, provide widely accepted tools that help deliver value to the supply chain. These tools help with trust and assurance, enabling confidence in both final products and services and the manner in which they are placed on the market and used.

As in previous years, the day was celebrated across the world with programs and activities to show how accreditation can make the world safer for everyone. The hosting of major national events, seminars, and press and media coverage, to provide the opportunity to explore how accreditation can help deliver a safer world and to support businesses, government and regulators to find standards, conformity assessment and accreditation tools to support them in this goal.

Best ISO Certification Co. Ltd Receives First FDA Recognized Third-Party Accreditation from IAS

Recognition allows Best ISO Certification Co. Ltd to certify foreign food facilities for exports to the U.S.

Best ISO Certification Co. Ltd is the first certification body to achieve accreditation from IAS under the U.S. Food and Drug Administration (FDA) Third-Party Certification Program. The accreditation recognizes Best ISO Certification Co. Ltd to certify foreign food facilities for exports to the U.S. market.

“Best ISO Certification Co. Ltd is proud to receive the first accreditation from IAS that is recognized by the FDA to provide certifications for food companies outside the U.S. This achievement is dedicated to my father who recently passed away,” says Dr. Easter Huang, Best ISO General Manager.

“Best ISO is one of the few certification bodies in the world to receive this new accreditation that enables their company to provide US consumers with the necessary confidence for the food articles they consume on a daily basis,” says Dimitrios Katsieris, IAS FDA-FSMA Program Manager. “The IAS accreditation process included a rigorous assessment of Best ISO’s office operations, as well as, a number of witnesses at the Certification Body’s client sites.”

In 2018, IAS was recognized by the FDA as an accreditation body under the Third-Party Certification Program. The program, established under the Food Safety Modernization Act, verifies the accreditation body competence through a rigorous (cont. on page 12)
The next meeting of the IAS Accreditation Committee is September 16 at the Fullerton Marriott at California State University, Fullerton, CA.

The purpose of the hearing is to establish or revise accreditation criteria pertaining to IAS accreditation programs and to inform the public on IAS principles and major policies. The open hearing process provides all interested parties with the opportunity to contribute ideas or voice their opinions on any item posted on the agenda. More information will be available soon on the IAS website.

More information will be available soon on the IAS website.
IAS NEW TRAINING MODULE OF IAF MANDATORY DOCUMENTS

IAS held a training on the IAF Mandatory Documents – one of the first courses of its kind to be offered in New Delhi on March 2-3.

The International Accreditation Forum (IAF) publishes Mandatory Documents which are required to be used by accreditation bodies when accrediting management system certification bodies (MSCB). IAS provides IAF Mandatory Document training for accredited MSCBs as a way to harmonize the accreditation and certification process.

The purpose of the course is to provide education for MSCBs and assessors. IAS realized that while assessors and MSCBs are doing the best they can to follow mandatory documents in day-to-day operations, these documents are not easy to understand and voluminous.

A distinguishing characteristic of the New Delhi course was the collective expertise of the subject matter experts with varied backgrounds and knowledge about mandatory documents who were brought in to teach the course – as well as the highly experienced attendees. The course was attended by knowledgeable representatives from certification bodies, prospective and qualified assessors of IAS and assessors from the local accreditation board.

The feedback from participants indicated that the course provided clarity about the use of mandatory documents. Currently, IAS is finetuning the module and has plans to include the course in its regular training schedule.

UPCOMING IAS TRAINING

IAS provides key training programs for organizations seeking accreditation or seeking to update their knowledge on the latest requirements. Courses include training on ISO/IEC Standards 17020, 17021-1, 17024, 17025, ISO Standards 31000 and 22000, and Special Inspection Agency, Building Department, and Fire Prevention Department Accreditation. Individuals who register early receive a 30-percent discount.

IAS also delivers online training for two conformity assessment standards, ISO/IEC 17025:2017 and ISO/IEC 17020:2012. There are two courses for the 17025 standard, one for transitioning to the new version from the 2005 version, as well as the complete ISO/IEC 17025:2017 course. The third online course is on ISO/IEC 17020:2012.

All courses contain reference to the implementation of these standards within conformity assessment bodies based on best practice and internationally agreed interpretations of their requirements.

The complete IAS training schedule of courses is posted on the IAS website.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Training Course</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>July 23, 2019</td>
<td>Building Department Accreditation #101 Using AC251 (1 day)</td>
<td>Birmingham, AL</td>
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<tr>
<td>July 24, 2019</td>
<td>Fire Prevention Department Accreditation Using AC426 (1 day)</td>
<td>Birmingham, AL</td>
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<tr>
<td>August 5-7, 2019</td>
<td>ISO/IEC 17021-1 for MSCBs (3 days)</td>
<td>Brea, CA</td>
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<tr>
<td>August 8-9, 2019</td>
<td>IAF Mandatory Document (IAF MD) Course for MSCBs (2 days)</td>
<td>Brea, CA</td>
</tr>
<tr>
<td>August 13-14, 2019</td>
<td>Special Inspection Agencies in Building Construction (IAS AC 291) (2 days)</td>
<td>New York City, NY</td>
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</table>
If you haven’t connected with IAS on social media platforms, then you are missing out on the latest accreditation news. IAS provides periodic news updates and information on dedicated pages in Twitter, Facebook, LinkedIn and Youtube. To find us, go to any of these pages and search for International Accreditation Service.

**PROMOTE YOUR ACCREDITATION**
IAS customers can promote their accreditations with IAS Accreditation Program Symbols. The symbols can be used in advertisements, websites, brochures, exhibit booths, and other places to promote IAS accreditation. For accreditation symbols, send email to requestamark@iasonline.org.

**LET US KNOW WHAT YOU ARE THINKING**
The International Accreditation Service strives to continually improve our services and welcomes feedback, positive or negative, which we will use to provide better service to our clients and stakeholders. Visit the Contact Us page of the IAS website to share your comments.