

World Metrology Day, World Accreditation Day and World Standards Day Forum 2019



(From left) Mr Wilson Shum, the Executive Administrator of the Hong Kong Accreditation Service of the Innovation and Technology Commission; Prof Albert Yu, the Chairman of the Hong Kong Council for Testing and Certification; Mr Dennis Chew, the Director of the Asia-Pacific Regional Centre of the International Electrotechnical Commission; Dr Walter Copan, the Director of the US National Institute of Standards and Technology; Mr Wong Wang-wah, Assistant Commissioner (Finance and Quality Services) of the Innovation and Technology Commission; Mr Brahim Houla, the Chairman of the Communication and Marketing Committees of the International Accreditation Forum and the Arab Accreditation Cooperation; Dr Lee Wai-on, the Acting Government Chemist of the Government Laboratory; Mr Basil Wai, the Chief Executive Officer of the Hong Kong Electronic Industries Association; and Mr Tsui Cho-man, the Head of the Standards and Calibration Laboratory of the Innovation and Technology Commission.

Metrology, standardisation and accreditation provide clarity and unity, playing a silent and yet fundamental role in our world every day. Experts recently converged at the Forum to examine their pivotal roles in supporting Quality Infrastructure (QI).



The International Network on Quality Infrastructure recently agreed on a new definition of the QI system as “the system comprising the organizations (public and private) together with the policies, relevant legal and regulatory framework, and practices needed to support and enhance the quality, safety and environmental soundness of goods, services and processes.”

The QI is a platform not only crucial for promoting sustainable economic growth, but also for maintaining environmental and social well-being, and as such, warrants proper exploration and discussion when change emerges.

For the Forum, esteemed guests were invited to share their views on different issues. Dr Walter Copan, the Director of the US National Institute of Standards and Technology, shared on ‘The Language of the Universe: Metrology, Accreditation and Standards Enabling Global Innovation’.

“Metrology, accreditation and standards are crucial to many aspects of our society, including commerce, innovation and international trade,” said Copan. “If you cannot measure it, you cannot improve it. Metrology enables innovation

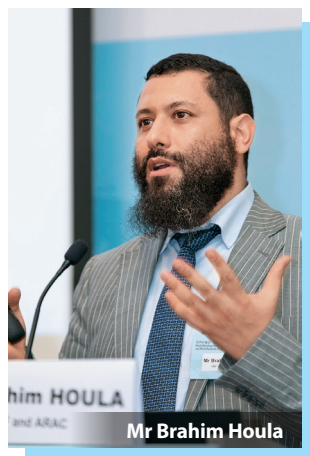
and industrial competitiveness by advancing measurement science. The next generation of measurement technology supports advanced technology development, including the Global Positioning System and the Advanced Encryption Standard, that promotes economic growth and improves our quality of life.”

“The recent redefinition of the International System of Units (SI) on May 20 is the most significant change to the SI since its adoption. All of the key measurement units are now defined by natural constants. It will continue to have great impact on the economy and advanced communications in the future,” continued Copan.

Mr Brahim Houla, the Chairman of the Communication and Marketing Committees of the International Accreditation Forum (IAF) and the Arab Accreditation Cooperation, shared on ‘The Economic Value of Accreditation’.

“Accreditation is a third-party attestation related to a conformity assessment body conveying formal demonstration of its competence, consistent operation and impartiality in performing specific conformity assessment activities,” said Houla. “Standards, certification, testing, inspection and accreditation help businesses reduce costs, increase productivity and access new markets. For example, the direct contribution of accreditation to the Australian economy is between AUD 315 and AUD 421 million per annum, representing about AUD 1 million per day.”

“The IAF and the International Laboratory Accreditation Cooperation share the common goal to enhance accreditation and conformity assessment worldwide. We promote accredited testing, inspection and certification services to industries, governments, regulators and consumers. A framework based on these accredited services can thus be formulated to support international trade through removing technical barriers, realising the free-trade goal of ‘tested, inspected or certified once and accepted everywhere’,” continued Houla.



Mr Dennis Chew, the Director of the Asia-Pacific Regional Centre of the International Electrotechnical Commission (IEC), was invited to talk about ‘IEC – Video to Emerging Technological Trends’. “Videos are built on algorithms and standardised by the IEC, the International Organization for Standardization (ISO) and the International Telecommunication Union. Having standards recognised and respected all over the world means that a video that can be encoded on one device can be decoded by another, regardless of the device used,” said Chew. “The IEC standards strive to strengthen global trading of electrical and electronic devices, as well as promote innovation, infrastructure development, smart urbanisation, transportation, energy access and efficiency, and safety and security of people and the environment.”

“In view of the growing trend of many emerging technologies, new technical subcommittees (SC) have been set up under the IEC and ISO. For example, there are the SC 41 on the Internet of Things and related technologies, and the newly created SC 42 on artificial intelligence. We are also getting ready for 5G. The IEC is evaluating human exposure to radio frequency fields, and actively looking at cybersecurity in various areas including smart grids and healthcare,” continued Chew.

Last but not least, Mr Basil Wai, the Chief Executive Officer of the Hong Kong Electronic Industries Association, enlightened guests on ‘Accreditation: Adding Value to Ecosystem of Electronics and Technology Sector’. “There are many challenges that the electronic industry is facing. For instance, businesses are now operating in different regulatory environments. Technology innovation is shortening the product life cycle, and thus putting great demand on supply chains. To assure product quality and traceability, testing, calibration, inspection and certification play a supporting role in supply chains,” said Wai.

“Accreditation has brought considerable benefits to trade. It helps reduce the costs of trade, and inspire confidence and trust over product and service quality. Standards and accreditation are fundamentally important to customers who look for high reliability and quality,” added Wai.

