

DEAR FRIENDS, DEAR COLLEAGUES,

This year IMEKO celebrates its 65th anniversary. Since we don't meet all in person at the General Council Sessions (in Budapest, Hungary) in this issue, we commemorate this occasion. We remember once again the "beginning" of IMEKO, 1958, „meeting” many of those who initiated with hard work and much determination the Confederation we all know now.

The greatest IMEKO event, the World Congress 2024 Hamburg, Germany, is getting closer. This is an excellent opportunity for many to meet again in person and present their research work to the world. There will also be a significant Industrial presence.

The Metrology Day theme was "Measurements Supporting the Global Food System." IMEKO Technical Committee 24, dedicated to Chemical Measurements, celebrated the day with an online workshop. Still about food is the upcoming Technical Committee 23 (Metrology in Food and Nutrition) conference organized at ANSES, the French scientific assessment agency for food and nutrition, introduced in this issue.

There is much more about the Technical Committees' upcoming events and recent successes. Back again to history, Metrology in Kazakhstan just celebrated its 100th anniversary.

A special, cross-disciplinary working group will represent IMEKO in the International Committee for Weight and Measures (CIPM) effort, developing a cross-sectional forum working on the SI Digital Framework. IMEKO is one of the supporting bodies in the long-term initiative to develop and establish a uniform and secure data exchange worldwide.

THE XXIVth IMEKO WORLD CONGRESS HAMBURG, GERMANY



IMEKO 2024
XXIV World Congress
26–29 August 2024 | Hamburg, Germany

Moin! Did YOU save the date yet?

Think Metrology 2024!

Be prepared ...

- ... to get your latest research reviewed and your paper published
- ... to engage with leading international experts
- ... to shake hands with Nobel Prize winners
- ... to apply for the 20 k€ Helmholtz Prize
- ... to gather insights into one of the world's leading metrology institute PTB
- ... to excite over innovative product developments
- ... to socialize in Hamburg city with your international peers



Find more information on our website:
www.imeko2024.org

A weekly update on the conference will be posted on [LinkedIn](#) and [Facebook](#). Follow IMEKO to receive regular updates!

THE 65TH ANNIVERSARY OF IMEKO 1958 2023

"I believe in the fortunate coincidence of a historical necessity and the appearance of an outstanding personality for realizing great deeds."

(From Dr Tamás Kemény, longtime IMEKO Secretary General)

With these opening words, we commemorate the 65th anniversary of the IMEKO's foundation. Through some interviews and words of witnesses, the beginnings and efforts of these 65 years are recalled. Perhaps not all involved are mentioned in this article; nevertheless, none are forgotten.

PROFESSOR GYÖRGY STRIKER (1913-1992)



"It happened in the years 1956-58 when a Hungarian scientist, after his university studies in Austria and ten years of exile in the US, returned to Hungary and, full of energy and enthusiasm, established several different institutions, all pointing in the same direction:

- *a factory for electronic measuring instruments,*
- *the Central Measurement Research Laboratory,*
- *co-founded the Department of Instrumentation at the Budapest Technical University,*
- *the Scientific Society for Measurement and Automation and*
- *organized IMEKOs first Conference on Measurement with international participation. (In 1958 in Budapest.)*

George Striker graduated from engineering at the University of Vienna, Austria, majoring in technical physics. He lived in the United States from 1938 to 1948, where he initially started by repairing and servicing electronic instruments.

Later he worked in various research institutes. Dr Striker participated in developing the so-called lie detector, the polygraph, measuring sensors, and producing the first portable medium and short-wave radio receivers.

In 1948, the management of the Orion Radio Factory in Budapest, Hungary, called him home, and he soon became the factory's chief engineer. Here he began his career as a domestic instrument developer.

In 1950, he initiated the establishment of the Electronic Measuring Instruments (EMG) factory in Budapest and worked there as the chief engineer.

Dr Striker, a titular university professor, taught for 15 years at the Faculty of Electrical Engineering of the Budapest University of Technology (BME) at the Department of Instrumentation and Fine Mechanics (later renamed the Department of Instrumentation and Measurement Technology).

In 1958, he was one of the founders and Secretary General of the Internationale Measurement Confederation (IMEKO), which awards a prize named after him to young scientists at its triennial world congresses.

He carried out decisive activities to ensure that during the Cold War period, Hungary was a member of five major engineering world organizations: IFAC (International Federation of Automatic Control), IMEKO, IFIP (International Federation for Information Processing), IFORS (International Federation of Operational Research Societies) and IMACS (Institute for Mathematics & Computer Science). These organizations had and still have an important role in international relations."

(From Dr Tamás Kemény, longtime IMEKO Secretary General)

EVENTS LEADING UP TO IMEKO

The birth of IMEKO was preceded by a chain of occurrences in various countries leading to a broad interest in the field of measurement and instrumentation- as well as in automatic control- on an international scale.

In the years after World War II, several local conferences sprang up on both sides of the Atlantic Ocean, showing a steady increase in international participation.

Of these events, the Hungarian and Swedish Conferences played a significant role in "sparking off" the thought of arranging a truly international Measurement Conference. This was greatly aided by the close and friendly contact between the organizers of these events.

Gyula Horváth, who was part of IMEKO from the beginning and had written the next part, fondly remembered these years:

"We often meet with names similar to those of IMEKO in the directory of international, non-governmental organizations since almost every field has its own international professional, scientific organization. However, this name is special to us because it is the only international organization founded by enthusiastic Hungarian professionals with the help of domestic and international supporters, with Dr György Striker in the lead.

He was called "the father" of IMEKO, and all the success that followed his initiative would not have been possible without him.

In 1956 György Striker, as the Hungarian Measurement and Automation Scientific Association MATE's Secretary General, met those foreign specialists at the Congress of the Swedish Academy of Engineering and scientists who could be relied on in the organization of IMEKO. He also gathered experiences from colleagues visiting foreign events.

As a first attempt, in early October 1956, MATE organized a symposium with international participation, where personal relations were formed with the former

socialist countries.

Striker consciously wanted to build on informal relationships and didn't want to start through the official channels contacting the MATE similar organizations abroad.

By early 1958 precisely through these personal relationships, he agreed with the Polish and Russian societies about organizing the first international conference in Budapest in October of the same year. It was hosted with attendees from 16 countries and 224 scientists besides the 580 Hungarians. A Temporary International Preparatory Committee was created for this occasion, the same which undertook the organization of the second congress in 1961, again in Budapest.

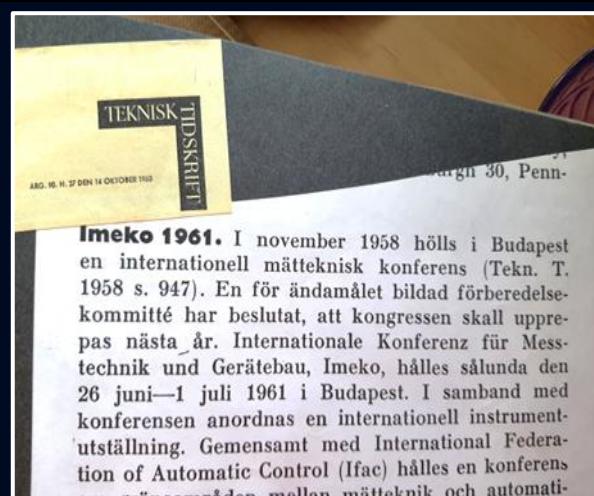
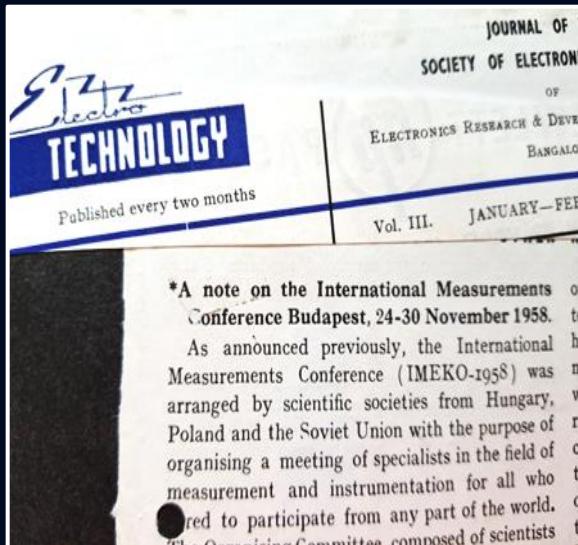


The first toast to the success of the initiative to organize an International Measurement Conference. The glasses were raised on the 18th of March 1958 in Budapest (from the left: Professor Jan Obalski Warsaw Technical University; Poland, Associated Professor György Striker, Technical University; Budapest Hungary, and Professor Valentin Ossipovich Arutiunov Leningrad Technical University; Russia).

The final statute was arranged in the 1964 Stockholm Congress. Hierby, the International Measurement Confederation was definitively established, with the main task of organizing tri-annual Conferences alternately in Eastern and Western countries. This led to the series of World Congresses, a tradition that still continues.

During this initial founding period, we worked very hard. In the 50s, there were no conference organizers; we had to do everything ourselves and learn it by doing it.

REVIEWS OF THE FIRST IMEKO CONFERENCE IN DIFFERENT LANGUAGES



The scope of the Conference may be judged from the following data.

Registered participants: about 800 of these: 500 from Hungary, 226 from other 16 countries.

Largest delegations were from the German Democratic Republic (79), the Soviet Union (60), Poland (25), Czechoslovakia (22). A smaller number of participants came from Albania, Austria, Belgium, Bulgaria, Denmark, France, Great Britain, German Federative Republic, Italy, Korea, Rumania and Yugoslavia, Holland and India were represented by papers read.

Among the participants were 43 university professors. About 80 different research-institutes were represented by over 200 researchers. The Scientific Academies of 8 countries as well as 6 international scientific federations were represented by 32 official delegates, furthermore technical

IMEKO 1958 et s'efforcer de donner une image nette de l'état actuel de la science et de la technique dans ces domaines spéciaux.

Le Comité s'est occupé en détail des questions d'organisation touchant la préparation de l'IMEKO 1961. Le présidium de l'Association hongroise a nommé un Secrétariat de trois membres désignant comme chef M. le professeur chargé de cours, György STRUKER, « secrétaire responsable » de l'IMEKO 1961.

La traduction simultanée des communications tenues dans une des langues officielles (allemand, anglais, français et russe) sera donnée par des interprètes pour les délégations suffisamment importantes. La date exacte de la Conférence et de l'Exposition (juin-juillet 1961) sera fixée ultérieurement.

Nevertheless, György Strikers' enthusiasm, intelligence, diligence, and unstoppable determination carried us through it all and made us follow him. The knowledge that we were creating an opportunity for both Hungarian and foreign scientists to exchange experiences, and broaden their scientific knowledge, which they could apply in their own fields of expertise, seemed a wonderful purpose and beneficial for all.

The lively correspondence was ongoing between the Temporary International Preparatory Committee's members. We put in really long hours exchanging telegrams, which wasn't easy, as you had to spell all the words of the long text letter by letter to the post clerk on duty, who didn't speak English. This always occurred after our daily jobs, and we made such long hours, sometimes taking a cab home early the next day.

The experience came slowly, and during the second conference, we overplanned everything three times; only by then had we found a feasible solution for all that could work and lead the event to success. Early in the beginning, the wish emerged to set up Technical Committees where the experts of a narrow field could meet and exchange ideas in more depth.

Striker's initiative came precisely at the right time when industrial and scientific knowledge reached a level, and the need was expressed for informal international inter-institutional collaboration.

During the first conferences, as it was not customary that the conference language was English, we had to employ translators for German, Russian, and French. This resulted in even more preparations as the translators had to be briefed about the text and science. In 1962 this problem was finally solved.

IMEKO gradually expanded through the years, feeling like a growing family despite the various international political conflicts that dominated the 60s. It was a silent agreement between East- and West that each should take turns organizing the congresses allowing time to allocate the

funds, which wasn't easy back then. Many friendships were formed besides professional relationships, and correspondence with Western colleagues could be arranged through the IMEKO Secretariat. As it was said, IMEKO made a significant hole in the "iron curtain".

As the established rule was that only scientific or social societies or through them formed committees could become IMEKO members, this led to the forming of measurement institutions in several countries where such wasn't available before.

Dr György Striker was widely recognized and respected abroad. He was made an honorary member of several Measurement Societies. He received the highest award from ISA (the International Society of Automation) in The United States.

As IMEKO Secretary General, he was several times reelected until his health didn't permit him to continue. After receiving the highest award for his work, he remained an honorary president and advisor.

In 1991, as a sign of his ongoing devotion, he established a foundation to award the most talented young scientist for their presentation, which still occurs at the triennial world congresses."

Finally, some data about the present:
IMEKO continues with a Hungarian Secretariat. Its 42 member institutions are from 5 continents. The yearly organized IMEKO events, about 15 on average, move a couple of thousands of participants. The triennial World Congress attracts more than 1000 participants. Adding it all up, IMEKO moves several thousand scientists each year and continues doing so.

The best closing words come from György Striker himself:

"May those who joined forces in our IMEKO family continue to enjoy their common endeavour in our Confederation with heart-warming memories of the past and a confident outlook into the future for many decades to come."



Polish and French delegates listen to the interpreter at the IPC meeting (Budapest 1958) (H.Trebert, B.Grinberg, M. Durepaire)



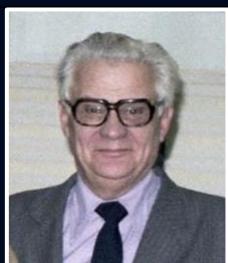
An exchange of toasts at the closing session of the IPC Committee (1958) (H. Kortum, Hungary)



Another glass is lifted to the success of IMEKO (V.O.Arutiunov, Sovjet Union, A. Baltadiev, Bulgaria, Wang Ta-hang, Chu Kang-chieh, China, Emil Djakov, Bulgaria)



A view of the Opening Session at the Second IMEKO Conference Budapest 1961



Some words about the writer of the second part of this story: Gyula Horváth (1920-2008) was a diamond-awarded mechanical engineer and a founding member of the International Measurement Confederation IMEKO. For his dedication to IMEKO, he was given the highest award in 1989 in Houston (USA).

He received his diploma in mechanical engineering (electrical department) in 1943 at the Budapest University of Technology. Between 1945 and 1990, he worked for Standard Electricity Company and Information Technology Company (BHG) in the planning, development and sales department. In addition, he dealt with all telecommunications, their economic and human aspects, and independent solutions to new problems. On behalf of the factory, he worked for Ericsson in Stockholm for a year and a half.

Dr Gyula Horváth was a tirelessly active member of the Federation of Technical and Scientific Societies (MTESZ), IMEKO and the Communication and Information Science Association (HTE) professional associations. He published more than 80 studies, led courses at the Institute of Continuing Education in Engineering and held numerous special lectures at home and abroad.

TC24 "TALKS ON CHEMICAL MEASUREMENTS" WORKSHOP METROLOGY DAY

The next in the successful series of TC24 "Talks on Chemical Measurements" was the workshop organized for Metrology Day.



HOW TO PICK STRAWBERRIES CORRECTLY? IMEKO DISPELS ALL YOUR DOUBTS ABOUT THE ISSUE

Picking strawberries may bring to mind bucolic scenarios and childhood memories, but when dealing with pesticide residues in food, the matter becomes serious.

The allowed concentration of pesticides in fruit is strictly regulated by laws to safeguard public health, so fruit producers must regularly face complex sampling and measurement uncertainty issues. How to determine the pesticide residue concentration (in the range of micrograms per kilogram) in a glasshouse which is hundreds of square meters wide? Chemical metrology can provide the correct solutions.

On the 26th of May, Iva Sabljak and Mirela Grubelić moderated the seminar "Sampling of plant origin food for the pesticide residues determination".

IMEKO TC24 organized the event in the frame of the "IMEKO Talks on Chemical Measurements" series, this time specifically dedicated to the topic' "Measurements supporting the global food system".

Iva Sabljak and Mirela Grubelić work at Eurofins Croatiakontrola d.o.o. part of Eurofins network of laboratories, a worldwide company with more than 60000 employees in 54 countries. Eurofin's network of laboratories offers laboratory activities in different fields (from microbiology to organic contaminants, allergens, and metals) using more than 200000 analytical methods and providing accredited sampling methods for different kinds of analytes. The case study specifically addressed during their presentation dealt with sampling strawberries and determining pesticide residues. The proposed sampling methodology described step-by-step how to perform the task correctly: from the path to follow in the bushes (to obtain a representative sample) to the cautions in the sample transportation and the procedure to carry out the analysis by LC-MS/MS (Liquid Chromatography with tandem mass spectrometry) and GC-MS/MS (Gas Chromatography Tandem Mass Spectrometry). Then, the possible sampling and measurement uncertainty sources were assessed for each step, obtaining a total expanded uncertainty (Sampling + analysis) of 13.9 %.



The event, attended by about 15 to 20 people, reveals the interest in Chemical Metrology among the IMEKO community and the professionals working in analytical chemistry. After a short summer break, the series of events, 'IMEKO Talks on Chemical Measurements', will continue in the second part of the year.

Written by Leonardo Iannucci, TC24 Scientific Secretary

ANSES, THE FRENCH AGENCY FOR FOOD, ENVIRONMENTAL AND OCCUPATIONAL HEALTH & SAFETY



(Credit Anses/ Y. Lastes.)

ANSES a brief description

Whether we are eating, working or simply breathing, everyday life constantly exposes us to health risks. Climate and technological changes and our societal choices have also led to the emergence of new threats to humans and the environment, both in France and abroad.

Since 2010, ANSES has been providing the scientific benchmarks needed to protect against health risks related to food, the environment and the workplace, as well as against risks affecting the health of animals and plants.

A scientific expert appraisal agency, ANSES, monitors and assesses these health risks while also conducting research into them. It contributes to advancing scientific knowledge to support public decision-makers, including during health crises.

ANSES is accountable to the French Ministries of Health, the Environment, Agriculture, Labour and Consumer Affairs. Serving the public interest, it works daily to mobilize science to make the world safer and healthier for all.

Key numbers

- 1400 employees
- More than 800 independent experts mobilized
- 9 laboratories throughout France
- Over 250 opinions and reports are published each year
- 750 scientific publications, of which 400 are category A or A+ every year
- More than 100 national, European and international reference mandates

THE PRINCIPLES GUIDING OUR WORK

A comprehensive approach to risks

Because safeguarding the health of some means safeguarding it for all, ANSES's activities have always been at the interface between human, animal and plant health. The vast scope of its work has enabled the Agency to adopt a comprehensive view of health threats to living organisms and ecosystems. It has developed an interdisciplinary approach to assessing the risks of today and anticipating those of tomorrow.

Scientific excellence

Every day, ANSES mobilizes scientific experts recognized in their fields, implements scientific reference methods and takes all the available scientific knowledge into account. This ongoing commitment enables it to provide benchmark scientific expertise. The Agency has established multiple partnerships with various scientific assessment and research players in France, Europe and the rest of the world. ANSES relies on its Scientific Board to guarantee the quality of its expert appraisals.

Expert groups at ANSES

Each year, several hundred scientists from different backgrounds, recognized in their respective disciplines, participate in independent expert groups. Coordinated by ANSES, the work of these groups is carried out within a structured framework and according to strict ethical principles.

Missions and compositions of ANSES's Expert Committees (CESs):

- Animal feed
- Water
- Assessment of the biological risks of foods
- Assessment of chemical risks of consumer items and products
- Assessment of the risks related to physical agents and new technologies
- Assessment of the risks related to air environments
- Assessment of the physical and chemical risks of foods
- Fertilizers and growing media
- Human nutrition
- Substances and plant protection products, biocontrol
- Biological risks for plant health
- Animal health and welfare
- Chemicals covered by the REACH and CLP Regulations
- Assessment of the risks related to biocidal substances and products
- Health reference values

Transparency and independence

ANSES takes great care to ensure that all its activities comply with principles of ethics and scientific integrity. Ever since it was created, the Agency has had a robust ethical framework which it continues to strengthen, and it regularly consults its Committee for Ethical Standards and Prevention of Conflicts of Interest. To assess health risks, it relies on multidisciplinary expert groups and transparent, collegial working methods that guarantee the independence and impartiality of the expert appraisal work on which its opinions are based.

It publishes all of its expert appraisal work.

Openness and dialogue

Health issues are a source of both interest and concern for society. Voluntary associations, trade unions, businesses, elected officials and government ministries are all represented on ANSES's Board of Administrators and discuss its strategic orientations. To foster informed debate that can benefit public action, the Agency systematically publishes its opinions and reports and accounts for scientific uncertainties. ANSES has also created dialogue committees on nanomaterials, radio frequencies and plant protection products. These provide it with forums to address the questions of stakeholders and explain its expert appraisals and the methods used.

INVESTIGATE

Advancing scientific knowledge on the hazards and risks to which humans, animals, plants and the environment are exposed and improving surveillance.

To identify hazards, how they spread, and how they impact living organisms, ANSES carries out research activities in three key areas in particular: animal health & welfare, plant health and food safety.

ANSES has a network of nine reference and research laboratories located throughout France, close to Industry. These laboratories operate in three main areas: (i) animal health and welfare, (ii) food safety (chemical and microbiological) and (iii) plant health. They are internationally recognized in their respective fields of expertise: epidemiology, microbiology and antimicrobial resistance, toxins and physicochemical contaminants. Thanks to their work in providing expertise, epidemiological monitoring, alerts and scientific and technical assistance, they play a vital role in understanding various threats and in collecting data from the network of accredited laboratories.

ANSES's laboratories hold over 100 "reference" mandates, ensure the quality of methods and analysis techniques and help public authorities to monitor, prevent and manage health crises in France, Europe and worldwide. Among the ANSES laboratories, a brief description is provided for the Laboratory for Food Safety hereafter.

Laboratory for Food Safety



The Laboratory for Food Safety focuses on biological and chemical hazards that can affect food safety and quality. It has two sites, in Maisons-Alfort and Boulogne-sur-Mer.

"Food safety" refers to efforts to guarantee the safety of food products, i.e. ensure that their consumption will not have negative health consequences. The laboratory's scientific activities aim to enrich knowledge on the types of contaminants or "hazards" found in food, understand their mechanisms of action and effects on health, and help improve policies for protecting consumer health.

The Maisons-Alfort site has 120 employees, specializing in food safety, while the Boulogne-sur-Mer site has over 20 staff members dedicated exclusively to fishery and aquaculture products.

The Laboratory for Food Safety provides public decision-makers with general scientific expertise on the quality and safety of foodstuffs, as well as more specific expertise relating to certain processing sectors.

The laboratory's work focuses on biological (bacteria, viruses, parasites) and chemical (toxins, metal trace elements, pesticides, organic pollutants, histamine) hazards that are found or likely to be found in foods, especially during their distribution and consumption.

The laboratory also performs analyses for health authorities and professionals in relation to fishery products (fish, shellfish, crustaceans) in Boulogne-sur-Mer and in relation to all types of foodstuffs in Maisons-Alfort, in the framework of the Central Laboratory for Veterinary Services, which carries out official analyses for the Departmental Directories for the Protection of Populations (DDPPs) in the Paris region.

The main chemical contaminants studied are as follows :



- pesticides (organochlorines, organophosphates, etc.)
- trace metals (lead, mercury, cadmium, copper, etc.) and minerals (sodium, potassium, calcium, magnesium, etc.)
- nanomaterials,
- bacterial toxins (*Staphylococcus aureus* and *Bacillus cereus* toxins)
- marine biotoxins (lipophilic toxins, domoic acid, saxitoxins, ciguatoxins, etc.)
- cyanotoxins (microcystins, etc.)
- biogenic amines (histamine, cadaverine, putrescine, etc.)
- nano- and micro-plastics.

The main biological contaminants studied:



- Salmonella;
- Pathogenic E. coli;
- Coagulase-positive staphylococci;
- Listeria monocytogenes;
- Bacillus cereus;
- Vibrio;
- Clostridium;
- Enteric viruses (HAV, HEV, noroviruses, enteroviruses);
- Fish parasites, in particular, Anisakidae

ANSES takes part in various health monitoring and alert systems in connection with other health agencies, State services, and European and international authorities and networks. Among other things, it participates in epidemiological surveillance platforms for animal and plant health and food-chain safety.

It also coordinates **five national vigilance schemes**: toxicovigilance with the French network of poison control centres, nutrивigilance for food supplements, phytopharmacovigilance, veterinary pharmacovigilance and the National Network for Monitoring and Prevention of Occupational Diseases (RNV3P).

All of this knowledge and information contributes to our health risk assessment activities.

EVALUATE

Assessing risks to human, animal and plant health thanks to independent and robust scientific expertise.

In response to questions asked by society, ANSES assesses health risks associated with food, the use of certain products and technologies, occupational activities, and, more broadly, pollution of environments such as air, water and soil. Its assessments are based on independent expert committees' scientific expert appraisal work and the most recent global knowledge. The Agency also ensures that the human, economic and social sciences are incorporated into its expert appraisals.

To better assess complex risks, such as the effects of cumulative exposure, the Agency develops new methodologies with its scientific partners. Through observatories and large-scale studies, ANSES collects useful data for assessing risks associated with the practices of the French population and the composition of foods and everyday products. ANSES also studies changes in products declared on the portals that it has created for nanomaterials and for smoking and vaping products.

In the area of regulated products - veterinary medicinal products, plant protection products and biocides in particular - ANSES assesses their efficacy as well as the risks they pose to human health, animal health and the environment, and it defines management measures in adequation with these risks. It is particularly responsible for issuing and withdrawing marketing authorizations in France.

The Agency is also a driving force when it comes to improving methods and proposing changes to national and European regulations.

PROTECT

Building capacities for action to protect on a daily basis and anticipate the risks of tomorrow.

To meet societal expectations in health, biodiversity and ethics, it has helped put effective prevention and protection measures into place and provide access to reliable, independent, multidisciplinary information.

ANSES's understanding of known and emerging, immediate and long-term risks is expanding and improving every day. Tapping into all necessary methods, research and partnerships, it is working to anticipate and rapidly detect the slightest alert, especially in crisis situations; to issue recommendations, including when scientific uncertainties exist; and to reduce scientific uncertainties whenever possible.

Beyond our borders, ANSES is recognized as a leading partner of European agencies and international health organizations, and it strives to be a source of new ideas to make the global health and safety system ever more effective.

Close to 1400 women and men spread out across 16 sites in France are working every day to fulfil ANSES's missions.

The 7th IMEKO-FOODS International conference organized at ANSES



ANSES organizes the 7th International IMEKOFOODS conference. Worldwide food trade and consumption: quality and risk assessment that will take place in Maisons-Alfort/Paris, France, between 25-27 October 2023.

The conference aims to get together scientists working in food-related fields, such as food chemistry, nutrition, food safety, risk assessment, food authenticity, and more, where metrology plays a vital role in ensuring consumer protection.

More information can be found at: <https://conferences.imeko.org/event/6/>

Written by ANSES Department of Communication and Institutional Relations (DICORIS)

100th ANNIVERSARY OF METROLOGY IN KAZAKHSTAN

Visit to Astana, Kazakhstan by Professor Kenneth T.V. Grattan, Past President of IMEKO



In the picture, attendees at the Plenary Session of the Conference

Professor Kenneth Grattan represented the President of IMEKO at the International Scientific and Practical Conference dedicated to the 100th Anniversary of Metrology in Kazakhstan at a Conference entitled 'Measurement as the Basis of Global Trust', held in Astana, the capital of Kazakhstan, on the 25th of May 2023.

The meeting was attended by representatives of a number of international and regional organizations, including IMEKO, OIML, GULFMET, SMIIC and COOMET, whom all conveyed their warm greetings to the Kazak hosts on this important occasion to celebrate 100 years of metrology in the country.



Professor Grattan made two invited presentations at the meeting, the first on the nature and role of IMEKO, encouraging those attending from the Kazak Member Organization of IMEKO to participate widely in IMEKO activities. In addition, a number of sessions on key topics in metrology, education and training were held, and Prof Grattan presented a paper entitled 'Measurement and metrology education and training for tomorrow's world' and spoke in the round table session on that subject, with wide international participation to discuss the important issues of training of those involved in metrology and measurement in future decades. Supporting these presentations, Professor Grattan prepared a paper entitled " Measurement, metrology, IMEKO and sustainability education and training", which discussed topics including " metrology and its implementation in society", "measurement, metrology and

sensors" "The structure and operation of IMEKO the International Measurement Confederation", " training for metrology and the requirements of our education system", " IMEKO's role in supporting the next generation of metrologists", " IMEKO and sustainability' and a bright future for metrology ubiquitous measurement', a topic which should be at the forefront of our education in the field, as an interdisciplinary concept in hardware and software engineering, recognizing that measurement can be, and often is, made any time and everywhere, and indeed may be needed 'on demand". This paper will form part of the written record of the conference when published later this year.

Overall, over 150 delegates attended the conference and participated actively in the question and answer sessions held at the end of the sessions.

In summary, this proved to be an excellent event to engage closely with colleagues from Kazakhstan and to help them to celebrate this important 100th anniversary of metrology in their country. We wish them well as they enter their second century in the field.

Written by K T V Grattan, IMEKO's Past President

NEW MEMBERS OF THE TECHNICAL COMMITTEES JOINED IN 2023

New members of the TCs

TC2: Thomas Germer; USA, TC3: Asoka Gardiye Hewawasan; Sri Lanka, TC8: Dr James A. Fedchak; USA, TC9: Dr Woong Kang; Korea, TC11: Dr Yoshitada Tanaka; Japan, TC12: Simon Peter Mukwaya; Uganda, TC17: Scientific Secretary Fumihiro Kato, TC24: Zhazira Zhumabekova, Kazakhstan, Nenad Bolf; Croatia, Martin Hruška; Czech Republic, Jaroslav Otta; Czech Republic, Alexandra Bogožalec Košir; Slovenia, Dr Denghao Zhu, Germany, Simon Peter Mukwaya; Uganda, Vanja Vučetić, Montenegro, Ljubica Ivanović, Montenegro, Ambrose Atwine, Uganda,

Welcome to IMEKO, and we wish you great success in the TC of your choice!

IMEKO FUTURE CONFERENCES 2023

TC20 INTERNATIONAL CONFERENCE OF MEASUREMENT OF ENERGY



We are thrilled to invite you to the International Conference of Measurement of Energy, 4-6 September 2023, Braunschweig, Germany.

This prestigious event aims to bring together leading experts from around the world to share their knowledge and experience in the field of energy measurement. As the demand for sustainable energy continues to grow, accurate and reliable measurements have become more important than ever. Whether you are a seasoned professional or a newcomer to the field, this conference promises to be a valuable opportunity for learning, networking, and collaboration.

We look forward to welcoming you to this exciting event.

Key topics:

- Metrology of Energy carriers
- Metrology for Wind and Solar
- Digitalization in Energy Metrology
- Metrology of dynamic quantities for energy
- Energy Storage and Monitoring
- Energy Metrology Networks
- Metrology for Carbon Capture and Storage (CCS)
- Geothermal energy conversion

**Registration began on the 1st of May, 2023.
Limited seats (80)**

Call for abstracts: Oral and Poster presentation deadline: 1st of August, 2023.

A special issue of the Measurement journal will be published following the conference. Authors who have presented their papers at the conference are invited to submit full papers to the special issue by the 1st of December, 2023. The usual review procedure of the Measurement journal will be applied.

www.energy.ptb.de

TC17 ISMCR 2023 21-22 September 2023 at the Technical University of Iasi, Romania
<https://ismcr.org/2023-ismcr/>

TC10 Conference MACRO meets NANO in Measurement for Diagnostics, Optimization and Control on September 21-22, 2023, in Delft, Netherlands www.imekotc10-2023.sztaki.hu

TC4 26th IMEKO TC4 International Symposium and 24th International Workshop on ADC and DAC Modelling and Testing (IWADC) in Pordenone, Italy 21-22, September 2023
<https://conferences.imeko.org/event/3/>

AMCTM 2023 Advanced Mathematical and Computational Tools in Metrology and Testing 2023, 26-28 September 2023, Sarajevo, Bosnia and Herzegovina <https://amctm.info>

TC4 Metroarcheo 19-21, October 2023 Rome Italy <https://www.metroarcheo.com>

TC8, TC11, and TC24 October joint conference 11-13 Madeira, Portugal. TC8: “Traceability in Metrology New Challenges and Opportunities”, TC11: “TIC for Confidence and Safety”, TC24: “New Perspectives in Chemical Measurements” <https://conferences.imeko.org/event/5>

TC23: 7th IMEKOFOODS Conference, 25-27 October 2023, Maisons-Alfort/Paris, France, <https://conferences.imeko.org/event/6/>

Asia Pacific Measurement Forum on Mechanical Quantities (APMF2023), cosponsored by IMEKO, from 20- 24 November in Chengdu, PR China. <https://apmf2023.nim.ac.cn/>

IMEKO'S JOINT EFFORT ON DIGITALIZATION



The first meeting was to discuss the Technical Committees' involvement in the IMEKO-wide joint effort on digitalization. Besides TC6 dedicated to this subject, the other TCs' expertise also involves digitalization.

Therefore an IMEKO-wide special working group will be formed. Further discussion on this will be at the General Council and Technical Board meeting.

Until then, TC Chairs are asked to consider

their involvement come forward with ideas and delegate a member or more members to this working group.

Dr Hugo Gasca (CENAM), Vice Chair of TC6 and internationally very involved with digitalization, will lead this group.

A brief explanation of the background:

With several organizations' support, the International Committee for Weight and Measures (CIPM) is developing a cross-sectional forum working on the SI Digital Framework. IMEKO is one of the supporting bodies in the long-term initiative to develop and establish a worldwide uniform and secure data exchange.

With our TCs, we cover many areas and we could clearly collaborate with this joint effort as IMEKO and not only as TC6.

All the TCs are very welcome to participate!



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