IMEKO NEWSLETTER

2026 JUNE

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TC 17 ISMCR 2026 Rio de Janeiro

DEAR FRIENDS, DEAR COLLEAGUES,

While summer is the time for holidays, IMEKO is busy preparing for its 70th General Council Sessions jointly with the Technical Board meeting to take place on 24 - 25 August in Bangkok, Thailand. This year, the Confederation has four candidates for membership, from various continents, affirming IMEKO is a global organisation, in expansion.

There are still 8 conferences scheduled for this year. The organisation of the World Congress 2027 in Rimini, Italy has entered a new phase by announcing various submission dates. Meet Special Session coordinator Prof. Federico Tramarin from the Rimini team in this issue. In the next Newsletter we will disclose the most recent information about the preparations.

We begin by the introduction of Mr Aiwen Ma who represents , the Chinese Society of Measurement IMEKO's Member Organisation for over 20 years.

Rio de Janeiro is the focal point for the International Symposium on Measurement Control in Robotics - ISMCR 2026, a meticulously organised symposium by TC17 Measurement in Robotics. IMEKO met Dr Geraldo Gurgel Filho, the General Chairperson, of this event alongside his colleagues.

Zeliha Hanım Karapınar from Türkiye gave us an interview about her professional journey, in the series IMEKO Goes to Young Scientists.

Dr Valentina Bello leader of Working Group for Young Scientists WYSM - also regularly featuring in the Newsletter and Prof. Luigi Rovati on the hand of the upcoming conference Photomet Eumet 2026, Klagenfurt, Austria gave a quick overview and plans on the special programme designed for Young Scientists.

The Newsletter finishes with short news, and a conference overview.

MR AIWEN MA SECRETARY-GENERAL OF THE CHINESE SOCIETY: OF MEASUREMENT DEEPLY ENGAGED IN METROLOGY, PROMOTING GLOBAL COOPERATION

I. Profile

Metrology is the science of measurement and its applications. It is the foundation of quality, the root of industry, and the source of innovation. Aiwen Ma currently serves as Vice Chairman and Secretary-General of the Chinese Society of Measurement, Council Member of the International Measurement Confederation, and Supervisor of the International Society of Sensing Technology. He also serves as Deputy Director of the Editorial Boards of two national core journals: "*Acta Metrologica Sinica*" and "*Industrial Metrology*."

For many years, he has focused on key tasks such as the construction of the metrology legal system, industry governance, academic research, science popularisation, and international exchanges. Based on China's industrial reality and keeping pace with global metrology development trends, he has actively promoted the progress of China's metrology and testing technology and international exchanges, facilitating practical cooperation between China and foreign countries in the metrology field.

II. Professional Dedication: Rooted in Frontline Practice, Consolidating the Metrology System

Secretary-General Aiwen Ma has a diversified background in industrial frontline practice, national regulatory authorities, and academic organisations.

He possesses rich industrial practical experience, macro-management thinking, and academic research literacy, with an in-depth, comprehensive, and unique understanding of the development context, technical routes, institutional status, and future direction of China's metrology and testing industry.

He has worked successively at Shougang Group and the former General Administration of Quality Supervision, Inspection and Quarantine. Starting from the frontline of industrial metrology application, he gradually participated in top-level supervision and system planning in the national metrology field, accumulating rich experience in industrial metrology implementation and industry governance, which laid a practical foundation for promoting the standardisation and regularisation of the national metrology industry.

Legal governance and standard construction are fundamental supports for the high-quality development of the metrology industry. Secretary-General Aiwen Ma has long been deeply involved in the top-level institutional design and core normative system construction of national metrology laws and regulations, and is one of the important participants and promoters of the improvement and upgrading of China's metrology legal system and technical specification system. At the national legislative level, he has fully participated in the revision, discussion, and implementation of relevant laws and regulations such as the "*Metrology Law of the People's Republic of China*" and the "*Energy Conservation Law of the People's Republic of China*".

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These aim at optimising the formulation of metrology regulatory rules based on industrial development and people's livelihood needs, improving the energy metrology management system, and providing core legal guarantees for the administration of metrology according to law, efficient energy utilisation, and high-quality industrial control nationwide.

In terms of industry technical specification development, he has led the formulation and revision of many national and industrial core norms, including the "*Measures for the Supervision and Administration of Type Approval of Measuring Instruments*" and the "*General Rules for the Allocation and Management of Energy Measuring Instruments for Energy Consumption Units*", as well as unified national metrology terminology standards and other basic, universal, and key documents.

These systems cover core areas such as measuring instrument supervision, energy metrology control, and unified industry terminology, effectively solving long-term pain points such as inconsistent standards, inconsistent regulatory calibers, and non-standard industrial metrology applications.

They have fully participated in regulating the national metrology market order, optimising the national metrology technical infrastructure system, providing solid institutional and technical support for manufacturing quality upgrading, energy conservation and emission reduction, trade fairness, and public service guarantee, and effectively improving the standardised and scientific governance level of China's metrology industry.

Since serving as Vice Chairman and Secretary-General of the Chinese Society of Measurement, Secretary-General Aiwen Ma has comprehensively presided over the daily management and core business of the Society, coordinating academic exchanges, industry empowerment, technical services, science popularisation, talent training, and international cooperation. Under his leadership, the Society has upgraded from a traditional academic platform into an authoritative core hub in the national metrology field, integrating academic leadership, technical support, resource aggregation, and international exchanges.

During his tenure, he has organised dozens of national metrology academic conferences, cutting-edge technology seminars, industry-university-research cooperation, and high-end industry forums, gathering experts, scholars, and technical backbones from national metrology research institutes, universities, leading enterprises, and regulatory agencies, building a high-level, professional, and full-coverage industry exchange and cooperation platform.

Through regular academic seminars and technical docking, the barriers between scientific research innovation and industrial application have been effectively broken through, promoting the implementation and transformation of cutting-edge metrology technologies, scientific research achievements, and innovative solutions, facilitating the in-depth integration of industry, university, and research in the national metrology and testing field, and continuously stimulating the endogenous innovation momentum of the industry.

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These means are promoting the steady progress of China's metrology industry to a new stage of high-quality development.

III. International Responsibility: Deeply Engaged in the IMEKO Platform, Building a Bridge for Global Metrology Cooperation

The International Measurement Confederation is the most authoritative and extensive international academic organisation in the global metrology field, undertaking the important mission of coordinating global metrology technology innovation, unifying international metrology standards, promoting cross-border metrology cooperation, and empowering the quality upgrading of global industries.

As a long-serving General Council Member of IMEKO, Secretary-General Aiwen Ma has long stuck to the frontline of international exchanges. With a professional, rigorous, and pragmatic attitude, he has been deeply involved in IMEKO's global governance-and is one of the core representatives of China's metrology academic circles connecting with the global metrology system.

In the IMEKO General Council, he has fully participated in core work such as the discussion of global metrology and instrumentation development plans, the formulation and revision of international metrology technical standards, the construction of international academic cooperation mechanisms, and the construction of the global metrology talent training system. Based on China's metrology practice and combined with global technology development trends, he has actively contributed China's experience and solutions to the improvement and upgrading of the international metrology system.

At the same time, he maintains regular communication and in-depth practical cooperation with metrology academic organisations, research institutions, and top experts in dozens of countries and regions around the world, building a stable, long-term, and diversified international exchange and cooperation network.

In international exchanges, Secretary-General Aiwen Ma always adheres to the concept of two-way connectivity and mutual benefit. On the one hand, he takes the initiative to systematically display China's breakthrough achievements and mature experience in metrology legal system, standard system, technological innovation, industrial application, and people's livelihood guarantee to the international community, breaking international cognitive barriers and enhancing the international recognition and influence of China's metrology industry; on the other hand, he accurately aligns with international frontiers, actively introduces global advanced metrology technology, innovative concepts, management models, and research directions, digests, absorbs, and re-innovates based on domestic reality, promoting the simultaneous integration of China's metrology and testing technology and industry management system with international advanced levels.

Relying on the authoritative IMEKO platform, he has continuously promoted all-round, multi-level, and wide-ranging cooperation between the Chinese Society of Measurement and international metrology organisations, covering various core dimensions.

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These are among others collaborative academic research, joint development of international standards, joint training of high-end talents, joint research on cutting-edge technologies, and mutual recognition of academic achievements.

Years of deep cultivation have effectively broken through the cooperation barriers between Chinese and foreign metrology fields, helping China's metrology innovation achievements deeply integrate into the global metrology system, significantly enhancing China's voice and rule participation in the international metrology field, laying a solid foundation for the long-term stable, mutually beneficial, and in-depth cooperation of Chinese and foreign metrology industries, and strongly promoting the collaborative innovation and common development of the global metrology cause.

In March 2026, in view of his influence in the international metrology field, he was elected Supervisor of the International Society of Sensing Technology, actively participating in academic exchanges, cooperation, and governance in the international intelligent sensing field.

IV. Academic Persistence: Deeply Engaged in Academic Journals, Assisting Industry Talent Training

Academic innovation and talent inheritance are the core driving forces for the sustainable development of the metrology industry. In addition to heavy industry management and international exchange work, Secretary-General Aiwen Ma has always adhered to his original academic aspiration.

He is deeply engaged in academic journal construction and youth talent training, and has contributed to the construction of China's metrology academic system and talent echelon with long-term persistence.

As Deputy Director of the Editorial Boards of two national core journals, "*Acta Metrologica Sinica*" and "*Industrial Metrology*", he has long been in charge of academic quality control, topic selection planning, high-quality achievement selection, and academic standard construction of the journals. Adhering to the rigorous and truth-seeking academic criteria, he strictly controls the academic quality and innovative value of manuscripts and puts an end to the impetuous and utilitarian academic atmosphere. Focusing on key and hot industry directions such as cutting-edge metrology technology, industrial metrology application, intelligent metrology innovation, metrology standard upgrading, and energy metrology control, he actively guides researchers to carry out basic, targeted, innovative, and practical research, vigorously promotes and publishes high-level, high-value, and implementable academic achievements, providing an authoritative display and communication platform for scientific research innovation in the metrology field.

At the same time, he attaches great importance to the growth of young researchers, carefully guides young scholars in project research, paper writing, technical research, and academic exchanges for a long time, and takes the initiative to build growth platforms and create development opportunities for young talents.

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He is helping a number of outstanding young metrology talents grow into industry backbones rapidly, reserving sufficient reserve forces for China's metrology cause and consolidating the talent foundation for long-term development.

V. Science Popularisation and Education: Spreading Metrology Culture, Interpreting Industry Original Aspiration

Metrology originates from people's livelihood, serves industry, and empowers society. It is both a rigorous technical discipline and a basic science close to life and supporting development. Secretary-General Aiwen Ma has always believed that the development of metrology requires both the hardcore support of technological innovation and institutional improvement, and the flexible nourishment of historical context and cultural heritage.

Having been deeply engaged in the industry for many years, he has always been committed to metrology history research and metrology culture communication, and is one of the few industry experts in China with both metrology management practice, academic research ability, and metrology history and cultural literacy. He inherits the context with writing and connects the past and present with original aspiration, making the ancient metrology culture glow with new vitality in the new era.

He has long studied the development history of Chinese and foreign metrology, the Chinese ancient weights and measures culture, and the traditional humanistic connotation of metrology. He is good at exploring the civilized value, era significance, and development law of metrology.

He does it from the historical context of the millennium, connecting the inheritance context between ancient traditional metrology and modern precise metrology, forming a research system integrating professionalism, culture, and science popularisation.

He has delivered many special lectures on metrology history and culture, systematically sorting out the evolution of measurement units, the iteration of weights and measures systems, and the inheritance process of metrology civilisation, deeply interpreting the humanistic philosophy and era value behind metrology, enabling the public and young students to understand, respect, and love metrology.

Relying on a profound accumulation of historical research, Secretary-General Aiwen Ma has actively participated in the compilation of metrology professional works and cultural books, and has successively participated in compiling authoritative industry reference books such as the "*China Quality Inspection Work Manual*", "*Metrology Management Manual*", and "*Metrology Culture Manual*". At the same time, he has edited characteristic books such as "*Time Measurement in Chinese Poetry*" and "*Length Measurement in Chinese Poetry*", innovatively exploring metrology knowledge and metrology culture such as time and length in classical poetry, deeply integrating traditional literature with metrology science, popularising metrology history and culture in a popular and vivid form, making rigorous metrology science have both literary temperature and historical thickness.

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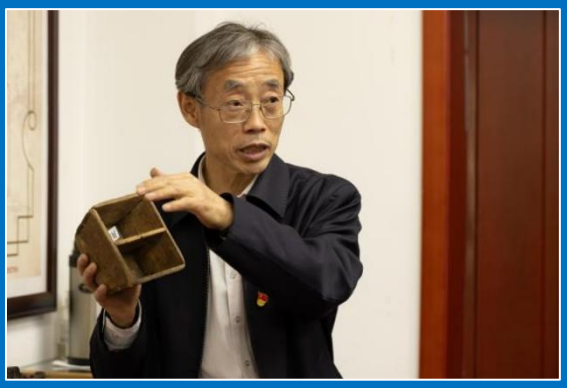
In various industry seminars, university lectures, and science popularisation activities, he often traces the development process of metrology, systematically interprets the evolution of human measurement units from human body measurement, natural object measurement to precise physical definition, and sorts out the far-reaching influence of China's ancient weights and measures theoretical system on global metrology development.

He always emphasizes that weights and measures are the rulers of civilisation, and the history of metrology is the history of human civilisation evolution in understanding nature, regulating society, and pursuing precision. The innovative development of modern metrology is always rooted in the profound accumulation of millennium metrology culture. He insists on educating people with culture and history, integrating metrology history, metrology philosophy, and metrology spirit into daily science popularisation and talent training, guiding metrology workers in the new era to stay true to their original aspiration, inheriting ingenuity, and innovating for the future.

From institutional construction and technological innovation to academic deep cultivation and cultural inheritance, Secretary-General Aiwen Ma has always been based in the industry and dedicated himself to practice. Internally, he deeply cultivates industrial empowerment, cultivates young talents, and inherits metrology culture; externally, he builds international bridges, conveys China's voice, and jointly builds a global ecosystem.

With decades of unchanging original aspiration, he has consolidated the industry foundation with professional deep cultivation, continued the metrology context with cultural feelings, led open cooperation with an international vision, and written the persistence, responsibility, and love of metrology workers in the new era in an ordinary post, continuously injecting a steady stream of endogenous power into the high-quality development of China's metrology cause and the collaborative development of global metrology.



In the picture, Mr Aiwen Ma

Written by Mr Aiwen Ma, IMEKO Member Organisation representative for over 20 years.

On this occasion, IMEKO thanks Mr Aiwen Ma for his many years of service to the Confederation.

INTERNATIONAL SYMPOSIUM ON MEASUREMENT CONTROL IN ROBOTICS - ISMCR 2026, RIO DE JANEIRO, BRAZIL

Bringing the ISMCR 2026 symposium to Rio de Janeiro.

An interview with Dr Geraldo Gurgel Filho - General Chairperson of ISMCR 2026.

Dr Geraldo Gurgel is an engineering educator and senior academic manager at the Universidade Estácio de Sá / YDUQS Educational Group in Brazil, and a member of IMEKO TC17 - Technical Committee dedicated to Measurement in Robotics.
He serves as General Chair of the 27th International Symposium on Measurement and Control in Robotics (ISMCR 2026), to be held on 17-18 September 2026, Rio de Janeiro, Brazil,

In this interview, Prof. Gurgel shares a few words about himself and the motivation behind bringing ISMCR to Brazil. He shares his passion, dedicated efforts, and vision for the role of robotics, metrology, artificial intelligence, and advanced measurement systems in the near future.

Prof. Gurgel, it is a pleasure to have this interview with you. Could you tell a little bit about your background, your work, and how you came to know about IMEKO?

I graduated in Engineering from the Military Institute of Engineering (IME - Brazil), and my professional path has always been strongly connected to engineering, applied research, measurement-oriented systems, strategic technologies, and education.

Part of my trajectory was developed within the Brazilian Armed Forces' technological and research environments.
This regards especially science, technology, and engineering programmes, involving R&D&I, autonomous systems, inertial navigation technologies, unmanned platforms, advanced instrumentation, and international scientific and technological cooperation. I retired from the Brazilian Army as a Lieutenant Colonel after a long career combining engineering, technological development, and multidisciplinary project coordination.

After many years in engineering and technological environments, I progressively expanded my activities toward higher education, engineering education, digital learning systems, (AR/MR/VR), and quantitative modeling applied to large-scale educational ecosystems.

Today, I am involved in engineering, educational innovation, and large-scale digital learning operations associated with the Universidade Estácio de Sá, one of the largest educational brands in Brazil, and part of one of the largest educational ecosystems in Latin America, comprising more than 1.3 million active learners across multiple programmes and digital learning environments.

This operational environment provides a rare real-world setting for examining measurement-driven educational systems, AI-assisted adaptive learning architectures, probabilistic assessment infrastructures, learning analytics, and longitudinal behavioral-response modeling under large-scale, continuous observation conditions.

INTERNATIONAL SYMPOSIUM ON MEASUREMENT CONTROL IN ROBOTICS - ISMCR 2026 RIO DE JANEIRO, BRAZIL

This trajectory has evolved into what we are now exploring as "Learning Metrology": an interdisciplinary research direction that applies concepts from measurement science, adaptive systems, uncertainty-aware modeling, and human-in-the-loop architectures to large-scale educational environments.

How did you find out about IMEKO and TC17?

My first contact with IMEKO was through Dr Simone Keller Füchter in 2022, who at that time was serving as Scientific Secretary of TC17 and was also connected to the same university environment in Brazil. Upon her invitation, I had the opportunity to meet and come closer to the IMEKO TC17 community, and to participate in activities associated with the online ISMCR 2022 edition.

It was also during this period that I met Dr Zafar Taqvi, the Chairperson of IMEKO TC17. His vision, support, and encouragement were extremely important to me. It marked the start of my participation in several meetings and scientific discussions connected to TC17 and ISMCR activities, gradually becoming more involved with the community before becoming an official TC17 member in 2024.

I remain very grateful for the trust, encouragement, and friendship I received from Dr Taqvi and from many colleagues within the IMEKO community. After his recent passing, these memories and experiences became even more meaningful to me personally. In many ways, being part of ISMCR 2026 today is also a continuation of that journey and of the motivation that he helped inspire. We certainly intend to honor his legacy during the Symposium in Brazil.

My involvement with the IMEKO community became stronger through scientific participation and collaboration in recent international events.

In 2024, colleagues from the Universidade Estácio de Sá and I presented a paper together at the XXIV IMEKO World Congress in Hamburg, Germany, entitled "Bridging Mathematics and AI: A Novel Approach to Goldbach's Conjecture". The work explored connections among artificial intelligence, computational modeling, heuristic analysis, mathematical structures, and prime-number-related problems, including perspectives on cryptography, computational security, and future quantum-computing-oriented analytical approaches. That research later evolved into an extended article published in the Measurement Journal by Elsevier, expanding the investigation toward computational metrology, heuristic signal-based modeling, and AI-assisted analytical approaches.

A particularly memorable experience at the Hamburg IMEKO World Congress was the opportunity to engage in a personal conversation with Nobel Laureate Dr Klaus von Klitzing during an informal scientific dialogue following his plenary lecture. I had the chance to briefly present some of the hypotheses and visual analytical patterns we are exploring in our research.

In the picture from left: Dr Klaus von Klitzing, Dr Simone Keller Füchter, and Dr Geraldo Gurgel Filho

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Despite belonging to completely different physical domains, some graphical behaviours and mathematical representations showed interesting visual similarities with the concepts and experimental representations presented by Dr von Klitzing in his plenary lecture on the Quantum Hall Effect.

This type of scientific exchange is one of the most valuable aspects of IMEKO events. Sometimes, a congress not only disseminates research, but also changes the way we think about our own research.

In 2025, we continued this research direction within the IMEKO TC17 community through ISMCR 2025, held in Belgium, where we further explored Learning Metrology, adaptive educational systems, semantic sensing, and digital twin-like representations of large-scale human-centered environments.

These studies investigate how educational-response dynamics may be interpreted through measurement-driven architectures inspired by concepts commonly explored in intelligent systems, robotics-related environments, adaptive autonomous systems, and human-in-the-loop operational frameworks. The very large operational scale of our educational ecosystem—involving millions of assessments per semester, longitudinal observation cycles, and extremely large student populations—creates a rare real-world environment for investigating adaptive cognitive-response behaviour under continuous interaction. This has progressively opened new interdisciplinary perspectives, connecting Learning Metrology, intelligent systems, semantic sensing, and AI-assisted adaptive architectures.

It has sparked broader discussions about human-centered robotic and autonomous-system environments.

In the picture: the conference scene at IDOMED Città - located in Barra da Tijuca, Rio de Janeiro, Brazil.

What inspired you and TC17 to pursue the opportunity to host ISMCR 2026 in Brazil?

The idea emerged from both scientific motivation and institutional opportunity.

IMEKO TC17 has built an important international community around robotics, measurement, and control systems. After participating more actively in the committee and in recent IMEKO events, I felt that Brazil and South America should also be more strongly connected to this movement.

Together with colleagues and institutional support in Brazil, we prepared the proposal to host ISMCR 2026 in Rio de Janeiro. Brazil was selected, and this became a very meaningful opportunity for us.

ISMCR 2026 represents a landmark edition, as the first full in-person ISMCR formally hosted in South America and one of the first major IMEKO TC17 events held in the Southern Hemisphere.

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For us at the Estácio University Group, this is not only the organisation of an international symposium. It is also an opportunity to strengthen scientific collaboration, international visibility, and integration among Brazilian researchers, Latin America, and the broader IMEKO community, while reinforcing the connection between engineering education, measurement science, intelligent systems, and emerging interdisciplinary technological environments.
Within this broader ecosystem, the Universidade Estácio de Sá serves as the host institution for ISMCR 2026 in Brazil, representing one of the major academic institutions associated with the Estácio educational network.

Why do you think ISMCR is particularly relevant today?

Brazil already has a very active robotics, automation, and engineering community, with important national initiatives, laboratories, research groups, and conferences.

In this context, ISMCR brings a very specific and valuable international perspective centered on measurement, precision, sensing, traceability, reliability, and intelligent control systems.

These topics are becoming increasingly important as autonomous systems, artificial intelligence, humanoids, aerospace applications, digital twins, medical robotics, defense technologies, advanced industrial systems, and many other interdisciplinary technological environments continue to evolve. The strong connection between robotics and metrology is a distinctive aspect of IMEKO TC17 and ISMCR.

Emerging technologies increasingly depend on accurate measurement, validation, uncertainty analysis, and trustworthy autonomous operation.

What may participants expect from ISMCR 2026?

ISMCR 2026 will have a strong international focus. The official language is English, and accepted papers will be published by Springer, with indexing in international databases such as Scopus, Web of Science, and Ei Compendex.

The symposium topics are intentionally broad and interdisciplinary, including robotics, sensors, smart sensing, measurement reliability, calibration, traceability, learning systems, AI and machine learning, augmented, mixed and virtual reality (AR/MR/VR), embedded platforms, digital twins, simulation, industrial automation, smart manufacturing, medical robotics, aerospace applications, human-robot interaction, autonomous systems and related fields.

The venue will be the IDOMED/Estacio - YDUQS auditorium at Città América, in Barra da Tijuca, Rio de Janeiro.

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It is offering a modern, well-located environment for technical sessions, networking, and scientific exchange. The venue is part of IDOMED, the medical education division of the YDUQS educational group in Brazil, which comprises 18 medical schools distributed across the country. IDOMED/Estacio itself is one of the educational segments within the broader YDUQS ecosystem, which includes multiple educational brands and institutions throughout Brazil.

We are also working on keynote lectures featuring researchers and professionals affiliated with important international institutions and projects.

How has the dissemination process been so far?

It has been very active and international. A major part of the work behind ISMCR 2026 has involved direct contact with researchers, laboratories, scientific groups, and institutions from different regions of the world, always seeking to strengthen visibility, collaboration, and participation within the IMEKO TC17 community.

ISMCR 2026 has already attracted strong international scientific interest across interdisciplinary domains associated with robotics, measurement science, adaptive systems, intelligent technologies, and human-centered engineering environments.

From my previous experience in organising scientific and technological events, I believe that infrastructure, logistics, and operational support are all important. However, the true foundation of a successful scientific symposium is always the quality and consistency of its technical programme.

For this reason, ISMCR 2026 is being conducted with a strong commitment to scientific quality, technical rigor, and constructive peer-review standards, reinforcing the long-standing international tradition associated with IMEKO's scientific events and Springer publications.

The Symposium is the result of an international collective effort within IMEKO TC17. After the important legacy built over many years by Dr Zafar Taqvi, whose dedication played a fundamental role in the consolidation and international growth of ISMCR and the IMEKO TC17 community, the current TC17 leadership – including Dr Bálint Kiss, Dr Simone Keller Füchter, Dr Ioan Doroftei, and Dr Fumihiro Kato – together with colleagues from both the international and national scientific committees, have been actively contributing to continue and strengthen this tradition and to make ISMCR 2026 possible.

The Brazilian IMEKO Member Organisation INMETRO and the Universidade Estácio de Sá are both involved in this event.
What role do they play in ISMCR 2026?

The Universidade Estácio de Sá, is the active host institution for ISMCR 2026 in Brazil and one of the academic institutions associated with the broader Estácio educational network, which belongs to the YDUQS educational ecosystem in Brazil.

For the Universidade Estácio de Sá, ISMCR 2026 is also an opportunity to reinforce its international scientific visibility and to associate the Estácio educational brand with emerging discussions involving measurement science, intelligent systems, AI-assisted technologies, adaptive systems, and Learning Metrology.

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Inmetro – Brazil's National Institute of Metrology, Quality and Technology, and the Brazilian Member Organisation of IMEKO – is providing important institutional support. This is very meaningful because it connects academic research, engineering education, metrology, innovation, and international scientific cooperation.

Do you have any message to the community as the organiser of ISMCR 2026?

In the picture, Windsor Marapendi Hotel - located in Barra da Tijuca, Rio de Janeiro, Brazil. This hotel is planned to host the ISMCR 2026 gala dinner and is one of the two reference hotels recommended on the symposium website for participants. It is also expected to accommodate the invited keynote speakers associated with the Symposium.

I would like people to feel that ISMCR 2026 is being organised with genuine dedication, scientific seriousness, and enthusiasm.

Organising an international symposium is always challenging, but we are strongly committed to building a high-quality scientific environment that fosters collaboration, visibility, and long-term connections.

Brazil has a very active scientific and engineering community, and Rio de Janeiro is a city that naturally attracts international interest.

We hope participants will not only enjoy the scientific quality of the Symposium, but also the experience of being part of a welcoming, collaborative, and international atmosphere.

It will be a great pleasure to welcome the IMEKO community to Rio de Janeiro.

In the picture, Rio de Janeiro.

Quick Information:

Event: 27th International Symposium on Measurement and Control in Robotics - ISMCR 2026

Dates: September 17-18, 2026

Location: Rio de Janeiro, Brazil

Venue: IDOMED/YDUQS Auditorium - Città América

Proceedings Publisher: Springer

https://meteor.springer.com/ISMCR2026

Official Website:

https://ismcr.org/2026-ismcr/

Contact:

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IMEKO GOES TO YOUNG SCIENTISTS

Zeliha Hanım Karapınar: Shaping the Future of Precision: The Convergence of Intelligent Metrology and Robotics.

I am a mechanical engineer, and that identity is at the very core of how I see technology, problems, and the world. Currently, I am pursuing my Master's degree in Mechatronics Engineering at Sabancı University, conducting research on humanoid robotics at the Robotics, Kinematics, and Motion Control Laboratory under the supervision of Prof. Kemalettin Erbatur.

Every day, I work at that fine line where theory meets action, translating the mathematics of robot kinematics into real-time, adaptive behaviour. My path toward mechatronics was not accidental.

Throughout my undergraduate years, I found myself increasingly drawn to problems that sit at the intersection of data-driven methods and physical systems. My capstone project on explainable deep learning for bearing fault diagnosis, my TÜBiTAK Star research on cutting force prediction using machine learning, and my TÜBITAK 2209 - A project on control algorithms for an automatic online balancing system all pointed in the same direction: I am most alive, intellectually, when sensing, modeling, and control come together in one system.

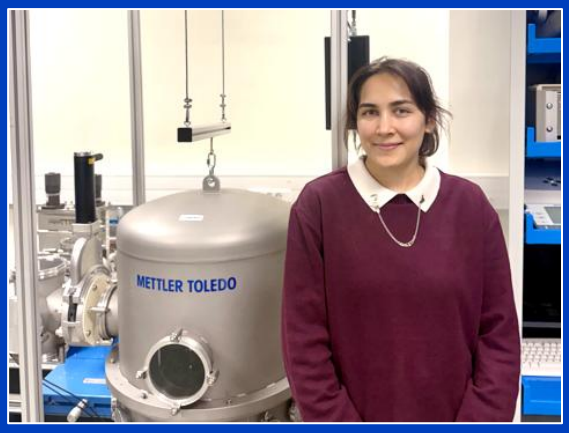
That convergence is the heart of mechatronics, and it is why I chose this path.

My bachelor's thesis, titled "Explainable Deep Learning-Based Bearing Diagnosis: A Powerful & Trusted Approach," and supervised by Assoc. Prof. ˙Ibrahim Sina Kuseyri was perhaps the clearest early signal of this direction. The project combined signal processing, mechanical design, and artificial intelligence to create a coherent whole. It has reinforced my core conviction: the most robust, pioneering solutions are born not within a single discipline, but at the intersections of several.

My Path to the Mass Laboratory

I never planned to become a metrologist. As an undergraduate, metrology felt distant to me, a world of rigid standards and textbook protocols, far removed from the dynamic systems I was drawn to. That perception shattered the moment I joined the Mass and Solid Volume/Density Laboratory at TÜB˙ITAK UME. Walking in for the first time, I felt something shift. This was not theory observed from a distance; this was real value being generated, in real time, with real consequences. The realisation that the entire global chain of measurement traceability depends on the precision cultivated within these walls left me genuinely in awe. But what truly changed me was something more personal. For the first time, I saw my theoretical knowledge brought to life in the real world.

IMEKO GOES TO YOUNG SCIENTISTS



In the picture, Zeliha Hanım Karapınar is standing in the laboratory of mass.

Every formula I had studied, every principle I had relied on, was not an abstraction here. They were the reason a measurement was valid or invalid, the reason a standard could be trusted across continents. That connection between theory and consequence made me fall in love with laboratory work in a way I had never expected.

Learning from Mentorship and Overcoming Challenges

This transformation had a guide: my supervisor, Assoc. Prof. Beste Korutlu. Working with her has been one of the most formative experiences of my career. As a physicist, she sees things differently from the engineering mindset I had been trained in. She taught me to look beneath the surface of the data, to pursue absolute precision not as a rule to follow, but as a reflection of your true commitment to the work. Under her mentorship, I did not just learn to operate laboratory equipment; I learned to think like a scientist.

What she showed me, above all, is that true innovation lies in dialogue between disciplines. Engineering without rigorous physical inquiry becomes brittle. Physics without practical problem-solving stays abstract.

The combination is where something extraordinary becomes possible.

With this mindset, I immersed myself fully in laboratory work. I have conducted primary- and secondary-level mass calibrations in the range of 1 mg to 1000 kg for determining the true and conventional mass values of the weights, along with solid density and volume calibrations ranging from 1 g to 50 kg. Participating in the calibration of non-automatic weighing instruments greatly enhanced my practical understanding of measurement uncertainty analysis, international standards such as OIML and ISO/IEC 17025, and the kind of meticulous data evaluation that leaves no room for error.

In the picture, Assoc. Prof. Beste Korutlu and Zeliha Hanım Karapınar at TÜBITAK Gebze campus.

However, as an engineer passionate about computer vision, machine learning, and reinforcement learning, I had a persistent question.

IMEKO GOES TO YOUNG SCIENTISTS

How can I incorporate intelligent automation into these legacy, protocol-driven frameworks without ever compromising their rigor?

Bridging Metrology and Artificial Intelligence

This question gradually became one of the central research directions in our laboratory: the automated generation of Digital Calibration Certificates (DCCs). Traditional mass calibration workflows still rely heavily on manual data recording and device-specific communication structures, limiting their integration into modern digital infrastructures. In response, our ongoing research focuses on developing platform-independent approaches to automatically generating DCCs directly from raw calibration data across diverse digital environments, supporting intelligent, reliable, and traceable metrological workflows. Although the project is still in its development and application phase, it already demonstrates the practical feasibility of communication-independent digital calibration workflows. Beyond this work, I am actively involved in multiple laboratory projects, particularly those that explore the integration of machine learning, computer vision, and data-driven methodologies into mass and volume metrology.

Envisioning the Future of Measurement Science Together

Precision measurement is the foundation beneath all advanced technology, and working in robotics has made me see, with striking clarity, how inseparable these two fields are.

The mass comparators and high-precision balances I work with daily are not static instruments anymore. They have evolved into automated, robotic systems. As a mechanical engineer focused on robotics, I see an extraordinary opportunity at this intersection, and I am not merely curious about it. I aim to be directly involved in designing and manufacturing the next generation of automated mass comparators; systems where robotics and metrology are not parallel tracks but a single, unified discipline. Beyond hardware, I believe robotic intervention is the most promising path to eliminating human error from precision measurement. Designing assistive robotic components that remove factors like hand tremor or minor positioning inconsistencies during delicate calibration processes will redefine what accuracy means in the laboratory.

I hope this journey shows something beyond the technical details: that stepping outside your comfort zone, genuinely, without a safety net, can lead you somewhere you never imagined. This is a story about persistence, about a physicist and an engineer learning from each other, and about the remarkable things that happen when disciplines stop competing and start converging. As I look ahead, I am determined to keep exploring the convergence where artificial intelligence, robotics, and metrology meet to open paths that have not yet been mapped.

Written by By Zeliha Hanım Karapınar, TÜBITAK UME & Sabancı University˙Turkiye

DR VALENTINA BELLO AND PROF. LUIGI ROVATI ON PHOTOMET EDUMET AND YOUNG SCIENTISTS

In the picture, Lake Side Science Technology Park, the conference venue.

On the occasion of IMEKO PHOTOMET EDUMET 2026 with TC1 - Education and Training in Measurement and Instrumentation and TC2 Photonics, Symposium: Metrology in Transition: Education, and the Impact of AI & Robotics, 31 August - 2 September 2026, Klagenfurt, Austria, [Web site], IMEKO conversed with Dr Valentina Bello, the leader of the group WYSM, Working Group of Young Scientists and Junior member of IMEKO TC2, and Prof. Luigi Rovati, Chairperson of TC2 and driving force of the creation of Junior membership in TC2 and the upcoming conference in Klagenfurt, Austria.

Prof. Rovati, you and this conference are taking the initiative of the Junior membership and the WYSM to the next level. Could you say a few words about your upcoming conference?

Prof. Rovati: The event will bring together researchers, engineers, and industry professionals to explore cutting-edge advancements in metrology and their impact across diverse domains such as automotive, healthcare, robotics, manufacturing, and environmental monitoring.

The conference programme will feature plenary sessions by leading experts, technical tracks, and special thematic sessions. Topics will include innovations in instrumentation and training, photonic metrology, optical sensing, and the integration of optics into next-generation industrial applications.

Participants are invited to present their latest research as an oral presentation or a poster to experts from industry and prestigious research facilities. Deadlines ahead of us are 15 June 2026 – Extended Paper deadline and 15 July 2026 – Final manuscript deadline.

The conference is focused, but not limited, to the main working topics of IMEKO's Technical Committee TC1, Education and Training in Measurement Sciences, and Technical Committee TC2, Photonics.

Could you share your view on the Junior membership, WYSM's current developments, and their involvement at the conference?

Prof. Rovati: Within our Technical Committee TC2 -Photonics, we strongly supported the creation of this initiative because we firmly believe that it can represent not only an important opportunity to enlarge the IMEKO community, but also a way to involve young members in an active and collaborative manner, encouraging them to contribute technically and scientifically to the future development and dissemination of IMEKO activities.

We are truly fortunate to have Valentina leading this group; her enthusiasm and energy are exactly what IMEKO needs for the future.

WITH DR VALENTINA BELLO AND PROF. LUIGI ROVATION PHOTOMET EDUMET 2026 AND YOUNG SCIENTISTS

For the conference in Klagenfurt, we plan to reserve dedicated space for IMEKO-WYSM activities. We would like Valentina and Andreas (Dr Matwieser), our other junior member within the TC2, to present the initiative, introduce the "rules of engagement" for young scientists interested in joining the group, and, at the same time, promote the initiative in an engaging and interactive way to encourage participation and networking among young researchers.

We are also considering organising a hybrid/remote connection so that this event can be shared with the other Technical Committees and possibly with additional young researchers who may not attend the conference in person.
We believe this could help maximize the visibility of the WYSM initiative across the IMEKO community.

Regarding the session structure, we are currently considering a format that combines short presentations with an open discussion, enabling young participants to interact directly with experienced researchers and IMEKO community representatives. The main goal is to foster connections and share experiences.

During the conference, we also intend to discuss possible mechanisms to facilitate the participation of young researchers in IMEKO activities, including mobility initiatives, doctoral schools, and opportunities for international collaboration among Technical Committees.

We strongly believe this initiative deserves broad visibility and support.

IMEKO: You are absolutely right!

Dr Bello, you will have a dedicated space at the conference. Could you say a few words about what you will present there?

Dr Bello: I am very excited about this! At PHOTOMET EDUMET Klagenfurt, this will be the time within the congress programme to officially introduce WYSM to the community. I will present what WYSM is, why it was created, and the initiatives we have in mind to give young researchers and professionals in measurement science greater visibility and a stronger voice within IMEKO. The presentation will be followed by a Q&A session and informal networking time, which I believe will be highly valuable. It will be a wonderful opportunity to meet the young researchers attending the conference in person, connect with them, and hopefully inspire them to join the group. We truly hope this will be the first of many WYSM events! Andreas will be there to support me in making this happen.

On the other side, together with other young IMEKO members who have already shown great interest and enthusiasm for this initiative, we are working on a proposal for a Special Session at the IMEKO World Congress in Rimini in 2027.
This session will be entirely dedicated to young researchers, giving them the opportunity to present their work and make themselves known to the broader IMEKO community. It will also be a unique chance to bring together young people from across the IMEKO world, foster new connections, and build a truly international network of the next generation of metrologists.

Thank you both very much for your time and your work. IMEKO wishes you much success with this conference and the TC's future.

INTRODUCING FEDERICO TRAMARIN, SPECIAL SESSION COORDINATOR OF THE IMEKO WORLD CONGRESS, 2027, RIMINI, ITALY

The IMEKO World Congress Rimini 2027 is now open for proposals for Special Sessions until 31 August 2026. Prof. Federico Tramarin is one of the coordinators of these. He is an associate professor at the Department of Management and Engineering of the University of Padua, Italy.

Prof. Tramarin, it's a pleasure to meet you and to have this conversation. Could you tell us briefly about your professional journey and how you came to choose your field of work?

My research journey began during my doctoral studies at the University of Padova, Italy, where I worked on the coexistence among wireless networks – a topic that was rapidly emerging at the time and that genuinely fascinated me. What I found most intriguing was its position at the intersection of measurements, networking, and programming: it felt like a way to advance classical measurement topics, including the development of a calibrated simulator to support experimental analysis, after my PhD, I moved to the National Research Council of Italy, where I worked on real-time networks and systems for industrial automation. That experience fed my inner passion for low-level systems programming, while keeping me grounded in experimental lab work – calibrating and optimising the algorithms I developed. I then became an Associate Professor at the University of Modena and Reggio Emilia, where I took on responsibility for Internet of Things measurement research and gradually broadened my perspective to include the automotive and biomedical fields. These share many interesting analogies with embedded real-time systems.

Some months ago, my journey came full circle, and I returned to Padova, where I am now part of the Department of Mechatronics. I am currently working on what I consider a significant step forward for my research: the interaction between measurements and machine learning, and the metrological characterization of machine learning systems.

What do you love most about your work?

What I love most is the possibility to keep moving, to diversify, to look at the world from different angles – and at the same time to discover analogies and hidden connections across topics that seem unrelated at first. I also deeply enjoy the interplay between theoretical studies and experimental analysis: there is something uniquely satisfying about seeing your ideas validated in the lab, and about having them reshaped by what the lab reveals. Teaching is another dimension I treasure deeply: the chance to share my passion with students, in the hope of passing on that same drive for curiosity and deeper understanding. Seeing them grow, explore, and make their first discoveries in the lab – that is genuinely thrilling. Lately, I have also been drawn to more philosophical and foundational thinking about metrology and science more generally, which I find both humbling and energising.

Then there are the people: I love the collaborations, the debates, the discussions with colleagues, especially when those professional exchanges grow into genuine friendships and shared ways of seeing the world.

INTRODUCING FEDERICO TRAMARIN, SPECIAL SESSION COORDINATOR OF THE IMEKO WORLD CONGRESS, 2027, RIMINI, ITALY

How did you come to join the IMEKO World Congress 2027 organising team?

It happened in a way I did not quite expect. Over the years I had accumulated substantial experience in conference organisation, as I have served as General Chair of IEEE MetroAutomotive 2024 (for which I have been Programme Chair in 2022, 2023, and 2025), as Programme Chair of IEEE M&N in 2024 and 2026, and of IEEE ETFA 2024 (with more than 300 participants), and as Associate Technical Programme Chair of I2MTC from 2022 to 2026, and also Special Session Chair of M&N 2022, INDIN 2021, and ETFA 2020. At some point, I felt the desire to also bring this experience to the IMEKO community, so I reached out to Prof. Pasquale Daponte to express my willingness. That conversation went well, but I did not think much more about it at the time, and honestly, I had actually forgotten that the IMEKO World Congress was going to be organised in Italy by Prof. Daponte and Prof. Carbone. Then, a few days later, he called me one evening, quite out of the blue, to offer me the role of Special Sessions Coordinator for the 2027 Congress. He mentioned that he and Prof. Carbone had already discussed it, and that they both believed I could be a significant asset in that position. I must admit it caught me off guard. I was genuinely surprised and, honestly, a little scared, too, because an event of this scale deserves to succeed, and I feel the weight of that responsibility. But the trust they placed in me was something I could not turn down, and I am determined to do everything I can to contribute to its success.

Which aspect of the event do you find most significant?

What strikes me most about the IMEKO World Congress is its role as a gateway for an extraordinarily heterogeneous set of realities from across the world. It brings together not only individual researchers, but also organisations, national metrology institutes, and industry representatives, a breadth that very few events in our field can match. It is arguably the largest research conference in measurement science, and that alone makes it a unique platform for visibility, exchange, and collaboration. The programme is further enriched by strong industrial connections: the presence of exhibitors provides a direct bridge between cutting-edge research and real market applications, giving participants a concrete sense of where the field is heading. And I am pleased to share that this edition will feature highly distinguished keynote speakers who will offer the audience authoritative and forward-looking perspectives on the future of metrology and measurement science.

I also believe that the special sessions will represent an extraordinary opportunity for the community to embrace a truly interdisciplinary perspective. We aim to bring together a rich collection of sessions devoted to themes at the intersection of different IMEKO Technical Committees, covering topics that do not neatly fit into a single disciplinary box but are precisely where some of the most exciting and forward-looking research is happening today. This cross-cutting dimension is something I personally care about deeply, as it resonates with my own research journey across different fields. The opportunity to contribute to shaping that part of the programme is one I do not take lightly, and I will do my very best to help make the 2027 edition a success.

CITESCORE METRICS RECOGNISE THE GROWTH OF ACTA IMEKO: FOR THE FIRST TIME, THE JOURNAL IS IN Q2!

Just like students receive their school reports, scientific journals are also regularly evaluated. In the case of scientific publishing, the 'grades' are assigned based on the quality and the impact of the published papers. Thus, each year, around May to June, every editorial board is on tenterhooks awaiting the publication of the new metrics that will determine the journal's position in international rankings.

But how to evaluate the work of a scientific journal?

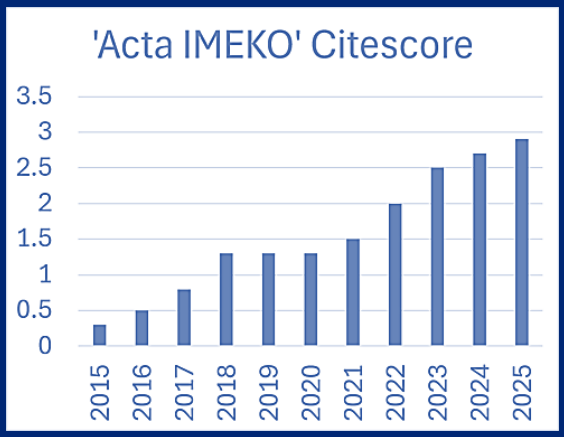
Finding the correct methodology to 'measure' its performance is surely not straightforward, and it would be a real headache even for the best metrologists. Anyway, nowadays, the academic world has accepted the use of scores and rankings derived from bibliometric indicators (such as the number of published papers or the number of citations received per paper). One of the most widely recognised parameters is the Citescore, developed by Elsevier and based on data from the Scopus database. It computes the average number of citations received per document published in a journal, and it is calculated each year simply using the following formula:

$$Citescore = \frac{Citations\ received\ in\ the\ last\ 4\ years}{Documents\ published\ in\ the\ same\ 4\ years}$$

Thus, the Citescore value determines the position of the journal in a ranking (each scientific field has a dedicated ranking). Consequently, the journal is positioned in the first quartile (Q1, the top 25%), second quartile (Q2, 25%-50%), or Q3, or Q4.

The higher the quartile, the greater the prestige of the journal, and thus the possibility of attracting the contribution of distinguished researchers in the future, thereby strengthening the journal's role as a leading reference for that scientific field.

After this brief explanation of the context, let's move on to the main point. Acta IMEKO recently received its Citescore value for the year 2025 and got a solid 2.9 score. This value has been constantly increasing over the last 5 years, indicating a positive path of growth for the Journal. In the figure, you can see the trend of the Citescore value from 2015 to 2025 for Acta IMEKO.



This improvement then is reflected in the ranking for the 3 categories associated with Acta IMEKO: 'Electrical and Electronic Engineering', 'Instrumentation', and 'Mechanical Engineering'. For 'Electrical and Electronic Engineering', Acta is in the 52nd percentile, i.e. in the second quartile (Q2); for 'Instrumentation', it is in the 57th percentile (Q2); for 'Mechanical Engineering', it is in the 49th percentile (Q3).

CITESCORE METRICS RECOGNISE THE GROWTH OF ACTA IMEKO: FOR THE FIRST TIME, THE JOURNAL IS IN Q2!

Considering that Acta IMEKO is a diamond open-access journal published directly by IMEKO, this news should make every person involved or collaborating with IMEKO proud. Specifically, this is the outcome of a collaborative effort involving many actors:

- of course, the Editor in Chief, who has the responsibility for the Journal's academic quality, editorial direction, journal vision, publication standards, and helps shaping the Journal's long-term strategy and reputation;
- the Editorial Board, which is directly involved in the peer-review process of the submitted manuscripts;
- the Editorial Team (composed of copyeditors and layout editors), who perform the final editing of the accepted papers; and then
- the Authors, who contribute with their research, and (last but not least) the Reviewers, who guarantee the quality standard of accepted papers.

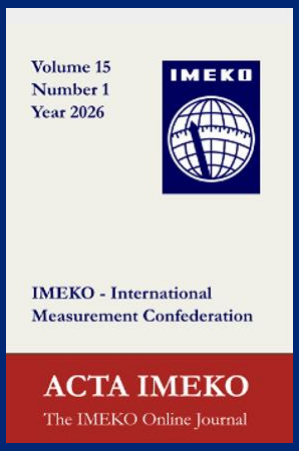
Taking into account that all these roles are held on a voluntary basis, the achievement becomes even more impressive.

To conclude, we invite you to actively support Acta IMEKO in its path of growth by:

- reviewing the submitted papers;
- keeping up-to-date with the papers published by the Journal (they are open access, so anyone can download them, at no cost);
- citing Acta IMEKO papers when preparing your future manuscripts.

Acta IMEKO papers are indexed in Web of Science, Scopus, and DOAJ (Directory of Open Access Journals). Acta IMEKO issues can be found on the journal website: https://acta.imeko.org/ where you can also find the rules for submission, and rules for new manuscripts. We look forward to receiving your contributions!

Written by Prof. Francesco Lamonaca, Editor in Chief, and Dr Leonardo Iannucci, Editorial Board Member.



The first issue of volume 15 (year 2026) of Acta IMEKO with 20 research papers is available online.

The published works span a wide spectrum of applications, such as biomedical diagnostics, industrial metrology, energy systems, environmental monitoring, advanced instrumentation, and digital infrastructures. Such diversity reflects the intrinsic interdisciplinarity of modern metrology and its increasing integration with computational intelligence, digital technologies, and emerging paradigms such as Industry 4.0 and Metrology 4.0.

For a quick overview, a table of contents is available on the Acta IMEKO page. https://acta.imeko.org/

IMEKO JOINT CONFERENCE CONCLUDED IN HANGZHOU, CHINA

The TC3 Measurement of Force, Mass, Torque, and Gravity, TC5 Hardness Measurement, TC16 Pressure and Vacuum Measurement, TC20 Measurements of Energy and Related Quantities, and TC22 Vibration Measurement Joint Conference took place from 23 - 27 March 2026, in Hangzhou, China.

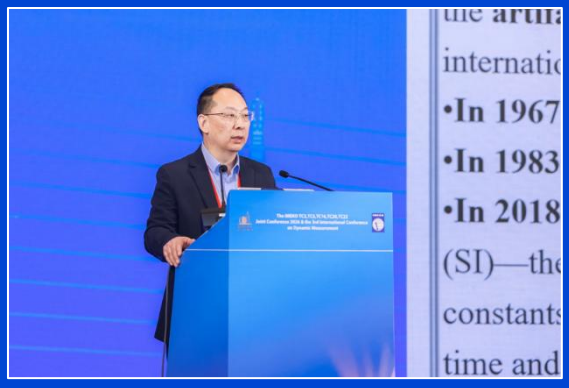
On 24 March, the IMEKO TC3, TC5, TC16, TC20, TC22 Joint Conference 2026 and the 3rd International Conference on Dynamic Measurement officially opened in Hangzhou.

This conference marked the first time these five IMEKO Technical Committees had jointly convened in China. The event was organised by the Chinese Society for Measurement and the Changcheng Institute of Metrology and Measurement.

At the opening ceremony, Dr Wynand Louw, President of the BIPM, addressed the conference via video message. The ceremony was chaired by Chief Expert Zhang Li of the Changcheng Institute of Metrology and Measurement.

In the picture, Dr Wynand Louw, President of the International Committee for Weights and Measures (CIPM)

In the picture, Chief Expert Zhang Li, Chairperson of the opening ceremony.



In the picture, Academician Li Detian.

IMEKO JOINT CONFERENCE CONCLUDED IN HANGZHOU, CHINA

During the opening session, Academician Li Detian of the Chinese Academy of Engineering, also a Researcher at the Lanzhou Institute of Physics, delivered a keynote speech entitled *Space Metrology and China's Aerospace Missions*. Using representative cases such as space vacuum leak detection, calibration for lunar dust detection, and testing and calibration of space charging and discharging effects, he addressed the urgent demand for improving data quality in future space exploration and proposed a vision for traceability pathways of space-related physical quantities as well as the future development of a space metrology system.

Following the opening ceremony, parallel sessions of TC3, TC5, TC16, TC20, and TC22 were held. Participants engaged in extensive discussions on the latest research progress, technical challenges, standards systems, and engineering applications in their respective fields, contributing valuable insights to the advancement of global measurement technology.

In the picture, the poster presentation area at the conference.

In addition to the technical sessions, the conference also featured poster presentations, technical exhibitions, and technical visits, providing a multi-level platform for academic exchange and promoting closer integration between fundamental research and engineering practice.

In the picture Prof. Adrian Podoleanu.

On 25 March, the conference entered another day of intensive academic exchange. A keynote speech entitled *Metrology of Coherence Gating in Biophotonics and Non-destructive Testing* was delivered by Professor Adrian Podoleanu from the University of Kent, United Kingdom, focusing on the application and metrology of optical coherence tomography (OCT).

The five Technical Committees continued their parallel discussions. Experts and scholars from around the world shared their latest research achievements and discussed key scientific and technical issues in force, mass, and torque measurement; hardness measurement; pressure and vacuum measurement; energy metrology; and vibration measurement.

IMEKO JOINT CONFERENCE CONCLUDED IN HANGZHOU, CHINA

In the picture, TC3 Chairperson Mr Andy Knott.

In the picture, TC5 Chairperson Dr Cihan Kuzu during the session.

In the picture, TC20 Chairperson Dr Bo Shu speaks during the session.

Also on 25 March, Prof. Zhang Li delivered a plenary speech titled "New Progress in Dynamic Measurement: From Primary Standards to Engineering Applications", which attracted wide attention from participants. Beginning with the core concept of dynamic measurement, the presentation provided a comprehensive overview of China's recent technological progress in this field. Mr Veldman Christiaan Smith, also a plenary speaker, presented *The Evolution of Vibration Metrology.*

In the picture, Prof. Zhang Li.

A total of 250 papers were presented at this conference, of which 124 were oral and 126 were posters.

On 26 March, the conference organised technical visits to a number of institutions and enterprises, including Alibaba Group Holding Limited, Hangzhou Hikvision Digital Technology Co., Ltd (Hikvision), Hangzhou Yunshenchu Technology Co., Ltd (Deep Robotics), Shanghai Institute of Process Automation & Instrumentation Co., Ltd. (SIPAI), the Metrology Museum of China Jiliang University, and Zhejiang Institute of Quality Sciences (ZQS.

SNIPPETS

IMEKO, the European Weighing Industry Association (CECIP) partner, was invited to the International Conference of Weighing (ICW) 8 - 10 June 2026 in Kitakyushu, Japan, to give a poster presentation on the Confederation.

The conference featured parallel sessions covering legal, scientific, and applied metrology, offering a broad and inclusive platform for the global weighing community.

IMEKO was happy to support this event and the weighing community.

The Directory of Open Access Journals DOAJ) has accepted IMEKO's Measurement Journal: Digitalization.

DOAJ is a massive, community-curated online index that lists high-quality, peer-reviewed, open-access scholarly journals from around the world.

This is a great step for this new Journal of IMEKO.

The 70th General Council and Technical Board Joint Sessions will take place on 24 - 25 August, at the Sukhothai Bangkok Hotel, Bangkok, Thailand. The agenda for this yearly meeting will be available soon.

IMEKO is about to launch a rede-signed website. Currently, the final touches are being finalised before the existing site's content is migrated to a more contemporary format.

The European Weighing Industry Association (CECIP) has invited IMEKO to present at one of its webinars about the IMEKO World Congress 2027 in Rimini, Italy.

The IMEKO Working Groups on Technical Committee Functioning and Technical Committee Events are continuing their work to further support IMEKO's growth.
Volunteers for these groups are welcome; please contact the Secretariat for more info.

The recent IMEKO FLOMEKO 2026 event by TC9 in Nara, Japan was very successful. A report on this conference will be available in the next issue of the Newsletter.

Eight IMEKO conferences are still ahead of us for this year. In addition, various TCs hold free online webinars at regular intervals.

OVERVIEW OF IMEKO CONFERENCES 2026-2027

1. TC1 Education and Training in Measurement and Instrumentation and TC2 Photonics Joint Symposium IMEKO PHOTOMET EDUMET 2026 - Metrology in Transition: Education, Photonics, and the Impact of AI & Robotics, 31 August - 2 September 2026, Klagenfurt, Austria. Website
2. TC4 Measurement of Electrical Quantities Conference with a Special TC11 Measurement in Testing, Inspection and Certification Technical Session, 16 - 18 September 2026, Prague, Czechia. Website
3. IMEKO TC7 Measurement Science, TC11 Measurement in Testing, Inspection and Certification, TC13 Measurements in Biology and Medicine, and TC21 Mathematical Tools for Measurements Conference Trusted Measurement, Trusted Analysis – Supporting Science-based Decision-making (incorporating Advanced Mathematical and Computational Tools in Metrology (AMCTM 2026) 27 - 29 October 2026, Faro, Portugal. Website
4. TC8 Traceability in Metrology, TC11 Measurement in Testing, Inspection and Certification, and TC24 Chemical Measurements Joint Conference, 26 - 29 August 2026, Metro Manila, Philippines. Website
5. TC10 20th Conference on the "Measurement for Diagnostics, Optimization and Control to Support Competitiveness and Innovation", 28 - 29 September 2026, Lisbon, Portugal. Website
6. TC15 Collegium 2026, 10 - 12 June 2026, Prague, Czechia.
7. TC17 ISMCR 2026, 27th International Symposium on Measurement and Control in Robotics, 17 - 18 September 2026, Rio de Janeiro, Brazil. Website
8. TC20 Measurements of Energy and Related Quantities, ICME 2026, International Conference on Measurement of Energy, 7 - 9 October 2026, Sohra, Meghalaya, India. Website
9. TC26 International Conference on Metrology for Archaeology and Cultural Heritage - MetroArchaeo, 14 - 16 October 2026, Bari, Italy. Website
10. XXV IMEKO World Congress, "Metrology for Humanity", 30 August - 3 September 2027, Rimini, Italy. Website

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