









### Dear Colleagues,

Welcome to the Joint Conference of IMEKO, TC8 Traceability in Metrology, TC11 Measurement in Testing and TC24 Chemical Measurements being held in Funchal, in the magnificent Island of Madeira in Portugal, from 11th to 13th of October 2023.

Following the recent success of the Joint Conference held in Cavtat-Dubrovnik, Croatia, in 2022, and strengthen the long tradition of cooperation between IMEKO Technical Committees, RELACRE (the Portuguese Association of Accredited Laboratories), is organizing the 2023 Joint Conference, together with IMEKO TC8, TC11 and TC24 and stakeholders. This event will bring together the TIC community, academia and industry, promoting latest's advancements in science and technology in many fields of measurement.

#### Why Madeira Island?

Madeira Island is a Portuguese jewel discovered in the XV Century in the Atlantic Ocean, known for the nice tropical weather, a place full of authenticity where art, culture and nature provide incredible experiences and lasting memories. Visitors are amazed with the exotic colours of the flowers, the blue sea and the emerald green vegetation; this is an archipelago where two thirds are a protected area and where the largest Laurisilva forest in the world is located. Funchal, its main City, is famous for its hospitality, gastronomical heritage and vibrant environment all over the places.

This joint Conference will be an unmissable chance to share your competence, expertise and innovation with scientific and technical experts, promoting your organisation and creating impact. This event will bring together experts in a wide diversity of domains, being expected to have participants from all over the world, networking in sessions covering the horizontal aspects of traceability, chemical measurements and testing, inspection and certification, bringing innovative solutions and discussing new ideas.

The organizing committee



IMEKO is a non-governmental federation of 42 Member Organizations individually concerned with the advancement of measurement technology. Its fundamental objectives are the promotion of: international interchange of scientific and technical information - in the field of measurement and instrumentation – the enhancement of international co-operation among scientists and engineers from research and industry. Founded in 1958, the Confederation has consultative status with UNESCO and UNIDO and is one of the five Sister Federations within FIACC: Five International Associations Co-ordinating Committee, further consisting of: – IFAC- International Federation of Automatic Control, - IFIP - International Federation for Information Processing, - IFORS -International Federation of Operational Research Societies and – IMACS - International Association for Mathematics and Computers in Simulation.



## Joint Conference of TC8, TC11 and TC24 Mottos

TC8, New challenges and opportunities in traceability

TC11, Testing, Inspection and Certification for confidence and safety

TC24, New perspectives in Chemical measurements



Hotel Vidamar Congress Center, Funchal, Madeira Island (Portugal)



#### **SUMMARY OF TOPICS for TC8 – Traceability in Metrology**

- Digital twins
- **Energy-related topics**
- Traceability in AI, self learning systems and big data
- Metrological traceability in chemistry (primary reference methods and primary standards)
- Reference materials and certified reference materials
- International cooperation and SI traceability in chemistry, pharmacy and medicine
- Standardization

#### SUMMARY OF TOPICS for TC11 - Measurement in Testing, Inspection and Certification

- Management systems and Quality in the TIC sector
- Regulatory framework for quality, safety and security of products and services (agrifood, environment, health, cybersecurity, communication, construction, IoT, AI, among others)
- Innovation and validation of methods in testing, calibration, inspection and certification
- Sampling activities related to measurements in the TIC Sector
- Metrological traceability, measurement uncertainty and conformity assessment in TIC Sector
- Certification of reference materials and their use in laboratories
- Certification of products, processes, management systems and persons
- Digital transformation in testing, inspection and certification
- Measurements as an enabler of economic development
- Quality management and conformity assessment in TIC Sector
- SMART Metrology and TIC: Demands and new opportunities in the incorporation of Key Enabling Technologies (KET's)
- Other TIC issues

#### **SUMMARY OF TOPICS for TC24 – Chemical Measurements**

- Traceability and fundamental chemical metrology
- Chemical and biochemical sensors
- Separation techniques
- Gas-phase chemical measurements
- Measurements for Cultural Heritage
- **Process Analytical Technology**
- Validation, uncertainty and quality control in chemical measurements
- Chemical measurements for environment
- Chemical measurements for food and agriculture
- Chemical measurements for health and biomedical applications
- Data integrity and digitalization



# Important Dates

Abstract submission – Until 1st April 2023

Confirmation to Authors – 15 May 2023

Full paper - 20 June 2023



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