## IMEKO TC8, TC11 and TC24 Conference



### Wednesday, 11 October 2023 - Friday, 13 October 2023 Madeira (Portugal)

## **Scientific Programme**

#### **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

Digitalization in Traceability – new tools, new opportunities, new challenges

**Digital transformation in TIC and Digital Twins** 

# **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

#### **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

Gas analysis for climate change and energy transition

**Other topics in Chemical Measurements** 

Chemical measurements for health and biology