# **International Conference**

# **Advanced Mathematical and Computational Tools in Metrology and Testing 2023**









# 26-28 September, 2023

# Sarajevo, Bosnia and Herzegovina

#### An event of

IMEKO TC21: Mathematical Tools for Measurements in conjunction with:

IMEKO TC6: Digitalisation, IMEKO TC6

Mathmet: the European Metrology Network for Mathematics and Statistics

**EURAMET: Mathmet** 

# organised by IMBiH and co-sponsored by IMEKO

www.amctm.info

## **Conference aims**

The overall aims of the conference series are to provide a multi-disciplinary forum to:

- Understand better the modelling, statistical and computational requirements in metrology
- Develop new mathematical and computation tools for measurement and testing
- Promote national, regional and international collaboration
- Support young researchers in metrology and related fields
- Transfer of best modelling and computational practice to testing and calibration, industry and other client communities

The conference will also celebrate the 30<sup>th</sup> Anniversary of the first Advanced Mathematical Tools for Metrology conference held in Turin, 1993.

#### **Conference scope**

The conference invites contributions relating to the general themes of

- mathematical and statistical modelling
- data analysis, machine learning and uncertainty quantification
- AI, knowledge representation and reasoning
- trustworthiness of data, models, algorithms, and software
- digital transformation and data science

and on how mathematical and computational tools can enable metrology address challenges in:

• advanced manufacturing and industry, e.g., digital twins, IoT



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- environment and climate e.g., sensor networks, smart cities, earth observation
- energy and sustainability, e.g., smart grids, infrastructure monitoring
- life sciences and health, e.g., imaging, machine learning

**Note**: submissions relating to instrument design or experimental results alone are **not** within scope.

#### **Conference format**

The conference will be an **in-person** conference (but with some facility for remote participation in exceptional circumstances.)

The conference will consist of:

- Plenary sessions featuring invited and selected contributions
- Sessions organised in themes
- Poster sessions

It is anticipated that the themed sessions will be held in two or three parallel streams.

#### **Organisation**

The conference is organised by IMBiH. IMBiH, the National Metrology Institute of Bosnia and Herzegovina, is responsible for developing scientific, industrial and legal metrology system. The Institute is a signatory to the CIPM-MRA on behalf of B&H. IMBiH's quality policy is to establish, maintain and manage the national metrology system in order to satisfy national and international requirements and needs. IMBiH became a IMEKO member organisation in 2022 <a href="https://www.met.gov.ba.">www.met.gov.ba.</a>

## **Publication of papers**

It is anticipated that accepted full papers, following peer review, will be published in the IMEKO journals: Measurement, Measurement: Sensors and Acta IMEKO. The multi-author AMCTM Book Series is under consideration also for 2023 conference papers.

# **Draft timetable**

Apr	2023	Abstracts for contributed talks
May	2023	Decision on review of abstracts for contributed talks
Aug	2023	Abstracts for including in conference programme booklet
Sep	2023	Conference
Dec	2023	Full papers submission
Mar	2024	Publication of full papers

#### **Conference chairs**

Alen Bošnjaković Mathmet, IMBiH, Bosnia and Herzegovina Zijad Džemić Mathmet, IMBiH, Bosnia and Herzegovina

Sacha Eichstädt IMEKO TC6, PTB, Germany Alistair Forbes IMEKO TC21, NPL, UK Franco Pavese IMEKO TC21, INRIM, IT João Alves e Sousa Mathmet, IPQ, Portugal

# **International Programme Committee**

Under construction

#### Local organising committee (IMBiH, Bosnia and Herzegovina)

Zijad Džemić Alen Bošnjaković Haris Memić Šejla Ališić



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