

2024 IEEE INTERNATIONAL WORKSHOP ON

Metrology for Automotive

BOLOGNA, ITALY /// JUNE 26 - 28, 2024



METROAUTOMOTIVE
BOLOGNA 2024



ORGANIZERS

HONORARY CHAIRS

Luigi Rovati
University of Modena and Reggio Emilia
Lorenzo Peretto
University of Bologna

GENERAL CHAIRS

Pier Andrea Traverso
University of Bologna
Federico Tramarin
University of Modena and Reggio Emilia

TECHNICAL PROGRAM CHAIRS

Stefano Cattini
University of Modena and Reggio Emilia
Marco Crescentini
University of Bologna
Gian Piero Gibiino
University of Bologna

IMPORTANT DATES

Tutorial and Special Session
Proposals Deadline
January 26, 2024

Full Paper Submission Deadline
April 12, 2024

Full Paper Acceptance
Notification
May 5, 2024

Final Paper Submission Deadline
May 26, 2024

CONTACTS

EMAIL
info@metroautomotive.org

WEBSITE
www.metroautomotive.org

SOCIAL



The 2024 IEEE International Workshop on Metrology for Automotive (*IEEE MetroAutomotive 2024*) aims to be a solid reference of the technical community to present and discuss the most recent advances and results of both scientific and technological research activities in the automotive industry, with particular emphasis on new trends and applications.

Attention is paid, but not limited, to new technologies for metrology-assisted production in automotive industry, sensors/diagnostics and associated signal conditioning for automotive, and calibration methods for electronic test and measurement for automotive.

The program is designed to raise the interest of a wide group of researchers, operators and decision-makers from metrology and automotive fields, by presenting the most innovative solutions from the scientific and technological points of view. The Workshop covers all aspects of the segment, with a particular focus on hybrid/full-electrical vehicles, connected autonomous cars and related mobility.

TOPICS

- Electronic instrumentation for automotive
- Automatic test equipment for automotive
- Sensors and sensor systems for automotive applications
- Wireless sensor networks in automotive
- Automotive instrumentation and telematics
- Measurement-based modeling and diagnostics for automotive components and sub-systems
- Standards for automotive instrumentation and sensing methodologies
- Real-time sensing and diagnostics for automotive batteries and battery cells
- Characterization techniques and standards for automotive materials
- AI-driven techniques for real-time monitoring and fault-prediction in automotive applications
- Legal and ethical implications of metrology in the future automotive field
- Thermal and mechanical instrumentation and measurement for automotive
- Experimental combustion analysis in internal combustion engines
- Virtual and innovative sensors development and validation
- Data-driven and AI-based control system development
- Calibration and mapping of Electronic Control Unit (ECU)
- Hardware-in-the-loop testing
- Engine performance cells and test rigs development and calibration
- Pollutant emission measurements and on-board monitoring in automotive
- NVH measurements and instrumentation

In addition to regular papers, many initiatives and opportunities such as special sessions, exhibits, tutorials, demos, student contests, journal papers, and others are planned to enhance your experience with the conference, and will make IEEE MetroAutomotive 2024 a vibrant event to meet with people in instrumentation and measurement for automotive applications.

Papers that are accepted and presented will be submitted for inclusion in the IEEE Xplore Digital Library.

<http://www.metroautomotive.org>