



eurolab **ASSOTIC**



IMEKO JOINT CONFERENCE



TC8 - TC11 - TC24

TC8 Traceability in Metrology

TC11 Measurement in Testing, Inspection and Certification

TC24 Chemical Measurements

TORINO, ITALY / SEPTEMBER 14-17, 2025

SPECIAL SESSION

Gas Analysis for Sustainable Energy and Climate Change Mitigation

DESCRIPTION

The rise in atmospheric greenhouse gases is the primary driver of climate change. Closely monitoring the gas phase composition of the atmosphere is therefore critically important to understand and monitor climate change. Robust metrology for greenhouse gas monitoring in the air will be vital to achieve zero-pollution and carbon neutrality, ambitions laid out in strategies by both the European Union and the United Nations.

Moreover, in striving towards environmental sustainability and a reliable energy network, it is vital to address outstanding fundamental challenges to establish renewable gases (e.g. Hydrogen, Ammonia, Biomethane) as a fuel source and as an energy vector. To ensure the safety and reliability of renewable gaseous fuels it is important to have robust, accurate measurements that can be traced to established standards.

KEYWORDS

- Gas metrology
- Climate change and air quality
- Low-cost sensors
- Hydrogen
- Decarbonisation

ORGANIZED BY



Zhechao Qu

Physikalisch-Technische Bundesanstalt (PTB)

zhechao.qu@ptb.de

Dr. Zhechao Qu is a researcher currently working at PTB (Physikalisch-Technische Bundesanstalt), focusing on the development of traceable optical techniques to address climate and energy-related gas analysis and dynamic measurement challenges. Dr. Qu has been actively involved in numerous EURAMET projects and currently serves as the project coordinator for MetNH3Energy under the European Partnership on Metrology.

WEBSITE

<https://imekotorino2025.org/special-session-1>

ORGANIZERS

CHAIRS OF THE ORGANIZING COMMITTEE

MICHELA SEGA
Istituto Nazionale di Ricerca
Metrologica (INRiM)

LEONARDO IANNUCCI
Politecnico di Torino

ÁLVARO SILVA RIBEIRO
National Laboratory for Civil
Engineering

TATJANA TOMIĆ
INA Industrija nafte d.d.

PAOLO MOSCATTI
ASSOTIC - Italian CABs Association

CONTACTS

WEBSITE 
imekotorino2025.org

EMAIL 
info@imekotorino2025.org

FACEBOOK 
fb.com/imekotorino2025

