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Metrology for Industry 4.0 and IoT

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MetroInd4.0&IoT
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CALL FOR PAPERS for the Special Session on

WIRELESS SOLUTIONS FOR IOT BASED MEASUREMENTS IN MOBILE AND WIDE AREA SCENARIOS

ABSTRACT

The importance of distributed measurements systems is increasing. The use of IoT paradigm can be successfully applied to metrology as demonstrated by recent advances of Industry 4.0. However the scenarios where sensors and instruments are placed on a wide area or on mobile systems remain extremely challenging.

In such cases, the use of wireless interconnections is often mandatory because of intrinsic incompatibilities (mobile device cannot use wires) or high cost of wired infrastructure to cover large (geographical) area.

In the recent years, the 5G revolution is begun promising superior performance for mobile systems, including the one used in industrial and public applications. In parallel, specialized wireless protocols for low power Wide Area Network have been introduced. The combination of new technology can have a very positive impact on instrumentation and sensor networks for production and monitoring of product in the era of "digital twins".

This special session is focused on wireless solutions for mobile scenarios or situations where instruments and sensors are deployed on a wide area.

ORGANIZERS

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MORE INFORMATION

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www.metroind40iot.org/special-session-3

TOPICS

Submissions are welcomed on (but not limited to):

- LPWAN systems for measurements
- In Vehicle measurements systems
- Continues tracking of product data after sale (digital twin)
- Short range wireless networks of sensors
- Bluetooth LE applications to measurements
- 5G/4G applications to measurements
- Distributed mobile IOT devices and systems
- Measurement systems for buildings and smartcities
- Large scale deployment of sensors (e.g. environment monitoring, fire detection)
- Cloud architecture to manage scalable measurement systems and measurement data platform in large deployment scenarios
- Applications of measurement sensors and systems to large process plants in Industry

INDUSTRY4.0

AUTOMATION   CONNECTION   CLOUD COMPUTING   IOT   BIG DATA   SYSTEM INTEGRATION