IEEE

IEEE Sensors Council ITALY CHAPTER

2021 IEEE INTERNATIONAL WORKSHOP ON
METROLOGY FOR INDUSTRY 4.0 & IoT

ROME, ITALY / JUNE 7 - 9, 2021

METROIND4.0&IoT

CALL FOR PAPERS for the Special Session on

SMART SENSORS AND DISTRIBUTED MONITORING SYSTEMS FOR SAFETY AND SECURITY

ORGANIZERS

Alessandro **POZZEBON**

University of Siena, Italy

Ada **FORT**

University of Siena, Italy

Marco **MUGNAINI**

University of Siena, Italy

Enza **PANZARDI**

University of Siena, Italy

CONTACTS

www.**metroind40iot**.org

info@**metroind40iot.org**

facebook.com/**MetroInd40IoT**

Visit the conference website as well as Facebook page for each specific call and additional news.

ABSTRACT

Smart Sensors and Distributed Monitoring Systems have rapidly become key tools for the protection of people against both unintended hazards (i.e., the safety) and deliberate threats (i.e., the security), within several application scenarios.

In a wide range of application scenarios, in particular within the Smart Industry context, but also in frameworks like Smart Cities, Smart Agriculture or Healthcare, intelligent measurement systems allow the real-time collection of a large quantity of data, integrating a wide range of different sensing devices, thus measuring a plethora of different physical, chemical and biological parameters.

All the sub-units composing intelligent distributed monitoring systems, i.e., sensors, data acquisition, processing and transmission platforms, are then required to satisfy strict requirements in terms of data protection, accuracy, reliability and availability when targeting at the safeguard of citizens, places or any kind of process and activity.

Smart Sensors and Distributed Monitoring Systems for safety and security include then a wide range of different data acquisition platforms, including mobile devices unmanned vehicles, environmental monitoring tools, anti-intrusion systems and any other kind of technological infrastructure whose task is to detect the possible occurrence of events that may threat in some way safety and security in any kind of environment, from the industrial to the urban one, including the homes and the private buildings.

TOPICS

Topics of interest include but are not restricted to:

- Smart Sensors for industrial monitoring;
- Safety and Security in industrial environments;
- Physical sensors for environmental monitoring and data collection;
- Chemical sensors for environmental monitoring and data collection;
- Biosensors for environmental monitoring and data collection;
- Distributed Measurement systems for critical scenarios;
- Data acquisition protocols for critical scenarios;
- Smart City architectures for safety and security;
- Wireless Sensor Networks for safety and security;
- Unmanned vehicles for safety and security;
- Mobile devices for safety and security;
- Real-time data acquisition systems;
- Intrusion detection systems.