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Special Session
**Advanced UHF RFID Tags and Reader Antennas for Sensing and
Communication in Metallic Environments of IoT**

SESSION ORGANIZERS

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ABSTRACT

Recent numerous IoT applications of UHF RFID (Ultra-High Frequency Radio Frequency Identification) arouse research interests to develop advanced UHF RFID tags and readers, in particular multi-functional reader antennas. For many IoT applications of industry, as an example, it is advantageous to have a UHF tag antenna that functions well while being mounted onto various objects. However, tag performance is affected for the object tagged, for example, it is more apparent for metallic surfaces, where there will be deterioration of desired surface current profile, which in turn disturbs the tag antenna input impedance, radiation pattern and so forth. In this special session, relevant advanced tag and reader solutions are sought for IoT applications in metallic environment; namely UHF RFID tags for metallic objects; UHF RFID tag array sensing on metallic objects; UHF RFID reader antenna for sensing and communications and so forth.