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Special Session

Wireless Power Transfer Enabling the IoT Energy Harvesting

SESSION ORGANIZERS

Dr. Francesca Benassi (francesca.benassi9@unibo.it), DEI - University of Bologna, Italy

Dr. Giacomo Paolini (giacomo.paolini4@unibo.it), DEI - University of Bologna, Italy

ABSTRACT

This session aims at introducing some innovative research outcomes regarding RFID systems for industrial applications enabled by the employment of wireless power transfer and energy harvesting technologies, with the concurrent exploitation of novel materials (e.g., polymers-, paper-, and fabric-based) and processing techniques.

A series of solutions for battery-less sensor nodes for predictive maintenance purposes will be presented; in fact, following this approach, it is possible to avoid the use of bulky batteries, and therefore their continuous replacement in machineries. Moreover, RFID technologies in UHF band in mobile and aerial robotics could be analyzed for solving the problems of traceability of goods in large stores or warehouses.