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Special Session on
"Mechatronics for Energy Harvesting and Self-Powered Sensing"

organized by

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Call for Papers

One of the major challenges in the era of the Internet of Things (IoT) is to power millions or billions of widely distributed wireless sensor nodes in various industrial applications ranging from autonomous driving, smart manufacturing to structural health monitoring and personalized healthcare. The limitations of the traditional battery-powered solution include huge costs and inconvenience for battery recharging or replacement on the sensor nodes with ever-growing number, especially in the industrial environment where those sensors are hard-to-reach. Therefore, it is critical to develop new energy harvesting technologies to power various wireless sensors. This special session aims at enhancing the communication on the latest developments in mechatronics for energy harvesting and self-powered sensing techniques.

Topics of interest include, but are not limited to:

- Energy harvesting techniques for industrial sensing applications
- Microfabrication technologies for energy harvesters
- Circuits and system integration of energy harvesting and self-powered sensing
- Reliability of energy harvester devices
- New transduction mechanisms and applications of energy harvester devices

IES Technical Committee Sponsoring the Special Session (if any):

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