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Special Issue on Intelligent Energy Solutions to Sustainable Production and Service Automation

A new scale of urbanization, digitization, and industrialization has been driving the change of our world more profoundly than ever before. The question of energy — and the way we use it — is at the center of these rapid changes. Going “energy-efficient” then becomes a major component of the missions for manufacturers and service providers to stay globally competitive. With the recent advancement of sensor informatics, the Internet-of-Things (IoT), and artificial intelligence (AI), this mission can be better achieved through modeling, analysis, real-time monitoring and control of production service systems. The idea of “intelligent sustainable energy solutions” applies to many application areas, including but not limited to manufacturing, transportation, building management, and networking, etc. The goal of this special issue is to explore scientific models, methods and technologies with both solid theoretical development and practical importance to reshape industries, transform cities and enrich lives. The central theme of the proposed special issue is on *Intelligent Energy Solutions to Sustainable Production and Service Automation*, where information technology based modeling, analysis, control and optimization are the focus areas, and broad aspects and issues will be well discussed. Topics to be covered include, but are not limited to the following:

- Energy-aware product design
- Modeling/analysis of manufacturing power consumption
- Sensor based monitoring, data analytics, and control and optimization for energy efficient manufacturing processes and systems
- Sustainable energy management of production and service: planning, scheduling and control
- Applications of artificial intelligence, big data and IoT for sustainable manufacturing and service
- Energy solutions to green supply chain
- Real-time energy resource management
- Smart control in smart grid and energy management in industries
- Energy strategies for building management
- Big data enabled intelligent operation for sustainable building
- Sustainable buildings for urban sustainability
- Operations of alternative energy products
- Energy solutions to intelligent transportation systems
- Energy-efficient cloud computing systems and data centers
- Energy-efficient fog computing devices and systems for product and service automation
- Blockchain for Sustainability

Important Dates

- Paper submission deadline: June 30st, 2019
- Completion of the first round review: September 30th, 2019
- Completion of the second round review: December 31st 2019
- Final submission due: February 28th, 2020
- Tentative publication date: April 30th, 2020

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Paper Submission

All papers are to be submitted through the IEEE’s **Manuscript Central** for Transactions on Automation Science and Engineering <http://mc.manuscriptcentral.com/t-ase>. Please select “Special Issue” under Manuscript Category of your submission. All manuscripts must be prepared according to the IEEE Transactions on Automation Science and Engineering publication guidelines <http://www.ieee-ras.org/publications/t-ase>. Please address inquiries to tang@rowan.edu.