

Special Section on:

Distributed Coordination Control and Industrial Applications

FOR MANY INDUSTRIAL APPLICATIONS, some complex coordination tasks, such as rendez-vous at a common point or move in a specified formation pattern, are required to be achieved with minimal communication between agents, and therefore, with limited information about the global state of the systems. Due to the breakthrough in new cost-effective and advanced instrumentation and communication equipment, the topic of distributed coordination control has gained great interest in the past years, partly due to its wide applications in many industrial systems, including multiple robot systems, sensor networks, industrial processes, unmanned aerial vehicles, transportation systems, as well as power networks. The cooperative systems offer many advantages in terms of flexibility, reliability, manipulability, and scalability that cannot be achieved by an individual system. As such, the design and control in networks of coordinated systems is of great theoretical and industrial interests. This special section aims at advancing the technology and methodology and further promoting the research activities in this direction. We focus on eight topics selected from the emerging technologies concerning the coordination control researches in industrial field.

Editors invite original manuscripts presenting recent advances in these fields with special reference to the following topics and their implementation:

- ✓ Distributed coordination systems
- ✓ Distributed optimization and decision making in coordination systems
- ✓ Practical applications of advanced control theory to distributed coordination systems
- ✓ Control of industrial cyber-physical systems over resource constrained networks
- ✓ Security for Industrial Cyber-Physical Systems
- ✓ Applications of Distributed Coordination Control to Multi-Robot Systems, Sensor Networks, Smart grids, and Electric Transportation Systems
- ✓ Autonomous Demand Response
- ✓ Power System Protection
- ✓ Fault Ride-through.

Manuscript Preparation and Submission

Check carefully the style of the journal described in the guidelines “Information for Authors” in the IEEE- IES web site: <http://www.ieee-ies.org/index.php/pubs/ieee-transactions-on-industrial-electronics> .

Please submit your manuscript in electronic form through: <https://mc.manuscriptcentral.com/tie-ieee/>.

On the submitting page, in pop-up menu of manuscript type, select: “**SS on Distributed Coordination Control and Industrial Applications**”, then upload all your manuscript files following the instructions given on the screen.

Corresponding Guest Editor
Prof. Yang Shi
 University of Victoria
 Dept. of Mechanical Engr.
 Victoria, BC V8P 5C2, Canada
 EMAIL: yshi@uvic.ca

Guest Editor
Prof. Jiahu Qin
 University of Sc.& Techn. of China
 West Campus, Huangshan Road
 Hefei 230027, P. R. China
 EMAIL: jhqin@ustc.edu.cn

Guest Editor
Prof. Hyo-Sung Ahn
 Gwangju Inst. of Sc. & Tech.
 123 Cheomdangwagi-ro, Buk-gu
 Gwangju 500-712, Korea
 EMAIL: hyosung@gist.ac.kr

Special Section email: SSdccc@ieee-ies.org
 Submission management email: tie-submissions@ieee-ies.org

Timetable

Deadline for manuscript submissions:	Information about manuscript acceptance:	Publication date:
March 31, 2016	Autumn, 2016	Spring, 2017