

Call for Papers for the Special Issue on
**Advances in Networking for
Distributed Control and Measurement**

SICE Journal of Control, Measurement, and System Integration

In the past decade, communication technologies have brought enormous changes to the fields of both control and measurement. Networks enable numerous field devices such as sensors, actuators, and controllers to be connected and communicate with each other over wired and wireless channels. In such networked systems, the system structures have continuously become more distributed since embedded devices are nowadays equipped with processing capabilities for making decisions based on local information obtained through communication. New applications in this domain include (i) sensor networks in a variety of settings such as industrial plants, building automation, and security/environmental monitoring, (ii) cooperative control and consensus of distributed autonomous vehicles/robots, and (iii) networked control systems where real-time feedback control is realized by utilizing shared channels.

This Special Issue on Advances in Networking for Distributed Control and Measurement aims at presenting recent developments related to networked systems in the fields of control and measurement. The Special Issue on this interdisciplinary topic will provide opportunities for researchers in the two fields to not only exchange ideas but also to potentially initiate cooperation for further research in new directions. All researchers working in the general area of networked systems are welcome to submit papers to this Special Issue. We note that the submitted papers will go through the regular reviewing process of JCMSI before they can be accepted for publication.

Keywords: Communication Networks, Wireless Connection, Sensor Networks, Networked Sensing, Networked Control Systems, Cooperative Control, Consensus, Bandwidth Constraints in Feedback Control, Sensors for Networking, Safety and Security.

Important Dates:

Submission Deadline: July 31, 2010

Tentative Publication Date: May, 2011

Guest Editors:

Hideaki Ishii
Department of Computational Intelligence
and Systems Science
Tokyo Institute of Technology
4259 Nagatsuta-cho, Midori-ku
Yokohama 226-8502
E-mail: ishii@dis.titech.ac.jp

Hiroyuki Shinoda
Department of Information Physics
and Computing
The University of Tokyo
7-3-1 Hongo, Bunkyo-ku
Tokyo 113-8656
E-mail: shino@alab.t.u-tokyo.ac.jp