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Special Session on

"Recent Developments in Sliding Mode Control and Its Industrial Applications"

Organized by

- **Shihua LI**,
  Southeast University, China
  email: lsh@seu.edu.cn

- **Shihong DING**,
  Jiangsu University, China
  email: dsh@mail.ujs.edu.cn

- **Xinghuo YU,**
  RMIT University, Australia
  email: xinghuo.yu@rmit.edu.au

- **Zhihong MAN**,
  Swinburne University, Australia
  email: zman@swin.edu.au

- **Leonid FRIDMAN,**
  National Autonomous University of Mexico, Mexico
  email: lfridman@unam.mx

Call for Papers

Sliding mode control (SMC) is popular thanks to its insensitivity and robustness to system uncertainties, since in the actual operation many physical systems suffer from various uncertainties, such as external disturbance, parameter perturbation, actuator error and so on. With the high precision requirement of the industrial area, the SMC techniques in industrial systems have already played an important role. As a result, the recent developments on SMC have been paid much attention both from theory and application aspects. Although much progress has been made on SMC, their capability to singularity problem, chattering problems, observers and practical implementations is still challenging.

Topics of the Session:

This special session aims to highlight the latest theoretical and technological developments in SMC. The papers should provide new ideas, and the papers presenting newly emerging fields are especially welcome. Topics of interest include, but are not limited to:

- Terminal Sliding Mode Control and its Applications
- Higher-order Sliding Mode Control Theory and its Applications
- Discrete-time Sliding Mode Control
- Sliding Mode Control of Nonlinear Systems with Mismatched Disturbances
- Sliding Mode Control of Mechatronic Systems
- Chattering-free Sliding Mode Control Theory
- Sliding Mode Control of Flight Control System
- Sliding Mode Observation Design
- Implementation methods of Sliding Mode Controller
- Sliding Mode Control in Power Electronics
- Motion Control Using Sliding Mode
- Sliding Mode in Artificial Intelligence