

MECHATRONICS

Call for Papers

Focused Section on Mechatronics in Automotive Systems

Automotive systems are becoming highly multidisciplinary, which demands an ever-increasing integration of mechanical/automotive, electrical/electronic, control and information disciplines. Rapidly growing public awareness on environmental issues, together with the energy crisis and the stricter standards on vehicle emission and active safety creates an impetus for vehicle electrification, also contributing to the long-term development of a resource-efficient society and planet This futher offers ample prospects for the integration of various mechatronic components/subsystems, towards enhanced vehicle performance and energy efficiency, active safety, and driving intelligence. The objective of this Focused Section is to compile recent research and development efforts contributing to advances in mechatronics for automotive systems. The Focused Section will also welcome contributions addressing the state-of-the-art in associated developments and methodologies, and the perspectives on future developments and applications. Manuscripts should contain both theoretical and practical/experimental results and will be subject to the normal TMECH review procedures. The topics of interest within the scope of this Special Section include (although not limited to) the following:

- > Advanced vehicle and powertrain control systems and integration
- ➤ Vehicle embedded mechatronic systems
- > Vehicle and powertrain health monitoring and management
- Development of advanced energy storage systems
- Advanced battery technologies and power management systems
- > Hybrid and electric propulsion systems and vehicles
- > Development of more efficient engines, electrical machines and drive systems
- > Smart materials for automotive applications
- ➤ Vehicular ergonomics and active vehicle vibration isolation
- Advanced driver assistance systems, semi-autonomous and autonomous vehicles

Manuscript Preparation:

Papers must contain original contributions and be prepared in accordance with TMECH standards. Instructions for authors are available online at: http://www.ieee-asme-mechatronics.org

Manuscript Submission:

Manuscripts should be submitted through the online submission service available at: http://mc.manuscriptcentral.com/tmech-ieee. The cover letter should report the following statement: "This paper is submitted for possible publication in the focused section on Mechatronics in Automotive Systems. All manuscripts will be subjected to peer review process. If you have any question relating to this Focused Section, please email one of the Guest Editors.

Important Dates:

Paper Submission July 1, 2014
Completion of First Review October 1, 2014
Submission of Revised Papers November 15, 2014
Completion of Final Review January 15, 2015
Submission of Final Manuscripts and Copyright Forms February 28, 2015
Publication June, 2015

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