

## CALL FOR PAPERS

### Special Issue on “Advanced Suspension Systems and Dynamics for Future Road Vehicles” *VEHICLE SYSTEM DYNAMICS*

#### **Guest Editors:**

*Dr. Xubin Song, Eaton Corporation, USA*

*Dr. Dongpu Cao, University of Waterloo, Canada*

Suspension design and dynamics have been extensively explored in the past several decades, considerably contributing to improvement of ride, handling and safety for different types of on- and off-road vehicles. One of the primary trends of today and tomorrow's vehicles is the development of vehicles with new-generation powertrain and propulsion systems, which consequently poses significant challenges on chassis and body design. As such, this calls for the advancement of novel suspension concepts, which may improve not only vehicle dynamic performance but fuel economy by involving regeneration functions. The enhanced vehicle maneuverability characterized by various advanced steering/mobility systems further requires novel suspension concepts to function coordinately and accordingly. The developments of new-generation suspension concepts however necessitate advanced suspension/vehicle dynamics and control to provide a theoretical foundation.

This Special Issue of *Vehicle System Dynamics* aims to compile the state-of-the-art research and development on current and near-future passive, semi-active and active suspension systems, and also encourage the initiative ideas and research on advanced suspension concepts for future on- and off-road vehicles. The specific topics of interest within the scope of this Special Issue include (but are not limited to) the following:

- Novel suspension concepts and development for future on- and off-road vehicles
- Theoretical suspension dynamics for future vehicles
- Analytical and experimental suspension-tire-soil dynamics
- Suspension controls for future on- and off-road vehicles
- Power consumption characteristics and energy regeneration of suspension systems
- State-of-the-art semi-active/active suspensions, active geometry control, and integrated vehicle control system

#### **Important Dates:**

Manuscript Submission Deadline: 28 February 2009

Reviewers' Reports and Decisions: 30 June 2009

Revised Manuscript Submission: 31 July 2009

#### **Instructions for Prospective Authors:**

All submissions should be made online. Instructions for authors are available on the webpage:  
<http://www.tandf.co.uk/journals/authors/nvsdauth.asp>

#### **Editors:**

Dr. Xubin Song  
Advanced Control & Automation  
Eaton Corporation  
26201 Northwestern Highway  
Southfield, MI 48076, USA  
E-mail: XubinSong@eaton.com

Dr. Dongpu Cao  
Waterloo Centre for Automotive Research (WatCAR)  
University of Waterloo  
200 University Avenue West  
Waterloo, ON N2L 3G1, Canada  
E-mail: dongpu@uwaterloo.ca