

Special Issue on Recent Advances on Mathematical Modeling and Control Methods for Complex Vehicle Systems

Call for Papers

Complex vehicle systems such as highway vehicle, surface vehicle, underwater vehicle, space vehicle, and unmanned vehicle play extremely important roles in wide range of industrial sectors like transportation, mineral exploration, space exploration, for instance. Due to the increasing demands on system performance, diversity, and complexity of the tasks, more and more attention has been paid to complex vehicle correlative technologies with full consideration of issues like mathematical modeling, mission planning, robust performance, coordination and formation, optimization, communication, navigation, prognosis, fault diagnosis and isolation, and so on. All aforementioned issues provide a basis for the design and operation of practical complex vehicle systems in order to achieve desired complex tasks.

The primary objective of this special issue is to provide a forum for researchers and practitioners to exchange their latest achievements and to identify critical issues and challenges for future investigation on mathematical modeling, optimization, monitoring, and control of complex vehicle systems. We invite investigators to contribute original research articles as well as review articles that provide the latest results in advanced mathematical modeling and control approaches for single vehicle system and coordination control strategies for multivehicle systems, for instance. Potential topics include, but are not limited to:

- Modeling and identification for complex vehicle systems
- Robust control and filtering for vehicle systems
- Model based planning and tracking algorithms with industrial applications
- Mathematical issues on communication and navigation techniques
- Fault diagnosis, prognosis, and healthy monitoring system design
- Data based solution with complex vehicle system applications
- Control system simulation technology for vehicles
- Advanced industrial applications on vehicle systems

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/jam/guidelines/>. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jam/cvs/> according to the following timetable:

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First Round of Reviews	Friday, 12 September 2014
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