

Call for Papers

Focused Section on Aerospace Mechatronics

In a variety of aerospace driven applications, such as aeronautical/space vehicles, launch vehicles and missiles, tremendous advances are being made in underlying theories, devices used and systems implemented. Associated with this trend, issues like system design, modeling, control, guidance, reliability, fault diagnosis as well as software development receive enhanced attention both in engineering and research domains. The primary objective of this Focused Section is to provide a forum for researchers and practitioners to exchange their latest achievements and to identify critical issues and challenges for future investigation in the field. The papers published in this Focused Section are expected to discuss the recent advances in aerospace mechatronics and in particular new ideas and approaches in all the related fields. Topics include, but are not limited to, the following research topics related to Aerospace Mechatronics:

- Design, manufacturing and maintenance
- Modelling, identification and dynamics
- Control, guidance and navagation
- Autonomous/intelligent control and system, multi-agent system
- Vibration and noise suppression
- Health, safety, diagnosis and monitoring
- Aerospace mechatronics embedded systems
- Software and computational techniques
- Instrumentation, sensors and actuators
- Aerospace oriented MEMS and nano technology, composite and smart materials
- Teleoperation and human-machine systems
- Methodologies and technologies for aerospace experimentations and simulations

The papers should contain both theoretical and practical/experimental results and will be subject to TMECH review procedures.

Manuscript preparation:

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

Manuscript submission:

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

September 1, 2012

December 1, 2012

January 15, 2013

March 15, 2013

April 15, 2013

August 2013

Important dates:

Paper Submission Completion of First Review Submission of Revised Papers Completion of Final Review Submission of Final Manuscripts and Copyright Forms Publication

Guest Editors:

OKYAY KAYNAK Bogazici University Turkey okyay.kaynak@boun.edu.tr

RAINER SANDAU DLR (German Aerospace Center) Germany rainer.sandau@dlr.de HUIJUN GAO Harbin Institute of Technology P. R. China huijungao@gmail.com

EDWARD TUNSTEL Johns Hopkins Univ., Applied Physics Lab. USA tunstel@ieee.org TAKASHI KUBOTA Japan Aerospace Exploration Agency Japan kubota@isas.jaxa.jp