



# MECHATRONICS

- Call for Papers -

## Focused Section on Surgical and Interventional Medical Devices

Advanced mechatronic medical devices showed their ability to assist physicians deliver less invasive and less disruptive diagnoses and therapies and enable novel medical procedures. The next steps are likely to address technologies that will make the medicine less expensive and accessible to the population at large, and provide a more uniform standard of care and quality control across physicians, hospitals, and geographic regions.

The adoption of new mechatronics technologies by the medical device sector has historically lagged behind non-medical fields such as automotive, aerospace and consumer products. Although this is partly due to regulatory constraints, there is great opportunity to accelerate the translation of the latest advances under development by numerous academic and industrial centers around the world for medical applications.

This special issue attempts to highlight the most important medical technology achievements enabled by Mechatronics: past, present, and future, in terms of their awaited medical service and economic impact. This cross-disciplinary section of the Journal targets both the engineering audience and the clinical community. It strives to provide inspiration for collaboration between innovative engineers and clinicians, and accordingly welcomes contributions by clinical authors and co-authors.

Potential topics related to mechatronics and their clinical applications include but are not limited to: surgical robotics, image-guided interventions with current or new imaging modalities, surgical assistant robots, tissue measurement/sensors for intervention, drug delivery, prostheses, artificial organs, skill evaluation, and safety of medical mechatronics.

**Manuscript Submission:** Instructions for preparing the manuscript are available on the website of the Journal at: <http://www.ieee-asme-mechatronics.org>. Paper submissions and reviews will be handled as usual on the Manuscript Central website at: <http://mc.manuscriptcentral.com/tmech-ieee>. To be handled under this call for papers please write "Section on Surgical and Interventional Medical Devices" in the Cover Letter (step 5 of the online submission page).

Please do not hesitate to email the guest editors for additional information or any aspects related to this focused section.

### Important Dates:

Manuscript Submission	February 15, 2010
Completion of First Review	April 15, 2010
Submission of Revised Paper	June 15, 2010
Completion of Final Review	August 15, 2010
Submission of Final Manuscripts and Copyright Forms	September 15, 2010
Publication	December 2010

### Guest Editors:

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