



# MECHATRONICS

Call for Papers

## Focused Section on Healthcare Mechatronics

A recent US National Academy of Engineering and Institute of Medicine study (*Building a Better Delivery System: A New Engineering/Health Care Partnership*, National Academy Press, 2005) advocated the applications of system engineering tools and information/communication technologies to improve the quality and productivity of the healthcare system. Mechatronics design principle provides a synergistic integration of information, computation and electromechanical device and systems, which plays an important role in advancing healthcare at both the device and system levels.

This Focused Section of the IEEE/ASME Transactions on Mechatronics (TMECH) is dedicated to new advances in mechatronics that are applicable for healthcare systems. The papers should contain both principle and practical experimental results and are subject to the TMECH review procedures. Potential topics include but are not limited to:

- Assistive device and systems
- Rehabilitation devices and robotics
- Prosthetic devices
- Patient mobility and handling
- Patient monitoring and evaluation
- Surgical robotics
- Medical device design and adaptation
- Medical imaging devices and algorithms
- Pharmaceutical process modeling and control
- Drug delivery systems
- Man-machine interfaces for healthcare/medical device and systems
- Integrated modeling, design and control of healthcare delivery systems
- Clinical evaluation accompanied with strong engineering principles
- Enabling technologies and devices for remote healthcare delivery
- Telemedicine

### Manuscript Submission

Please submit the manuscripts in PDF format to <http://mc.manuscriptcentral.com/tmech-ieee>, and indicate on your cover letter that "This paper is submitted for possible publication in the Focused Section on Healthcare Mechatronics." Instructions for authors are available online at: <http://www.ieee-asme-mechatronics.org> (or <http://www.me.gatech.edu/aimrl/TMech/Index-TMech.htm>). If you have any questions relating to this Focused Section, please email one of the guest editors.

### *Important Dates:*

Manuscript Submission	June 15, 2009
Completion of First Review	September 15, 2009
Submission of Revised Papers	October 31, 2009
Completion of Final Review	December 15, 2009
Submission of Final Manuscripts and Copyright Forms	January 15, 2010
Publication	April 2010

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