

Special Section on:

## Advanced Motion Control for Mechatronic Applications with Precision and Force Requirements

Advanced motion control is deployed in numerous mechatronic systems, especially those which are dynamically acting in heterogenous, time-varying, active, and human-accessible environments. With the progress of new technological solutions and design methods in the motion control systems, like virtual sensors, human-machine and environmental interfaces and, above all, novel control strategies including observation, adaption, and precision- and robustness-enhancing techniques, the level of motion control performance further raised in the last years. Especially the mechatronic systems which have comprehensive application-specific requirements on the precision of controlled motion and the complying interactive forces are benefiting from the advanced motion control techniques and related methods. Reduced energy consumption when inducing a controlled motion appears as an additional challenge.

Editors invite original manuscripts presenting the recent advances and developments in these fields with special reference to the following topics of interest:

- ✓ Control of high precision positioning systems
- ✓ Robust, adaptive, and AI-supported motion control
- ✓ Haptic and force control in robotics and mechatronics
- ✓ Hybrid and discrete motion control systems

### Manuscript Preparation and Submission

Check carefully the style of the journal described in the guidelines “Information for Authors” in the IEEE- IES website: <http://www.ieee-ies.org/pubs/transactions-on-industrial-electronics>.

Please submit your manuscript in electronic form through: <https://mc.manuscriptcentral.com/tie-ieee/>.

On the submitting page, in pop-up menu of manuscript type, select: “**SS on Advanced Motion Control for Mechatronic Applications with Precision and Force Requirements**”, then upload all your manuscript files following the instructions given on the screen.

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#### Timetable

Deadline for manuscript submissions:

~~Sept. 30~~, Nov. 30, 2019

Information about manuscript acceptance:

Summer, 2020

Publication Date:

Autumn, 2020