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**

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