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Special Session on

“Power Electronics for Enhancing Mechatronics Control”

Organized by

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Call for Papers

Abstract: (100 words)

In recent years, control performance required for mechatronics systems has been significantly being higher. However, almost no general and commercial servo drivers that provide adequate specifications to realize such a high control performance have been available so far. On the other hand, in the research field of power electronics, very high-speed and high-precision servo controllers have been well studied so far, and those are expected to provide the required specifications described above. In this special session, power electronics technologies that enhance control performance of mechatronics systems will be studied, and a direction of the fusion of power electronics and mechatronics will be discussed.

Topics of interest include, but are not limited to:

- Power Converters for Improving Mechatronics Control
- Power Electronics for High-Precision Mechatronics Systems
- Wide-Bandwidth Current Control for Mechatronics Systems
- High-Speed Motor Drive for Mechatronics Systems
- Integrated Design of Mechatronics and Power Electronics Components