

**IEEE INTERNATIONAL CONFERENCE ON MECHATRONICS (ICM 2025)**  
**FEBRUARY 28<sup>TH</sup> - MARCH 2<sup>ND</sup>, 2025**  
**Wollongong, NSW, Australia**

**Special Session Title**

Human-Robot Interaction for Assistive Technologies

**Organized by**

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**Call for Papers**

This session will focus on cutting-edge technologies for human-robot interaction and collaboration, with an emphasis on stress-free sensing, flexible assistance, and ensuring safety in human-machine communication. Core topics include intelligent mechatronic systems and robotic technologies designed to support human activities.

The session will showcase new research findings and recent developments in the field, while also providing a platform for discussion on the latest advancements in human-robot interaction. Attendees will have the opportunity to explore new potential directions and applications in this rapidly evolving domain.

This special session will be organized by the IEEE Industrial Electronics Society's Technical Committee on Control, Robotics, and Mechatronics.

**Topics of the Session**

Topics of interest include, but are not limited to:

- Advanced sensing in the field of human-robot interaction/collaboration
- Advanced human interface in the field of human-robot interaction/collaboration
- Human Factors in the field of human-robot interaction/collaboration
- Applications and case studies in the field of human-robot interaction/collaboration
- Approaches to standardizing display and control of technologies
- Human-agent teaming
- Perceptual and cognitive abilities of robots
- Prediction of mechatronic behavior
- Real-world implications for human-robot interaction/collaboration
- Rehabilitation and biomechatronics systems

**• IEEE IES Technical Committee Sponsors (if any):**

- IEEE IES Technical Committee on Control, Robotics, and Mechatronics.
- IEEE IES Technical Committee on Sensors and Actuators
- IEEE IES Technical Committee on Human Factors (if possible)