
Special Session

Robotics and Intelligent Manufacturing

Description/Scope

Robots are key elements to achieve manufacturing competitiveness, especially if they are able to interact and collaborate with humans in a safe shared workspace, creating a co-working partnership. The paradigm for robot usage has changed from an idea in which robots work with complete autonomy to a scenario in which robots collaborate with humans, integrated with other elements of the manufacturing system. This means taking the best of each partner, human and robot, by exploring the cognitive and dexterity capabilities of humans and the capacity of robots to produce repetitive work and provide assistance.

Topics (but are not limited to)

- Human-Robot Interaction
- Human-Robot Collaboration
- Physical Human-Robot Interaction
- Cognitive Interfaces
- Collaborative Working Scenarios
- Robot Collision Avoidance
- Robot Safety
- Advanced Robot Applications in Manufacturing

Organizers

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