The 16th International Conference on Intelligent Robotics and Applications (ICIRA 2023)

July 5-7, 2023 in Hangzhou, China

ICIRA 2023 Special Session Proposal

Title of the Proposal: Robotics in Sustainable Manufacturing for Carbon Neutrality

Technical Outline of the Session and Topics:

Outline of the Session:

As the rising global environmental issues, the sustainability is a recent global concern. As the next generation Intelligent Manufacturing for Carbon Neutrality, it is the philosophy of robotics and manufacturing systems with the principles of technical, social and economic sustainability. Robotics in Sustainable Manufacturing for Carbon Neutrality is an intelligent design and manufacturing process with the consideration of environmental sustainability during its entire life cycle, which is one of the most effective approaches to sustainable development of the world. The aim of this session is to bring together original articles that present significant contributions in advancing robotics in sustainable manufacturing field.

Topics of the Session:

- *Artificial Intelligence in Robotics*
- *Innovative Robotics, such as Underactuated Robotics, Mobile robot, Collaborative Robotics*
- *Design and Manufacturing for Low Carbon Footprint*
- *Carbon Neutrality, Energy Conservation, Digital Twin in Sustainable Manufacturing System*
- *Application of Robotics in Sustainable Manufacturing System*
- *Design and Simulation Software for Robot in Manufacturing System*
- *Machine Vision Technology for Robot in Manufacturing Systems*
- *Wearable Robotics*

Contact details of the Session Organizers

- *Organizer: Prof. Bin He, Shanghai University, mehebin@shu.edu.cn*
- *Organizer: Prof. Long Chen, University of Shanghai for Science and Technology, cl@usst.edu.cn*
- *Organizer: Prof. Bai Chen, Nanjing University of Aeronautics and Astronautics, chenbye@nuaa.edu.cn*