

**Special Session on**  
**“Advances in Human-Mechatronic Systems”**  
**Organized by**

- **Jinhua She,**  
Tokyo University of Technology  
email: she@stf.teu.ac.jp
- **Sho Yokota,**  
Toyo University  
email: s-yokota@toyo.jp
- **Mihoko Niitsuma,**  
Chuo University  
email: niitsuma@mech.chuo-u.ac.jp
- **Gabor Sziebig,**  
UiT The Arctic University of Norway  
email: gabor.sziebig@uit.no

**Call for Papers**

Along with the rapid progress in the fields of human factors and mechatronics, the importance of human factors in the development and operation of mechatronic systems has been widely recognized. This special session provides people a platform to present their new research results, and to discuss the state-of-the-art research topics and challenges in the related fields with broad interest. Contributors are welcome to submit their papers to this special session including human factors theory, robotics, mechatronics, behavioural and social sciences, design, health, human-computer interaction, artificial intelligence, haptics, etc.

**Topics of the Session:**

- AI
- approaches to standardizing display and control of technologies
- biological control
- human-agent teaming
- perceptual and cognitive abilities of robots
- prediction of mechatronic behavior
- real-world implications for human-robot interaction
- open possibilities for use of robots, where it was not common before
- develop module driven robots
- synthetic vision systems,
- system reliability