

## Special Issue on the Emerging Mobile Robotics

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(Received 11 October 2021; Revised 11 October 2021; Accepted 11 October 2021; Published online 12 October 2021)

Mobile robotics as an emerging technology is growing at a tremendous pace. This is due to the need for efficient execution of tasks in various service sectors ranging from domestic to public and industrial. The aging population and the shortage of manpower to support this sector is one example of urgent need to look into development and deployment of such technology to support the elderly population. In this context, major issues to address and resolve include the coordination of actions to be taken by the robot in relation to the need/demand of the user, i.e., human-machine interaction, and the safety of the user and of the robot. Underwater exploration and inspection of large structures such as wind towers, ships, and buildings for defects are some of the industrial applications where mobile robotics provide significant support.

The articles included in this special issue touch upon mobility mechanisms of mobile robots and associated requirements. A robot exoskeleton on a moving platform as a rehabilitation system has

been investigated in a simulated environment by Jatsun et al, which allows the opportunity for training individuals with impairment in their lower extremities. Briskin *et al.* have investigated mobility of a robot in an underwater environment, where the robot is to be empowered to account for the additional compression force. Mondal *et al.* have investigated the adhesion requirements for a mobile robot climbing on a vertical surface in the context of inspection of a wind tower.

The guest editor would like to thank the reviewers for their efforts in reviewing the papers and the authors for their positive responses to the reviewers' comments and suggestions. Also, he would like to specially thank the journal editor, Prof. Yinong Chen, and the members of the editorial board, for their support of this special issue, which is hoped to constitute a valuable addition to scientific and developmental knowledge in the emerging area of mobile robotics.