

**2019 IEEE/SICE**

**International Symposium on System Integration (SII2019)**

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**Special Session on**

**“Robotic Teleoperation and Environmental Sensing”**

**organized by**

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Abstract of proposed special session:

Robotic teleoperation system is necessary for exploration of disaster sites and unmanned construction. To effectively achieve teleoperation tasks, human operators of robots need information of surrounding environment and robot itself. In this session, researches on robotic teleoperation are introduced from the aspect of remote control system and sensing technologies to supply the information of sites to operators.

Brief description of the area of interest with special focus on why we should believe this is an interesting and significant topic?

Recently, demand for robotic teleoperation system is rising rapidly due to large number of calls for disaster responses such as decommissioning of nuclear power plants and unmanned construction for recovery after natural disaster. To achieve these missions, wide variety of specialities are required.

Potential authors of this special session are chosen from several kinds of fields on robotic teleoperation such as nuclear professional, human interface and environmental sensing. Furthermore, the topics for the disaster response are gathering social attention. We believe the topics of this session will interest not only researchers of robotics but also ones of other fields.

Topics of interest include, but are not limited to:

- Environmental sensing
- Robotic teleoperation
- Decommissioning
- Surveying in disaster site
- Unmanned construction

**Submissions Procedure:** All the instructions for paper submission are included in the conference website <http://www.sii2019.org> . A good quality paper may be considered for publication in IEEE Transactions on Industrial Informatics subjects to further rounds of review