



# *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: Advanced Underwater Robot Technologies**

#### **Technical Outline of the Session and Topics:**

Outline of the Session: Underwater robotics have become useful tools for many applications. Emerging applications require innovative design and control of underwater robots in complex and harsh environments with novel end effector implementations. With the development of robotic sensor technology, communication technology, automatic control technology, multisensory fusion technology, artificial intelligence, so on, underwater robotic technologies have reached a new stage of development that includes new theories, methods, and technologies.

#### **Topics of the Session:**

- *Innovative underwater robot design*
- *Underwater robot hydrodynamic performance analysis and optimization*
- *High fidelity dynamic modelling for underwater robot and parameter estimation/identification technologies*
- *Underwater robot sensing, localization & control in complex environment*
- *Advanced robotic underwater operation technologies*
- *Underwater man-robot interactive technologies*
- *Advanced underwater robot homing and docking technologies*
- *Networked and autonomous underwater robotic systems*
- *Deep sea robotic exploration technologies*
- *Deep sea robotic salvage & operation technologies*

#### **Contact details of the Session Organizers**

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