

Invited Speaker



In Sung Jang

Senior Director, Marine Industry Research Division, Korea Institute of Ocean Science and Technology (KIOST)

Education

- B.S. in Civil Engineering, Seoul National University (Mar. 1989 – Feb. 1993)
- M.S. in Civil Engineering, Seoul National University (Mar. 1993 – Feb. 1995)
- Ph.D. in Civil Engineering, Seoul National University (Mar. 1995 – Feb. 2001)

Professional Experience

- Postdoctoral Researcher, Senior Researcher, Principal Researcher, Korea Institute of Ocean Science and Technology (KIOST) (2001–present)
- Director, Marine New Industry Research Division, KIOST (2023–present)
- Director, Underwater Construction Robot Program Office, Ministry of Oceans and Fisheries (2013–2022)
- Visiting Researcher, University of Texas at Austin (2006–2007)

Academic and Committee Activities

- Board Member, Korean Society of Civil Engineers (2024–2025)
- Board Member, Korean Geotechnical Society (2021–2023)
- Advisory Member, Republic of Korea Navy Submarine and Salvage Technology Development Committee (2016–present)
- Member, Central Construction Technology Deliberation Committee, Ministry of Land, Infrastructure and Transport (6th–8th, 10th, 12th–13th terms) (Mar. 2016–Feb. 2024)
- Deliberation Member, Self-Assessment Deliberation Committee for Administrative Agencies, Ministry of Oceans and Fisheries (2020–2024)
- Member, General Technical Deliberation Committee (Soil and Tunnel), K-water (2019–2021)
- Board Member, Korean Society of Underwater and Surface Robotics Technology (2016–2024)

Major Publications

- Technical Manual for Suction Foundation Structures (Woo Sun Park, O Soon Kwon, In Sung Jang, Hee Do Ahn), Korea Ocean Research and Development Institute, 2011

Major Awards

- Contribution Award, Korea Ocean Research and Development Institute, 2005
- Achievement Award, Korea Ocean Research and Development Institute, 2008
- Commendation from the Minister of Land, Transport and Maritime Affairs, 2012
- Outstanding Employee Award, Korea Institute of Ocean Science and Technology, 2012
- Presidential Citation, 2019
- KIOST Award, Korea Institute of Ocean Science and Technology, 2019
- Commendation, Korean Society of Civil Engineers, 2024

Selected Papers and Research Projects

- “Numerical assessment on the consolidation characteristics of clays from strain-holding, self-boring pressuremeter test,” Computers and Geotechnics, 2003
- “Lateral and consolidation behaviors of seabed-type breakwater for very soft ground,” Ocean Engineering, 2007
- “Fire Resistance Performance of Steel Composite Hollow RC Column with Inner Tube under ISO834 Standard Fire,” Structural Concrete, 2014

Title of Presentation : “Role of Underwater Robots and Current Development Status in Korea”

As the demand for various purposes of marine structures such as floating offshore wind power, offshore plants, submarine cables and pipelines increase and the depth of installation increases, the need for underwater robots that can investigate, explore, and work underwater is gradually increasing. In the past, since there was no technology or equipment developed domestically, we had no choice but to rent them overseas at high costs. In this presentation, the role of underwater robots and current development status of underwater construction robots along with practical applications in Korea is introduced. In addition, research projects currently underway for more advanced technology development and field application in the future are presented.