



**Osaka University**

Graduate School of Engineering  
Department of Naval Architecture & Ocean Engineering

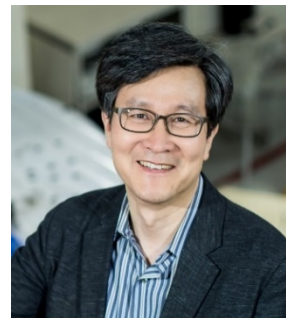
# Hydro-Seminar

by Lab. of Floating-Body Dynamics in Waves

**The speaker in the 61st Hydro-Seminar is**

**Professor Yonghwan Kim**

Department of Naval Architecture & Ocean Engineering  
Seoul National University, Seoul, Korea



**Date: January 18 (Monday), 2021**

**Time: 15:30 – 16:30**

**Venue: Using Zoom**

**Meeting ID: 919 4710 3301**

**Passcode: 913180**

<https://zoom.us/j/91947103301?pwd=L2wxYkgwaHlxZlJPOC9EMndBU3IrUT09>

## Overview of Model-Scale Experiment for Sloshing in LNG Cargo

### Abstract

Sloshing is one of the critical problems in the design of LNG carrier or LNG-related offshore platforms. There have been numerous researches and publications to solve the sloshing flows, but model-scale experiment is known as the most reliable for the design of LNG cargo. In the present seminar, followings are introduced:

- Overview of sloshing experiment for practical ship cargo design
- Technical issues in model-scale sloshing experiment for LNG tank
- Experimental experience and database of Seoul National University
- Effects of density ratio and phase transition during impact process
- Application to LNG cargo design

### The Speaker: Professor Yonghwan Kim

Professor Kim graduated Seoul National University for his bachelor and master degrees, and got a PhD degree at MIT. From 2004, he has been working at the Department of Naval Architecture and Ocean Engineering at Seoul National University. Currently he is the director general of Future Ocean Cluster (FOC) and the Lloyd's Register Foundation Center at Seoul National University. He was a specially-appointed professor of Osaka University.

His primary research areas are marine hydrodynamics, including motion responses of ships and offshore structures, sloshing, ship hydroelasticity, greenship technology, and naval hydrodynamics. He is the author of more than 350 technical papers, and he is serving for several international journals as editor-in-chief, guest editor, and editorial board member.

He is a member of Korean Academy of Engineering and Fellow of RINA and SNAME. Also he was chosen as the Distinguished Visiting Fellow of Royal Academy of Engineering, UK, in 2015~2016.



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