



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 39th Hydro-Seminar is

Dr. Eva Loukogeorgaki

Assistant Professor of Marine Structures
Department of Civil Engineering
Division of Hydraulics and Environmental Engineering
Aristotle University of Thessaloniki



Date: Friday, 7 April, 2017
Time: 15:30 – 17:00
Venue: S1-412 (Lecture room, 4F of S1 building)
Suita Campus, Osaka University

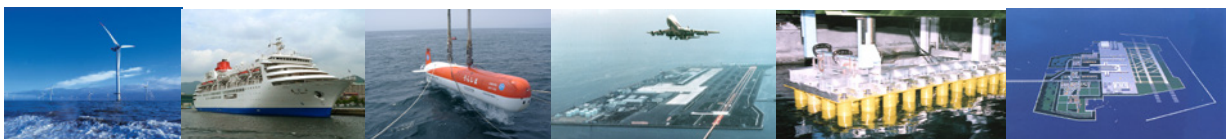
Numerical and Experimental Approaches for the Hydroelastic Analysis of Floating Structures

Abstract

The presentation will give an introduction to “dry” and “wet” mode superposition approaches developed in AUTH for the frequency domain hydroelastic analysis of floating structures. Initially, the two approaches will be briefly presented and will be compared from a physical and a mathematical point of view in order to highlight their main differences. Next, the two approaches will be applied for two different floating structures for comparing and assessing their accuracy in terms of the calculated hydroelastic response using as basis of comparison relevant experimental results. Finally, the results of a 3D experimental campaign aiming at the combined investigation of the hydroelastic and the structural (connectors' internal forces) response of a pontoon-type modular floating structure will be presented and discussed.

The Speaker: Dr. Eva Loukogeorgaki

Dr. Eva Loukogeorgaki is Assistant Professor of Marine Structures in the Civil Engineering Department of Aristotle University of Thessaloniki (AUTH), Greece. She holds a Civil Engineering degree (2002) and a PhD (2007) both from AUTH. Her main research interests include fluid-structure interaction, offshore structures for various applications (e.g. offshore wind turbines, wave energy converters), hydroelasticity, mooring systems, coastal structures (e.g. floating breakwaters), risk assessment and structural health monitoring of marine structures. She has participated in 12 domestic and EU projects. She has published more than 40 peer-reviewed papers in journals and conferences, while she is co-author of a book chapter. She holds international distinctions and awards, such as "ISOPE Offshore Mechanics Scholarship for Outstanding Students" (2007), Biographical inclusion in the Who's Who in Science and Engineering (2007), "ISOPE Session Organizer of the Year Award" (2016). Moreover, she is a member of the Technical Committee of the ISOPE Annual Conference as well as the Chair of the Coastal Engineering Group of the International Hydrodynamics Committee of ISOPE since June 2014.



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