

Curriculum Vitae



Name HONG, Sa Young

Birth date : March 12, 1960. Birth place : Suwon city, Gyeonggi-do, Korea

Home address: #605-702 Songnim Maeul Apt. Hagi-dong Yuseong-gu, Daejeon, KOREA, 305-358

Post: Principal Researcher, Offshore Plant Research Department, Korea Research Institute of Ships and Ocean Engineering(KRISO)

Education

Mar. 1979 ~ Feb. 1983 B. Eng., Seoul National University(SNU), Dept. of Naval Architecture

Mar. 1983 ~ Feb. 1985 Ms. Eng., SNU, Dept. of Naval Architecture

Mar. 1990 ~ Aug. 1994 PhD. SNU, Dept. of Naval Architecture and Ocean Engineering,

Dissertation: "Analysis of Steady and Unsteady Flow Around a Ship Using a Higher-Order Boundary Element Method" Supervisor: Prof. Hang S. Choi

Main Research Work

- Floating body dynamics: HOBEM, FEM, multi-body interaction, coupled analysis with sloshing, NWT
- Mooring & DP system: coupled dynamics with floating bodies
- Marine Operations: Transportation and Installation
- VLFS design & analysis: hydroelasticity, multi-body hydroelasticity, time-domain analysis, bathymetry effects, coupled analysis with floating breakwaters, etc.
- Wave energy: OWC type, floating hinge-type, OTEC, floating solar power, etc.

Experience

Mar. 1985 ~ present Principal Researcher, Senior Researcher, Principal Researcher, KRISO

Apr. 1998 ~ Apr. 1999 Visiting Scholar, Texas A&M Univ.

Feb. 2008 ~ Feb. 2009 Visiting Scholar, ABS(American Bureau of Shipping)

Sep. 2011 ~ 2015 Adjunct Professor, Ocean Engineering System, KAIST

Sep. 2012 ~ 2015 Adjunct Professor, Department of Naval Architecture and Ocean Engineering, Chungnam National University

Sep. 2012 ~ Present Chief Major Professor, Ship and Ocean Plant Engineering, University of

Science and Technology

Academic Activities(ISOPE)

1997 ~ present	Member, ISOPE, TPC member(2006~), Offshore Technology committee, Hydrodynamics committee, Editors of the Proceedings of ISOPE-2011, 2012, 2013, 2014, 2015, Editors of the Proceedings of PACOMS-2010, Board Member(2012~2016), IHC(International Hydrodynamics Committee) Secretary(2012-2014) IHC Chairman (2014-2016)
2010	LOC secretariat & Co-chairman of ISOPE-PACOMS 2010, Busan
2014	LOC secretariat of ISOPE-2014, Busan
2011 ~ present	Associate Editor of IJOPE(International Journal of Offshore and Polar Engineering, SCIE)
2018	LOC chair, ISOPE-PACOMS-2018, Jeju

Other Academic Activities

2018 ~ present	Member, The National Academy of Engineering of Korea(NAEK)
1987 ~ present	Member, Society of Naval Architects of Korea(SNAK)
1989 ~ present	Member, Korean Society of Ocean Engineering(KSOE) Director(editor, 2006~2007), Director(General Affairs, 2010~2011), Vice-President(2012~2013), President(2014~2015)
2005 ~ present	Member, ASME
2003 ~ 2008	Member, ITTC Ocean Engineering Committee
Journal reviewer	IJOPE, Ocean Engineering, OMAE, Applied Ocean Research

Awards

ISOPE Best Paper Award(2008)
ISOPE PACOMS Award(2010)
KSOE Academic Award(2010), Korean Society of Ocean Engineers
ISOPE C.H. Kim Award(2013)
ISOPE Best Session Organizer Award(2014)
SNAK Best Paper Award(2015), Society of Naval Architect of Korea
The Order of Industrial Service Merit(2016), Korea Government
ISOPE Award(2016)

Technical Publications

(International Journal Papers only)

1. S.Y. Hong, Y.R. Choi, D.,J. Kim, and M.H. Kim, "Responses of a Barge-Mounted Platform in Waves and Currents", *Int'l J. Offshore and Polar Engineering*, Vol.9, No. 4, pp283-292, 1999.
2. Kim, M.H., Koo, W.C. and Hong, S.Y., "Wave interactions with 2D structures on/inside porous seabed by a two-domain boundary element method", *Applied Ocean Research* Vol. 22, pp255-266, 2000.
3. Sung, H.G. Hong, S.Y. and Choi, H.S., "Evaluation of non-linear forces on a fixed body by the higher-order boundary element method", *Proc. Instn Mech Engrs* Vol.214, Part C, vol. 214, pp825-839, 2000.
4. Yoon R. Choi, Sa Y. Hong, and Hang S. Choi, "An Analysis of Second-Order Wave Forces on Floating Bodies by Using a Higher-Order Boundary Element Method", *Ocean Engineering*, Vol.28, No. 1, pp117-138,2000.
5. M. H. Kim, J. M. Niedzwecki, J. M. Roesset, J. C. Park, S. Y. Hong, and A. Tavassoli, "Fully Nonlinear Multidirectional Waves by a 3-D Viscous Numerical Wave Tank", *J. Offshore Mech. Arct. Eng.*, Vol. 123, Issue3, pp124-133, 2001
6. D.C. Hong, S.Y. Hong, S.W. Hong, "Numerical study on the reverse drift force of floating BBDB wave energy absorbers", *Ocean Engineering* Vol. 31, pp1257-1294, 2004
7. D.C. Hong, S.Y. Hong, S.W. Hong, "Numerical study of the motions and drift force of a floating OWC device.", *Ocean Engineering* Vol. 31, pp139-164, 2004
8. S.Y. Hong, J.H. Kim, S.K. Cho, Y.R. Choi and Y.S. Kim, "Numerical and experimental study on hydrodynamic interaction of side-by-side moored multiple vessels", *Ocean Engineering* Vol. 32 No. 7, pp783-801., 2005
9. J.H. Kyoung, S.Y. Hong, B.W. Kim and S.K. Cho, "Hydroelastic response of a Very Large Floating Structure over a Variable Bottom Topography", *Ocean Engineering*, Vol. 21, pp2040-2052, 2005.
10. J.H. Kyoung, S.Y. Hong, J.W. Kim and K.J. Bai, "Finite-element Computation of Wave Impact Load due to a Violent Sloshing", *Ocean Engineering*, Vol. 32, pp2020-2039, 2005.
11. J.H. Kyoung, S.Y. Hong and B.W. Kim, "Finite Element Method for Time Domain Analysis on Hydroelastic Response of VLFS with Fully Nonlinear Free Surface Conditions", *IJOPE*, Vol. 16, No. 3, pp168-174, 2006
12. D.C. Hong, S.Y. Hnog and S.W. Hong, "Reduction of Hydroelastic Response of a Very-long Floating Structure by a Floating Oscillating-water-column Breakwater System", *Ocean Engineering* Vol. 33, pp610-634, 2006.
13. B.W. Kim, S.Y. Hong, J.H. Kyoung and S.K. Cho, "Investigation on Wave Reduction Performances of Floating Hinge-Linked Breakwater", *Journal of Ocean Science and Technology*, Vol. 3, No. 1,

- pp13-22, 2006
14. D.K. Lee, S.Y. Hong and G.J. Lee, "Theoretical and experimental study on dynamic behavior of a damaged ship in waves" , Ocean Engineering Vol. 34 No. 1, pp21-31., 2007
 15. D.C. Hong and S.Y. Hong, "Hydroelastic responses and drift forces of a very-long floating structure equipped with a pin-connected oscillating-water-column breakwater system", Ocean Engineering, Vol. 34, pp696-708, 2007.
 16. B.W. Kim, S.Y. Hong, J.H. Kyoung, S.K. Cho, "Evaluation of bending moments and shear forces at unit connections of very large floating structures using hydroelastic and rigid body analyses", Ocean Engineering, Vol. 34, pp1668-1679, 2007
 17. J.H. Kyoung, S.Y. Hong, "Time domain analysis of hydroelastic response of VLFS considering horizontal motion", International Journal of Offshore and Polar Engineering Vol. 18 No.1, pp21-26, 2008
 18. Kim, B.W., Sung, H.G., Hong, S.Y. Jung, H.J., "Finite Element Nonlinear Analysis for Catenary Structure Considering Elastic Deformation", CMES-Computer Modeling in Engineering & Sciences, Vol. 65, No. 1, pp29-45, 2010
 19. Kim, B.W., Jung, H.J., Hong, S.Y., "Investigation on efficiency and applicability of subspace iteration method with accelerated starting vectors for calculating natural modes of structures", Structural Engineering and Mechanics, Vol. 37, No. 3, pp561-573, 2011.
 20. Hong, S.Y. and Nam, B.-W., "Analysis of 2nd-Order Force on Floating Bodies Using FEM in Time Domain", International Journal of Offshore and Polar Engineering Vol. 21, No.1, pp22-28, 2011
 21. Nam, B.W., Sung, H.G., Hong, S.Y., "Numerical Simulation of Diffracted Wave by Vertical Cylinder Using VOF Method", International Journal of Offshore and Polar Engineering Vol. 22, No.1, pp7-12, 2012
 22. Hong, S.Y., Kim, B.W., Nam, B.W., "Experimental Study on Torsion Springing and Whipping of a Large Container Ship", International Journal of Offshore and Polar Engineering Vol. 22, No.2, pp97-107, 2012
 23. Nam, B.W., Hong, S.Y., Kim, Y.S. and Kim, J.W., "Effects of Passive and Active Heave Compensators on Deepwater Lifting Operation", International Journal of Offshore and Polar Engineering Vol. 23, No.1, pp33-37, 2013

.....And, more than 100 peer-reviewed international proceedings papers