

HONG, Seok Won

Born: 1954

Education:

Mar.,1973 - Feb., 1977 B. Engineering, Seoul National University, Naval Architecture Depart.
Mar.,1977 - Aug., 1979 Ms. Engineering, Seoul National University, Naval Architecture Depart.
Major: Hydrodynamics-Ship Motion in Wave (Seakeeping Problems)
Sept.,1984 - April., 1988 Phd, Applied Mechanics, University of Michigan USA,
Thesis on “ Unsteady Separated Flow around a 2-Dimensional Bluff Bodies
under a Free Surface,” , Advisor: Prof. W.P. Graebel

Experiences:

Mar. 1979 - Aug. 1984 Researcher, KRISO(Korea Research Institute of Ships and Ocean Engineering)
Sept. 1984 - April. 1988 Research Assistant, Univ. of Michigan
June 1988 - Mar. 1991 Senior Researcher, KRISO
Mar. 1991 - April 1999 Principal Researcher, MOERI/KORDI(former KRISO)
April. 1999 - Sept. 2001, Director, Ocean Development System Lab., MOERI/KORDI
Sept. 2001 – April 2002, Visiting Researcher, Woods Hole Oceanographic Research Institute, USA
April 2002- May 2005, Principal Researcher, MOERI/KORDI
May. 2005 – May 2008, Director General, MOERI/KORDI
June 2008- Present, Tenured Principal Researcher, Ocean Engineering Research Dept., KRISO

Major Research Work:

1979 - 1984 Seakeeping analysis of ships and offshore structures
1988 - 1992 Model Testing Techniques for High Speed Ship Motion
1992 - 1993 Development of a ROV (CROV300)
1993 - 1997 Development of a AUV (VORAM,)
1993 1997 Construction of an "Ocean Engineering Basin" with multi-directional wave makers
1997- present : Dynamic modeling of underwater vehicle, Development of a Wave Energy Device

Professional Activities:

Mar. 1977 - present Member of SNAK,
Mar. 1985 - present Member of KSOE(former KCORE)
Mar. 1985 - present Member of ISOPE, TPC Member
Mar. 1989 - present Member of MTS, USA
Mar. 1996 - present EC Member of ISOPE - PACOMS
Mar. 2000 - 2002 Member of ITTC's "Wave Committee"
June 2005 – Local Host, ISOPE-2005 Seoul Conference
May. 2005 - 2010 Member of ITTC's AC, and Vice Chair
Jan. 2006 – Dec. 2007, President of KSOE
July 2006 – July 2008, Board Member, ISOPE
Jan. 2009 - Feb. 2015 Secretary general, KAOST(Korea Society of Ocean Science & Technology Societies)

Prize and Awards:

April, 1988 Honored Graduate Student, Univ, of Michigan

Aug. 1994 First Grade Prize for Best Research Work, KRISO

April, 1995 Korean Prime Minister's Award

May, 2005 ISOPE Award

July, 2008 ISOPE Award

April, 2009 Korean Government's Hyeoksin Medal

Publication List:

No.	Title	Journal/Proceeding	Year	Page
1	Performance Analysis of Closed-type OTEC Cycle using Waste Heat	J. of Ocean Eng. and Tech. Vol.25, No.1 (in Korean)	2011	80-84
2	Second-order Motion Characteristics of a Semi-submersible Platform in Waves	Ocean System Engineering Vol.1 , No. 3	2011	155-164
3	Stable nonlinear adaptive controller for an autonomous underwater vehicle using neural networks	International Journal of Systems Science Vol.38, No. 4	2007	327-337
4	A Simulation of Directional Irregular Waves at Chagui-Do Sea Area in Jeju Using the Boussinesq Wave Model	J. of Ocean Eng. and Tech. Vol.21, No.1 (in Korean)	2007	7-17
5	Stable nonlinear adaptive controller for an autonomous underwater vehicle using neural networks	International Journal of Systems Science Vo.38, No.4	2007	327-337
6	A Study on the Performance of the Ring-type Impulse Turbine for Wave Energy Conversion	J. of Ocean Eng. and Tech. Vo.20, No.1 (in Korean)	2006	20-25
7	Underwater Navigation Sytem Based on Inertial Sensor and Doppler Velocity Kalman Filter	International Journal of Offshore and Polar Engineering	2005	88-95
8	A hierarchical real-time control architecture for a semi-autonomous underwater vehicle	Ocean Engineering Vo.32, No.13	2005	1631-1641
9	Numerical study on the reverse drift force of floating BBDB wave energy absorbers	Ocean Engineering, Vol.31	2004	1257-1294
10	Numerical study of motions and drift force of a floating OWC device	Ocean Engineering Vol.31	2004	139-164
11	Effect of Guide Vane on the Performance of Impulse Turbine	J. of Ocean Eng. and Tech. Vo.18, No.6 (in Korean)	2004	1-7
12	Wave Energy Distribution at Jeju Sea and Investigation of Optimal Sites for Wave Power Generation	J. of Ocean Eng. and Tech., Vo.18, No.6 (in Korean)	2004	8-15
13	An Experimental Study of Pneumatic Damping at the Air Chamber for an OWC type Wave Energy Device	J. of Ocean Eng. and Tech., Vo.18, No.4 (in Korean)	2004	8-14
14	Development of a Wave Absorbing System Using Inclined Punching Plate	J. of Ocean Eng. and Tech., Vo.18, No.1 (in Korean)	2004	1-6
15	Rotating Arm Test for Assesement of an Underwater Hybrid Navigation System for a Semi-Autonomous Underwater Vehicle	J. of Ocean Eng. and Tech., Vo.17, No.4 (in Korean)	2003	73-80
16	And more		2004 -	

17	Experimental study of a compliant mooring system for a floating OWC system	ISOPE 2004	2004	225-231
18	A real-time control architecture for a semi-autonomous underwater vehicle	Techno-Ocean Conference, 2004.10	2004	271-275
19	Underwater Navigation System Based on an Inertial Sensor and Doppler Velocity Log Using Indirect Feedback Kalman Filter	ISOPE2004	2004.5	214-221
20	Preliminary Study on the Inertial-doppler Localization of a Deep-sea Launcher	Scientific Submarine Cable Workshop	2003.10	139-144
21	Recent Research Activities of Underwater Vehicle in Korea	ISOPE PACOMS 2002	2002	21-27
22	Autonomous Control System of an Induction Generator for Wave Energy Device	ISOPE PACOMS 2002	2002	213-218
23	Preliminary Design And Operational Concept Of A Deep-Sea Unmanned Underwater Vehicle	IMARTECH 2002	2002	
24	Design and Implementation of a Dual Use Purpose Semi-Autonomous Underwater Vehicle	Underwater Defense Technology (UDT) 2002	2002	
25	Analysis of Hydro-elastic Response of Pontoon-type VLFS Coupled with Floating Breakwaters Using a Higher -Order Boundary Element Method	ISOPE 2002	2002	313-318
26	Current Researches on Underwater Robotics in Korea	UT 2002 Symposium	2002	
27	Research and Development of Underwater Robotics in Korea	ICRA Workshop on Underwater Robotic Technologies, IEEE,	2001	62-68
28	A Plan for the Development of a Deep-sea Unmanned Underwater Vehicle	Procced. 12th UUST	2001	
29	Investigation of Draft Effects on Analysis of Hydroelastic Responses of Pontoon-Type VLFS	Proc., ISOPE 2001	2001	222-227
30	Design of an Underwater Vehicle- Mounted Manipulator System and Non- Regressor Based Adaptive Control of It	Proceeding, ISOPE2000, Seattle	2000	314-319
31	System Design of an ROV with Manipulators and Adaptive Control of It	UT2000 Symposium	2000	431-436
32	Design of a Teleoperation Controller for an Underwater Manipulator	ICRA	2000	3114- 3119
33	Experimental Study on Wave Loads and Responses of a Barge-Mounted Plant with Dolphin-Fender Mooring System	Proceed., ISOPE2000, Seattle	2000	204-209
34	Discrete-Time Quasi-Sliding Mode Control of an Autonomous Underwater Vehicle	IEEE J. of Oceanic Eng., Vol. 24, No. 3	1999	388-395
35	System Design of an Autonomous Underwater Vehicle for Ocean Research and Monitoring	RAMST98	1998	47-56
36	System design and quasi-sliding mode control of an AUV for ocean research and monitoring	Underwater Technology 98	1998	179-184
37	Self-tuning Control of Autonomous Underwater Vehicles Based on Discrete Variable Structure	Oceans 97 Conference	1997	902-909
40	Design of a Control System for CROV	Underwater Robotics, TSI Press	1994	327-336
41	Experimental Study of Position Control System for ROV	ISOPE'92, San Francisco	1992	533-538
42	Solution of a Potential Problems Using an Overdetermined Complex Boundary Integral Method	J. of Computational Physics, Vol. 84, No. 2	1989	414-421
43	Development of an electrical power plant from ocean wave energy	2nd European Wave Power Conf.	1995	297-304