

HAENG SIK KO

Sonny Astani Dept. of Civil and Environmental Eng.
Tsunami Research Center, BHE 12
University of Southern California
Los Angeles, CA 90089-2531
Phone: (213) 740-5129
Email: haengsik@usc.edu

EDUCATIONAL BACKGROUND

- Aug. 2011 — present* **PhD Student of Civil Eng., University of Southern California, USA**
Advisor: Dr. Patrick Lynett
- Aug. 2010 — May. 2011* **PhD Student of Ocean Eng., Texas A&M University, USA**
Advisor: Dr. Patrick Lynett
- Mar. 2006 — Feb. 2008* **Jeju National University, Korea**
M.S. in Dept. of Ocean Civil Engineering
Thesis: “The Application of SPH Method in Numerical Fluid Analysis”
Advisor: Dr. Namhyeong Kim
- Mar. 1999 — Aug. 2005* **Jeju National University, Korea**
B.S. in School of Ocean Science
(Major: Civil and Environmental Engineering)

EXPERIENCE

- Aug. 2011 — present* **Graduate Research Assistant**, Dept. of Civil Engineering, University of Southern California, USA
- Mar. 2010 — June. 2010* **Part-time Lecturer**, Dept. of Civil Engineering, Jeju College of Technology, Korea
- Feb. 2008 — June. 2010* **Jang Ho Development Co., LTD**, the Practicing Civil Engineer as a deputy section chief
- Mar. 2006 — Feb. 2008* **Graduate research assistant**, Dept. of Civil and Environmental Engineering, Jeju National University, Korea
- Sep. 2005 — Feb. 2006* **Research assistant**, Dept. of Civil and Environmental Engineering, Jeju National University, Korea
- Aug. 2002 — Aug.2005* **Undergraduate research assistant**, Coastal & Harbor Lab., Dept. of Civil and Environmental Engineering, Jeju National University, Korea

COMPUTER SKILLS

Fortran, Matlab, AutoCAD, Tecplot, Origin, Surfer, OpenFOAM

SCHOLARLY WORKS

Refereed Publications

1. N.H. Kim and **H.S. Ko**(2008). Numerical Simulation on Solitary Wave Propagation and Run-up by SPH Method, *KSCE Journal of Civil Engineering*, Vol.12, No.4, pp.221-226.
2. N.H. Kim and **H.S. Ko**(2007). Numerical simulation of the Water Column Collapse using SPH Method, *KSCE Journal of Civil Engineering*, Vol.27, No.3B, pp.313-318. (in Korean)

Conference Proceedings

1. **Ko, H. S.**, Lynett P. J. (2014). Development of a Hydraulic-Control Wave-Maker (HCW) for the Study of Combined Waves and Flows, *International Conference on Coastal Engineering*, Seoul, Korea.

Resume

2. **Ko, H. S.**, Lynett P. J. (2014). Design of a Hydraulic-Control Wave-Maker (HCW) for the Study of Oceanographic Flows, *2014 Ocean Sciences Meeting*, Hawaii, USA.
3. N.H. Kim and S.R. Kim and **H.S. Ko**(2010). Numerical Simulation of wave transmission over a submerged breakwater in wave flume by using SPH method, *The 2010 KSCE Annual Conference Journal*, pp.2289-2292, Incheon, Korea. (in Korean)
4. N.H. Kim, S.R. Kim, and **H.S. Ko**(2010). An Effective Analysis Method for Wave Absorbers in SPH Method, *2010 Joint Conference Journal of the Korean Association of Ocean Science and Technology Societies*, pp.2937-2940, Jeju ICC, Korea. (in Korean)
5. N.H. Kim, H.M. Kwon , **H.S. Ko**, and H.H. Kang(2008). Characteristics of the Topography Process of Iho Beach by Field Survey, *2009 Joint Conference Journal of the Korean Association of Ocean Science and Technology Societies*, pp.3033-3039, Jeju ICC, Korea. (in Korean)
6. N.H. Kim, H.H. Kang, **H.S. Ko**, and J.W. Mun(2007). Field Survey on the Seasonal Topography Process of Iho Beach in Jeju, *Proceedings of the KOSMEE Fall Annual Meeting*, pp.331-336, Incheon, Korea. (in Korean)
7. N.H. Kim and **H.S. Ko**(2007). Numerical Simulation on the Solitary Wave Propagation and Runup using SPH Method, *The 2007 KSCE Annual Conference Journal*, pp.4542-4545, Daejeon, Korea.
8. N.H. Kim and **H.S. Ko**(2006). Numerical Simulation of the Collapse of Water Column Using SPH Method, *The 2006 KSCE Annual Conference Journal*, pp.2176-2179, Daegu, Korea. (in Korean)

RESERCH INTERESTS

Creation of a Hydraulic-Flow-Driven Wave-tank; Particle-Based Modeling of Objects Embedded in Wavy Flows; Numerical modeling of wave mechanics and free-surface flows using a particle method; Sediment transport in coastal zone; Fluid dynamics modeling; Laboratory and field techniques in fluid mechanics

PERSONAL INTERESTS

Playing basketball and soccer, Fishing, Hiking, Swimming, Traveling, Taking a photograph