

Curriculum Vitae

ALI ABDOLALI, Postdoctoral Research Scholar
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EDUCATION

Ph.D. of Coastal and Harbor Engineering, Civil Engineering Department, University of Rome (R3), Italy
Thesis title: Numerical Modeling of Hydro-acoustic Waves for Tsunami Early Warning System, 2014

M.S., of Hydraulic Engineering, Civil and Environmental Engineering Department, Amirkabir University of Technology (Tehran Polytechnic), Iran.
Thesis title: Experimental And Numerical Investigation Of Flow Pattern Near Floating Breakwaters In Shallow, Intermediate And Deep Waters”, 2011.

PUBLICATIONS

JOURNAL PAPERS

- 1- Abdolali, A., Kirby, J. T. and Bellotti, G., 2015, Depth-Integrated Equation of Hydroacoustic Waves in Weakly Compressible Fluid overlying Viscous Sediment, *Journal of Fluid Mechanics*, 766.
- 2- Abdolali, A., Cecioni, C., Bellotti, G. And Kirby, J. T., 2015, Hydro-acoustic and tsunami waves generated by the 2012 Haida Gwaii earthquake: modeling and in-situ measurements, *Journal of Geophysical Research: Ocean*, 120, 2014JC010385
- 3- Cecioni, C., Abdolali, A., Bellotti, G., and Sammarco, P., 2014, Large-scale numerical modeling of hydro-acoustic waves generated by tsunamigenic earthquakes, *Nat. Hazards Earth Syst. Sci. Discuss.*, 2, 4629-4658, doi:[10.5194/nhessd-2-4629-2014](https://doi.org/10.5194/nhessd-2-4629-2014).
- 4- Renzi, E., Abdolali, A., Bellotti, G. and Dias, F., 2014, Wave-power absorption from a finite array of Oscillating Wave Surge Converter. *Journal of Renewable Energy*, Volume 63, Pages 55–68. Doi: <http://dx.doi.org/10.1016/j.renene.2013.08.046>
- 5- Sammarco, P., Cecioni, C., Bellotti, G. and Abdolali, A., 2013, Depth-integrated equation for large-scale modelling of low-frequency hydroacoustic waves. *Journal of Fluid Mechanics*, 722, R6 doi:[10.1017/jfm.2013.153](https://doi.org/10.1017/jfm.2013.153), May 2013.
- 6- Alizadeh, M.J., Kolahdoozan, M., Tahershamsi, A., Abdolali, A., 2014, Experimental Study of the Performance of Floating Breakwaters with Heave Motion. *Civil Engineering Infrastructures Journal* 47.1 pp 59-70.
- 7- Abdolali A, Kolahdoozan M., 2012, Comparison of analytical methods of wave decomposition for evaluating reflection coefficient. *Journal of Marine Engineering* Vol. 7 (Issue 14) pp105-116

- 8- Michele, S., Sammarco, P., D'Errico, M., Abdolali, A., Bellotti, G., Renzi, E., and Dias, D., 2015, Flap gate farm: From Venice lagoon defense to resonating wave energy production. Part 2: Synchronous response to incident wave in open sea, *Applied Ocean Research*. Under Review.

CONFERENCE PROCEEDINGS

- 1- Abdolali, A., Cecioni, C., Bellotti, G. And Sammarco, P., 2014, A Depth-Integrated Equation For Large Scale Modeling Of Tsunami In Weakly Compressible Fluid, *Coastal Engineering Proceedings*, ASCE, 1(34), currents.9. doi: <http://dx.doi.org/10.9753/icce.v34.%p>
- 2- Abdolali A., Cecioni C., Kirby J., Sammarco P. and Bellotti G., 2015, Numerical Modeling of Low Frequency Hydro-acoustic Waves Generated By Submarine Tsunamigenic Earthquake, 4th Tsunami and Safety Symposium at *ISOPE-2015*, Kona, Big Island, Hawaii, June 21-26, 2015.
- 3- Abdolali, A., Kirby, J. T. and Bellotti, G., 2014, Formation of Hydro-acoustic Waves in Dissipative Coupled Weakly Compressible Fluids, *AGU Fall Meeting*, San Francisco, Dec. 2014.
- 4- Bellotti, G., Cecioni, C., Romano, A., Abdolali, A., Sammarco, P., Franco, L., 2013, Tsunami Early Warning Systems Based on Real-Time Measurements of Hydroacoustic Waves" *proceeding of 12th International Conference on Computing and Control for the Water Industry, CCWI2013* doi: <http://dx.doi.org/10.1016/j.proeng.2014.02.035>
- 5- Abdolali, A., Kirby, J. T., Bellotti, G., "Numerical modeling of hydro-acoustic waves in weakly compressible fluid". Young Coastal Scientist and Engineers Conference-North America. 9-11 July, 2014, Newark, DE, USA
- 6- Renzi, E., Abdolali, A., Bellotti, G. and Dias, F., 2012, Mathematical Modeling of the Oscillating Wave Surge Converter, *XXXIII Convegno Nazionale di Idraulica e Costruzioni Idrauliche, IDRA*, Sep, 2012, Brescia, Italy.
- 7- Abdolali, A., Franco, L., Bellotti, G. and Kolahdoozan, M., 2012, Hydraulic and numerical modeling of the performance of Pi-type Floating Breakwaters, *proceeding of 10th International Conference on Coasts, Ports and Marine Structures ICOPMAS 2012*, Tehran, Iran.
- 8- Abdolali. A, Kolahdoozan. M, Jandaghi Alae. M and Allahyar M.R., 2012, On the Comparison of Analytical Methods Using for the Decomposition of Wave Characteristics, *Proceeding of PIANC COPEDEC Conference*, Madras, India, February, 2012
- 9- Alizadeh. M.J, Kolahdoozan. M, Abdolali. A and Tahershamsi. A., 2012, Experimental study on the performance of floating breakwater with attached plate, *9ICCE (9th International Congress on Civil Engineering)* http://www.civilica.com/Paper-ICCE09-ICCE09_1271.html

- 10- Abdolali, A, Kolahdoozan. M, Jandaghi Alae, 2011, Guide line: feasibility of using floating breakwater for providing appropriate hydrodynamic condition in harbors- Iranian Seas (in Farsi), *Port and Maritime Organization of Iran (PMO)*.
- 11- Abdolali, A., Kirby, J. T., Bellotti, G., Franco, L., 2014, Hydro-acoustic Wave Propagation through Two Layered System, *11th International Conference on Coasts, Ports and Marine Structures ICOPMAS* November, 2014, Tehran, Iran
- 12- Cecioni, C., Abdolali, A., Bellotti, G., and Sammarco, P., 2014, Modello di larga scala per la generazione e propagazione di onde di maremoto in fluidi debolmente comprimibili, *XXXIV Convegno Nazionale di Idraulica e Costruzioni Idrauliche, IDRA*, Sep, 2014, Bari, Italy (in Italian).
- 13- Bellotti, G., Cecioni, C., Romano, A., Abdolali, A., Sammarco, P. and Franco, L., 2013, Tsunami Early Warning Systems Based On Real Time Measurements of Hydro-acoustic Waves. *International Tsunami Symposium, Gocek, Turkey, Sep. 2013.*

PRESENTATIONS

- 1- Abdolali, A, Hydracoustic waves modeling for enhancement of Tsunami Early Warning Systems (TEWS): Haida Gwaii 2012 earthquake (talk) PREDICT Workshop: a Tsunami Detection initiative for British Columbia, Ocean Network Canada, University of Victoria, Victoria, BC, March 24-25, 2014
- 2- Abdolali, A, A review of oscillating wave surge converters. Numerical modeling of flap gate farm: from Venice lagoon defense to resonating wave energy production, (talk), School of Civil and Environmental Engineering (CEE), Cornell University, Ithaca, USA, October 9, 2014.

[Google Scholar - ALI ABDOLALI \(link\)](#)

SOFTWARE CAPABILITIES

FORTTRAN, MATLAB, Parallel Computing, GPU programming
COMSOL Multi-physics, MIKE, FLOW 3D, FUNWAVE, SAC, HEC-RAS, TEC PLOT,
WAVELAB, MACE, SPSS, LINUX, MS PROJECT

LANGUAGE PROFICIENCY

Farsi or Persian (native language); English (fluent- IELTS (7.5)); Italian.

TEACHING

Teacher assistant of Hydraulics, Civil and Environmental Engineering Department, Amirkabir University of technology (2010 & 2011).

INDUSTRY

Coastal engineer, Hydrodynamic modeler, Pouya Tarh Pars Consulting Engineers Co., Tehran, Iran (Fulltime 2011-2012). web: <http://www.ptpco.com/>

Research assistant, Hydrodynamic modeler, Numerical modeling of wave energy converters i.e. Oysters, MERMAID: Innovative Multi-purpose offshore platforms: planning, design and operation (part-time 2012-2013). web: <http://www.mermaidproject.eu/>

REFERENCES

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