Curriculum Vitae

Dr. Mohammad H. Kazeminezhad



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Academic Background

- ➤ Ph.D. in Civil Engineering Water and Coastal Engineering, College of Civil Engineering, Iran University of Science and Technology, Tehran, Iran., Sept. 2005-Feb. 2011
 - Dissertation Title: "Euler-Euler two-phase simulation of scouring around submarine pipelines"
- Visiting Ph.D. Student, School of Ocean Science, Bangor University, North Wales, UK, Jan. 2010 July 2010
- ➤ M.Sc. in Civil Engineering Hydraulic Structures, College of Civil Engineering, Iran University of Science and Technology, Tehran, Iran. Sep. 2002 Jan. 2005
 - Dissertation Title: "Application of Fuzzy Inference System in the prediction of wind-wave parameters"
- ➤ B.Sc. in Civil Engineering, School of Civil Engineering, Azad University (Central Tehran Branch), Tehran, Iran, Sep. 1997 Feb. 2002

Positions & Work Experiences & Memberships

- ➤ Head of Ocean Engineering and Technology Research Center, Oct. 2015 Apr2017
- ➤ Head of Iranian National Center for Ocean Hazards, Oct. 2013 Oct. 2015.
- Assistant Professor, Ocean Engineering and Technology Research Center, Iranian National Institute for Oceanography and Atmospheric Science, June 2012- present.
- ➤ Adjunct Lecturer, College of Civil Engineering, Iran University of Science and Technology, Sept. 2011 present.
- Adjunct Lecturer, School of Civil Engineering, Islamic Azad University (Central Tehran Branch), Sept. 2006 Dec. 2009

Teaching Experiences

> Iranian National Institute for Oceanography and Atmospheric Science

Ph.D. Courses: Wave Theories, Applied Hydrodynamics

> Iran University of Science and Technology, College of Civil Engineering

B.Sc. Courses: Dam Engineering, Engineering Economy

M.Sc. Courses: Design of Marine Structures

> Islamic Azad University, Central Tehran Branch

B.Sc. Courses: Dam Engineering, Hydrology Engineering, Dynamics

Research Activities

Research Interest

- > Simulation of wave current structure interaction
- > Experimental and numerical investigation of fluid-structure-seabed interactions
- Experimental and numerical simulation of scour around cylindrical structures
- ➤ Euler-Euler Two-phase flow simulation of sediment transport
- ➤ Numerical simulation of wind induced waves
- > Application of data mining methods in marine engineering

Full Papers

Refereed Journal Papers (ISI Journals)

- 1. **Kazeminezhad, M.H.**, 2013. "Numerical simulation of oscillatory flow around submarine pipelines", Journal of Coastal Research (SI 65), 260-265.
- 2. Mafi, S., Yeganeh-Bakhtiary, A. and **M.H. Kazeminezhad**, 2013. "Prediction formula for longshore sediment transport rate with M5' algorithm", Journal of Coastal Research (SI 65), 2149-2154.
- 3. **Kazeminezhad, M.H.**, Yeganeh-Bakhtiary, A., Etemad-Shahidi, A., and J.H. Baas, 2012. "Two-Phase Simulation of Wave-Induced Tunnel Scour beneath Marine Pipelines", Journal of Hydraulic Engineering 138 (6), 517-529.
- 4. Yeganeh-Bakhtiary, A., **Kazeminezhad, M.H.**, Etemad-Shahidi, A., Baas, J.H. and L. Cheng, 2011. "Euler–Euler two-phase flow simulation of tunnel erosion beneath marine pipelines", Applied Ocean Research 33, 137-146.
- 5. **Kazeminezhad, M.H.** and A. Yeganeh-Bakhtiary, 2011. "Two-Phase Simulation of Coastal Current-Induced Scour around Submarine Pipelines", Journal of Coastal Research (SI 64), 542-546.
- 6. Kamranzad, B., Etemad-Shahidi, A. and **M.H. Kazeminezhad**, 2011. "Wave height forecasting in Dayyer, the Persian Gulf". Ocean Engineering 38, 248-255.
- 7. Ghazanfari, S., Etemad-Shahidi, A. and **M.H. Kazeminezhad**, 2011. "Prediction of Pile Groups Scour in Waves Using Support Vector Machines". Journal of Hydroinformatics 13(4), 609-620.
- 8. **Kazeminezhad, M.H.**, Yeganeh-Bakhtiari, A. and A. Etemad-Shahidi, 2010. "Numerical Investigation of Boundary Layer Effects on Vortex shedding Frequency and Forces acting on Marine Pipeline", Applied Ocean Research 32, 460-470.
- 9. **Kazeminezhad, M.H.**, Etemad-Shahidi, A. and A. Yeganeh-Bakhtiari, 2010. "An Alternative Approach for Investigation of the Wave-Induced Scour around Submarine Pipelines", Journal of Hydroinformatics 12(1), 51-65.
- 10. Yasa, R., Etemad-Shahidi, A. and **M.H. Kazeminezhad**, 2010. "Prediction of Wave-Induced Scour Depth under Submarine Pipelines", Applied Ocean Research 33, 54-59.
- 11. Kazeminezhad, M.H., Etemad-Shahidi, A. and J. Mahjoobi, 2008. "Reply to A Discussion on Hindcasting of wave

- parameters using different soft computing methods", Applied Ocean Research 30, 154-156.
- 12.Mahjoobi, J., Etemad-Shahidi, A., and **M.H. Kazeminezhad**, 2008. "Hindcasting of wave parameters using different soft computing methods", Applied Ocean Research 30, 28-36.
- 13.Etemad-Shahidi, A., **Kazeminezhad, M.H.** and S.J. Mousavi, 2009. "On the prediction of wave parameters using simplified methods", Journal of Coastal Research (SI 56), 505-509.
- 14. **Kazeminezhad, M.H.**, Etemad-Shahidi, A. and S.J. Mousavi, 2007. "Evaluation of Neuro Fuzzy and Numerical Wave Prediction Models in Lake Ontario", Journal of Coastal Research (SI 50), 317-321.
- 15. **Kazeminezhad, M.H.**, Etemad-Shahidi, A. and S.J. Mousavi, 2005. "Application of Fuzzy Inference System in the Prediction of Wave Parameters", Ocean Engineering 32, 1709-1725.

Conference Papers (International)

- 16. **Kazeminezhad, M.H.**, Etemad-Shahidi, A. and S.J. Mousavi, 2008. "Application of neuro-fuzzy model in wave forecasting of Neka", Proceedings of 7th International Conference on Coastal and Port Engineering in Developing Countries, 24-28 February 2008, Dubai, UAE.
- 17. **Kazeminezhad, M.H.**, Mousavi, S.J. and A. Etemad-Shahidi, 2006. "A Neuro Fuzzy Approach to the Wave Prediction", Proceeding of Hydro Informatics 2006, Nice, France.
- 18. **Kazeminezhad, M.H.**, Etemad-Shahidi, A. and S.J. Mousavi, 2004. "Testing of CEM wave prediction model for Lake Ontario", Proceedings of International Conference on Hydrodynamics, pp 219-224, Nov. 2004, University of Western Australia, Perth, Australia.
- 19. **Kazeminezhad, M.H.**, Etemad-Shahidi, A. and S.J. Mousavi, "Application of Simplified Methods in the Prediction of Wave Parameters in Neka", Proceedings of International Conference on Coasts, Ports and Marine Structures, Nov. 2004, Tehran, Iran.
- 20.Mahjoobi, J., Etemad-Shahidi, A., and **M.H. Kazeminezhad**, 2007. "Soft computing methods for significant wave height hindcasting", Proceedings of 7th Iranian Conference on Fuzzy systems, Aug. 2007, Ferdowsi University, Mashhad, Iran.
- 21. **Kazeminezhad, M.H.**, Yeganeh-Bakhtiari, A., Etemad-Shahidi, A. and R. Valipour, 2008. "Numerical investigation of gap to diameter ratio effects on flow pattern and drag force around an offshore pipeline", 27th International Conference on Offshore Mechanics and Arctic Engineering, 15-20 June 2008, Estroil, Portugal.
- 22. Valipour, R., Yeganeh-Bakhtiari, A., Ghaheri, A. and **M.H. Kazeminezhad**, 2008. "Determination of vortex shedding frequency around offshore pipeline using unsteady drag force model", 27th International Conference on Offshore Mechanics and Arctic Engineering, 15-20 June 2008, Estroil, Portugal.

Books

Wind-induced waves: theory, prediction methods and models (in Farsi), 2010, Iran University of Science and Technology

Projects

Project Manager

- ➤ Application of data mining methods in coastal engineering, Iranian National Institute for Oceanography and Atmospheric Science, 2014.
- ➤ Evaluation of WAVEWATCH III model for wave modelling in the Persian Gulf, Iranian National Institute for Oceanography and Atmospheric Science, 2014.
- ➤ Development of Wave Forecasting Numerical Model in the North Part of Indian Ocean, Iranian National Institute for Oceanography and Atmospheric Science, 2013.
- ➤ Investigation of wave-induced scour around submarine pipelines using data mining methods, Water Research Institute, 2011.

Main Contributor

- > Development of a hybrid model for wave forecasting in the Persian Gulf, Transportation Research Institute, 2012.
- ➤ Wave prediction in Caspian Sea based on soft computing, spectral and manual methods, Iran Water Resources Management Company, 2009.

Workshops

- ➤ Scientific Secretary, Technical Meeting of Ocean Hazards, Gulf of Oman and Indian Ocean Research Station, Chabahar, Iran, Jan. 2014.
- ➤ Lecturer, Marine Pipeline Engineering Short Course, Iranian National Institute for Oceanography and Atmospheric Science, Tehran, Iran, Jan. 2014.
- Lecturer, Short Course on "Small Ports National Project", 14th Marine Industries Conference, Tehran, Iran, Dec. 2013
- ➤ Lecturer, Supervision to Design and Construction of Breakwaters, 15th Marine Industries Conference, Kish Island, Iran, Oct. 2013.
- Lecturer, Marine Pipeline Engineering Short Course, Iranian National Institute for Oceanography and Atmospheric Science, Tehran, Iran, July 2012.