

Curriculum Vitae

I. PERSONAL INFORMATION:

NAME: **Mehdi Shafieefar**

Date of Birth: 23 Oct. 1958

Place of Birth: Ghom, Iran

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II. EDUCATIONAL RECORDS:

B. Sc. in Civil Engineering, Tabriz University, 1984.

M. Sc. in Civil Engineering (Hydraulic Eng.), Iran University of Science & Technology, 1989.

M. Sc. Coastal & Offshore Eng., IHE, Delft, The Netherlands, 1991.

Ph.D. Civil Engineering, (Offshore Eng.), Delft University of Technology, The Netherlands, 1997.

III. ACADEMIC EXPERIENCES:

Professor, Tarbiat Modares University, Tehran, Iran, (2011-present)

Associate Professor, Tarbiat Modares University, Tehran, Iran, (2006-2011)

Assistant Professor, Tarbiat Modares University, Tehran, Iran, (1998-2006)

Research Associate, Delft University of Technology, Delft, The Netherlands (1992-1997).

IV. MEMBERSHIP OF SCIENTIFIC SOCIETIES:

Iranian Association of Naval Architecture & Marine Engineering

Iranian Association of Hydraulic Engineering

International Association of Hydraulic Engineering and Research (IAHR)

Iranian Society of Consultant Engineers

V. REFEREE FOR JOURNAL ARTICLES SUBMITTED TO:

International Journal of Civil Engineering

Modares Civil Engineering Journal

Technical Journal of Tehran University

Journal of Marine Engineering

International Journal of Maritime Technology

Ocean Engineering, Elsevier

VII. JOURNAL PAPERS

Shekari, M.R. Shafieefar, M., An experimental study on the reshaping of berm breakwaters under irregular wave attacks, *Applied Ocean Research* 42 (2013) 16–23.

Shafieefar, M., Tajali, Z., Hydrodynamic Analysis Of Multi-Body Floating Piers Under Wave Action, *Ocean Engineering*, Vol. 38, pp. 1925-1933, 2012.

Moghim, M.N., Shafieefar, M., Torum, A., Chegini, V., "A new formula for the sea state and structural parameters influencing the stability of homogeneous reshaping berm breakwaters" *Coastal Engineering*, Elsevier, Vol. 58, No. 8, pp 706-721, 2011.

Shafieefar, M., Bahreininejad, A., Moghim, M.N., Prediction of wave and current forces on slender structures using artificial neural networks" *The HKIE Transactions*, Vol. 18, Vol. 1, pp. 30-35, 2011.

Panahi, R., Shafieefar, M., 2010, "Towards a Numerical Hydrodynamics Laboratory by Developing an Overlapping Mesh Solver Based on a Moving Mesh Solver; Verification and Application", *Applied Ocean Research*, [doi:10.1016/j.apor.2009.12.006](https://doi.org/10.1016/j.apor.2009.12.006).

Panahi, R. , Shafieefar, M., 2009, "A Finite Volume Algorithm Based on Overlapping Meshes for Simulation of Hydrodynamic Problems, *J. Marine Science and Application*, Vol. 8, No. 4, pp. 281-290. DOI: [10.1007/s11804-009-8082-4](https://doi.org/10.1007/s11804-009-8082-4).

Panahi, R., Shafieefar, M., 2009, "Application of Overlapping Mesh in Numerical Hydrodynamics, *Polish Maritime Research*, Vol. 16 No. 2, pp. 24-33.

Adjami, M., Shafieefar, M., Salehi, Neyshaboori, A.A., 2009 :Developing a Large Eddy Simulation Model (2DH FLOWER SD) for Flow Modeling in Compound Channels", *Turkish Journal of Engineering and Environment* , Vol. 32, No. 6, pp. 337-356.

Valizadeh, V., Shafieefar, M., Monagan, J.J, Salehi, Neyshaboori, A.A., 2008, "Modeling Two-Phase Flows Using SPH Method", *Journal of Applied Sciences*, Vol. 8, Issue 21, 3817-3826, DOI: [10.3923/jas.2008.3817.3826](https://doi.org/10.3923/jas.2008.3817.3826).

Shafieefar, M., Rezvani, A. 2008, "Simple Genetic Algorithm Application in Optimum Design of Mooring Patterns, , *Journal of Marine Engineering*, Vo4. 1, No.7, pp. 27-40.

Habibi, B., Shafieefar, M., 2007 "The effect of TLP's Hull Geometry on the Platform Responses under Waves", *Journal of Marine Engineering*, Vo4. 1, No. 6, 2007, pp. 11-21.

Ezabad, P., Shafieefar, M., Shirian, N., 2007 "An Investigation on Stability of Reshaping Breakwaters Using Experimental Data", *Journal of Marine Engineering*, Vo4. 1, No. 6, pp. 49-60.

Shafieefar, M. Rezvani, A., 2006 "Mooring optimization of floating platforms using a genetic algorithm", Elsevier, *Ocean Engineering*, Dec. 2006.

Adjami, M., Shafieefar, M., Salehi, Neyshaboori, Hydrodynamic Channel Flow Modeling Using Combined Large Eddy Simulation and Wall Functions, *Int. J. of Fluid Mechanics Research*, Vol. 37, pp. 42-69.

Adjami, M. Shafieefar, M. 2008, "Hydrodynamic Shape Optimization of Semi-Submersibles Using a Genetic Algorithm", *Journal of Marine Science and Technology*, Vol. 16, No. 2, pp. 109-122.

.Shekari, M.R. Shafieefar, M., An experimental study on the reshaping of berm breakwaters under irregular wave attacks, *Applied Ocean Research* 42 (2013) 16–23.

Moghim, S., Gunther, H., Gayer G., Shafieefar M., 2005 "Application of 3rd Generation Shallow Water Wave Models in a Tidal Environment", *Ocean Dynamic*, No. 55, Feb. 2005, pp. 10-27.

Shafieefar, M. and Massie, W.W., 2001 "In-line Force from Combined Wave and Current Flow on Oscillating Cylinders", *International Journal of Offshore and Polar Engineering*, Vol. 11, No. 2, June 2001, pp. 93-98.

VIII. LIST OF PAPERS PRESENTED IN CONGRESSES AND SEMINARS

Shafieefar, M., Massie, W.W. and Vugts, J. H., "The Validity of Morison Equation Extensions", Proceedings of the Offshore Technology Conference (OTC), ASCE, Paper 8046, Houston, USA, 1996.

Shafieefar, M., Vugts, J. H. and Massie, W.W. "Hydrodynamic Forces on Oscillating Cylinders in Waves and Currents", Proceeding of the 4th International Conference on Civil Engineering, Sharif University of Technology, Tehran, Iran, Vol. IV, pp. 13-24, 1997.

Shafieefar, M., Massie, W.W. and Vugts, J.H. "A Generalized Approach to Hydrodynamic Interaction of Oscillating Cylinders in Waves and Currents", Proceedings of the 8th International Conference on the Behavior of Offshore Structures (BOSS); Delft, The Netherlands, 1997.

Shafieefar, M., "Hydrodynamic Interaction of Offshore Structures" (in Persian), Proceeding of 3rd International Conference on Coasts, Ports and Marine Structures (ICOMPAS), Tehran, Iran, 1998, Vol. II, pp. 126-137, 1998.

Shafieefar, M., Paknejad, A., "Density Current in Bahmanshir River" 5th Seminar on River Eng., Ahwaz, Iran, pp. 451-464, 1999.

Shafieefar, M., "Prediction Methods for Ocean Waves Characteristics" (in Persian) Workshop on Ocean, Tehran University, Iran 1999.

Shafieefar, M. and Massie, W.W., "Hydrodynamic Forces on Slender Marine Structures" Proc. of the 5th International Conference on Civil Engineering (ICCE) Mashad, Iran, 2000.

Ghodsian, M. and Shafieefar, M., "Afflux Upstream of Rectangular Bridge Pier", Joint Conference USA, 2000.

Shafieefar, M., Hosseini, S., "Study on Hydraulics of Currents and Waves in Khouran Strait", 4th International Conference on Coasts, Ports & Marine Structures (ICOPMAS), Shahid Rajaei Port Complex, Bandar Abbas, Iran, 2000.

Vosooghi, N., Shafieefar, M., Aghakouchak, A.A., "Dynamic Analysis of Fixed offshore Platforms Considering Waves and Structure Interaction, 4th International Conference on Coasts, Ports & Marine Structures (ICOPMAS), Shahid Rajaei Port Complex, Bandar Abbas, Iran, Nov. 2000.

Habibi, M., Shafieefar, M., Imani, M. "An Investigation on Different Methods for Estimation of Longshore Sediment Transport Rate", 4th International Conference on Coasts, Ports & Marine Structures (ICOPMAS), Shahid Rajaei Port Complex, Bandar Abbas, Iran, Nov. 2000.

Shafieefar, M. Boddohi, R., "Hydrodynamic Lift Force on offshore Structures due to Waves and Currents", Proc. of Hydraulic Structures Conference, Kerman, Iran, May. 2001.

Habibi, M., Shafieefar, M., Imani, M. "Validation of Longshore Sediment Transport Models Using Field Measurements in Babolsar Coast", Hydraulic Structures Conference, Kerman, Iran, May. 2001.

Ghodsian, M. and Shafieefar, M., "Afflux Upstream of Circular Pier", XXIX IAHR Congress, Beijing, China, 2001.

Habibi, M., Shafieefar, M., Imani, "Validation of Different Methods for Estimation of Longshore Sediment Transport Rate Using Field Measurements in the Southern Caspian Sea", 3rd Iranian Hydraulic Engineering Conference, Tehran, Iran, Nov. 2001.

Shafieefar, M. and Khoddam, A.R., "Numerical Simulation of Nearshore Currents and Beach Changes on the Genaveh Coast," Int. Conf. On Eng. For Ocean & offshore Structures and Coastal Eng. Development, Dec. 2001, Singapore.

Shafieefar, M., "Hydrodynamic Lift Force on Oscillating Cylinders in a Uniform Flow," Int. Conf. On Eng. For Ocean & Offshore Structures and Coastal Eng. Development, Dec. 2001, Singapore.

Shafieefar, M. and Hosseini, S., "Migration Pattern of a Young Meandering River", in River Flow 2002, Vol. 2., pp. 809-812, Balkema Publisher, 2002.

Shafieefar, M., Hamed, A., "Verification of Wave Spectrum Models for the North of Persian Gulf Area", 5th International Conference on Coasts, Ports & Marine Structures (ICOPMAS), Ramsar October, 2002.

Hajmomeni, A., Shafieefar, M., Karimi, M., Navari, M. "Organize And Restore Super Saline Estuaries, Numerical Modeling" 5th International Conference on Coasts, Ports & Marine Structures (ICOPMAS), Ramsar October, 2002.

Shafieefar, M., Taghizadeh, M. "Rehabilitation of Genaveh Estuary, Numerical Simulation of Sediment Transport", 5th International Conference on Coasts, Ports & Marine Structures (ICOPMAS), Ramsar October, 2002.

Shafieefar, M., "Contribution of waves and Tidal Current on Alongshore Sediment Transport Rate in Bushehr Coast", XXXIAHR, Greece, Jan. 2003.

Montaseri, H., Shafieefar, M., Moghimi, S., "The link of Wave Mathematical Model and Geographical Information System (GIS) for the Study of Sea Waves Patterns", 5th International Conference of Civil engineering, Isfahan, Iran, April, 2003.

Shafieefar, M., Valizadeh, A., "Development of a Numerical Model for Storm Surge Prediction", 5th International Conference of Civil engineering, Isfahan, April, 2003.

Shafieefar, M., Hajmomeni, A., "Numerical Simulation of the Exchange of Estuary Saturated Water with Sea Water", 4th Iranian Hydraulic Conference, Shiraz, Iran, Oct., 2003.

Moghimi, S., Montaseri, H., Shafieefar, M., "Linking of a 3rd Generation Wave Model with GIS and Use for the Study of Wave Hydrodynamic in Caspian Sea", 4th Iranian Hydraulic Conference, Shiraz, Iran, Oct., 2003.

Valizadeh, A., Shafieefar, M., Moghimi, S., "The Study of Wet-Dry Boundaries and Current Pattern in Urmieh Lake, Using a Numerical Model, Developed for Storm Surge Prediction", 4th Iranian Hydraulic Conference, Shiraz, Iran, Oct., 2003.

Shafieefar, M., Khosronegad, A., Borumand, H., "Numerical Simulation of Thermal Diffusion of Outfalls", 3rd Int. Conf. on Marine Waste Water Disposal and Marine Environments", Catania, Italy, Oct., 2004.

Shafieefar, M., Allahdadi, N., "Modeling of Sediment Transport in Urmia Lake", 6th Int. Conf. on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov., 2004.

Torki, A., Shafieefar, M., "The Study of Antifer Armor Arrangement in Breakwaters with a Steep Slope", 6th Int. Conf. on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov., 2004.

Moghimi, S., Gayer, S., Gunther, G., Shafieefar, M., “Effects of different Wave Conditions on SPM Distribution Patterns in Highly Variable Tidal Environments”, 5th International Conference on Coastal Dynamics, Barcelona, Spain, April, 2005.

Mirjalili, A., Shafieefar, M., Keshmiri, F., “Design Optimization of Block Gravity Quays”, 2nd National Civil Engineering Congress, Tehran, Iran, May, 2005.

Dehghani, A., Ghodsian, M., Salehi, N., A., “Bed Characteristics in 180 Channel Bend with Lateral Diversion”, XXXI IAHR Congress, Seoul, Korea, Oct., 2005.

Shafieefar, M., “Salinity Circulation in the Urmia Lake after Construction of the Causeway”, XXXI IAHR Congress, Seoul, Korea, Oct., 2005.

Mirzaei, M. Shafieefar, M., Moharrami, M.R., “Hull-Mooring Coupled Dynamic Analysis of Two Side-By-Side Operating Vessels” ASME 29th International Conference on Offshore Mechanics and Arctic Engineering, Shanghai, China, 2010.

Panahi, R. , Shafieefar, M., 2D simulation of Free-floating structure motions in waves of flapping-type wavemaker, ICOPMAS 2010.

Moghim, M.N., Torum, A., Shafieefar, M., Stability of Multi-Layer Berm Breakwaters, ICOPMAS 2010, Tehran, Iran.

Shafieefar, M., Adjami, M., Equilibrium Beach Profile with respect to the Gravity Term Effects, A Case Study for Chabahar Bay, 4th International Conference on Estuaries and Coasts, Hanoi, Vietnam, 2012.

IX. RESEARCH PROJECTS

Shafieefar, M., “Chapter 4 of Iranian Code for Marine and Port Structures; Shore Protection Structures and Breakwater”, Research and Training Organization, the Ministry of Road and Transport, I.R. of Iran.

Ghodsian, M., Shafieefar, M., Hashemi, O., “The Effect of Water Repercussion in the Upstream of Bridge Piles”, Tarbiat Modares University and The Ministry of Power, I.R. of Iran.

Shafieefar, M., Aghakuchak, A., A., Yasrebi, S., S., Azarmsa, S., A., “Revision and Completion of Iranian Code for Marine and Port Structures”, Tarbiat Modares University and Research and Training Organization, the Ministry of Road and Transport, I.R. of Iran.

Shafieefar, M., “Numerical Modeling of Hydrodynamics of Behshahr Project”, Tarbiat Modares University.

Shafieefar, M., “Numerical Modeling of Thermal Circulation in Mobin Seawater intake”, Water Engineering Research Institute, Tarbiat Modares University, I.R. of Iran.

Shafieefar, M., Valizadeh A., Moghimi S., “Numerical Modeling of Storm Surge Prediction”, Water Research Center, Ministry of Power, I.R. of Iran.

Shafieefar, M., Montaseri, H., Moghimi, S., “The Study of Coastal Hydrodynamics Using Geographic Information System (GIS), Water Research Center, The Ministry of Power, I.R. of Iran.

X. COURSES TAUGHT:

1	Hydrodynamics	Graduate
2	Coastal Engineering	Graduate
3	Basic Marine Hydraulics	Graduate
4	Design of Offshore Structures	Graduate
5	Wave Theories	Post Graduate

6	Sediment Transport	Post Graduate
7	Advanced Coastal Hydrodynamics	Post Graduate

XI. Work Experiences

Involved in many civil engineering projects as designer, supervisor and project manager from 1978 till now.

Ghenaveh Port Rehabilitation Project, Hydrodynamic studies and numerical simulation of sediment transport, Sazeh Pardazi Consultant Engineers, 1997.

Engineering and Design of Salakh Fishery Port, Project Manager, Sazeh Pardazi Consultant Engineers, 1989-1990.

Bahmanshir River Project, Modeling Tidal Current and Salt Intrusion, Head of Team, Sazeh Pardazi Consultant Engineers, 1989.

Senior advisor to Sazeh Pardazi Consultant Engineers in several projects for example: Numerical simulation of nearshore waves for Naiband Bay, Hydrodynamics of Googsar port, Simulation of Wave penetration to several harbors, etc. 1997 to present.

Pareh-Sar Seawater Intake, Project manager for Basic Design Sazeh Pardazi Consultant Engineers, 2001-2002.

Mathematical simulation of Storm Surge in Southern Caspian Sea, Sazeh Pardazi Consultant Engineers, 2000-2002.

Mobin Seawater Intake, senior advisor for Civil and Structure discipline, Sazeh Pardazi Consultant Engineers. 2002-2003.

Shahid Beheshti Port development project (Chabahar), senior engineering, Sazeh Pardazi Consultant Engineers, 2004-2005.

Kish Island Port Development project, project director, Pars Geometry Consultant Engineers, 2006-2008.

Mahshahr Oil Terminal Revamp Project, project director, Pars Geometry Consultant Engineers, 2007-2008.

XII. Awards,

Distinguished Professor, Tarbiat Modares University, 2009