



Name & Surname: Mehdi Ghomeshi

Date of Birth: 01/08/1958



Address, Suburb, State, Postcode: Faculty of Water & Environmental Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Iran, 6135743311



Phone/Mobile Number: +98 9166166372



E-mail address: ghomeshi@scu.ac.ir

PROFESSIONAL PROFILE:

Professor of Water Engineering in Shahid Chamran University (SCU) of Ahvaz.

EDUCATION BACKGROUND:

B.Sc.	1982	Irrigation Engineering	Jundi-Shapoor University	IRAN
M.Sc.	1988	Irrigation & Drainage	Shahid-Chamran University	IRAN
Ph.D.	1995	Civil Engineering	Wollongong University	AUSTRALIA

Thesis Title:

M.Sc.: “Sediment Deposition in Dez Reservoir”

Ph.D.: “Reservoir Sedimentation Modelling”

TEACHING AND TRAINING EXPERIENCE:

- River Engineering
- Open Channel Hydraulics
- Reservoir sedimentation
- Sediment Transport

- Fluid Mechanics
- Hydrodynamics

HONOURS AND AWARDS:

- Top researcher of Shahid Chamran University of Ahvaz in 2003
- Top researcher of Shahid Chamran University of Ahvaz in 2009
- Top academic instructor of Shahid Chamran University of Ahvaz in 2015
- Exemplary master of the country in 2014
- Top researcher of Shahid Chamran University of Ahvaz in 2015
- Top researcher of Shahid Chamran University of Ahvaz in 2017
- Top researcher of Khuzestan Province in 2016
- Obtaining the title of "Iranian Hydraulic Veteran" by the Iranian Hydraulic Association in 2021

INTERESTS AND RESEACH FIELDS:

- River Engineering
- River and Reservoir Sedimentation
- Hydrodynamic of Transverse Wave Due to Obstacles
- Turbidity Currents

RESARCH ACTIVITIES:

PUBLICATIONS:

Journal Papers:

- 116 Papers in Iranian Journals (Persian)
 - 36 papers in international journals as follow:
1. Ghomeshi, M., 1995, "Evaluation of HEC-6 Performance for prediction of sediment deposition in large reservoir", *I. J. Water Resources Eng.* Vol. 2, Nos3 and 4 pp: 67-77.
 2. Hagi-abi, A. H., M. Ghomeshi, and S. M., Kashefipoor, 2005, "On hydrodynamics of a density current on an incline", *Asian Journal of Water Environment and Pollution*, Vol. 2, Nos1, pp: 1-8.
 3. Javaheri, N., M. Ghomeshi, and S. M., Kashefipoor, 2008, "Use of Fuzzy Method for Determination of Sediment Balance and its Role on the Morphological Changes in Meandering Rivers" *Asian Journal of Scientific Research*, Vol. 1 (1), 32-40.
 4. Ghomeshi, M., S.A. Mortazavi-Dorcheh, and R. Falconer, 2007, " Amplitude of Wave Formation by Vortex Shedding in Open Channels", *Journal of Applied Sciences*, Vol. 7, (24), 3927-3934.
 5. M. Fathi-Moghadam, H. Torabi-Poudeh, M. Ghomeshi, and M. Shafaei, 2008, "The density current head velocity in expansion reaches", *Lakes & Reservoirs: Research and Management*, Vol. 13, 63-68.
 6. H. Torabi-Poudeh, M. Fathi-Moghadam, M. Ghomeshi, and M. Shafaei, 2008, Motion of a Density Current Head in a Diverging Channel, *Journal of Environ. Science & Engg.*, Vol. 50, P. 63-68.

7. S. A. Asghari Pari, S. M. Kashefipour, M. Ghomeshi and M. Shafai Bajestan, 2010, Effects of obstacle heights on controlling turbidity currents with different concentrations and discharges, *Journal of Food, Agriculture & Environment* Vol.8 (2): P. 930-935.
8. Ahmad Jafari, Mehdi Ghomeshi, Mahmood Bina and Seyed Mahmood Kashefipour, 2010, Experimental study on ten modes of transverse waves due to vertical cylinders in open channels, *Journal of Food, Agriculture & Environment* Vol.8 (2): P. 949-955.
9. Seied mohammad seied Aboutorabi, Mehdi Ghomeshi and Amir abbas Kamanbedast, 2010, Experimental Investigation of Height preventing structures for Vertical wave against flow in open channel, *World Applied Sciences Journal* 9 (9): 1067-1074.
10. M. Fathi-Moghadam, S. Emamgholizadeh, M bina & M. Ghomeshi, Physical modeling og pressure flushing for desilting of non-cohesive sediment, *Journal of Hydraulic Research* Vol. 48, No. 4 (2010) pp. 509-514.
11. Abdolazim Ghomeshi, Abdollahim Hooshmand, Mehdi Ghomeshi, Reza Azizi, 2011, An experimental study on the effects of transverse wave on bed of channels due to vortex shedding, *Journal of Food, Agriculture & Environment* Vol.9 (1): P. 546-549.
12. Nader Barahmand, Abolfazl Shamsai, Mehdi Ghomeshi, 2011, Roughness effects on hydraulic jumps in density currents, *Journal of Food, Agriculture & Environment* Vol.9 (2): P. 531-534.
13. Naval Azam, Mehdi Ghomeshi, 2012, Effect of Protecting Piles on Scour Reduction Around Bridge Piers, *Archives Des Sciences*, Vol.65 (7): P. 39-46.
14. Zainab Alem, Mehdi Ghomeshi, Siavash Mohammadi, 2012, Experimental study on the effects of collar's elevation and roughness on the reduction of scour of rectangular bridge abutment, *Archives Des Sciences*, Vol.65 (8): P. 370-383.
15. Mohammad Hemmati, Mehdi Ghomeshi, Seyed Mahmood Kashefipour, Mahmood Shafai-Bejestan, Stefano Lanzoni "Experimental Investigation of the Effects of Angle and Length of Bendway Weirs on Scouring and Sedimentation in a Meander River" *J. Am. Sci.* 2012; 8(9):912-917. (ISSN: 1545-1003).
16. Reza Nasrollahpour, Mehdi Ghomeshi, Javad Ahadian, "Turbidity Currents Head over Artificially Roughened Bed", *World Applied Sciences Journal*, 2012; 19(9):1278-1283. (ISSN: 1818-4952).
17. Morteza Bakhtiari, S. M. Kashefipour, M. Ghomeshi and J. Zahiri, "Effect of geometric parameters of spur dike and depth-placed riprap on its failure threshold in a 90° flume bend", *Ecology ,environment and conservation*, 18 (3):2012; pp. (479-484)
18. Reza Azizi, M. Shafai Bajestan, and M. Ghomeshi, "Scour Depth at the Edge of Different Submerged Vanes Shapes", *Journal of Applied Sciences*, 12 (4):2012, pp. 362-368
19. Reza Nasrollahpour, Mehdi Ghomeshi, "Effect of Roughness Geometry on Characteristics of Density Currents Head", *Indian Journal of Science and Technology*, Vol: 5 (12), Dec 2012, pp. 3783-3787.
20. Hosein Khozaymeh nezhad, Mehdi Ghomshi and Mamud Shafai Bejestan, " Investigation of Collar in different sizes and bed level as a Bridge Abutment Scour Countermeasure", *Ecology , environment and conservation*, 18 (4): 2012; pp. (963-966).
21. Mehdi Ghomeshi, Mohammad Reza Zayerie and Houshang Hasounizadeh, " Analysis of turbidity currents measured in Dez Reservoir", *Ecology ,environment and conservation*, 19 (1):2013; pp. (223-229).

22. Hosein Khozayemeh nezhad and Mehdi Ghomeshi, "Comparison of Symmetrical and Unsymmetrical Rectangular Collars on Scour Reduction of Bridge Abutment", *Middle-East Journal of Scientific Research* 18 (8): 1099-1104, 2013
23. Nader Parsazadeh, Mohammad Mahmoudian Shoushtari, Mehdi Ghomeshi, 2012, Verification of Sediment Bed Load in Dez River (Case study: in Tale Zang Station), *International Journal of Latest Trends in Computing* Vol.3 (3): P. 67-72.
24. Ali Zabihollah zadeh, Mehdi Ghomeshi, Mohammad Reza Mohseni kia, 2014, Construction Peculiarities of Botton outlet Tunnel, Its Air Vent and Energy Dissipater at Upper Gotvand Dam, *International Journal of Innovative Research in Advanced Engineering (IJIRAE)* Vol.1 (9): P. 150-155.
25. Morteza Marosi, Mehdi Ghomeshi, Hamed Sarkardeh, 2015," The Influence Of Roughness On The Propagation Of Density Currents" , *Sadhana* Vol. 40, Part 4, June 2015, pp. 1373–1383.
26. Peyman Varjavand, Mehdi Ghomeshi, Ali Hosseinzadeh Dalir, Davood Farsadzadeh, Alireza Docheshmeh Gorgij, 2015," Experimental observation of saline underflows and turbidity currents, flowing over rough beds", *Canadian Journal of Civil Engineering*, Vol. 42.pp.824-844
27. Reza Nasrollahpour, Mohamad Hidayat Jamal, Zulhilmi Ismail, Mehdi Ghomeshi & Peiman Roushenas, 2015," The Influence of Roughness On The Propagation Of Density Currents", *Malaysian Journal of Civil Engineering* 27 Special Issue (2):266-272 (2015).
28. Mohammad Hemmati, Mehdi Ghomeshi, Hojjat Ahmadi & Stefano Lanzoni, "Scour depth around flat and sloped crest bendway weirs: a laboratory study" *International Journal of River Basin Management*, Vol. 13, No. 4.
29. Seyed Amin Asghari Pari, Seyed Mahmood Kashefipour & Mehdi Ghomeshi," An experimental study to determine the obstacle height required for the control of subcritical and supercritical gravity currents", *European Journal of Environmental and Civil Engineering*, 2017, Vol. 21, No. 9, 1080-1092.
30. Seyed Mahmood Kashefipour, Mehdi Daryae & Mehdi Ghomeshi," Effect of bed roughness on velocity profile and water entrainment in a sedimentary density current", *Can. J. Eng. NRC Research Press*, 2018, Vol. 45, 9-17.
31. M. Ghomeshi, M. Saraei Baher & P. Ehdaei, 2018," An experimental study of plunge depth in the case of clear water movement", *INTL. J. RIVER BASIN MANAGEMENT* Vol. 17, No (3):323-332, (2019).
32. M. Akbarizadeh, M.R. Saffarian & M. Ghomeshi, 2019," Experimental Investigation of Sediment Accumilation Reduction in Reservoirs Due to Turbidity Currents with Channel Insertion at the Entrance", *INTL. J. of Civil Engineering*, Vol. 18, No (1):37-47, (2020).
33. N. Poustizadeh, M. Ghomeshi, 2018," An Experimental Study on the Effects of Obstacle Diameters on Suspended Sediment Concentration in the Case of Transverse Waves", *J. of Hydrosiences and Environment*, Vol. 2, No (3):16-20, (2018).
34. N. Raeisi, M. Ghomeshi, 2020, "Effect of bridge pier diameter on maximum depth of scour impacts on the environment", *J. NS Applied Sciences*, 2:1794, p 1-11, (oct.2020).
35. M. Khoshchehreh, M. Ghomeshi, A Shahbazi, 2020, "Hydrological evaluation of global gridded precipitation datasets in a heterogeneous and data-scarce basin in Iran", *J. Earth Syst. Sci.*, 129 201, p 1-15, (Sept.2020).

36. M. Khoshchehreh, M. Ghomeshi, A Shahbazi, 2021, "Spatial and temporal evaluation of global rainfall products in a data-scarce region: The Dez Basin, Iran", *JOURNAL OF WATER AND LAND DEVELOPMENT*, Vol.48. No.1, p 148-161, (Mar.2021).

CONFERENCE PAPERS:

- 214 Papers in Iranian Conferences (Persian)
 - 16 Papers in International Conference as follow:
1. Ghomeshi, M., M. Bina and H. Sedghi, 1993, "Sediment distribution and evaluation of useful life-time of Dez dam in Iran". *Proceedings of the Int. Conf. on Environmental Management (ICEM1)* Australia. 1993.
 2. Bina, M., M. Ghomeshi, and A. Shokrollahi, 1993, "Initial unit weight of reservoir deposited sediment". *Proceedings of the Int. Conf. on Environmental Management (ICEM1)*, Australia, 1993.
 3. Ghomeshi, M., M. Bina and H. Sedghi, 1995. "Sediment distribution and evaluation of useful life-time of Dez Reservoir in Iran" *Sixth Int. Symp. On River Sedimentation*, 7-11 Nov. 1995.
 4. Ghomeshi, M. and M. Sivakumar, 1995, "A new model for reservoir sedimentation: DEPO", *Sixth Int. Symp. On River Sedimentation*, 7-11 Nov. 1995.
 5. Ghomeshi, M. and M. Sivakumar, 1995," Gravity currents-an experimental study", *2 nd Int. Conf. On Environmental Management (ICEM 2)*, Australia, 10-13 Feb. 1998.
 6. Haghi-abi, A. H., Ghomeshi, M. and Kashefipoor, S. M., 2004, "Laboratory experiments on density currents", *The Ninth Int. Symposium on River Sedimentation*, 18-21 Oct. 2004.
 7. Javaheri, N., Kashefipoor, S. M., and Ghomeshi, M., 2005, "Application of the harmonic-periodic wave for prediction of the morphology change in the meandering rivers", *17th Canadian Hydrotechnical Conference*, 17-19 Aug. 2005.
 8. Kashefipoor, S. M., Javaheri, and M. Ghomeshi, 2008, "Application of the first area moment curve for determination of morphological changes in meandering rivers", *River flow 2008*, 1263-1269. Sept. 2008.
 9. Ahmad Jafari, Mehdi Ghomeshi, Mahmood Bina, Seyed Mahmood Kashefipoor, 2010, " Physical modelling study of free and submerged flow on the obstructions in rivers with ten modes of Transverse waves", *8th International River Engineering Conference*, Shahid Chamran University, 26-28 Jan. 2010, Ahwaz.
 10. Ahmad Jafari, Mehdi Ghomeshi, Mahmood Bina, Seyed Mahmood Kashefipoor, 2010, "Comparing of Ten Modes of Oscillation Occurring Across the Open Channels", *IAHR-APD2010 Conference Proceedings*, The University of Auckland, 22-24 Feb. 2010, New Zealand.
 11. Reza Azizi, Mehdi Ghomeshi, 2010, "Computing Strouhal Number in Transverse Wave Generation by Vortex Shedding in Open Channels", *IAHR-APD2010 Conference Proceedings*, The University of Auckland, 22-24 Feb. 2010, New Zealand.
 12. Kashefipoor, S. F., Kooti, and M., Ghomeshi, 2010, "Effect of reservoir bed slope and density current discharge", *Environmental Hydraulics*, 195-200. 2010.
 13. Mehdi Ghomeshi, S.B. Sarvari Nezhad, 2011," Experimental Evaluation of Velocity Distribution of Density Current in Converging Reaches ", *3rd International con. On Managing River in 21st Century*, Malaysia (Penang) 538-542, 2011

14. Reza Nasrollahpour, Mehdi Ghomeshi, Ali Akbar Ghorban Moghadam, "Effect of roughness on density current head characteristics", *9th International River Engineering Conference*, Shahid Chamran University, Ahvaz, Iran, Jan. 2013.
15. Reza Nasrollahpour, Mehdi Ghomeshi, "Effect of roughness geometry on turbidity currents head characteristics", *9th International River Engineering Conference*, Shahid Chamran University, Ahvaz, Iran, Jan. 2013.
16. M.R.Zayrie, M. Ghomeshi, 2016, "Numerical Modeling of Turbid Currents in Dez Reservoir, Iran", *River flow 2016*, 1407-1412. Sept. 2016.

BOOKS:

1. M. Ghomeshi, A. Pajohesh-Jahromi, "Fortran 77 and Graphic ", Ya-Mahdi Press Office, 1996 (Persian).
2. M. Ghomeshi, S. Emamgholi-zadeh, "An Introductory Book to Fluid Mechanics & Hydraulics", Shahid Chamran University of Ahvaz Press Office, 2008 (Persian).
3. M. Ghomeshi, H. Khozaymenezhad, "Measuring Instruments of Hydraulic Quantities", Shahid Chamran University of Ahvaz Press Office, 2015 (Persian).
4. M. Ghomeshi, "1000 Solved Problems in Fluid Mechanics", Shahid Chamran University of Ahvaz Press Office, 2012 (translated to Persian).

CONFERENCE PRESENTATIONS:

1. Keynote speaker of the International Workshop of "Reservoir Dams Sedimentation Control" Karaj, Iran, October 19-21, 2009.
2. Keynote speaker of fourth national conference of Irrigation and Drainage networks management, Shahid Chamran University of Ahvaz, Ahvaz, Iran, March 2014.
3. Keynote speaker of second national conference Water Crisis, Shahrkord University, Shahrkord, Iran, September 2014.
4. Keynote speaker in Sustainable Supply Management and Energy Security in Khuzestan Province Seminar, Ahvaz, Iran, Feb. 2016.
5. Keynote speaker of International Conference on New Research Findings in Civil Engineering, Architecture and Urban Management, Tehran, Iran, April 2016.
6. Keynote speaker of National Conference of Regional Aquaculture Management and Promotion of Water Resources Productivity, Fisheries Science Research Institute, Peruvian Aquatic Research Institute, South of the Iran, Ahvaz, Iran, Jan. 2019.
7. Keynote speaker of 18th Iran Hydraulic Conference, Tehran, Iran, Jan. 2020.
8. Keynote speaker of 19th Iran Hydraulic Conference, Mashhad, Iran, Jan. 2021.

RESEARCH PROJECTS:

1. "Simulation of Sediment Deposition in Khozestan Reservoirs", completed in 2001.
2. "Critical Shear Stress of Erosion of Cohesive Sediment", completed in 2002.
3. "Effects of Sediment Load of Dez River Branches on Sediment Deposition in Dez Reservoir". Completed in 2004.
4. "Analysis of Suspended Sediment Particles in Khozestan Rivers ". Completed in 2006.
5. "Evaluation of Turbidity Current in Converging-Diverging Flow". Completed in 2007.
6. "Evaluation of Sand Collecting from Bed of Allah River in Khozestan". Completed in 2008.

7. "Experimental Investigation on the Effect of Transverse Waves on the Sediment Transport in Open Channels ". Completed in 2008.

PROFESSIONAL MEMBERSHIPS:

- Member of Iranian Water Resources Science and Engineering Association
- Member of Iranian Hydraulic Association
- Member of Iranian River Engineering Association
- Secretary of the Regional Committee for Irrigation and Drainage of Khuzestan Province 2007 to 2010

LANGUAGES:

Persian (native)

English (medium)