

RESUME



1-PERSONAL INFORMATION

First name: Masoud
Last name: Ghodsian
Date of birth: 21.03.1960
Place of birth: Mahallat-Iran
Married status: Married
Address: Faculty of Civil and Environmental Engineering
Tarbiat Modarres University
P.O.Box.: 14115/143-Tehran, I. I. Iran
Tel: +98 21 82883317
Fax: +98 21 82884914
Email: ghods@modares.ac.ir

2. EDUCATIONAL RECORDS

Date	Degree	Institution
1986	B.Tech	P.A.U., Ludhiana- India
1989	M.Tech	Roorkee Univ., India- Civil Engg. (Hydraulics)
1992	Ph.D	Roorkee Univ., India- Civil Engg. (Hydraulics)

3. ACADEMIC EXPERIENCES,

1. Assistant professor, Tarbiat Modares University, Tehran, Iran (1992-2000).

2. Associate professor, Tarbiat Modares University, Tehran, Iran (2001-2003).
3. Professor, Tarbiat Modares University, Tehran, Iran (since 2003).
4. Advisore, Water research center, Tehran, Iran (1994-1996).
5. Advisore, Building and housing research center, Tehran, Iran (1998-2000).
6. Head of Hydraulic engineering group, Civil engineering department, Tarbiat Modares University, Tehran –Iran (1996-1999).
7. Head of Hydraulic engineering group, Civil engineering department, Tarbiat Modares University, Tehran –Iran (2001-2004).
8. Head of Hydraulic Engineering Group, Water Engineering Research Institute, Tarbiat Modares University, Tehran, Iran (since 2004).
9. Assoc. Dean Academic, Faculty of Engineering, Tarbiat Modares University, Tehran. (2003-2005).
10. Member of academic council, Tarbiat Modares University, Tehran. (2003-2005).
11. Head of Civil Engineering Section, Tarbiat Modares University, Tehran, Iran (2007-2009).
12. Member of University Council, Tarbiat Modares University, Tehran, Iran (2007-2009).
13. Head of Faculty of Civil and Environmental Engineering, Tarbiat Modares University, Tehran, Iran (2009-2011).
14. Member of academic council, Tarbiat Modares University, Tehran. (2009-2011).
15. Head of Hydraulic engineering group, Civil and environmental engineering, Tarbiat Modares University, Tehran –Iran (2014-).
16. Head of Tarbiat Modares University Campus (2016-).
17. Member of academic council, Tarbiat Modares University, Tehran. (2016-).
18. Member of University Council, Tarbiat Modares University, Tehran, Iran (2016-).

4. MEMBERSHIP OF SCIENTIFIC SOCIETIES:

- 1) Member of Iranian Hydraulic Association.
- 2) Member of International association for Hydroenvironmental Engineering and Research (IAHR).
- 3) Editor-In-Chief: Modares Civil Engineering Journal, Tarbiat Modares University-Tehran-Iran.
- 4) Member of Editorial Board; Modares Civil Engineering Journal, Tarbiat Modares University-Tehran-Iran.
- 5) Member of Editorial Board; International Journal of Sediment Research-Elsevier.
- 6) Member of Editorial Board; Journal of Iranian Hydraulic Association.

5. REVIEWER

- 1) International journal of engineering science, Iran university of science and technology.
- 2) Agriculture research journal, Shahid Chamran university, Ahvaz-Iran.
- 3) Research journal of technical department– Tehran university- Tehran.
- 4) Esteghlal research journal, IUT, Esfahan-Iran.

- 5) Modares technical and engineering journal, Tarbiat Modares University- Tehran-Iran.
- 6) Journal of Irrigation and drainage engineering, ASCE.
- 7) Journal of Hydraulic engineering, ASCE.
- 8) Journal of hydroenvironmental Research, IAHR-Elsevier
- 9) Journal of Iranian Hydraulic Association
- 10) Journal of Iranian Water Resources Association
- 11) International journal of sediment research
- 12) International Journal of Civil Engineering, Iranian Society of Civil Engineer
- 13) Journal of water and watershed
- 14) Journal of research in agriculture engineering

6.COMMITTEE MEMBERS

- 1) Member of subcommittee on flood prevention , sea water oscillation and flooding of rivers, Tehran (1997-2000).
- 2) Member of national committee on flood protection- Tehran province (1997-2000).

7. RESEARCH INTERESTS

- 1) River Engineering
- 2) Physical models
- 3) Fluvial hydraulics
- 4) Hydraulic structures
- 5) Sediment transport

8. PUBLICATIONS

a) JOURNAL PAPERS

- 1) Swamee, Pathak and **Ghodsian, M.** (S. Ali), "Analysis of rectangular side sluice gate", Journal of Irrigation and Drainage Engineering, ASCE, Vol. 119, No.6, 1993.
- 2) Swamee, Pathak, Mohan, Agrawal and **Ghodsian M.** (S. Ali), "Sub critical flow over rectangular side weir", Journal of Irrigation and Drainage Engineering, ASCE, Vol. 120, No. 1, 1994.
- 3) Swamee, Pathak and **Ghodsian, M.** (S. Ali), "Side weir analysis using elementary discharge coefficient", Journal of Irrigation and Drainage Engineering, ASCE, Vol. 120, No. 4, 1994, Republished in water resources journal, Vol. 182, Sep. 1994.
- 4) **Ghodsian, M.** "Viscosity and surface tension effects on rectangular weir flow", International Journal of Engineering Science, Vol. 9, No. 4, pp. 111-117- 1998.
- 5) **Ghodsian, M.**, Discussion of "Analysis of flow through lateral slot" by C.S.P. Ojha and D.Subbiah, Journal of Irrigation and Drainage Engg., Vol. 124, No. 6, pp. 327-329. 1998.

- 6) Borghei, S.M., Jalili and **Ghodsian, M.**, "Discharge Coefficient for sharp crested side weir in sub critical flow", Journal of hydraulic engineering, ASCE, Vol. 125, No. 10, Oct. 1999.
- 7) **Ghodsian, M.** and Bahrami, J "Measurement of discharge by triangular broad crested weirs" International Journal of Engineering Science, No.7, Vol.10, 1999, (in persian).
- 8) **Ghodsian, M.**, Discussion of "Scour below pipeline in river crossing" by Moncada and Aguirre-Pe, Journal of Hydraulic Engineering, ASCE, October, 2000.
- 9) **Ghodsian, M.** and Hosseini Tehrani, S.M. "Scour around groin", International Journal of Sediment Research, No.1, Vol. 16, March, 2001.
- 10) **Ghodsian, M.**, Amanian, N. and Marashi, S.A., "Discharge coefficient of semicircular labyrinth weir" Amirkabir Journal of science and Technology, Vol. 13, No. 49, pp. 76 – 83, 2002. (in persian).
- 11) Abassi, A.A., **Ghodsian, M.**, Habibi, M. and Salehi A.A., "Experimental investigation on sediment control in lateral intake using Sill" Journal of Pajouhesh-va-Sazandegi, No.55, Vol.2., 2002. (in persian).
- 12) **Ghodsian, M.** and Azar F. Ardeshtir, " Scour hole characteristics below free overfall spillway" International Journal of Sediment Research, Vol. 17, No. 4, pp 304-313. 2002.
- 13) **Ghodsian, M.** and Saryazdi, M. H. A., " Dimensions of scour hole downstream of flip bucket spillway" Modarres Technical and Engineering Journal, Special issue on civil engineering, T.M.U, No. 8, summer 2002. (in persian).
- 14) Borghei, S.M., Vatannia, Z, **Ghodsian, M.** and Jalili, M.R., "Oblique rectangular sharp crested weir" Proceedings of the Institution of Civil Engineers, Water and Maritime Engineering, 156, June 2003.
- 15) **Ghodsian, M.**, "Super critical flow over rectangular side weir" Canadian journal of civil engineering, 30, 2003.
- 16) **Ghodsian, M.**, Discussion of flume tests for scour in clay at circular piers", Journal of hydraulic engineering, ASCE, Vol. 126, No. 7, July, 2003.
- 17) **Ghodsian, M.**, "Flow over side sluice gate" Journal of Irrigation and Drainage Engg., ASCE, Vol. 126, No. 6, 2003.
- 18) Ghaheri, A., Goodarzy, M. and **Ghodsian, M.**, "Analysing field data for determination of discharge coefficient of side weirs in trapezoidal channels", International Journal of Engineering Science, No.2, Vol.14, 2003 (in persian).
- 19) Montazer, G., **Ghodsian, M.**, Nasiri, F., Javan, M. and Eghbalzadeh, A., " Intelligent prediction of afflux due to bridge pier using ANN based on RBF" Modarres Technical and Engineering Journal, Special issue on civil engineering, T.M.U, No. 14, Winter 2004. (in persian).

- 20) Khosronejad, A., **Ghodsian, M.** and Montazer, G.A. , "Prediction of scour around piles using ANN" International Journal of Sediment Research, Vol. 18, No. 6. 2003.
- 21) **Ghodsian, M.**, "Flow over triangular side weir" Iranica scientia, Vol. 11, No. 1&2, 2004.
- 22) Najafi, J. and **Ghodsian, M.** "Experimental investigation on dimentions of scour hole downstream of pipe culverts" Journal of engineering, Faculty of engineering, University of Tehran, Vol. 38, No.2, July 2004. (in persian).
- 23) **Ghodsian, M.** "Stage discharge relationship for triangular weir" International journal of civil engineering, Vol. 2, No.1, March 2004.
- 24) Aboughasemi, M., **Ghodsian, M.**, Ayoubzadeh, S.A., Shafae Bajestan, M., "Scour hole location in sinus a channel", Journal of Hydaulic Engineering, Iranian Hydraulic Association, Summer 2005, (in persian).
- 25) Dehghani, A.A., Montazer, G.A., Nasiri Ssaleh, F., **Ghodsian, M.** "Optimisation of concrete gravity dams by using genetic algorithm and ANN", Modarres Technical and Engineering Journal, Special issue on civil engineering, No.25, Fall 2006, (in persian).
- 26) Hassanpour, F., Ayoubzadeh, S.A., **Ghodsian. M.**, Samani, J.M.V., "Effect of submerged vanes on itake discharge amnd water surface profile at 90 degree lateral intakes", Journal of research and construction, No.. Vol. 2. (in persian).
- 27) Dehghani, A.A., **Ghodsian, M.** Salehi Neyshaburi, S.A.A. and Shafeefar, M., "Variations of alluvial channel bed in a 180 degree channel, " Journal of Hydaulic Engineering, Iranian Hydraulic Association, Summer 2007, (in persian).
- 28) Salajegha, A., Salehi Neyshaburi, S.A.A., Ahmadi, H., Mahdavi, M. and **Ghodsian, M.**, "Experimental study on 3D flow pattern in river bend", Iranian journal of natural resource, Vol. 58, No. 1, 25-33 (in persian).
- 29) **Ghodsian, M.**, Melville, B. and Tajkarimi, D. "Local scour due to free overfall jet", Water management, Institution of Civil engineers, London, Vol. 159, IssueWM4, 2006.
- 30) **Ghodsian, M.** and Mousavi, S. K., "Experimental study on bed scour in a 90o channel bend", International Journal of Sediment Research. Vol. 21, No. 4, 2006.
- 31) Khosronejad, A., **Ghodsian, M.**, Salehi Neyshabouri and Masouri, A.R.,m "Computation of scour depth and length around pile groupe using ANNs", Modares Technical and Engineering Journal, No. 29, Fall 2007, (in persian).
- 32) Zakermoshfegh, M.,**Ghodsian, M.**, Salehi Neyshabouri and Shakiba, M., "River flow forcasting using Newral Network and Auto-Calibrated NAM model with Shuffled complex evolution", Journal of Applied Science, 8(8), 1487-1494, 2008.
- 33) Montaseri, H., **Ghodsian, M.**, Safeefar, M., Salehi Neyshaburi, S.A.A., and Dehghani, A.A., "Experimental study on flow field and scouring at lateral intake in a

180 degree channel bend", Journal of Iranian agriculture science and natural resources, Vol. 15, No. 2, 225-240, 2008, (in persian).

34 Nasrollahi, A., **Ghodsian, M.**, Salehi Neyshabouri, S. A. A., "Local scour at permeable spur dikes", Journal of Applied Sciences, Vol. 8 Issue 19, p3398, Oct. 2008

35 **Ghodsian, M.**, Vaghefi M., and Panahpour, N. "Experimental study on 2D flow pattern around spur dike in 90 degree channel bend", Journal of Iranian agriculture science and natural resources, Vol. 15, No. 4, 269-280, 2008, (in persian).

36 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaburi, S.A.A., "Experimental study on flow pattern around T-shaped spur dike in a 90 degree bend with flat bed", Technical Journal, Tabriz University, Tabriz-Iran, Vol. 37, No. 3, 75-81, Fall 2008 , (in persian).

37 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaburi, S.A.A., "Experimental study on 3D flow field and scouring in a 90 degree channel bend", Journal of Hydraulic Engineering, Iranian Hydraulic Association, Vol. 3, No. 3, 41-57, 2008, (in persian).

38 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaburi, S.A.A., " Experimental study of scour around spur dike in a 90 degree bend", Journal of Iranian water resources, Vol. 4, No. 3, 67-69, 2008, (in persian).

39 Fazli, M., **Ghodsian, M.** and Salehi Neyshaburi, S.A.A., "Variations of bed topography of a 90 degree channel under different flow conditions", Modarres Technical and Engineering Journal, No.35, 123-142, Spring 2009, (in persian).

40 **Ghodsian, M.** and Vaghefi, M. "Experimental study on scour and flow field in a scour hole around a T-shaped spur dike in a 90° bend", International Journal of Sediment Research. Vol. 24, No. 2, 145-157, 2009.

41 **Ghodsian, M.**, " Stage discharge relationship for a triangular labyrinth spillway", Journal of Water management 162, WM3, Institution of Civil Engineers, London, 173-178, June 2009.

42 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaboori A.A. "Experimental study on the effect of a T-shaped spur dike length on scour in a 90° channel bend", The Arabian Journal for Science and Engineering, Volume 34, Number 2B, 337-348, Oct. 2009.

43 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaboori A.A., "Temporal variations of scour around a T-shaped spur dike in a 90 degree bend", Journal of water and soil protection", Vol. 16, No., 1, 79-105, 2009, (in persian).

44 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaboori A.A., "Experimental study of 3D flow field around a T-shaped spur dike in a 90 degree bend", Journal of water and soil protection", Vol. 16, No. 2, 105-129, 2009, (in persian).

- 45 Ghohari, S., Ayubzade, S.A., **Ghodsian, M.** and Salehi Neyshaboori A.A., "Effect of submerged vanes and spur dike on sediment control to lateral intake", *Journal of water and soil protection*", Vol. 16, No. 2, 35-59, 2009, (in persian).
- 46 Vaghefi, M., Ahmadabadi, A., Fathnia, A. and **Ghodsian, M.** "Comparison of interpolation methods for bed topography of channel bends", *Journal of watershed science and engineering*, Iranian watershed association, Vol. 3, No. 6, Spring 2009. (in persian).
- 47 Fazli, M., **Ghodsian, M.** and Vaghefi, M., "Scouring and flow pattern around two impermeable spur dike in a 90 degree bend", *Journal of Civil and Environmental Engineering*, Vol. 39, No. 33, 33-45, fall 2009 (in persian).
- 48 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshaboori A.A., "Experimental study on the effect of channel radius and location of T-shaped spur dike on scour in a 90 degree channel bend", *Journal of Hydraulic Engineering*, Iranian Hydraulic Association, Vol. 4, No. 1, 90-107, 2009, (in persian).
- 49 Vaghefi, M. and **Ghodsian, M.**, "Experimental study on the effect of T-shaped spur dike on bed topography in a 90 degree bend", *Journal of civil engineering*, Ferdousi University, Mashhad, Iran, Vol. 22, No. 113, 1-128. 2010 (in persian).
- 50 Vaghefi, M. and **Ghodsian, M.**, "Experimental study on secondary flow and vorticity around a T-shaped spur dike in a 90 degree bend", *Journal of civil engineering*, Ferdousi University, Mashhad, Iran, Vol. 21, No. 111, 2010 (in persian).
- 51 Vaghefi, M. and **Ghodsian, M.**, "Experimental study on flow field around a T-shaped spur dike in a 90 degree bend with movable bed", *Journal of Civil and photometry*, Faculty of Engineering University of Tehran, Vol. 44, No. 2, 265-276, 2010, (in persian).
- 52 Vaghefi, M. and **Ghodsian, M.**, "Experimental study on the effect of a T-shaped spur dike on bed topography in a 90 degree bend ", *Journal of civil engineering*, Ferdousi University, Mashhad, Iran, No. 1, 1-17, 2010 (in persian).
- 53 Vaghefi, M. and **Ghodsian, M.**, "Experimental study on the effect of bend radius on bed topography in a 90 degree bend ", *Journal of science and irrigation engineering*, Shahid Chamran University, Ahvaz, Iran, Vol. 33, No. 2, 93-113, 2010. (in persian).
- 54 Mousavi, S.K. and **Ghodsian M.**, "Experimental study on the effect of relative channel bend radius on bed scouring of a 90 degree channel bend", *Modarres Technical and Engineering Journal*, Vol. 10, No.2, 135-144, Spring 2010, (in persian).
- 55 Vaghefi, M. and **Ghodsian, M.**, Behnam Taghdosi, M., "A new instrument for measuring bed topography", *Modarres Technical and Engineering Journal*, Vol. 11, No. 1, 85-92, Summer 2010, (in persian).

- 56 Safarzadah, A., Salehi Neyshaboori A.A., Zarati, A.R and **Ghodsian, M.** "Study on distribution of shear stress in uniform channel", Journal of Hydaulic Engineering, Iranian Hydraulic Association, Vol. 5, No. 1, 51-70, 2010, (in persian).
- 57 Vaghefi, M. and **Ghodsian, M.**, "Experimental study on the effect of bend radius on secondary flow in 90 degree bend", Journal of Hydaulic Engineering, Iranian Hydraulic Association, Vol. 5, No. 1, 91-99, 2010, (in persian).
- 58 Ghohari, S, Ayubzadeh, S.A., **Ghodsian, M.** and Salehi Neyshaboori A.A., "Experimental study on flow field of lateral intake using submerged vanes and spur dike", Journal of agricultur engineering research, Vol. 11, No. 4, 1-18, 2010, (in persian).
- 59 Masoud **Ghodsian** and Mohammad Vaghefi, "Experimental study on scour and flow field in a scour hole around a T-shaped spur dike in a 90o bend", International Journal of sediment research, Vol. 24, No.2, 145-158, 2009.
- 60 Mohammad Vaghefi, Masoud **Ghodsian** and Seyd Ali Akbar Salehi Neyshaboury," Experimental study on the effect of a T-shaped spur dike length on scour in a 90o channel bend", Arabian journal of science and engineering, Vol. 34, No. 2B, 337-348, 2009.
- 61 Naji Abhari, M., **Ghodsian, M.** and Vaghefi, M. and, N. Panahpur, "Experimental and numerical simulation of flow in a 90 bend", Flow Measurement and Instrumentation, 21, 2010.
- 62 Mehraein, M., **Ghodsian, M.** and Salehi Neyshaboury, S.A.A., "Local scour due to an upwards inclined circular wall jet" Journal of water management, Institution of civil Engineers, London, 164, WM3, 111-122, March 2011.
- 63 Karami, H., Ardeshir, A., Behzadian, K. and **Ghodsian, M.**, "Protective spur dike for scour mitigation of existing spur dike", Journal of Hydraulic Research, IAHR, Vol. 49, No. 6, 809-813, 2011.
- 64 Aboulghasemi, M., **Ghodsian, M.**, Sanginabadi, H., "Effect of flow diversion on sediment entrance to a 52 degree intake in sinus rivers", Journal of Hydaulic Engineering, Iranian Hydraulic Association, Vol. 6, No. 1, 41-52, Spring 2011, (in persian).
- 65 Faizilahi, F., **Ghodsian, M.**, and Dehghani, A.A., "Discharhe coefficient of laterl sluice gate in a 180 degree bend", Modarres Civil Engineering Journal, Vol. 11, No. 3, 111-117, Fall 2011, (in persian).
- 66 Mousavi, S.A., Vaghefi, M. and **Ghodsian, M.**, "Experimental study on the effect of bend radius on flow pattern around a T-shaped spur dike in a 90 degree bend with rigid bed", Journal of water and waste water, Vol. 23, No. 1, 15-23, 2012, (in persian).

- 67 Khosravi, M., Vaghefi, M. and **Ghodsian, M.**, "Experimental study on 3D flow field around a submerged T-shaped spur dike in a 90 degree bend", Journal of Hydraulic Engineering, Iranian Hydraulic Association, Vol. 7, No. 1, 49-65, Spring 2012, (in persian).
- 68 Vaghefi, M., **Ghodsian, M.** and Salehi Neyshabouri, S.A.A., "Experimental Study on Scour around a T-Shaped Spur Dike in a Channel Bend" Journal of Hydraulic Engineering, ASCE, Vol. 138, No. 5, May 1, 2012.
- 69 Mehraein, M., **Ghodsian, M.** and Schleiss, A. J. "Scour formation due to simultaneous circular impinging jet and wall jet", Journal of Hydraulic Research, IAHR, Vol. 50, No. 4, 395-399, 2012.
- 70 **Ghodsian, M.**, Ranjbar, M. and M. Mehraein, "Local scour due to free fall jets in non-uniform sediment", Scientia Iranica, 2012.
- 71 Vaghefi, M., **Ghodsian, M.** and Adib, A., "Experimental study on the effect of Froude number on temporal variation of scour around a T shaped spur dike in a 90 degree bend", Applied mechanics and materials, Vol. 147, 75-79, 2012.
- 72 Moradpour, R. Ahmadi, S.B. Parhizkar, T., **Ghodsian, M.**, Taheri-Nassaj, E., "Study of the Effects of Ceramic Nano-Pigments in Cement Mortar Corrosion Caused by Chlorine Ion", World International Journal of Civil, Architectural Science and Engineering, Academy of Science, Engineering and Technology Vol:7 No:3.pp 24-29. 2013.
- 73 Moradpour, R., Taheri Nassaj, E. , Tavassoli, SH., Parhizkar, T. and **Ghodsian, M.**, 2013, "Tunable wettability and rewritable wettability-gradient in self-cleaning composites containing nanoscale photocatalysts" Journal of Nanoscience and nanotechnology, Vol. 13, No. 3, pp 2247-2254.
- 74 Moradpour, R., Taheri-Nassaj, E., Parhizkar, T., **Ghodsian, M.**, "The effects of nano scale expansive agents on the mechanical properties of non-shrink cement-based composites: The influence of nano-MgO addition" Journal of Composites-part B-55, pp 193-202, 2013.
- 75 Norbakhsh, S.M., Vaghefi, M., **Ghodsian, M.**, "Experimental study on flow field around a submerged T-shaped spur dike", Journal of water researches research, Vol. 9, No. 2, 52-60, Fall, 2013, (in persian).
- 76 Vaghefi, M., **Ghodsian, M.** and Azimi, A., "Numerical simulation of scour pattern in channel bend using Flow-3D", Journal of erosion research, No. 9, 78-90, 2013, (in persian).
- 77 Mehraein, M. and **Ghodsian, M.**, Discussion of "Experimental study on flow over labyrinth weirs" Journal of Irrigation and Drainage engineering, ASCE, DEC-2013, 139(6), 1056.

- 78 Mojtaba M. and **Ghodsian** M, Comments on “Discharge coefficient of rectangular sharp crested side weirs part I: Traditional weir equation” by Bagheri, Kabiri-Samani, AR, and Heidarpour, M., Flow Measurement and Instrumentation 45, 2015, 408-410, <http://dx.doi.org/10.1016/j.flowmeasinst.2015.06.013>.
- 79 Vaghefi1, M., **Ghodsian**, M. and Salimi, S. "Scour Formation Due to Laterally Inclined Circular Pier", Arab J Sci Eng., 2015, DOI 10.1007/s13369-015-1920-6
- 80 Sangsefidi, Y. Mehraein, M. and **Ghodsian**, M. "Numerical simulation of flow over labyrinth spillways" Scientia Iranica A (2015), 22(5), 1779-1787.
- 81 Pishgar, R., Ayubzadeh, S.A., Sane, M. and **Ghodsian**, M., “Experimental study on effect of alignment of sediment suction pipe on sediment removal efficiency”, Journal of Hydraulic Engineering, Iranian Hydraulic Association, Vol. 10, No. 1, 1-12, Spring 2015, (in persian).
- 82 Sangsefidi, Y., Mehraeen, M. and **Ghodsian**, M. “Experimental Investigation on hydraulic efficiency of arced weire”, Modares civil engineering journal, Vol. 15, No. 2, Sept. 2015, (in persian).
- 83 Vaghefi, M., **Ghodsian**, M. and Ssalimi, S. "The effect of circular bridge piers with different inclination angles toward downstream on scour", Sadhana, Indian Academy of Sciences, 2015.
- 84 Vaghefi, M., **Ghodsian**, M. and Azimi, A., "Numerical simulation of flow pattern in a channel bend using Flow-3D", Journal of science and irrigation, Vol. 39, No. 1, 2016, (in persian).
- 85 Vaghefi, M., **Ghodsian**, M. and Akbari, M., “Effect of secondary flow on shear stress around T-shaped spur dike in a 90° channel bend”, Journal of water and soil science, No. 75, Vol. 20, Spring 2016, (in persian).
- 86 Iranshahi, M., **Ghodsian**, M. and Vaghefi, M., “Flow field and scouring around series of Triplex spur dikes in sharp bend”, Modares civil engineering journal, Vol. 16, No. 3, Sept. 2016.
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- 88 Gholizadeh, A., **Ghodsian**, M., and Panahi, R., “Numerical study on the effect crest shape on discharge coefficient of trapezoidal labyrinth weirs”, Modares civil engineering journal, Vol. 16, No. 4, Sept. 2016, (in persian).
- 89 Mehraeen, M., **Ghodsian**, M., “Study on turbulent burst around submerged spur dike in a channel bend”, Journal of Hydraulic Engineering, Iranian Hydraulic Association, Vol. 11, No. 2, 17-31, 2016, (in persian).

90 Minaee, Afshar, **Ghodsian**, M., and Mehraeen, M., "Experimental study on hydraulic jump in stilling basing with stepped end sill", Modares civil engineering journal, Vol. 16, No. 1, Sept. 2016, (in persian).

91 Mehraeen, M., **Ghodsian**, M. and Khosravi Mashizi, M., "Study on effect of submergence of T-shaped spur dike on turbulence parameters in a 90° bend", Modares civil engineering journal, Vol. 16, No. 2, Sept. 2016, (in persian).

92 Vaghefi, M., Khoshabi, A., Akbari, M. and **Ghodsian**, M., "Effect of inclination angle of T-shaped spur dike on flow pattern using Flow 3D model", Iranian Journal of Irrigation and drainage, Vol. 11, No. 1, 2017.

93 Mehraein, M., **Ghodsian**, M., Khosravi Mashizi, Mojtaba and Vaghefi, Mohamad, "Experimental Study on Flow Pattern and Scour Hole Dimensions Around a T-Shaped Spur Dike in a Channel Bend Under Emerged and Submerged Conditions", Int. Journal of Civil Engineering", DOI: 10.1007/s40999-017-0175-x, 2017.

94 Vaghefi¹, M., **Ghodsian**, M. and Akbari¹, M. "Experimental Investigation on 3D Flow around a Single T-Shaped Spur Dike in a Bend", Periodica Polytechnica Civil Engineering, DOI: 10.3311/PPci.7999,1-9, 2017.

95 Baghalian, S. and **Ghodsian**, M., "Experimental analysis and prediction of velocity profiles of turbidity current in a channel with abrupt slope using artificial neural network", J Braz. Soc. Mech. Sci. Eng., 26 July 2017. DOI 10.1007/s40430-017-0867-9

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b) PAPERS PRESENTED IN CONGRESSES AND SEMINARS

- 1) Ghodsian (S. Ali), Lavania and Asawa, "Protection of graded core material by filter", Third International Congress of Civil Engineering, Shiraz-Iran, 1990 (in persian).
- 2) Ghodsian, M., "Meandering parameters of Gheshlagh river", Third national seminar on river engineering, Ahvaz-Iran, 1994 (in persian).
- 3) Ghodsian, M., "Elementary discharge coefficient of rectangular side weir", Proceeding of 4th International Conference on Civil Engineering, Tehran-Iran, 1994. (in persian).
- 4) Ghodsian, M., "Experimental Investigation of Broadly graded filters in Earth Dams", Proceeding of the MWA International Conference on Dam Engineering, Kuala Lumpur, Malaysia, 1995.
- 5) Jalili, Borgei S.M. and Ghodsian M., "Experimental Investigation of sub critical flow over side weirs", Proceeding of 4th International Conference on Civil Engineering, Tehran, Iran, 1997. (in persian).

- 6) Ghodsian, M., "Design of filter for graded core material", First Seminar on Earth Dams, Tehran-Iran, 1997. (in persian).
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- 132) Nourbakhsh, S. M., Ghodsian, M. and Vaghefi, M., "Effect of contraction ratio due to T-shaped spur dike on bed topography in a straight channel, 4th Iranian water resources management conference, Amirkabir university of technology, Tehran, Iran, 2011, (in persian).
- 133) Nourbakhsh, S. M., Ghodsian, M. and Vaghefi, M., "Equilibrium bed scour due to a T-shaped spur dike, 4th Iranian water resources management

conference, Amirkabir university of technology, Tehran, Iran, 2011, (in persian).

- 134) Shariatzadeh, Y., Khosravi, M., and Ghodsian, M., "Experimental study on the effect of T-shaped spur dike angle on bed topography", 4th Iranian water resources management conference, Amirkabir university of technology, Tehran, Iran, 2011, (in persian).
- 135) Shojaezadeh, A., Ghodsian, M. and Mehraeein, M., "Effect of bed roughness on flow pattern and turbulence parameters of a 3D wall jet", 9th international congress on civil engineering, Esfahan university of technology, Esfahan, Iran, 2012, (in persian).
- 136) Alizadeh, H., Vaghefi, M. and Ghodsian, M., "Experimental study on the effect of Froude number on scour due to an attracting Triplex spur dike", 9th international congress on civil engineering, Esfahan university of technology, Esfahan, Iran, 2012, (in persian).
- 137) Khosravi, M., Vaghefi, M., and Ghodsian, M., "Experimental study on sediment gradation on scour around a submerged T-shaped spur dike in a 90° bend", 9th international congress on civil engineering, Esfahan university of technology, Esfahan, Iran, 2012, (in persian).
- 138) Ghodsian, M., Akbari, R., and Galchobian, E., "Discharge coefficient of sharp crested triangular side weir", 9th international congress on civil engineering, Esfahan university of technology, Esfahan, Iran, 2012, (in persian).
- 139) Iranshahi, M., Vaghefi, M. and Ghodsian, M., "Experimental study on scour around series of T-shaped spur dike in a sharp 90° bend", 11th Iranian hydraulic conference, Urumieh university, Urumieh, Iran, 2012, (in persian).
- 140) Hoseinzadeh Tabrizi, H., Ghodsian, M., and Vaghefi, M., "Effect of Froude number and inclination angle of T-shaped spur dike on bed topography in a straight channel", 11th Iranian hydraulic conference, Urumieh university, Urumieh, Iran, 2012, (in persian).
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- 142) Iranshahi, M., Ghodsian, M., and Vaghefi, M., "Experimental study on the effect of inclination angle of series of Triplex spur dike on scour in a 90° sharp bend", 9th International seminar on river engineering", Shahid Chamran university, Ahvaz, Iran, 2012, (in persian).
- 143) Vaghefi, M., Ghodsian, M. Azimi, A., Numerical study of scour in a channel bend by varying U/U_c ", 9th International seminar on river engineering", Shahid Chamran university, Ahvaz, Iran, 2012, (in persian).

- 144) Moradpour R, Ahmadi SB, Ghodsian M, Parhizkar T, Taheri Nassaj E, Ji T., " Utilization effect of ceramic nano-pigment on the corrosion performance of cement based composite in sulfate environments". 4th International symposium on nanotechnology in construction (NICOM4), Greece; 2012.
- 145) Sarabadani, S., Ghodsian. M., and Bagherpour, M. S., "Numerical study of vertical velocity profiles around T-shaped spur dike", 7th national congress on civil engineering, Zahedan university, Zaheda, Iran, 2013, (in persian).
- 146) Hoseinzadeh Tabrizi, H., Ghodsian, M., and Vaghefi, M., "Effect of submergence of a Triplex spur dike on bed topography in straight channel", 12th Iranian hydraulic conference, University of Tehran, Tehran, 2013, (in persian).
- 147) Vaghefi, M. Ghodsian, M., and Soleimani, B., "Numerical study on the effect wing length of a T-shaped spur dike on flow pattern in a sharp bend", 12th Iranian hydraulic conference, University of Tehran, Tehran, 2013, (in persian).
- 148) Vaghefi, M., Ghodsian, M., and Takhti, M. A., "Numerical study on the effect of T-shaped spur dike length on flow pattern in a 90° bend", 12th Iranian hydraulic conference, University of Tehran, Tehran, 2013, (in persian).
- 149) Godarzi, M., Sangsefidi, U., Ghodsian, M. and Mehraeein, M., "Discharge of arced labyrinth spillway", 12th Iranian hydraulic conference, University of Tehran, Tehran, 2013, (in persian).
- 150) Vaghefi, M., Ghodsian, M. and Soleimani, B., "Numerical study on the effect of channel radius on flow separation zone around a T-shaped spur dike in a 90° bend with rigid bed", 5th Iranian water resources management conference, Shahid beheshti university, Tehran, Iran, 2013, (in persian).
- 151) Vaghfi, M., Ghodsian, M., and Koshabi, A., "Effect of U/U_c on 3D velocity components around a T-shaped spur dike in a bend", 5th Iranian water resources management conference, Shahid beheshti university, Tehran, Iran, 2013, (in persian).
- 152) Vaghefi, M., Ghodsian, M., and Koshabi, A., "Effect of Froude number on flow pattern around a T-shaped spur dike in a developed bend using numerical method", 1th national seminar on optimisation of water use", University of natural resources and agriculture science, Gorgan, Iran, 2013, (in persian).
- 153) Sangsefidi, U, Mehraeein, M., Ghodsian, M., and Gholizadeh, A., "Flow convergence downstream of arced labyrinth weirs", 15th conference of civil engineering students", Urumieh university, Urumieh, Iran, 2014, (in persian).
- 154) Sangsefidi, U, Mehraeein, M., Ghodsian, M., and Gholizadeh, A., "Flow regims in arced labyrinth weirs", 13th Iranian hydraulic conference, Tbriz university, Tabriz, Iran, 2014, (in persian).

- 155) Bagheri, O., Ghodsian, M., and Saadatseresht, M., "Introducing superspatial approach in river engineering", 10th International seminar on river engineering", Shahid Chamran university, Ahvaz, Iran, 2015, (inpersian).
- 156) Keshtkar, S., Ayoubzadeh, S./A., Ghodsian, M., "Experimental study on the effect of obstacle, slope break and inlet sediment concentration on velocity profiles of turbidity current", 10th International seminar on river engineering", Shahid Chamran university, Ahvaz, Iran, 2015, (inpersian).
- 157) Bagheri, M. Ghodsian and M. Saadatseresht, " Reach scale application of UAV+SFM method in shallow rivers hyperspatial bathymetry", International conference on sensors & models in remote sensing & photogrammetry, 23–25 Nov 2015, Kish Island, Iran.
- 158) Masoud Ghodsian, Majid Fazli, "Bed topography variations due to a spur dike in a curved channel" 5th International conference on water and flood management (ICWFM), Daka, Bangladesh, 2015.
- 159) Haghazadeh, H., SalehiNeshaburi, A.A., and Ghodsian, M., "Experimental investigation on the threshold of destruction rock spur dike unde submerged conditions", 8th Iranian national congress on civil engineering, 2015.
- 160) Pishgar, R., Aubzadeh, S.A., Ghodsian, M. "The effect of bottom holes spacing and diameter of suction pipe on the efficiency of burrowing type sediment removal method", 36th IAHR congress,
- 161) Attarzadeh A., Ghodsian, M., Ayoubzadeh, S.A., and Salehineyshabouri, S.A.A., "Experimental investigation on the effect of sill, spur dike and submerged vanes on sediment control on 90° intakes" 10th international congress on civil engineering, Tabriz university, Tabriz, 2015.
- 162) Attarzadeh A., Ghodsian, M., Ayoubzadeh, S.A., and Salehineyshabouri, S.A.A., "Experimental study on the effect of sediment control structures on bed topography at laterla intakes", 10th international congress on civil engineering, Tabriz university, Tabriz, 2015.
- 163) Keshtkar, S., Ayoubzadeh, S./A., Ghodsian, M., "Experimental study on the effect of slope break and inlet sediment concentration on velocity profiles of turbidity current", 14th Iranian hydraulic conference", Sistan and Baluchestan University, Zahedan, Iran, 2015, (inpersian).
- 164) Baghlian, S. and Ghodsian, M., "Experimental study on the effects of slope break and sediment concentration on turbidity current" 2ng international conference on new research in civil , archticture and urban management, IFIL, Tehran, Iran, 2016.
- 165) Asadi, M., Ghodsian, M., and Gomar, K., "Experimental study on delta in reserviors under continus hydrographs", 2ng international conference on new research in civil , archticture and urban management, IFIL, Tehran, Iran, 2016.

9. RESEARCH PROJECT LEADER

- 1) Scour around spur dikes
- 2) Backwater effects upstream of bridge piers
- 3) Design criteria for bridge considering effects of runoff, scouring, hydrologic, hydraulic and geologic conditions
- 4) Experimental investigations of scouring, sedimentation and flow pattern around groynes in curved channels
- 5) River engineering guide for protection of road and railway constructions
- 6) Experimental study on scouring due to free fall water jets
- 7) Experimental study on sediment control on lateral intake in 180 degree channel bend using submerged vanes
- 8) Experimental and numerical study of flow pattern and scouring around T-shaped spur dike
- 9) Experimental study on the effect of spur dike, submerged vanes and sill on sediment control and flow field at lateral intakes
- 10) Sediment control at reservoirs by obstacles (2012)
- 11) Experimental investigation on discharge coefficient of arced trapezoidal labyrinth spillway (2014).
- 12) Experimental investigation on scouring around spur dike under unsteady flow (2015).

10. BOOKS (In Persian)

- 1) Flood Control and Drainage Engineering (translated from English), Published by Tarbiat Modarres Univ., Tehran, 1999.
- 2) Dam Hydraulics (translated from English), Published by Tarbiat Modarres Univ., Tehran, 2003.

11. RESEARCH STUDENTS SUPERVISED

M.sc. thesis [topic, name of student, (year)]

- 1) Discharge coefficient of side weir, Esmael Hoseini, (1995).
- 2) Hydraulic characteristics of bottom racks, Reza Foughani Alahabadi, (1995).
- 3) Effects of viscosity and surface tension in triangular weirs, Afshin Rasekh, (1997).
- 4) Discharge coefficient of broad-crested triangular weirs, Jamil Bahrami, (1998).
- 5) Effect of radius of roller bucket in scour depth downstream of spillway, Mohammad Hasan Assadi, (1998).
- 6) Effect of sediment size distribution on scour downstream of free over fall spillway, Ardashir Azar Faradonbeh (1998).
- 7) Experimental investigation on the effect of angle of submerged vanes on efficiency of intakes", Alireza Ghalani (1998).

- 8) Experimental investigation on scour around combined groin, Seyed Mehdi Hoseini Tehrani, (1998).
- 9) Optimal design of stilling basin, Saeed Bahramian, (1999).
- 10) One-dimensional model for water and sediment flow, Parasto Houshiosadat, (2000).
- 11) Backwater effect upstream of bridge piers, Seyed Javad Hashemi Avani, (2000).
- 12) Discharge coefficient of semicircle Labyrinth spillway, Seyed Ali Marashi Shoshtari, (2000).
- 13) Supercritical flow over rectangular side weir, Alireza Amirabadi Farahani, (2000).
- 14) Effect of crest shape on discharge coefficient of triangular Labyrinth spillway, Hosein Shenavai, (2001).
- 15) Effect of opening of groin on scour, Ali Nasrolahi (2001).
- 16) Effect of length of bridge piers on afflux, Pedram Danshmand (2002).
- 17) Effect of spacing of groin on scour, Mohammad Ghasem Razmju (2002).
- 18) Scour downstream of pipe culver, Javad Najafi (2003).
- 19) Riverflow forecasting, Zakermosgfeigh (2003).
- 20) Analysis of scour around spur dike and application of Artificial Neural Network, M. Azardarakh (2003).
- 21) Study of River topography using GIS, Hajiabadi (2003).
- 22) Analysis of scour due to unsubmerged jet and application of Artificial Neural Network, Dorna Tajkarimi (2004).
- 23) Effect of channel bend radius on bed scour, S., Kamal Mousavi (2004).
- 24) Investigation on pollutant resources on water quality in Shafarood river, Hasan Nazari (2005).
- 25) Flow pattern around spur dike in curved channels, Nima Panahpour (2005).
- 26) Analysis of scour downstream of rectangular freefall jets, Mohammadreza Saeedinejad (2005).
- 27) Experimental study on flow pattern in lateral intake in a 180° bend, Seyed Mohammad Reza Miralaei (2005).
- 28) Analysis of scour downstream of sediment carrying freefall jet, Ehsan Ghasemi (2006).
- 29) Experimental study on discharge coefficient of combined lateral structure (weir and gate), Farshid Faizolahi (2006).
- 30) Intelligent optimisation of Tunnel type sediment excluders design, Masoud Rafiee (2007).
- 31) Study of flow pattern in scoured bed around T-shaped spur dike in a 90° bend, Javad Foughani (2007).
- 32) Scour downstream of free fall jets in nonuniform bed materials, Hamid Reza Ranjbar (2007).
- 33) Scour rate downstream of free fall jets in nonuniform bed materials, Seyed Amin Salamatian (2007).
- 34) Effect of inclination of circular bridge pier on scour, Saeed Salimi (2007).
- 35) Numerical simulation of flow around spur dike in a 90° bend, Mandana Naji Anhari (2007).
- 36) Study on scour at a T-shaped spur dike, Hossein Farhadian (2008).
- 37) Experimental study flow pattern around a T-shaped spur dike in a 90° bend, Seyd Abbas Mousavi (2009).

- 38) Experimental study on the effect of sediment size on scour due to a T-shaped spur dike in a 90° bend, Alireza Mehrnabad (2010).
- 39) Scour around T-shaped spur dike in a 90° bend, Morteza Abbaspour (2010)
- 40) Experimental study of flow pattern around a T-shaped spur dike in a straight channel, Seyed Majed Nourbakhsh (2011).
- 41) Experimental study on flow pattern and scour around a T-shaped spur dike in a bend, Mojtaba Khosravi (2011).
- 42) Study on flow pattern around attractiong and replling triplex spur dike, Hosein Alizadeh Armaki (2011).
- 43) Experimental study on flw pattern and scour due to a Triplex spur dike in a 90° bend, Yase shariatzadeh (2011).
- 44) Estimation of discharge coefficient a triangular side weir using ANN, Roham Akbari (2011).
- 45) Simulation of flow around spur dike, Somayeh Sarabadani (2012).
- 46) Numerical simulation of flow around inclined bridge pier, Fatemah Kalali (2012).
- 47) Experimental study on flow pattern and scour around series of attracting and repelling triplex spur dike, Mehdi Hoseini (2012).
- 48) Experimental study on flow pattern and scour around series of imerged and submerded spur dike in a straight channel (2012).
- 49) Experimental study on flow pattern and scour around series triplex spur dike in 90° bend, Maezieh Iranshahi (2013).
- 50) Experimental study on the effect of slope of stepped spillway on flow regime and energy disipation, Mohsen Darvish Hendi (2013).
- 51) Experimental study of hydraulic jump in a stilling basin with steped endsil, Afshar Minaee (2013).
- 52) Effect of slope of upstream and downstream walls of arced labyrinth spillway on discharge coefficient, Milad Godarzi (2013).
- 53) Experimental study on discharge coefficient of trapezoidal arced labyrinth weirs, Usef Sangsefidi (2014).
- 54) Study on the effect of location of spur dike on flow field around unsubmerged spur dike in a 89° bend, Seyed Mohammad Amin Najibi (2014).
- 55) Numerical simulation of spatially varied flow along a trpezoidal side weir, Abdolhosein Rami (2014).
- 56) Numerical study on the effect of crest shape of trapezoidal arced layirinth weirs on discharge coefficient, Ali Gholizadeh (2014).
- 57) Experimental study on flow field and scour due to double afset jets, Marjan Falaki (2015).
- 58) Experimental study on the effect of bed slope on turbidity flow with obstacle, Hosein Barikani (2016).
- 59) Experimental study on afflux due to circular inclined bridge pier, Afsaneh Noubakat (2016).
- 60) Environmental rehabilitaion of south urumieh rivers based on Rozgen clasification, Alireza Kargar (2016).
- 61) Experimental study on the effect of inclination of rectangular bridge pier on scour, Alireza Shahbazi (2016).

Ph D thesis [topic, name of student (year)]

- 1) Experimental investigation on sediment control in lateral intakes, Ali Akbar Abassi (2003).
- 2) Experimental study on sediment control in lateral intake in a 180 degree bend. Amirahmad Dehghani (2006).
- 3) Experimental study on sediment control in lateral intake in meandering channels. Mansour Aboulghasemi (2006).
- 4) Experimental study on scouring at spur dike in a 90° bend. Majid Fazli (2008)
- 5) Sediment control in lateral water intake in a 90° bend using submerged vanes. Hossein Montazer (2008).
- 6) Experimental study on flow pattern and scouring at T-shaped spur dike in a 90° bend. (Mohammad Vaghefi (2009).
- 7) Experimental study of scour and flow field due to submerged wall and impinging jets. Mojtaba Mehraein (2011).
- 8) Sediment control in reservoirs by using obstacle, Mandana Naji Abhari (2012).
- 9) Experimental study on the effects of spur dike, submerged vanes and sill on sediment control and flow pattern in lateral intakes, Ali Attarzadeh (2013).
- 10) Experimental study on scour around spur dike under unsteady flow, Ali Babakhani (2015).
- 11) Experimental study on flow field and scour due to USBRVI stilling basins, Ehsan Behnamtalab (2016).

12. RESEARCH STUDENTS CO-SUPERVISED

- 1) Scour around permeable groin, Sharifimanesh, Msc., (1994).
- 2) Performance of permeable groins, Mahmud Miri, Msc. (1994).
- 3) Experimental study on the effect of angle of submerged vanes on their performance, Alireza Ghalani, M.sc., (1999).
- 4) Study on the effect of sand and gravel mining pit migration in a channel bed Ali Farhadzadeh, Msc., (2001).
- 5) Discharge coefficient of side weir in trapezoidal channel, Mohamad Godarzi, (2002).
- 6) Study on the effects of sand and gravel mining pit migration in a curved channel, Afshin Eghbalzadeh, Msc. (2001).
- 7) Effect of hydraulic and geometric parameters on discharge coefficient of combined structure, Karimi, MSc., (2005).
- 8) Experimental study on bed forms in nonuniform flow, Hajar Zakiaghil, MSc., (2005).
- 9) Experimental study on failure of submerged spur dike, Hamed Haghazari, MSc., (2013).
- 10)
- 11) Experimental study on flow pattern around spur dike in 180° bend, Phd., (2003).
- 12) Performance of lateral intakes by using combined submerged vanes and sill, Farzad Hasanpour, Phd., (2006).
- 13) Experimental study on flow pattern and sediment control in lateral intakes by using submerged and spur dike, Phd., (2006).

- 14) Numerical simulation of flow field at intakes in a bend, Phd.,
- 15) Experimental study on turbulent flow around spur dike with different shapes, Saafarzadeh, Akbar, Phd., (2010).
- 16) Experimental study flow field and sediment at lateral intakes from trapezoidal channel, Phd., (2013).

13. COURSES TAUGHT

Undergraduate

- 1) River engineering
- 2) Hydraulics
- 3) Physical models
- 4) Water conveyance structures

Postgraduate

- 1) River engineering
- 2) Hydraulic models
- 3) Hydraulic structures
- 4) Hydraulic Lab.
- 5) Advanced hydraulics
- 6) River training I
- 7) River training II.
- 8) Hydrology
- 9) Sediment transport