#### Personal Information

Full name: Roozbeh Panahi

**Birth:** September 1980, Tehran, Iran

Nationality: Iranian

**Address:** Department of Civil and Environmental Engineering,

Tarbiat Modares University, Jalal Al Ahmad Exp. Way,

Tehran, Iran. +98(21) 82884903

<u>roozbeh\_panahi@yahoo.com;</u> <u>rpanahi@modares.ac.ir</u>

## Education Background

September 2006-January 2010

## Ph.D. in Civil Engineering-Water Engineering

Tarbiat Modares University, Tehran, Iran

Thesis: Development of a Numerical Algorithm for Marine Structures Hydrodynamic Simulation

<u>Supervisor</u>: Professor M. Shafieefar <u>Advisor</u>: Professor A.A. Salehi N.

Highlights: Wave Generation, Finite Volume Method, Overlapping Mesh System, Fluid-

Structure Interaction, Code Development

September 2003-January 2006

## M.S. in Naval Architecture-Ship Structure

Sharif University of Technology, Tehran, Iran

Thesis: Ship Motions Simulation By Computational Fluid Dynamics

Supervisor: Professor M.S. Seif

Highlights: Two-phase flow, Finite Volume Method, Fluid-Structure Interaction, Moving Mesh,

Code Development

September 1998-September 2003

# B.S. in Mechanical Engineering-Sea Engineering

Sharif University of Technology, Tehran, Iran

Thesis: Design and Analysis of an Aqua Cage Using ANSYS Software

Supervisor: Assistant Professor M. Daghigh

Advisor: Professor M.S. Seif

Highlights: Mooring, Finite Element Method, Standards and Manuals

June 1998

# **High School Diploma in Mathematics and Physics**

Elites School of Imam Sadegh, Tehran, Iran

#### **Position**

### **Head of Group**

Marine Structures Group & Hydraulic Structures Group,
Faculty of Civil and Environmental

Engineering, Tarbiat Modares University, Tehran, Iran.

July 2017-present

## Adviser

Iran Marine Fund, Ministry of Industry, Mine and Trade, Iran. March 2015-present

## **Head of Department**

Maritime Transportation Department Road, Housing & Urban Development Research Center. Ministry of Road and Urban Development Jan 2015-Jan2016

#### Main Activities

Covering & following all executive tasks related to post graduate students i.e. education and research.

## Supporting:

- 1- Ship construction risk assessment projects.
- 2- Marine tourism development projects.
- 3- Small and medium-sized enterprises development plan.
- 4- International specialized fund establishment plan.
- Maritime transportation strategic planning.
- Technical consultation in marine structures design.
- Developing required rules and regulations.
- Project supervisor, "*Iran small commercial ports master plan*", Main employer: Port and Maritime Organization (PMO), Iran, August 2015- Jan 2016
- Project supervisor, "A comprehensive analysis of Rajaie port with respect to crisis management and passive defense requirements", Main employer: Port and Maritime Organization (PMO), Iran, August 2015- Jan 2016.
- Project supervisor, "A comprehensive analysis of Imam Port with respect to crisis management and passive defense requirements", Main employer: Port and Maritime Organization (PMO), Iran, August 2015- Jan 2016.

#### **Assistant Professor**

Marine Structures Group,
Faculty of Civil and Environmental
Engineering,

Tarbiat Modares University, Tehran, Iran. **June 2013-present** 

- Lecturing post graduate courses especially in marine/ coastal engineering.
- Supervising and advising postgraduate theses.
- Project planner and analyzer, "Spectral analysis of Oman sea and strait of Hormuz field wave data", Main employer: Port and Maritime Organization (PMO), Iran, August 2012- April 2014.
- Senior advisor of project at Pars Geometry Consulting Eng. Co., "Iranian Shipbuilding and Offshore Industries Complex Company (ISOICO) master plan", Main employer: Ministry of Industry, Mine and Trade, Iran, May 2013-May 2014.
- Senior advisor of project at Pars Geometry Consulting Eng. Co., "*Tonbak port development study*", March 2013-May 2013.
- Project manager, "Assessment of shipbuilding industry development pattern", Main employer: Iran Marine Fund, Ministry of Industry, Mine and Trade, Iran, March 2014-Febraury 2015.
- Senior advisor of project at Pars Geometry Consulting Eng. Co.," Sina container terminal master plan", Oct. 2014-Jan 2015.
- Project manager, "Study of maritime equipment construction industry in Iran", Main employer: Iran Marine Fund, Ministry of Industry, Mine and Trade, Iran, October 2015-March 2017.
- Director of vessel traffic discipline at Sazeh Pardazi Iran Consulting Eng.

Co., "Eleven Iranian main commercial ports ten-years development plan", Main employer: Port and Maritime Organization (PMO), Iran, Feb 2016-August 2016.

- Senior advisor, "*Iran small commercial ports master plan*", Main employer: Port and Maritime Organization (PMO), Iran, August 2016- present.
- Benchmarking assessment of marine industries.
- Capability assessment of marine industries.
- Developing supportive plans for marine industries.
- Auditing shipbuilding Industries.
- Planning and conducting research necessities of marine industry.

# Adviser

Iran Marine Fund, Ministry of Industry, Mine and Trade, Iran. November 2011-February 2013

#### **Assistant Professor**

Department of Maritime Technology and Transportation,

Transportation Research Institute, Iran University of Science and Technology, Tehran, Iran.

January 2010- March 2013

#### Assistant i l'ulessui

• Marine transportation and infrastructure capability and benchmarking assessment.

- Project manager at Eman Taghato Consulting Eng. Co., "Value engineering study of Rajaee port traffic plan", Main employer, Port and Maritime Organization (PMO), Hormozgan Central Office, Iran, October 2012-May 2013.
- Coordinating and managing research projects mainly resulting in practical guidelines. Some of these projects are as below:
- "Effect of sloshing on LNG ship seakeeping" in cooperation with Deylam Delta consulting engineers company, Tehran, Iran, 2010-2012.
- "A guideline for implementing floating breakwaters in Iran" in cooperation with Tarbiat Modares University, Tehran, Iran, 2010-2012.

#### Research Associate

Department of Maritime Technology and Transportation,

Transportation Research Institute, Iran University of Science and Technology, Tehran, Iran.

February 2008-Junuary 2010

- Coordinating and managing research projects mainly resulting in practical guidelines. Some of these projects are as below:
  - "Effect of sea environment on ship motions in channels and basins" in cooperation with Sharif University of Technology, Tehran, Iran, 2009-2012.
- "Study of oil pollution effects based on MARPOL convention-Field study" in cooperation with Tehran University, Tehran, Iran, 2009-2011.
- "Determination of the minimum slip under ships when moving in restricted channels" in cooperation with Amirkabir University of Technology, Tehran, Iran, 2009-2011.
- "An instruction for maintenance of marine environment parameters measurement instruments" in cooperation with Iranian National Institute for Oceanography, Tehran, Iran, 2007-2010.
- "Optimized ships for cargo and passenger transportation in Persian gulf" in cooperation with Sharif University of Technology, Tehran, Iran, 2007-2010.
- "An instruction for measurement of marine environment parameters" in cooperation with Iran University of Technology, Tehran, Iran, 2007-2009.
- "Marine accidents analysis in Bandar-e-Abbas zone" in cooperation with Amirkabir University of Technology, Tehran, Iran, 2007-2009.
- "Environmental assessment of ballast water discharge-Field study" in cooperation with Iranian National Institute for Oceanography, Tehran, Iran, 2007-2009.

## **Project Manager**

Pajoohesh Gostar Yaarkar Consulting Engineers Company, Tehran, Iran.

## January 2007-Feburary 2008

• "Buoy design guideline for Persian gulf", Main employer: Transportation Research Institute.

#### Advisor

Center of Excellence in Marine Hydrodynamics,

Sharif University of Technology, Tehran, Iran

January 2006-February 2008

- Studying, identifying and solving ship building industry challenges based on:
  - Physical modeling in marine hydrodynamics.
  - Numerical modeling; especially CFD models; in marine hydrodynamics.
  - Developing state of the art as well as practical software.

### **Research Assistant**

Center of Excellence in Marine Hydrodynamics,

Sharif University of Technology, Tehran, Iran

October 2004-Junuary 2006

- Developing of software for hydrodynamic simulation of high speed marine crafts as a team member.
- Developing a strategic plan for marine industries of Iran as a team member.
- Physical modeling in marine hydrodynamics.

## **Teaching Experiences**

Teaching Experiences		
Workshop	Place and Date	
Basic Port Design	Port and Maritime Organization (PMO), Tehran, Iran Port and Maritime Organization (PMO)- Hormozgan Province Central Office, Bandar-e-Abbas, Iran.	Apr 2009, Nov 2013
Value Engineering in Marine Industries	12 <sup>th</sup> Marine industries Conference, Zibakenar, Iran. Port and Maritime Organization (PMO)- Hormozgan Province Central Office, Bandar-e-Abbas, Iran. 4 <sup>th</sup> Offshore Industries Conference, Sharif University of Technology, Tehran, Iran. Center of Excellence in Marine Hydrodynamics, Sharif University of Technology, Tehran, Iran.	Oct 2010, Jan 2011, May 2011, Summer 2012
How to Write a Paper?	Iranian Society of Transportation Engineering, Tehran, Iran.	Feb 2011, March 2012
Practical Hydrodynamics	Center of Excellence in Marine Hydrodynamics, Sharif University of Technology, Tehran, Iran.	Feb 2012
Post Graduate Course	Place and Date	
Advanced Engineering Mathematics	Tarbiat Modares University, Iran, TMU.	Fall 2013-present
Numerical Methods in Marine Engineering	Tarbiat Modares University, Iran, TMU.	Spring 2013- present
Design of Special Offshore Structures	Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT. Tarbiat Modares University, Iran, TMU.	Fall 2011- Fall 2012 AUT, Spring 2014, Spring 2015, Spring 2017
Dynamics of Offshore Structures	Tarbiat Modares University, Iran, TMU.	Fall 2017
Ports Design	Tarbiat Modares University, Iran, TMU. Amirkabir University of Technology (Tehran Polytechnic),	Fall 2010 - Spring 2014 AUT, Fall 2012-present TMU

Iran.	ΑI	IT

Energy Management	Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT.	Spring 2015
Innovation Management	Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT.	Spring 2014
Value Engineering	Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT. University of Tehran, Iran, UT.	Fall 2012- Fall 2015 AUT, Fall 2015 UT
Advanced Strategic Planning Knowledge Management	Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT. Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT.	Fall 2013- Fall 2014 AUT Fall 2014
Multi Criteria Decision Making	Amirkabir University of Technology (Tehran Polytechnic), Iran, AUT.	Fall 2014

<sup>\*</sup> Experience in Undergraduate courses like fluid mechanics, statics, mechanics of materials, structure analysis, differential equations, Mathematics.

# Thesis Supervision

Thesis Supervision	
Supervisor	
M.S. Thesis, "Hydrodynamic Assessment of a Floating Breakwater", Azad University, Mr. Shafiee.	2010-2012
M.S. Thesis, "Analysis of Bunkering Market in Persian Gulf and the role of Iran", Amirkabir University of Technology (Tehran Polytechnic), Mr. Khadiv.	2012-2014
M.S. Thesis, "Port Society System- A benchmark Assessment", Amirkabir University of Technology (Tehran Polytechnic).	2012-2014
M.S. Thesis, "Numerical Assessment of a Passive Controller of Vortex Induced Vibration in Marine Risers, Tarbiat Modares University, Mr. Kouhdasti.	2012-2014
M.S. Thesis, "Numerical Assessment of Point Wave Absorber", Tarbiat Modares University, Mrs. Amiri.	2013-2015
M.S. Thesis, "Numerical Assessment of paddle-type wave maker individually and in a farm", Tarbiat Modares University, Mr. Behzad.	Oct. 2014-Feb 2016
M.S. Thesis, "Application of Submerged breakwaters in harbour protection; A Case Study of Dayyer Port", Tarbiat Modares University, Mr. Nobakhti.	2015-present
M.S. Thesis, "Traffic simulation based ship collision risk assessment using AIS data", Tarbiat Modares University, Mr. Filom.	2015-Dec.2016
M.S. Thesis, "Tidal Turbines array optimization using numerical methods", Tarbiat Modares University, Mr. Radfar.	2015- Aug.2016
M.S. Thesis, "Development of a new double-peak spectrum for Makran region", Tarbiat Modares University, Mr. Golpira.	2016-present
M.S. Thesis, "Quantitative risk assessment of ship grounding in one area in Persian gulf coasts", Tarbiat Modares University, Mr. Allahmoradi.	2016-present
M.S. Thesis, "Optimization of a container storage yard based on simulation", Tarbiat Modares University, Mr. Moghaddam.	2016-present
M.S. Thesis, "Quantitative risk assessment of non-conventional ship grounding and Collision in one area in Persian gulf coasts", Tarbiat Modares University, Mr. Edraki.	Oct. 2017- present
M.S. Thesis, " ", Tarbiat Modares University Mr. Saadati.	Oct. 2017- present

#### Advisor

Ph.D. Thesis, "A Numerical Algorithm to Simulate a Piston-Type Wavemaker", Ferdowsi University.	2010-2012
M.S. Thesis, "Simulation of Local Scouring at Bridge Piles", Azad University.	2010-2012
M.S. Thesis, "Optimization of a Reef Breakwaters Shape with respect to wave overtopping", Azad University.	2011-2013
M.S. Thesis, "Spectral Spectrum Analysis of Oman Sea Field Wave Data", Tarbiat Modares University, Mr. Gharangian.	2012-2014
M.S. Thesis, "Spectral Analysis of Persian Gulf Field Wave Data", Tarbiat Modares University, Mr. Parsapour.	2012-2014
Ph.D. Thesis, "Development of 3D Numerical Wave Tank", Tarbiat Modares University, Mr. Mahmoudi.	2012- March2017
M.S. Thesis, "Numerical Simulation of Spatially Varied Flow in Channel with sharp trapezoidal Side -Weir", Tarbiat Modares University, Mr. Rami.	2013-2014
M.S. Thesis "Numerical assessment of crown effect on Hydraulic conductivity in Congressional Weir with Trapezoidal Plan", Tarbiat Modares University, Mr. Gholizadeh.	2013-2015
M.S. Thesis, "Numerical Simulation of Armour type and Arrangement in overtopping of Rubble-Mound Breakwaters", Tarbiat Modares University, Mr. Ghasemi.	2013-2014
M.S. Thesis, "Assessment of Strait of Hormuz and Oman Sea Field Wave Data Using Data Mining Techniques", Tarbiat Modares University, Mr. Rezaie A.	2013-2014
M.S. Thesis, "Numerical analysis of flow parameters affecting cavitation at tunnel spillway, Tarbiat Modares University, Mr. Niknami.	2014- Feb. 24, 2016
M.S. Thesis, "Numerical assessment of parameters responsible for floating mass motions in reservoir", Tarbiat Modares University, Mr. Shakeri.	Jan. 2017- present

## Awards and Honors

October 2013	Distinguished Paper Entitled "Assessment of Chabahar Field Wave Data", 15 <sup>th</sup> Marine industries
	Conference, Kish Island, Iran.
November 2011	Distinguished Paper of the 13 <sup>th</sup> Marine Industries Conference Entitled "Estimation of Ship Squat in Shallow Water Based on Model Test Results", 13 <sup>th</sup> Marine industries Conference, Kish Island, Iran.

October 2010 Distinguished Paper of the 12<sup>th</sup> Marine Industries Conference Entitled "Mathematical Model of Sloshing in A 2D Rectangle and Its Interaction with Ship Motions", 12<sup>th</sup> Marine industries Conference, Zibakenar, Iran.

**November 2009** Distinguished Paper of the 11<sup>th</sup> Marine Industries Conference Entitled "Analytical Wave Generation Using CFD", Kish Island, Iran.

**November 2006** Distinguished Paper of the 8<sup>th</sup> Marine Industries Conference Entitled "Numerical Simulation of Hydrodynamics Tests-Formulation and Validation", Bushehr, Iran.

November 2006 Iran's Distinguished M.S. Thesis in Marine Engineering in 2006; Selected by Iranian Association of Naval Architecture and Marine Engineering (IRANAME) in 8<sup>th</sup> Marine Industries Conference, Bushehr, Iran.

May 2006 Iran's Distinguished M.S. Thesis in Mechanical Engineering in 2006; Selected by Iranian Society of Mechanical Engineers (ISME) in 14<sup>th</sup>Annual (International) Mechanical Engineering (ISME) Conference, Isfahan University of Technology, Isfahan, Iran.

# Contribution in Journals and Conferences

Jan 2016	Chair of Scientific Committee of "2 <sup>nd</sup> International Conference on Value Engineering and Cost management", Tarbiat Modares University.
Nov 30 2014	Chair of Scientific Committee of "1st National Conference on Value Engineering and Cost management", University of Tehran.
Since May 2013	Reviewer of "National Congress on Civil Engineering" of Iran since 7 <sup>th</sup> conference.
Since February 2013	Reviewer of the journal of "The Modares Journal of Civil Engineering", Tarbiat Modares University, Iran (English-Persian).
February 2013	Reviewer of "1st National Conference on Transportation Infrastructures", Tehran, Iran.
Since July 2012	Scientific Editor of the "Iranian Journal of Marine Science And Technology", Iranian Society of Marine Science and Technology, Iran.
Since May 2012	Reviewer of "International Congress on Civil Engineering" of Iran since 9 <sup>th</sup> conference.
Since November 2011	Reviewer of the "Journal of Hydraulics", Iranian Hydraulic Association, Iran.
November 2011	Member of Executive Committee of 13 <sup>th</sup> Marine Industries Conference, Kish Island, Iran.
Since Summer 2011	Scientific Editor of the "International Journal of Marine Technology", Iranian Association of Naval Architecture and Marine Engineering, Iran. (In Persian)
Since Summer 2011	Scientific Editor of the "Journal of Marine Engineering", Iranian Association of Naval Architecture and Marine Engineering, Iran. (In English)
Since January 2011	Reviewer of the journal of "International Journal of Maritime Technology", Iranian Association of Naval Architecture and Marine Engineering, Iran. (In English)
Since January 2011	Reviewer of the journal of "World Applied Science Journal", Noshirvani University of Technology, Babol, Iran.
Since 2010	Reviewer of the "Iranian Journal of Marine Science And Technology ", Iranian Society of Marine Science and Technology, Iran.
Since August 2010	Reviewer of the journal of "Marine Engineering", Iranian Association of Naval Architecture and Marine Engineering, Iran
Since 2010	Reviewer of the ISI journal of "Scientia Iranica", Sharif University of Technology, Iran. (In English)
Since 2010	Reviewer of the ISI journal of "Progress in Computational Fluid Dynamics", Inderscience Publishers. (In English)

**Since November** Reviewer of "Iranian Hydraulics Conference" since 9<sup>th</sup> conference. **2010** 

November 2010 Member of Executive Committee of 12<sup>th</sup> Marine Industries Conference, Zibakenar, Iran.

**Since November** Reviewer of "Marine Industries Conference" of Iran since 10<sup>th</sup> conference. **2008** 

### List of Publications

## a) Book

- 1. *An Introduction to ANSYS and Finite Element Method*, Translated by: Mohebbi, M., <u>Panahi, R.</u>, 448 pp., Naghoos Pub., Iran, 2002 (In Persian).
- 2. *Marine Accident Analysis with Special Attention to the Bandar Abbas Region*, Zeraatgar, H., <u>Panahi, R.</u>, 503 pp., Transportation Research Institute, Iran, 2011 (In Persian).
- 3. Commercial Development of Regional Ports as Logistic Centers, Translated by: <u>Panahi, R.</u>, Kashefzadeh. F., 143 pp., Pars Geometry consultants, Iran, 2014 (In Persian).
- 4. Shipbuilding industry development: Vol.1-World market and industry development review in distinguished countries, Panahi, R., Horufi E.B., 174 pp., Iran Marine Fund, 2015.
- 5. Shipbuilding industry development: Vol.2- New players' development path and industry performance (Brazil, Turkey, Singapore, Vietnam, India), Panahi, R., Aghajani, S., Mohajeri, M.J., 150 pp., Iran Marine Fund, 2015.
- 6. Shipbuilding industry development: Vol.3- Current situation of Iran and lessons learned from industry players, Panahi, R., Horufi, B., Zare, M., Fakhri, S., 80 pp., Iran Marine Fund, 2015.

### b) International ISI Journal Paper

- 7. Panahi, R., Jahanbakhsh, E., Seif, M.S., Comparison of interface capturing methods in two phase flow, Iranian Journal of Science & Technology, Transaction B: Technology, 29(B6):539-548, 2005.
- 8. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Development of a VoF-fractional step solver for floating body motions simulation*, Applied Ocean Research, 28:171-181, 2006.
- 9. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Numerical simulation of three-dimensional interfacial flows*, International Journal of Numerical Methods for Heat & Fluid Flow, 17(4):384-404, 2007.
- 10. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Towards simulation of 3D nonlinear high-speed vessels motion*, Ocean Engineering, 36:256-265, 2009.
- 11. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Catamaran motion simulation based on moving grid technique*, Journal of Marine Science and Technology, 17(2):128-136, 2009.
- 12. Seif, M.S., Jahanbakhsh, E., <u>Panahi, R.</u>, Karimi, M.H., *A unified computational method for simulating dynamic behavior of planing vessels*, China Ocean Engineering, 23(2):1-10, 2009.
- 13. <u>Panahi, R.</u>, Shafieefar, M., *Application of overlapping mesh in numerical hydrodynamics*, Polish Maritime Research, Vol.16, 2(60):24-33, 2009.
- 14. <u>Panahi, R.</u>, Shafieefar, M., A finite volume algorithm for simulation of hydrodynamic problems based on overlapping mesh, Journal of Marine Science and Application, 8:281-289, 2009.

- 15. <u>Panahi, R.</u>, Shafieefar, M., *Towards a numerical hydrodynamics laboratory by developing an overlapping mesh solver based on a moving mesh solver; verification and application*, Applied Ocean Research,32(3): 308-320, 2010.
- 16. <u>Panahi, R., Simulation of water-entry and water-exit problems using a moving mesh algorithm</u>, Journal of Theoretical and Applied Mechanics, Vol.42, No. 2, 2012.
- 17. <u>Panahi, R.</u>, Ghasemi K., A., Shafieefar, M., *Development of a bi-modal directional spectrum*, Ocean Engineering, 105:104-111, 2015.
- 18. Kafaei, M., <u>Panahi, R.</u>, Ranjbar, G.A., *Passive defense requirements weighting in selecting new ports location based on analytical hierarchy process*, International Geoinformatics Research and Development Journal, 6(2): 19-32, June 2015.
- 19. Gharangian, R., Shafieefar, M., <u>Panahi, R.</u>, *An appropriate unidirectional wave spectrum model for the Strait of Hormuz*, Journal of Marine Science and Application, No.14(3): 261-269, 2015.
- 20. Amiri, A., <u>Panahi, R.</u>, Radfar, S., *Parametric Study of Two-Body Floating-Point Wave Absorber*, Journal of Marine Science and Application, 15: 41-49, 2016.
- 21. <u>Panahi, R.</u>, Shafieefar, M., Ghasemi, A., *A new method for calibration of unidirectional double-peak Spectra*, Journal of Marine Science and Technology, 21:167-178, 2016.
- 22. Mahmoudi M., A., Shafieefar, M., <u>Panahi, R.</u>, <u>Development of a high-order level set method: Compact Conservative Level Set (CCLS), Computers and Fluids 129:79-90, 2016.</u>
- 23. Behzad, H., <u>Panahi, R.</u>, *Optimization of bottom-hinged flap-type wave energy converter for a specific wave rose*, Journal of Marine Science and Application, 16(2):159-165, June 2017, DOI:10.1007/s11804-017-1405-y.
- 24. Sadathosseini, A., Radfar, S., <u>Panahi, R.</u>, <u>Developing new formulae for prediction of mean overtopping discharge at vertical walls</u>, Journal of Marine Science and Technology, 22(4): 414-425, Sept.2017, DOI: 10.1007/s00773-016-0421-y.
- 25. Radfar, S., <u>Panahi, R.</u>, Javaherchi, T., Filom, S., Rezaee M., A., *A comprehensive insight into tidal stream energy farms in Iran*, Renewable and Sustainable Energy Reviews, 79:323-338, November 2017, DOI: 10.1016/j.rser.2017.05.037.

#### c) International Peer-Reviewed Conference Paper

- 26. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Numerical simulation of floating body*, 14<sup>th</sup> Annual (International) Mechanical Eng. Conf (ISME06), Isfahan, Iran, 2006(In Persian).
- 27. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., Shafieefar, M., *Numerical Simulation of Sloshing and an Investigation on the effect of baffle arrangement*, 15<sup>th</sup> Annual (International) Mechanical Eng. Conf (ISME07), Tehran, Iran, 2007(In Persian).
- 28. Javanmardi, M.R., <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Trimaran Resistance calculation*, 15<sup>th</sup> Annual (International) Mechanical Eng. Conf (ISME07), Tehran, Iran, 2007(In Persian).
- 29. <u>Panahi, R.</u>, Hasannejad, M., Jahanbakhsh, E., Shafieefar, M., Seif, M.S., *Slamming simulation using finite volume discretisation*, 16<sup>th</sup> Annual (International) Mechanical Eng. Conf (ISME07), Kerman, Iran, 2008(In Persian).

- 30. <u>Panahi, R.</u>, Shafieefar, M., Seif, M.S., *Hydrodynamic assessment of fixed and/or fleet marine structures by developing software*, 8<sup>th</sup> International Conference on Coasts, Ports, and Marine Structures (ICOPMAS), Tehran, Iran, November 2008(In Persian).
- 31. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Multi-dimensional free surface flow simulation using two-phase Navier-Stokes solver*, 8<sup>th</sup> Numerical Towing Tank Symposium (NuTTs), Varna, Bulgaria, Oct. 2-4, 2005.
- 32. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Effect of interpolation in interface capturing methods*, 8<sup>th</sup> Numerical Towing Tank Symposium (NuTTs), Varna, Bulgaria, Oct. 2-4, 2005.
- 33. <u>Panahi, R.</u>, Seif, M.S., *Ship performance evaluation in sea waves*, 13<sup>th</sup> Annual International Mechanical Engineering (ISME) Conference, Isfahan University of Technology, Isfahan, Iran, May 2005.
- 34. <u>Panahi, R.</u>, Seif, M.S., *Significance of human factors in ship design evaluation*, 1<sup>st</sup> International Conference on Design Engineering and Science (ICDES2005), Vienna, Austria, Oct.28-31, 2005.
- 35. <u>Panahi, R.</u>, Seif, M.S., *Analysis of ship motions in waves*, 16<sup>th</sup> International Conference on Hydrodynamics in Ship Design and 3<sup>rd</sup> International Symposium on Ship Maneuvering (HYDMAN05), Gdansk, Poland, Sept., 2005.
- 36. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Development of a numerical hydrodynamic tank for ship motion simulation*, ECCOMAS CFD 2006, Egmondaan Zee, Netherlands, Sept. 5-8, 2006.
- 37. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Numerical investigation on the effect of baffle arrangement in tanker sloshing*, 9<sup>th</sup> Numerical Towing Tank Symposium (NuTTs), Nantes, France, Oct. 1-3, 2006.
- 38. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Ship dynamic simulation, based on a three-dimensional viscous Free surface solver*, 9<sup>th</sup> Numerical Towing Tank Symposium (NuTTs), Nantes, France, Oct. 1-3, 2006.
- 39. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *High-speed planing catamaran resistance simulation, based on a three-dimensional viscous free surface flow solver*, 10<sup>th</sup> Numerical Towing Tank Symposium (NuTTs), Hamburg, Germany, Sept. 23-25, 2007.
- 40. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *High speed catamaran maneuvering simulation, based on a three-dimensional viscous free surface flow solver*, 9<sup>th</sup> Int. Conf. of Russian Shipbuilding and Shipping, Port Activities and Offshore Developments, NEVA, Saint-Petersburg, Russia, Sept. 25-26, 2007.
- 41. <u>Panahi, R.</u>, Salehi N., A.A., Shafieefar, M., *Modification of PISO using SIMPLEC*, 16<sup>th</sup> Annual (International) Mechanical Engineering (ISME) Conference, Kerman, Iran, May, 2008.
- 42. <u>Panahi, R.</u>, Shafieefar, M., *Technical comparison of motion simulation strategies in finite volume simulation of marine structures hydrodynamics*, 8<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, November 2008.
- 43. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Development of a numerical tool for hydrodynamics simulation of high speed planning crafts*, 6<sup>th</sup> International Conference on High-Performance Marine Vehicles (HIPER), Naples, Italy, September 18-19, 2008.
- 44. <u>Panahi, R.</u>, Simple development of a 2D Chimera mesh algorithm, 18<sup>th</sup>Annual (International) Mechanical Engineering (ISME) Conference, Sharif University of Technology, Tehran, Iran, 11-13 May, 2010.
- 45. <u>Panahi, R.</u>, Shafieefar, M., *Using overlapping mesh system to develop a general wavemaker*, <sup>13th</sup> Numerical Towing Tank Symposium (NuTTs), Duisburg, Germany, Oct. 10-12, 2010.

- 46. <u>Panahi, R.</u>, Shafieefar, M., 2D simulation of a free-floating structure motions in waves of a flapping-type wavemaker, 9<sup>th</sup>International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov. 29 Dec. 1., 2010.
- 47. <u>Panahi, R.</u>, Khademi, H., *Assessment of rules and regulations in approach channel design- case study: Rajaee port*, 10<sup>th</sup>International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov. 19 21, 2012 (In Persian).
- 48. Kashefzadeh, F., <u>Panahi, R.</u>, *Intelligent city development by means of renewable energy*, 2<sup>nd</sup> International Conference on Emerging Trends in Energy Conservation (ETEC), Feb 19-20, 2013 (In Persian).
- 49. Nasiraie, H., <u>Panahi, R.</u>, *Energy extraction from vortex induced vibration*, 2<sup>nd</sup> International Conference on Emerging Trends in Energy Conservation (ETEC), Feb 19-20, 2013 (In Persian).
- 50. Alamdar, J., <u>Panahi, R.</u>, Assessment of conductor negligence in using value engineering, The 4<sup>th</sup> International Conference of construction & Energy industry, Tehran, 20-21 Jan, 2014.
- 51. <u>Panahi, R.</u>, Shafieefar, M., Ghasemi, A., Allahyar, M.R., Nemati, M.H., Shoushtarizadeh N., A., *A bio-modal directional wave spectrum for coastal regions around Chabahar bay*, 11<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov. 24 26, 2014.
- 52. Amiri, A., <u>Panahi, R.</u>, *Application of AQWA-ANSYS in hydrodynamic assessment of point wave absorber*, 11<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov. 24 26, 2014.
- 53. Mohajeri, M.J., Salimi T., A., <u>Panahi, R.</u>, <u>Simulation of cylinder water-entry implementing two different methods:</u> *FVM and SPH*, 11<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov. 24 26, 2014.
- 54. Kafaei, M., <u>Panahi, R.</u>, Ranjbar, Gh., *Passive defense requirements weighing in selecting new port location based on AHP*, 11th International Conference on Coasts, Ports and Marine Structures (ICOPMAS), Tehran, Iran, Nov. 24 26, 2014.
- 55. Amiri, A., <u>Panahi, R.</u>, Behzad, H., *Frequency and time domain analysis of point wave absorber*, 6<sup>th</sup> International Offshore Industries Conference, Tehran, Iran, 4 and 5 May 2015 (In Persian).
- 56. Behzad, H., <u>Panahi, R.</u>, Amiri, A., *Numerical assessment of paddle-type wave absorber using AQWA-ANSYS*, 6<sup>th</sup> International Offshore Industries Conference, Tehran, Iran, 4 and 5 May 2015 (In Persian).
- 57. Gharangian, R., Shafieefar, M., <u>Panahi, R.</u>, <u>Development of An Unidirectional Wave Spectrum Model For The Waves Climate Of Hurmoz Strait Area, Tehran, 6<sup>th</sup> International Offshore Industries Conference, Tehran, Iran, 4 and 5 May 2015.</u>
- 58. SadatHoseini, A., Radfar, S., <u>Panahi, R.</u>, *Prediction of mean overtopping discharge at vertical walls on horizontal foreshore*, 6<sup>th</sup> International Offshore Industries Conference, Tehran, Iran, 4 and 5 May 2015.
- 59. Shafieefar, M, Panahi, R., Gharangian, R., *Unidirectional wave spectrum models for Chabahar bay, Gulf of Oman*, 36<sup>th</sup> IAHR world congress, 28 June-3 July, 2015, The Hauge, Netherland.
- 60. Radfar, S., <u>Panahi, R.</u>, Rezaie, A., *Extraction of mean tidal constituents in tidal energy farm using 2 methods of admiralty and mike 21 model- case study of Persian Gulf*, 2<sup>nd</sup> International conference in new research on civil, architectural and urban management, Tehran, Iran, 20 May, 2016 (In Persian).

- 61. Hosseinzadeh, N., <u>Panahi, R.</u>, *Application of value engineering in port planning with an especial focus on risk management*, 2<sup>nd</sup> International conference in new research on civil, architectural and urban management, Tehran, Iran, 20 May, 2016 (In Persian).
- 62. Mahmoudi, A., Shafieefar, M., <u>Panahi, R.</u>, Development of a conservative level set method for two-phase flow, 9th International Conference on Multiphase Flow (ICMF2016), 22 to 27 May, 2016 Firenze, Italy.
- 63. Amiri, A., <u>Panahi, R.</u>, Radfar, S., *Parametric study of hydrodynamic performance of twin-pantoon floating breakwater*, 12<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS2016), Oct.31-Nov.2, 2016, Tehran, Iran.
- 64. Radfar, S., <u>Panahi, R.</u>, Javaherchi M., A.T., Khalilpur, H., *Investigation on performance and array optimization of an operating marine hydrokinetic turbine farm in great-Tonb of Iran*, 12<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS2016), Oct.31-Nov.2, 2016, Tehran, Iran.
- 65. Filom, S., <u>Panahi, R.</u>, <u>Safety domain concept in ship-ship collision probabilistic modelling</u>, 12<sup>th</sup> International Conference on Coasts, Ports and Marine Structures (ICOPMAS2016), Oct.31-Nov.2, 2016, Tehran, Iran.
- 66. Radfar, S., Taherkhani, A., <u>Panahi, R.</u>, *Standardization of the main dimensions of design container ships in ports- A case study*, The 7<sup>th</sup> International Congress on Engineering and Technology, Oct. 20-22, 2017, Guilin, China.

## d) National Peer-Reviewed Journal Paper

- 67. <u>Panahi, R.</u>, Seif, M.S., *Effect of Motions Evaluation in Ship Routing*, Journal of Transportation Research, 2(3):151-159, Nov. 2005 (In Persian).
- 68. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Using fractional step method in free surface flow simulation*, Modares Engineering Journal, Mechanics Especial Issue, Vol. 28, Summer 2007 (In Persian).
- 69. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Ship motions simulation using finite volume discretization*, Sharif Periodical, Mechanics and Civil Engineering Especial Issue, 42: 81-88, June 2008 (In Persian).
- 70. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *Numerical simulation of a viscous flow with complex interface*, Journal of Iran Water Resources, 2: 66-74, Fall 2008 (In Persian).
- 71. <u>Panahi, R.</u>, Shafieefar, M., *Development of a finite volume method to assess hydrodynamics of marine structures*, Journal of Marine Engineering, Year 5, No.10: 1-10, Fall and Winter 2010 (In Persian).
- 72. Azarsina, F., <u>Panahi, R.</u>, *A comparative study of sloshing in liquefied natural gas carriers according the classification codes*, International Journal of marine science and engineering, Vol.2(1): 91-100, Summer 2012.
- 73. Zeraatgar, H., <u>Panahi, R.</u>, Akbari, K., Asghari, M., Aziz Jalali, A., *An experimental study on ship squat in channels*, Journal of Marine Engineering, Year 8, No.16: 65-77, Fall and Winter 2012 (In Persian).
- 74. Azarsina, F., <u>Panahi, R.</u>, An experimental study on sloshing effect on ship motions in front of regular waves, Journal of Marine Engineering, Year 10, No.20: 1-9, Fall and Winter 2014 (In Persian).
- 75. Sadat Hosseini, A., Ganji, H., <u>Panahi, R.</u>, *Prediction of mean overtopping discharge at vertical seawalls using MLR and GLM statistical approaches*, International Journal of Maritime Technology, Vol.3: 33-39, 2015.
- 76. Gharangian, R., Shafieefar, M., <u>Panahi, R.</u>, *A proper directional spreading function (DSF) for waves of Hormuz Strait Zone*, Journal of Marine Engineering, Year 11, No.21: 95-108, Spring and Summer 2015 (In Persian).

- 77. Ghasemi, A., Shafieefar, M., Panahi, R., *Numerical simulation of wave overtopping from armour breakwater by considering porosity effect*, Journal of Marine Engineering, Year 11, No.22: 50-61, Fall and Winter 2016 (In Persian).
- 78. Yazdandoost, M., <u>Panahi, R.</u>, *Fatigue analysis of SMP mooring with respect to mooring line length in different wave directions*, Iranian Journal of Marine Science and Engineering, No.77: 11-20, Autumn 2015 (In Persian).
- 79. Allahmoradi, Q., <u>Panahi, R.</u>, *Ship grounding risk assessment from risk management prospect*, Iranian Journal of Marine Science and Engineering, No.78: 27-41, Summer 2016 (In Persian).
- 80. Filom, S., <u>Panahi, R.</u>, Moradi, A., Khorram, S., *Methods in prediction of high risk locations in waterway risk assessment*, Iranian Journal of Marine Science and Engineering, No.79: 17-27, Autumn 2016 (In Persian).
- 81. Gholizadeh, A., Ghodsian, M., <u>Panahi, R.</u>, *Numerical study of effect of Crest Shape on Discharge Coefficient of Trapezoidal Arced Labyrinth Weir*, Modares Civil Engineering Journal, 16(4): 225-237, September 2016 (In Persian).
- 82. Radfar, S. <u>Panahi, R.</u>, *Economic Analysis of Developing Tidal Stream Energy Farms in the South Coasts of Iran*, Iranian Journal of Marine Science and Engineering, No.81: 41-47, Spring 2017 (In Persian).

# e) National Peer-Reviewed Conference Paper

- 83. <u>Panahi, R.</u>, Seif, M.S., *Ship behavior in waves*, 6<sup>th</sup> Marine Industries Conference, Bandar-e- Abbas, Iran, 2004 (In Persian).
- 84. <u>Panahi, R.</u>, Seif, M.S., *Human Operation and Ship Design*, 7<sup>th</sup> Marine Industries Conference, Tehran, Iran, 2005(In Persian).
- 85. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *CFD and numerical hydrodynamics modeling*, 7<sup>th</sup> Marine Industries Conference, Tehran, Iran, 2005(In Persian).
- 86. Jahanbakhsh, E., <u>Panahi, R.</u>, Seif, M.S., *3D two phase flow simulation using fractional step method*, 7<sup>th</sup> Marine Industries Conference, Tehran, Iran, 2005(In Persian).
- 87. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Numerical Simulation of Hydrodynamics tests-Formulation and Validation*, 8<sup>th</sup> Marine Industries Conference, Bushehr, Iran, 2006(In Persian).
- 88. <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *CFD application in sea current modeling*, 6<sup>th</sup>Symp. On Marine Science and Technology, Tehran, Iran, 2006(In Persian).
- 89. Asadian, M., <u>Panahi, R.</u>, Seif, M.S., *Application of VTS in ship routing*, 6<sup>th</sup>Symp. On Marine Science and Technology, Tehran, Iran, 2006Marine Industries Conference (In Persian).
- 90. <u>Panahi, R.</u>, Jahanbakhsh, E., Karimi, M.H., Nateghi, H.A., Seif, M.S., *Numerical Simulation of catamaran motion and resistance using a developed 6DoF viscous free surface flow solver*, 9<sup>th</sup> Marine Industries Conference, Noor, Iran, 2007(In Persian).
- 91. Hasannejad, M., <u>Panahi, R.</u>, Jahanbakhsh, E., Seif, M.S., *Numerical simulation of slamming*, 9<sup>th</sup> Marine Industries Conference, Noor, Iran, 2007(In Persian).
- 92. <u>Panahi, R.</u>, Salehi N., A.A., *Assessment of composite interpolations in discretisation of volume fraction transport equation*, 11<sup>th</sup> Fluid Dynamics Conference, Tehran, June 2008(In Persian).

- 93. <u>Panahi, R.</u>, Shafieefar, M., Salehi N., A.A., *Modification of PISO by assessment of predictor-corrector algorithms*, 10<sup>th</sup> Marine Industries Conference, Abadan, Iran, 2008(In Persian).
- 94. <u>Panahi, R.</u>, Shafieefar, M., *Different grids in finite volume simulation of marine structures hydrodynamic*, 10<sup>th</sup> Marine Industries Conference, Abadan, Iran, 2008(In Persian).
- 95. <u>Panahi, R.</u>, Shafieefar, M., *Components of software to simulate turbulent two-phase flow*, 10<sup>th</sup> Marine Industries Conference, Abadan, Iran, 2008(In Persian).
- 96. Seif., M.S., Alavimehr, J., Rafie, J., Hesabi, A.H., <u>Panahi, R.</u>, design of an optimum passenger boat by considering the situation of travels the Persian gulf, 10<sup>th</sup> Marine Industries Conference, Abadan, Iran, 2008(In Persian).
- 97. Seif., M.S., Alavimehr, J., Hesabi, A.H., Mazaheri, S., <u>Panahi, R.</u>, *Statistical analysis of available small passenger and cargo boats*, 10<sup>th</sup> Marine Industries Conference, Abadan, Iran, 2008(In Persian).
- 98. <u>Panahi, R.</u>, Shafieefar, M., *Overlapping mesh and simulation of 2D slamming*, 12<sup>th</sup> Fluid Dynamics Conference, Babol, Iran, May 2009(In Persian).
- 99. <u>Panahi, R.</u>, Shafieefar, M., Salehi N., A.A., *Analytical wave generation using CFD*, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 100. Zeratgar, H., <u>Panahi, R.</u>, Hasani C., E., Saibani, M., *Stability analysis of a small passenger boat after collision using deterministic and probabilistic methods*, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 101. Zeratgar, H., Mehri, R., Mazaheri, S., <u>Panahi, R.</u>, Saibani, M., *Iran marine accidents situation in comparison to other countries*, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 102. Jahromi K., S., Hesabi, A.H., <u>Panahi, R.</u>, *Feasibility study of using fiberglass in cargo vessels*, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 103. Hesabi, A.H., Alavimehr, J., <u>Panahi, R.</u>, Mazaheri, S., <u>Determining the main characteristics of a cargo vessel for Persian gulf</u>, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 104. Eghtesadi, P., Maghsoodloo, A., Mazaheri, S., <u>Panahi, R.</u>, Moghadam, M., Amirabadi, R., *Economic analysis of ballast water in Persian gulf, based on Caspian sea Mnemiopsisleidyi experience*, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 105. Moghadam., M., Maghsoodloo, A., Eghtesadi, P., Mahmoodof, M., Mazaheri, S., <u>Panahi, R.</u>, *Entered species to the southern ports of Iran by discharging ballast water*, 11<sup>th</sup> Marine Industries Conference, Kish Island, Iran, 2009(In Persian).
- 106. <u>Panahi, R.</u>, Shafieefar, M., Salehi N., A.A., *Wedge-type wave maker and CFD*, 8<sup>th</sup>Iranian Hydraulics Conference, University of Tehran, Tehran, Dec., 2009(In Persian).
- 107. <u>Panahi, R.</u>, Shafieefar, M., Salehi N., A.A., *Flapping-type wave maker and CFD*, 9<sup>th</sup>Iranian Hydraulics Conference, Tarbiat Modares University, Tehran, Nov. 9-11, 2010 (In Persian).
- 108. Askari, M., <u>Panahi, R.</u>, Mazaheri, S., *An introduction to Persian Gulf buoy design guidelines*, 12<sup>th</sup> Marine Industries Conference, Zibakenar, Oct.19-21, 2010 (In Persian).
- 109. Ghaderi, S., Mousavizadegan, H., Seif, M.S., <u>Panahi, R.</u>, <u>Experimental assessment of the effect of demi-hulls distance on hydrodynamic resistance of a Catamaran, 12<sup>th</sup> Marine Industries Conference, Zibakenar, Oct.19-21, 2010 (In Persian).</u>

- 110. Azarsina, F., Panahi, R., Horufi, B., Sloshing risks in marine transportation, 12th Marine Industries Conference, Zibakenar, Oct.19-21, 2010 (In Persian).
- 111. Azarsina, F., Panahi, R., Mathematical model of sloshing in a 2D rectangle and its interaction with ship motions, 12th Marine Industries Conference, Zibakenar, Iran, Oct.19-21, 2010 (In Persian).
- 112. Daghigh, M., Panahi, R., Foroughi, S., Assessment of international standards on design of fixed and fleet mooring, 12th Marine Industries Conference, Zibakenar, Oct.19-21, 2010 (In Persian).
- 113. Shafieefar, M., Najafi J., A., Panahi, R., Sanayei, M., Rezaee, A.R., Feasibility study of using floating breakwaters in Iran, 4th Offshore Industries Conference, Sharif University of Technology, May16-17, 2011 (In Persian).
- 114. Rezaee, A.R., Sanayei, M., Najafi J., Shafieefar, M., Panahi, R., Numerical study of pontoon type floating breakwater hydrodynamic characteristics, 4th Offshore Industries Conference, Sharif University of Technology, May16-17, 2011 (In Persian).
- 115. Fathi K., M.R., Panahi, R., Seif, M.S., Measurement of squat in an oil carrier using model test, 4th Offshore Industries Conference, Sharif University of Technology, May16-17, 2011 (In Persian).
- 116. Panahi, R., Pourreza, M., Mirazizi, S., Value engineering Role in marine industries development, 4th Offshore Industries Conference, Sharif University of Technology, May16-17, 2011 (In Persian).
- 117. Panahi, R., Rahmani, I., Seif, M.S., Commercial software to assess port hydrodynamics and ship maneuvering: An assessment, 13th Marine industries Conference, Kish Island, Nov.8-11, 2011 (In Persian).
- 118. Rezaee, A.R., Sanayei, M., Najafi J., Shafieefar, M., Panahi, R., Calculation of wave transmission coefficient in pontoon and catamaran type floating breakwaters, 13th Marine Industries Conference, Kish Island, Nov.8-11, 2011 (In Persian).
- 119. Fathi K., M.R., Seif, M.S., Panahi, R., Estimation of ship squat in shallow water based on model test results, 13th Marine Industries Conference, Kish Island, Nov.8-11, 2011 (In Persian).
- 120. Azarsina, F., Panahi, R., Rahmani, I., Review of standards related to sloshing in LNG tanks, 13th Marine Industries Conference, Kish Island, Nov.8-11, 2011 (In Persian).
- 121. Ganji, H., Panahi, R., Study of international and national free port and free zone formation and activities, 13th Marine Industries Conference, Kish Island, Nov.8-11, 2011 (In Persian).
- 122. Zeraatgar, H., Panahi, R., Masoomi, S., Asghari, M., Assessment of formulations applicable in squat prediction, 13th Marine Industries Conference, Kish Island, Nov.8-11, 2011 (In Persian).
- 123. Shafiee, M.H., Panahi, R., Chegini, V., Experimental and numerical assessment of wave transmission coefficient in pantoon type breakwater, International Conference on Mechanical Engineering and Advanced Technology, Isfahan, Oct. 10-12, 2012 (In Persian).
- 124. Shafiee, M.H., Panahi, R., Shafieefar, M., Experimental and numerical assessment of piston type wavemaker performance in regular wave generation, International Conference on Mechanical Engineering and Advanced Technology, Isfahan, Oct. 10-12, 2012 (In Persian).
- 125. Arabi, M., Borghei, M., Azarsina, F., Panahi, R., Effect of environmental factors on scouring depth, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).

- 126. Ebadi, N., Panahi, R., Lesson learned during construction of marine oil berths on north west of Persian gulf, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).
- 127. Gashmarid, A., Harandi, A.A., Panahi, R., Eco-tourism in Bushehr province based on coasts and ports, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).
- 128. Khademi, H., Panahi, R., Assessment of guidelines performance in port basin design, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).
- 129. Ghasemizadeh, M., Panahi, R., Effect of holes shape and dimension on stresses, movements and stability of a perforated vertical breakwater, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).
- 130. Fathi K., M.R., Seif, M.S., Panahi, R., Development of a model to assess ship maneuvering in wind, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).
- 131. Shafiee, M.H., Panahi, R., Simulation of flapping and piston-type wavemakers using FLOW3D, 14th Marine Industries Conference, Tehran, Dec.26-27, 2012 (In Persian).
- 132. Hajari, M.A., Panahi, R., Ganji, H., Development of port strategy based on SWOT models, 1st National conference on Transportation Infrastructures, Feb.12-13, 2013 (In Persian).
- 133. Ghasemi, S., Ghasemi N., I., Panahi, R., Substantial repair of lanterns and beacons in Hormozgan province, 1st National conference on Transportation Infrastructures, Feb.12-13, 2013 (In Persian).
- 134. Panahi, R., Rahmani, I., Seif, M.S., Categorization of software applicable in hydrodynamic studies at port, 1st National conference on Transportation Infrastructures, Feb.12-13, 2013 (In Persian).
- 135. Fatahi K., M.R., Panahi, R., Seif, M.S., A guideline to assess the effect of sea environment on ship motions in channels and basins, 1st National Conference on Transportation Infrastructures, Feb.12-13, 2013 (In Persian).
- 136. Kazemi, A., Panahi, R., Effect of wave theory on time-domain analysis of jackets, 5th Offshore Industries Conference, May 21-22, 2013 (In Persian).
- 137. Sadat Hosseini, A., Ganji, H., Panahi, R., A regression model for prediction of wave overtopping at caisson-type breakwaters, 5th Offshore Industries Conference, May 21-22, 2013 (In Persian).
- 138. Ghamari, E., Azarsina, F., Panahi, R., Numerical analysis of the hydrodynamic performance of rubble mound breakwaters with Xbloc Armours, 5th Offshore Industries Conference, May 21-22, 2013 (In Persian).
- 139. Nasiraie, H., Panahi, R., Assessment of cylinder diameter on energy extraction from vortex induced vibration, 5th Offshore Industries Conference, May 21-22, 2013 (In Persian).
- 140. Gharangian, R., Shafieefar, M., Panahi, R., Assessment of Chabahar Field Wave Data, 15th Marine Industries Conference, Kish Island, October 2013 (In Persian).
- 141. Ganji, H., Panahi, R., System dynamic on inter-connection between port activities and region economy, 15th Marine Industries Conference, Kish Island, October 2013 (In Persian).
- 142. Panahi, R., Ganji, H., Yousefi, A.Sh., Pourreza, M., Assessment of direct incomes at port and maritime organization, 15th Marine Industries Conference, Kish Island, October 2013 (In Persian).
- 143. Jenami, G., Panahi, R., Comparison of different port community systems, 15th Marine Industries Conference, Kish Island, October 2013 (In Persian).

- 144. Mardanpour, M.R., Panahi, R., Characteristic of a leader in a value engineering team, 1st conference on Management of Construction Projects, Mashhad, October 2013 (In Persian).
- 145. Panahi, R., Dolatmoradi, M., Comparison of value engineering and other process modification tools, 1st conference on Management of Construction Projects, Mashhad, October 2013 (In Persian).
- 146. Panahi, R., Khalilian, Sh., Akradi, K., Analysis of AHP based software, 1st National congress on assessment and construction engineering of civil works, Gorgan, May 1, 2014 (In Persian).
- 147. Dehghan M., M., Panahi, R., Combining Risk management and value engineering in mega projects, 1st National congress on assessment and construction engineering of civil works, Gorgan, May 1, 2014 (In Persian).
- 148. Kafaei, M., Ranjbar, Gh., Panahi, R., Passive defense consideration in port site selection- A general viewpoint, 1st national conference on passive defense in marine engineering, Bandar Abas, Nov. 19-20, 2014.
- 149. Amiri, A., Panahi, R., Numerical assessment of floating part effect on point wave absorber performance, 16th Marine Industries Conference, Bandar Abas, December 2014 (In Persian).
- 150. Ghasemi, A., Shafieefar, M., Panahi, R., Rezaie, H., Parametric analysis of overtopping in rubble mound break water with Xlboc armour, 16th Marine Industries Conference, Bandar Abas, December 2014 (In Persian).
- 151. Rezaie, H., Shafieefar, M., Panahi, R., Presentation of wave spectrum in strait of Hormouz using M5' algorithm, 16th Marine Industries Conference, Bandar Abas, December 2014 (In Persian).
- 152. Rami, A., Ghodsian, M., Panahi, R., Numerical Simulation of Spatially Varied Flow in Channel with sharp trapezoidal Side –Weir, 15th National Civil Engineering Students conference, Oroomieh, Sept. 2-4, 2014 (In Persian).
- 153. Rami, A., Ghodsian, M., Panahi, R., Numerical Simulation of Spatially Varied Flow in Channel with round Cylindrical Side –Weir, 15th National Civil Engineering Students Conference, Oroomieh, Sept. 2-4, 2014 (In Persian).
- 154. Panahi, R., Maleki T., A.M., Maleki T., H., The Necessity of Using Value Engineering and the Investigation of its Success Factors in Civil Plans, 1st national conference on development of civil engineering, architecture, electricity and mechanical in Iran, Gorgan, Dec. 18, 2014.
- 155. Ghahramani, R., Panahi, R., Saybani, M., Challenges in implementing value engineering in Iran, 2<sup>nd</sup> national congress on construction engineering and evaluation of civil projects, Semnan, Iran, May 28, 2015 (In Persian).
- 156. Gholizadeh, A., Ghodsian, M., Panahi, R., Sangsefidi, Y., Numerical investigation of the effect of crown shape on hydraulic conductivity of congress weir, 13<sup>th</sup> Iranian Hydraulics Conference, Tabriz, Nov. 12-14, 2014.
- 157. Mahmoudi M., A., Shafieefar, M., Panahi, R., Assessment of Poisson equation solvers, 10th International Congress on Civil Engineering, Tabriz, May 5-7, 2015.
- 158. Radfar, S., Panahi, R., Rezaie, A., A rough feasibility study on tidal energy extraction in Persian Gulf, 17th Marine Industries Conference, Kish Island, Dec. 22-25, 2015.
- 159. Ghasemi, A., Panahi, R., Prediction of wind wave in Anzali port using experimental methods, 17th Marine Industries Conference, Kish Island, Dec. 22-25, 2015.
- 160. Behzad, H., Panahi, R., Numerical simulation of a paddle-type wave maker farm, 17<sup>th</sup> Marine Industries Conference, Kish Island, Dec. 22-25, 2015.

- 161. Ghasemi, A., Shafieefar, M., Panahi, R., Numerical simulation of the hydrodynamic behavior of rubble mound breakwater encountering a wave spectrum, 17<sup>th</sup> Marine Industries Conference, Kish Island, Dec. 22-25, 2015.
- 162. Filom, S., Panahi, R., Khorram S., Radfar, S., Assessment of ship routes heading pier no. 25 and pier no.26 of container terminal of Shahid Rajaie port, 18<sup>th</sup> Marine Industries Conference, Kish Island, Oct. 18-21, 2016.
- 163. Allahmoradi, Q., Panahi, R., Assessment of ship routes in Shahid Rajaie port based on AIS data, 18<sup>th</sup> Marine Industries Conference, Kish Island, Oct. 18-21, 2016.
- 164. Radfar, S., Panahi, R., Economic study of developing a tidal farm in Persian Gulf: Hengam Island, 18<sup>th</sup> Marine Industries Conference, Kish Island, Oct. 18-21, 2016.
- 165. Golpira, A, Panahi, R., Shafieefar, M., Assessment of one dimensional approach in separation of seas and swell parts of two-peak wave spectra in Makran region, 16<sup>th</sup> Iranian Hydraulics Conference, Ardabil, Sep. 6-7, 2017.

## Knowledge of

- Computational fluid mechanics.
- Marine hydrodynamics.
- Marine transportation as well as its environmental impacts.
- Port planning and design especially in the field of marine structures.
- Marine standards related to port works and ship structure.
- Project management Skill.
- Scientific reports preparation and presentation.
- Lecturing.
- Computer skills:

OS Linux, Windows
 Programming C, C++, FORTRAN, Pascal
 Technical Computing MATLAB, Octave, Fluent, Flow3D, ArcGIS

o Post Processing ParaView, Tecplot

• Mesh Generation Gambit

o Desktop Writing OpenOffice.org, MS Office