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<http://www.hindawi.com/23813842/>

https://www.researchgate.net/profile/Hassan_Ghassemi

Member of Editorial Board:

1. Ocean Eng. <http://www.journals.elsevier.com/ocean-engineering/>
2. Int. J. Naval Arch Ocean Eng <https://www.journals.elsevier.com/international-journal-of-naval-architecture-and-ocean-engineering>
3. J. of Mechanics <http://journals.cambridge.org/action/displayJournal?jid=JOM>
4. Polish Maritime Research <http://www.bg.pg.gda.pl/pmr/pmr.php>
5. J. Mar Sci App, <http://www.springer.com/engineering/civil+engineering/journal/11804>
6. J Mari Univ. Szczecin <http://scientific-journals.eu/>
7. J. Ocean, Mech. Aerospace, <http://isomase.org/JOMase3.php>
8. Amer. J. of Mech. Eng., <http://www.sciepub.com/journal/AJME/editors>
9. Int. J. Marine Tech., <http://www.ijmt.ir/>

Academic qualification:

- BSc of Mechanical Engineering, Sharif University of Technology, Tehran, Iran, 1984-88.
- MSc of Ocean Engineering, Gdansk University of Technology, Poland, 1991-93.
- PhD of Ocean Engineering, Yokohama National University, Japan, 1993-96.
- Researcher at IHI, Japan, 1996-98.
- Post-doctoral, Memorial University of Newfoundland, St. John's, NFLD, Canada, 1998-00.
- Assistant Professor, Amirkabir University of Technology, 2000-07,
- Associate Professor, Amirkabir University of Technology, 2008-14,
- Professor, Amirkabir University of Technology, 2015- date

Research interest:

- Advance Hydrodynamics,
- Propulsions and Propeller Theory,
- Ship Resistance,
- Modern Marine Vehicles,
- Renewable Energy,
- Cavitation Phenomena,
- Numerical Methods (BEM, CFD)
- Partial Differential Equations,

Lectured courses:

Under-graduate:

- Ship Knowledge,
- Ship Hydrostatics,
- Ship Hydrodynamics (I, II)
- Fluid Mechanics (I, II),
- Vibration Theory,
- High-Speed Marine Vehicles,

Post-graduate:

- Marine Propulsor Design,
- Boundary Element Method (BEM),
- Computational Fluid Dynamics (CFD)
- Advanced Hydrodynamics,
- Dynamic of Marine Structures,
- Aero-Hydrodynamics,
- Marine Technology Management,

Published Books:

- [1]. Nano-Technology in Marine Industries, 2017, Published by Amirkabir Univ., 200 pages,
۱- فناوری نانو در صنایع دریایی، ۱۳۹۶، انتشارات دانشگاه صنعتی امیرکبیر، ۲۰۰ صفحه (قاسمی-نوروزی)
- [2]. Engineering Vibration, Published by Nowshahr Maritime University, 500 pages,
۲- طراحی کشتی مبنی برریسک، ۱۳۹۶، انتشارات دانشگاه دریایی نوشهر ۵۰۰ صفحه (قاسمی-پژوهان)
- [3]. Risk-based Ship design, 2017, Published by Nowshahr Maritime University, 500 pages,
۳- ارتعاشات مهندسی، ۱۳۹۵، انتشارات دانشگاه دریایی نوشهر ۵۰۰ صفحه (قاسمی-فیروزی)
- [4]. Hydrodynamic of high speed craft, Published by Rashedin publication,
۴- هیدرودینامیک شناورهای تندرو (۲ جلدی) ۱۳۹۵ انتشارات راشدین (قاسمی-اسماعیلیان)
- [5]. Theory and Design of Marine Propulsor, 2016, Published by Amirkabir Univ., 600 pages,
۵- تئوری و طراحی پیشرانه های دریایی، ۱۳۹۵، انتشارات دانشگاه صنعتی امیرکبیر، ۶۰۰ صفحه (قاسمی-اسماعیلیان- سلیمانی)
- [6]. Boundary Element Method, 2016, Published by Amirkabir Univ., 450 pages,
۶- روش المان مرزی، ۱۳۹۵، انتشارات دانشگاه صنعتی امیرکبیر، ۴۵۰ صفحه (قاسمی- بختیاری)
- [7]. Underwater Robots, 2015, Published by Rashedin publication, 550 pages,
۷- روباتهای زیرسطحی، ۱۳۹۴، انتشارات راشدین، ۵۵۰ صفحه (قاسمی- کمرلویی- ابطحی)
- [8]. Ship Design, 2014, Published by Rashedin publication, 400 pages,
۸- طراحی کشتی، ۱۳۹۳، انتشارات راشدین، ۴۰۰ صفحه (قاسمی- اشرفی- امیریان)

Under preparation:

Renewable Energy

Advanced Hydrodynamics

کتابهای در دست تهیه

انرژی های تجدیدپذیر

هیدرودینامیک پیشرفته

Supervisor of PhD Graduated students:

- Dr. AR. Kohansal,
- Dr. I. Farahbakhsh,

- Dr. R. Shamsi,
- Dr. M. Ghassabzadeh,
- Dr. E. Yari,
- Dr. M. Khosravi,

Present PhD students:

Dehghanian, Safaei, Firouzi, Zakerdoost, Bakhtiari, Nowruzi, Mahmoodi,

Supervisor of MSc Graduated students:

More than 80 students,

Supervisor of Under-Graduated students:

More than 120 students,

ISI Journal papers:

- [1]. H. Zakerdoost, **H. Ghassemi**, M. Iranmanesh, Solving steady state convection-diffusion-reaction using DRBEM, *Advances in Applied Mathematics and Mechanics*, 2017, 9 (3), 680-697,.
- [2]. S Majdfar, **H Ghassemi**, H Forouzan, A Ashrafi, Hydrodynamic prediction of the ducted propeller by CFD solver, *Journal of Marine Science and Technology* 25 (3), 268-275.
- [3]. E Esmailian, **H Ghassemi**, H Zakerdoost, Systematic probabilistic design methodology for simultaneously optimizing the ship hull-propeller system, *International Journal of Naval Architecture and Ocean Engineering* 9 (3), 246-255.
- [4]. H Nowruzi, **H Ghassemi**, Effects of Nano-Nozzles Cross-Sectional Geometry on Fluid Flow: Molecular Dynamic Simulation, *Journal of Mechanics*, 2017, 1-12.
- [5]. M Gorji, **H Ghassemi**, J Mohamadi, Hydrodynamic effect on the sound pressure level around the marine propeller, 2017, NISCAIR-CSIR, India.
- [6]. K Mahmoodi, **H Ghassemi**, H Nowruzi, Data mining models to predict ocean wave energy flux in the absence of wave records, *Scientific Journals of the Maritime University of Szczecin*, 49, 2017,119-129.
- [7]. A Dehghanian, MR Khedmati, **H Ghassemi**, Practical Approaches of Inducing Controlled Simulated Resin Starvation Areas into Vacuum Infusion Processed Sandwich Composites Used for Characterization of The Surface Defects and Their Outcomes, *Latin American Journal of Solids and Structures* 14(6), 2017,1170-1182.
- [8]. H Nowruzi, **H. Ghassemi**, E Amini, I Sohrabi-asl, Prediction of impinging spray penetration and cone angle under different injection and ambient conditions by means of CFD and ANNs, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 1-18, 2017.
- [9]. MM Shora, **H. Ghassemi**, H Nowruzi, Using computational fluid dynamic and artificial neural networks to predict the performance and cavitation volume of a propeller under different geometrical and physical characteristics, *Journal of Marine Engineering & Technology*, 2017, 1-26.
- [10]. H Nowruzi, **H. Ghassemi**, M Ghiasi, Performance predicting of 2D and 3D submerged hydrofoils using CFD and ANNs, *Journal of Marine Science and Technology*, 2017, 1-24.
- [11]. M Motallebi-Nejad, M Bakhtiari, **H Ghassemi**, M Fadavie, Numerical analysis of ducted propeller and pumpjet propulsion system using periodic computational domain, *Journal of Marine Science and Technology*, 2017, 1-15.
- [12]. R Shamsi, **H. Ghassemi**, M Iranmanesh, H, A Comparison of the BEM and RANS Calculations for the hydrodynamic performance of the PODS, *Mechanics & Industry* 2017, 18 (2).
- [13]. **H. Ghassemi**, H Zakerdoost, Ship hull-propeller system optimization based on the multi-objective evolutionary algorithm, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Eng. Sci.*, 2017, 231(1), 175-192.

- [14]. R. Shamsi, **H. Ghassemi**, Determining the Hydrodynamic Loads of the Marine Propeller Forces in Oblique Flow and Off-Design Condition, Iranian Journal of Science and Technology, Transaction of Mechanical Eng, 2016.
- [15]. H. Nowruzi, **H. Ghassemi**, Using artificial neural network to predict velocity of sound in liquid water as a function of ambient temperature, electrical and magnetic fields, Journal of Ocean Engineering and Science, 1(3), 2016.
- [16]. H. Malekizade, MR. Jahed-Motlagh, B Moaveni, A. Moarefianpur & **H. Ghassemi**, Robust model predictive control employed to the container ship roll motion using fin-stabilizer, Cogent Eng, 2016, pp1-15.
- [17]. E. Yari, **H. Ghassemi**, Hydrodynamic analysis of the surface-piercing propeller in unsteady open water condition using boundary element method, International Journal of Naval Architecture and Ocean Engineering 8 (2016), pp22-37.
- [18]. E. Yari, **H. Ghassemi**, Numerical analysis of surface piercing propeller in unsteady conditions and cupped effect on ventilation pattern of blade cross-section, J Mar Sci Technol, (2016).
- [19]. E. Yari, **H. Ghassemi**, Numerical study of surface tension effect on the hydrodynamic modeling of the partially submerged propeller's blade section, J of Mechanics, (2016), DOI: 10.1017/jmech.2016.38.
- [20]. E. Yari, **H. Ghassemi**, Boundary element method applied to added mass coefficient calculation of the skewed marine propellers, Polish Maritime Research 2 (90) 2016 Vol. 23; pp. 25-31.
- [21]. Ali Bakhshandeh Rostami, Parviz Ghadimi, **H. Ghassemi**, Adaptive viscous–inviscid interaction method for analysis of airfoils in ground effect, J Braz. Soc. Mech. Sci. Eng. (2016).
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- [23]. M. Bakhtiari, S. Veysi, **H. Ghassemi**, Numerical modeling of the stepped planing hull in calm water, Int. J of Eng. Transactions B: Applications, Vol. 29, No. 2, (February 2016).
- [24]. I. Farahbakhsh, **H. Ghassemi**, & F. Sabetghadam, A vorticity based approach to handle the fluid-structure interaction problems, Fluid Dynamic Research, 48 (2016).
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- [26]. M. Kamarlouei, **H. Ghassemi**, Robust control for horizontal plane motions of autonomous underwater vehicles, J Braz. Soc. Mech. Sci. Eng., (2015).
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- [29]. I. Farahbakhsh, **H. Ghassemi**, F. Sabetghadam, An Immersed boundary method based on the kinematic relation of the velocity-vorticity formulation, Journal of Mechanics, Vol. 31, No. 2, (April 2015).
- [30]. I. Farahbakhsh, **H. Ghassemi**, F. Sabetghadam, A One-Continuum Approach for Mutual Interaction of Fluids and Structures, J. of Mechanics (2015), DOI: 10.1017/jmech.2015.30.
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- [32]. **H. Ghassemi**, M. Kamarlouei, S. Taj Golah Veysi, A hydrodynamic methodology and CFD analysis for performance prediction of stepped planing hulls, Polish Maritime Research 2(86) (2015) Vol. 22; pp.23-31, 10.2478/pomr-2015- 0014.
- [33]. **H. Ghassemi** & H. Zakerdoost, Ship hull–propeller system optimization based on the multi-objective evolutionary algorithm, Proc IMechE Part C: J Mechanical Engineering Science, (2015) DOI: 10.1177/0954406215616655.
- [34]. M. Kamarlouei, **H. Ghassemi**, K. Aslansefat, D. Nematy, Multi-objective evolutionary optimization technique applied to propeller design, Acta Polytechnica Hungarica Vol. 11, No. 9, (2014).

- [35]. M. Ghassabzadeh, **H. Ghassemi**, Determining of the hydrodynamic forces on the multi-hull tunnel vessel in steady motion, *J Braz. Soc. Mech. Sci. Eng.* (2014) 36: pp697–708.
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- [51]. P. Ghadimi, **H. Ghassemi**, M. Ghassabzadeh, Z. Kiaei, Three-dimensional simulation of underwater welding and investigation of effective parameters, *Welding journal* 92, (8), (2013), pp239-249.
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Journal papers (English and Persian):

- [1]. **H. Ghassemi**, I have published many papers (Persian and English) in the journals of IJMT, MST, JHSCE, JOMASE, AJME, IJPDEA, AJAMS, Amirkabir, Sharif, Modares, Esteghlal, Mashad, OJFD, JOR, JNAME, IJE, IJMSE, AJCEA, IJEE ([more than 150 papers](#))
- [2].

Conference papers:

- [1]. **H. Ghassemi**,I have published many papers in the national and international conferences of the HSC, OMAE, MIC, ICMT, ICHD, ISME, AHC, ... ([more than 300 papers](#))
- [2].

Research and Industrial Projects:

Close link with marine industries and marine research center

Patents:

- [1]. Wave Energy Converter,
- [2]. New Propeller Design,
- [3]. New Craft Design,

