

Curriculum Vitae

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Professor Hassan Ghassemi,

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Adjunct professor

Int. School of Ocean Engineering,
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Short Bio: Professor Hassan Ghassemi is an Exemplary Professor and Distinguished Professor in maritime engineering.

He studied and worked at different universities (Sharif University of Technology in Iran, Gdansk University of Technology in Poland, Yokohama National University and IHI company in Japan, Memorial University of Newfoundland in Canada, Harbin Institute of Technology (HIT) in China) and he has experienced more than 30 years in teaching and research at different fields of Mechanical, Ocean and Maritime engineering.

Currently, He is working at Harbin Institute of Technology (HIT), Weihai, Shandong province, Ocean Engineering Department, International Group. His current field and project are about wave energy converters (WECs), energy-saving devices (ESDs), marine propulsion, and the seakeeping of ships. He did and managed many research and industrial projects regarding the above subjects.

He is a member of the editorial board of about 10 journals.

Prof. Ghassemi authored over 170 refereed publications and graduated over 130 BSc, 120 MSc, and 20 PhD students.

Academic qualification

- BSc of Mechanical Engineering, Sharif University of Technology, Iran, 1984-88.
 - MSc of Ocean Engineering, Gdansk University of Technology, Poland, 1991-93.
 - PhD of Ocean Engineering, Yokohama National University, Japan, 1993-97.
 - Associate researcher, IHI, Japan, 1997-98.
 - Post-doctoral, Memorial University of Newfoundland, Canada, 1998-00.
 - Assistant Professor, Amirkabir University of Technology, 2000-07,
 - Associate Professor, Amirkabir University of Technology, 2008-13,
 - Full Professor, Amirkabir University of Technology, 2014- date.
 - Exemplary professor and Distinguished professor, 2018.
 - Foreign superior professor at Shandong province, China, 2022.
 - Top 2% of world scientists 2023.
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Teaching experience

Undergraduate:

- ✓ Statics,
- ✓ Dynamics.
- ✓ Vibration Theory,
- ✓ Ships and ocean knowledge,
- ✓ Ship hydrostatics and stability,
- ✓ Ship Hydrodynamics,
- ✓ Fluid Mechanics,
- ✓ High-Speed Marine Vehicles,

Post-graduate:

- ✓ Advanced fluid mechanics,
- ✓ Marine transport,
- ✓ Marine Propulsor Design,
- ✓ Boundary Element Method (BEM),
- ✓ Computational Fluid Dynamics (CFD),
- ✓ Advanced Hydrodynamics,
- ✓ Dynamic of Marine Structures,
- ✓ Renewable Ocean Energy

Member of the Editorial Board of the Journals

- [Ocean Engineering \(OE\)](#),
 - [Journal of Marine Science and Application \(JMSA\)](#),
 - [Int. Journal of Naval Architecture and Ocean Engineering \(IJNAOE\)](#),
 - [China Ocean Engineering \(COE\)](#),
 - [Journal of Mechanics \(JoM\)](#),
 - [Polish Maritime Research \(PMR\)](#),
 - [Journal of Maritime University of Szczecin](#)
 - [International Journal of Coastal and Offshore Engineering](#)
 - [American Journal of Mechanical Engineering](#)
 - [Ship Science & Technology](#)
 - [Int. Journal of Maritime Technology](#)
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Research project experience

- Energy-saving devices (ESDs),
 - Wave energy converters (WECs),
 - Marine propeller and propulsion system,
 - Design of ship propellers for industry companies,
 - The potential of the wave, wind, and tidal energy,
 - A comprehensive software program for propeller design (SPD) by BEM,
 - Technical devices installed on the ship to reduce fuel oil consumption and its pull options,
 - Vibration control of ship propulsions system,
 - Analysis of ship accidents during the past ten years,
 - Hydrofoil and control surfaces.
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Honors and awards

- Excellence Award from Marine Industries Conference, 2012,
 - Excellence Awards from JMUS, 2018,
 - Exemplary professor, 2017,
 - Department Outstanding Performance Award, 2017,
 - Distinguished professor, 2018,
 - Foreign Talent Professor at HIT, 2022.
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Interested research

- Marine renewable energy,
 - Wave energy converters (WECs)
 - Marine transportation and route navigation
 - Ship accident analysis,
 - Optimize the ship transportation route,
 - Wavestar wave energy converters,
 - Dynamic motions of a semi-submersible floating wind turbine,
 - Design of ship propeller and providing SPD software,
 - Seakeeping of planing craft,
 - Design of pump-jet for high-speed craft
 - Hydrodynamic analysis of the propeller behind the container ship
 - The vibration of the shafting system of the ship
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Information Websites

- https://scholar.google.com/citations?hl=en&user=TSB3NsoAAAAJ&view_op=list_works&sortby=pubdate
 - <https://www.scopus.com/authid/detail.uri?authorId=23008523400>
 - https://www.researchgate.net/profile/Hassan_Ghassemi
 - <https://orcid.org/0000-0002-6201-346X>
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Some recent published papers

- [1]. A Abbasi, **H Ghassemi**, 2024. Numerical results of the dynamic response and capture factor of the two-raft-type WEC, **Energy Conversion and Management** 303, 118176.
- [2]. Z Luan, B Chen, R Jin, G He, **H Ghassemi**, P Jing, 2024. Validation of a numerical wave tank based on overset mesh for the wavestar-like wave energy converter in the South China Sea, **Energy** 290, 130192.
- [3]. M Bandizadeh Sharif, AH Gorbanpour, **H Ghassemi**, G He, 2024. Assessment of sediment accumulation inside the harbour basin in the development plan due to longshore sediment transport (LST) rate. A case study of Genaveh port, **Ships and Offshore Structures**, 1-12.
- [4]. A Neisi, **H Ghassemi**, M Iranmanesh, 2023. Effect of the multi-segment mooring system failure on the dynamic motions of the floating platform, **Ocean Engineering** 290, 116371.
- [5]. M Bandizadeh Sharif, **H Ghassemi**, G He, M Karimirad, 2023. A review of the flow-induced vibrations (FIV) in marine circular cylinder (MCC) fitted with various suppression devices, **Ocean Engineering** 289, 116261.
- [6]. G He, C Liu, B Chen, **H Ghassemi**, L Liu, K Yang, Z Luan, 2023. Effect of piecewise damping torques and coefficients on power absorption of a point-absorber wave energy converter, **Renewable Energy** 12, 119440.
- [7]. A Neisi, HR Ghafari, **H Ghassemi**, T Moan, G He, 2023. Power extraction and dynamic response of hybrid semi-submersible yaw-drive flap combination (SYFC), **Renewable Energy** 218, 119315.
- [8]. H Zakerdoost, **H Ghassemi**, 2023. Probabilistic surrogate-based optimization of ship hull-propulsor design with bi-level infill sampling technique, **Ocean Engineering** 286, 115614
- [9]. H Yazdi, HR Ghafari, **H Ghassemi**, G He, M Karimirad, 2023. Wave power extraction by Multi-Salter's duck WECs arrayed on the floating offshore wind turbine platform, **Energy** 278, 127930.
- [10]. P Jing, G He, **H Ghassemi**, Z Luan, 2023. Transient responses of the linear and nonlinear gap resonances in the fixed and free-heaving moonpools, **Physics of Fluids** 35 (8).