Curriculum Vitae

for

Dariush Mansoury

Personal Profile	
Name	- Dariush Mansoury
Date and Place of Birth	- 1968, Nour
Gender	- Male
ID No.	- 127
Military Status	- Completed, with military service completion certificate
Civil Status	- Married
Nationality	- Iranian
Religion	- Islam, Shia
Job	- Associate Professor in Tarbiat Modares University
Address	 Department of Physical Oceanography, College of Natural Resources and Marine Sciences, Tarbiat Modares University, P. O. Box 46417-76489, Imam Reza Blvd., Nour, Mazandaran Province, Iran.
	- Telephone: +981144998000, Extension: 8140, Fax: +981144553499
	- Email Address: mansoury@modares.ac.ir or dariushm127@yahoo.com
Educational Background	 1982-86: Diploma in Mathematics, Dr. Ali Shariati High School, Nour, Mazandaran, Iran. 1386-91: Bachelor of Science in Mechanical Engineering, Shipbuilding, Sharif University of Technology, Tehran, Iran. 1994-1997: Master of Science in Marine Engineering, Ship Structure, Sharif University of Technology, Tehran, Iran. 2010-16: Doctor of Philosophy in Physical Oceanography, Khoramshahr Marine Science and Technology University, Khoramshahr, Iran.
Projects and Theses	- BSc. "Design of 30 Meter Fishing Ship".

MSc. "Physical Modeling of Oil Well Fire Extinguisher Barge Using Turbojet". Ph.D. "Three Dimensional Numerical Modeling of Water Circulation in the Caspian Sea and the Exchange flows Between the Middle and Southern Basins". 1987-94: Cooperation with a computer corporation **Professional** (programming and network) for 7 years, Tehran. **Experiences** 1992-94: Instructor of the Faculty of Mechanics in Chalus Marine Science and Technology University. 1998 up to now: An official faculty member of Tarbiat Modares University, College of Natural Resources and Marine Sciences, Department of Physical Oceanography. 2000-16: Instructor of the Faculty of Mechanics in Islamic Azad University, Nour Branch. Marine Renewable Energy Research Numerical and Physical Modeling **Background** Fluid Mechanics Geophysical Fluid Dynamics **Book Translations** Mansoury, D., Namarian, M. 2000, Outdoor Motors and Outdrives, NEDSA Information Center of Research Organization and Autarky. Mansoury, D., 2021. Dynamics of Marine Ecosystems, (Under translation). **Published Papers** Rad, M., Mansoury, D., Kazemi, F., 2000. Investigation and Presentation of a Model for a Water-jet Propulsion System for High Speed Boats, J. Maritime Sciences, No. 15, pp. 22-31. Bannazadeh, M., Chegini, V., Mansoury, D., 2002. The Effect of Oblique Waves on the Resistance of Bern Breakwater Head, Iranian Journal of Marine Sciences, Vol. 1, No. 4, autumn 2002. Mansoury, D., 2002. Simulation of Inviscid Flow around Different Marine Bodies by Panel Method, Iranian Journal of Marine Sciences, Vol. 1, No. 4. Mehdizadeh, M., Bannazadeh, M., Torabi Azad, Mansoury, D., Moghimi, S., 2002. A Numerical Model of Storm Surge and Wind Induced Currents in the Caspian Sea, Iranian journal of Marine Sciences, Vol. 1, No. 3. Mansoury, D, Abasspour, M., 2003. Physical Modeling of Oil Well Fire Extinguisher Barge Using Turbojet, Journal of Environmental Sciences & Technology, No. 16. Mansoury, D., Torabi Azad, M., 2003. The Application of Mathematics in the Simulation of Physical Processes, Journal of Environmental Sciences & Technology, No. 16.

Mansoury, D., Torabi Azad, M., 2003. Examination of the Vessels Hull Resistance at the Calm Sea, Journal of

Environmental Sciences & Technology, No. 18.

- **Assgari, A., Mansoury, D., 2006.** *Sea Energy,* J. Payam-Darya, Vol. 148.
- Abbaspour, M., Mansoury, D., Mansoury, N., 2008. *Physical Modeling of Oil Well Fire Extinguisher Barge Using Turbojet*, International Journal of Mechanical Systems Science and Engineering 2;3 © www.waset.org.
- Torabi Azad, M., Mohseni Arasteh, A., Salami Abyane, R., Mansoury, D., 2009. *Investigation of Evaporation in the Persian Gulf Using a Sea-Air Interaction Model*, Journal of Environmental Sciences & Technology, Vol. 12, No.2.
- Ghader, S., Qasemi Varnamkhshadi, A., Banazadeh Mahani, M., Mansoury, D., 2010. Numerical Simulation of the Gravitational Flow of the Ocean Bottom on an Inclined Plane Using Fourth-Order Compact Method, Iranian Journal of Geophysics, Vol. 4., No. 1.
- Haghighi, D. T., Saad, C. R., Hosainzadeh Sahafi, H., & Mansoury, D., 2009. The Effect of Dietary Lipids on the Growth of Kutum Fry (Rutilus frisii kutum), Iranian Journal of Fisheries Sciences, Vol. 8, No. 1, 13-24.
- Ghader, S., Qasemi Varnamkhasdi, A., Banazadeh Mahani, M., Mansoury, D., 2010. Numerical Solution of Incompressible Boussinesq Equations Using Fourth-Order Compact Method: Case study of Lock-exchange, Journal of Physics of the Earth Space, Volume 37, Issue 1.
- Ghader, S., Ghasemi, A., Banazadeh, M. R., Mansoury, D., 2011. High-Order Compact Scheme for Boussinesq Equations: Implementation and Numerical Boundary Condition, International Journal for Numerical Methods in Fluids, wileyonlinelibrary.com, doi: 10.1002 / fld.2576.
- **Khalilabadi, M. R., Mansoury, D., 2013.** The Effect of GONU Super Cyclone on the Sea Level Variation along the Iranian coastlines, Indian Journal of Geo Marine Sciences, Vol.42 (4), pp. 470-475.
- Mansoury, D., Sadri Nasab, M., Akbari Nasab, M., 2015. *Modeling the Structure of Temperature and Salinity Fields in the Caspian Sea water using POM Model*, Journal of HydrophysicS, Vol.1 (1), pp. 1-13.
- Hatami Bavarsaad, N., Mansoury, D., Khalil Abadi, M.R., 2017. Monitoring the Atmospheric Low Pressure and Investigating their Impact on the Caspian Sea Levels Journal of Hydrophysics, Vol.3 (1), pp. 51-65.
- Mansoury, D., Sadri Nasab, M., Akbari Nasab, M., 2018. Seasonal and Annual Changes of the Wind Field and Surface Water Flow of the Caspian Sea, Iranian Journal of Marine Science and Technology, Vol.17 (1), pp. 68-82.
- Mansoury, D., 2018. An investigation of sediments grain size in the coastal area of Nour, Research in Marine Sciences, 3(1): 259-268.
- Mansoury, D., Doshmanziari Ilami, F., Rezaie, S., Rashidi, M. M., 2018. Effect of Al2O3 / water Nanofluid on the Performance of the Parallel Flow Heat Exchanger: An Experimental Approach, Journal of Thermal Analysis and

- Calorimetry, Springer link, 135: 625-643, doi.org/10.1007/s10973-018-7286-8.
- Abdulahi, A., Nahavandian, S., Mansoury, D., 2018. Variation of vertical structure of water temperature in the coastal area of Noshahr and Lavijrood, Research in Marine Sciences, 3(2): 311-322.
- **Zereshkian, S., Mansoury, D., 2018.** Evaluation of Offshore Wind Power to Supply the Electric Power Required for Offshore Oil and Gas Platforms in the Caspian Sea, Journal, of Hydrophysics, 4(1): 57-68.
- Mansoury, D., Doshmanziari Ilami, F., Kiani A., Chamkha A. J., and Sharifpour, M., 2019. Heat Transfer and Flow Characteristics of Al2O3 / Water Nanofluid in Various Heat Exchangers: Experiments on Counter Flow, Journal of Heat Transfer Engineering, 1521-0537, doi.org/10.1080/01457632.2018.1528051.
- Torabi Azad, M., Mehrfar, H., Mansoury, D., Mohamadi Pasand, M., 2019. A physical study on tidal currents in Mond and Helleh rivers in the Persian Gulf, Research in Marine Sciences, 4(2): 518-527.
- Ghorbani Taleghani, M., Akbarpour Jannat, M., Mansoury, D., Golshani, A. A., 2019. Statistical analysis and numerical modeling of the coastal waves at the South of the Caspian Sea (coasts of Amir Abad Port), Research in Marine Sciences, 4(3): 563-583.
- Eskandari, S., Mansoury, D., 2019. Study of temporal and spatial variations of electrical conductivity in the Caspian Sea using POM, Research in Marine Sciences, 4(4): 599-614.
- **Zereshkian, S., Mansoury, D., 2020.** Evaluation of ocean thermal energy for supplying the electric power of offshore oil and gas platforms, Journal of the Earth and Space Physics, Vol. 46, No. 2, 331-345. doi: 10.22059/jesphys.2020.289441.1007161
- **Zereshkian, S., Mansoury, D., 2021.** A study on the feasibility of using solar radiation energy and ocean thermal energy conversion to supply electricity for offshore oil and gas fields in the Caspian Sea, Renewable Energy, 163, 66-77. https://doi.org/10.1016/j.renene.2020.08.111
- Hatami Bavarsad, N., Mansoury, D., Khalilabadi, M.R., Malekilonbar, M., 2021. The impact of the inlet cyclones to the Caspian Sea on the sea level fluctuations, IJCOE, 5(1), 15-28.
- Fallahi, M., Torabi Azad, M., Mansoury, D., 2021. A Hydrodynamic Model of Tidal Current in the Strait of Hormuz, IJCOE, 5(1), 37-45.
- **Fallah, F., Mansoury, D., 2022.** Coastal upwelling by wind-driven forcing in the Caspian Sea: A numerical analysis, Oceanologia, 64(2), 363-375, https://doi.org/10.1016/j.oceano.2022.01.003.
- Vahedi, A.A., Mansoury, D., 2022. Vertical Structure and Double Diffusion Convection of the Water Column in the

- *Mazandaran Coasts*, Oceanography, 13(49), 15-27, http://joc.inio.ac.ir/article-1-1645-fa.html.
- Safari, M., Mansoury, D., Azarmsa, S.A., 2022. Grain-size characteristics of seafloor sediment and transport pattern in the Caspian Sea (Nowshahr and Babolsar coasts), IJCOE, 7(1), 34-42.
- Vosoughi, M., Mansoury, D., Aliakbari Bidokhti, A.A., 2022. The impact of the latest reanalysis data of the ECMWF model on the surface temperature changes of the Caspian Sea, Hydrophysics, 7(2), 67-78.
- Eskandari, S., Mansoury, D., 2022. Spatial and temporal variations of the electrical conductivity and magnetic field of the Caspian Sea using Princeton, IJCOE, 7(3), 31-42.
- Safari, M., Mansoury, D., 2022. Equilibrium modeling of the beach profile on the southern beach of the Caspian Sea: Mazandaran beach, Research in Marine Sciences, 7(2), 31-51.
- **Zereshkian, S., Mansoury, D., 2023.** Solar-Wind Hybrid Energy System to Supply Electricity for Offshore Oil and Gas Platforms in the Caspian Sea, The Journal of Engineering, 2023(2), e12239. DOI: 10.1049/tje2.12239
- Fallah, F., Mansoury, D., 2022. Temperature structure and wind-induced water level anomalies in the Caspian Sea: a study on coastal upwelling, Regional Studies in Marine Science, 62, 102975.

https://doi.org/10.1016/j.rsma.2023.102975

Conferences

- Mansoury, D., Saghafi, M., 2004. *Investigation of Some Physical Phenomena by Inviscid Flow*, Third Technical and Engineering Conference of Young Researchers Club, Yazd.
- Mosadad, M., Torabi Azad, M., Mansoury, D., 2004. The Importance of Depicting and Depth Finiding in Coastal Areas through the Use of Sound Radiography and Vortex Model, Sixth International Conference on Coasts, Ports and Marine Structures, Ports and Maritime Organization of Iran, Tehran.
- Mansoury, D., Torabi Azad, M., 2005. Investigation of Changes in Temperature, Salinity and Amount of Light Influence in the Marine Waters of Nour Coasts, Noor Regional Development Strategies Conference, Islamic Azad University Nour Branch, Iran.
- Bagherirad, M., Azarmsa, a., Mansoury, D., Rashidi, A., 2006. Study of the Caspian Sea Water Level Fluctuations Using Fourier and Spectral Analysis, Seventh International Conference on Coastal Engineering, Ports and Marine Structures, Tehran, Iran.
- Bagherirad, M., Azarmsa, a., Mansoury, D., Rashidi, A., 2006. Comparison and Prediction of the Caspian Sea Water Level Time Series Using ARIMA Random Model and Spectral Analysis Method, Seventh International Conference

- on Coastal Engineering, Ports and Marine Structures, Tehran, Iran.
- Mosaddad, M., Torabi Azad, M., Mansoury, D., 2006. The Study of Sound Channels in Hormuz Strait, Seventh International Conference on Coastal Engineering, Ports and Marine Structures, Tehran, Iran.
- Mansoury, D., 2006. Wind Climate in Nour Coastal Areas, Regional Conference on Natural Resources and Sustainable Development, Islamic Azad University Nour Branch, Iran.
- Mansoury, D., Torabi Azad, M., 2006. The Study of Waves Breaking in Nour Coastal Areas, Regional Conference on Natural Resources and Sustainable Development, Islamic Azad University, Nour Branch, Iran.
- Mansoury, D., 2007. The Study of Sea Waves in Nour Coastal Areas, Ninth Maritime Conference, Iranian Association of Marine Engineering, Nour, Iran.
- Mansoury, D., 2007. Investigation of the Amount of Suspense Sediments in Nour Marine Areas, Seventh Conference on Marine Science and Technology, Iranian Association of Marine Sciences, Noshahr, Iran.
- Rashidi, A., Mansoury, D., Farjami, H., 2007. Application of a New Method to Calculate the Potential Function to Be Used in the Numerical Models of Tide and Tidal Currents Prediction, Seventh Conference on Marine Science and Technology, Iranian Association of Marine Sciences, Noshahr, Iran.
- Ghader, S., Ghasemi, A., Bannazadeh, M., Mansoury, D., 2008. Application of High Resolution Numerical Schemas to Increase the Accuracy of Ocean Prediction Models: A Case Study on Gravitational Flow, Second Conference on the Ways to Deal with Natural Disasters, Tehran, Iran.
- Ghader, S., Ghasemi, A., Bannazadeh, M., Mansoury, D., 2009. Numerical Solution of Incompressible Boussinesq Equations using Fourth Order Compact Method: A Case Study on Lock-Exchange Flux, Twelfth Fluid Dynamics Conference, Babol, Iran.
- Mansoury, D., 2009. Morphological Study of Nour Marine Area to Create a Safe Beach, Second International Conference of Iranian Students Residing in Belarus, The Islamic Association of Iranian Students Residing in Belarus, Belarus.
- Ghader, S., Ghasemi, A., Bannazadeh, M., and Mansoury, D., 2010. Numerical Solution of Two-Dimensional Incompressible Boussinesq Equations Using Fourth-Order Compact Method: Numerical Simulation of Bottom Gravitational Flow, Fourteenth Iranian Conference on Geophysics, Tehran.
- Mansoury, D., Torabi Azad, M., 2013. Hydrodynamics of Deep and Shallow Areas of the Southern Coasts of the Caspian Sea (Nour), Fifth National Conference on Offshore Industries, Sharif University of Technology, Tehran.

- Mansoury, D., Sadri Nasab, M., 2013. Investigation of Bottom Sediment Distribution in Nour Marine Area, Fifth National Conference on Offshore Industries, Sharif University of Technology, Tehran.
- Mansoury, D., Rashidi A., 2013. Wind Induced Currents in the Southern Coasts of the Caspian Sea, Fifteenth Marine Industry Conference, Kish.
- Mansoury, D., Sadri Nasab, M., Soltani, F., 2014. *Investigation of Physical Parameters of Lakes Surface Water Using COHERENS Model*, First National Conference on Sustainable Marine Development, Khorramshahr.
- Mansoury, D., Sadri Nasab, M., Akbari Nasab, M., 2015. Seasonal and Annual Changes in the Structure of Temperature and Salinity as well as Surface Water Flow in the Caspian Sea, International Conference on Science and Engineering, Dubai.
- Mansoury, D., Sadri Nasab, M., Akbari Nasab, M., 2015. *Investigation of the Upwelling Phenomenon in the Caspian Sea Using POM Model*, Seventeenth Marine Industry Conference, Kish.
- Mansoury, D., Sadri Nasab, M., Akbari Nasab, M., 2015. Investigation of Changes in Surface Temperature and Salinity of the Caspian Sea Using POM Model, Seventeenth Marine Industry Conference, Kish.
- Mansoury, D., Sadri Nasab, M., Akbari Nasab, M., 2015. Changes in the Surface Density of the Caspian Sea Wter Mass, Third International Conference on Oceanography, Persian Gulf, Tehran.
- Maleki Lanbar, M., Mansoury, D., 2016. Changes in the Vorticity of Surface Water Masses and Bottom of the Southern Basin of the Caspian Sea, Second National Conference on Sustainable Marine Development, Khorramshahr.
- Maleki Lanbar, M., Mansoury, D., Rashidi Ibrahim Hessari, A., 2017. Changes in the Bottom and Surface Vorticity of the Northern Basin of the Caspian Sea due to Advection and Diffusion, Seventh International Conference on Offshore Industries, Tehran.
- Maleki Lanbar, M., Mansoury, D., Rashidi Ibrahim Hessari, A., 2017. Changes in the Vorticity of the Middle Basin of the Caspian Sea due to Atmospheric and Marine Force, Nineteenth International Conference on Offshore Industries, Kish.
- Hatami Bavarsad, N., Mansoury, D., Khalil Abadi, M. D., 2017. Study of the Storm on the Caspian Sea, Nineteenth International Conference on Marine Industry, Kish.
- Hatami Bavarsad, N., Mansoury, D., 2017. Monthly Variations of Wind Pattern, Wind Induced Cyclones and Anticyclones on the Caspian Sea, Seventh International Conference on Offshore Industries, Tehran.
- Sholeh, Gh. and Mansoury, D., 2016. Experimental Investigation of the Effects of polyvinylpyrrolid on Silver

- *Nanofluid Viscosity*, First International Symposium on Nanotechnology, Islamic Azad University, Najafabad Branch, Isfahan, Iran, May 24th and 25th.
- Mansoury, D., Kiani, A., 2018. The Effect of Al2O3 / Water Nanofluid on Double-Pipe Heat Exchanger Performance: Comparison of Parallel and Counter Flow Arrangements, Fourth International Conference on Engineering Science & Technology, Vancouver, Canada, January 27th.
- Zereshkian, S., Mansoury, D., 2017. A Comparative Study of the Use of Renewable Energy in Supplying the Electricity Required for Offshore Oil and Gas Platform in the Caspian Sea, First Conference on Water, Soil and Environmental Sciences, Tehran.
- Zereshkian, S., Mansoury, D., 2018. Assessing the Renewable Energy of Sun and Offshore Wind in the Southern Basin of the Caspian Sea, Twentieth Marine Industry Conference, Kish.
- **Safari, M., Mansoury, D., 2019.** *Investigation of seasonal changes in Babolsar equilibrium profile,* 8th International Offshore Industries Conference, Sharif University of Technology, Tehran.
- **Safari, M., Mansoury, D., 2019.** Classification of bed sediments in the South Caspian Sea (Nowshahr and Babolsar coasts), 8th International Offshore Industries Conference, Sharif University of Technology, Tehran.
- **Fallah, F., Mansoury, D., 2019.** *Investigation of up- and downwelling due to wind field in the Caspian Sea,* 8th International Offshore Industries Conference, Sharif University of Technology, Tehran.
- Fallah, F., Mansoury, D., 2019. Investigation of sea surface temperature of Caspian Sea using satellite images and POM model, 8th International Offshore Industries Conference, Sharif University of Technology, Tehran.
- **Eskandari, S., Mansoury, D., 2019.** Changes in the electrical conductivity of the Caspian Sea in winter, 8th International Offshore Industries Conference, Sharif University of Technology, Tehran.
- **Eskandari, S., Mansoury, D., 2019.** *Modeling the Caspian Sea magnetic field anomaly using the POM model,* 8th International Offshore Industries Conference, Sharif University of Technology, Tehran.

Credible Workshops

- Panel of Experts on "Impact of the Caspian Sea Level Fluctuations on Coastal Ecosystems", Tarbiat Modares University and Institute for Research and Planning in Higher Education, Nour, December 2003.
- Workshop on "Information Literacy", Tarbiat Modares University, Nour, February 5th-9th, 2005.
- Workshop on "Scientific Databases of Scientific Search Engines, ISI, Endnote, and Alert" Tarbiat Modares University, Nour, February 14th-16th, 2005.

Workshop on "Coastal Oceanography in the Southern Caspian Sea, Forcing & Structure", National Center OF Oceanography, Tehran, December 1st-15th, 2007. Workshop on "Flow Hydrodynamic Model Using Irregular Network of Mike21 Software", National Center of Oceanography, Tehran, February 4th-6th, 2007. Workshop on "Introduction to COHERENS Numerical Model to be Used in Hydrodynamic Simulation", Iranian Naval Engineering Society, Tehran, August 6th-7th, and 13th-14th, 2014. Workshop on "Introduction to FVCOM Software", National Oceanic and Atmospheric Research Center, Tehran, August 26th-27th, 2014. Workshop on "Farsi Language and Writing", Department of Educational Courses, Tarbiat Modares University, College of Natural Resources and Marine Sciences, Nour, November 9th-10th, 2016. Workshop on "Application of Psychology in Education", Department of Educational Courses, Tarbiat Modares University, College of Natural Resources and Marine Sciences, Nour, November 17th, 2016. Workshop on "Teaching Methodology", Department of Educational Courses, Tarbiat Modares University, College of Natural Resources and Marine Sciences, Nour, January 4th, 2017. Educational-Expertise Conference on "Management and Organization of Coastal Areas with the Approach of the Caspian Sea Water Fluctuations", Mazandaran Governorate and Caspian Sea National Research Center, Izadshahr, July 12th, 2017. **Instructional Advanced Fluid Mechanics Booklets** Dynamics of Marine Ecosystems (being compiled). Applicable Software Determining the Features of Fluid Flow and Drawing the Lines of Combinational Flows. Development of POM ocean model for the Caspian Sea Second Language Russian Diploma Determination of Wind Waves Pattern in the Southern Research Projects Coastal Area of the Caspian Sea (Nour), 2004. The Study of Sediment in the Southern Coastal Area of the Caspian Sea (Nour), 2007. Experimental Investigation of the Effectiveness of the Use of Metal Nano-Fluids in Thermal Converters.

MSc. Thesis Advisor and Examiner

- Advisor of more than 10 MSc theses in Physical Oceanography:
 - 1. Examination and Comparison of the Main Tidal Components in Various Marine Areas of Bushehr.
 - 2. Investigation and Mathematical Simulation of Sound Channel in Hormuz Strait.
 - 3. Analysis of Wind Waves in Bushehr Coasts Using Mike21.
 - 4. Prediction of Tidal Currents Velocity in Hormuz Strait.
 - 5. Investigation of Spatial and Temporal Variation of Persian Gulf Surface Temperature Using Modis Satellite Images.
 - 6. Investigation of the Effect of Volga River Discharge, Evaporation and Precipitation on the Fluctuation of the Caspian Sea Level through Fourier Analysis.
 - 7. Study of the Surface Temperature of the Caspian Sea.
 - 8. Investigation of Wind and Wave Climate in Amirabad Port through Implementing the Local Model.
 - 9. Numerical Simulation of the Gravitational Flow of the Ocean Bottom on an Inclined Plane Using Fourth-Order Compact Method.
 - 10. Determination of Wave Break Range Using the Caspian Sea Wave and Current Model and the Morphodynamic Features of Sediments in the Coasts of Anzali and Amirabad.
- Examiner of more than 20 MSc theses in physical oceanography.

MSc. Thesis Supervisor

- Inside the College of Natural Resources and Marine Sciences:
 - 4 theses completed and presented in the final oral:
 - 1. Temporal and Spatial Changes of the Caspian Sea Water Vorticity
 - 2. The Effect of Atmospheric Cyclones on the Caspian Sea Level Fluctuations
 - 3. Evaluation of the Role of Renewable Energy in Supplying the Electricity Required for Offshore Oil and Gas Platform in the Caspian Sea
 - 4. Investigation of the Slack Stability and Double Diffusion of the Caspian Sea Water Column (Mazandaran Marine Areas)
 - 5. Simulation of the Caspian Sea Water Mass Magnetic Field Anomaly
 - 6. Mathematical Modeling of the Bottom of the Southern Coasts of the Caspian Sea
 - 7. Investigation of Upwelling in the Coasts of the Caspian Sea Using POM Model.
- Outside the College: Around 10 thesis completed and presented in the final oral.

Instructional Background

MSc. Seminar Supervisor

- Analysis of Inviscid Flow Using Panel Method.
- Application of Satellite in Physical Oceanography.
- Sound Propagation in Sea.
- Study of Numerical Methods for Investigating Tide & Tidal Current.
- The Methods of Using Different Sea Energy Derived from Oceanic Phenomena.
- Investigation and determination of methods for Leveling the Caspian Sea Water Surface.
- Investigation of Sea Currents, Theories & Sea Currents Modeling.
- Modeling in Physical Oceanography.
- Study of Wave Climate Using Empirical Methods and Local Model.
- Study of Sea Surface Temperature Distribution.
- Numerical Methods for Solving Equations in Physical Oceanography.
- Investigation of Physical Parameters of Water Using COHERENS Model.
- Analysis of the Wind Climate of the Marine Areas of Amirabad and Anzali to Be Used in the Caspian Sea Wave Model (CASWAC).
- Examination of Estimation Methods for the Costal Sedimentation Transport Rate.
- And ...

Apprenticeship Supervisor

- Apprenticeship supervisor of the mechanic students in Islamic Azad University, Nour Branch (More than 20 cases).

Courses Thought

- Ph.D.:

1. Advanced Fluid Mechanics- Mechanical Engineering (Islamic Azad University, Nour Branch).

- MSc:

- 1. Advanced Fluid Mechanics- Physical Oceanography (Tarbiat Modares University- College of Natural Resources and Marine Sciences).
- 2. Advanced Partial Differential Equations- Physical Oceanography (Tarbiat Modares University- College of Natural Resources and Marine Sciences).

- 3. Marine Instrumentation- Physical Oceanography (Tarbiat Modares University- College of Natural Resources and Marine Sciences).
- 4. Advanced Fluid Mechanics- Mechanical Engineering (Islamic Azad University, Noor Branch).
- 4. Geophysical Fluid Dynamics- Physical Oceanography (Tarbiat Modares University- College of Natural Resources and Marine Sciences).'
- 5. Ocean Dynamics- Physical Oceanography (Tarbiat Modares University- College of Natural Resources and Marine Sciences).
- BSc:
 - 1. Static
 - 2. Technical Drawing.
 - 3. Strength of Material and Laboratory.
 - 4. Dynamics.
 - 5. Graphic Geometry 1 and 2.
 - 6. Statics 1 and 2.
 - 7. General Mathematics.
 - 8. Mathematics 1.
 - 9. Physics 1.
 - 10. Applied Mathematics.
 - 11. Computer Programming.

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Executive Background

- 1. Deputy of the Marine Physics Department
- 2. Member of the specialized council of the Marine Physics Department
- 3. Responsible for the operations of the Faculty of Natural Resources and Marine Sciences
- 4. Head of Marine Physics Laboratory
- 5. Advisor of the Computer Center of the College
- 6. College Library Manager
- 7. Head of the Department of Physical Oceanography
- 8. Member of the Faculty Research Council
- 9. Executor of internal evaluation project of Marine Physics
- 10. Establishment of Geophysical Fluid Dynamics Laboratory (GFDL)
- 11. Establishment of Heat Exchanger Pilot Laboratory