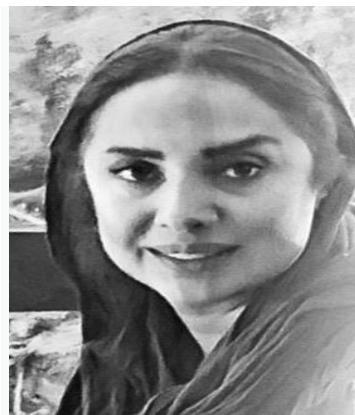


Curriculum Vitae

Personal Information

- Full Name: **Sara Allahyaribeik**
- Field of study: Physics
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Educational background

- PhD in Physical Oceanography from Islamic Azad University, Science and Research Branch, Tehran, Iran (Summer 2012)
- Master of Science in Physical Oceanography from Islamic Azad University, North Tehran Branch, Tehran, Iran (Summer 2006)
- Bachelor of Science in Physics from Islamic Azad University, Science and Research Branch, Tehran, Iran (Spring 2003)

Honors

- Obtaining a doctoral scholarship from Science and Research Branch, Islamic Azad University
- First rank among the Physical Oceanography MSc graduates
- First rank in the admissions of PhD Entrance examination
- Scientific advisor to the top team of the first national competition of aquatic robot design competitions
- Top Idea Generator of the first egg acceleration event
- Scientific advisor of the top team of the first national aquatic robots' competition

Related experiences

- Research Director of the Faculty of Natural Resources & Environment (June, 2021-present)
- Research Director of the Faculty of Marine Science and Technology (August 2013- July 2016)
- Research Director of Zakaria Razi Laboratory Complex and Sheikh Baha'i (2018-2020)
- Secretary of the System Committee of the Faculty of Natural Resources and Environment
- Head of Scientific Programs, Faculty of Natural Resources and Environment
- Internal Director of International Journal of Marine Science and Engineering(IJMASE) (2010-present)
- Executive Committee Chairman of the of the First National Congress on Halal Food (1398)
- Member of the Commission for Reviewing the Standard Special Requirements for the Application of the OIS / SMIIC1 Standard in the places of preparation, storage and presentation of halal food and beverages
- Member of the Research Council of the Faculty of Marine Science and Technology (2010-2017)
- Secretary of the Research Council of the Faculty of Marine Science and Technology (2014-2017)
- Main member of the Research Council of Zakaria Razi Laboratory Complex (1397-present)
- Secretary of the Research Council of Zakaria Razi Laboratory Complex (1397-present)
- Scientific consultant of aquatic robot shark design and construction team
- Membership in the system committee of Free Partner laboratories (1397-present)
- Launching the optics laboratory of North Tehran branch in 2004
- Launching Modern Physics Laboratory, North Tehran Branch, 2006
- Setting up a sea hydraulic laboratory, Tehran Science and Research Branch, 2007
- Launching "Mahpad" laboratory materials and equipment management system in Sheikh Baha'i laboratory complex and laboratories of educational block 2 in 2019
- Expert in 1st, 2nd and 3rd grade physics laboratories, modern physics, optics, physical chemistry and electronics in physics laboratories of Islamic Azad University, North Tehran Branch for six years (2004-2010)
- Expert of quality control laboratory of Konik industrial sprays manufacturing company for one year (2004-2005)
- Member of the Young and Elite Researchers Club

- Main member of the board of directors of the laboratory complex (Zakaria Razi and Sheikh Baha'i) Science and Research Branch
- Member of the jury of the first national competition of aquatic robots
- Member of the jury of the Journal of Hydrophysics
- Member of the interview committee of the PhD examination in physical oceanography (2010-present)
- Member of the interview committee for the doctoral exam in the field of civil engineering of coasts, ports and marine structures
- Member of the Journal Evaluation Commission
- Member of Iranian Marine Science and Technology Association
- Member of Iranian Acoustic and Vibration Association

Collaboration with scientific journals

- Chairman of International Journal of Marine Science and Engineering (IJMASE) (2020-present)
- Executive Director of International Journal of Marine Science and Engineering (IJMASE) (2010- 2020)
- Journal of Food Processing and Preservation reviewer, 2020-present
- Hydrophysics journal reviewer (2012-present)
- Journal of Marine Science and Technology (Khorramshahr) reviewer (2014-present)
- Iranian Journal of Marine Technology reviewer (2017-present)

Collaboration in scientific events

- Chairman of the Executive Committee of the First National Congress on Halal Food (2018)
- Member of the jury of the First National Congress on Halal Food
- Member of the Scientific Committee of the First National Congress on Halal Food
- Member of the Policy Council of the First National Congress on Halal Food
- Member of the Executive Committee of the first national competition for designing and manufacturing aquatic robots (2016-2017)
- Member of the Scientific Committee of the first national competition for designing and manufacturing aquatic robots (2016-2017)
- Member of the jury of the first national competition for designing and manufacturing aquatic robots (2017-2016)
- Chairman of the Executive Committee of the Second National Congress on Halal Food (2021)
- Member of the jury of the Second National Congress on Halal Food (2021)

- Member of the Scientific Committee of the Second National Congress on Halal Food (2021)
- Member of the Policy Council of the Second National Congress on Halal Food (2021)

Membership in Committees & Organizations

- International Federation of Inventors' Associations (IFIA) Member.
- Faculty member of Islamic Azad University, Science and Research Branch (Assistant Professor, Department of Marine Physics) (2010-present)
- Admission as the founder of the Pre-Development Center in the Polymer Technology Development Center of the Ministry of Science, Research and Technology
- Inspector of the Iranian Marine Science and Technology Association
- Internal Director of the International Journal of Marine Science and Engineering
- Member of Young and Elite Researchers Club
- Main member of the board of directors of the laboratory complex (Zakaria Razi and Sheikh Baha'i) Science and Research Branch
- Member of the jury of the first national competition of aquatic robots
- Member of the jury of the Journal of Hydrophysics
- Member of the interview committee of the doctoral exam in Marine Physics (2010-present)
- Member of the interview committee for the doctoral exam in the field of civil engineering of coasts, ports and marine structures
- Member of the Journal Evaluation Commission
- Member of Iranian Marine Science and Technology Association
- Member of the Iranian Acoustic and Vibration Association

Certificates

- NDT Level II UT (Ultrasonic Testing) method from the American society of Non-Destructive Testing
- NDT Level II PT (Liquid Penetrant Testing) method from the American society of Non-Destructive Testing
- MCHC language certificate with a score of 70/70
- IAUEPT language certificate with a score of 100/70
- standardization and safety workshop in the laboratory certificate (design and construction of a laboratory and standard workshop)

- Creating active capacity in the industry and attracting credit to hold the first National Congress of Halal Food
- Shallow water acoustic tomography: Numerical simulation and field applications
- Environmental challenges of Persian Gulf and Oman Sea with sustainable management approach
- Health, Safety and Environment (HSE) workshop attendance
- Good Laboratory Practice (GLP) workshop attendance

Patents:

- FORMULATION OF SAFFRON AND A METHOD OF PREPARATION THEREOF, Ahari, Hamed; Anvar, AmirAli; Rahimian, Mahdi; Allahyaribeik, Sara; Moradi, Sima, US Patent, Patent Number: US 10,953,065B2, Application Number: 17/086,763.
- FORMULATION OF SAFFRON AND A METHOD OF PREPARATION THEREOF, Ahari, Hamed; Anvar, AmirAli; Rahimian, Mahdi; Allahyaribeik, Sara; Moradi, Sima, PCT, Application Number: PCT/IB2020/061605.
- WATER-IN-OIL NANO-EMULSION OF SAFFRON AND A METHOD OF PREPARING THEREOF; Ahari, Hamed; Anvar, AmirAli; Rahimian, Mahdi; Allahyaribeik, Sara; Moradi, Sima, US Patent, Patent Number: US 0161987/2021B2, Application Number: 17/174,340.
- PRODUCING IRANIAN SAFFRON (CROCUS SATIVUS L.) NANO-EMULSION USING EPI METHOD FOR INCREASING THE SHELF LIFE ON FOOD INDUSTRY. Ahari, Hamed; Allahyaribeik, Sara; Anvar, Amir Ali; Rahimian, Mahdi; Moradi, Sima. Gold Medal in Internation Invention and Innovation Competition, July, 18-20, 2021, Geneva, Switzerland.

ISI and Scientific Research Papers

- Nanoemulsion of saffron essential oil by spontaneous emulsification and ultrasonic homogenization extend the shelf life of shrimp (*Crocus Sativus* L.). (2021). *Journal of Food Processing and Preservation*, 45 (2), 1-9.
- Calculating Relative Sound Velocities of Sea Salts by a New Method. (2009). *Asian Journal of Chemistry*, 21(8), 5833-5837.
- Simulation of Waves on Boom and Oil Plume Rising using Smoothed Particle Hydrodynamics. (2020). *Journal of Applied Fluid Mechanics*, 13 (1), 39-54.

- Internal gravity waves spectrum generated by a cylindrical body moving in a stratified fluid. (2020). *Journal of Applied Fluid Mechanics*, 13 (4), 1253-1262.
- The impact of P/E ratio and price return on the stock market Bohemian quantum potential approach. (2020). *International Journal of Finance and Managerial Accounting (IJFMA)*, 5(18), 55-62.
- Ultrasonic Waves Application in Sediments Determination. (2012). *Archives Des Sciences*, 65(8), 142-148.
- Determination of sediments diameter using acoustic waves. (2013). *International Journal of Marine Science and Engineering*, 3(4), 169-174.
- Analysis of liquids and chemicals costs in a sample port. (2014). *International Journal of Marine Science and Engineering*, 4(1), 1-5.
- Materials performance assessment of protective layer of rubble mound breakwaters, southern coast of Iran. (2014). *International Journal of Marine Science and Engineering*, 4(2), 58-64.
- Numerical study on current and cavitation around ship's propeller with and without energy saving device. (2016). *International Journal of Marine Science and Engineering*, 6(1), 8-18.
- Effect of Thermocline Formation on Underwater Acoustic Waves Propagation in Persian Gulf. (2015). *International Journal of Marine Science and Engineering*, 5(1), 1-14.
- Implementing Self-upending for lightweight Jackets in Persian Gulf. (2015). *International Journal of Marine Science and Engineering*, 5(2), 55-64.
- Monitoring coastline changes in Amirabad Port by surveying coastline and sea level. (2016). *International Journal of Marine Science and Engineering*, 5(2), 93-98.
- Analyzing Pressure Fields on Marine Current Turbine Blades by Cavitation Simulation via ANSYS Software. (2016). *International Journal of Marine Science and Engineering*, 6(1), 32-41.
- The effects of boom on oil plume dispersion using smoothed particle hydrodynamics (SPH). (2018). *Modares Mechanical Engineering (Tarbiat Modares University Press)*, 18(3), 29-37.
- Investigating of clamp effects on fatigue damage in the fixed platforms riser. (2018). *Research in marine sciences*, 3(1), 245-258.

- A quantum Model for the stock Market. (2020). *Advances in Mathematical Finance and Applications*, 5(5), 120-129.
- Internal gravity waves spectrum generated by a hydrofoil body moving in a stratified fluid. (2020). *Hydrophysics* 5 (2), 33-42.
- Experimental Study of Internal Waves Due to the Movement of a Cylindrical Body in a Density Stratified fluid. (1396). *HYDROPHYSICS*, 3 (1), 33-39.
- Simulation of Circulation and the effect of oceanic meso-scale eddies on sound velocity profiles in the Persian Gulf by the ROMS model. (1398). *Iranian Journal of Marine Technology*, 6 (3), 113-127.
- Estimation of extractable energy by creating artificial rip currents. (2019). *HYDROPHYSICS*, 5 (1), 73-85.
- A study on the identification and modification of fish gelatin properties as a Halal source. (2019). *Journal of comparative pathobiology*, 105-112.

National Scientific Research Papers

- Laboratory study of internal waves caused by the movement of a cylindrical body in a stratified fluid. (1396). *Journal of Hydrophysics*, 3 (1), 33-39.
- Calculating the Persian Gulf specific sound velocity equation using the coefficient matrix. (1385). *International Oil and Energy Monthly*, 1 (6), 48-51.
- A method for calculating the speed of sound in seawater. (1385). *Technical Monthly of Road and Building Engineering*, 4 (34), 58-62.
- Wave breaking. (1385). *Scientific Monthly of Payam Darya*, 4 (149), 130-132.
- Tsunami. (1383). *Technical Monthly of Civil Engineering*, 3 (22), 41-50.
- How sound is produced by raindrops underwater. (1384). *Iranian Journal of Marine Science and Technology, Quarterly*, 8 (14), 5-7.
- Elninio (1383). *Quarterly Journal of the Iranian Marine Science and Technology Association*, 7 (2), 8-7.
- Investigating the calm situation of Shahid Zakeri Qeshm port basin and providing solutions to reduce unrest. (1396). *Specialized and Research Monthly Port and Sea*, 32 (247), 56-59.
- Simulation of rotation and the effect of mid-scale ocean ivy on sound velocity profiles in the Persian Gulf by the ROMS model. (1398). *Scientific Quarterly of Marine Technologies*, 6 (3), 113-127.
- Estimation of energy extractable from waves by creating artificial disruptive currents. (1398). *Journal of Hydrophysics*, 5 (1), 73-85.
- A study on identifying and modifying the properties of fish gelatin as a solvent source. (1398). *Journal of Comparative Pathobiology*, 105-112.

Published books

- Research Methodology Hand Book. (2021). LAMBERT Academic Publishing.
- Atlas of Food Microbiology. (2021). National Halal Research Center and Islamic Azad University.
- Halal food production. (2019). Islamic Azad University Publishing Organization.
- Research Methodology. (2019). Shahid Beheshti University, National Institute of Nutritional Research and Food Industry
- Research Methodology in food science and technology (volume 4). (2021). Islamic Azad University (science and research branch), Ministry of Health and Medical Education.
- Digital library of basic science (2019). Islamic Azad University.
- production process of Iranian saffron stable emulsion Using ultrasonic probe homogenizer technology. (2020). Islamic Azad University Publishing Organization.
- A review of new technologies in production of Iranian saffron nano-emulsions. (2020). Islamic Azad University Publishing Organization.
- Using ultrasonic probe homogenizer technology in the production process of stable Iranian saffron emulsion. (1399). Islamic Azad University Publishing Organization.
- Member of the Standardization Commission "Special Requirements for the Application of the OIS / SMIIC₁ Standard for Places for the Preparation, Storage and Supply of Solvent Foods and Beverages". (1399). National Standard of Iran No. 10580, first edition.

Participation in scientific events

- sound speed calculation in sea using the coefficient matrix. (2007). Fourth Conference on Underwater Science and Technology, Malek-e-Ashtar University, Isfahan, Iran (Oral).
- Calculating relative sound velocity in sea (2007). Fourth Conference on Underwater Science and Technology, Malek-e-Ashtar University, Isfahan, Iran (Oral).

- determination of Special characteristics of bottom Sediments size using ultrasonic waves. (2010). The 9th International Conference on Coasts, Ports and Marine Structures, Tehran, Iran (Poster).
- Better Understanding of Sea Shores and Globalization. (2012). International Scientific Conference on Education and Globalization, Tehran, Iran (Oral).
- The effect of clamp in the vibration oscillations pipe riser fixed platforms. (2016). civil engineering, architecture and urban development, SHAHID BEHESHTI University, Tehran, Iran (oral).
- Monitoring coastline changes in Amirabad port by surveying coastline and sea level. (2018). The 2nd International conference on urban management, civil Engineering and technology in modern architecture, Rome, Italy (oral).
- Implementing the “self-upending concept” for the jackets in persian gulf with the new arrangement of buoyancy tanks. (2018). The 13th International Conference on Coasts, Ports and Marine Structures, Tehran, Iran (Oral).
- The effect of thermocline formation and its thickness change on underwater acoustic waves propagation in the Persian Gulf. (2015). 17th Marine Industry Conference (MIC), Kish Island, Iran (Oral).
- Investigation of the effect of jacket platform on oscillating vibrations of riser pipes (Case study: South Pars region). (2016). National Conference on Applied Research in New Horizons of Civil Engineering and Architecture, Bushehr, Iran (Oral).
- The effect of the presence of eddies investigation on the propagation of underwater sound waves. (2016). The Second National Conference on New Marine Technologies, Imam Khomeini University of Marine Sciences, Nowshahr, Iran (Poster).
- Simulation of vortex currents around the foundations of the Persian Gulf Bridge. (2017). 7th International Conference on Offshore Industries, Sharif University of Technology, Tehran, Iran (Oral).
- Analysis of cavitation pressure fields in horizontal axis offshore turbines. (2017). 7th International Conference on Offshore Industries, Sharif University of Technology, Tehran, Iran (Oral).
- experimental method for Measurement of sedimentary sound loss rate in shallow water. (2017). Twelfth National Conference on Marine Science and Technology under the Twelfth Symposium on Advances in Science and Technology, Mashhad, Iran (Oral).

- Investigation the tranquility of Shahid Zakeri Port in Qeshm and provide a solution to reduce unrest. (2017). 19th International Conference on Marine Industries, Kish, Iran (Oral).
- Investigation of the effect of different factors on rip currents in an artificial channel with similar conditions as the Caspian Sea by numerical modeling. (2018). 20th Marine Industry Conference (MIC), Kish Island, Iran (Oral).
- Oil quality control using ultrasonic testing. (2018). 4th National Congress of Basic Veterinary Sciences, Tehran, Iran (poster).
- An overview of the identification and modification of fish gelatin properties as one of the Halal gelatin sources. (2019). First National Halal Food Congress, Tehran, Iran (Oral).
- A review of various new technologies in the production of Iranian saffron nanoemulsions (1399). Fifth National Conference on Nanotechnology Development, Tehran, Iran (Lecture).

Holding Specialized workshops

- Standardization and safety of work in the laboratory, summer 1398

Extracurricular research projects:

- Administrator of research project on the use of ultrasonic probe homogenizer technology in the production process of stable Iranian saffron emulsion (Research project No. 14555).
- Executor of research project on modeling and risk assessment of effluents from refinery activities in the South Pars region on the shores of the Persian Gulf to South Pars (South Pars Gas Complex Company).
- Project partner of research project, preparation and compilation of instructions for the use of oil dispersants in oil pollution control operations (Environmental Protection Organization)
- Project partner in the research project, determination the optimal location of ship scrap in the Persian Gulf and the Sea of Oman (Environmental Protection Organization).
- Project partner in the standard research project for ship sewage and balance water at sea (Environmental Protection Organization).

- The main project partner in the research project, silver and copper nano-composite production by green synthesis method.
- The main partner of the project in the research project of increasing the organic and microbial properties of Iranian saffron "Crocus sativus" using ultrasonic homogenizer method for nanoemulsion produced (research project No. 14559).
- The main partner of the project in the research project of studying the physicochemical properties of nanoemulsions produced from Iranian saffron "crocus sativus" (research project No. 14557).

Research Projects

- Calculating the equation of speed specific sound of the Persian Gulf (northern regions) (9/7/85). Sara Allahyaribeik, Afshin Mohseni Arasteh, Kamran Lari.
- Experimental study of sound propagation in shallow water and estimation of specific properties of bed sediments (granulation) - Laboratory study (29/6/91). Sara Allahyaribeik, Majid Abbaspour Tehranifard, Amir Hossein Javid, Afshin Mohseni Arasteh, Kamran Lari.
- Field study of seasonal changes and physical characteristics of the water column in the South Caspian (11/12/93). Narges Khajeh Shahzarian, Mojtaba Azam, Abbas Ali Akbari Beidakhti, Sara Allahyaribeik.
- Study of the effect of thermocline formation on the propagation of acoustic waves in the Persian Gulf (11/26/93). Vahid Zarehpour, Mojtaba Azam, Sara Allahyaribeik, Abbas Ali Akbari Beidakhti.
- Determining the location of submarine pipeline leakage by sound wave propagation and its analysis using numerical model (2013)
- Analysis of chain failure due to rotation and torsion of inhibitory systems and providing a suitable solution for their greater efficiency (not defended). Hadi Shiri, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Determining the effect of sea waves on the fatigue phenomenon on offshore single base wind turbine structures (31/6/97). Alireza Salehi Shabestari, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Laboratory study of upstream changes in reflective sandy beaches (11/27/94). Mojtaba Poozesh, Mehdi Shafieifar, Sara Allahyaribeik.
- Evaluation of the performance of the protective layer rock materials in the rock mass breakwaters of the southern coasts of Iran (6/15/94). Peyman Atabak, Sara Allahyaribeik, Farhoush Azarsina.
- Functional analysis of a pantomime floating breakwater using the Hamutter particle hydrodynamic method (11/25/94). Mohammad Javad Librarian, Sara Allahyaribeik.

- Numerical modeling of the flow around the ship's propeller with the aim of investigating cavitation (cavitation (6/26/93). Sam Fatah Al-Ulumi, Majid Ghodsi Hassanabad, Sara Allahyaribeik.
- Optimization of porcelain fiber layer and submarine composite shell weight by genetic algorithm method with the help of ANSYS MATLAB software and investigation of mechanical properties using finite element software (not defended). Milad Ranjbaran, Sara Allahyaribeik, Farhoud Azarsina.
- Statistical analysis of wind patterns and wind waves around Abu Musa Island using field measurements and numerical modeling (31/6/95). Shima Pishdar, Mojtaba Azam, Sara Allahyari Beyk.
- Study of ten-year changes in sea surface temperature (SST) using satellite measurements during the years (2014-2004) in the Persian Gulf (16/6/95). Hengameh Adsi, Mojtaba Azam, Sara Allahyaribeik.
- Study of the trend of seasonal changes in the depth of the mixed layer in the Oman Sea (6/27/95). Masoumeh Shahbal Ardebili, Mojtaba Azam, Sara Allahyaribeik.
- Simulation of sound propagation in the Persian Gulf using parabolic equations (9/11/97). Alireza Gheidari, Sara Allahyaribeik, Mojbah Ghodsi Hassanabad.
- Study of the effect of lateral border and bed conditions on simulation of tidal currents in Qeshm canal (11/24/95). Fataneh Safarzadeh, Mojtaba Azam, Sara Allahyaribeik.
- Numerical study of the role of atmospheric systems and waves on water level fluctuations in the South Caspian Sea (11/11/94). Akram Jamshidi Nia, Abbas Ali Akbari Beidakhti, Mojtaba Azam, Sara Allahyaribeik.
- Simulation of sound propagation in the South Caspian (10/7/96). Zahra Ranjbar, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Cavitation simulation in horizontal offshore turbines (6/30/96). Amir Jalali Afshar, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Modeling the behavior of suspended solids due to dredging operations in Shahid Rajaei port (not defended). Fardin Ramezani, Sara Allahyaribeik, Amir Hossein Javid.
- Numerical simulation of the effect of current on the propagation of sound waves in the Strait of Hormuz using parabolic equations (not defended). Somayeh Mohammadi Firooz, Sara Allahyaribeik, Mojtaba Azam, Abbas Ali Akbari Beidakhti, Mohammad Reza Soheilifar.
- Feasibility study of energy extraction from fault currents and study of their seasonal and hydrodynamic variability in the northern coasts of the country (Mazandaran province) (6/20/99). Baharak Sabahi Nambani, Majid Ghodsi Hassanabad, Sara Allahyaribeik, Mojtaba Azam.
- Investigation of the trend of changes in water level and patterns of ivy in the South Caspian Sea using satellite measurements over a period of 10 years (6/29/96). Lida Poladzadeh, Mojtaba Azam, Sara Allahyaribeik.

- Study of noise and light pollution in District 18 of Tehran Municipality to achieve the conditions of flexible cities (6/20/95). Shirin Sadat Mashali Arab, Majid Abbaspour Tehranifard, Sara Allahyaribeik.
- Investigation of noise and light pollution in the 21st district of Tehran to achieve the conditions of flexible cities (6/20/95). Parvin Asadi, Majid Abbaspour Tehranifard, Sara Allahyaribeik.
- Simulation of vortex currents around the bases of the Persian Gulf Bridge (11/16/95). Afshin Bakhsha, Sara Allahyaribeik, Amir Hossein Javid.
- Simulation of flow around tidal turbine blades in Dorogh estuary area (not defended). Meysam Talebpour, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Investigation and determination of flow status, waves and sedimentation regime in the northern coasts of Qeshm (Khoran Strait) using numerical models MIKE21 and PMODynamics (11/30/95). Makan Ismaili Dehklani, Amir Hossein Javid, Sara Allahyaribeik.
- Fatigue damage analysis in fixed platform risers (13/10/96). Hamid Anbarestani, Sara Allahyaribeik, Nasser Shabakhti, Saeed Kazemi.
- Shape design and numerical modeling of mini-turbines of sea currents taking into account the Iranian sea currents (6/29/96). Noushineh Fallah Zabihi, Majid Ghodsi Hassanabad, Sara Allahyaribeik.
- Statistical analysis of wind patterns and wind waves around Abu Musa Island using field measurements and numerical modeling (1396)
- Presenting patterns for using floating tanks to set up jackets (Case study of 44-meter A20 jacket) (31/6/95). Ali Amid, Sara Allahyaribeik.
- Simulation of wind waves in the southern regions of the Caspian Sea for the period 2003 to 2013 using ECMWF wind data (11/24/95). Fariba Rezaian Fayyaz, Mojtaba Azam, Sara Allahyaribeik.
- Investigation of sedimentation process and morphological changes due to the development of the breakwater of the North Oil Terminal Company downstream to the area of Amirabad port (31/6/95). Mahmoud Heydari, Sara Allahyaribeik.
- Investigating the calm situation of Shahid Zakeri Qeshm port basin and presenting a solution to reduce unrest (10/5/96). Ramin Mansoori, Mohammad Asadian Ghahfarkhi, Sara Allahyaribeik.
- Determining the sedimentation rate in the eastern side and the mouth of Nowshahr port before and after the construction of the western breakwater (6/29/96). Reza Jafarnejad Thani, Sara Allahyaribeik, Amir Hossein Javid.
- Modeling the effect of wave and current on how the oil plume ascends in shallow water using the smooth particle hydrodynamics method (4/26/98). Mehdi Rostami Hossein Khani, Sara Allahyaribeik, Pouria Omidvar, Massoud Torabi Azad.

- Numerical study of an oil forced plume in the shallow sea bed (Case study of the Persian Gulf (not defended) Maryam Bafandeh, Abbas Ali Akbari Beidokhti, Mojtaba Azam, Majid Ghodsi Hassanabad, Sara Allahyaribeik.
- Modeling to optimize the location of barriers to prevent the release of oil pollutants at sea (Case study: Persian Gulf) (20/6/98). Mahsa Rezaei, Sara Allah, Amir Hossein Javid, Ali Machinchian Moradi.
- Identifying the risks of HSE and analyzing the consequences of accidents caused by leakage of petroleum products and developing a comprehensive control plan in the center of receipt and delivery of petroleum products in Tehran (6/20/97). Elahe Peyvandi, Mohammad Kasaian, Sara Allahyaribeik, Mohammad Reza Miri Lavasani.
- Investigation of the possibility of reducing water solutes using cold plasma method (6/6/97). Maryam Sabbaghzadeh, Amir Hossein Javid, Davood Durranian, Sara Allahyaribeik.
- Investigation of noise pollution in the area of Sadr class bridge and provide appropriate solutions to reduce it (11/17/96). Mitra Sarchami, Sara Allahyaribeik, Ali Machinchian Moradi.
- Simulation of sediment transfer due to parallel shore flow behind the breakwater of Chabahar port (11/17/96). Mehdi Alizadeh, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Numerical modeling of the effect of seasonal changes in mid-scale ivy on ship fuel consumption (Case study of the Persian Gulf and the Sea of Oman) (not defended). Seyed Saeed Shariati, Sara Allahyaribeik, Amir Hossein Javid.
- Study of sound propagation in a laboratory environment with free surface and variable coverage (not defended). Zeinab Masjidi, Sara Allahyaribeik, Mohammad Akbari Nasab, Amir Hooman Homsni.
- Risk assessment of environmental, indigenous and technical effects of demolition of infrastructure and offshore structures (Case study: Investigation of pollution and consequences in the Persian Gulf due to demolition of the dam) (not defended). Kamyar Pahlavan, Mohammad Kasaianov Sara Allahyaribeik.
- Modeling the pollution situation of Nayband Bay in order to determine the share of each of the polluting sources of South Pars industries (not defended). Bashari Kargarnovin, Amir Hossein Javid, Sara Allahyaribeik, Ali Machinchian Moradi, Majid Ghodsi Hassanabad.
- Risk assessment of environmental, indigenous and technical effects of demolition of infrastructure and offshore structures
- Evaluation of the concentration of suspended particles inside train carriages and way stations (11/29/96). Mojgan Moosivand, Faramarz Moatar, Alireza Haji Seyed Mirza Hosseini, Sara Allahyaribeik.
- Study of tracking subsurface objects using internal wave signals and turbulence sequence (10/29/98). Mohammad Akbarnejadbaei, Abbas Ali

Ali Akbari Beidakhti, Mohammad Akbari Nasab, Sara Allahyaribeik, Mojtaba Azam.

- Modeling the propagation of sound waves in the scale ivy of the Persian Gulf region (not defended). Mina Ashouri, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Investigating the possibility of using ultrasonic technology to control oil quality (20/6/96). Shiva Hesam Mahmoudinejad, Maryam Qarachulu, Saralah Yari Beyk
- Evaluation of response of berths with monopil under the influence of dynamic and impact loads (11/29/96). Sara Allahyaribeik, Mohammad Kasaian, Amir Hossein Javid.
- Feasibility of reducing noise pollution in the building through active sound control (not defended). Alireza Gomar, Parvin Nasiri, Sara Allahyaribeik, Alireza Asadi Karizki.
- Simulation of bed level changes before and after rehabilitation of coastal areas around Nowshahr port (9/11/97). Babak Teymourifard, Sara Allahyaribeik, Amir Hossein Javid.
- Numerical simulation of the effect of wind waves on the turbulence of the water level inside the Caspian port (6/6/98). Mahsa Gholamrezaei, Sara Allahyaribeik, Amir Hossein Javid.
- Feasibility study of energy extraction by locating solar cells on the breakwater of Shahid Rajaei port
- Numerical modeling of petrochemical effluent emission in Assaluyeh port and providing a solution to reduce it (6/20/99).
- Tracking and identification of damage in the wind turbine base template structure by modal strain energy method (10/29/98). Amin Karimpour Zahraei, Majid Ghodsi Hassanabad, Sara Allahyaribeik.
- Determining the quantum model for the stock market (15/4/99). Neda Allahyaribeik, Sara Allahyaribeik, Hashem Nikomram, Fereydoun Rahnama Rudposhti.
- Redesigning and calibration of hinged wave generator for marine hydraulic laboratory (not defended). Ali Dineh Kaboudi, Mohammad Asadian Qahfarkhi, Sara Allahyaribeik.
- Modeling the trend of changes in the water level of Gorgan Bay using the artificial neural network model (not defended). Delara Asadpour, Amir Hossein Javid, Sara Allahyaribeik.
- Analysis of the effect of breakwater geometry of Nowshahr port on sedimentation rate and hydrodynamic behavior (6/20/98). Omid Rahspar Mohammadi, Sara Allahyaribeik, Amir Hossein Javid.
- Predicting the quality of groundwater resources in Robat Karim region using artificial neural network (ANN) method (not defended). Fatemeh Biabani Mirkohi, Amir Hossein Javid, Sara Allahyaribeik.

- Optimization of parabolic solar water desalination for small (unprotected) communities. Khatere Souri, Amir Hossein Javid, Sara Allahyaribeik.
- Determining the dilution zones of the effluent from the Luft thermal desalination plant and presenting different scenarios to reduce pollution (not defended). Mohammad Doleh, Amir Hossein Javid, Mojtaba Azam, Sara Allahyaribeik.
- Investigation of the environmental effects of the sea on the location of the underwater sound source by the adaptive field processing method in the Persian Gulf (not defended). Vahid Zarehpour, Mojtaba Azam, Sara Allahyaribeik.
- The effect of saffron nanoemulsion (*Crocus sativus* L) produced by ultrasonic homogenization method to increase the shelf life of green tiger shrimp (*Penaeus semisulcatus*) (not defended). Maedeh Pourmoghadam, Seyed Amir Ali Anvar, Hamed Ahri, Sara Allahyaribeik, Maryam Ataei.
- Nanocrystallization of saffron extract (*Crocus Sativus* L.) by spontaneous emulsion method and its application in increasing the shelf life of salmon (not defended). Nadia Ahmadi, Sara Allahyaribeik, Seyed Amir Ali Anvar, Hamed Ahari.
- Investigation of the use of integrated bioremediation systems by Arbal method and magnetic fields in the removal of nitrate from water sources (not defended). Hooman Ghahramanzadeh, Sara Allahyaribeik, Amir Hossein Javid, Amir Hossam Hassani.
- Predicting groundwater quality in Kahrizak region using artificial neural network (ANN) model (not defended). Bi Aina Tahmasebian, Sara Allahyaribeik, Amir Hossein Javid, Seyed Mostafa Khezri.
- Increasing the shelf life of king prawns by producing nanoemulsions of saffron essential oil (*Crocus Sativus* L) in two methods of spontaneous emulsification and ultrasonic homogenizer (not defended). Mahnoosh Abu Turab, Sara Allahyaribeik, Hamed Ahri, Seyedeh Shima Yousefi, Abbas Ali Motalebi Moghanjoghi.
- Numerical study of the effect of marine environmental parameters on underwater sound propagation in shallow environment using finite element method (not defended). Zahra Karimi, Mojtaba Azam, Sara Allahyaribeik, Majid Ghodsi Hassanabad.
- Optimizing the location of parallel and perpendicular water breakers to create a tourist area (Case study of Salmanshahr beaches) (not defended). Mohammad Reza Najmzadeh, Sara Allahyaribeik, Saeed Kazemi.
- Investigating the sound and vibration situation in Lopeh Zanak mine in Tehran province and providing control solutions (not defended). Mina Zarvani, Parvin Nasiri, Sara Allahyaribeik.
- Predicting the concentration of suspended sediments using the SVM method and comparing it with the results of numerical modeling (Case study:

Bushehr canal) (not defended). Hossein Alipour, Sara Allahyaribeik, Amir Hossein Javid, Seyed Ahmad Mirbagheri Firoozabadi.

- Modeling the trend of changes in habitats on the southern shore of the Caspian Sea due to flood currents (Case study: East coast of Mazandaran province) (not defended). Seyed Mostafa Sadati Kiadehi, Sara Allahyaribeik, Amir Hossein Javid, Parvin Farshchi.
- Investigating the pattern of sea currents and waves in the area of Bushehr Bay and their effect on sedimentation in the access channel of Bushehr port (not defended). Parviz Karimi, Sara Allahyaribeik, Mojtaba Azam, Kamran Lari.

Academic teaching experience

- Teaching sound at sea PhD in Tehran Science and Research Unit (2015-present)
- Teaching topics in the dynamics of geophysical fluids in the doctoral program in the Science and Research Branch of Tehran (1397-present)
- Teaching the rotation of the oceans PhD in Tehran Science and Research Unit (1396-present)
- Teaching advanced engineering mathematics for doctoral program in Tehran Science and Research Branch (2015-present)
- Teaching advanced marine physics for doctoral program in Tehran Science and Research Unit (2014-present)
- Teaching sea hydraulics PhD in Tehran Science and Research Unit (2016-present)
- Teaching marine physics for doctoral program in Tehran Science and Research Unit (2014-present)
- Teaching advanced specialized language for doctoral program in Tehran Science and Research Branch (2015-present)
- Teaching advanced research methods and essay writing for doctoral degree in Tehran Science and Research Branch (1396-present)
- Teaching air-sea interaction for Master's program in Tehran Science and Research Unit (2015-present)
- Teaching sound at sea Master's program in Tehran Science and Research Branch (2013-present)
- Teaching the dynamics of geophysical fluids in the Master's program in Tehran Science and Research Unit (2014-present)
- Teaching advanced engineering mathematics for Master's program in Tehran Science and Research Branch (2014-present)
- Teaching applied mathematics in the specialized Master's program in Tehran Science and Research Branch (2013-present)
- Teaching physical instrumentation at sea Master's program in Tehran Science and Research Branch (2013-present)

- Teaching data analysis in oceanography for Master's program in Tehran Science and Research Branch (2014-present)
- Teaching marine physics for master's program in Tehran Science and Research Unit (2014-present)
- Teaching research method for Master's program in Tehran Science and Research Branch (2008-present)
- Teaching general language and specialized language for Master's program in Tehran Science and Research Branch (2008 – 2011)
- Teaching differential equations in Tehran Science and Research Unit (2011-present)
- Teaching General Mathematics 2 in Tehran Science and Research Unit (2011-present)
- Teaching marine ecology in Tehran Science and Research Unit from (2010-2013)
- Teaching physics grade 1 and 2 in Tehran Science and Research Unit (2011-present)
- Teaching physics 1st and 2nd grade at Khajeh Nasir al-Din Tusi University of Technology (2005 – 2009)
- Teaching physics 1st and 2nd grade, electronic laboratory, physics laboratory 1, 2 and 3 in Islamic Azad University of Karaj (2005 to 2009)
- Teaching general mathematics 1 and 2 in the Comprehensive University of Science and Technology, Tehran Branch (Dezashib) (2007 - 2008)
- Teaching Physics Laboratories 1 and 2 and Thermodynamics Laboratory in Islamic Azad University, Shahriar Branch (2007 - 2008).
- Teaching general mathematics 1 and basic physics 1 and 2 in the Islamic Azad University, Mallard Branch (2007 – 2008)
- Teaching physics 1st and 2nd grade in extracurricular classes of Khajeh Nasir Al-Din Tusi University of Technology (2005 – 2006)

Interests

- Underwater acoustics
- Laboratory and field research
- Reverse engineering