

Curriculum Vitae

Dr. Maryam Ghaemi

Positions: Head of Bushehr Oceanography Center

Faculty member of the Marine Science Department of the INIOAS

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Academic Background

- Ph.D. in Analytical Chemistry, Shiraz University, Shiraz, Iran, 2012
- M.Sc. in Analytical Chemistry, Shiraz University, Shiraz, Iran, 2006
- B.Sc. in Pure Chemistry, Persian Gulf University, Bushehr, Iran, 2003

Positions & Work Experiences & Memberships

- Assistant Professor in Analytical Chemistry in the Iranian National Institute for Oceanography and Atmospheric Science (INIOAS), 2013 till now
- Vice-Chair of IOC Sub-Commission for the Central Indian Ocean (IOCINDIO), 2021 till now
- Advisor to Regional Whale Shark Conservation Committee, 2023 till now
- Head of the Bushehr Oceanography Center, 2017 till now
- Secretary of Bushehr Province Energy Committee, 2017 till now
- Membership in the ocean science decade working group under the Regional Research Centre on Oceanography for West Asia (RCOWA), 2021 till now
- Membership in the Iran Ocean Acidification Observing Network (IrOA-ON)
- Membership in the technical committee of water quality ISIRI/ ISO/TC 147
- Membership in Blue Economy Working Group, Bushehr Province, Iran
- Membership in INIOAS Research Ethics Working Group
- Membership in INIOAS council
- Membership in the specialized research and technology council of INIOAS
- Membership in the scientific committee of the third workshop on the effects of climate change on the Indian Ocean marine environment, in collaboration with IORA, 20-23 February 2023
- Scientific secretary of workshop on "water hydrochemistry in the Persian Gulf", 11 Dec. 2023
- PI of "Nutrient and Chlorophyll *a* project" in the Persian Gulf and Gulf of Oman Oceanographic Cruises, 2018 till now
- SCOR Visiting Scholar, State Key Laboratory of Estuarine and Coastal Sciences, East China Normal University, 2023
- Co-author of the 2023 released oceanographic atlas of the Persian Gulf and the Gulf of Oman
- Corresponding Guest editor of Special Issue on "Understanding Oceanographic and Ecosystem Characteristics of the Persian Gulf: A Poorly Understood System" in Deep Sea Research Part II: Topical Studies in Oceanography | Journal | ScienceDirect.com by Elsevier, 2024-2025
- Reviewer of ISI Journals

Research Activities

- Marine chemical ecology in coastal ecosystems (mangroves, estuaries, etc.)
- Chemical oceanography
- Marine pollution
- Ocean acidification
- Dynamics of nutrients in coastal and offshore waters
- Nanotechnology
- Application of Ionic liquids for modification of nanoparticles in separation sciences
- Application of nanoparticles in separation of amino acids, DNA, dyes, drugs, ...
- Green chemistry

Teaching Experiences

2003 till now:

- Teaching different courses including: Marine Chemistry, General Chemistry Courses, Analytical Chemistry, Advanced Analytical Chemistry, Instrumental Analytical Chemistry, Ultra Trace Analysis Methods, Real Sample Analysis in different universities
- Lecturer in different national and international workshops

Full Papers

Ghaemi, M., Bahdury, P., Gholamipour, S., 2024. Patterns of carbonate chemistry in mangroves of the northern Persian Gulf, *Regional Studies in Marine Science*, 77, 103652.

Ghaemi, M., Hamzei, S., Saleh, A., Gholamipour, S., 2024. Nutrient regimes in a semi-enclosed marginal sea: The Persian Gulf *Journal of Operational Oceanography*, 17, 124-136.

Ghaemi, M., Soleimani, F., Gholamipour, S. 2023. Heavy metal and persistent organic pollutant profile of sediments from marine protected areas: the northern Persian Gulf, *Environmental Science and Pollution Research*, 30,120877-120891.

Arfaeinia, H., **Ghaemi, M.**, Jahantigh, A., Soleimani, F., Hashemi, H., 2023. Secondhand and thirdhand smoke: a review on chemical contents, exposure routes, and protective strategies, *Environmental Science and Pollution Research*, 30,78017-78029.

Ghaemi, M., Mohammadpour, G., Hamzei, S., Gholamipour, S., 2022. Spatial and Temporal Characterizations of Seawater Quality on Marine Waters Area of the Persian Gulf, *Regional Studies in Marine Science* 53 102407.

Ghaemi, M., Behrooz Abtahi, Gholamipour, S., 2021. Spatial Distribution of Nutrients and Chlorophyll *a* across of the Persian Gulf and the Gulf of Oman, *Ocean & Coastal Management*, 201, 105476.

Saleh, A., Abtahi, B., Mirzaei, N., Chen-Tung Arthur Chen, Ershadifar, H., **Ghaemi, M.**, Hamzhepour, A., Abedi, E., 2021. Hypoxia in the Persian Gulf and the Strait of Hormuz, *Marine Pollution Bulletin* 167, 112354.

Ghaemi, M., Where are the Missing Plastics at Sea? 2020. *Basparesh*, 10, 19-27.

Bakhshan, Y., Samari, F., **Ghaemi, M.**, Ghafarigousheh, S., Kakoe, A., 2018. Experimental Study on the Thermal Conductivity of Silver Nanoparticles Synthesized Using *Sargassum Angostifolium*, Iran. *J. Sci. Tech, Trans. Mech. Eng.*, DOI 10.1007/s40997-018-0153-1.

Ghaemi, M., Gholamipour, S., 2017. Seasonal Measurement of Nutrient Concentrations and Total Alkalinity in the Mond Estuary Ecosystem, *JOC.*, 8, 11-18.

Ghaemi, M., Gholamipour, S., 2017. Controllable Synthesis and Characterization of Silver Nanoparticles Using Sargassum Angostifolium. Iran. J. Chem. Chem. Eng, 36, 1-10.

Ghaemi, M., Absalan, G., Pourshamsi, T., 2017. Modification of CoFe₂O₄ Magnetic Nanoparticles by Dopamine and Ascorbic Acid as Anchors. Anal. Bioanal. Chem. Res., 4, 141-154.

Absalan, G., Bananejad, A., **Ghaemi, M.**, 2017. Removal of Alizarin Red and Purpurin from Aqueous Solutions Using Fe₃O₄ Magnetic Nanoparticles. Anal. Bioanal. Chem. Res., 4, 65-77.

Ghaemi, M., Taghvaie Yazdli, A., 2017. Analysis of Green Chemistry Patents as Indicators of Environmental Research and Development. J. Env. Sci. Tech., 19, Special No.4, 383-395.

Abedi, E., Gholamipour, S., **Ghaemi, M.**, 2016. Seasonal Determination of Nutrients Concentration in the Bardestan Creek and Loading Analysis of Them on the Persian Gulf. JOC., 7, 33-40.

Ghaemi, M., Absalan, G., 2014. Study on the Adsorption of DNA on Fe₃O₄ Nanoparticles and on Ionic Liquid-Modified Fe₃O₄ Nanoparticles. Microchim Acta, 181, 45-53.

Ghaemi, M., Absalan, G., Sheikhan, L., 2014. Adsorption Characteristics of Titan Yellow and Congo Red on CoFe₂O₄ Magnetic Nanoparticles, J. Iran. Chem. Soc., 11, 1759-1766.

Ghaemi, M., Absalan, G., 2014. Fast Removal and Determination of Doxycycline in Water Samples and Honey by Fe₃O₄ Magnetic Nanoparticles, J. Iran. Chem. Soc., 12, 1-7.

Absalan, G., **Ghaemi, M.**, 2012. Investigating the Parameters Affecting the Adsorption of Amino Acids onto AgCl Nanoparticles with Different Surface Charges. Amino acids. 43, 1955-1967.

Ghaemi, M., Hamzei, S., 2022. Assessment of Water Quality Across the Persian Gulf and the Gulf of Oman, The 8th International Conference of Agricultural Engineering, Natural Resources and Environment, Tehran, Iran.

Ghaemi, M., Sheijooni Fumani, N., 2022. Seawater Quality Parameters at Nayband Mangrove Ecosystem on the Northern Coasts of the Persian Gulf. The 8th International Conference of Agricultural Engineering, Natural Resources and Environment, Tehran, Iran.

Hosseini Jabali, H., Abtahi, B., **Ghaemi, M.**, 2020. Relationships between zooplankton biomass, silicate and chlorophyll a in the water layers of the northern Persian Gulf, 2nd International Conference on Oceanography for West Asia, Tehran, Iran.

Saadat Dehghan, B., Abtahi, B., **Ghaemi, M.**, 2020. Measuring the amount of nutrients and chlorophyll a in the water layers of the northeastern Persian Gulf, 2nd International Conference on Oceanography for West Asia, Tehran, Iran.

Ghaemi, M., Gholamipour, S., 2020. Study of carbonate chemistry parameters in Nayband mangrove forest (Bushehr province), 2nd International Conference on Oceanography for West Asia, Tehran, Iran.

Ghaemi, M., Gholamipour, S., 2019. Assessment of Impacts of the 2019 April Floods on Water Quality Parameters of the Mond River, Bushehr Province, Iran, 7th Flood Comprehensive Conference on Engineering and Management, Tehran University, Tehran, Iran.

Ghaemi, M., Gholamipour, S., 2018. Investigation of Physicochemical Parameters Related to Mangrove Ecosystems Health in Bushehr Province (Nayband and Mel-Gonze), First National Conference on Sustainable Development of the Persian Gulf (Sensitive Ecosystems), Persian Gulf University, Bushehr, Iran.

Ghaemi, M., Gholamipour, S., 2018. An Assessment and Comparison of Acidification State of Mangrove Ecosystems on the Northern Coast of the Persian Gulf (Bushehr Province), International Conference on Global Warming, Climate Change and Pollution Control, Subang Jaya, Malaysia.

Ghaemi, M., 2018. Spatial and Seasonal Variations of Physicochemical Parameters Associated with Acidification of Nayband Mangrove Ecosystem (Bushehr Province, Iran), 8th International Conference on Agricultural, Chemical, Biological and Ecosystems (ICACBE-18), Dubai (UAE).

Ghaemi, M., Gholamipour, S., 2017. Evaluation of Physico-Chemical Parameters, Chlorophyll a and Nutrients in the Mangrove Ecosystem of Nayband, Northern Coast of Persian Gulf, First International Conference on Oceanography for West Asia, Tehran, Iran.

Ghaemi, M., 2017. Study of Seasonal Variations of Acidification Related Parameters in the Mond Estuary Ecosystem in the Persian Gulf, 12th Symposium on Advances in Science & Technology, Mashhad, Iran.

Ghaemi, M., 2017. Study of Temporal and Spatial Variations of Nutrient Concentrations Along Marine, Estuarine and Riverine part of the Mond Estuary Ecosystem in the Persian Gulf, 12th Symposium on Advances in Science & Technology, Mashhad, Iran.

Ghaemi, M., Gholamipour, S., 2016. Controllable Synthesis and Characterization of Silver Nanoparticles Using *Sargassum Angostifolium*, 23rd Iranian Seminar of Analytical Chemistry, Sharif University of Technology, Tehran, Iran.

Ghaemi, M., Absalan, G., 2013. Rapid and Simple Determination of Doxycycline in Water Samples and Honey by Fe_3O_4 Magnetic Nanoparticles. 19rd Iranian Seminar of Analytical Chemistry, Ferdowsi University, Mashhad, Iran.

Absalan, G., Akhond, M., Bananezhad, A., **Ghaemi, M.**, 2013. Removal of Alizarin Red and Purpurin from Aqueous Solutions using Fe_3O_4 Magnetic Nanoparticles. 19rd Iranian Seminar of Analytical Chemistry, Ferdowsi University, Mashhad, Iran.

Absalan, G., **Ghaemi, M.**, 2011. Competitive Adsorption of Azo Dyes from Aqueous Solution Using CoFe_2O_4 Magnetic Nanoparticles. 5rd National Seminar of Chemistry & Environment, Shahid Chamran University, Ahvaz, Iran.

Absalan, G., Akhond, M., Abolverdi, M., **Ghaemi, M.**, 2011. Temperature-Controlled Ionic Liquid-Phase Microextraction for Preconcentration and Determination of Copper I. 5rd National Seminar of Chemistry & Environment, Shahid Chamran University, Ahvaz, Iran.

Ghaemi, M., Eslami, E., Hamze, F. 2011. Extraction of Aromatic Amino Acids Using Nanoparticulate Reverse Micelles. 1st National Iranian New Chemistry Congress.

Ghaemi, M., Absalan, G. 2010. Adsorption of Acidic, Basic and Neutral Amino Acids on Nanoparticles of Silver Chloride. 3rd International Congress on Nanoscience and Nanotechnology, Shiraz University, Shiraz, Iran.

Absalan, G., Akhond, M., **Ghaemi, M.**, 2007. Application of New Laboratory-Synthesized Polymeric-Based Sorbent for Extraction of Silver Ions from Aqueous solutions. 15rd Iranian Seminar of Analytical Chemistry, Shiraz University, Shiraz, Iran.

Projects

- 2023: Promoting the concept of social responsibility towards the marine environment through education to children, in collaboration with IOC-UNESCO Office in Tehran, Co-I
- 2021 to 2024: Clean Coast, Clean Sea” (Programme on the UN Decade of Ocean Science for Sustainable Development: The West Asia Blue Waters), Partner organization: UNESCO Category 2 Regional Education and Research Centre on Oceanography for West Asia (RCOWA), PI
- 2022: Promotion of Women’s Role in the Economic Development of Family Life Through Marine Handicrafts”, Partner organization: RCOWA, UNESCO Tehran Cluster Office, and INIOAS, PI
- 2024-2025: Seasonal evaluation of water hydrochemistry in Makran coast, National Environment Fund, Co-I
- 2023-2024: The bioaccumulation of some toxic pollutants from hookah wastewater in the *Siphonaria* carb in the intertidal area of the Persian Gulf, Iran, PI
- 2021-2024: Analysis and evaluation of water and sediment quality and pollution parameters in marine protected areas and coastal swimming areas of Bushehr province, Iran, National Environment Fund, PI
- 2021-2024: Analysis and evaluation of water and sediment quality and pollution parameters in marine protected areas and coastal swimming areas of Hormozgan province, Iran, National Environment Fund, Co-I
- 2021-2024: Analysis and evaluation of water and sediment quality and pollution parameters in marine protected areas and coastal swimming areas of Sistan and Baluchestan Province, Iran, National Environment Fund, Co-I
- 2021-2024: Seasonal evaluation of water hydrochemistry in the Persian Gulf, PI
- 2018-2019: Evaluating the effects of April 2018 regional flood on the loading of nutrients (nitrate, nitrite, phosphate and silicate) in the northwest of the Persian Gulf, PI
- 2021-2024: Seasonal assessment of carbonate chemistry, hypoxia, and water acidification in the Persian Gulf and Gulf of Oman, National Environment Fund, Co-I
- 2021-2024: Evaluation of biological parameters of coastal and offshore areas (isolated corals) of the Persian Gulf and Gulf of Oman, National Environment Fund, Co-I

- 2021-2024: Assessing the health of mangrove forests in the Persian Gulf and Gulf of Oman, National Environment Fund, Co-I
- 2021: Hypoxia in the Persian Gulf, Co-I
- 2018-2021: Investigation of spatio-temporal changes in the concentration of nutrients, total nitrogen and total phosphorus - and chlorophyll *a* in the offshore waters of the Persian Gulf and the Strait of Hormuz, PI
- 2020: Investigation of heavy metal accumulation in sediments of Bushehr province mangrove forests and ecological risk assessment, PI
- 2018: Study of the relationships of zooplankton biomass, silicate and chlorophyll *a* levels in the northeastern water layers of the Persian Gulf, Co-I
- 2018: Study of zooplankton biomass and nutrient level relationships in the water layers of the northeast Persian Gulf, Co-I
- 2012-2014: Monitoring of Northern Pars Special Economic Energy Zone coastal water (Persian Gulf), Co-I
- 2014-2015: Measurement and analysis of chemical oceanographic parameters of the Mond Estuary (Bushehr province), Iran, PI
- 2014-2015: Synthesis of silver nanoparticles using brown alga *Sargassum Angostifolium* on the coast of the Persian Gulf (Bushehr Province, Iran, PI.
- 2011- 2015: Estimation of economic impacts and oil pollution damage caused by sinking of two barges in Nayband national park area (year 2010) in Bushehr Province, Iran, Co-I
- 2015-2016: Investigation of pollutant sources and environmental threats of Persian Gulf in Bushehr province, Iran, Co-I
- 2015-2018: Evaluation and comparison of physicochemical parameters associated with acidification of Bushehr mangrove ecosystems (Nayband, Melgonze and Bardestan), Bushehr Province, Iran, PI
- 2015-2018: Ecological study and comparison of the composition of plankton communities of the Mond Estuary in the Persian Gulf, Co-I
- 2016-2018: Analysis of nutrients in the coastal waters of Bushehr city with the help of paper-based microfluidic technology and comparison with standard method, Co-I

Workshops

- Workshop on Developing International Capacity, INIOAS (Iran) & SKLEC (China), 27-28 January 2024
- Invited speaker in Indian Ocean UN Decade Conference, INCOIS-Hyderabad, 1-3 February 2024
- Invited speaker in in Tour of Asian Marginal Seas, Chinese Marginal Seas Case Study 2023 Annual Meeting on 23-24 November 2023
- Workshop on “Ocean acidification”, INIOAS (IR. of Iran) & IIM-CSIC (Spain), 17-18 October 2022.
- Workshop on the environmental hazards of the Persian Gulf and provide protection solutions, 6 December 2022
- Scoping of the next Assessment(s) of the United Nations Regular Process for the Global Reporting and Assessment of the Marine Environment, including Socioeconomic Aspects (Regular Process), Belitung, Indonesia, 13-15 December 2022
- IOCINDIO Training Workshop on Methodologies and Approaches of Coastal Vulnerability, Sea Level Rise and Advances in Operational Oceanography Science and Technology in the Indian Ocean, 13-17 December 2021
- Workshop on “Ocean acidification, developing regional capacity for ocean observations”, 8-9 June 2019, Organized by UNESCO/IOC, RCOWA, INIOAS, Tehran, Iran
- Introduction of ocean sampling equipment, Bushehr, Iran, 2018.
- The Role of Antarctic in the global climate change (past, present and future), Iranian National Institute of Oceanography and Atmospheric Sciences, Tehran, Iran, 2017.
- Antarctic research, Iranian National Institute of Oceanography and Atmospheric Sciences, Tehran, Iran, 2017.

- Role of mangrove forests in the Persian Gulf ecosystem, Persian Gulf oceanography center (Bushehr), Bushehr, Iran, 2017.
- Marine pollutants and its control strategies, Persian Gulf oceanography center (Bushehr), Bushehr, Iran, 2017.
- Regional ocean governance for the Mediterranean, Black, Baltic& Caspian seas, The University of Malta and International Ocean Institute, 6th Nov-8th Dec, Malta; 2016.