Curriculum Vitae

Dr. Ali Mehdinia



Professor in Chemistry

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Academic Background

- ➤ Ph.D in Chemistry, Tarbiat Modares University (TMU), Tehran, Iran
- M.Sc in Analytical Chemistry, Shahid Beheshti University (SBU), Tehran, Iran
- ➤ B.Sc in Chemistry, Zanjan University (ZU), Tehran, Iran

Positions & Work Experiences & Memberships

- Faculty Member, Faculty of Ocean Science, Iranian National Institute for Oceanography and Atmospheric Science, Since 2008
- ➤ Director of Marine Chemistry Lab., Iranian National Institute for Oceanography and Atmospheric Science, 2009-now
- ➤ Director of Marine bioscience group, Iranian National Institute for Oceanography and Atmospheric Science, 2013-2015.
- ➤ Head of INIOAS Central Laboratory, Iranian National Institute for Oceanography and Atmospheric Science, 2016 to now.
- ➤ Head of Ocean Science Department, Iranian National Institute for Oceanography and Atmospheric Science, 2018 to 2022.
- ➤ Deputy of research and education of Iranian National Institute for Oceanography and Atmospheric Science, 2018 to now.

Research Activities

Research Interest

Environmental Chemistry

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Some published papers

M Esmaeilzadeh, A Mehdinia, Origin and comprehensive risk assessment of heavy metals in surface sediments along the Caspian Sea, Marine pollution Bulletin, 205, 2024, 116587.

Vahid Aghadadashi, Ali Mehdinia, Mahdie Rezaei, Saeideh Molaei, Mehri Seyed Hashtroudi, Fatemeh Ahmadian, Ali Hamzehpour, Reza Rahnama, Basin scale monitoring of microplastics and phthalates in sediments from the Persian Gulf and the Gulf of Makran using GIS-based algorithms: Insights towards spatial variation and potential risk assessment, Science of The Total Environment, 927, 1 **2024**, 171950.

A Manbohi, A Mehdinia, R Rahnama, A Hamzehpour, R Dehbandi, Distribution of microplastics in upstream and downstream surface waters of the Iranian rivers discharging to the southern Caspian Sea, Environmental Science and Pollution Research, 1-12. 2023

A Manbohi, A Mehdinia, R Rahnama, A Hamzehpour, R Dehbandi, Sources and hotspots of microplastics of the rivers ending to the southern Caspian Sea, Marine Pollution Bulletin 188, 114562, 2023

MS Hashtroudi, V Aghadadashi, A Mehdinia, NS Fumani, Combining theoretical concepts and Geographic Information System (GIS) to highlight source, risk, and hotspots of sedimentary PAHs: A case study of Chabahar Bay, Environmental Research 216, 114540, 2023

Fatemeh Bateni, A. Mehdinia, Lisa Lundin, Mehri Seyed Hashtroudi, (2022) Distribution, source and ecological risk assessment of polycyclic aromatic hydrocarbons in the sediments of northern part of the Persian Gulf, Chemosphere, 2022, 295:133859.

A. Mehdinia, Fatemeh Bateni, Davoud Jahedi Vaighan, Neda Sheijooni Fumani, Occurrence of polychlorinated biphenyl congeners in marine sediment of Makran region, Chabahr bay, Iran. (2021), Marine Pollution Bulletin, 164, 112038

A Manbohi, A Mehdinia, R Rahnama, R Dehbandi, (2021), Microplastic pollution in inshore and offshore surface waters of the southern Caspian Sea, Chemosphere, 281, 130896.

A Manbohi, A Mehdinia, R Rahnama, R Dehbandi, A Hamzehpour, (2021), Spatial distribution of microplastics in sandy beach and inshore-offshore sediments of the southern Caspian Sea, Marine Pollution Bulletin 169, 112578

V Aghadadashi, A Mehdinia, S Molaei, (2021), Normal alkanes in sediments from the Persian Gulf: spatial pattern and implications for autochthonous, allochthonous, and petroleum-originated contaminants, Environmental Monitoring and Assessment 193 (6), 1-18

M Rezaei, A Mehdinia, A Saleh, S Modabberi, MRM Daneshvar, (2021), Environmental assessment of heavy metal concentration and pollution in the Persian Gulf, Modeling Earth Systems and Environment 7 (2), 983-1003.

A Mehdinia, F Bateni, DJ Vaighan, NS Fumani, (2021), Occurrence of polychlorinated biphenyl congeners in marine sediment of Makran region, Chabahr bay, Iran, Marine Pollution Bulletin 164, 112038.

Mehdinia, A., Dehbandi, R., Hamzepour, A., Rahnama, R., (2020) Identification of microplastics in the

sediments of southern coasts of the Caspian Sea, north of Iran, Environmental Pollution 258, 113738.

Kor, K., Mehdinia, A., (2020) Neustonic microplastic pollution in the Persian Gulf, Marine Pollution Bulletin, 150, 110665.

Aghadadshi, V., Molaei, V., Mehdinia, A., Mohammadi, J., Moeinaddini M, Riyahi Bakhtiari, A.R., (2019) Using GIS, geostatistics and Fuzzy logic to study spatial structure of sedimentary total PAHs and potential ecorisks; An Eastern Persian Gulf case Study, Marine Pollution Bulletin 149 (2019) 110489

Aghadadashi, V., Neyestani, MR., Mehdinia, A., Riyahi Bakhtiari, A., Molaei, M., Farhangi, M., Esmaili, M., Rezai Marnani, H., Gerivani, H., (2019) Spatial distribution and vertical profile of heavy metals in marine sediments around Iran's special economic energy zone; Arsenic as an enriched contaminant, Marine Pollution Bulletin 138, 437–450.

Aghadadshi, V., Mehdinia, A., Riyahi Bakhtiari, A, Mohammadi, J., Moradi, M., (2019) Source, spatial distribution, and toxicity potential of Polycyclic Aromatic Hydrocarbons in sediments from Iran's environmentally hot zones, the Persian Gulf, Ecotoxicology and Environmental Safety 173, 514–525.

Mehdinia, A., Bateni, F., (2018) Predicting efficiency of different chemical extraction methods in risk assessment of trace metals in sediment of the Persian Gulf, 1595-160.

Aghadadashi, V., Mehdinia, A., Molaei, S., Origin, toxicological and narcotic potential of sedimentary PAHs and remarkable even/odd n-alkane predominance in Bushehr Peninsula, the Persian Gulf, Marine Pollution Bulletin 114 (2017) 494–504.

Ziyaadini, M., Mehdinia, A., Khaleghi, L., Nasiri, M. (2016) Assessment of concentration, bioaccumulation and sources of polycyclic aromatic hydrocarbons in zooplankton of Chabahar Bay, Marine Pollution Bulletin, 107: 408–412.

Aghadadashi, V., Mehdinia, A. (2016) Occurrence, spatial deposition and footprint of polybrominated diphenyl ethers in surficial sediments of Bushehr peninsula, the Persian Gulf., Marine Pollution Bulletin 112, 211–217.

Ghane, M., Moradi, M., Kabiri, K., Mehdinia, A., (2016) Investigation and validation of MODIS SST in the northern Persian Gulf, Advances in Space Research, 57, 127–136.

Mehdinia, A., Aghadadashi, V., Sheijooni Fumani, N. (2015) Origin, distribution and toxicological potential of polycyclic aromatic hydrocarbons in surface sediments from the Bushehr coast, Marine Pollution Bulltein, 90 334–338.

Tavakoly Sany B., Hashim R., Salleh A., Safari O., Mehdinia, A., Rezayi M. (2014) Risk assessment of polycyclic aromatic hydrocarbons in the West Port semi-enclosed basin (Malaysia), Environmental Earth Science, 71(10) 4319-4332.

Tavakoly Sany B., Hashim R., Salleh A., Mehdinia A., Rezayi M., Safari O. (2014) Polycyclic Aromatic Hydrocarbons in Coastal Sediment of Klang Strait, Malaysia: Distribution Pattern, Risk Assessment and Sources, PLOS One; 9(4): e94907.

Tavakoly Sany B., Salleh A., Sulaiman A.H, Mehdinia, A., Monazami GH. (2011) Geochemical Assessment of

Heavy Metals Concentration in Surface Sediment of West Port, Malaysia, World Academy of Science, Engineering and Technology, 56, 83-87.

-Agah, H., Fatemi, S.M.R., Mehdinia, A., Savari, A., (2011) Determining Total Mercury in Samples from the Persian Gulf and the Caspian Sea: Comparison of Dry Ash and Wet Extraction Mothods, Journal of the Persian Gulf, 2(4), 11-18.

US patents

- Mehdinia, A., Bahrebar, S., (2019) Carbon Nanotube based microbial fuel cells and methods for generating an electric current, Patent No. US 10, 396, 387, B2, Date 27 Aug 2019.
- ➤ Bahrebar, S, Mehdinia, A., (2018) MICROBIAL FUEL CELLS AND METHODS FOR GENERATING AN ELECTRIC CURRENT, Patent No. US 10, 164, 282, B2, Date 25 Dec 2018.

Book Chapters

- Mehdinia, A., Aziz Zanjani M.O., (2015) Solid-Phase Microextraction, Book Chapter, Analytical Separation Science, First Edition. Edited by Jared L. Anderson, Alain Berthod, Verónica Pino Estévez, and Apryll M. Stalcup. 2015 Wiley-VCH
- ➤ Mehdinia, A., Mehrabi, H. (2019) Application of nanomaterials for removal of environmental pollution, Book Chapter, Industerial Application of nanomaterials, Paperback ISBN: 9780128157497, Editors: Sabu Thomas Yves Grohens Yasir Beeran Pottathara, Elsevier.
- Mehdinia, A., Rostami, S., (2020), Green Synthesis of Plasmonic Metal Nanoparticles and Their Application as Environmental Sensors, Book Chapter, Nano sensor Technologies for Environmental Monitoring, Inamuddin Abdullah M. Asiri Editors, Springer.