

CURRICULUM VITAE of Nasser Hadjizadeh Zaker



Associate Professor, School of Environment, College of Engineering,
University of Tehran

Name: Nasser
Family Name: Hadjizadeh Zaker
Date of Birth: 14 July 1957
Address: School of Environment, College of Engineering, University of Tehran,
No 25, Ghods St, Enghelab St.
E-mail: nhzaker@ut.ac.ir
nhzaker@gmail.com

Degrees Held

- Ph.D. Coastal Environmental Engineering, University of Western Australia, 1998.
- MSc in Civil Engineering, University of Tehran, Tehran, 1986
- BSc in Civil Engineering, University of Tehran, Tehran, 1984

Positions Held

Current Positions

- Academic Member (Associate Professor) at School of Environment, College of Engineering, University of Tehran, 2000-continues
- National Representative of IR-Iran in PIANC/ENVICOM, 2012-continues

- Head of Environmental Group, Marine Science Institute, University of Tehran, 2018-continues
- Member of the Scientific Committee of Iranian Fisheries Organization, 1998-continues
- Member of the Scientific Committee of Coastal Engineering Projects, Ports and Maritime Organization of Iran, 2010-continues
- Member of Scientific Committee of International Conference on Coasts, Ports and Marine Structures (ICOPMAS), 2000 - continues

Previous Positions

- Director of Iranian National Institute for Oceanography and Atmospheric Science, Feb. 2015- Feb. 2018, 2000- 2005.
- Director of the UNESCO Category 2 Regional Education and Research Centre on Oceanography for West Asia (RCOWA), 2015- Feb. 2018
- National Representative of IR-Iran in Intergovernmental Oceanographic Commission IOC/UNESCO, Feb. 2015- Feb. 2018, 2000- 2005.
- Vice Chairman of IOCINDIO: IOC/UNESCO Regional Committee for the Central Indian Ocean 2016- Feb. 2018
- Vice-Chair of IOTWS Sub-regional Working Group for the North West Indian Ocean, 2015- Feb 2018
- Joint Chair of WG 3, Capacity Development of Second International Indian Ocean Expedition (IIOE-2), February 2017 – February 2018
- Chairman of IOCINDIO: IOC/UNESCO Regional Committee for the Central Indian Ocean 2000-2005
- Coordinator of ODINCINDIO-IOC/UNESCO Project: Ocean Data and Information Network for the Central Indian Ocean Region 2002-2005, 2016- Feb. 2018
- Director of the office of International Oceanographic Institute (IOI) in Iran 2002-2005, Feb. 2015- Feb. 2018
- National Representative of IR-Iran in Inter-Islamic Science and Technology Network on Oceanography (INOC), Feb. 2015- Feb. 2018

- National Representative of IR-Iran in Scientific Committee on Antarctic Research (SCAR), Feb. 2015- Feb 2018
- National Representative of IR-Iran in the Executive Committee of the Intergovernmental Oceanographic Commission IOC/UNESCO, 2000-2005
- Academic Member of Iranian Fisheries Research Organization, 1998-2000
- Head of Department of Design and Construction of Fishery Ports (Iranian Fisheries Organization), 1988-1992

Fields of Research

- Coastal Engineering
- Coastal Environmental Engineering
- Physical and dynamical oceanography
- Marine Pollution

Educational Activities

Academic Member of University of Tehran, Faculty of Environment since 2000, presenting courses and conducting postgraduate research projects on the following subjects:

- Coastal Engineering
- Physical and Dynamical Oceanography
- Coastal Environmental Engineering
- Marine Pollution
- Marine Environmental Management
- Numerical Modeling in Environmental Studies
- Water resources
- Water quality
- Research Methodology for postgraduate students
- Outfall Design
- Remote Sensing Applications in Coastal Environmental Studies
- Design of Coastal Structures

Books

- 1- **Nasser Hadjizadeh Zaker**, Guidelines for prevention and control of ship caused marine pollution based on annexes of 2 and 5 of MARPOL, 2011- 403 pages (in Persian). Iranian Transportation Research Institute, Iranian Ministry of Roads and Urban Development.
- 2- **Nasser Hadjizadeh Zaker**, Dynamics of the Coastal Boundary Layer off Perth, Western Australia, 1998- 244 pages. University of Western Australia
- 3- Hamid Ghiasi, **Nasser Hadjizadeh Zaker**, Nima Pourang, Qolamreza Miraki, Guidelines for design of ports and coastal structures in Iran (Environmental Considerations), 2006 – 203 pages (in Persian). Iranian Strategic Planning and Supervision Organization.

Journal Publications in English

- 1 Taghavi, N., Hadjizadeh Zaker, N. and Biglarbeigi, P. (2021). Concentrations and Sources of Aliphatic and Aromatic Hydrocarbons in Babolsar Coastal Sediments in the Caspian Sea. *Pollution 2021*, 7(2): 469-479
- 2 Ranjbar, MH., and **Hadjizadeh Zaker, N.**, November 2018, Numerical modeling of general circulation, thermohaline structure, and residence time in Gorgan Bay, Iran, *Ocean Dynamics*, 2017, 68(1)
- 3 Ranjbar, MH., and **Hadjizadeh Zaker, N.**, November 2016, Estimation of environmental capacity of phosphorus in Gorgan Bay, Iran, via a 3D ecological-hydrodynamic model., *Environ Monit Assess.* 2016 Nov;188(11):649.
- 4 Payandeh A, **Hadjizadeh Zaker N**, Niksokhan MH, 2015 Numerical assessment of nutrient assimilative capacity of Khur-e-Musa in the Persian Gulf, *Environ Monit Assess* (2015) 187:4097 DOI 10.1007/s10661-014-4097-7
- 5 Payandeh A, **Hadjizadeh Zaker N**, Niksokhan MH, 2014, Numerical modeling of pollutant load accumulation in the Musa estuary, Persian Gulf, *Environmental Earth Sciences*, 2014, DOI 10.1007/s12665-014-3409-0
- 6 Mirvakili, H.S., and **Hadjizadeh Zaker, N.**, spring 2014, Evaluation of PAHs in Hydrocarbons Pollution, Biodegradation and Weathering Extent in Surface Sediments of the Kharg Island in the Persian Gulf, *Int. J. Environ. Res.*, 8(2):387-394
- 7 Leila Mashhadi, **Nasser Hadjizadeh Zaker**, Mohsen Soltanpour , Saeed Moghimi, 2013, Numerical simulation of waves and storm surge induced by the Gonu tropical cyclone in the Chahbahar Bay area, *International Journal of Maritime Technology*, 9(17): 37-50

8 Leila Mashhadi, **Nasser Hadjizadeh Zaker**, Mohsen Soltanpour, Saeed Moghimi, 2013,
Study of the Gonu Tropical Cyclone in the Arabian Sea, Journal of Coastal Research, doi:
<http://dx.doi.org/10.2112/JCOASTRES-D-13-00017.1>

8 Hamideh Sadat Mirvakili, **Nasser Hadjizadeh Zaker**, Farshid Imani, 2013,
Evaluation of Oil Pollution and Origin in Surface Coastal Sediments of Kharg Island in
the Persian Gulf, Journal of Coastal Reseach, Special Issue No. 65, pp 93-98

9 Shima Shamkhali Chenar, Abdulreza Karbassi, **Nasser Hadjizadeh Zaker**, and
Fereydoun Ghazban, July 2013,
Electrofloculation of Metals during Estuarine Mixing (Caspian Sea), Journal of Coastal
Reseach, 4, 29, pp 847-854

10 Ozeair Abessi, Mohsen Saeedi, Mark Davidson, and **Nasser Hadjizadeh Zaker**,
2012
Flow Classification of Negatively Buoyant Surface Discharge in an Ambient Current
Jouranl of Coastal research, Vol. 28, No. 1A

11 **Zaker, N.H.**, Ghaffari, P., Jamshidi, S., Nouranian, M., 2011
Currents on the Southern Continental Shelf of the Caspian Sea off Babolsar, Mazandaran,
Iran, Journal of Coastal Research, SI 64, pp1989-1997

12 **N.H. Zaker**, P. Ghaffari, S. Jamshidi and M. Nourian, 2011
Dynamics of the Currents in the Strait of Khuran in the Persian Gulf
Journal of Shipping and Ocean Engineering 1 (2011) 109-115

13 Mohammad Heidarzadeh, Moharram D. Pirooz, **Nasser H. Zaker**, 2009
Preliminary estimation of the tsunami hazards associated with the Makran subduction
zone at the northwestern Indian Ocean, Journal of Natural Hazards. No 48, pp 229-243

14 Mohammad Heidarzadeh, Moharram D. Pirooz, **Nasser H. Zaker**, Mohammad
Mokhtari, and Ahmet C. Yalciner, 2008.

Historical Tsunamis in the Makran Subduction Zone off Southern Coasts of Iran and
Pakistan and Results of Preliminary Numerical Modeling, Ocean Engineering, No 35, pp
774-786

15 Mohammad Heidarzadeh, Moharram D. Pirooz, **Nasser H. Zaker**, 2008
Evaluating Tsunami Hazard in the Northwestern Indian Ocean, Journal of Pure and
Applied Geophysics. No 165, pp 2045-2058

16 **Zaker, N.H.**, 2007.

Characteristics and Seasonal Variations of Dissolved Oxygen in the Southern Shelf of the Caspian Sea, International Journal of Environmental Research, No 4.

17 **Zaker, N.H.**, Imberger, J., and Pattiaratchi, C., 2007.
Dynamics of the Coastal Boundary Layer off Perth, Western Australia, Volume 23, Issue 5, pp. 1112-1130.

18 **Zaker, N.H.**, Ghaffari, P., and Jamshidi, S., 2007.
Physical Study of the Southern Coastal Waters of the Caspian Sea, off Babolsar, Mazandaran in Iran. Journal of Coastal Research, especial issue 50, pp 564-569

19 Mohammad Heidarzadeh, Moharram D. Pirooz, **Nasser H. Zaker**, and Mohammad Mokhtari, 2007
Evaluating the Potential for Tsunami Generation in Southern Iran, International Journal of Civil Engineering (IJCE), Vol 5, No 4, pp 312-329

20 **N. H. Zaker** and A. Etemad-Shahidi, 2006
Sedimentation in Babolsar and Pozm Fishery Ports in Iran, Journal of Coastal Research, SI39, pp 424-427

21 A. Etemad Shahidi, A. H. Azimi and **N. H. Zaker**, 2006
Numerical Simulation of Boston outfall in Stagnant Ambient Current, Journal of Coastal Research, SI39, pp 424-427

22 **Zaker, N.H.**, Imberger, J., and Pattiaratchi, C., 2002.
Numerical Simulation of the Coastal Boundary Layer off Perth, Western Australia, N. H. Zaker, J. Imberger, C. Pattiaratchi, Journal of Coastal Research, Vol. 18, No. 3

23 **Zaker, N.H.**, Imberger, J., and Pattiaratchi, C., 2000.
Dispersion of an Effluent Plume in a Shallow Coastal Area, N. H. Zaker, J. Imberger, C. Pattiaratchi, Journal of Marine Environmental Engineering, No 21, pp 21-32

Some Conference Papers in English

1 Nasser Hadjizadeh Zaker 2018

Seasonal Variation of Temperature in the Southern Coastal Waters of the Caspian Sea, off Anzali, Gilan in Iran, International Conference on Understanding the problems of Inland Waters, 12-14 May 2018, Baku, Azerbaijan

2 Shirin Farkhani, Nasser Hadjizadeh Zaker 2018

Assessment of the effects of climate change on air temperature over the Caspian Sea, International Conference on Understanding the problems of Inland Waters, 12-14 May 2018, Baku, Azerbaijan

3 Alinejhad-Tabrizi, Tahereh, Hadjizadeh-Zaker, Nasser 2018

Assessment of the changes in average wind speed in the south Caspian Sea, due to climate change, International Conference on Understanding the problems of Inland Waters, 12-14 May 2018, Baku, Azerbaijan

4 Shirin Farkhani, **Nasser Hadjizadeh Zaker** 2017

A numerical modeling approach to forecast the effect of climate change on surface temperature of the Gulf of Oman, First International Conference on Oceanography for West Asia (RCOWA 2017).

5 Alinejhad-Tabrizi T., **Hadjizadeh-Zaker N.**, Kamranzad B. 2017.

Investigation of wind speed projections in the Persian Gulf using different resources of CMIP5 data. 37th IAHR World Congress.

6 Alinejhad-Tabrizi T., **Hadjizadeh-Zaker N.**, Kamranzad B. 2017. Assessment of CORDEX wind field in the Persian Gulf. First International Conference on Oceanography for West Asia (RCOWA 2017).

7 Alinejhad-Tabrizi T., **Hadjizadeh-Zaker N.**, Kamranzad B. 2016.

Assessment of CMIP5 wind field in the Persian Gulf. 12th International Conference on Coasts, Ports and Marine Structures (ICOPMAS 2016).

8 Alinejhad-Tabrizi T., **Hadjizadeh-Zaker N.**, Kamranzad B. 2016.

STATISTICAL DOWNSCALING Of CMIP5 MODEL for CLIMATE CHANGE IMPACT ASSESSMENT In PERSIAN Gulf. 12th International Conference on Coasts, Ports and Marine Structures (ICOPMAS 2016).

9 **Zaker, N.H.** 2015

Study of Oil Pollution in the Coastal Sediments of Kharg Island in the Persian Gulf, the 5th International Conference on Pollution and Treatment Technology, Shangha, China (PTT 2015).

10 **Zaker, N.H.** 2008

Study of Some of the Environmental Characteristics of the Ecosystem of the Strait of Khuran in the Persian Gulf, Fourth International Symposium on GIS/Spatial Analysis in Fishery and Aquatic Sciences, Brazil, 2008

11 **Zaker, N.H.** (2006).

Physical Oceanography of the Strait of Khuran in the Persian Gulf, International Conference of INOC, Kutakinabalo, Malaysia, 2006

12 **Zaker, N.H.** (2005).

Marine Pollution Inputs and Their Priorities Along the Iranian Coastal Areas In the Caspian Sea, International Conference Pacem in Maribus 31: Building Bridges Towards Integrated Oceans Governance, 2005, Australia

13 **Zaker, N.H.** (2005).

Marine and Information Management in the Indian Ocean Region, Indian Ocean Marine Environmental Conference, IOMEC, 2005, Perth, Australia

14 **Zaker, N.H.** (2005)

Physical Oceanography of the Strait of Hormuz, Indian Ocean Marine Environmental Conference, IOMEC, 2005, Perth, Australia

15 **Zaker, N.H.** (2004)

. Sedimentation in Babolsar and Pozm Fishery Ports in Iran N. H. Zaker and A. Etemad Shahidi, International Coastal Symposium, 2004, Brazil

16 **Zaker, N.H.** (2003)

Environmental Issues and Sustainable Development of the Persian Gulf, International Conference of Pacem in Maribus, Ukraine, September 2003

17 **Zaker, N.H., Hafezi, M.,** (2002).

Control of Instability of Dayyer Port Quays, 5th International Conference on Coasts, Ports and Marine Structures (ICOPMAS 2002), Ramsar, Iran, 14-17 October 2002

18 **Zaker, N.H.** (2000).

Physical Oceanography of the ROPME SEA AREA, ROPME Scientific Report, Summer 2000.