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## Education

- PhD in Physical Oceanography and Coastal Sciences (2012), GPA: 4/4
- M.Sc. in Marine Structures, University of Tehran, Tehran, Iran, (June 2006), GPA: 17.93/20 (Thesis: 20/20)
- B.Sc. in Civil Engineering, Isfahan University of Technology, Isfahan, Iran, (July 2003), GPA: 16.7/20
- B.Sc. in Math Sciences, Isfahan University of Technology, Isfahan, Iran, (January 2004), GPA: 16.4/20.0

## Research Interests

- Nearshore Hydrodynamics
- Data Analysis
- Parallel Programming and Cluster Computing
- Remote sensing for marine applications

## Referred Journal Papers

- S.M. Mahmoudof, **S.M. Siadatmousavi**, S.A. Seyedalipour, 2021. Experimental study of bound triad interactions across a dissipative surf zone under different wave breaking conditions. *Journal of Ocean Engineering*, 235, 109427.
- A. Alipour, **S.M. Siadatmousavi**, F. Jose, 2021. Numerical simulation of waves in the Caspian Sea: calibration and verification of the observation-based source terms. *Journal of Ocean Dynamics*, 71 (6), 699-714.
- M. Yaghoobi Kalourazi, **S.M. Siadatmousavi**, A. Yeganeh-Bakhtiary, F. Jose, 2021. WAVEWATCH-III source terms evaluation for optimizing hurricane wave modeling: A case study of Hurricane Ivan. *Oceanologia*. 63(2), 194-213.
- M. Beyramzade, **S.M. Siadatmousavi**, M. H. Derkani, 2021. Calibration and skill assessment of two input and dissipation parameterizations in WAVEWATCH-III model forced with ERA5 winds with application to Persian Gulf and Gulf of Oman. *Journal of Ocean Engineering*, 219, 108448.
- M. Seyedvalizadeh, H. Alizadeh Ketek Lahijani, **S.M. Siadatmousavi**, 2021. South Caspian vertical circulation during rapid sea level rise and fall. *Caspian Journal of Environmental Sciences* 19 (1), 19-29
- S.A. Seyedalipour, **S.M. Siadatmousavi**, S.M. Mahmoudof, 2020. Improving the Simulation of Depth-induced Breaking in the Third-Generation Wave Model SWAN. *Journal of Marine Engineering* 16 (31), 53-64
- S. Shirinmanesh, M. Sadrasab, A. Karimi, **S.M. Siadatmousavi**, 2020. Determination of suspended load concentration in Hendijan Delta using remote sensing technique. *Journal of Watershed Engineering and Management*, 11 (4), 999-1015
- S.M. Mahmoudof, **S.M. Siadatmousavi**, 2020. Bound infragravity wave observations at the Nowshahr beaches, southern Caspian Sea. *Journal of Applied Ocean Research*, 98, 102122.
- M. Yaghoobi Kalourazi, **S.M. Siadatmousavi**, A. Yeganeh-Bakhtiary, F. Jose, 2019. Simulating tropical storms in the Gulf of Mexico using analytical models. *Oceanologia*, 62 (2), 173-189.
- D. Shariatmadari, **S.M. Siadatmousavi**, C. Ershadi, 2019. Enhanced predictions of tides in the Persian Gulf through data assimilation. *Journal of Oceanography*, 10 (40), 85-95.
- F. Komijani, V. Chegini, **S.M. Siadatmousavi**, 2019. Seasonal variability of circulation and air-sea interaction in the Caspian Sea based on a high resolution circulation model, *Journal of Great Lakes Research*, 45 (6), 1113-1129
- M. Beyramzade, **S.M. Siadatmousavi**, M. Nik Majidy, 2019. Skill assessment of SWAN model in the red sea using different wind data. *Regional Studies in Marine Science*, 30,

- M. R. Abbasi, V. Chegini, M. Sadrinasab, **S.M. Siadatmousavi**, 2019. Correcting the Sea Surface Temperature by Data Assimilation Over the Persian Gulf. *Iranian Journal of Science and Technology, Transactions A: Science*, 43(1), 141-149.
- M. N. Esfahani, M. R. A. Jannat, B. Banijamali, **S.M. Siadatmousavi**, 2018, The impact of ERA-Interim winds on wave generation model performance in the Southern Caspian Sea region. *Meteorology and Atmospheric Physics*, 131 (5), 1281-1299.
- M. R. Abbasi, V. Chegini, M. Sadrinasab, **S.M. Siadatmousavi**, 2018, Improving the Persian Gulf sea surface temperature simulation by assimilating the satellite data via the ensemble Kalman. *International Journal of Environmental Science and Technology*, 1-10.
- H. Noori, H. Karami, S. Farzin, **S.M. Siadatmousavi**, B. Mojaradi, O. Kisi, 2018, Investigation of RS and GIS techniques on MPSIAC model to estimate soil erosion, *Journal of Natural Hazard*, 91(1), pp 221-238
- S. T. Hosseini, V. Chegini, M. Sadrinasab, **S.M. Siadatmousavi**, 2018. Temperature, salinity and water-age variations in a tidal creek network, Bushehr Port, Iran. *Journal of Coastal Conservation*, 22(6), 1093-1106.
- M. R. Abbasi, V. Chegini, M. Sadrinasab, **S.M. Siadatmousavi**, 2018. Optimization of the modeled surface temperature by assimilation of SST data over the Persian Gulf, *NISCAIR-CSIR*, 49(9), pp 1803-1808.
- M. Khosravi, **S.M. Siadatmousavi**, R. Vennell, V. Chegini, 2018. The transverse dynamics of flow in a tidal channel within a greater strait, *Journal of Ocean Dynamics*, 68(2), 239-254
- M. Beiramzade, **S.M. Siadatmousavi**, 2018. Implementation of viscoelastic mud-induced energy attenuation in the third-generation wave model, SWAN, *Journal of Ocean Dynamics*, 68(1), pp 47-63.
- A. Hamidi, **S.M. Siadatmousavi**, 2018. Numerical simulation of scour and flow field for different arrangements of two piers using SSIIM model, *Ain Shams Engineering Journal*, 9 (4), pp215-2426.
- S.T. Hosseini, **S.M. Siadatmousavi**, 2018. Field observations of hypersaline runoff through a shallow estuary, *Journal of Estuarine, Coastal and Shelf Science*, 202, pp 54-68
- M.H. Kazeminezhad, **S.M. Siadatmousavi**, 2017. Performance evaluation of WAVEWATCH III model in the Persian Gulf using different wind resources, *Journal of Ocean Dynamics*, 67(7), pp 839-855
- S.T. Hosseini, V. Chegini, M. Sadrinasab, **S.M. Siadatmousavi**, S. Yari, 2016. Tidal asymmetry in a tidal creek with mixed mainly semidiurnal tide, Bushehr Port, Persian Gulf. *Ocean Science Journal*, 51(2), pp 195-208.
- J. Azizpour, **S.M. Siadatmousavi**, V. Chegini, 2016. Measurement of tidal and residual currents in the Strait of Hormuz. *Journal of Estuarine, Coastal and Shelf Science*, 178, pp 101-109.
- H. Noori, **S.M. Siadatmousavi**, B. Mojaradi, 2016. Assessment of sediment yield using RS and GIS at two sub-basins of Dez watershed, Iran, *Journal of International Soil and Water Conservaton Research*, 4 (3): 199-206.
- S.M. Mahmoudof, P. Badiel, **S.M. Siadatmousavi**, V. Chegini, 2016. Observing and estimating of intensive triad interaction occurrence in very shallow water. *Journal of Continental Shelf Research*, 122, pp 68-76.
- P. Akbari, M. Sadrinasab, V. Chegini, **SM. Siadatmousavi**, 2016, Tidal Constituents in the Persian Gulf, Gulf of Oman and Arabian Sea: a Numerical Study, *Indian Journal of Geo-Marine Sciences*, 45(8), pp 1006-1016.
- J. Azizpour, V. Chegini, **SM. Siadatmousavi**, 2017, Seasonal Variation of the Double Diffusion Processes at the Strait of Hormuz, *Acta Oceanologica Sinica*, 36 (1), pp 1-9.
- **Siadatmousavi**, S.M., F. Jose, G. Miot da Silva, 2016, *Sensitivity of a Third Generation Wave Model to Wind and Boundary Condition Sources and model physics: A Case Study from the South Atlantic Ocean off Brazil Coast*, *Journal of Computers & Geosciences*, 90, pp 57-65.
- **Siadatmousavi**, S.M., Jose, F., 2015, *Winter Storm-Induced Hydrodynamics and Morphological Response of a Shallow Transgressive Shoal Complex: Northern Gulf of Mexico*. *Journal of Estuarine, Coastal and Shelf Science*, 154, pp 58-68.
- **Siadatmousavi**, S.M., Jose, F., Chen, Q., Roberts, R.R., 2013, *Comparison between Optical*

*and Acoustical Estimation of Suspended Sediment Concentration: Field Study from a Muddy Coast.* *Journal of Ocean Engineering*, 72, pp 11-24.

- **Siadatmousavi, S.M.**, Allahdadi, M.N., Chen, Q., Jose, F., Roberts, R.R., 2012, *Simulation of Wave Damping during a Cold Front over the Muddy Atchafalaya Shelf*, *Journal of Continental Shelf Research*, 47 (1), pp 165-177.
- G. Miot da Silva, **Siadatmousavi, S.M.**, F. Jose, 2012, *Wave-driven sediment transport and beach/dune dynamics in a headland bay beach*, *Journal of Marine Geology*, 323, pp 29-46.
- **Siadatmousavi, S.M.**, Jose, F., Stone, G.W., 2012. *On the Importance of High Frequency Tail in Third Generation Wave Models.* *Journal of Coastal Engineering*, 60 (1), pp 248-360.
- **Siadatmousavi, S.M.**, Jose, F., Stone, G.W., 2011. *The Effects of Bed Friction on Wave Simulation: Implementation of an Unstructured Third-Generation Wave Model, SWAN*, *Journal of Coastal Research*, 27 (1), pp 140-152.
- **Siadatmousavi, S.M.**, Jose, F., Stone, G.W., 2011. *Evaluation of two WAM White Capping Parameterizations Using Parallel Unstructured SWAN with Application to the Northern Gulf of Mexico, U.S.A.*, *Journal of Applied Ocean Research*, 33 (1), pp 23-30.
- M. Khosravi, **S.M. Siadatmousavi**, V. Chegini, R. Vennell, 2018. Across-channel distribution of the mean and tidal flows in the Khuran Channel, Persian Gulf, Iran. *International Journal of Maritime Technology* 10, 1-6
- S. Memari, **S.M. Siadatmousavi**, 2018. Numerical Modeling of Heat and Brine Discharge Near Qeshm Desalination Plant. *International Journal of Coastal and Offshore Engineering*, 1(4), 27-35.
- S.M. Mahmoudof, P. Badieli, **S.M. Siadatmousavi**, V. Chegini, 2018. Spectral Wave Modeling in Very Shallow Water at Southern Coast of Caspian Sea. *Journal of Marine Science and Application*, 17(1), pp.140-151.
- M. Hajjarab Derkani, **S.M. Siadatmousavi**, S.M. Mahmoudof, 2017. Sandbar Migration Due to Cross-Shore Sediment Transport; A Case Study of Noshahr Coasts, Iran, *International Journal of Maritime Technology*. Vol 7, pp 29-37.
- M.R., Abbasi, V., Chegini, M., Sadrasab, **S.M., Siadatmousavi**, 2017. Capabilities of data assimilation in correcting sea surface temperature in the Persian Gulf, *Pollution*, 3(2): 273-283.
- S.T. Hosseini, V. Chegini, M. Sadrasab, **S.M. Siadatmousavi**, S. Yari, 2016. Residence Times in a Hypersaline Creek: Using Salinity as a Tracer, *International Journal of Maritime Technology*, 6 (summer): 11-18.
- M. Rahnama, **S.M. Siadatmousavi**, S.A. Chavoshian, 2016. Optimal high frequency cut-off in SWAN wave model, *Journal of Persian Gulf*, 6 (20): 51-64.
- Badieli, P., **Siadatmousavi, S.M.**, 2010. *The Third Generation Spectral Wave Model, WAVEWATCH-III, Enhanced for Use in Nearshore Regions*, *Journal of Iranian Civil and Surveying Engineering*, 44 (2):289-302.

## Referred Conference Papers

- **Siadatmousavi, S.M.**, Jose, F., Stone, G.W., 2009. *Simulating Hurricane Gustav and Ike Wave Fields along the Louisiana Innershelf: Implementation of an Unstructured Third-generation Wave Model, SWAN*, October 2009, Biloxi, MS.
- Stone, G.W., Jose, F., Luo, Y., **Siadatmousavi, S.M.**, Holland, T., 2009. *A WAVCIS-based Ocean Observing Station to Provide Hydrodynamic Data off Eglin Air Force Base, Fort Walton, Florida, USA*, October 2009, Biloxi, MS.
- Jose, F., Stone, G.W., Kobashi, D., **Siadatmousavi, S.M.** and Liu, B., 2009. *Hydrodynamic Response of a Transgressive Shoal to the Proposed Mining for Restoring Adjacent Beaches and Barrier Islands: Sabine Bank, off Louisiana-Texas Coast, United States*, eProceedings, Coastal Dynamics 2009, September 2009, Tokyo, Japan, World Scientific.
- **Siadatmousavi, S.M.**, Badieli, P., 2006. *Verification of WAVEWATCH-III*,

*SWAN and MIKE21-SW and Parametric Models in Caspian Sea*, International Conference on Coasts, Ports and Marine Structures, October 2006, Tehran, Iran. (in Farsi)

- **Siadatmousavi, S.M.**, Badiei, P., 2006. *Comparison of the Results of Mathematical Wind-generated Wave Models, SWAN and MIKE21-SW at Chabahar Bay*, 7<sup>th</sup> International Conference of Civil Engineering, Tarbiat Modatres University, May 2006, Tehran, Iran. (in Farsi)
- **Siadatmousavi, S.M.**, Badiei, P., 2005. *Comparison of the Results of WAVEWATCH-III Wave Prediction Mathematical Model with Parametric Model at Deep Waters*, 5<sup>th</sup> Hydraulic Conference of Iran, Shahid Bahonar University, October 2005, Kerman, Iran. (in Farsi)
- Khosravi, Siadatmousavi, Chegini, Vennell, 2017. Observation of across-channel flow in the Khuran Channel, Persian Gulf, Iran. First International Conference on Oceanography for West Asia, 30-31 Oct 2017, Tehran, Iran
- Beiramzadeh, Siadatmousavi, 2016. Implementation of viscoelastic mud-induced wave dissipation in SWAN. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.
- Moazzami, Siadatmousavi, 2016. Optimization of the weight matrix in data assimilation for wave data in Persian Gulf using WAVEWATCH-III model. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.
- Hajiarabderkani, Siadatmousavi, Mahmoudov, 2016. Numerical modelling of wave-driven currents in shallow water; a case study from Noshahr coasts. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.
- Hamze-Ziabari, Yeganeh-Bakhtiary, Siadatmousavi, 2016. Analytical solution for groundwater head in unconfined coastal aquifer using variational iteration method. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.
- Hamze-Ziabari, Yeganeh-Bakhtiary, Siadatmousavi, 2016. Analytical solution for groundwater head in unconfined coastal aquifer using variational iteration method. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.
- Arefi, Siadatmousavi, Hajmomeni, Khalili, KourosNia, 2016. Coastal erosion potential at Hormozgan province through satellite image analysis. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.
- Raghebi, Allahyar, Sadeghian, Siadatmousavi, Haghghat, 2016. Hormozgan province beach and shoreface morphodynamic classification. International Conference on Coasts, Ports and Marine Structures, 31 Oct. - 2 Nov 2016, Tehran, Iran.

## Posters

- **Siadatmousavi, S.M.**, Jose, F., Stone, G.W., 2010. *Evaluation of Two Parameterizations of WAM in the Gulf of Mexico Using Parallel Unstructured SWAN with Implications for Coastal Louisiana*, State of the coast, June 8-10, Baton Rouge, LA.
- Stone G.W., Luo, Y., Gibson, W.J., Chen, Y., **Siadatmousavi, S.M.**, Liu, B., Spaziani, A.L., Allahdadi, M.N., Jose, F., 2010. *WAVCIS: an Ocean*

*Observing Network for Supporting Coastal Restoration Efforts of Louisiana, USA, State of the coast, June 8-10, Baton Rouge, LA.*

### **Honors & Awards**

- Dissertation Year Award (Fall 2011)
- Second rank among M.Sc. student of Marine Structures, University of Tehran, Tehran, Iran, (June 2006)
- Top ranked B.Sc. student of Civil Engineering among 90 Students, Isfahan University of Technology, Isfahan, Iran, (July 2003)
- Certificate of Web base Collaboration (<http://www.hydro-web.org>), (Summer 2003)
- Ranked 16<sup>th</sup> among 350,000 participants in the National University Entrance Examination for B.Sc. degree, (July 1999)

### **Referred Technical Reports**

- Stone, G.W., Kobashi, D., Jose, F., Liu, B., **Siadatmousavi, S.M.**, Spaziani, A., 2010, *Wave Bottom Interactions and Bottom Boundary Layer Dynamics in Evaluating Sand Mining at Sabine Bank for Coastal Restoration; Southwest Louisiana*. Scientific report submitted to BOEMRE (formerly MMS), 147 pages.
- Stone, G.W., Jose, F., Luo, Y., **Siadatmousavi, S.M.**, Gibson, J.W., 2009, *A WAVCIS-based Ocean Observing Station off Eglin Air Force Base, Fort Walton, Florida*. Scientific report submitted to Naval Research Laboratory, Stennis Space Center, MS. 46 pages.
- Stone, G.W., Condrey R.E., Fleeger, J.W., Khalil, S.M., Kobashi D., Jose, F., Evers, E., Dubois, S., Liu, B., Arndt, S. Gelpi, C., Grippo, M., Luo, Y., **Siadatmousavi, S.M.**, Chen, Y., Alavillamo, M., and Reynal, F., 2009. *Environmental Investigation of the Long-term Use of Ship Shoal Sand Resources for Large Scale Beach and Coastal Restoration in Louisiana*. Scientific report submitted to BOEMRE, LA, 278 pages.