# Sahar Soltani

Ph.D. Student at the University of Windsor Thesis Topic: Modeling sediment transport pathways around Point Pelee Foreland MSc. in Civil-Hydraulic (Coastal) Engineering

Phone: 437-972-8039

Email: soltani2@uwindsor.ca

## RESEARCH INTERESTS

- o Sediment Dynamics in Estuaries and Coastal Areas
- o Environmental Monitoring
- Constituent Sediment Analysis and Sedimentology
- o Coastal Hydrodynamics
- o Coastal Geomorphology
- o Field Measurements
- o Coastal Disaster

#### EDUCATION

Master of Science, Civil - Water and Hydraulic Structures Engineering,
 K. N. Toosi University of Technology, Tehran, IRAN
 Thesis Topic: Analysis and Mapping of Oolitic Sediments in the Persian Gulf

o Bachelors of Science, Civil Engineering, Power and Water University of Technology, Tehran, IRAN 2013

## CORE COURSES

- o Hydrodynamics (MSc.)
- o Advanced Hydraulics (MSc.)
- o Sedimentation & Erosion Engineering (MSc.)
- o Embankment (Earth) Dams (MSc.)
- o Advanced Eng. Hydrology (MSc.)
- o Numerical Model in Water Eng. (MSc.)
- o Hydraulic Design of Structures (MSc.)
- o River Eng. (MSc.)

#### RESEARCH EXPERIENCE

- Morpho-Dynamics Modeling of Astara Port Coastline, the Caspian Sea, Institute of Geophysics, University of Tehran; 2019 – Present.
- O Developing a forecasting system for winds, waves, and currents in the Persian Gulf, Institute of Geophysics, University of Tehran; 2018 2019.

- o Site Selection of Cage Culture Farms in the Persian Gulf, based on Environmental Considerations, Institute of Geophysics, University of Tehran; 2017 2018.
- o Sediment Constituents in the Iranian Waters of The Persian Gulf, The Oman Sea and The Caspian Sea, Institute of Geophysics, University of Tehran; 2017

#### Work Experience

- o Visiting Scholar,
  - Met-Ocean and Environmental Monitoring Studies Institute of Geophysics, University of Tehran; 2016-Present
- Project Expert,
  Ray Aab Consulting Engineers; 2017-Present

#### PUBLICATIONS

## a) Refereed Journal Publications:

o <u>Soltani, Sahar</u>, Haghshenas, S. A., (2019): Characteristics of Oolitic Banks in the North-Western Persian Gulf. Submitted to Marine Geology (under review).

#### b) Conference Presentations:

- O Soltani, Sahar, Haghshenas, S. A., Soltanpour, M., (2018): An investigation on the Formation of Oolitic Banks in the North-Western Persian Gulf, 15<sup>th</sup> International Coastal Symposium, May, 2018, Busan, South Korea.
- O Soltani Sahar, Soltanpour M., Haghshenas S. A. (2016): Finger prints of hydrodynamic conditions of the North-Western Persian Gulf in the oolitic banks case study of Bushehr Bay, 12th International Conference on Coasts, Ports & Marine Structures, ICOPMAS, Tehran, Iran, CD, pp. 155-15

### TEACHING EXPERIENCE \_\_\_\_\_

- o Teaching Assistant, The theory of Waves and Tides, Institute of Geophysics, University of Tehran; 2017-Present
- o Iranian Coastal & Marine Structural Engineering Association (ICOMSEA)

## HIGHLIGHT OF RESEARCH EXPERIENCE

- o Sediment Constituent Analysis in the following coastal areas:
  - General assessments of sediment sources along the northern Persian Gulf coastlines
  - Iranian Coastlines of The Caspian Sea
- o Coastal dynamics and modeling
- o Waves and currents forecasting for the Persian Gulf
- o Feasibility study for developing an environmentally sustainable integrated multi-trophic mariculture system (IMTM)
- o Shoreline Changes Evaluation over Iranian Coastlines of the Persian Gulf

## SOFTWARE SKILLS

- o Delft-3D
- o Fortran Programming
- o Arc GIS
- o DHI-Mike 21
- o Flow 3D
- o Water Gems
- o Civil 3D
- o Sketch Up
- o Auto Cad