

Postdoctoral Fellow (Ocean Modeller)

We are seeking an outstanding scientist who can apply well-developed skills in physical oceanography and numerical modeling to address issues in coastal and shelf-scale oceanography related to system connectivity, productivity and spatial-temporal dynamics. The successful candidate will be based at Masdar Institute Campus, Abu Dhabi (UAE), part of Khalifa University of Science and Technology. The role of this position will be to define and initiate research into shelf-ocean interactions and coastal and shelf processes in Arabian Seas and Gulfs, especially the Arabian Gulf and the Gulf of Oman. The successful candidate will focus on improving the understanding of ocean circulation and the transport and fate of waterborne materials, and will also work closely with ocean color scientists in our group to observe and forecast adverse events in the marine environment, such as red tide, oil spills, and interpret the underlying mechanisms. The duties and responsibilities associated with this position include, but are not limited to the following:

- Carrying out numerical modelling (both weather and hydrodynamic).
- Studying the properties of currents, waves, tides and ocean circulation, plus the temperature, density and salt content of oceans
- Performing simulations of ocean phenomena using computer or mathematical models
- Implementation of hydrodynamic models in real-time operational platforms
- Validating modelling software products in the Arabian Seas.
- Running hydrodynamic modeling software such as such as ROMS, MITgcm, HYCOM on a Linux platform
- Writing technical MATLAB and Python scripts.

Required Qualifications

- PhD/Masters in physical oceanography or a related discipline preferably with some postdoctoral experience.

Required Experience

- Strong scientific background and practical experience in physical oceanography and numerical modeling.
- Experience in analyzing large observation datasets and model outputs to interpret oceanographic processes.
- Strong programming skills in Matlab, IDL, Python C/C++, or FORTRAN.
- Practical experience in running software on a Linux platform.
- Detailed knowledge of one or more modelling software products such as ROMS, MITgcm or HYCOM.
- Demonstrated ability to publish research findings in peer reviewed journals.
- Excellent skills in scientific writing/publishing, presentation, and communication in English.

Please note that all candidates should possess good English language skills and should be capable of working with people of different national and cultural backgrounds. The compensation package for this position is very competitive with annual tax-exempt net salary commensurate with experience and education. Additional benefits include: one-time moving allowance, free comprehensive medical coverage and other components.

The application package should include:

- A cover letter summarizing experience and motivation for this position
- Comprehensive Curriculum Vitae
- Sample of relevant developed applications/products
- A list of 2-3 potential referees

Please contact: maryamr.alshehhi@ku.ac.ae