

## **Postdoctoral research associate in Hydrodynamic Modeling or observation and data analysis of coastal zone**

### ***What You Will Do***

Miaohua Mao's numerical modeling team seeks applicants with expertise in the numerical modeling or observation and data analysis of the coastal, estuarine, and lake hydrodynamics. The successful candidate will work on the parameterizations and physical explanations of plume dynamics, wave dynamics, storm surge, circulation, and sediment transport dynamics or further setting up and developing the observational system in the coastal zone such as the Bohai Sea, China. Outcomes from this work will be presented at the national and international conferences and published in the peer-reviewed journals.

### ***What You Need***

*Desired Skills:* The successful candidates should have experience in the ocean modeling, fluid dynamics, or coastal observation and data analysis. The candidate will also need the skill in the data analysis and/or visualization (e.g., Matlab), and be familiar with the Linux system, Fortran and C++ codes. The experience in the model calibration and validation against observational data is preferred. The ability to work in a highly cooperative team is also a requirement. **The experience of the publications in the peer-reviewed journals is highly encouraged**, such as those ranking at least Quartile 3 based on the Chinese Academy of Sciences journal ranking system.

*Education:* A Ph.D. degree in the marine/ocean science, physical oceanography, fluid dynamics, geophysics, mathematics, earth science, or related fields.

### ***Where You Will Work***

Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences is located at the beautiful coastal city of Yantai, Shandong Province, China. The successful candidate will be provided an office together with other researchers at Yantai, while he/she could visit the University of Maryland Eastern Shore numerical modeling group in Maryland, USA. The numerical simulations will be conducted via the remotely connected supercomputer system. The postdoc position is 2 years.

### ***Application Procedure***

Before a formal application, the applicants are encouraged to send a brief description of your research interest/area and an updated CV to Miaohua Mao (<http://ir.yic.ac.cn/profile/mhmao>) at [mhmao@yic.ac.cn](mailto:mhmao@yic.ac.cn) ASAP.

**Location:** Yantai, China.

**Organization Name:** Yantai Institute of Coastal Zone Research (YIC), Chinese Academy of Sciences (CAS).

**Job Title:** Hydrodynamic modeling or observation and data analysis postdoc

**Appointment Type:** Postdoc.

**Salary:** Up to 45 k U.S. dollars/year (~300 k RMB) plus benefit + free accommodation in the faculty building of the Institution.

**Introduction of the current group:** Dr. Miaohua Mao got his BS in Zhejiang University, and achieved PhD degree at University of Maryland Eastern Shore in 2018. Dr. Mao works at Yantai Institute of Coastal Zone Research (YIC), Chinese Academy of Sciences (CAS) as an Associate Research Scientist since 2019. His research interests include but are not limited to nearshore hydrodynamics, numerical modeling and observation of wave-current interaction. Dr. Mao lead 3 publications in the prestigious journals including *JGR: Oceans* and *Ocean Modelling* and presented nearly 20 times at the international academic conferences. Dr. Mao is a reviewer of peer-reviewed journals such as *Progress in Oceanography*, *Estuarine, Coastal and Shelf Science (ECSS)*, *Ocean Dynamics*, and award as the outstanding contribution in reviewing ECSS of year 2018.

**The numerical modelling team** is an international team, which includes the full time Associate Research Scientist, Visiting Professor from US, Visiting Scholar from Shenzhen University (Assistant Professor), full time Assistant Research Scientist from India. This team has recruited fresh graduate students from Vietnam National University (CAS full scholarship) and two domestic graduate students (one ranks 1<sup>st</sup> in the graduate admission test and one from the Ocean University of China). The disciplines of the team members involve atmospheric science, physical oceanography and hydrology, and their research interests focus on the observational data analysis and numerical modelling. This is a vigorous team with the guidance and help from the experienced US Visiting Professor, we hope excellent postdoc to join this group.