

# Postdoctoral Scholar Opportunity

## Introduction

Uwe Send's Ocean Time-Series Group at Scripps Institution of Oceanography collects mooring-based observational data of the ocean. Their primary interest is physical oceanography (e.g., ocean circulation), with an additional focus on interdisciplinary studies that collect biogeochemical/ecosystem data and examine topics like ocean acidification and bio-physical interactions. The group typically has a portfolio of 5-10 funded projects which, in their entirety, range from the nearshore to basin-scale and span all three major oceans. In the near future, the group expects to hire a postdoctoral scholar who will actively participate in the projects and produce scientific results from the data collected. The group's observational research topics include:

- Large-scale ocean circulation, such as the Atlantic meridional overturning circulation and studies of the Loop Current in the Gulf of Mexico
- Boundary currents and circulation through straits at multiple additional sites, incl. off the western US, around Sri Lanka, and through Yucatan Channel
- Technology development for long-term time series observations with oceanographic moorings, including hardware, software, real-time data connectivity, and data management aspects
- Regional circulation in the California Current system and coastal circulation off California, including phenomena of upwelling and marine heat waves
- Ocean acidification and hypoxia
- Variability of nutrient and plankton concentrations and interpretation of the signals w.r.t. circulation and biogeochemical or ecosystem processes

## Minimum Requirements

To be considered for this job opportunity, a candidate should:

- have a doctoral degree at the time when this appointment begins, either in the discipline of physical oceanography or a related discipline;
- not have previous appointments as postdoctoral scholar of a cumulative duration in excess of five years;
- be willing and able to participate in field work on oceanographic research vessels up to several times per year;
- be willing and able to travel occasionally to scientific conferences and similar meetings;
- be fluent in the English language, both spoken and written, to a level appropriate for discussion and publication of scientific results;
- have computer software and analysis skills commensurate with independent research in the field of oceanography;
- have a demonstrated scientific interest in topics that broadly overlap with the group's interests;
- not be barred from obtaining necessary permits or visas to work in the US, as appropriate for the candidate's citizenship status;
- be willing to relocate to the San Diego region and work on site.

## Preferred Qualifications

Possession of the following qualifications will be evaluated favorably:

- Scientific publications authored by the candidate about a topic that overlaps with the group's research areas
- Prior experience with deploying oceanographic equipment from research vessels, especially those that clearly relate to the group's instrumentation (oceanographic moorings, sensors for seawater temperature, salinity, currents, oxygen and nutrient concentrations, pH, phytoplankton)
- Advanced knowledge of relevant software, such as MatLab or Python, as well as familiarity with use of the Linux operating system
- Demonstrated experience with processing of observational oceanographic data from a "raw" status into a final product that has undergone calibration, validation, and quality control procedures, and familiarity with NetCDF data formats as well as common metadata standards
- Experience with linear inverse models in an oceanographic context, such as those that relate (sparse or otherwise limited) observations of ocean properties to those that describe the underlying dynamics

## Further Information

For additional information, incl. when and how to apply, please contact:

Uwe Send ([usend@ucsd.edu](mailto:usend@ucsd.edu)) or Matthias Lankhorst ([mlankhorst@ucsd.edu](mailto:mlankhorst@ucsd.edu))

Scripps Institution of Oceanography

9500 Gilman Drive

La Jolla, CA 92093-0230

USA

UC San Diego is an Equal Opportunity/Affirmative Action Employer.