

# who studies every different aspect of the ocean.

# What is Oceanography?



Oceanography is the study of the ocean and all its complex relationships with the planet. It covers a wide range of topics, including marine life and ecosystems, ocean currents, the study of weather and all the chemical and physical properties of the ocean.

# What does an oceanographer do?

Oceanographers are busy answering questions about the processes of the ocean. Many discoveries made in the field of oceanography are the product of multidisciplinary involving an oceanographer from all the branches of the science.

### Chemical oceanographers

They study the composition of the ocean water including analysis of sea water components, the effects of pollutants, and the impacts of chemical processes on marine organisms.



### \*\*\* Physical oceanographers

They study the physical conditions and physical processes within the ocean such as waves. currents, tides or eddies. They also examine the coastal erosion and the tansport of sand. Physical oceanographers have an interest in how the ocean interacts with the land and atmostphere to influence weather patterns. They often use remote sensing techniques like satellites or underwater robots.



#### Biological oceanographers

Marine biologists and biological oceanographers study the marine ecosystems. The are interested in marine organisms and their environment, To accomplish their work, they may use field observations and perform different experiments, collect data or track the animals.

A newest area is marine molecular biology, that is focused on recovering resources for biotechnology.



### Geological oceanographers

They explore the ocean floor and the formation of beaches, They also examine volcanic processes or sea level rise and earthquakes.



### Where does an oceanographer work?

The primary task of an oceanographer is research. Oceanographers spend lots of time running experiments, collecting data, reading many studies and writing about their results and sharing their findings with the people.

Lots of this work is done in a laboratory, but they can work in a variety of different settings, Oceanographers must spend time o in a research vessels or in a submersible in order to collect data.

Others are under the water or studiying the areas from the shoreline. Many of the oceanographers work at institutions where they are teaching about the ocean, Other scienctist work in legislative offices, coastal zone magement or private industries like energy companies.

# What ocean scientist can do to save our ocean?

Healthy oceans are crucially important to maintaining a healthy planet. Oceanographers are some of the most important climate researchers in the fight to mitigate the effects of climate change, marine pollution or overfishing.

- Use predictive computer models to describe various oceanic factors may respond to climate change
- Promote a interdisciplinary research and ensure data and information are made available freely and openly as essential element of ocean research and management
- Document and educate citizens on the importance of a healthy marine environment for economic vitality, and human welfare.

# How to become an oceanographer?

If you are a curious person that has a sense of adventure and if you like exploring, you might want to be an oceanographer.

At the high school, take as many science and maths classes as possible.



Obtain a bachelor's degree in oceanography, physics, biology, geology or similar fields.

There are opportunities to work in a range of support positions like a research assistant, technician or computer specialist.

You can also obtain your PhD at Spanish National Research Council (CSIC) and find job opportunities like a scientist.

SOCIB is a coastal and observing and forecasting system that is contributing to the needs of marine and coastal research in the context of global change.