

THE WORLD OF OCEANOGRAPHERS

Oceanography is the scientific study of everything in our oceans, from the animals and plants that live there to underwater volcanoes, with the aim of keeping our oceans healthy. Oceanographers help to raise awareness and advise governments about the health of our oceans.

Oceanographers
(oh-shun-NOG-ruh-furs)



*Oceanographers' tools usually include **GPS** for navigation, **satellite communication systems** for staying in touch with the research team, and sampling equipment such as **water samplers** and **nets** for safely collecting marine specimens. They also use **underwater cameras** to take pictures of new discoveries.*

WHAT DO OCEANOGRAPHERS DO?

An oceanographer's work is really interesting because there is always a chance of making new discoveries.

FIELDWORK

Planning research trips is a complex task that requires a team of experts to manage all the details. While in the field, oceanographers collect samples, often using advanced equipment, such as marine robots and underwater vehicles. As well as gathering samples, they capture underwater videos and photographs to help with their research. Many oceanographers are required to scuba dive – it's certainly helpful if they don't suffer from sea sickness!



LAB WORK

Today, oceanographers use advanced equipment to study samples and conduct tests under controlled laboratory conditions. Sophisticated computer programs then interpret the data, providing insights into the health of our oceans and helping scientists make predictions about future changes. Staying up to date with research developments around the world is important, as is sharing findings with the scientific community. Oceanographers are often invited to deliver lectures and participate in interviews to discuss their work, and writing research papers is a big part of their role.

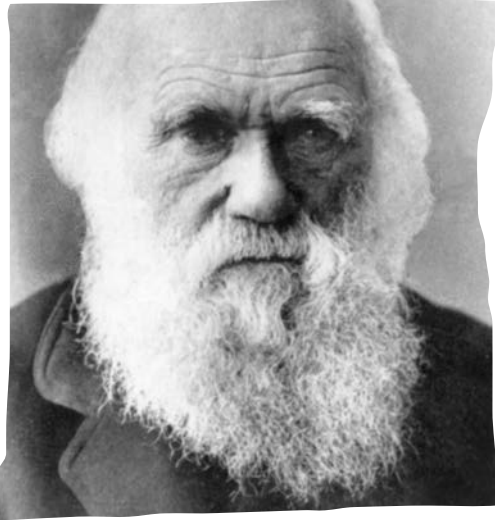


WHO DO OCEANOGRAPHERS WORK FOR?

Most oceanographers will join research projects; some can be long-term projects, lasting many years. These projects are usually funded by governments or agencies involved in conservation projects.

FAMOUS DISCOVERIES

Oceanographers have made so many amazing discoveries that have changed our understanding of the ocean and everything living within it. Here's just a few of the biggest and best!

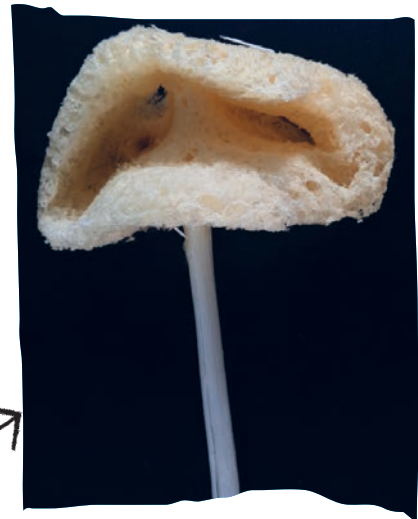


CHARLES DARWIN

Charles Darwin was a famous scientist who sailed on a ship called HMS Beagle from 1831 to 1836. During his journey, he collected and studied many different sea creatures. His work was important to understanding ocean life, and his specimens are still kept in the British Museum in the UK today.

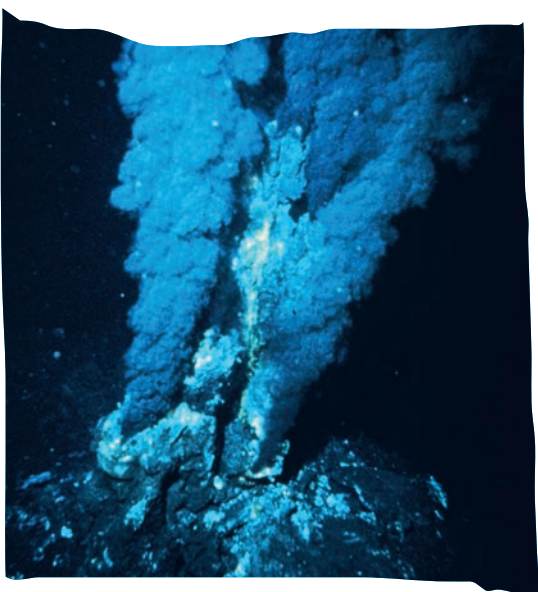
ADVHENA

The E.T. sponge, also known as the Advhena, was named after the movie *E.T. The Extra-Terrestrial* because it looks like an alien! Scientists collected a sample of this delicate sponge in 2016, using a robot called 'Deep Discovery'. The E.T. sponge was found in the Pacific Ocean where many other amazing creatures live.



HYPOTHERMAL VENTS

Robert D. Ballard, an American deep-sea explorer, is famous for his underwater discoveries. He found special underwater openings called hypothermal vents, where super-hot water flows up from deep inside the Earth. These vents were discovered in a place called the Mid-Ocean Ridge, and are very important to scientists studying the ocean floor.



Oceanographers are making discoveries all the time; who knows what they might discover next!

FAMOUS OCEANOGRAPHERS

There have been so many clever oceanographers over the years. Here's just a few of the most famous.



RACHAEL CARSON

Rachael Carson made a huge impact on marine conservation with her work to protect ocean health. While working for the U.S. Bureau of Fisheries, she gained a deep understanding of the threats facing ocean life. Her research raised awareness of the dangers of specific artificial chemicals, which were banned in 1972 thanks to her work.



RUTH GATES

Born in 1962 in Cyprus, Ruth Gates dedicated her life to protecting coral reefs and understanding marine ecosystems. She became the first woman president of the International Society of Reef Studies, a major achievement in marine science. In her later years, she led the Hawai'i Institute of Marine Biology, where her work continues to inspire marine conservationists.



JACQUES COUSTEAU

Jacques Cousteau, a French naval officer, became a renowned filmmaker, oceanographer, and author. He co-invented the first successful underwater breathing device, making deep-sea exploration possible. This invention allowed him to film some of the earliest underwater documentaries, beginning in 1956, for black-and-white television audiences.



These are just a few of the many oceanographers who have made a huge difference to the science.