Mediterranean Sea Research Center of Israel (MERCI)

About the Center - Leading research on the Mediterranean in Israel

Unprecedented development in the Mediterranean Sea off the coast of Israel, especially the development of gas reservoirs and related infrastructure, presents the State of Israel with both major challenges and enormous potential. Rational and sustainable development and leveraging of technological and scientific opportunities require highly developed infrastructures for monitoring and conducting marine research, alongside educating a workforce with the appropriate expertise and skills. The Mediterranean Sea Research Center of Israel (MERCI) is an association of seven research universities, two colleges and two government research institutes led by the University of Haifa:

1. University of Haifa
2. Technion - Israel Institute of Technology
3. The Hebrew University of Jerusalem
4. Ben-Gurion University of the Negev
5. Bar-Ilan University
6. Tel Aviv University
7. Weizmann Institute of Science
8. Ruppin Academic Center
9. Interdisciplinary Center Herzliya
10. Israel Oceanographic and Limnological Research (IOLR)
11. Geological Survey of Israel
12. The Open University of Israel

The center’s goal is to pool resources at the national level in order to address the variety of scientific, technological, economic, security, and environmental challenges and opportunities presented in the Mediterranean.

The center’s activities focus on:

* Establishing and improving the advanced and innovative research infrastructures necessary in order to conduct marine research
* Promoting scientific expertise and national databases in the field of marine sciences
* Ensuring the sustainable development of the State of Israel’s natural resources in the eastern basin of the Mediterranean Sea
* Leveraging local opportunities for leadership in international marine sciences and technology development

**Mediterranean Sea Research Center of Israel is leading the State of Israel towards a better future through research and collaborations.**

Vision of the center

The accelerated development in the waters within the Exclusive Economic Zone of the State of Israel has increased the importance of addressing the needs of academic and research communities in Israel who are engaged in the study of the Mediterranean. The activities currently taking place in this field present many opportunities for the future of the State of Israel. They also pose unprecedented challenges that require, first and foremost, the development of local expertise equipped to deal with the wide range of scientific, economic, social, environmental, and security implications of marine development.

MERCI was established in 2012. The organization is led by the University of Haifa and unites all the research universities in Israel, one college, and two national research institutes. The center received initial funding from the Planning and Budgeting Committee (PBC) for to be used towards infrastructure establishment. This budget was primarily invested in establishing the necessary infrastructure for advanced scientific research of the Mediterranean. The scientific community needs additional resources to enable ongoing and long-term research.

Its main needs are:

* Creating a long-term budget dedicated to research expeditions;
* Providing scholarships for all degrees in the field of marine science;
* Purchase of advanced technological equipment needed for the study of the deep sea, the continental shelf, and coastal waters (especially important given the major development taking place in them);
* Recruiting skilled engineering and technical teams with experience in operating the marine equipment and overseeing its funding.

A professional and skilled workforce is at the heart of research capabilities. Additionally, a dedicated budget is necessary for routine maintenance and operation of the equipment, which includes insurance coverage of the devices at sea, satellite communications, and dedicated laboratories. Unfortunately, unlike many other countries, the State of Israel does not allocate adequate resources to address the challenges and opportunities in this important area, especially regarding the training needed to create a scientific and technological workforce infrastructure in Israel. Dong so would be strategically beneficial for the future of the State of Israel.

**Leading the study of the Mediterranean in Israel**

Words from MERCI’s founder:

The growing impact of global changes, combined with the growing demand for developing marine resources, is increasing pressure on marine and coastal environments. These raise the need to develop proactive responses at the regional and global levels, based on a deep interdisciplinary understanding of the marine environment. This mission requires a new generation of experts with a broad view of the marine sciences.

The Mediterranean is a unique ecosystem. It represents a natural laboratory of important global processes, especially those related to global climate change and environmental changes that are difficult to study elsewhere. The Mediterranean Sea Research Center of Israel (MERCI) headed by the University of Haifa, is a unique initiative operating on a global scale, which implements an interdisciplinary approach at a high professional level. MERCI consists of seven universities, two government research institutes and one college. Each institution specializes in a coherent set of disciplines. Together, they cover a wide range of issues essential to understanding complex marine systems. The establishment of MERCI fills a large gap, enabling significant scientific progress in many areas of the marine sciences.

 MERCI concentrates on research of the Mediterranean, which is particularly diverse. In the relatively small Mediterranean Sea, complex tectonic processes take place which, among other consequences, can cause devastating earthquakes and tsunamis. The Mediterranean contains natural resources awaiting discovery and exploitation. It encompasses a combination of oceanographic processes and biogenic habitats that are highly sensitive to global changes. This region has been the meeting point of maritime cultures throughout human history. It is a center of life for some 200 million people and a center of attention for the whole world. The combination of accessibility to the Mediterranean, an enthusiastic and innovative scientific team, and state-of-the-art technology has enabled MERCI to become an advanced research and educational facility.

MERCI leads interdisciplinary and inter-institutional projects that foster collaborations between researchers from a wide range of scientific fields. The center also supports the training of a new generation of scientists and gives them the tools they need to meet these important challenges.

The most important discoveries are still ahead of us.

Prof. Zvi Ben-Avraham, Founder of the Mediterranean Sea Research Center of Israel