Ph.D. student (m/f/d) – seafloor fluxes and Anthropocene record of the southeast Mediterranean Sea

Background

Global warming, acidification and other anthropogenic stressors are changing the fundamental behavior of our oceans in ways we are still struggling to understand. The eastern Mediterranean Sea experienced anthropogenic pressure for longer than most marine regions, and is one of the fastest changing marine regions on Earth. These make the eastern Mediterranean an ideal natural lab to unravel the effects of future warming, acidification, overfishing and pollution on the subtropical oceans. To unravel these changes, we need to characterize the present system. We then need to compare it with high resolution records of the recent past, and understandings of the processes that created and preserved these systems.

The East Mediterranean Sea - Future Ocean Research project (EMS FORE) is a new international collaboration between GEOMAR Helmholtz Centre for Ocean Research Kiel and Charney School of Marine Sciences (CSMS) at the University of Haifa. EMS FORE aims to build a framework for understanding the future oceans under anthropogenic stress, using the recent and modern southeast Mediterranean Sea as an analog system. In the context of this project, we are looking for a highly motivated and skilled team member, who has a keen interest in geochemistry and paleoclimatology, to join us as a PhD student.

The Ph.D. student will be co-supervised by, and work in collaboration with, researchers of the University of Haifa, Israel Oceanographic and Limnological Research (IOLR) and GEOMAR Helmholtz Centre for Ocean Research Kiel. The position is primarily based in Haifa, Israel, and includes work at sea and in the laboratory and extended visits in Kiel, Germany. Expected start date (partly negotiable) would be October 2021.

Tasks

- Join sea going operation as part of the EMS FORE team.
- Collect, process and analyze marine sediment cores from the southeast Mediterranean Sea.
- Generate pore water and bulk sediment profiles of nutrients and organic matter as well as major and trace elements.
- Generate age models and constraints on bioturbation effects in the upper sediment column.
- Synthesize recent geochemical paleo-oceanographic trends of the southeast Mediterranean Sea.
- Present research output at international conferences.
- Publish results in international peer-reviewed journals.

Requirements

- M.Sc. (or equivalent) in Geosciences, Analytical Chemistry (inorganic), Oceanography or related topics.
- Strong background in geochemistry and/or (paleo-)oceanography.
- Strong data analysis skills.
- We expect excellent English language skills (written and spoken).
- Willingness to spend time in partner-labs.
- The candidate should be willing to participate in sea-going expeditions. Experience with working on research vessels is an advantage
- A strong interest in collaborative research.

Additional skills and knowledge

- Demonstrated relevant laboratory experience (wet-chemistry, mass spectrometry, nutrient analysis, geochemical analyses, or similar) are a strong asset.
- Previous experience in scientific publishing is an advantage.

Further Information

Applications including a cover letter, CV, publications (if applicable) and a writing sample should be sent to obialik@campus.haifa.ac.il. In the cover letter, please provide names and contact information of two referees. Deadline for applications is Jan 14th, 2022. Program to start in October 2022, although earlier and later starts dates are possible.

For further information regarding the position and EMS-FORE please contact Or Bialik (obialik@campus.haifa.ac.il), Zvi Steiner (zsteiner@geomar.de)