

PhD Position at the University of Florida

U-Th Geochronology, Carbonate Geochemistry, and Quaternary Sea-Level Change

A funded PhD position is available in the Department of Geological Sciences at the University of Florida with Dr. Oana Dumitru. The position is associated with an NSF-funded project, *Collaborative Research: Deciphering MIS 5e Sea-Level Changes Using U–Th-Dated Fossil Corals and Cave Deposits from the Yucatán Peninsula*.

The project aims to reconstruct sea-level change during the Last Interglacial (approximately 130,000-115,000 years ago), using fossil corals and cave deposits from the Yucatán Peninsula, Mexico. The broader goal is to improve our understanding of past global and regional sea-level change and of the processes that drive sea-level variability.

I am seeking a motivated student with interests in U-Th geochronology, carbonate geochemistry, sedimentology, Quaternary geology, and/or sea-level change. The student will have opportunities to participate in fieldwork in the Yucatán Peninsula, including the collection of fossil-coral and cave-deposit samples.

Research opportunities

The student will receive training in U-Th geochronology using the Nu Plasma MC-ICP-MS at the University of Florida. Research activities will include:

- U-Th dating of fossil corals and speleothems
- Carbonate geochemistry and evaluation of sample preservation
- Interpretation of geochemical and geochronological datasets
- Reconstruction of Last Interglacial sea-level history
- Field sampling in the Yucatán Peninsula
- Development of independent research projects aligned with the group's broader scientific goals

The student will be encouraged to pursue independent research questions while contributing to an interdisciplinary, collaborative project focused on Quaternary environmental change.

Qualifications

Previous field and laboratory research experience is desirable, particularly experience involving carbonate rocks, sedimentology, geochemistry, geochronology, fossil corals, speleothems, or Quaternary geology. However, applicants with strong backgrounds in related disciplines and a clear interest in developing expertise in U-Th geochronology are strongly encouraged to apply.

Applicants should have strong quantitative, analytical, and scientific writing skills, as well as an interest in interdisciplinary Earth-science research. Enthusiasm for both laboratory-based analytical work and field-based research is especially valued.

How to apply

Interested prospective students should email Dr. Oana Dumitru at odumitru@ufl.edu with:

- A curriculum vitae (CV)
- A brief statement describing research interests
- A summary of relevant field, laboratory, analytical, or research experience

Please use the subject line: “PhD Position:U–Th Geochronology and Sea-Level Research.”