

# Open PhD position in the FWF-funded project "Update for understanding geological time"

University of Vienna, Faculty of Earth Sciences, Geography and Astronomy, Department of Palaeontology

Job vacancy starting: 1<sup>st</sup> of March 2025 | Working hours: 30.00 | Classification CBA: §48 VwGr. B1 Grundstufe (praedoc)

Limited contract until: 28<sup>th</sup> February 2028 (3 years)

As a PhD student, you will join the research team around Theresa Nohl in the FWF-funded project "Update for understanding geological time". The position is limited to 3 years.

### **Project Abstract:**

Rhythmically alternating lithologies have been subject of intense discussion in the terms of their origin. They are often used as a record of astronomically forced climate change, even though it has been shown that diagenesis can enhance or disguise the environmental signal, or even introduce rhythmicity. Importantly, cyclic deposits are used to infer deposition rates and geological time from the rock record. Up to date, an integration of diagenetic and cyclostratigraphic methods is missing with severe implications for the temporal resolution of a broad range of geoscientific analyses. The aims of the project are (1) to scrutinise how diagenesis and post-depositional processes affect the record of original environmental cycles and (2) to evaluate how time is distributed within an astronomically forced lithological cycle. To achieve this, two new methods from diagenesis (based on the geochemistry) and cyclostratigraphy (statistical method) are planned to be applied to selected records from drill cores from the Integrated Ocean Drilling Program (IODP) and its predecessors from different water depths, latitudes and ages with existing interpretations on diagenesis or cyclostratigraphy.

#### Your future tasks:

You actively participate in research and administration in the project and research group, which means:

- Laboratory work on samples (CaCO<sub>3</sub>, XRF), data organisation and data analysis
- Writing of and contributing to publications and conference presentations
- Contributing to administrative tasks
- Participating in the University's doctoral school program VISESS

# Your profile:

• Completed Master's degree or Diploma, in the field of Geosciences or Geology with focus on carbonate sedimentology and/or cyclostratigraphy and/or diagenesis



- Competence in statistics and R.
- Experience in academic writing, academic publications and conference presentations are of advantage.
- Good command of written and spoken English (B2 Level).
- You should be a team player with high social skills.

## It is that easy to apply:

- With your scientific curriculum vitae
- With your letter of intent summarising your qualification and motivation for this project as well as your research interests and future professional plans (max. 2 p.)
- Degree certificates (BSc and MSc)
- Contact details of two references

Please send all documents combined in one pdf-file to Theresa Nohl (theresa.nohl@univie.ac.at)

**Application deadline: 22/11/2024** 

We look forward to new personalities in our team! The University of Vienna has an antidiscriminatory employment policy and attaches great importance to equal opportunities, the <u>advancement of women</u> and <u>diversity</u>. We lay special emphasis on increasing the number of women in senior and in academic positions among the academic and general university staff and therefore expressly encourage qualified women to apply. Given equal qualifications, preference will be given to female candidates.