

2-year postdoc position in abrupt carbon cycle dynamics at the Oregon State University ice core lab

Position:

The Oregon State University ice core laboratory is looking to hire a postdoctoral researcher on an NSF-funded research project to investigate abrupt carbon cycle dynamics (Principal investigators Dr. C. Buizert and Dr. E. Brook).

The project aims to investigate abrupt carbon cycle dynamics during the Dansgaard-Oeschger and Heinrich climate cycles using high-precision CO₂ measurements in ice core samples at unprecedented temporal resolution (decadal), and to investigate its link to abrupt changes in the southern hemisphere westerly winds as seen in multi-proxy reconstructions from Antarctic-wide ice core records.

This is a full-time, 2-year position within the College of Earth, Ocean and Atmospheric Sciences (CEOAS) at Oregon State University. The start date is negotiable, but ideally in the Fall of 2020. The postdoc will work under the mentorship of Christo Buizert, but close collaboration with other members of the ice core lab and wider paleoclimate community at OSU are envisioned.

Responsibilities:

The successful candidate will lead a large measurement campaign of CO₂ concentrations in ice core samples at ultra-high temporal resolution; perform quality control to ensure the integrity of the ice core CO₂ data; investigate the relationship between fast carbon cycle dynamics and shifts in the SH westerlies from Antarctic ice core proxy evidence using for example existing climate model output and/or reanalysis data products; collaborate with scientists at OSU, domestically and internationally; disseminate scientific results in peer-reviewed publications and presentations at scientific meetings; assist in the training of undergraduate and graduate students; actively participate in the operations of the OSU ice core lab and its facilities; and participate in outreach and professional development activities. Polar fieldwork is not envisioned as part of the project, but opportunities may become available during the duration of the position.

Qualifications:

Applicants must have a PhD degree in a relevant area, such as paleoclimate, glaciology, biogeochemistry or Earth sciences at the start of the position; excellent written and verbal communication skills in English; proficiency in numerical data analysis (for example in Matlab or Python), effective problem-solving skills and the ability to formulate and design research independently; be highly motivated; and work well within a team of researchers.

Preference will be given to candidates with strong laboratory skills and experience.

Application:

Applications received by May 1, 2020 will be given full consideration. Applicants must send: (1) a cover letter describing academic experience, qualifications, motivation and interest in the position; (2) a curriculum vitae, including current employment and contact information; (3) undergraduate and graduate transcripts; (4) names, addresses, telephone numbers, and email addresses of three professional references; and (5) reprints/ preprints of representative publications. We strongly

encourage applicants from under-represented groups (including people of color, women, people with disabilities and LGBTQ+ candidates) to apply.

Application materials should be sent to Dr. Christo Buizert at buizertc@oregonstate.edu

For questions regarding this position please contact Dr. Christo Buizert at buizertc@oregonstate.edu

Learn more about the OSU ice core and quaternary geochemistry lab at <http://icecore.ceoas.oregonstate.edu/>