CALIFORNIA INSTITUTE OF TECHNOLOGY

Postdoctoral positions in isotope geo/cosmochemistry and isotope metallomics
Division of Geological and Planetary Sciences

The Isotoparium (www.isotoparium.org) is seeking to hire 1-2 postdoctoral scholars in specific fields related to the lab’s near-term and long-term research interests (below). Applicants should submit by Dec 15th 2023, a cover letter, a CV, and (optional) 3 letters of recommendation.

We are seeking candidates with demonstrated interest in one of the specific research topics below, a strong publication record, skills in complementary areas that extend the lab's expertise, and who will both benefit from and add to the community at Caltech. The postdoctoral researchers will join the isotope geochemistry group of Prof. Tissot, within the GPS Division at Caltech. The group presently comprises 2 postdoctoral researchers and 5 graduate students. The postdoctoral researchers will have access to the cutting-edge facilities of the Isotoparium, which include among other instruments, 1 Thermo Neptune Plus MC-ICPMS and 1 Thermo Neoma MS/MS instrument (equipped with collision cell technology), 1 ESI Femtosecond laser ablation system (257 nm and 1066 nm), as well as a state-of-the-art clean laboratory (Class 100).

1) Isotope geo/cosmochemistry position: The successful candidate(s) will develop novel methods to explore the mass-dependent and independent (nucleosynthetic, radiogenic) isotope signatures in meteorites and their inclusions to place constraints on Solar System and planetary evolution.

2) Isotope metallomics position: The successful candidate(s) will join a core team working on a large-scale project funded by the Heritage Medical Research Institute to explore the medical applicability (diagnosis, prognosis) of using calcium stable isotopes as biomarkers of diseases, including, but not limited to, osteoporosis and kidney diseases.

The candidates are required to have: (i) completed a doctoral degree in relevant fields of Earth and planetary sciences or biology/chemistry, (ii) strong quantitative skills, and (iii) demonstrated effective written and verbal communication skills. Although different backgrounds will be considered, experience in clean laboratory procedures and multi-collector inductively coupled plasma mass spectrometry (MC-ICPMS) techniques is especially desirable. All postdoctoral researchers will assist the PI in the maintenance and operation of the clean lab and instruments (i.e., lab-manager duties). Initial appointment is for 1 year, renewable up to 2 times contingent upon good progress. The salary range is $68,000 - $74,000/year, depending on experience.

A cover letter, a CV and the names of three references should be sent to Prof. François Tissot (tissot@caltech.edu). Review of applications will begin Dec 15th, 2023; applications received after this date may be considered if the position is not filled. The cover letter (< 2 pages) should describe research interests and reasons for applying for the position, including identification of the specific topical area (above), how it relates to the candidate's past and future research plans, as well as what the candidate thinks they would bring to the Isotoparium community at Caltech.

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin, disability status, protected veteran status, or any other characteristic protected by law.