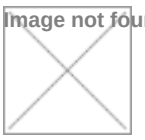
Assistant Project Scientist - Earth & Planetary Science
University of California Berkeley

Job Title	Assistant Project Scientist - Earth & Planetary Science
Department	Earth & Planetary Science
Institution	University of California Berkeley Berkeley, California
Date Posted	Aug. 18, 2025
Application Deadline	09/16/2025
Position Start Date	Available immediately
Job Categories	Research Scientist/Associate
Academic Field(s)	Geology/Geosciences - General
Apply Online Here	https://apptrkr.com/6474794
Apply By Email	

Job Description



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Position overview Position title: Project Scientist
Salary range: The UC academic salary scales set the minimum pay determined by rank and step at appointment. See the following table for the current salary scale for this position: https://www.ucop.edu/academic-personnel-programs/_files/2025-26/represented-july-2025-scales/t37-b.pdf. The current full-time base salary for this position is $76,700-$97,600. "Off-Scale" salaries, which yield compensation that is higher than the published system-wide salary at the designated rank and step, are offered when necessary to meet competitive conditions.

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Percent time: 100%

Anticipated start: September 2025

Position duration: Initial appointment is a one-year term; reappointment is dependent upon performance, programmatic need, and budget.

Application Window
Open date: August 15, 2025

Next review date: Saturday, Aug 30, 2025 at 11:59pm (Pacific Time)
Apply by this date to ensure full consideration by the committee.

Final date: Tuesday, Sep 16, 2025 at 11:59pm (Pacific Time)
Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

Position description

The Global Seismology Research Group resides at UC Berkeley, within the Department of Earth and Planetary Science and the Berkeley Seismological Laboratory. Our research focuses on improving our understanding of the present day structure and internal dynamics of our planet, from the crust to the inner core, using seismic imaging approaches. We tackle the development and application of new methods for the computation of the seismic wavefield in complex 3D media, with a focus on complex structure in the deep mantle, and for tomographic imaging of elastic and anelastic structure using full waveform inversion (FWI), at the global and regional scale. For our applications, we make use HPC supercomputing facilities at NERSC and ACCESS. One of our recent interests is in the development and implementation of "Box Tomography", i.e. how to perform FWI of remote target regions in the deep earth at the short periods relevant to teleseismic observations, while keeping the computational cost manageable.

One of our more exotic research directions concerns the Earth's "hum" and the insights it brings to ocean/atmosphere/solid earth interactions. In order to better understand the chemical and thermal state of the mantle and the processes operating therein, we also seek to apply the latest findings of the mineral physics community within the context of our seismic probing and geodynamic modeling.

We also have an interest in the of study earthquake source mechanisms and scaling laws, as well as global seismic moment release and its relation to plate tectonics. Our research is supported through a

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variety of sources, mostly through grants from NSF.

The incumbent will implement a scalable version of the Distributed Finite Difference Method (DFDM, Masson, 2023; Masson and Virieux, 2024; Masson et al., 2024) for seismic wave propagation in a global 3D elastic and attenuating Earth, for implementation in the new HPC facility "Doudna" at NERSC (National Energy Research Scientific Computing center). They will coordinate with collaborators at NERSC on this project and test and benchmark the new code against the Spectral Element Method, specifically the widely used and optimized SPECFEM3D_Globe code. They will also add features necessary for the application to real case scenarios (moment tensor source, anelastic attenuation) and demonstrate its efficiency and accuracy for deep earth modeling applications.

The candidate will participate in the development of an azimuthally anisotropic shear velocity model of the extended upper mantle transition zone in the southwest Pacific using full waveform inversion and shear wave splitting data. Additionally, the candidate will be expected to attend conferences , participate in developing grant proposals/reports and authoring or co-authoring technical papers.

Union: https://ucnet.universityofcalifornia.edu/resources/employment-policies-contracts/bargaining-units/academic-researchers/contract/

Qualifications
Basic qualifications (required at time of application)
PhD or equivalent international degree

Preferred qualifications
PhD in Geophysics
At least 4 years experience in quantitative seismology beyond the PhD.
Experience with numerical methods for the computation of the seismic wavefield,
Evidence for the successful development of methodologies for the computation of the seismic excitation and propagation of seismic waves in 3D visco-elastic and acoustic media and in particular handling solid-solid and solid-fluid boundaries with topography.
Experience with the use of the spectral element SPECFEM suite of codes
Experience with seismic velocity imaging techniques

Application Requirements

Document requirements

- Curriculum Vitae - Your most recently updated C.V.

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- Research Statement - Please discuss research accomplishments and proposed plans. This can include, for example, your publication record, awards, presentations, inclusive research practices that promote the excellence of your research, and areas for future research.

Reference requirements

- 3 required (contact information only)

Apply link: https://aprecruit.berkeley.edu/JPF05030

Help contact: emartinez24@berkeley.edu

About UC Berkeley

UC Berkeley is committed to diversity, equity, inclusion, and belonging in our public mission of research, teaching, and service, consistent with UC Regents Policy 4400 and University of California Academic Personnel policy (APM 210 1-d). These values are embedded in our Principles of Community , which reflect our passion for critical inquiry, debate, discovery and innovation, and our deep commitment to contributing to a better world. Every member of the UC Berkeley community has a role in sustaining a safe, caring and humane environment in which these values can thrive.

The University of California, Berkeley is an Equal Opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or protected veteran status.

For more information, please refer to the University of California's Affirmative Action and Nondiscrimination in Employment Policy and the University of California's Anti-Discrimination Policy.

In searches when letters of reference are required all letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality prior to submitting their letter.

As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.

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As a condition of employment, the finalist will be required to disclose if they are subject to any **final** administrative or judicial decisions within the last seven years determining that they committed any misconduct.

- "Misconduct" means any violation of the policies or laws governing conduct at the applicant's previous place of employment, including, but not limited to, violations of policies or laws prohibiting sexual harassment, sexual assault, or other forms of harassment or discrimination, as defined by the employer.
- UC Sexual Violence and Sexual Harassment Policy
- UC Anti-Discrimination Policy
- APM - 035: Affirmative Action and Nondiscrimination in Employment

Job location
Berkeley, CA

To apply, visit https://aprecruit.berkeley.edu/JPF05030

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

N/A
University of California Berkeley
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