

Postdoctoral Scholar in Planetary Climate, Atmospheric Chemistry, and/or Exoplanet Biosignatures

We welcome applications for a position as a Postdoctoral Scholar in planetary climate, atmospheric chemistry, and/or exoplanet biosignatures in the Department of Earth & Planetary Sciences at the University of California, Riverside (UCR). The Postdoctoral Scholar will work with Dr. Edward Schwieterman and his graduate students as a member of his Planetary Astrobiology Laboratory (PALs). Dr. Schwieterman's group covers a wide variety of research areas including 1D and 3D modeling of planetary climate, modeling of atmospheric chemistry, spectral modeling of terrestrial exoplanets, studies of Earth as an exoplanet, and development and analysis of potential exoplanet biosignatures and their false positives. The group has access to world-class computational resources through UCR's High Performance Computing Center (HPCC), which would allow the candidate dedicated access to computer nodes capable of running the most advanced 3D Global Circulation Models (GCMs) and large ensembles of 1D climate, photochemical, and spectral models. The group is affiliated with the UCR-based Alternative Earths team funded by the NASA Interdisciplinary Consortium for Astrobiology Research (ICAR) and receives additional funding through the NASA Exobiology and Exoplanet Research programs. Depending on qualifications and interests, the Postdoctoral Scholar will work on improving and developing 1D atmospheric chemistry models, studying planetary climate with a combination of 1D radiative-convective models and 3D GCMs, and/or forward modeling the observables of terrestrial planet atmospheres with radiative transfer codes and instrument models. The Postdoctoral Scholar will be expected to work with graduate and undergraduate students in Dr. Schwieterman's research group.

The position is for one year with expected renewal for a second-year contingent upon satisfactory research performance. The salary is competitive and based in part on experience with excellent health and other benefits. The basic qualification for this position is: a PhD in astronomy, atmospheric sciences, physics, planetary sciences, or a related field before the start date.

Preferred qualifications for this position include: demonstrated expertise with high performance computing and either atmospheric chemical models, generalized planetary GCMs, and/or radiative transfer models and instrument simulators for space-based observatories. A candidate with pre-existing knowledge about exoplanet biosignature science and experience working with graduate or undergraduate students will be especially competitive.

Applications will be accepted on a rolling basis until the position is filled. Start date is negotiable and can be as soon as July 1, 2022 and as late as November 1, 2022. We request applicants submit a current curriculum vitae (CV), list of publications, and a statement of research interests. Three letters of recommendations may be solicited after initial review of application materials. Applications, letters of recommendation, and inquiries should be addressed to Dr. Edward Schwieterman and sent via email to: eschwiet@ucr.edu.

UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

As a condition of employment, you will be required to comply with the University of California SARS- CoV-2 (COVID-19) Vaccination Program Policy. All Covered Individuals under the policy must provide proof of Full Vaccination or, if applicable, submit a request for Exception (based on Medical Exemption, Disability, and/or Religious Objection) or Deferral (based on pregnancy) no later than the applicable deadline. For new University of California employees, the applicable deadline is eight weeks after their first date of employment.