Postdoctoral Scholar – Astrobiology –Planetary Science Research Group - Space Sciences Laboratory

The Space Sciences Laboratory (SSL) and the Chemistry Department at the University of California, Berkeley seeks applications for a full-time (100%) Postdoctoral Scholar with a preferred appointment start date between March 1, 2019 and December 31, 2019.

Initial appointment will be for one (1) year, with renewal based on performance and availability of funding.

About The Space Sciences Laboratory (SSL) and Chemistry Department at the University of California, Berkeley: Built six decades ago, UC Berkeley's Space Sciences Laboratory (SSL) was the realization of NASA's vision to gather many of the most innovative and dedicated science minds in one place at Berkeley. In the hill above Berkeley, physicists, researchers, biologists, engineers and technicians worked in unison: interacting, learning from one another, leading, challenging and inspiring one another in creating cutting-edge space science instrumentation and conducting top research. Through sixty years of NASA-funded support, their efforts, and those of hundreds of dedicated students and staff, have brought about myriad highlights, such as the space science missions of S3-3, ISEE, Polar, Van Allen Probes, Cluster, IMAGE, THEMIS and MAVEN. All have contributed to new discoveries about the physics of space, and initiated marked new advances in engineering technology. http://ssl.berkeley.edu/

The top ranked Berkeley Chemistry Department provides a stimulating high-level science environment in all areas of modern chemistry. Superb analytical and instrumental support is also available along with high quality shops and micro and nanofabrication facilities. SSL and the Berkeley Chemistry Department have a history of collaboration especially the Mariner probes that provide the first chemical data on the Martian surface and atmosphere.

Position Description:

The successful applicant will work under the direction of Dr. Anna Butterworth (SSL) and Prof. Richard Mathies (Chemistry) on the development and optimization of instruments and methods for the detection of trace organic molecules in solar system exploration. More specifically the incumbent will work with a team of engineers, chemists and astrobiologists at Berkeley on a microfluidic capillary electrophoresis analyzer that is the analytical core of the Enceladus Organic Analyzer (EOA) and the Microfluidic Organic Analyzer for Biosignatures (MOAB) instruments. The objective of these instruments is to sensitively probe for bioorganic molecules, especially amino acids, that are indicative of extraterrestrial life in various solar system locations. The successful applicant will join a dynamic and productive group of engineers and scientists focused on developing flight capable instruments and methods for space missions with the goal of detecting extraterrestrial life at Enceladus, Europa, Mars and other likely solar system bodies and locations. This work will be conducted jointly at the Space Sciences Lab and Chemistry Department at UC Berkeley.

Basic Qualifications:

- Advanced degree or enrolled in advanced degree program at the time of application.

Additional Qualifications:

- PhD or equivalent international degree required by the start date.

- No more than three (3) years' research experience since obtaining Ph.D. or equivalent international degree.

Preferred Qualifications:

- Ph. D. in chemistry, analytical chemistry, astrobiology, or a related field.

- Skills and/or experience of particular interest include:
 - Quantitative analysis of high-resolution chromatographic separations especially by capillary electrophoresis (CE) and/or microchip CE
 - Instrumental analysis with a focus on instrument and technique development
 - Experience with high sensitivity analysis of trace analytes from challenging samples

Salary and Benefits:

Starting salary will commensurate with experience.

The university provides a comprehensive benefits program which offers Medical, Dental, Vision, Life and AD&D Insurance, Short-Term Disability Insurance and Long-Term Disability Insurance. For a complete guide on Postdoctoral Health Benefits, please visit: <u>https://clients.garnett-powers.com/pd/uc/</u>

To apply, please visit: https://aprecruit.berkeley.edu/apply/JPF02071

Applicants should submit Curriculum Vitae including list of publications, statement of research interests, and optional cover letter. Applicants should also request three (3) letters of reference. 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 (http://apo.berkeley.edu/evalltr.html) prior to submitting their letters.

Please address inquires to Dr. Anna Butterworth at butterworth@berkeley.edu

Position will remain open until filled.

Diversity Statement:

The Space Sciences Laboratory is interested in candidates who will contribute to the diversity and equal opportunity in higher education through their work.

Family Friendly Statement:

UC Berkeley has an excellent benefits package as well as a number of policies and programs to support employees as they balance work and family.

The University of California is an Equal Opportunity/Affirmative Action Employer. It is the policy of the University not to engage in discrimination against or harassment of any person employed or seeking employment with the University of California on the basis

of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy, physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services. For the complete University of California nondiscrimination and affirmative action policy see: http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct