CALIFORNIA STATE UNIVERSITY
LONG BEACH
RESEARCH FOUNDATION

EMPLOYMENT OPPORTUNITY

WORKING TITLE	Post-Doctoral Fellow in EGS
PAYROLL CLASSIFICATION	N3407
DEPARTMENT	Postdoctoral Fellow VII
STATUS	Full-Time Benefitted (Exempt)
POSTING DATE	July 9, 2024
POSITION NUMBER	2672

OVERVIEW

Enhanced geothermal systems (EGS), or engineered geothermal energy, holds the potential to power more than 65 million American homes and businesses, and is the next frontier for renewable/clean energy deployment (https://www.energy.gov/eere/geothermal/enhanced-geothermal-systems). The success of EGS hinges on the development and management of a permeable fracture system in hot bedrock. New tools are needed that can verify the distribution of flow in stimulated fracture systems to produce an effective heat exchange. In collaboration with the Frontier Observatory for Research in Geothermal Energy (Utah-FORGE), we are developing an integrated well-testing toolset that uses solute, heat, strain, and fluid pressure data to monitor subsurface hydraulic parameters. This toolset will permit tuning of the engineered system to optimize clean energy production.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The Department of Earth Science at California State University Long Beach (CSULB) seeks a Postdoctoral Fellow to advance well testing methods in support of Enhanced Geothermal Systems (EGS). The position is a perfect opportunity for Earth Scientists and Engineers who want to merge field testing and theoretical models and is a rare chance to get in on "big science" experiments in geothermal energy. The Fellow will design, conduct, and analyze the planned field experiments. These activities will lead to experience in heat and solute transport, hydromechanical behavior in fractured bedrock, and the use of fiber optic distribute acoustic and strain sensing. Field experiments will be conducted at at the Utah-FORGE testing facility near Milford, Utah. This job description is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities and qualifications required of employees assigned to the job, however the anticipated division of time is:

- Design, simulate, carry out tracer tests at the Utah FORGE Site (50%).
- Write manuscripts and publish results in peer-reviewed journals, and present results at conferences (30%).
- Self-directed research and professional development (10%).
- Attend conferences and travel to collaborate with project partners (5%).
- Mentorship and knowledge sharing: assisting graduate and undergraduate students with research projects, guest lectures, etc. (5%).

The position is in Long Beach California (near Los Angeles), located a few miles from the ocean. Long Beach has a wide variety of cultural and outdoor opportunities and enjoys some of the best weather in the world. The position is funded

for 15 months with potential for extension. A professional development program is an important part of the Fellowship, with opportunities to collaborate with Department of Energy Laboratories and other Academic Institutions. The Fellow will work with Professor Matt Becker at CSULB, the Conrey Chair in Hydrogeology and the current National Groundwater Association Distinguished Darcy Lecturer.

EDUCATION, SKILLS AND ABILITIES

- Ph.D. (within past 5 years) or Ph.D. all but dissertation in Earth Science or a related engineering field (e.g. Civil or Petroleum Engineering).
- Knowledge of fundamental transport and hydraulic processes in subsurface systems.
- Excellent written and oral communication skills (based on personal interview).
- Proficiency in data science tools (e.g. Matlab or Python).
- Ability and desire to pursue research both independently and as part of a team.
- Evidence of interest in teaching, mentoring, or outreach.
- Must be able to meet the travel requirements of the position, be able to apply for a California Driver's license.
- Be able to work in hazardous and sometimes uncomfortable field conditions at the well site.
- The position requires the candidate to provide verification of their right to work in the US upon offer of employment by presenting valid documentation that meets the requirements of the I-9 Form. Neither the University nor grant project will sponsor international Visas.

Must be able to accept constructive criticism, prioritize workload, be professional and dependable, interact positively with others and possess a friendly and outgoing personality. Regular, punctual attendance required. This position is employed through the CSULB Research Foundation. Employment is at-will.

POST OFFER BACKGROUND CHECK REQUIREMENT

A post offer background check (including a reference and criminal records check) must be completed, and the individual cleared, before they can start work with the CSULB Research Foundation. No information will be required prior to the offer of employment. Once an offer of employment is made, failure to complete the background check and receive clearance may affect the application status of a new hire individual and/or the continued employment of a current CSULB Research Foundation employee who has applied for/moved into a new position. Individuals working with minor children and/or the elderly will be required to renew their live scan fingerprinting and be cleared every twelve (12) months. Information obtained through the background check does not automatically disqualify an individual from employment.

GRANT FUNDED EMPLOYMENT

This position is restricted to the conditions set forth in the grant. Ongoing employment is contingent upon satisfactory job performance and continual renewal of grant money/availability of funds.

COMPENSATION RANGE: $3,016.87 per pay period (24 pays per year)

FILING DEADLINE: Open Until Filled, Review of applications begins August 1, 2024.

NOTE: In order to be considered for this position, please submit the required information as soon as possible. The hiring committee will review applications, interview qualified candidates and close the position anytime on or after two (2) weeks from the posting date listed above. Removal of a position from our website is indication that the position has been filled.

APPLICANT PROCEDURE

Interested individuals should forward their cover letter, resume, and completed employment application referencing position number to the CSULB Research Foundation Human Resources Department in one of the following ways:

- By Mail/Delivery: 6300 State University Drive, Suite 332, Long Beach, CA 90815

- By Confidential HR Fax: 562. 985.1726
- By E-mail: FND-HRPAYROLL@CSULB.EDU (put Job# in the Subject line)

A separate application is necessary for each employment opportunity posting. The employment Application can be found alphabetically on our website at https://www.csulb.edu/research-foundation, under the Forms, then the Human Resources tab. It is the responsibility of the applicant to clarify on their application their ability to perform the job for which they are applying. Individuals requiring a reasonable accommodation in order to apply for this position should provide necessary information to the Director of Human Resources. Additionally, individuals invited to interview for this position should inform the Director of Human Resources at the time of invitation, of any requirements for a reasonable accommodation.

NOTICE

The CSULB Research Foundation does not discriminate on the basis of sex in its employment as required by Title IX of the Education Amendments of 1972, as amended, and Section 86.9 of the administrative regulations adopted by the Department of Education pursuant thereto, nor does it discriminate on the basis of race, color, religion, national origin (including language restrictions), sex (pregnancy or gender), sexual orientation, marital status, age, disability (mental and physical, including HIV and AIDS), ancestry, medical condition (cancer/genetic characteristics), denial of family and medical care leave, denial of pregnancy disability leave or reasonable accommodation or veteran's status (including Vietnam-era veterans) as required by other federal/state non-discrimination statues, related administrative regulations and executive orders. Individuals selected for employment must provide proof of identity and employment eligibility as prescribed in Title 8, United States Code, and Section 132A. We are an Equal Opportunity, Affirmative Action, and Title IX Employer. The CSULB Research Foundation is a 501 (c) (3) corporation that exists solely to support and advance the mission of CSULB. Employment with the CSULB Research Foundation rests solely with the CSULB Research Foundation and provides no rights or benefits of employment or any other kind, with any other organization. This includes but is not limited to: California State University Long Beach, the State of California, or the sponsoring agencies of any programs administered by the CSULB Research Foundation.

Please read and complete voluntary Applicant Affirmative Action Information Form below. Submit completed form with your resume and employment application to:

CSULB Research Foundation, Human Resources

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APPLICANT AFFIRMATIVE ACTION INFORMATION FORM
VOLUNTARY

Thank you for your interest in employment with our Company. The following questions about your race and gender and Protected Veteran status are included only because of government regulations. As an Equal Opportunity Employer, the Company does not use this information in its employment decisions, so whether or not you return this form has no effect on your application. To the extent we are a government contractor subject to the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended by the Jobs for Veterans Act of 2002, we comply with requirements to take affirmative action regarding the employment of, and advancement in employment of, qualified Protected Veterans (disabled veterans, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, and recently separated veterans). If you come within any of those categories, and would like to be included in our affirmative action program, you may tell us now or at any time in the future. We also invite you to tell us now, or at any time in the future, about any reasonable accommodations that you believe we could make which would better enable you to perform the essential functions of the job properly and safely. Submitting this information is **voluntary**. Providing it or declining to provide it will not affect your application or employment in any way. If you choose to submit the information, it will be kept confidential to the extent provided by law.

Name: _____

Date of application: _____

Position(s) applied for: _____

Gender: ◯ Male ◯ Female

Race/ethnic background (select one only):

◯ Hispanic/Latino	Persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
◯ White	Persons having origins in any of the original peoples of Europe, the Middle East or North Africa.
◯ Black/African American	Persons having origins in any of the black racial groups of Africa.
◯ Asian	Persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.
◯ Native Hawaiian/Other Pacific Islander	Persons having origins in any of the peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
◯ American Indian/Alaska Native	Persons having origins in any of the original peoples of North and South America, (including Central America), and who maintain tribal affiliation or community attachment.
◯ Two or more Races	Non-Hispanic persons who identify with more than one of the following five races: (1) White, (2) Black, (3) Asian, (4) Native Hawaiian/Other Pacific Islander, (5) American Indian/Alaska Native.

VETERAN STATUS

a. Status: Select one of the following

- ◯ I identify as one or more of the classifications of Protected Veteran listed below.
- ◯ I identify as a veteran, just not a Protected Veteran.
- ◯ I am not a veteran.
- ◯ I do not wish to self-identify.

b. Protected Veterans are described as:

Disabled Veteran

Veteran entitled to VA-administered disability compensation for, or discharged from active duty because of, a service-connected disability, or who would be so entitled but for receipt of military retired pay.

Active Duty Wartime or Campaign Badge Veteran

Veteran who served on active duty during a war or a campaign or expedition for which a campaign badge has been authorized. List of eligible campaigns can be found at http://www.opm.gov/staffingportal/vgmed-al2.asp.

Armed Forces Service Medal Veteran

Veteran who, while on active duty, participated in a military operation for which an Armed Forces Service Medal was awarded pursuant to Exec. Order No. 12985.

Recently Separated Veteran

Veteran who served on active duty and was discharged or released from active duty within the last three years.

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