

# San José State University Research Foundation

## Position: Postdoctoral Researcher: Wildfire Meteorology

DEPARTMENT:	Department of Meteorology and Climate Science / WIRC
IMMEDIATE SUPERVISOR:	Dr. Craig B. Clements
POSTING DATE:	January 17, 2023
CLOSING DATE:	Until Filled
SALARY:	\$66,000-\$81,000 annually, DOQ/E
EXEMPT STATUS:	Exempt, Full-Time, Benefited

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### GENERAL NATURE OF POSITION

The goal of the project is to conduct a set of field observations relating fire-atmosphere interactions to fire behavior at multiple scales. The candidate will be responsible for leading field deployments of WIRC's Doppler LiDAR and Ka-band Doppler radar to active wildfires in addition to executing small-scale wildland fire field experiments in complex terrain. The candidate will be required to be fire-line qualified, pass an off-road drivers safety course, and be responsible for crews in the field. The post-doctoral position is part of the Wildfire Interdisciplinary Research Center (WIRC) at SJSU and the candidate will interact regularly with the seven faculty associated with the WIRC. The position is available for up to two years based on satisfactory performance in the first year.

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### ESSENTIAL DUTIES & RESPONSIBILITIES

1. Lead field deployments of Doppler LiDAR and Ka-band Doppler radar to active wildfires.
  2. Execute small-scale wildland fire field experiments in complex terrain.
  3. Development of wind profiling network and data management system.
  4. Conduct data analysis of radar, LiDAR, and micrometeorological data to understand fire behavior.
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### INTERPERSONAL CONTACTS

- 1) Reports to the center director and project principal investigator.
  - 2) Frequently interacts with SJSU faculty and graduate students.
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### SUPERVISORY RESPONSIBILITIES

None.

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## QUALIFICATIONS

### Education and Experience

- Ph.D. in atmospheric science, meteorology, or a closely related field required.
- Experience in boundary layer meteorology, Doppler radar and LiDAR remote sensing, data processing and visualization.
- Experience in instrument deployments, electronics, and sensor networks.
- Experience processing turbulence and LiDAR data.

### Knowledge, Skills, and Abilities Required

- Knowledge of Doppler radar and LiDAR remote sensing, micrometeorology instrumentation, programming in Python or Matlab, or equivalent, data processing and visualization.
- Ability to develop independent research projects as demonstrated through publication of peer-reviewed literature.
- Proficient verbal and written communication skills to collaborate effectively in a team environment and present and explain technical information.
- Initiative and interpersonal skills and ability to work in a collaborative, multidisciplinary team environment.

### Complexity of Duties

- Field deployments for days to weeks.
- Interacting with fire management agencies and teams.
- Understand complex instrument and data acquisition systems.

### Physical Requirements

- Must be technologically adept and able to operate a PC and other office equipment.
- Must be able to climb towers and lift 50 lbs.
- Must be able to pass a rigorous fire fighter training program.
- Must be able to pass an off-road driver's safety course.
- Must be willing to travel and work occasional weekends.

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**NOTE:** This position description intends to describe the general nature and level of work being performed by people assigned to this job. It is not intended to include all duties and responsibilities. The order in which duties and responsibilities are listed is not significant.

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## BENEFITS

The San José State University Research Foundation (SJSURF) provides an excellent benefits package to benefited employees. **The comprehensive benefits package includes:**

- a) Four company health insurance plans to choose from (employee contributions differ according to plan and level of coverage).
- b) Employer-paid dental and vision for employees and their eligible dependents.
- c) Life, AD&D, LTD with supplemental coverage opportunities.
- d) 14 paid federal & state holidays.

- e) Retirement Plan: 403 (b) employee contribution plan component and a 403 (b) employer contribution component, which vests immediately.
- f) Vacation hour accruals and separate sick hour accumulations.
- g) Employee discounts.

Please visit the [Benefits & Compensation page](#) on the SJSU Research Foundation website for more detailed information.

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#### COVID-19 VACCINATION POLICY

As required by the CSU Vaccination Policy, all new hires must be fully vaccinated against COVID-19 starting on September 30, 2021. Fully vaccinated means it has been 14 days after the second dose of the Pfizer or Moderna vaccine has been given, or it has been 14 days after the one dose of the J&J vaccine has been given. Additionally, all employees are required to have booster shots and provide proof to SJSU by 2/28/2022 or after six months from the final dose of the original vaccination, whichever is later. Proof of being fully vaccinated does not need to be disclosed until a job offer has been made, and proof must be submitted after the acceptance of the job offer. New hires may request a reasonable accommodation of the COVID-19 vaccination requirement based on medical or religious reasons. New hires must submit their request for an accommodation form after they accept the job offer, and before their scheduled start date. The reasonable accommodation provided to the employee, if any, will depend on the employee's job and the applicable facts, but it may include weekly COVID-19 testing. New hires who do not submit, before their scheduled start date, proof of being fully vaccinated or a request for reasonable accommodation will have their job offer revoked.

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#### APPLICATION PROCEDURE

To apply for this position, an applicant must submit a formal employment application, as well as a resume, and a cover letter. The formal employment application is located on the SJSURF website on the [Forms page](#). **All candidates must submit their application materials to [foundation-jobs@sjsu.edu](mailto:foundation-jobs@sjsu.edu). Please add **PD WM** to the subject line of the email.**

A background check (including a criminal records check) must be completed satisfactorily before any candidate can be offered a position with the SJSURF. Failure to satisfactorily complete the background check may affect the application status of applicants or the continued employment of current SJSURF employees who apply for the position.

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#### REASONABLE ACCOMMODATION

The San José State University Research Foundation (SJSURF) is committed to providing access, equal opportunity, and reasonable accommodation for individuals with physical or mental disabilities in the employment, recruitment, examination, hiring, and interviewing processes. If you are a job seeker with a physical or mental disability and require a reasonable accommodation to search, apply, or interview for a job opening or otherwise need a reasonable accommodation during the application and hiring process, please contact us at [foundation-jobs@sjsu.edu](mailto:foundation-jobs@sjsu.edu). In the email message, please indicate your full name, phone number, and the type of assistance required. You must not reveal the underlying medical reason for your needed reasonable accommodation or otherwise disclose confidential medical information.

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## ABOUT THE SJSU RESEARCH FOUNDATION

SJSURF employment is separate and distinct from San José State University or state of California employment. SJSURF employees are not employees of SJSU or the state of California.

SJSURF is a non-profit auxiliary of San José State University. SJSURF is totally self-supported. The majority of the organization's funding comes from the federal government, and other public and private entities. With annual revenues totaling over \$65 million, programs managed through SJSURF cover a rich diversity of applied research, public services, and educational-related activities.

**SJSURF is an equal opportunity employer** and does not discriminate based on race, color, creed, gender, religion, marital status, registered domestic partner status, age, national origin, ancestry, physical or mental disability, medical condition, sex, genetic information, sexual orientation, military and veteran status or any other consideration made unlawful by federal, state, or local laws. It also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics.

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