

**Job Title: Research Technician and/or Research Assistant**

**Project/Department: Global Change Research Group (Prof. Walter Oechel and Prof. Donatella Zona)**

**Immediate Supervisor:**

**Dr. Jordan Goodrich Jordan Goodrich <jpgoodrich@mail.sdsu.edu>**

**Effective: 2016-04-15**

**Full or part time. If part time, more than one person may be hired. Full time in summer in Alaska maybe required.**

## **FUNCTION OF THE UNIT**

The Global Change Research Group (GCRG) is a research group at SDSU composed of ecologists working to understand the interaction of climate change and ecosystem processes. Faculty, post-doctoral fellows, Ph.D, masters, and undergraduate students, technicians and staff work together on maintaining long-term ecological measurements in Alaska, California, and Mexico. The group currently consists of more than 16 members working on ecological and global change issues in a diversity of ecosystems including in Arctic Alaska, chaparral, coastal sage scrub, coastal marine, desert, and tropical regions. Members of the group are working on various projects related to current or historical data. Results are published in high impact factor journal articles and made available to the public.

## **PURPOSE OF THE POSITION**

**The research technician and/or research assistant for the GCRG will be responsible for trouble shooting, and maintaining research equipment, including that which has been deployed in the field. Ecological and meteorological equipment must be kept clean, calibrated, maintained and repaired in order to collect useful and reliable data. Time will be spent in the field and in the laboratory. Other administrative and office duties will apply. He/she would need to spend significant periods of time in Barrow, Alaska and the North Slope (summer) and various periods in the winter. Salary is commensurate to experience.**

## **SPECIFIC DUTIES**

The following information is intended to be representative of the work performed by incumbents in this position and is not all-inclusive. The omission of a specific duty or responsibility will not preclude it from the position if the work is similar, related, or a logical extension of position responsibilities. Job priorities be changed at any time, and the job description may be modified, based on the needs of the research and of the group.

- Lean all equipment, study manuals, read background materials.
- Install new equipment, explain and oversee student use of equipment.
- Check instrument and sensor output on a regular basis; any malfunction should be noted and corrected as soon as possible.
- Obtain samples, conduct *in situ* measurements, calibrate equipment on a regular schedule and repair malfunctioning equipment promptly.
- Maintain computer systems, servers and data base software and hardware in in good condition.
- Coordinate field research; obtain necessary permits.
- Store data in a safe and easily accessible manner.
- Process purchasing paperwork and coordinate with Foundation personnel on purchases as necessary.
- Establish a good working relationship with manufacturers to facilitate help and advice on equipment trouble shooting and installation.
- Provide scientific and technical input when discussing and publishing data.
- Help design and test new sensor systems.
- Trouble shoot problems in existing systems when they arise.

## QUALIFICATIONS AND SPECIAL SKILLS

### Desirable Background and Abilities

- Bachelor's or MS degree completed or in progress, in a relevant field.
- Working knowledge in or interest in ecology, global change.
- Working knowledge of fundamental biology, mathematics, physics, and chemistry.
- Background understanding of field instrumentation, maintenance, trouble shooting, calibration, and data logging.
- Knowledge of the Eddy Covariance technique and instrumentation, other biometeorological and ecophysiological instrumentation and methods or, if not, the desire and ability to learn this instrumentation and these approaches.
- Ability to learn and understand complex computer systems and data loggers.
- Basic knowledge of electricity and circuits.
- Basic ability and knowledge of trouble shooting
- Experience building, maintaining, troubleshooting equipment and/or systems.
- The ability to interact effectively and positively with co-workers; ability to relate well to others within the GCRG environment.
- Understand and follow work rules and procedures
- The successful applicant will be highly motivated and a self-starter. The successful applicant will internalize the goals of the position and the research goals and importance of the group.
- The successful applicant will have strong interpersonal skills and the ability to communicate effectively both orally and in writing.
- The successful applicant should be well organized, have the ability and desire to meet deadlines, be detail oriented, possess good judgment and possess common sense.
- The applicant should have a driver's license and be able to operate automobiles, trucks, snow machines, ATVs.
- New skills and equipment to master should be seen as an opportunity (Hilti drills, chain saws, power tools, etc.)
- It is unlikely that any applicant will be familiar with all (or even most) equipment used by the Group. More important is that the applicant be a fast learner, self starter, good trouble shooter, excellent problem solver, respond well to new challenges and a rapidly changing work environment and priorities.
- It is important that the applicant have a history of construction/repair/trouble shooting, and independent motivation.
- The successful applicant must be flexible in time and space and be able to travel including extended periods in Alaska or other locations.

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Please email a motivation letter and 3 letters of reference to Dr. Jordan Goodrich [jgoodrich@mail.sdsu.edu](mailto:jgoodrich@mail.sdsu.edu), and Dr. Aram Kalhori [akalhori@mail.sdsu.edu](mailto:akalhori@mail.sdsu.edu)