JOB DESCRIPTION

TITLE
Scientific Instrument Repair Technician

JOB SUMMARY
Performs skilled electronic repair and maintenance of scientific equipment. Work is performed under minimal supervision with evaluation based on acceptable completion of tasks. Work is performed under general supervision and performance is based upon completion of assignments and results obtained. The performance evaluation is conducted through the performance evaluation system and in accordance with the University Policies & Procedures.

ORGANIZATIONAL RELATIONSHIPS
Reports to: Director, Research and Sponsored Programs
Supervises: May supervise Student Assistants

ESSENTIAL DUTIES - May include, but not limited to the following:

- Performs, with a high degree of skill, mechanical and electrical layout, construction, modification, testing, adjustment, calibration, and preventive maintenance of simple and complex electronics equipment for use in scientific research.
- Performs troubleshooting of simple and complex electronics equipment (e.g. sampling oscilloscopes, multi-channel pulse-height analyzers, nanosecond amplifiers, precision feedback electrometers, digital, etc.)
- Originates, modifies, assembles, and maintains complex schematic and wiring diagrams.
- Repairs and maintains equipment through corrective and preventative maintenance procedures.
- Operates simple machine tools and common electronics instruments, and performs skilled soldering.
- Researches sources and orders parts for equipment repair.
- Prepares reports as required.
- Installs new equipment.
- Consults with faculty and staff regarding scientific equipment and computer hardware/software problems.
• Consults with maintenance centers on repairs and maintenance.
• Assists with repairs and calibration of scientific equipment.
• Assists in purchasing parts for scientific equipment.
• Assists principal investigators with obtaining service from outside vendors.
• Assists principal investigators with developing operation and maintenance procedures.
• Observes the repair process when an outside service technician repairs or maintains scientific equipment on campus. The information gained can be used in future maintenance and repair of equipment.

**ADDITIONAL DUTIES**

Performs other duties as requested.

**EDUCATION**

Associate’s degree in physics, electrical engineering, computer science or equivalent technical training required. Bachelor’s degree preferred.

**EXPERIENCE**

Four year’s experience in performing electronics work in the maintenance or constructions of technical or scientific electronics equipment or in troubleshooting and repair of radio/television equipment, computer equipment, or electronics instrumentation.

**REQUIREMENT**

Regular and reliable attendance at the University during regular scheduled days and work hours is an essential function of this position.

**KNOWLEDGE, SKILLS, AND ABILITIES - The following are essential:**

• Knowledge of modern techniques and theories of electronic repair.
• Knowledge of computer hardware helpful.
• Ability to effectively communicate, both orally and in writing.
• Knowledge of and ability to operate an oscilloscope, audio HF generator, digital and analog voltmeter, caliper, micrometer, personal computer, calculator, telephone, vacuum, frequency counter, sound level meter and other related diagnostic equipment.
• Ability to use tools including electric drills, sanders and saws, soldering and de-soldering equipment, hammer, screwdriver, wrenches, pliers and general mechanical tools.
• Ability to work in conditions including cold areas, heat, outdoors and indoors, and around mechanical, electrical, explosive, radiation, fumes/odors, dust/mites, chemical and toxic waste hazards.
• Ability to use a personal computer and other office equipment, including related university software and email.

**PHYSICAL DEMANDS**

The physical demands described in the Essential Duties and below are representative of those that must be met by an employee to successfully perform the essential duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.

The employee may be required to travel.

**WORK ENVIRONMENT**

All employees are responsible for maintaining an environment that is free from discrimination, intimidation, harassment, including sexual harassment. Works in conditions including cold areas, heat, outdoors and indoors, and around mechanical, electrical, explosive, radiation, fumes/odors, dust/mites, chemical and toxic waste hazards. The employee handles hazardous chemicals in the laboratory. The employee will be required to wear all appropriate safety equipment, including but not limited to eye protection, gloves, and lab coat.

**SAFETY**

TWU promotes a safe working environment. Employees are responsible for completing assigned tasks safely and efficiently, and supervisors are responsible for creating and maintaining a safe work environment. Employees must report any unsafe work conditions or practices, as well as any near-miss incidents, to their supervisor and Risk Management. Supervisors and employees should ensure that injury/accident reports are submitted to the Office of Human Resources and Risk Management within 24 hours of the incident.

*The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.*

**Employee Signature:** ____________________________  **Date:** ______________
Employee Printed Name: _________________________

Texas Woman's University strives to provide an educational environment that affirms the rights and dignity of each individual, fosters diversity, and encourages a respect for the differences among persons. Discrimination or harassment of any kind is considered inappropriate.

Texas Woman's University is committed to equal opportunity in employment and education and does not discriminate on the basis of race, color, religion, gender, sex, sexual orientation, ethnic origin, age, veteran's status, or against qualified disabled persons.

All positions at Texas Woman's University are deemed security sensitive requiring background checks.