



Job Title: Environmental Research Field Technician
Department: Agricultural and Environmental Research Station (AERS)
Reports to: Associate Research Professor
FLSA Status: Exempt

Position Summary:

The primary function of the position is to provide specialized field research assistance to conduct and promote the mission of the soil water and natural resources management McIntire Stennis program at the Agricultural and Environmental Research Station (AERS). The program explores basic and applied understanding of natural processes, development evaluation and dissemination of best management practices, and improve soil fertility and health, water quality, and efficient and sustainable use of our natural resources and ecosystem services. The position is on-site, in-person. The incumbent will be stationed at the WVSU campus in Institute, West Virginia.

This position is employed by the West Virginia State University Research and Development Corporation

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Major Duties

Conduct field research and greenhouse experiments and operation (50%)

Deploy manage and operate field monitoring instrumentation (30%)

Participation in additional research activities (20%)

Field research operation (50%)

The incumbent will have full responsibility for establishment, sampling, maintenance, and take-down of field and greenhouse research studies. Maintaining safe work environment; purchase operate and maintain field supply and equipment, and resources deployment spatial inventory; develop and maintain contact and communication with partners, collaborators, and clients; sampling handling and preparation of field samples for lab analysis; keep meticulous record and process and analyze samples and data, and summarize and report results and findings.

Typical, but not all-inclusive, duties may include the following, and combinations thereof:

- Conduct field and greenhouse experiments

- Responsible for operation and maintenance of diverse field equipment and research.
- Keep coherent and detailed record of research and monitoring activities.
- Adopt existing methodology, modify existing procedures, develop and validate new methods to meet specific research needs.
- Conduct field soil rock sediment water and plant sampling handling, preparation, and analysis.
- Accurately and independently acquire understand and implement published procedures and protocols.
- Oversee field equipment and sensors purchase, including market survey, communication with equipment and technical representatives on method development and applicability, specification and purchase matrices development, scheduling and overseeing installation maintenance and operation.
- Keep field/workplace and activities in compliance with relevant land-use agreements, and state and federal safety regulations.
- Assist in related research activities as needed to achieve research goals.

Deploy manage and operate field monitoring instrumentation (30%)

The incumbent will manage and oversee field activities and data acquisition and processing.

Typical, but not all-inclusive, duties may include the following, and combinations thereof:

- Keep record of deployed sensors and equipment,
- Conducted scheduled visit for maintenance and data downloading
- Deploy, monitor, manage, and keep field equipment and sensors operational and in working conditions.
- Manage monitoring workflow and update equipment and software as needed.
- Oversee and supervise student workers, contractors, and temporary employee activities.
- Monitor and maintain field consumables supply, conduct routine maintenance, troubleshoot instrument problems, and coordinate repairs and service as needed to sustain efficient workflow.
- Manage field expenditures and budget.

Additional participate in research activities (20%)

The incumbent will participate in supervisor's research activities and assume responsibilities and assignment as they arise to assure successful and timely completion of research projects goals.

Typical, but not all-inclusive, duties may include the following, and combinations thereof:

- Assist in planning, implementing, monitoring and sampling greenhouse and field experiments.
- Keep coherent and detailed record of field research timeline and activities.
- Conduct literature search and maintain up-to-date literature reference database.
- Critically evaluate experimental results. Identify erroneous and/or unusual results.
- Summarize and report experimental results using spreadsheet and statistical software as needed.
- Work to disseminate research findings to clients and the general public

QUALIFICATIONS:

For successful performance, the incumbent must be able to perform each major duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The ideal candidate will be of high moral and integrity, detail oriented, well organized, enthusiastic, and able to appreciate and pursue goal-based research and development. Demonstrated success in working as part of a team and initiating collaborative partnerships. The incumbent must be willing to work flexible hours with a minimum of supervision.

Education

Required:

- Bachelor's degree in a science related field from an accredited university.

Preferred:

- Advanced degree in chemistry, soil science, hydrology, environmental sciences and/or closely related field.

Experience

Required:

- A minimum of two (2) years in field research.
- Independently operate, maintain, and troubleshoot field instrumentation, sensors, and dataloggers (e.g. YSI multiProbe, Hobo/Onset soil/water/meteorological sensors, products, etc.).
- Be able to operate off-road vehicle and equipment.
- Be able to work outdoors at remote and rugged terrain
- Operate gas powered small engine equipment
- Be able to hike a day-long off-trail with in loaded backpack (25 - 35 lb).
- Configure, install, maintain, and collect data from field monitoring systems and sensors.
- Operate sensor-dedicated software.
- Analyze and report complex datasets using computer software such as Microsoft Excel, SAS, JMP, SigmaPlot, etc.

Preferred:

- Operate farm equipment.
- Conduct lab, greenhouse, and field research experiments.
- Management skills and education
- Managing reference databases through the use of computer software such as Reference Manager or EndNote.

Language Skills

- Ability to read, analyze and interpret technical procedures, professional journals, or governmental regulations.
- Ability to write reports and procedure manuals.
- Effective oral and written ability to effectively present information and findings.

Reasoning Ability

- Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists.
- Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

Computer Skills

To perform this job successfully, an individual should have:

- Knowledge of how to operate personal computer
- Knowledge of how to operate document processing software such as Microsoft Word, Excel, Power Point.
- Knowledge of how to configure and operate data loggers and sensory equipment.
- Ability to analyze complex datasets using computer software such as Microsoft Excel, SAS, JMP, SigmaPlot, etc.
- Knowledge of how to search the World Wide Web (i.e. Internet)
- Knowledge of reference database software such as Reference Manager or EndNote to create, retrieve and maintain reference databases.
- Knowledge or ability to learn specialty software to control analytical and monitoring equipment.

Additional Qualifications

- Must have or be able to obtain and maintain a valid WV driver's license
- Must be able to travel both in and out of state

Other Qualifications

Must be able to attend moderate and present at meetings and other work-related events and activities; and travel to attend state, regional, and national conferences and workshops as appropriate.

COMPETENCIES

To perform the job successfully, an individual should demonstrate the following competencies:

Problem Solving - Identifies and resolves problems in a timely manner; gathers and analyzes information skillfully; develops alternative solutions; works well in group problem solving situations; uses reason even when dealing with emotional topics.

Interpersonal Skills - Focuses on solving conflict, not blaming; maintains confidentiality; listens to others without interrupting; keeps emotions under control; remains open to others' ideas and tries new things.

Oral and Written Communication - Speaks clearly and persuasively in positive or negative situations; listens and gets clarification; responds well to questions; demonstrates group presentation skills; participates in meetings; writes clearly and informatively; edits work for spelling and grammar; varies writing style to meet needs; presents numerical data effectively; able to read and interpret written information.

Teamwork - Balances team and individual responsibilities; exhibits objectivity and openness to others' views; gives and welcomes feedback; contributes to building a positive team spirit; puts success of team above own interests; able to build morale and group commitments to goals and objectives; supports everyone's efforts to succeed.

Diversity - Demonstrates knowledge of EEO policy; shows respect and sensitivity for cultural differences; educates others on the value of diversity; promotes a harassment-free environment; builds a diverse workforce.

Ethics - Treats people with respect; keeps commitments; inspires the trust of others; works with integrity and ethically; upholds organizational values.

Professionalism - Approaches others in a tactful manner; reacts well under pressure; treats others with respect and consideration regardless of their status or position; accepts responsibility for own actions; follows through on commitments.

Quality and Quantity - Demonstrates accuracy and thoroughness; looks for ways to improve and promote quality; applies feedback to improve performance; monitors

own work to ensure quality; meets productivity standards; completes work in timely manner; strives to increase productivity; works quickly.

Adaptability - Adapts to changes in the work environment; manages competing demands; changes approach or method to best fit the situation; able to deal with frequent change, delays, or unexpected events.

Dependability - Follows instructions, responds to management direction; takes responsibility for own actions; keeps commitments; commits to long hours of work when necessary to reach goals; completes tasks on time or notifies appropriate person with an alternate plan.

Initiative - Volunteers readily; undertakes self-development activities; seeks increased responsibilities; takes independent actions and calculated risks; looks for and takes advantage of opportunities; asks for and offers help when needed.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit and reach with hands and arms. The employee is frequently required to stand and walk. Specific vision abilities required by this job include ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

This position is designated as security-sensitive. Before an offer of employment is made, a pre-employment background investigation will be completed, which may include a criminal background check, educational, DMV and prior employment.

Closing date: This position will remain open until filled. However, first consideration will be given to applicants who reply by September 30, 2024.

To Apply

Preferred: Information accepted as emailed in a Microsoft Word or PDF format to rdemployment@wvstateu.edu. Qualified candidates may submit a cover letter, resumé, unofficial transcript and contact information for three professional references (name, title, address, phone number, and email address).

Hard copy applications may be sent to:

ATTN: Search Committee, Environmental Research Field Technician
West Virginia State University Research and Development Corporation
PO Box 1000, 201 Byers Admin. Bldg.
Institute, WV 25112

AAP/EEO Statement

West Virginia State University is an equal opportunity affirmative action institution. No person shall be denied admission to educational program, activities or employment on the basis of any legally protected status, or be subjected to prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, marital status, citizenship, sex, sexual orientation, gender identity or expression, age, disability, or protected veteran status.

West Virginia State University is committed to providing access, equal opportunity and reasonable accommodation for individuals with disabilities. To request disability accommodation contact: Michael Casey at (304) 766-3083. Concerns and complaints related to bias or equal opportunity in education and in employment based on aspects of diversity protected under federal, state, and local law, or arising under Title IX should be directed to: Carolyn Stuart, EEO Officer, at (304) 204-4018.