

Post Doctoral Researcher - LTE (REPOST)

Job Type: Limited Term (Fixed Term)



Open Date: 09/07/22

Primary Recruiter: Jessica Brown

Close Date: 10/10/22 at 12 a.m.

Compensation: \$90,082.00 per year

Level ID: 4580 Regional Water Quality

Location: River Mountains Water Treatment
Facility

The term of this appointment will be a maximum of 36 months. All persons hired into Limited-Term positions will be required to sign a term of employment letter specifying the conditions of employment.

Hours of Work: 4/10's, 6:30 am - 5:30 pm, M-Th

The ideal candidate for this position will possess a PhD in engineering mathematics, statistics, computation biology, epidemiology, biology, bioinformatics, or computer science; will have experience with advanced applied statistical methods and possess the ability to construct statistical models from scratch while learning new application areas; experience in water treatment or water-related data is not required but desirable.

This position will focus on constructing, evaluating, and analyzing a dynamic quantitative microbial risk assessment; it also involves constructing a machine learning model to project recycled water contribution in surface water.

INTRODUCTION: Human Resources will screen applications and supplemental questionnaires. Candidates possessing the strongest skills and experience for this position will be forwarded to the hiring department for further evaluation and to determine who will be invited to the formal interview process. The candidate hired will be required to pass a drug screening, background check and may be required to pass a job-related physical evaluation.

GENERAL PURPOSE

Under direction, independently conducts highly specialized research studies on raw and potable water to detect and analyze unregulated compounds and contaminants and develop methods for their detection and removal, using novel techniques and emerging technologies; assists in the design, execution and reporting on research studies and drafting of proposals for external research funding; and performs related duties as assigned.

DESIRED MINIMUM QUALIFICATIONS

Knowledge of:

Theory, principles, practices, methods, chemicals and agents used in chemical and physical analysis and testing of water; water sample preparation methods; laboratory procedures for water analysis; methods and processes used in raw water treatment, including membranes, ozone, chlorine and activated carbon; federal EPA regulations and Safe Drinking Water Act; the operation and maintenance of applicable complex, laboratory instrumentation and related computer programs and software; programmable laboratory equipment; federal EPA methodologies; the use of standard laboratory glassware, beakers, flasks, pipettes, etc.; safe laboratory practices and procedures; quality control techniques.

Ability to:

Design and implement scientific studies and research related to the treatment and monitoring of unregulated contaminants and formation of byproducts, utilizing newly developed and emerging analytic methods and technologies; operate a computer and complex automated/programmable laboratory instrumentation; apply

principles and scientific methods to the development of new methodologies for identifying unregulated compounds and contaminants; prepare accurate reports and records of test results and special analyses; conduct original research; present scientific data clearly and concisely, both orally and in writing; establish and maintain effective working relationships with co-workers, outside consultants and researchers and others encountered in the course of work.

Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a college or university with a doctorate in analytical chemistry, inorganic chemistry, engineering or another relevant scientific discipline. Knowledge and experience involving water treatment processes is required.

Licenses; Certificates; Special Requirements:

A valid State of Nevada driver's license and the ability to maintain insurability under the District's Vehicle Insurance Policy.

PHYSICAL AND MENTAL DEMANDS

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

Physical Demands

While performing the duties of this class, employees are regularly required to walk; talk or hear by telephone and in person; sit; climb or balance; smell; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands or arms. Employees are frequently required to stand.

Specific vision abilities required by this job include close vision, distance vision, the ability to distinguish basic colors and shades, depth perception and the ability to adjust focus.

Employees must frequently lift and/or move up to 10 pounds and occasionally up to 50 pounds.

Mental Demands

While performing the duties of this class, employees are regularly required to use oral and written communications skills; read documents or instructions; analyze and solve complex problems; observe and interpret data or information; use math and mathematical reasoning; learn and apply new information or skills; perform highly detailed and precise work; and meet time-sensitive deadlines.