

POSITION ANNOUNCEMENT

LOCATION: Kansas Geological Survey (KGS) at the University of Kansas (KU), 1930 Constant Ave, Lawrence, Kansas

POSITION TITLE: Earthquake Analyst

KU TITLE: Research Analyst (000691)

APPLICATION DEADLINE: Review of applications will begin March 27, 2023, and continue until the position is filled.

TENTATIVE START DATE: May 15, 2023, start date is negotiable.

SALARY AND BENEFITS: Full-time position with benefits, subject to annual review. Salary starts at \$47,500 or higher, commensurate with qualifications and experience. KU offers great benefits to employees with up to 176 hours of paid vacation earned per year, 96 hours of sick leave earned per year, nine paid holidays plus one discretionary day, a retirement program, medical & dental insurance, life and disability insurance, other benefit plan options, and State of Kansas discounts offered by various vendors. KU also offers employees educational and professional development opportunities. **KGS at KU is a great place to work!**

The University actively encourages applications from members of underrepresented groups.

POSITION OVERVIEW:

Responsibilities include analysis of signals recorded by earthquake stations in Kansas using both command line and graphical user interface (GUI) software and maintain and interact with a relational earthquake database. Calculate and catalog earthquake focus with preliminary interpretation relative to geologic structures and trends. Other duties include seismograph station maintenance; inventory, test, and configure equipment; and monitor earthquake servers.

Prior academic exposure to earthquake or seismic theory is not required or expected. Candidates who are skilled in computing and would enjoy performing data analysis are encouraged to apply.

Work Location: On-site at the Lawrence, KS campus with possibility of a hybrid (remote and on-site work) schedule as deemed by the supervisor. This position has the flexibility for up to 50% remote work during normal business hours and opportunity for overtime.

GEOPHYSICS PROGRAM: The Kansas Geological Survey (KGS) Geophysics Program develops and uses several investigative methods to provide information about the subsurface, using both invasive and non-invasive approaches with a focus on higher resolution and accuracy while reducing cost.

For more information about the KGS visit our website: <http://www.kgs.ku.edu>

RESPONSIBILITIES:

Up to 50% of work may be performed remotely once full proficiency for data analysis is reached, which depends on the individual and is likely several months. There may be an opportunity for occasional overtime outside of normal business hours to respond to significant earthquakes that meet pre-defined criteria.

60% Data Analysis: Assist with processing and analysis of data from about thirty 3-component earthquake stations located around Kansas. Data analysis steps include formatting, event identification and locating, refine event picking, quality control checks, and archive/catalog data. Perform enhanced analysis, such as calculating focal mechanisms and recursion relationships.

25% Quality Control and Reports: Perform rigorous quality control checks to ensure accurate time picks, minimal location errors, and a complete catalog (at and above the magnitude of completeness). Collaborate with other researchers to interpret earthquake and fault characteristics. Make graphs, maps and tables, and assist with writing reports, newsletters, and brief website articles.

10% Earthquake Servers and Database: Maintain already-configured earthquake servers and programs. Interact with the Oracle relational earthquake database using existing programs and SQL scripts.

5% Field and Section Support: Occasional visits to installation sites statewide will be necessary for troubleshooting and

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routine maintenance. Maintain earthquake station equipment inventory, stock field supplies, test equipment, and assist with mobilization/demobilization. Assist with section field crews as needed. Other duties as assigned by supervisor.

POSITION REQUIREMENTS:

1. Valid Class "C" driver's license at onset of employment for travel to the field sites.
2. Willingness to travel to field sites several days at a time.
3. Work outside in possibly extreme conditions.

REQUIRED QUALIFICATIONS:

1. Bachelors in Physics, Engineering (e.g., Computer, Electrical, Mechanical), Geology, Mathematics, or related degree, to be completed by the time of appointment.
2. Advanced computing skills (e.g. experience with computer programming, command line computing, scripting and/or experience using specialized scientific or engineering software, etc.).
3. Demonstrated experience following written and/or oral instructions, and good oral communication skills. Written skills will be evaluated by the quality of the application materials and oral communication skills will be assessed during the interview and by reference checks.

PREFERRED QUALIFICATIONS:

1. Scientific or engineering data analysis experience in academic or employment setting, as evidenced by submission of example(s).
2. Basic mechanical/electrical experience (working with hand tools, etc.) or experience operating scientific instruments.
3. Experience working independently and making decisions with remote guidance as evidenced by work experience.

APPLICATION PROCEDURE:

Apply online only at <https://employment.ku.edu/staff/24471BR>. Complete the University of Kansas Unclassified Professional Staff profile and upload the required material:

1. Cover letter addressing the required and preferred qualifications and position requirements.
2. Resume.
3. Contact information for three professional references.
4. Unofficial college transcripts to determine education requirement.

Review begins March 27, 2023, and will continue until a qualified pool of applicants is received. For best consideration apply by the review date above.

CONTACT INFORMATION:

Annette Delaney, Kansas Geological Survey, University of Kansas. adelaney@ku.edu or 785-864-2152.

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