

# Job Title: CHEMIST IV - SENIOR INSTRUMENT LABORATORY CHEMIST - IPR#46112

**Agency :** Department of Transportation

**Closing Date/Time:** 01/30/2023

**Salary:** \$5,465 - \$9,230 Monthly

**Job Type:** Salaried Full Time

**County:** Sangamon

**Number of Vacancies:** 1

**Plan/BU:** NR916 - Protech Teamsters

**\*This position is covered by the Revolving Door Prohibition policy.**

**This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.**

**All applicants who want to be considered for this position MUST apply electronically through the [illinois.jobs2web.com](http://illinois.jobs2web.com) website. State of Illinois employees should click the link near the top left to apply through the **SuccessFactors** employee career portal.**

**Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.**

## **Agency Mission Statement**

The Illinois Department of Transportation is seeking to hire a Senior Instrument Laboratory Chemist.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

## **Job Responsibilities**

This position is accountable for the operation of the Bureau of Materials' Instrument Laboratory and the quality testing of asphalts, cements, metals, paints, and numerous other materials used in the construction and maintenance of highways and other projects within the department and other local transportation agencies.

Samples tested:	30 per day, approximately
Typical types of materials tested:	115 approximately
New products tested:	8-15 annually

This position reports to the Field Operations Chief. There are no subordinates reporting to this position.

This position works in an environment where s/he is responsible for organizing and performing the chemical testing of materials used in highway construction and maintenance to ensure compliance with required specifications through utilization of sophisticated instrumentation and techniques. The incumbent provides testing services of a methodological and specialized nature. This position provides instrumental analyses for all of the Bureau of Materials' laboratories as well as for several laboratory research projects and other agencies such as the Department of Central Management Services (CMS). S/He has comprehensive knowledge of all testing procedures and operates, maintains, calibrates, and repairs all testing equipment used in the instrument laboratory to ensure accurate results. The incumbent has a thorough knowledge of testing materials, chemicals, and equipment and maintains a strong safety program to ensure toxic chemicals and hazardous wastes are handled and disposed of properly.

A typical challenge for this position involves the development of new chemical test methods and procedures to utilize technological advancements in instrumental methods. Therefore, the incumbent must remain knowledgeable with new and innovative types of materials analyses and the instrumentation required for such novel analyses. A major challenge for the incumbent is to maintain a flexible and aggressive program for testing in an environment of ever-increasing chemical complexity that will ensure all products are tested in an efficient and timely manner.

This position maintains inventory of equipment, apparatuses, and supplies. The incumbent provides technical expertise and informed recommendations on the purchase of these items. S/He ensures samples received are tested and reported in an efficient and timely manner and interprets results, specifications, and test procedures. The incumbent ensures proper laboratory tests are performed on materials and the results are accurate. In the event products submitted for testing are not covered by available specifications and test methods, it is the responsibility of the incumbent to perform a literature search for specifications or to develop new specifications and techniques as needed.

### **(Job Responsibilities continued)**

The incumbent networks with peers to identify best practices and innovative instrumental techniques to ensure the department stays on the cutting edge of materials testing. This position keeps abreast of the latest changes in specifications, testing procedures, and technical advances in order to continually broaden his/her capabilities and to assist the Field Operations Chief in the procurement of new chemical instrumentation. The incumbent assists the Field Operations Chief in the administration of the Bureau of Materials' Hazardous Waste Program. This includes the instrumental analysis of unknown waste materials and technical expertise of the chemical properties and safety considerations of hazardous materials.

The incumbent performs work with general supervision within the department's established guidelines. S/He assists in the instrumental testing and analysis of highway materials for construction and maintenance as well as assists the Field Operations Chief with the characterization of wastes to ensure waste materials are handled, stored, transported, and disposed of in accordance with federal, state, and local regulations. Matters of a unique nature are referred to the Field Operations Chief with recommendations.

Internally, the incumbent consults with staff in the district offices, Bureau of Local Roads and Streets, Bureau of Operations, and Bureau of Business Services concerning problems with non-specification materials, components, and material identification and offers advice on technical questions. This position has frequent external contact with material suppliers concerning test results and problems with non-specification materials. S/He has frequent contact and troubleshooting discussions with technical representatives from instrumentation manufacturers to ensure proper maintenance, calibration, and service for all instruments. This position requires occasional statewide travel which may include overnight stays.

The effectiveness of this position can be evaluated by the quality and quantity of tests performed, amount of

backlog samples compared to the number of samples received, supervision required, and lack of complaints from companies being inspected.

## **Principal Accountabilities**

1. Ensures equipment is properly maintained and supplies are kept at a proper level.
2. Ensures samples received are tested and reported in an efficient and timely manner.
3. Interprets test results, specifications, and procedures.
4. Ensures proper laboratory tests are performed on materials and the results are accurate.
5. Performs a literature search for products where specifications are not available or develops new specifications and techniques as needed.
6. Keeps abreast with the latest changes in specification, testing procedures, instrumentation, and technical advances to continually broaden his/her capabilities.
7. Assist's in the administration of the Bureau of Materials' Hazardous Waste Program to ensure waste materials are handled, stored, transported, and disposed of in a manner that complies with all federal, state, and local rules and regulations.
8. Keeps the environment and work areas clean to ensure the laboratory is healthy and safe.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs other duties as assigned.

## **Qualifications**

### **Position Requirements**

- Education/Experience:
  - Completion of a bachelor's degree in chemistry or chemical engineering
  - Five years of experience in analytical chemistry with three years directly related to analyses of highway construction and maintenance materials
- Occasional statewide travel which may include overnight stays
- Valid driver's license

### **Position Desirables**

- Extensive knowledge and experience in the operation and routine maintenance of various sophisticated chemical testing instruments
- Working knowledge of the principles and practices of instrumental chemistry
- Experience performing routine maintenance and troubleshooting with technical representatives for various chemical testing instruments
- Ability to develop and maintain cooperative relationships with coworkers and management
- Effective oral and written communication skills

**Work Hours:** 8:00 am - 4:30 pm Monday-Friday

**Work Location:** 126 E Ash St Springfield, IL 62704-4766

**Office:** Office of Highways Project Implementation/Bureau of Materials

**Agency Contact:** DOT.CONTACTHR@ILLINOIS.GOV

**Job Family:** Transportation

## **APPLICATION INSTRUCTIONS**

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the [Illinois.jobs2web.com](http://Illinois.jobs2web.com) homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the [Illinois.jobs2web.com](http://Illinois.jobs2web.com) homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the [career portal](#) for State employees and review the [Internal Candidate Application Job Aid](#)

Non-State employees: on [Illinois.jobs2web.com](http://Illinois.jobs2web.com) – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your “junk mail”, “spam”, or “other” folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- [donotreply@SIL-P1.ns2cloud.com](mailto:donotreply@SIL-P1.ns2cloud.com)
- [systems@SIL-P1.ns2cloud.com](mailto:systems@SIL-P1.ns2cloud.com)