

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES  
CLASS SPECIFICATION

METROLOGIST ASSOCIATE

POSITION CODE: 27146

Effective: 09-01-14

DISTINGUISHING FEATURES OF WORK:

Under direction, assists in the operation of the State Metrology Laboratory; assists in maintaining accuracy and physical security of state standards and associated measuring instruments; calibrates regulatory and industry standards of weight and volume; recommends approval or disapproval of weighing and measuring devices used and sold in the state; assists Metrologist by providing guidance and leadership and work review of lower level laboratory workers; or assisting in the training of new laboratory personnel; performs duties of Metrologist in temporary absence of same.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Assumes responsibility for selecting appropriate procedures to perform mass, volumetric or weight calibrations.
2. Compares weights submitted either by field personnel or industry with official state standards by one of the National Institute of Standards and Technology approved methods, e.g., direct reading, single substitution, double substitution, transposition, 3-1 weighing designs, etc.
3. Performs volume calibration by means of volume transfer or gravimetric procedure.
4. Assists Metrologist with routine office functions such as scheduling appointments and record keeping in both paper and electronic formats.
5. Assists Metrologist in maintaining the accuracy of sophisticated measuring instruments used; inspects, evaluates, cleans and calibrates weights and measures standards for department.
6. Assists Metrologist in the safekeeping and preservation of the state primary standards, instrumentation and associated equipment to maintain required traceability to the National Institute of Standards and Technology.

## METROLOGIST ASSOCIATE (Continued)

7. Assumes responsibility for ongoing reviews of the Quality Assurance Program.
8. Performs other duties as required or assigned which are reasonably within the scope of the duties enumerated above.

### DESIRABLE REQUIREMENTS:

#### Education and Experience

Requires knowledge, skill and mental development equivalent to completion of two years of college with courses in physical sciences, mathematics, physics or engineering.

Requires successful completion of National Institute of Standards and Technology (NIST) seminars – Fundamentals of Metrology, Mass Metrology and Volume Metrology – during the first year of employment.

#### Knowledges, Skills and Abilities

Requires working knowledge of a wide range of calibration methods, techniques and instruments.

Requires working knowledge of computers and the skill to use various software products.

Requires working knowledge of the metric system.

Requires demonstration of an aptitude for successful completion of the ten basic Laboratory Auditing Program problems for the Office of Weights and Measures.

Requires ability to assume responsibility for extreme accuracy in test procedures.

Requires ability to interpret and apply weights and measures laws and regulations relating to weighing and measuring devices and equipment.

Requires ability to prepare clear, concise and accurate laboratory reports.

Requires ability to gain and maintain satisfactory working relationships with industry and National Institute of Standards and Technology personnel.