PHYSICIST

General Statement of Duties and Responsibilities

This class of positions encompasses professional and/or supervisory responsibilities of various levels of responsibility and complexity involved in the performance of work in physics. Utilizes computers and other equipment and instruments current with the professional standards. There are three Assignment Levels within this class of positions. May work in a physics, radiation testing, and/or acoustics instrumentation laboratory; and/or conduct field investigations, surveys, or source monitoring and analysis. All personnel perform related work. The following are typical assignments within this class of positions:

Assignment Level I

Under supervision, performs scientific work of moderate professional difficulty and responsibility in the field of physics. May supervise subordinate employees.

Examples of Typical Tasks

Maintains, repairs, adjusts, calibrates and develops electronic and electro-mechanical instruments, radiation equipment, noise measuring equipment, and other measuring instruments, and/or physics-related instruments.

Participates in research, laboratory and/or field investigations and surveys; measures, assembles and analyzes data.

PHYSICIST (continued)

Assignment Level I (continued)

Examples of Typical Tasks (continued)

Assists in measuring radiation levels in samples of air, soil, water, food, etc., as well as radioactive materials and materials suspected of radioactive contamination, including stray radiation from medical, dental, fluoroscopic and other x-ray installations; maintains protection against radiation hazards.

Assists in radiological research and development. Assists in the development of special methods and apparatus for work with radioisotopes.

Prepares radioisotopes for assays. Reviews and may perform up-take measurements and dose determinations.

Prepares reports and maintains records, as required.

Assignment Level II

Under general supervision, with considerable responsibility and latitude in the exercise of independent judgment and decision, in addition to performing the duties of AL I, performs difficult and responsible professional work in the field of physics, such as the following:

PHYSICIST (continued)

Assignment Level II (continued)

Examples of Typical Tasks

Participates in the development and construction of electronic, electro-mechanical, optical, chemical, and related instruments and equipment.

Assures the timely maintenance and service of Geiger-Mueller counters, scintillation counters, scalors, amplifiers, recorders, ionization instruments, electro-cardiographs, electro-encephalographs, short wave and other physical therapy equipment.

Maintains and modifies air pollution monitoring systems.

Conducts radiological research and development. Develops special methods and apparatus for work with radioisotopes.

Prepares specifications for radiation equipment and measuring instruments; conducts tests to determine compliance with specifications.

Measures radiation levels in samples of air, soil, water, food, etc., as well as radioactive materials and materials suspected of radioactive contamination, including stray radiation from medical, dental, fluoroscopic and other x-ray installations; maintains protection against radiation hazards.

Trains subordinates.

May operate a small institutional physics laboratory.

PHYSICIST (continued)

Assignment Level III

Under direction, with wide latitude for the exercise of independent judgment and decision, in addition to performing the duties of AL I and II, is in charge of and assumes responsibility for a major program, project or activity in the field of physics. May be in charge of the scientific work of a small agency or the operation of a physics laboratory, including supervisory work involving electronics, radiation testing, radioactive isotopes, spectrometry and toxicology. In addition, performs tasks such as the following:

Examples of Typical Tasks

Supervises the professional, technical and administrative work of a physics laboratory.

Supervises and participates in the maintenance, repair, calibration and adjustment of physics instruments and equipment. Prepares specifications for, designs, develops and constructs: equipment, instruments and preparative methods, for use in the performance of work in physics.

Supervises, conducts, records and/or analyzes the results of physics experiments.

Initiates, plans and directs research projects.

Compiles data and maintains data reference systems; prepares and maintains technical records and reports.

Supervises and makes radiation dosage measurements.

PHYSICIST (continued)

Assignment Level III (continued)

Examples of Typical Tasks (continued)

Supervises and participates in up-take measurements, the assay of radioisotopes, and radiation protection measurements.

Evaluates toxicity levels.

Develops safety methods against radioactive hazards.

Acts as expert consultant. Testifies in court.

Qualification Requirements

1. A master's degree from an accredited college in physics; electronic engineering; electrical engineering; acoustics; or a closely related field; or

2. A baccalaureate degree from an accredited college, including or supplemented by 24 semester credits in physics; electronic engineering; electrical engineering; acoustics or a closely related field; plus one year of satisfactory full-time professional experience in one of the fields listed in "**1**" above, or a closely related field.

PHYSICIST (continued)

Qualification Requirements (continued)

For Assignment Level II

To be eligible for placement in Assignment Level II, individuals must have, after meeting the minimum requirements described for Assignment Level I above, at least one year of satisfactory service as a Physicist with the City of New York, or at least one additional year of satisfactory full-time professional experience in one of the fields listed in "**1**" above, or a closely related field.

For Assignment Level III

To be eligible for placement in Assignment Level III, individuals must have, after meeting the minimum requirements described in Assignment Level I, at least two years of satisfactory service as a Physicist with the City of New York, or at least two additional years of satisfactory full-time professional experience in one of the fields listed in "**1**" above, or a closely related field.

Note: A Ph.D. or D.Sc. degree from an accredited college in physics or a related field, obtained after no less than 3 years of graduate study, will be accepted as equivalent to 3 years of experience.

Direct Lines of Promotion

From: None **To:** None