

CHEMISTRY LABORATORY DIRECTOR

KIND OF WORK

Administrative and supervisory work in a large scale scientific laboratory.

NATURE AND PURPOSE

An employee in this class is responsible for organizing and directing the work of an entire laboratory staff or a sizable portion of a staff of scientific professionals such as chemists, bacteriologists, engineers, and physicists, para-professional aides and office personnel performing a wide variety of laboratory tests and functions to support the programs of various state departments. The employee is also responsible for planning research projects and adapting laboratory methods and equipment to changing needs and conditions.

An employee in this class possesses wide latitude for approving or disapproving research proposals or results and for exercising independent judgment in devising solutions to problems. Direction is received from a higher level scientific specialist who directs the overall operations of the largest departmental laboratories or from departmental administrative personnel in those laboratories where the incumbent is in charge of the laboratory.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Directs and supervises work of laboratory personnel in making tests and observations of various types of samples such as highway construction materials, and radioactive and other contaminated biological materials.

Performs administrative functions for the laboratory such as estimating future needs of supplies, equipment and personnel, assisting in budget preparation, personnel selection, and procurement of laboratory supplies and equipment.

Supervises laboratory staff including the planning and outlining of work programs and research projects, review of analysis findings for quality control, regulation of work flow, and review and evaluation of performance of subordinate staff.

Conducts independent research to establish new, more accurate, better analysis methods and procedures, and designs and constructs specialized laboratory instrumentation where commercial equipment is not available.

Supervises installation and operation of automated analysis programs.

Provides technical advice to agency program directors, and assistance to subordinate staff and to other governmental and private organizations engaged in similar types of scientific analysis.

Directs laboratory and field personnel in the sample collection and analysis associated with the monitoring of nuclear power effluents for radioactivity.

Supervises laboratory personnel in chemical analysis of air samples for pollutant content, blood, food, tissue and urine samples for toxic materials, and in chemical and bacteriological analysis of water and sewage and industrial wastes for environmental studies.

Directs laboratory personnel in chemical and physical analysis of petroleum and tar products such as cements, paints, bituminous mixes and rubber joint sealing materials, alloys and aluminum and makes technical determinations on whether to accept or reject tested materials.

Directs the inspection of oil refineries, paint plants and sign companies who supply the state with construction and related commodities.

Performs related work as required.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Thorough knowledge of the principles and practices of analytical chemistry, physics and related scientific disciplines bearing upon the work performed in the laboratory supervised.

Ability to:

Plan, assign, supervise and evaluate the work of employees engaged in laboratory analysis.

Evaluate laboratory procedures and equipment and to effect constructive improvements.

Conduct difficult original and independent research.

Skill in:

Analytical laboratory technique and analysis.

Est.: 10/16/44
Rev.: 9/12/51, 2/18/70
Checked: 2/22/73, 8/92

T.C.: 4/84
Former Title(s): Laboratory Director - Chemistry