Physical Scientist (Research) 11

GS-1301-11 Research

NOTE: THE SENTENCE IN PART I DESCRIBING THE PURPOSE OF THE POSITION AND PARTS II AND III IN THEIR ENTIRETY ARE PERMANENT PARTS OF THE LIBRARY AND MAY NOT BE CHANGED OR EDITED IN ANY WAY.

I. INTRODUCTION

This position is located in

Incumbent is a member of a team performing research on physical science phenomena.

II. MAJOR DUTIES AND RESPONSIBILITIES

Incumbent investigates long range and short term problems, recommends solutions, and writes scientific papers for publication. The focus may be oceanographic, geodetic, meteorological, or other, requiring use of a variety of physical science theories and techniques, to assess the dynamic interaction of the phenomena studied. The following are examples of the work performed:

Oceanographic investigations centering on fluxes of energy, momentum and materials through the air-sea interface, the transport and composition (thermal and chemical) of ocean and coastal water masses and the structure and dynamical processes on the sea-floor.

Oceanography, marine meteorology and related disciplines to improve understanding of environmental processes in coastal and open-ocean systems.

Dynamics of geophysical fluids in the atmosphere, hydrosphere, and cryosphere, over a wide range of time and space scales. Potential applications include deterministic atmospheric forecasting, life cycle of hurricanes, and clear air turbulence.

Atmospheric and environmental problems caused by changes in atmospheric composition associated with natural and manufactured emissions.

Global and climate change, acid deposition, atmospheric chemistry, and meteorological and biological problems involving interaction between lower atmosphere and underlying surface, primarily vegetation.

Chemical and physical processes in the earth's atmosphere to advance the capability of monitoring, predicting, and controlling the atmosphere.

Understanding and prediction of coastal and estuarine processes and interdependencies with the atmosphere, land, and sediments.

FACTOR 1 - Research Situation/assignment Degree A, 2 pts.

The incumbent is assigned projects that are readily defined and limited in scope. The assignments may be part of a larger assignment to study specific physical science problems, or they may be segments of a larger investigation. The incumbent usually participates substantively in all phases of the research investigation, including problem definition, planning, execution, analysis, interpretation, and reporting of findings.

Investigations may cover new areas in physical science research, where the objectives are clear-cut and fairly conventional, or they may involve applying existing theory or methods to new problems not previously studied.

Projects are expected to result in a publishable addition to scientific knowledge.

FACTOR 2 - Supervision Received Degree A, 2 pts.

The supervisor gives general instructions as to scope/objectives of physical science investigations to be conducted. Incumbent consults with supervisor on problem definition and development of plan and attack. Incumbent is responsible for the study and pursues it to completion, solving problems ordinarily entailed in accomplishment of the work with only occasional reference to the supervisor. Incumbent interprets results and prepares reports. Supervisor reviews papers for completeness, clarity, and presence of supporting information.

FACTOR 3 - Guidelines and Originality Degree A, 2 pts.

At this level the incumbent uses existing theory and methods that are generally applicable to most problems. The originality required is primarily to develop a complete and adequate research design for a particular project. Only limited innovation or modification of procedures and techniques is required. They may apply complex but established experimental techniques.

FACTOR 4 - Qualifications and Scientific Contributions Degree A, 4 pts.

Performs independent research as member of a research team. Has contributed as co-author, in a secondary role, to major scientific papers, or as senior author of a paper of minor importance to a limited area.

Points: 2 + 2 + 2 + 4 = 10

This position is exempt from coverage under the Fair Labor Standards Act.

IV. UNIQUE POSITION REQUIREMENTS
