



[Home](#) > [HR Practitioners](#) > [Classification & Position Management](#) > [PD Library](#)

Physical Scientist (Research) 13

GS-1301-13 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 performs independent research on critical problems of 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.

III. FACTOR LEVELS

FACTOR 1 - Research Situation/assignment Degree C, 6 pts.

Incumbent researches multi-phase physical science problems of considerable scope and complexity, either alone or as principal researcher of a group effort. Novel and sometimes unconventional approaches must be applied to the physical science problem to be investigated. Problems often are difficult to define.

Incumbent is the author of one or more publications of considerable interest and value to physical science. The publications answer important questions and add to scientific knowledge. The results represent important changes to products, processes and techniques.

FACTOR 2 - Supervision Received Degree C, 6 pts.

Incumbent has considerable freedom in identifying, defining, and selecting specific problems for study. Independently formulates hypotheses and develops and carries out plan of attack. Supervisor is kept informed through general discussions, and consults with the researcher on proposals to changes the direction or level of research efforts significantly. Scientific recommendations are normally followed with completed work reviewed for overall results and contribution to understanding of physical science phenomena.

FACTOR 3 - Guidelines and Originality Degree C, 6 pts.

Significant gaps or contradictory findings exist in relevant physical science literature. Incumbent applies a high degree of originality in defining and delimiting problems for study. Incumbent develops and applies new techniques and original methods to attack problems in physical science phenomena. Researcher shows creativity and applies a high degree of insight to finding solutions to physical science problems. Incumbent must analyze and synthesize complex physical science information of precedent-setting nature.

FACTOR 4 - Qualifications and Scientific Contributions Degree C, 12 pts.

Personal performance of research marks incumbent as a significant contributor. As author of one or more papers of considerable interest, incumbent demonstrates leadership in the conception and formulation of productive research ideas for others. May serve on technical committees in the specialty area.

Total Points: 6 + 6 + 6 + 12 = 30

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

IV. UNIQUE POSITION REQUIREMENTS

(Last Updated: November 4, 1994)

[Website Feedback](#) [About OHRM](#) [Contact Us](#) [DOCHROC](#) [FOIA](#) [Site Map](#)
[Privacy Policy](#) [Commerce Homepage](#) [Careers at Commerce](#)
[Commerce Employees](#) [HR Practitioners](#)