Hydrogeologist

Job Code 00001306

General Description
Responsible for conducting water resources engineering related to aquifers, and communicate the results to scientific and engineering communities and the private sector.

Examples of Duties
Prepare research proposals for external funds.
Organize and perform field trips to collect aquifer data.
Install and operate groundwater monitoring systems.
Manage research projects.
Compile data and perform engineering investigation and analysis.
Develop numerical models and prepare research reports.
Write and present professional papers to disseminate findings from the research projects.
Organize technical meetings and symposiums.
Provide consultation, guidance and advice to the university graduate and undergraduate students on their research papers and thesis.
Perform other duties as assigned.

Knowledge, Skills, and Abilities

Knowledge of: Advanced engineering principles and disciplines and water resources engineering; UNIX system hardware and software.

Skill in: Using personal computers in telemetry data collection and complex engineering analysis; creating spreadsheets and databases in aquifer tests and data collection; maintaining aquifer data and interpretive results on web sites; assessing aquifer sustainability and groundwater availability.

Ability to: Interpret and apply complex engineering and technical documents, digest professional papers and understand technical manuals; prepare reports and articles on research progress for publication; perform advanced math and statistics, using partial differential equation (PDE), numerical analysis, multivariate regression, and time series analysis; effectively direct the work of others and motivate output; develop mathematical models, and perform numerical analysis.

Experience and Education
To qualify for this classification, an individual must possess any combination of experience and education that would likely produce the required knowledge, skills, and abilities.
Other Requirements