Physical Research Laboratory

Geosciences Division

Tuesday Seminar

Isotopic characterization of Groundwaters of India: insights into hydrogeological processes

Abstract

Only 3% of the global water is fresh water, of which only 30% is groundwater (0.009% of total water on earth). In an agrarian country like India, where rainfall is erratic and unevenly distributed, groundwater becomes the important source of irrigation as well as domestic usage. Availability and quality of groundwater is adversely affected due to overexploitation, geogenic and anthropogenic contamination and climate change. While the adverse effects on groundwater, and the dependent economy and ecology, are obviously realised, the mechanism of underlying geohydrological processes is not so well understood. Hence, the knowledge about spatially variable geohydrological processes has become crucial not just from the academic perspective but in order to provide societally relevant information which can be useful in efficient water resource management in the field. In the above backdrop, I will pursue my Ph.D. research in the field of groundwater hydrology whereby I propose to use isotope characteristics of groundwater of first unconfined aquifer to answer some of the emergent scientific questions pertaining to geohydrological processes. In this talk, I would provide a broad outline and objectives of my future doctoral research work, major scientific questions to be addressed, challenges and limitations.

Speaker: Mr. Amit Pandey
JRF, GSDN

Date	Time	Venue
01-January-2019	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

Tea at 15:30 Hrs

(Near Ground Floor Lecture Hall Foyer)

A. K. Sudheer, Geosciences Division