

NATIONAL GEOPHYSICAL RESEARCH INSTITUTE

LABORATORY FACILITIES

- 1) Environmental tritium & radiocarbon lab using methane as counting gas.**
- 2) A Liquid Scintillation System (Quantulus).**
- 3) High Level Tritium measurements for recharge studies.**
- 4) Radon measuring facility using Alpha Scintillation System.**
- 5) Low Level Chloride Measurements**
- 6) Mass Spectrometer for Stable Isotope Measurements**

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Ongoing and Future Research Programmes

- 1) **Isotope & geochemical tracer techniques for study of the mechanism of recharge from the unsaturated to saturated zone in fractured rock aquifers. Basically this aims at determining the significance of the preferential flow as compared with the piston flow component and has long term objective of the reappraisal of estimate of groundwater recharge in the country in view of the findings.**
- 2) **Study of process of recharge to the deeper aquifers in the hard rock area especially from the hydrochemistry and radiocarbon measurements of deeper hard rock aquifers vis-à-vis shallow aquifers.**
- 3) **Research in the possible use of Radon and Helium in delineation of fractures and in the siting of high yield bore wells in hard rock areas.**
- 4) **Study of artificial recharge structures such as percolation ponds with an aim to determine their efficacy using the chloride mass balance technique developed by NGRI and determining the factors controlling their efficacy.**