

# ION CHROMATOGRAPH



In 2018, Prof. Gh Jeelani spearheaded a pioneering project under the sponsorship of MoES, focusing on the critical issue of groundwater security in the Indus basin of Ladakh. Titled "Groundwater security of Indus basin (Ladakh) in present and future climate and land scenarios," the project aimed to assess the impact of climate change and land use on groundwater resources. To conduct comprehensive analyses of ion concentrations vital for understanding groundwater quality, the Department of Earth Sciences acquired an Ion Chromatograph. This sophisticated instrument facilitated precise measurements of various ions present in groundwater samples, enabling researchers to discern trends, identify sources of contamination, and assess the overall health of the aquifers in the Indus basin. Its

application proved instrumental in providing actionable insights for sustainable water resource management strategies tailored to the unique challenges faced by the region.