

**Department of Earth Sciences
Indian Institute of Technology Roorkee**

**Area of specialization available for
Ph.D. admissions - Autumn Semester, 2026-27**

S. No.	Areas of specialization with vacancies
1.	Sedimentology, Sequence Stratigraphy, Basin Analysis
2.	Seismic wave scattering and attenuation, AI/ML for seismic signal processing, Ambient noise tomography
3.	Gravity & Magnetic modeling & inversion, AI-ML based inversions, GRACE/GOCE applications, Crustal deformation, Geophysical Signal Processing
4.	Hydrogeophysics
5.	Engineering Geology, Rock Mechanics
6.	Energy Transition, CCUS, Geothermal, Natural Hydrogen, Petrophysics and Rock Physics, Digital Rocks
7.	Planetary Geology-Geochemistry-Petrology
8.	Seismology, Seismic tomography, earthquake source mechanisms
9.	Fracture topology, Applied Structural Geology, Fabric analysis
10.	Structural Geology
11.	Paleoclimate
12.	Modelling and inversion of MT and ERT data. Joint inversion, AI-ML based inversion



25/05/2026

Chairman,
D.R.C.,
Department of Earth Sciences,
IIT Roorkee