

NGRI - National Geophysical Research Institute

National Geophysical Research Institute (NGRI) is a leading Indian research institute in Earth sciences and geophysics under CSIR. It focuses on understanding the Earth's structure, natural resources, and geohazards to support sustainable resource use and disaster preparedness.

NGRI, established in 1961 as a CSIR laboratory in Hyderabad, focuses on earthquake studies, groundwater, mineral exploration, geothermal energy, environmental geophysics, and critical minerals research. Celebrating 60 years in 2020, it has become a key institution in India's geophysical and mineral exploration capabilities.

Objectives & significance of NGRI

NGRI aims to study Earth processes, assess earthquake hazards and landslides, explore groundwater and minerals, support disaster risk reduction, develop geophysical technologies, and aid government agencies in geo - resource management.

It is vital to India's scientific ecosystem, aiding in earthquake hazard assessment, seismic mapping, groundwater management, mineral exploration, geothermal studies, and carbon capture research. It also boosts public safety by enhancing earthquake preparedness and resilience.

Collaborations

NGRI collaborates with CSIR labs, Geological Survey of India, IITs, universities, international -

geoscience organizations, disaster management agencies, and the energy and mining sectors, also contributing data to global seismic databases.

Achievements & Recognitions

NGRI's major achievements include studies on reservoir - induced earthquakes, national risk mapping, exploration and artificial recharge initiatives, identification of platinum reserves in Hutti gold mines, and the establishment of the Centre for Geothermal Energy Research. NGRI scientists have received several prestigious awards, including Dr. Prakash Kumar's election as a Fellow of TWAS (UNESCO) and accolades such as the CSIR Young Scientist Award, National Geoscience Award, Krishnan Gold Medal, and Anni Talwani Memorial Prize.

Conclusion

The National Geophysical Research Institute (NGRI) is a leading Indian research institution dedicated to studying the Earth. It focuses on areas such as earthquakes, groundwater, minerals, and geophysics, contributing to disaster management and sustainable development.

