

**DEPARTMENT OF EARTHQUAKE ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE**

Dated May 15, 2021

List of faculty available to supervise Ph. D. students with MHRD fellowships

Sr. No	Faculty Name	Research Specialization	Vacant Seats	Interest
1	Prof. Yogendra Singh	Performance Based Seismic Design, Performance Based Design of Buildings and Bridges, Seismic Response Evaluation of Structures, Non-Linear Modelling and Analysis of RC Structures, Seismic Evaluation and Retrofitting of Structures, Seismic Evaluation and Retrofit of Hospitals and Schools, Seismic Vulnerability and Risk Evaluation, Seismic Vulnerability and Risk Analysis of Indian Housing Stock, Dynamic Soil-Structure Interaction, Effect of Soil on Seismic Performance of Buildings, Towers, and Bridges, Seismic Risk In Hilly Areas, Seismic Fragility Analysis of Hill Buildings, Seismic Risk In Hilly Areas, Slope-Building Interaction under Seismic Action	02	Yes
2	Prof. M. L. Sharma	Engineering Seismology, Seismotectonics, Seismic hazard analysis, Digital telemetered seismic arrays, SAR Interferometry, Strong ground motion prediction, Seismic Microzonation	01	Yes
3	Prof. J. P. Narayan	Earthquake Ground Motion Simulation; Viscoelastic Finite-difference Algorithms; Pseudo-dynamic rupture modelling; Site and Site-city interaction effects on ground motion and building response; Seismic Microzonation.	04	Yes
4	Prof. Manish Shrikhande	Computational mechanics, Random vibrations, Structural Reliability, Strong Motion Studies, Soil-Structure Interaction, Vibration Control, Probabilistic mechanics	03	Yes
5	Prof. B. K. Maheshwari	Geotechnical Earthquake Engineering, Dynamic Soil-Structure Interaction (Pile Foundation), Dynamic Soil Properties, Liquefaction, Seismic Slope Stability, Nonlinear FE Analysis.	02	Yes
6	Prof. Pankaj Agarwal	Earthquake Resistant Design of Structures, Low-strength masonry buildings, Repair and retrofitting of masonry and reinforced concrete buildings. Vibration Control.	04	No
7	Dr. J. Das	Seismo-Tectonics, Remote Sensing, GIS, Seismic Hazards, Related to these areas	1/2	No
8	Dr. R. S. Jakka	Geotechnical Earthquake Engineering, Site Characterization, Local Site Effects, Shallow and Deep Foundation, Slope Stability, Liquefaction, Ground Improvement.	01	Yes
9	Dr. S. C. Gupta	Observational Seismology, seismological arrays and networks.	01	No
10	Dr. Daya Shanker	Seismology and Seismotectonics, Seismic risk analysis, Earthquake data analysis, Statistical seismol, Seismotectonic of Himalaya, Seismic hazard and Earthquake prediction / Earthquake Disaster Management, Earthquake prediction in Himalaya, NE India, Editor, e-journal of ISES (Indian Society of Earthquake Science), Prediction of Ground Motion studies and seismic Microzonation, Microzonation of Kochi City India, Applied Geophysics/Theoretical seismology, Gravity and Magnity Survey In Mandala Na Jabalpur India, Geophysical application in Civil Engineering and tunneling Technology, In situ stress estimation, Landslide/Earthquake Control and Hill development, Landslide hazard estimation, Marine geophysics/Tsunami study, Tsunami Survey and hazard studies	01	Yes
11	Dr. R. N. Dubey	Static and dynamic analysis of structures, Finite element method, Earthquake resistant design, Static and dynamic analysis of structures, Finite element method, Earthquake resistant design	03	Yes
12	Dr. P. C. Ashwin Kumar	Structural Engineering, Seismic response and design of steel and reinforced concrete structures, Structural Engineering, Supplemental damping and energy dissipating devices, Structural Engineering, Seismic rehabilitation and	01	Yes

		retrofitting of steel and concrete structures., Structural Engineering, Large scale testing and simulation study of structural systems., Structural Engineering, Non-destructive assessment of structures		
13	Dr. Saurabh Shiradhonkar	Seismic damage assessment, Structural reliability and risk assessment, Performance evaluation of structures, Post earthquake safety assessment, Repair, Rehabilitation and Retrofitting of structures, and Vibration Control, Nonlinear analysis of structures	02	Yes
14	Dr. Ritesh Kumar	Finite element method and computational soil dynamics, Smooth particle hydrodynamics, Data assimilation, Dynamic soil properties and liquefaction analysis, Dynamic soil-structure interaction, Physical and numerical modeling of liquefaction-related problems, Reliability-based analysis/design in geotechnical engineering	04	Yes
15	Dr. Sohom Ray	Physics of frictional sliding and its relevance to geological faults, Mathematical modelling in the field of tectonophysics and seismology, Nonlinear dynamics and partial differential equations, Numerical and approximate solution of partial differential equations, Solid and fracture mechanics and their relevance to (many ways of) slip on geological faults.	04	Yes

(J. P. Narayan)
Chairman, DRC