

Rajesh Singh

Research Scholar

Email: rajeshsingh11@iitb.ac.in

georajeshsingh@gmail.com



RESEARCH THEME

Thermal-Hydro-Mechanical (THM) responses of the geological structures

KEY ACADEMIC PROJECTS

M.Tech: A Numerical Approach to Quantify the Slope Stability of Landslide Prone Area, Mahabaleswar Maharashtra under the guidance of **Prof. T. N. Singh**

M.Sc: Multifractal Behaviour of Seismicity in Sichuan Province under the Guidance of **Dr. J.N Tripathi**

KEY ACADEMIC ACHIEVEMENTS

- Secure 58th rank in GATE-2009
- Secure 22nd rank (Lectureship) in National Eligibility Test (CSIR-NET 2012)

POSITION OF RESPONSIBILITY

- Web Manager, Post Graduate Academic Affair, IIT Bombay, 2013-14
- Web Nominee, Hostel-13, IIT Bombay, 2012-13
- Student Companion, Institute Research Scholar Companion Program, IIT Bombay, 2012-13
- Web developer Gea-2011- An Annual Techfest, Department of Earth Sciences, 2011
- Web developer Gea-2010- An Annual Techfest, Department of Earth Sciences, 2010
- Executive member, Post Graduate Academic Affair, IIT Bombay, 2010-11

COMPUTER SKILL

- Programming Languages: C++, Matlab, PHP, HTML
- Software Packages: Abaqus, COMSOL, GMT, Phase2, Slide, Surfer, Geosoft, LAC/SLOPE-2D/3D, Inkscape, GIMP

PUBLICATIONS

1. S. S. Gupte, Rajesh Singh, V. Vishal and T. N. Singh, 2013, Detail Investigation of Stability of In-Pit Dump Slope and its Capacity Optimization, International Journal of Earth Sciences And Engineering, 06(02): 146-159.
2. M. K. Ansari, M. Ahmad, Rajesh Singh and T. N. Singh, 2013, Rockfall Hazard Rating System for Indian Rockmass, International Journal of Earth Sciences And Engineering, 06(01):18-27.

3. T. N. Singh, M. Ahmad, Ashutosh Kainthola, Rajesh Singh and S. Kumar, 2013, A Stability Assessment of a Hill Slope – An Analytical and Numerical Approach, *International Journal of Earth Sciences And Engineering*, 06(01):50-60.
4. S.S. Gupte, Rajesh Singh, and T.N. Singh, 2013, In-pit Waste Dump Stability Analysis using two Dimensional Numerical Models, *Mining Engineers' Journal*, 14(7): 16-20.
5. M. Ahmad, R. Umrao, M. Ansari, Rajesh Singh and T.N. Singh, 2013, Assessment of Rockfall Hazard along the Road Cut Slopes of State Highway-72, Maharashtra, India, *Geomaterials*, 3(1):15-23, doi: 10.4236/gm.2013.31002.
6. M.K. Ansari, M. Ahmad, Rajesh Singh, and T.N. Singh, 2013, Rockfall hazard assessment at Ajanta Cave, Aurangabad, Maharashtra, India, *Arabian Journal of Geosciences*, DOI 10.1007/s12517-013-0867-8.
7. Rajesh Singh, V. Vishal, T.N. Singh and P.G. Ranjith, 2012, A comparative study of generalized regression neural network approach and adaptive neuro-fuzzy inference systems for prediction of unconfined compressive strength of rocks, *Neural Computing & Application*, DOI: 10.1007/s00521-012-0944-z.
8. Rajesh Singh, R. K. Umrao and T.N. Singh, 2012, Probabilistic analysis of slope in Amiyan landslide area, Uttarakhand, *Geomatics, Natural Hazards and Risk*, 4(1): 13-29.
9. Rajesh Singh, V. Vishal, T. N. Singh, 2012, Soft computing method for assessment of compressional wave velocity, *Scientia Iranica – Transactions in Civil Engineering*, 19(4): 1018–1024.
10. M.K. Ansari, M. Ahmad, Rajesh Singh, T.N. Singh, 2012, Rockfall assessment near Saptashrunji Gad temple, Nashik, Maharashtra, India, *International Journal of Disaster Risk Reduction*, 2:77–83.
11. D Verma, A Kainthola, Rajesh Singh and TN Singh 2012, Assessment of Geo-mechanical properties of some Gondwana Coal using P-Wave Velocity, *International Research Journal of Geology and Mining*, 2(9):261-274.
12. Rajesh Singh, A. Kainthola and T.N. Singh, 2012, Estimation of elastic constant using an ANFIS approach, *Applied Soft Computing*, 12: 40–45.
13. Ravi K. Umrao, Rajesh Singh, Mashud Ahmad and T.N. Singh, 2012, Role of advance numerical simulation in landslide analysis: a case study, *Proceeding of National Conference on Advanced Trends in Applied Sciences & Technology*, Surat, India.
14. R. K. Umrao, Rajesh Singh, M. Ahmad, and T.N. Singh, 2011, Stability Analysis of Cut Slopes Using Continuous Slope Mass Rating and Kinematic Analysis in Rudraprayag District, Uttarakhand, *Geomaterials*, 1: 79-87.