RESEARCH PUBLICATIONS:

Journal Papers Published in Indexed Journals: (SCI/SCIE/SCOPUS)

- 1. Dutta, A., and Sarkar, K., 2024, A neural network model for predicting stability of jointed rock slopes against planar sliding, *Journal of Earth System Science* Vol-133 (201), pp.1-15 (Q3; IF: 1.3)
- 2. Dutta, A., Sarkar, K., and Tarun, K., 2024, Machine learning regression algorithms for predicting the susceptibility of jointed rock slopes to planar failure, Earth Science Informatics, https://doi.org/10.1007/s12145-024-01296-5 (Q2; IF: 2.7)
- 3. Devi, M., Gupta, V., and Sarkar, K., 2024, Landslide susceptibility zonation using integrated Supervised and Unsupervised Machine Learning techniques in the Bhagirathi Eco-Sensitive Zone (BESZ), Uttarakhand Himalaya, India, Journal of Earth System Science, Vol-133(131), pp.1-25 https://doi.org/10.1007/s12040-024-02344-w (Q3; IF: 1.3)
- 4. Keshri, D., Sarkar, K., and Chattoraj, S.L., 2024, Landslide Susceptibility Mapping in Parts of Aglar Watershed, Lesser Himalaya Based on Frequency Ratio Method in GIS Environment, Journal of Earth System Science, Vol-133,1, pp.1-26. https://doi.org/10.1007/s12040-023-02204-z . (Q3; IF: 1.3)
- 5. Rahman,T., Sarkar, K., and Sahu, S.,2023, Correlations between dynamic elastic properties and P-wave velocity for different rock types, Indian Geotechnical Journal, https://doi.org/10.1007/s40098-023-00793-6. (IF: 1.4)
- Chawla, A., Sarkar, K., Abhishek, R., Chawla, S., Pasupuleti, S., and Mishra, S., 2023, A geotechnical approach to compare different slope stabilization techniques for failed slope in the Darjeeling hills, India, Environmental Earth Sciences, Vol-82(376), pp.1-15. https://doi.org/10.1007/s12665-023-11054-3. (Q2; IF: 2.8)
- 7. Kundu, J., **Sarkar, K.,** Ghaderpour, E., Scarascia Mugnozza, G., and Mazzanti, P., 2023, **A GIS-Based Kinematic Analysis for Jointed Rock Slope Stability: An Application to Himalayan Slopes, Land, Vol-12(402), pp.1-27. https://doi.org/10.3390/land12020402. (Q2; IF: 3.2)**
- 8. Niyogi, A; Ansari, T.A., Sathapathy, S.K., **Sarkar, K.,** and Singh, T.N., 2023, **Machine Learning Algorithm for the Shear Strength Prediction of Basalt-driven Lateritic Soils,** *Earth Science Informatics,* Vol-16,pp.899–917; https://doi.org/10.1007/s12145-023-00950-8. (Q2; IF: 2.7)
- 9. Rahman, T., and Sarkar, K., 2023, Correlations between Uniaxial Compressive Strength and Dynamic Elastic Properties for six rock types, International Journal of Geomechanics, 10.1061/IJGNAI.GMENG-7854. (Q2; IF: 3.3)
- 10. Rahman, T., and Sarkar, K., 2023, Empirical correlations between uniaxial compressive strength and density on the basis of lithology: implications from statistical and machine learning assessments, Earth Science Informatics, DOI:10.1007/s12145-023-00969-x (Q2; IF: 2.7)
- 11. Rahman, T., Sarkar, K., Niyogi, A., Mahanandia, A., and Ahmad, S., 2022, Paleo-environmental study of the Raniganj and Barakar Formations: Implications from the Geochemical and Geomechanical Aspects of Sandstone and Shale, Journal of Geological Society of India, Vol-98, PP.1497–1504. https://doi.org/10.1007/s12594-022-2204-x.(Q3; IF: 1.2)
- 12. Kundu, J., Sarkar, K., Verma, A.K., and Singh, T.N., 2022, Novel methods for quantitative analysis of kinematic stability and slope mass rating in jointed

- **rock slopes with the aid of a new computer application**, Bulletin of Engineering Geology and the Environment, Vol-81, PP.1-29. https://doi.org/10.1007/s10064-021-02524-8. (O1; IF: 3.7)
- 13. Rahman, T., and Sarkar, K., 2022, Estimating Strength Parameters of Lower Gondwana Coal Measure Rocks under Dry and Saturated Conditions, Journal of Earth System Science, Vol-131(3), pp.1-18.(Q3; IF: 1.3)
- 14. Kundu, J., Sarkar, K., and Singh, T.N., 2022, Stability assessment of a weathered rock slope with surficial soil cover-A case study from Jaintia Hills, India, Himalayan Geology, Vol-43(2), pp.435-441. (Q3; IF: 1.2)
- 15. Devi,M., Gupta, V., Solanki, A. and Sarkar, K., 2022, Assessment of Slope instability using Kinematic analysis and Finite Element Modelling in the Main Central Thrust zone, Bhagirathi Valley, NW Himalaya, Himalayan Geology, , Vol-43(1A), pp.51-60.(Q3; IF: 1.1).
- 16. Rahman,T., and Sarkar, K. 2021, Lithological Control on the Estimation of Uniaxial Compressive Strength by the P-Wave Velocity Using Supervised and Unsupervised Learning, Rock Mechanics and Rock Engineering, Vol-54,pp.3175-3191, https://doi.org/10.1007/s00603-021-02445-8. (Q1; IF: 5.5)
- 17. Singh,A.K, Kundu,J. Sarkar,K., Verma, H.K., and Singh,P.K, 2021, Impact of rock block characteristics on rockfall hazard and its implications for rockfall protection strategies along Himalayan highways: A case study, Bulletin of Engineering Geology and the Environment,Vol-80,pp.5347–5368.https://doi.org/10.1007/s10064-021-02288-1. (Q1; IF: 3.7)
- 18. Rahman, T., Sarkar, K., and Singh, A.K., 2020, Correlation of Geomechanical and Dynamic Elastic Properties with the P-wave Velocity of Lower Gondwana Coal Measure Rocks of India, International Journal of Geomechanics, DOI: 10.1061/(ASCE)GM.1943-5622.0001828. (Q2; IF: 3.3)
- 19. Kundu, J., **Sarkar, K.**, Singh, A.K., and Singh, T.N., 2020, **Continuous functions** and a computer application for Rock Mass Rating, International Journal of Rock Mechanics and Mining Sciences, Vol-129, 104280.(Q1; IF: 7.0)
- 20. Acharya, B., Sarkar, K., Singh, A.K., and Chawla, S., 2020, Preliminary slope stability analysis and discontinuities driven susceptibility zonation along a crucial highway corridor in higher Himalaya, India, Journal of Mountain Science, Vol-17(4),801-823. (Q3; IF: 2.3)
- 21. Niyogi, A; Sarkar, K., Singh, A.K., and Singh, T.N., 2020, Geo-engineering classification with deterioration assessment of basalt hill cut slopes along NH 66, near Ratnagiri, Maharashtra, India, Journal of Earth System Science, doi.org/10.1007/s12040-020-1378-0. (Q3; IF: 1.3)
- **22.**Chawla ,A, Srinivas, P, Chawla, S, Rao, A. C. S., **Sarkar,K** and Dwivedi,R,2019, **Landslide Susceptibility Zonation Mapping: A Case Study from Darjeeling District, Eastern Himalayas, India,** Journal of the Indian Society of Remote Sensing, Vol-47(3), pp.497-511.(Q3; IF: 2.2)
- 23. Chawla ,A Chawla,S Srinivas,P, Rao, A. C. S., **Sarkar,K** and Dwivedi,R,2018, **Landslide Susceptibility Mapping in Darjeeling Himalayas, India,** Advances in Civil Engineering; doi.org/10.1155/2018/6416492. (Q3; IF: 1.5)
- 24. Roy, N., Sarkar, R., Sarkar, K., and Fulwaria, G., 2018, Assessment of Vulnerability of Rock Slope Considering Material and Seismic Variability, Journal of Geological Society of India, 92 (4), 449-456. (Q3; IF: 1.2)
- 25. Kundu, J., Sarkar, K., Singh, P.K., and Singh, T.N., 2018, Deterministic and Probabilistic Stability Analysis of soil slope A Case Study, Journal of Geological Society of India, Vol-91(4), pp.389-516.(Q3; IF: 1.2)

- 26. Singh,A.K., Kundu,J., and Sarkar, K.,2018, Stability analysis of a recurring soil slope failure along NH-5, Himachal Himalaya, India, Natural Hazards, Vol-90(2), pp.863-885. (Q2; IF: 3.3)
- 27. Kundu, J., Mahanta, B., Sarkar, K. and Singh, T.N., 2018, The Effect of Lineation on Anisotropy in Dry and Saturated Himalayan Schistose Rock Under Brazilian Test Conditions, Rock Mechanics and Rock Engineering, Vol-51(1), pp.5-21. (Q1; IF: 5.5)
- 28. Kumar, N., Verma, A.K, Sardana, S. **Sarkar, K**., and Singh, T.N, 2018, *Comparative analysis of limit equilibrium and numerical methods for prediction of a landslide*, Bulletin of Engineering Geology and the Environment, Vol-77(2), pp.595-608. (Q1; IF: 3.7)
- 29.Kundu,J., Sarkar, K., Tripathy, A, and Singh, T.N., 2017, Qualitative stability assessment of cut slopes along the National Highway-05 around Jhakri area, HimachalPradesh, India, Journal of Earth System Science, .Vol-126, pp. 112. (Q3; IF: 1.3)
- **30.**Kundu,J., **Sarkar, K.**, and Singh,T.N., 2017, **Static and Dynamic Analysis of Rock Slope a Case Study,** Symposium of the International Society for Rock Mechanics, Procedia Engineering, Vol.191,pp.744–749.
- 31. Behera, P.K., Sarkar, K; Singh, A.K, Verma, A.K and Singh, T.N, 2016, **Dump Slope Stability Analysis A Case Study**, *Journal of Geological Society of India*, Vol-88(6), pp.725-735. (Q3; IF: 1.2)
- 32. Sarkar,K; Singh,A.K, Niyogi,A, Behera,P.K. Verma,A.K and Singh,T.N, 2016, The assessment of slope stability along NH-22 in Rampur-Jhakri area, Himachal Pradesh, India. *Journal of Geological Society of India*, Vol- 83(3),pp. 387-393. (Q3; IF: 1.2)
- 33. Gautam, P.K; Verma, A.K; Jha, M.K.; **Sarkar, K**; Singh, T.N, Bajpai, R.K, 2016, Study of Strain Rate and Thermal Damage of Dholpur Sandstone at Elevated Temperature, *Rock Mechanics Rock Engineering*. Vol-49(9), pp.3805-3815. (Q1; IF: 5.5)
- 34. Sarkar,K; Buragohain,B and Singh,T.N, 2016, Rock slope stability analysis along NH-44 in Sonapur area, Jaintia Hills District, Meghalaya, India. *Journal of Geological Society of India*, Vol- 87(3), pp. 317-322.(Q3; IF: 1.2)
- 35. Kainthola .A, Singh,P.K, Verma,D , Singh,R ., Sarkar,K and Singh,T.N ,2015, Prediction of Strength Parameters of Himalayan Rocks: A Statistical and ANFIS Approach, Geotechnical and Geological Engineering, Vol- 33(5), pp. 1255-1278.
- 36. Sarkar, K., Vishal, V. and Singh, T.N, 2012, An Empirical Correlation of Index Geomechanical Parameters with the Compressional Wave Velocity, Geotechnical and Geological Engineering, Vol-30(2), pp.469-479.
- 37. Sarkar, K., Singh, T.N. and Verma, A.K., 2012, A numerical simulation of landslide-prone slope in Himalayan region a case study, International Journal of Arabian Geosciences, Vol-5(1), pp.73-81.(Q3; IF: 1.827)
- 38. Sarkar, K., Tiwary, A. and Singh, T.N., 2010, Estimation of strength parameters of rock using artificial neural networks, Bulletin of Engineering Geology and the Environment, Vol-69, pp.599-606. (Q1; IF: 3.7)
- 39. Singh, T.N., Verma, A.K., and **Sarkar, K.,** 2010, **Static and Dynamic analysis of a landslide,** *International Journal of Geomatics, Natural Hazards and Risk*, ISSN: 1947-5713, Vol-1(4), pp.323-338.(Q1; IF: 4.5)
- 40. Singh, N., Singh, T.N., Tiwary, A., and Sarkar, K., 2010, Textural identification of basaltic rock mass using image processing and neural network, International Journal of Computational Geosciences, Vol. 14(2), pp. 301-310. (Q3; IF:2.1)

41. Singh, T.N., Jain, A. and Sarkar, K., 2009, Petrophysical parameters affecting the microbit drillability of rock, International Journal of Mining and Mineral Engineering, Vol-1(3), pp.261-277.

Journal Papers Published in other Refereed Journals:

- 1. Buragohain,B., Kundu,J., **Sarkar, K**. and Singh, T.N., 2016, **Stability Assessment of a Hill Slope-An Analytical and Numerical Approach**, *International Journal of Earth Sciences and Engineering*, Vol-9(3), pp.269-273.
- 2. Verma, A.K., Singh, T.N., Chauhan, N.K. and **Sarkar, K**, 2016, **A Hybrid FEM-ANN Approach for Slope Instability Prediction**, J. Inst. Eng. India Ser. A.. Online DOI: 10.1007/s40030-016-0168-9.
- 3. Sarkar, K and Singh, T.N, 2011, Instability analysis of slope along NH-22 around Sainj area, H.P., Indian Landslides, Vol-49(1), pp.9-12.
- 4. Verma, A.K., Singh, T.N., Verma, M.K. and **Sarkar, K**., 2009, **Predictions of shear displacement in fully grouted rock bolt**, *Journal of Rock Mechanics and Tunneling Technology*, Vol-15(2), pp.117-130.
- 5. Sarkar, K. and Singh, T.N., 2009, Prediction of strength parameters by dynamic wave, International Journal of Earth Sciences and Engineering, Vol-2(1), pp.12-19.
- 6. Sarkar, K, Sazid, M., Khandelwal, M.and Singh, T.N. 2009, Stability analysis of soil slope in Luhri area, Himachal Pradesh, Mining Engineers Journal, Vol-10(6), pp.21-27.
- 7. Singh, T.N. and **Sarkar, K.**, 2009, **Landslides and flooding around Mumbai**, *Journal of Indian Landslides*, Vol -2(1), pp. 1-8.
- 8. Singh, T.N., Dubey, S., Gupta, N. and Sarkar, K., 2009, Effect of pH on various physico-mechanical properties of basalt rock, *Mining Engineers Journal*, Vol-10(10), pp.17-23.
- 9. Sarkar, K. and Singh, T.N., 2008, Slope Stability Study of Himalayan Rock-A Numerical Approach, International Journal of Earth Sciences and Engineering, Vol. 1, pp.7-16.
- 10. Sinha, S.C, Sarkar, K and Singh, T.N., 2008, Geotechnical investigation of road hill slope near Bhatan tunnel along Mumbai-Pune expressway, Maharashtra, *Mining Engineers Journal*, Vol 10(3), pp.24-27.
- 11. Sarkar, K., Gulati, A. and Singh, T.N., 2008, Landslide Susceptibility Analysis Using Artificial Neural networks and GIS in Luhri area, Himachal Pradesh, Journal of Indian Landslides, Vol -1(1), pp. 11-20.
- 12. Sarkar, K. and Singh, T.N., 2007, Evaluation of Instability Analysis of Slope A Numerical Approach, *Mining Engineers Journal*, Vol-8, pp.11-31.
- 13. Singh, T.N., Bhardwaj, V., Dhonta, L. and Sarkar, K., 2007, Numerical analysis of instability of slope near Rudraprayag area, Uttarakhand, Indian Journal of Engineering Geology, Vol-34(1-4), pp.33-41.
- 14. Singh, T.N., Barde, K.S., Purwar, N., Gupta, S. and **Sarkar, K.**, 2007, **Effects of heightening on overburden spoil dump stability,** *Mining Engineers Journal*, Vol 9(2), pp.16-23.
- 15. Singh, T.N., Sarkar, K. and Bali, R., 2005, A Geotechnical Investigation of Rocks of Amiyan Landslide area, Kumaun Himalayas, Uttrakhand, Mining Engineers Journal, Vol-1, pp. 21-26.

Papers in Conference Proceedings:

- 1. Sarkar, K., and Dutta, A., 2025, Application of numerical simulation techniques for stability analysis of a jointed rock slope in the Himalayan region of India, ICGEID-2024, pp.107-114.
- 2. Dutta, A., Sarkar, K., and Singh, T.N., 2025, Rockfall Simulation with Distinct Element Method in a Jointed Rock Slope with Overhang—A Case Study from the Himachal Himalayas in India, ICGEID-2024, pp.3-13.
- 3. Sarkar, K., and Dutta, A., 2023, Comparative study of finite and distinct element methods for stability assessment of a jointed rock slope, 15th ISRM Congress, *Austrian Society for Geomechanics*, pp. 2892-2897.
- 4. Rahman, T., Niyogi, A., and Sarkar, K., 2022, Determination of Continuous Kinematic Criticality in Structurally Homogeneous Zones A new Approach, ARMA 22–0198, https://doi.org/10.56952/ARMA-2022-0198.
- 5. Acharya, B., Kundu, J., Sarkar, K., and Chawla, S., 2017, Stability Assessment of a Critical Slope near Nathpa Region, Himachal Pradesh, India, Indian Geotechnical Conference, IIT Guwahati, PP. 1-4.
- 6. Behera, P.K; Niyogi A; **Sarkar, K.,** 2017, **Stability estimation of a waste dump in Talcher opencast coalmine: A case study,** Mine Fest India 2017, Exhibition & symposium on mining, Kodaikanal, India, pp. 138-144.
- 7. Singh, A.K; Sarkar, K., and Singh, T.N., 2016, Stability assessment of cut-slope along NH-22, Rampur area, Himachal Pradesh, India, Sixth Indian Rock Conference (INDOROCK 2016), pp. 842-853.
- 8. Niyogi, A; Sarkar, K., and Singh, T.N., 2016, Effect of geomechanical properties on the stability of basaltic road cut slopes at Ratnagiri, Maharashtra, Sixth Indian Rock Conference (INDOROCK 2016), pp. 854-862.
- 9. Kundu, J., Mahanta, B, Tripathy, A; **Sarkar, K**., and Singh,T.N., 2016, **Stability Evaluation of Jointed Rock Slope with Curved Face,** Sixth Indian Rock Conference (INDOROCK 2016), pp. 971 -978.
- 10. Kundu, J., Sarkar, K., and Singh, A.K., 2016, Integrating structural and numerical solutions for road cut slope stability analysis—A case study, India, Rock Dynamics: From Research to Engineering: Proceedings of the 2nd International Conference on Rock Dynamics and Applications (CRC Press), pp.457-462.
- 11. Kumar, N., Verma, A.K., Singh, T.N and Sarkar, K., 2014, Comparative Analysis of methods for prediction of a Landslide, INDOROCK-2014, New Delhi, pp. 567-576.
- 12. **Sarkar, K.** and Singh, T.N., 2010, Rock Slope Stability Analysis along NH-22 in Luhri Area, Himachal Pradesh -A case study, Indian Geotechnical Conference -2010 GEOtrendz, 695-698.
- 13. Sarkar, K. and Singh, T.N., 2010, Road Cut stability analysis along NH-22 in Luhri area, Himanchal Pradesh, Rock Mechanics in civil and environmental engineering (Zhao, Labiouse, Dudt and mathier, Eds) Taylor and Francis pub., pp. 659-662.
- 14. Singh, T.N., Verma, A.K., and **Sarkar, K.,** 2009, **Static and Dynamic analysis of a landslide- A Case Study,** *Proceeding of National seminar on Geodynamics, sedimentation and biotic response in the context of India-Asia collision, Aizwal, Mizoram*, pp. 49-65.
- 15. Sarkar, K. and Singh, T.N., 2008, Slope failure analysis in road cut slope by numerical method, 5th International Symposium, ISRM, Tehran, pp.635-642.

- 16. Sarkar, K. and Singh, T.N., 2008, Environmental impact assessment of hill cut road, Himachal Pradesh, *Proceedings of EMMA, Pilgrim Press Pvt. Ltd., Varanasi*, pp.655-663.
- 17. Singh, T.N., and Sarkar, K., 2008, Assessment of instability analysis of slope by numerical method, *Proceeding of Landslide Management-Present scenario and future directions*, CBRI, Roorkee, pp.218-231.
- 18. Hydrose, M.K and Sarkar, K., 2007, Design of Waste Dump Slope in an Iron ore Mine A case Study, International seminar on Mineral Processing Technology, Bombay, pp. 682-684.
- 19. Singh, T.N. and Sarkar, K., 2007, Engineering Geological Characteristic of Unconsolidated Sandstone from Himalaya, India; National conference on Emerging Technology and Developments in Civil Engineering, Amravati, pp.75-81.
- 20. Sarkar, K., Hydrose, M.K and Singh, T.N, 2007, Assessment of Dump Slope stability in an Iron ore Mine, Goa, India, Geominetech Symposium, ENTMS, Bhubaneswar, pp. 31-33.
- 21. Singh, T.N., Barde, K.S., Purwar, N., Gupta, S. and **Sarkar, K.**, 2007, **Assessing Stability of Waste Dump A Case Study**, *Tenth International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production*, *Thailand*, pp.769-779.
- 22. Singh, T.N and Sarkar, K., 2006, Indian Mineral Industry on the path of Sustainable Development, National workshop on Occupational safety, Health and Environmental Issues in Industries, Goa, pp. 73-86.
- 23. Singh, T.N and Sarkar, K., 2005, Geotechnical Investigation of Amiyan landslide hazard zone in Himalayan Region, Uttaranchal, India, First International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation, Singapore, DOI No:10.1142/9789812701602_0036, pp. 355-360.
- 24. Singh, T.N. and Sarkar, K., 2005, Influence of chemical properties on strength of sandstone in Himalayan Region, Uttaranchal; National conference on Geotechnics and Environment for Sustainable Development, Nagpur, pp. 6-12.
- 25. Majumdar, R.K., Mukherjee, A.L., Roy, N.G, **Sarkar, K.** and Das, S., 2002, **Groundwater studies on south Sagar Island region, south 24 parganas, West Bengal**; National *Conference on Analysis and Practice in Water Resources Engineering for Disaster Mitigation, Kolkata, New Age Publishers, V.1*, pp. 175 183.

Edited Book Chapters:

- 1. Niyogi, A., Sarkar, K., Rahman, T., Singh, T.N. 2023, Stability Assessment of Lateritic Soil Slope Along NH-66, Ratnagiri Maharashtra, India, Landslides: Detection, Prediction and Monitoring, Springer, Cham, ISBN NO. 978-3-031-23858-1, pp.161-174.
- 2. Sarkar ,K., Verma, A. K and Singh , T. N., 2011, Jointed rockmass behavior along road cut slope in Luhri area, Himachal Predesh, India, Slope Stability-Natural and Man made slope, chap.- 10 (edited by T N Singh and Y C Sharma), Yavu education of India, New Delhi, ISBN NO. 978-93-8071-84-0, pp. 155-165.
- Verma, A.K., Sarkar, K. and Singh, T. N., 2011, Numerical modeling for Landslides, Slope Stability- Natural and Man made slope, chap.- 24(edited by T N Singh and Y C Sharma), Yavu education of India, New Delhi, ISBN NO. 978-93-8071-84-0, pp. 387-405.

- 4. Singh, T.N., Sarkar, K., and Gulati, A., 2010, Slope Stability Analysis for Management of Landslides, Natural and Man Made Disasters, MD *Publications Pvt. Ltd., New Delhi (Edited by K.K Singh and A.K Singh), ISBN-13: 9788175332027*, pp.83-121.
- 5. Singh, T.N., Sarkar, K., and Gulati, A., 2009, Application of Soft Computing for Landslide and its Parametric Analysis, NOVA Science Publishers, Inc., USA (Edited by P.K. Joshi et al.), pp.349-382.

Abstracts in Conferences:

- Sarkar, K., and Dutta, A., 2023, Stability assessment of a jointed rock slope with insights into numerical simulation – a case study from the Himachal Himalayas in India, ISRM specialized SLRMES conference on Rock Mechanics for Infrastructure and Geo-resources Development, pp.90-91.
- 2. Dutta, A., and Sarkar, K., 2023, Numerical analysis of a jointed rock slope in the Himalayan region of India a comparative study between continuum and discontinuum approaches, ISRM specialized SLRMES conference on Rock Mechanics for Infrastructure and Geo-resources Development, pp.42-43.
- 3. Kundu, J., Sarkar, K., Jaboyedoff, M and Singh, T.N., 2019, GISMR: A Computer Application to Perform Kinematic Analysis, Slope Mass Rating and Optimization of Slope Angle on a GIS Platform With the Aid of ArcGIS or QGIS, AGUFM 2019, NH53A-05.
- 4. Kundu, J., Sarkar, K. and Singh, A.K, 2019, Easy SMR: A computer program to check kinematic feasibility and calculate Slope Mass Rating., Geophysical Research Abstracts, Vol. 21, EGU2019-1540.
- 5. Nath, S., Kundu, J., Singh, A.K., Acharya, B., and **Sarkar, K**., 2018, **Lithological control on joint roughness**, *Emerging Trends in Geophysical Research for Make-in-India (ETGRMI) Abstract volume*, 9-11 March 2018, IIT(ISM) Dhanbad, pp. 149-151.
- 6. Rahman, T., Singh, A.K., and Sarkar, K., 2018, Correlation of Vp with UCS and BTS of coal measure rocks, Emerging Trends in Geophysical Research for Make-in-India (ETGRMI) Abstract volume, 9-11 March 2018, IIT(ISM) Dhanbad, pp.151-152.
- 7. Acharya, B., Mishra, A., and **Sarkar, K.**,2018, **Rock Mass Characterization of a Highway Slope along NH-5, Himachal Pradesh**, Emerging Trend in Geophysical Research for Make-in-India (ETGRMI), Abstract volume, 9-11 March 2018, IIT(ISM), Dhanbad, pp.115-116.
- 8. Behera, P.K, Singh, A.K., Niyogi, A., and Sarkar, K., 2017, Comparative stability assessment of a coalmine dump in static and dynamic condition: A case study, In 4th Indian Landslide Congress (ILC), 8-9 Dec 2017, IIT Bombay, pp.72.
- Niyogi, A., Sahay, A., Singh, A.K., Sarkar, K., and Singh, T.N., 2017, Rockfall hazard analysis of road cut slope along NH-66 near Sangameshwar, Ratnagiri using rigid body model, 4th Indian Landslide Congress, 8-9 Dec 2017, IIT Bombay, pp.57.
- 10. Sarkar, K., and Verma, A.K., 2013, Static and Dynamic analysis of soil slope-A case study, International Conference on Future Challenges in Earth Sciences for Energy & Mineral Resources, pp.236.
- 11. Verma, A.K, Sarkar, K. and Singh, T.N., 2013, A Neurofuzzy Approach to Predict Water Quality from Field Parameters, National Seminar on Recent Approaches to Water Resource Management, pp.67.