



Contact Information:

Department of Mining Engineering.
National Institute of Technology Karnataka
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Education:

2010 –2015 PhD in Mining Engineering
 Institute: National Institute of Technology Karnataka, Surathkal

2005 - 2007 Master’s degree in Mine Planning
 Institute: Institute of Technology Banaras Hindu University (IT-BHU)

2000 - 2004 Bachelor’s Degree in Mining Engineering
 Institute: University College of Engineering (KSM)

Teaching/Research/Industry Experience:

September 2019 - Present Assistant Professor in Department of Mining Engineering
 Institute: National Institute of Technology Karnataka, Surathkal

December 2017 – September 2019 Scientist in Geomechanics & Ground Control Department
 Institute: National Institute of Rock Mechanics (NIRM)

December 2014 – November 2017 Scientist in Slope Stability Cell
 Institute: National Institute of Rock Mechanics (NIRM)

October 2008 – November 2014 Scientist in Mine Design Department
 Institute: National Institute of Rock Mechanics (NIRM)

October 2006 – September 2008 Jr. Manager
 Organization: South West Mining Limited (JSW Group)

April 2004 – March 2005 PGPT
 Organization: Western Coal Fields Limited (CIL Subsidiary)

Research Areas:

- Mine Planning
- Open pit mining
- Slope Stability

- Underground Mining
- Rock Engineering
- Strata Control
- GIS & Remote sensing
- Geostatistics

Membership of Professional Bodies:

Life Member (LM-2930)	Mining Engineers Association of India (MEAI)
Life member (LM-2231)	Indian Society for Rock Mechanics and Tunnelling Technology (ISRMTT)
Member (M-1529484)	Institution of Engineers (India)
Member (410/IND/2021-2040)	International Society for Rock Mechanics and Rock Engineering (India)
Life Member (867)	Society of Geoscientists and Allied Technologies (SGAT)
Life Member (10855-LM)	The Mining, Geological & Metallurgical Institute of India

Awards/Honors/Achievements:

- Dr. Rajendra Prasad Gold Medal for best paper titled “Stress distribution on blasting gallery pillar due to goaf formation during extraction”, presented at Indian Engineering Congress held at Chennai, Dec. 21, 2017 (Co-author: Dr. V R Sastry).
- "Best Researcher award" for best paper titled ‘Monitoring the movement of slopes in opencast mines’, presented at International Conference on Advanced Engineering and Information Technology, 7-9 December, 2017, Linton University College, Mantin, Malaysia.
- Second Class Coal Mine Manager (Un-Restricted) Certificate of Competency of the Govt. of India in 2005.
- Second Class Metal Mine Manager (Restricted) Certificate of Competency of the Govt. of India in 2007.

Journal Publications:

- Kumar Reddy, S. and Sastry, V, R. (2012). Induced Stresses in Blasting Gallery Panel during Depillaring based on Field Instrumentation – A Case Study, International Journal of Earth Sciences and Engineering, Volume 05 No 06 (01), 1820-1827.
- Kumar Reddy, S. and Nagaraj, C. (2012). Longwall Goaf monitoring using Deep Hole Extensometers, International Journal of Earth Sciences and Engineering, Volume 05 No 05 (01), 1402-1405.

- Kumar Reddy. S., and Sastry. V.R., (2013). Strata monitoring studies in Blasting Gallery panel during depillaring based on field instrumentation, Indian National Group of International Society for Rock Mechanics (ISRM India) Journal, Volume 02 No.1, 25-31.
- Kumar Reddy. S., and Sastry. V.R., (2013). Gallery monitoring in Blasting Gallery panel during depillaring - a case study, Journal of Mines, Metals & Fuels, Volume 61 No 7 & 8, 257-260.
- Kumar Reddy. S., and Sastry. V.R., (2016). Stress distribution on blasting gallery barrier pillar due to goaf formation during extraction, Journal of Institution of Engineers Limited (India), Series D, Volume 97, No. 2, 205-213.
- Kumar Reddy, S., James Paul., and Paul Prasanna Kumar. (2017). Application of slope stability radar in an opencast mine, Journal of Mining Engineers Association of India, Volume 19, No. 5, 10-13.
- Kumar Reddy, S and Rajan Babu A. 2018. Slope stability studies in open pit mines – A case study, Indian National Group of International Society for Rock Mechanics (ISRM India) Journal, Volume 07 No.2, 36-40.
- Kumar Reddy, S and Rajan Babu A. 2019. Highwall Slope Stability Assessment of Open Pit Coal Mine- A Case Study, Journal of Engineering Geology (Submitted).

Conference/Seminar Publications:

- Kumar Reddy, S. and Nagaraj, C. (2011). Development and Application of Deep Borehole Extensometers for Monitoring the Caving Behavior in Longwall Workings, International Conference on Underground Space Technology, pp. cm 12-6.
- Kumar Reddy, S. and Sastry, V, R. (2012). Strata monitoring studies during extraction of Thick Seams by Blasting Gallery Method-A Case Study, World Conference on Applied Science and Engineering Technology, pp. 60-68.
- Kumar Reddy. S. (2012). Coal as energy - Problems and issues related to mining industry, International Conference on Energy and Environment, 01-04th December 2012, Hyderabad.
- Kumar Reddy, S. and Sastry, V, R. (2012). Strata monitoring studies with Convergence Stations in Galleries of Blasting Gallery Panel during Depillaring – A Case Study, Seminar on Ground Control and Improvement organized by Central board of irrigation and power (CBIP). 20-21 Sep, 2012, New Delhi.
- Kumar Reddy. S, Sastry. V.R., and Ram Chandar. K., (2013). Induced blasting practice for hard roof management in Blasting Gallery method- A Case study, National seminar on Explosives & Blasting Techniques for Mining, Quarrying & Infrastructure Industry (EBTMQI), 27-28 September, 2013, Surathkal.
- Kumar Reddy. S., and Sastry. V.R., (2013). Gallery supporting and monitoring in Blasting Gallery panel during depillaring - A Case study, international conference on Developments in best practices in surface and underground mining and innovative developments in mining machinery. 28-30 January 2013, Kolkata.
- Kumar Reddy. S. (2013). Mass production technology in underground coal mines of sccl – An emerging trend, 2nd World Conference on Applied Science and Engineering Technology, 8-9 March 2013, Hyderabad.

- Kumar Reddy. S, Sastry. V.R., and Nair Roshan., (2014). Assessment of Mining Induced Stress with Numerical Modelling during Depillaring of Underground Coal Pillars with Blasting Gallery Method, National seminar on Innovative Practices in Rock Mechanics (IPRM), 6-7 February, 2014, Bengaluru.
- S. Kumar Reddy, (2014). Sustainable Development of Pulivendula Baryte Deposit Adopting Suitable Excavation Method, National seminar on Sustainable Development in Mineral & Earth Resources (SDMinER), 21-22 June , 2014, New Delhi.
- Kumar Reddy, S and Rajan Babu A. (2016). Stability analysis of an open pit slope in a Chromite mine, Proceedings of International conference on Recent Advances in Rock Engineering, 16-18 Nov, 2016, Bangalore.
- Kumar Reddy, S and Rajan Babu A. (2016). Stability analysis of a waste dump in Chromite mine: Existing state and planned heightening, Proceedings of 3rd International conference on Earth Sciences and Engineering, 17-18 June, 2016, Coimbatore.
- Kumar Reddy, S and Rajan Babu A. (2016). Cavability Studies of Immediate roof of Seam No. 3 of GDK-10 Incline, SCCL- A Case Study, Proceedings of Seminar on Recent Practices and Innovations in Mining Industry, 19-20 February, 2016, Raipur.
- Kumar Reddy, S and Rajan Babu A. (2017). Numerical stability analysis of an open pit mine slope by FLAC/SLOPE- A case study, Proceedings of conference on Numerical modeling in geomechanics, 3-4 March, 2017, IIT-Roorkee.
- Kumar Reddy, S and Rajan Babu A. (2017). Monitoring the movement of slopes in opencast mines, Proceedings of international conference on Advanced Engineering and Information Technology, 7-9 December, 2017, Linton University College, Mantin, Malaysia (ISBN: 978-967-15567).
- Kumar Reddy. S, AmrithRenaldy. T, Meena SS, Bharath Kumar AY and Rajan Babu A. (2019). Slope stability studies in an open pit mine, Proceedings of national conference on Recent Advances in Mining Technology (RAMT-2019), 23-24 May, 2019, Bengaluru.
- AmrithRenaldy. T, Bharath Kumar AY, Meena SS, Kumar Reddy. S, and Rajan Babu A. (2019). Assessment of stability of high walls of a granite quarry, Proceedings of national conference on Recent Advances in Mining Technology (RAMT-2019), 23-24 May, 2019, Bengaluru.
- Kumar Reddy. S, AmrithRenaldy. T, Meena SS, Bharath Kumar AY and Rajan Babu A. (2019). Slope stability study of an open pit mine – A case study, Proceedings of national symposium on Safe and sustainable mining – Future challenges, 5-6 July, 2019, Kanyakumari.
- A Rajan Babu, AmrithRenaldy. T, Meena SS, S Kumar Reddy and AY Bharath Kumar. (2019). Feasibility of extraction of locked up ore in the opencast benches by innovative methods, Proceedings of national symposium on Safe and sustainable mining – Future challenges, 5-6 July, 2019, Kanyakumari.
- Kumar Reddy. S. and Ram Chandar K (2020). Stability assessment of highwall slope of an open pit coal mine – A Case Study, conference on Recent practices and advancement in mineral industry (RPAMI), 21-22 February, 2020, Nagpur.

- Kumar Reddy. S. (2020). Feasibility of extraction of locked up ore in the opencast benches by innovative methods, FDP on Slope and dump stability in open pit mines, 3-8August, 2020, Hyderabad.
- Kumar Reddy. S. (2020). Slope stabilization techniques in opencast mines, FDP on Slope and dump stability in open pit mines, 3-8August, 2020, Hyderabad.
- Kumar Reddy. S. (2021). Slope Stability and Stabilization Methods in open pit mines, TEQIP-III Workshop on Slope Stability and Stabilization Methods in open pit mines, 8th February, 2021, Surathkal.
- Kumar Reddy. S. (2021). Design of deep excavation slopes in open pit mines, TEQIP-III Workshop on Slope Stability and Stabilization Methods in open pit mines, 11th February, 2021, Surathkal.

Projects Handled (PI/Co-PI):

Sponsored projects:

Sl. No.	Title of R&D Project	Funding Agency
1	Investigation of Cavability of overlying Strata and Development of Guidelines for estimation of Support Capacity for Longwall Faces	Central mine planning and design institute limited (CMPDI), Ministry of Coal

Consultancy projects:

Sl. No.	Title of R&D Project	Sponsoring Agency
1	Strata control investigations in Panel No. CMP-2 during extraction by continuous miner at VK-7 Incline., KGM Area, SCCL.	SCCL
2	In-situ strength test and estimation of stability of pillars in BG panel in 3 Seam at GDK-10 Incline, RG-III Area, SCCL.	SCCL
3	Strata behaviour analysis in BG Panel No. 1D in 3 Seam at GDK-10 Inc., RG-III Area, SCCL.	SCCL
4	Strata monitoring in WS Panel No.4 at GDK-8A Incline, RG-II Area, SCCL.	SCCL
5	Strata Monitoring in BG Panel No.1E in 3 Seam at GDK-10 Incline, RG-III Area, Singareni Collieries Company Limited (SCCL).	SCCL
6	Strata monitoring in BG Panel No.3B in 3 Seam at GDK-10 Incline, RG-III Area, SCCL.	SCCL
7	Soil testing and analysis for the study of stability of overburden dumps at Medapalli opencast mine, SCCL.	SCCL
8	Scientific studies to optimize the bench parameters and design of final pit slope stability studies of Kesoram Cement opencast mines, Basanthnagar, Karimanager District, A.P.	Kesoram Cement

9	Study on the impact of quarry operations to nearby Arkavathy dam and other structures and recommendation for scientific quarrying, Nellahalli village (Quarry lease No. 313, survey No. 298), Kanakapura taluk, Ramnagara district.	Quarry
10	Conducting non-destructive test at shanthikahani man winding shaft.	SCCL
11	Conducting non-destructive test on haulers at gdk-1, 3, 5, 8, 10, 10A, 11, Vakeelpalli, RK1 and Shanthikhani mines.	SCCL
12	Strata control investigations in Panel 38 Level East Panel in V seam at Churcha Mine, SECL.	SECL
13	Design of Supports and Suitable Stopping Method for the Baryte Mines at Pulivendula, YSR District, Andhra Pradesh.	Baryte mine association
14	Slope Stability Studies at Kaliapani Chromite Mine, Kaliapani, Jajpur District, Odisha.	Balasure Alloys Limited
15	Dump material testing and analysis of Kaliapani chromite mine at Kaliapani, Jajpur District, Odisha.	Balasure Alloys Limited
16	Review the slope stability measures at Pallava Granites, Chimakurthy, Prakasam District, A.P.	Pallava Granites
17	Slope stability studies of CopilaGaichem Paul Iron ore mine, Sigao and Collem village, Dharbandora taluka, South Goa.	Fomento Resources Ltd.
18	Scientific studies to optimize the bench parameters and design of final pit slope stability studies of G V granites quarry in Naganur village, Kulithalai Taluk, Karur district, Tamilnadu.	G V granites quarry
19	Scientific studies to optimize the bench parameters and design of final pit slope stability studies of Magna stone quarry in Thogaimali village, Karur district, Tamilnadu.	Magna stone quarry
20	Scientific studies for pit stability monitoring towards north side and design of final pit slope stability up to 120m depth workings of Krishna Limestone Mine in Ramayanpatti village, Tirunelveli District, Tamil Nadu.	Krishna Limestone Mine
21	Slope stability studies of Bicholim Iron ore mine, Sigao and Collem village, Dharbandora taluka, South Goa.	Vedanta Limited
22	Slope stability studies of Codli Iron ore mine, Sigao and Collem village, Dharbandora taluka, South Goa.	Vedanta Limited
23	Scientific study on stability of south side (in-corp) highwall benches at MOCP, RG-1 area, SCCL, Peddapalli District, Telangana State.	SCCL
24	Slope Stability Studies to deepening the quarry and enhancing the dump-3 height of Kaliapani Chromite Mine, Kaliapani, Jajpur District, Odisha.	Balasure Alloys Limited
25	Strata Control and Monitoring Plan (SCAMP) for Depillaring Panel No. 9LS & 4LS in Seam 'A' of Kurja Underground Mine, HASDEO Area, SECL.	SECL
26	Strata Control and Monitoring Plan (SCAMP) for Rajnagar R.O Mine, HASDEO Area, SECL.	SECL
27	Scientific Studies for Final Dump Slope Stability with Suitable Bench Parameters for Narrain Iron Ore Mine, Chitradurga, Karnataka State.	Vedanta Limited
28	Scientific studies to optimize the bench parameters and design of final pit slope stability of K Deivendran granite quarries and other granite quarries with associated survey numbers in Veeriyampalayam village,	Deivendran granite quarry

	Krishnarayapuram Taluk, Karur, Tamilnadu.	
29	Design and stability evaluation of proposed deepening of mine workings (from -44 to -66) including the surface dumps stability at Redi Iron Ore Mine of Gogte Minerals.	Fomento Resources Limited
30	Scientific Study for design of Ultimate Pit Slope, stability assessment and monitoring of slopes of Dharmapura Iron Ore Mine of Sri V.N.K Menon mines, Sandur, Bellary.	Fomento Resources Limited
31	Scientific Study for design of slopes and stability assessment of slopes of Dolomite Project at Mangampet, APMDC Limited, Andhra Pradesh.	APMDC Limited
32	Scientific Study for slope stabilization and monitoring of ground movement of South Face, Mine I of NLCIL, Neyveli, TN.	NLCIL
33	Slope stability studies for the optimization of bench parameters and recommendation for the final pit slope stability of SM Block iron ore mine M/s. M. Hanumantha Rao at Narayanpur village, Sandur Taluk, Bellary district, Karnataka.	M. Hanumantha Rao
34	Slope stability studies for the optimization of bench parameters and recommendation for the final pit slope stability of Sadahalli quarry.	Sadahalli quarry
35	Geological mapping at multiple levels in different segments between 14 th level to 4 th level of the mine for determining geotechnical parameters to evaluate the feasibility of HW lode mining of TMPL mine, UCIL, AP.	UCIL
36	Slope stability studies for the optimization of bench parameters and recommendation for the final pit slope stability of indaram opencast project, Srirampur area, Singareni collieries company limited.	SCCL
37	Slope stability studies for the optimization of bench parameters and recommendation for the final pit slope stability of Srirampur opencast project-2, Srirampur area, Singareni collieries company limited.	SCCL
38	Slope stability studies for the optimization of bench parameters and recommendation for the final pit slope stability of John iron ore mine, Chitradurga, Karnataka.	John iron ore mine
39	Slope stability studies for the dump slope stability of John iron ore mine, Chitradurga, Karnataka.	John iron ore mine
40	Slope stability studies for the optimization of bench parameters and recommendation for the final pit slope stability of Dharmapuri iron ore mine, Bellary, Karnataka.	VeerabhadrappaSangappa& Company