

BIO-DATA

1. PERSONAL INFORMATION

Name	Dr. Mangalpady Aruna
Fathers Name	Late M. Perna
Date of Birth & Place	17-05-1971; Mangalore, Karnataka State
Present Designation / Post Held	Associate Professor
Address & Telephone Nos.	Office: Department of Mining Engineering NITK, Surathkal, Post Srinivasnagar Mangaluru – 575 025 Karnataka State, India +91-824-2473374 +91-9449066672 (M)
	Residence: AP-6, NITK Campus Post Srinivasnagar, Mangaluru - 575 025, Karnataka State, India +91-824-2474374 +91-9449066672 (M)
E-mail	arunamangalpady@gmail.com arunm@nitk.ac.in
Fax	+91-824-2474033

2. ACADEMIC RECORD

An undergraduate programme in MINING ENGINEERING from Karnataka Regional Engineering College, Surathkal, Mangalore University leading to Bachelor of Engineering Degree (1993) with First Class. Ph.D. degree from Indian School of Mines, Dhanbad in the year 2008.
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3. PROFESSIONAL CAREER

Period		Designation	Organization	Nature of Work
From	To			
16.05.2018	Till date	Associate Professor (with AGP 9500)	NITK, Surathkal	Teaching, Research & Consultancy
11.11.2011	15.05.2018	Associate Professor (with AGP 9000)	NITK, Surathkal	Teaching, Research & Consultancy
11.11.2008	10.11.2011	Assistant	NITK, Surathkal	Teaching, Research

		Professor		& Consultancy
17.12.2004	10.11.2008	Sr. Scale Lecturer	NITK, Surathkal	Teaching, Research & Consultancy
17.12.1998	16.12.2004	Lecturer	NITK, Surathkal	Teaching, Research & Consultancy
01.07.1998	07.12.1998	Asst. Manager	Chowgule & Co. Ltd.	Mine Planning & Management
01.04.1997	30.06.1998	Senior Officer	Chowgule & Co. Ltd.	Mine Planning
01.10.1994	31.03.1997	Junior Engineer	Chowgule & Co. Ltd.	Production Planning
13.10.1993	30.09.1994	Graduate Trainee	Chowgule & Co. Ltd.	Machine Allocation

4. RESEARCH PAPERS / PUBLICATIONS

4.1 Summary of Publications

Publications	Numbers
Papers published in peer reviewed journals	International : 35 National : 10
Papers published in non referred journals	14
Papers published in seminars / conferences	International : 41 National : 18
Articles published in newsletter/bulletin	03
General articles	01
Books	01
Chapter in books	nil
Reports	R&D Project Reports : 11 Consultancy Project Reports : 45
Patents	nil

4.2 Details of Publications

International Journals (Peer reviewed)

S.No	Authors	Title	Journal	Vol, Issue, Year, Page No.	Major Indexing	ISSN/ DOI
1	Aruna, M., Karmakar, N. C. & Rao, Y. V.	Designing Lantern for Efficient Lighting of Mine Roadways – An Experimental Approach	CIM Bulletin, Canada	Vol. 98, November 2005, pp 78	SCI	1718-4169
2	N. C. Karmakar, M.	“Design of Haul Road Lighting	International Journal of	Vol. 20, No.3,	SCI	1748-0949

	Aruna, Y. V. Rao & U. K. R. Yaragatti,	System – A Computer Oriented Approach : Part I – design based on optimal energy considerations	Surface Mining, Reclamation & Environment, U. K.	Septemb er, 2006, pp 165- 174		
3	N. C. Karmakar, M. Aruna, Y. V. Rao & U. K. R. Yaragatti,	Design of Haul Road Lighting System – A Computer Oriented Approach : Part II – design based on optimal cost considerations	International Journal of Surface Mining, Reclamation & Environment, U. K.	Vol. 20, No.3, Septemb er,2006, pp 175- 180	SCI	1748-0949
4	N. C. Karmakar, M. Aruna, Y. V. Rao & U. K. R. Yaragatti,	Design of Haul Road Lighting System – A Computer Oriented Approach : Part III – Application of developed models on a real life mine haul road	International Journal of Surface Mining, Reclamation & Environment	Vol. 20 No. 4, Decembe r,2006 pp 244- 248.	SCI	1748-0949
5	M. Aruna & Sampath Kumar, N. N.	Studies on Iron Ore Tailings Towards Usage For Paving Blocks Manufacture	International Journal of Earth Sciences and Engineering (IJE)	Vol. 03, No. 06, Decembe r, 2010, pp 861- 868.	Scopus	09745904
6	Kashinath Pal, Harsha Vardhan & Aruna M	Impact of Pumping in Openpit Mining Ground Water Flow : A Case Study	International Journal of Mining and Mineral Engineering	Vol. 2, No. 2, 2010, pp 101-122.	Scopus	1754-8918
7	Kashinath Pal, Harsha Vardhan & Aruna M	Investigation of contaminant transport in groundwater from the tailings pond of uranium mine: a case study	International Journal of Mining and Mineral Engineering (IJMME)	Vol. 3, No. 6, Decembe r, 2010, pp 861- 868.	Scopus	1754-8918
8	Sunil M Jaralika & Mangalpady Aruna	Case Study of a Hybrid (Wind and Solar) Power Plant	Scientific Journal of Telkomnika, Indonesia	Vol. 9, No. 1, April, 2011, pp 19-26.	Scopus	2502-4752
9	Kashinath Pal, Deb, D., Vardhan, H., Aruna, M and Samanta, B	Land-Use Land- Cover Changes in East Singbhum Mineralised Zone: A Case Study	Disaster Advances	Vol. 4(4), October, 2011, pp 5-10.	SCI	0974262X
10	Sunil M Jaralika & Mangalpady Aruna	Study of Performance of a Power Station for Operational	International Journal of Electrical and Computer	Vol. 2, No. 1, February ,	Scopus	2088-8708

		Optimization	Engineering (IJECE)	2012, pp 17-25.		
11	Mangalpady Aruna & Sunil M Jaralika	Design of Lighting System for Surface Mine Projects	Scientific Journal of Telkomnika	Vol. 10, No. 2, June, 2012, pp 235-244.	Scopus	2502-4752
12	Maood, Harsha Vardhan, M. Aruna, Rajesh Kumar B	A Critical Review on Estimation of Rock Properties using Sound Levels Produced during Rotary Drilling	International Journal of Earth Sciences and Engineering	Vol. 05, No. 06(01), 2012, pp 1809-1814	Scopus	09745904
13	Maood, Harsha Vardhan and M. Aruna	Portable Low Cost Drill Set-Up For Estimating Rock Properties	International Journal of Earth Sciences and Engineering	Vol. 07, No. 02, 2014, pp	Scopus	09745904
14	Lakshmi pathy, Murthy and M. Aruna	Design and Development of Optimum Lighting Parameters for Haul Roads in Surface Coal Mines Using MATLAB Software Program - A Case Study	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering	Vol. 3, No. 6, June 2014, pp 10101-10112	Research Bible	2278-8875
15	Shreekanth R Lamani, M. Aruna, Harsha Vardhan and A. T. Shanth	Development of Value Added Product Using Iron Ore Waste for its Effective Utilization	International Journal of Advanced and Applied Sciences	Vol. 2(12), 2015, pp 30-35.	ESCI by Web of Science	2313-3724
16	Lakshmi pathy, Murthy and M. Aruna	Factors Affecting Visual Environment in the Surface Mines – A Critical Review	Science and Technology International Research Network	Vol. 1, Issue 3, March, 2015, pp 23-42	-	2310-9173
17	Shreekanth R. L, Aruna M and Harsha Vardhan	Utilization of Mine Waste in the Construction Industry – A Critical Review	International Journal of Earth Sciences and Engineering	Vol. 09, No. 01, February , 2016, pp 82-195.	Scopus	09745904
18	Shreekanth R. L, Aruna M and Harsha Vardhan	Utilization of Iron Ore Waste in Brick Making for the Construction Industry	International Journal of Earth Sciences and Engineering	Vol. 09, No. 02, April, 2016, pp 450-455.	Scopus	09745904
19	Aruna M, Lakshmi pathy N, Abhishek Kumar Tripathi and	Application of LED in Surface Mines – A Case Study	International Journal of Current Advanced Research	Vol. 6, Issue 5, May, 2016, pp 3783 –	Open J- Gate,	2319-6475

	Murthy Ch.S.N.			3786.		
20	Shreekanth R. L, Aruna M and Harsha Vardhan,	Investigating the Utility of Iron Ore Waste in Preparing Non-fired Bricks	Journal of Institution of Engineers, (India): Series D	98(2), 2016, 239-250	Scopus	10.1007/s40033-016-0129-5.
21	Abhishek Kumar Tripathi, Aruna M and Ch S N Murthy (2016),	Influence of Mine Environmental Parameters on the Performance of Solar Energy System-A Review	Concurrent Advances in Mechanical Engineering	Vol. 2 (1), February , 2016, pp 1-5	Index of Copernicus	2455-3638
22	Abhishek Kumar Tripathi, Ch S N Murthy and M Aruna	Experimental Investigation of Dust Effect on PV Module Performance,	Global Journal of Researches in Engineering	Vol 17(3), 2017, pp. 35-39.	EBSCO, Google Scholar	10.17406/gjre
23	Abhishek Kumar Tripathi, M.Aruna and Ch.S.N.Murthy	Output Power Loss of Photovoltaic Panel Due to Dust and Temperature	International Journal of Renewable Energy Research	7(1), 2017, 439-442	SCOPUS, ESCI, EBSCO, WEB of SCIENCE	ijrer.org/ijrer/index.php/ijrer/article/download/4995/pdf
24	Abhishek Kumar Tripathi, M.Aruna and Ch.S.N.Murthy	Performance Evaluation of PV Panel Under Dusty Condition	International Journal of Renewable Energy Development	6(3), 2017, 225-233	SCOPUS, ESCI, EBSCO, WEB of SCIENCE	doi.org/10.147.10/ijred.0.x.%25p
25	Shreekanth R. L, Aruna M and Harsha Vardhan	Impact of Al ₂ O ₃ , SiO ₂ & Fe ₂ O ₃ Present in Bricks Prepared Using Iron Ore Waste On Its Compressive Strength	International Journal of Earth Sciences and Engineering	Vo.10, No. 03, June, 2017, pp 700-705	Crossref Google Scholar	09745904
26	Ravindra, M.Aruna and Harsha Vardhan	Investigation on the performance of a variable compression ratio engine operated with raw cardanol kerosene blends	Biofuels, Talyor & Francis	2017 online	SCOPUS, ESCI EBSCO, WEB of SCIENCE	DOI:10.1080/17597269.2017.1389195
27	Abhishek Kumar Tripathi, M.Aruna and Ch S N Murthy	Performance Degradation of Solar Photovoltaic Panel Due to Dust Shading	Advanced Science Letter, American Scientific Publisher	Accepted , 2018	SCOPUS	1936-7317
28	Abhishek Kumar Tripathi, M.Aruna and Ch.S.N.Murthy	Performance Degradation of PV Module Due to Different Types of Dust Pollutants	International Journal of Engineering & Technology	7(3.7), 2018 pp. 669-671		DOI:10.14419/ijet.v7i3.7.25734
29	Abhishek Kumar Tripathi, M.Aruna and Ch S N Murthy	Output Power Enhancement of Solar PV Panel Using Solar Tracking System	Recent Advances in Electrical & Electronics Engineering,	12(1), 2019 pp. 45-49	SCOPUS	DOI: 10.2174/2352096511666180501124714

			Bentham Science			
30	Abhishek Kumar Tripathi, M.Aruna and Ch.S.N.Murthy	Performance of PV Panel Under Different Shading Strengths	International Journal of Ambient Energy ,Talyor & Francis	Vol. 40, Issue 3, 2019 pp. 248-253	SCOPUS, ESCI, EBSCO, WEB of SCIENCE	dx.doi.org/10.1080/01430750.2017.1388839
31	N.V.Sharath Babu Goriparti, Ch.S.N. Murthy, M.Aruna	Minimization of Specific Energy of a Belt Conveyor Drive System Using Space Vector Modulated Direct Torque	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	Vol. 8, Issue 4, February 2019 pp. 505-511	SCOPUS	D2877028419/19©BEIES P
32	Sandeep Kumar Jeripotula, Aruna Mangalpady, Govinda Raj Mandela	Evaluation of Whole-Body Vibration (WBV) of Dozer Operators Based on Job Cycle	Journal of Institution of Engineers, India, Series D	Vol. 100, Issue 2, October, 2019, pp. 187-193.	SCOPUS	https://doi.org/10.1007/s40033-019-00195-0
33	Sandeep Kumar Jeripotula, Aruna Mangalpady, Govinda Raj Mandela	Evaluation of Whole-Body Vibration (WBV) of Dumper Operators Based on Job Cycle	Mining. Metallurgy & Exploration, Springer	online	SCI	DOI 10.1007/s42461-019-00140-5
34	Sandeep Kumar Jeripotula, Aruna Mangalpady, Govinda Raj Mandela	Musculoskeletal Disorder among Dozer Operators Exposed to Whole Body Vibration in Indian Surface Coal Mines	Mining. Metallurgy & Exploration, Springer	online	SCI	DOI: 10.1007/s42461-019-00170-z
35	Sandeep Kumar Jeripotula, Aruna Mangalpady, Govinda Raj Mandela	Evaluation of WBV of Dozer operators based on Postural variability	Mining. Metallurgy & Exploration, Springer	online	SCI	DOI: 10.1007/s42461-020-00175-z

National Journals (Peer reviewed)

S.No	Authors	Title	Journal	Vol, Issue, Year, Page No.	Major Indexing	ISSN/ DOI
1	Aruna, M., Karmakar, N. C. & Rao, Y. V.,	Problems in Surface Mine Lighting and Factors To Be	Journal of the Institution of Public	Special Issue, March, 2004,pp	-	-

		Considered in Lighting Design	Health, Engineers, India	34-40		
2	Aruna, M., Karmakar, N. C. & Rao, Y. V.,	Designing Cost-Effective Lighting System for Surface Mining Projects	Journal of Mines, Metals & Fuels.	Vol. 52, No. 11, 2006, pp 380-385	Scopus	0022-2755
3	N. C. Karmakar, M. Aruna, Y. V. Rao & Uday Kumar R. Yaragatti	Haul Road Illumination Design Based on Reflected Light and Surface Wetness – An Innovative Approach	MGMI Transactions,	Vol. 102, No. 1&2, 2006, pp 93-102	-	-
4	Aruna, M., Karmakar, N. C. & Rao, Y. V.	Energy Saving Lighting Design of Haul Roads	MGMI Transactions,	Vol. 102, No. 1&2, 2006, pp 103-109	-	-
5	Aruna, M., Ch. S. N. Murthy, Radesh Pai & Rama Nand,	Applications of Computer in Mining Industry with Special Regard To Shovel-Dumper Productivity	Journal of Mines, Metals & Fuels	Vol. 55, No. 6&7, June-July, 2007, pp 191-194	Scopus	0022-2755
6	M. Aruna, N. C. Karmakar & Y. V. Rao	Lighting Haul Roads in Surface Coal Mines – A Design Based on Reflectance	Journal of The Institution of Engineers (India)	Vol. 88, February, 2008, pp 9-13	Scopus	2250-2157
7	Mangalpady Aruna	Optimization of shovel-dumper system in surface mines by using match factor method	Journal of Mines, Metals & Fuels	Vol. 57, No.7, July, 2009, pp 168-173	Scopus	0022-2755
8	Mangalpady Aruna	A Comparison of Conventional Limit Equilibrium Method of Slope Stability Analysis with Finite Element Modelling	Journal of Mines, Metals & Fuels	Vol. 57, No.12, December, 2009, pp 455-450	Scopus	0022-2755
9	M. Aruna, N. C. Karmakar & Y. V. Rao	Design of Cost Effective Lighting System for Surface Mine Haul Roads – A Case Study	Journal of The Institution of Engineers (India)	Vol. 91, August, 2010, pp 10-15	Scopus	2250-2157
10	Aruna, M & Jaraliker, S. M	Investigation to Determine the Effect of Wet Surface Condition in Mines on Design of Lighting System	Journal of Mines, Metals & Fuels	Vol. 59 (11-12), 2011, 381-384	Scopus	https://www.scopus.com/results/results.uri?numberOfFields=0&src=s&clickedLink=&edit

Non-referred Journals

S.No	Authors	Title	Journal	Vol, Issue, Year, Page No.	Major Indexing	ISSN/ DOI
1	Ch. S. N. Murthy, Harsha Vardhan & M. Aruna	Control Techniques for Machinery Noise Reduction	The Indian Mining and Engineering Journal	October/November, 1999, pp 17-21	-	0019-5944
2	Y. V. Rao, M. Aruna & Harsha Vardhan	Trends and Development in Truck Transportation System	The Indian Mining and Engineering Journal	December, 1999, pp 13-15	-	0019-5944
3	Rao, Y. V., Harsha Vardhan, Sridhar, S. & Aruna, M.	Reliability Evaluation and Reliability Centered Maintenance of Production Equipment in Mechanised Opencast Mines – A Case Study	Mining Engineers Journal	2000, pp 17-20	-	-
4	Rao, Y. V., Harsha Vardhan & Aruna, M.,	Value Engineering in Mining Industry	The Indian Mining and Engineering Journal	Vol. 39, No. 5, May, 2000, pp 33-35	-	0019-5944
5	Aruna, M. & Suresh, K. D.,	Global Positioning System (GPS): “Development in Surveying, Exploration and Excavation	The Indian Mining and Engineering Journal	Vol. 39, No. 8, May, 2000, pp 29-31	-	0019-5944
6	Rao, Y. V., Harsha Vardhan & Aruna, M.	Underground Mine Lighting and Illumination Survey	Mining Engineers Journal	Vol. 3, No. 2, September, 2001, pp 12-22	-	-
7	Rao, Y. V., Aruna, M., Harsha Vardhan & Murthy, Ch. S. N.,	Mining and Environment	The Indian Mining and Engineering Journal	Annual Issue, 2001, pp 45-51	-	0019-5944
8	Aruna, M., Uday, K. R. Y. & Suresh Ram	Illumination Survey in Surface Mines	Mining Engineers Journal	Vol. 6, No. 2, September, 2004, pp 13-16	-	-
9	Aruna, M. & Saurabh Khare	Tunnel Boring Machines (TBM) : A Cost Effective Approach	Mining Engineering Journal	Vol. 8, No. 8, pp, 2007, 16-23	-	-
10	Reddy, D. V., Murthy, Ch. S. N., Vardhan,	Advances and Latest Trends in Exploration and	Mining Engineers Journal	Vol. 9(2), September, 2007, pp	-	-

	H. and Aruna, M.	Exploitation of Commercial Rock Deposits		24-32		
11	Ch. S. N. Murthy, Harsha Vardhan, M. Aruna & Saurabh Khare	Latest Trends in Bioleaching	The Indian Mining & Engineering Journal	Vol. 47, No. 4, April, 2008, pp 26-30	-	0019-5944
12	Masood, Shivam S, Vardhan H, Aruna M & Animesh R	A Critical Review on the Use of Drilling Fluids in Mining, Oil and Gas Industry	Mining Engineering Journal	Vol. 13(1), 2011, pp 18-25	-	-
13	Kashinath Pal, D. Deb, H. Vardhan, M. Aruna, B. Samantha, A. K. Sarangi, P. Chaudhury	Land-Use Land-Cover Changes in East Singbhum Mineralized Zone: A Case Study	The Indian Mining & Engineering Journal	Vol. 51, No. 11, November, 2012, pp 19-22	-	0019-5944
14	Shreekanth R Lamani, Aruna Mangalpady & Harsha Vardhan	Development of Mathematical Models for Prediction of Compressive Strength & Water Absorption of Bricks Prepared Using IOW, Cement & Fly Ash WITH Different Mix Ratios	Mining Engineer's Journal	Vol. 18, No. 11, June, 2017, pp 13-19	-	-

International Conferences

S.No	Authors	Title	Name of Conference	Period, Page No.
1	Rao, Y. V., Harsha Vardhan & Aruna, M.	Selective Inventory Control – A Case Study	Proceedings of International Conference on Management of Mining Machinery (MMM-99) Kolkata	July, 14-16,1999, pp 85-96
2	Rao, Y. V., Harsha Vardhan & Aruna, M.,	“Development of Intelligent Support System for Vibration Controlled Blast Deign	Proceedings of International Conference on Rock Engineering Techniques for Site Charecterisation (ROCKSITE -99) Bangalore	December 6-8, 1999, pp 601-607
3	Rao, Y. V., Aruna, M. & Harsha Vardhan	Design, Construction and Rehabilitation of Spoil Dumps – A Case Study	Proceedings of Sixth International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production: SWEMP 2000 Canada	May 30 – June 2, 2000, pp 102-105
4	Sastry, V. R., Harsha Vardhan & Aruna, M.,	Improving the Efficiency of Tunneling: Role of Effective Ventilation	Proceedings of International Conference on Tunnelling Technology, Goa	September 28-30, 2000, pp 45-49.

		Planning		
5	Rao, Y. V., Harsha Vardhan & Aruna, M.	Impact of Human Population on Resources and Ecosystems	Proceedings of International Symposium on Geo-Environmental Reclamation, Nagpur	November 4-6, 2000, pp 343-349
6	Rao, Y. V., Aruna, M. & Harsha Vardhan	Design and Management of Spoil Dumps	Proceedings of International Symposium on Geo-Environmental Reclamation, Nagpur	November 4-6, 2000, pp 7-11
7	Rao, Y. V., Aruna, M. & Harsha Vardhan	Post Mining Land Use Planning	Proceedings of International Conference on Technology Management in Mining, Processing & Environment, Kharagpur	December 1-3, 2000, pp 191-199
8	Y. V. Rao, Harsha Vardhan & Aruna, M.	Optimization of Production Scheduling in Opencast Mines	Proceedings of International Conference on Mechanization and Automation – The Future For Mineral Industry, Kolkatta	July 26-28, 2001, pp 24-26
9	Aruna, M., Rao, Y. V. & Karmakar, N. C.	Study of Reflectance of Mine Surfaces and Its Influence on Design of Illumination System of an Opencast Mine	Proceedings of International Conference on VISION 2004 – A Challenge, Bangalore	November 4-7, 2003, pp 43-47
10	M. Aruna, Y. V. Rao & N. C. Karmakar	Design of Illumination System in Opencast Mines	Proceedings of 19th World Mining Congress, New Delhi	November 1-5, 2004, pp 1149-1157
11	M. Aruna, Y. V. Rao & N. C. Karmakar	Development of Computer Models for Design and Economic Analysis of Lighting Systems in Surface Mines	Proceedings of 20th World Mining Congress, Tehran	November 1-5, 2005, pp 949-952
12	Aruna, M., Rao, Y. V. & Karmakar, N. C.	Illumination Standard in Surface Mine – A New Strategy	Proceedings of International Symposium on Environmental Issues of Mineral Industry, Nagpur	January, 11-15, 2006 pp 9-12
13	Ch. S. N. Murthy, Harsha Vardhan, Aruna, M. & Saurabh Khare	Innovations in Mining Industry – Its Impact on Productivity and Safety	Geominetech Symposium on New Equipment – New Technology Management and Safety, Bhubaneswar	May 11-12, 2006, pp 99-104
14	Ch. S. N. Murthy, Aruna, M. & Saurabh Khare	Prospects of Uranium Mining In India	Proceedings of 1st Asian Mining Congress, Kolkata	May 16-18, 2006, pp 175-182
15	Aruna, M. & Uday Kumar, R. Y.	Efficient Artificial Lighting System For Surface Mine Haul Roads	Proceedings of IEEE IAS Conference, Tampa Florida	October 8-12, 2006, pp 937-941 SCI
16	Mangalpady Aruna & M. Govinda Raj	Energy Sector Reforms In India – A Review	Proceedings of the Fourth IASTED International Conference on Power and Energy Systems (AsiaPES 2008), Langkawi,	April 2-4, 2008, pp 42-45 Scopus

			Malaysia	
17	Mangalpady Aruna	Energy Saving Lighting Design of Haul Roads	Proceedings of International Conference on Energy Security and Climate Change: Issues, Strategies and Options (ESCC 2008), Bangkok, Thailand	August 6-8, 2008, pp. 132-136
18	Aruna, M., Rao, Y. V. & Karmakar, N. C.	Artificial Illumination System for Surface Mine Haul Roads	Proceedings of International Workshop on Winning Strategies to Revitalize the Mineral/Coal Sector, India,	August 8-9, 2009, pp. 156-161
19	Mangalpady Aruna & Sunil Jaraliker	Lighting Haul Roads in Openacst Mines With Respect To Reflectance of Road Surface	Proceedings of International Conference on Advances in Energy Conversion Technologies (ICAETC 2010), India,	January 7-9, 2010, pp. 64-72
20	Mangalpady Aruna & Govinda Raj	Utilization of Iron Ore Tailings in Manufacture of Paving Blocks	Proceedings of 4th International Workshop and Conference on Earth Resource Technology - Georesources For Green Society: Development, Recovery and Recycling (G4G 2010), Thailand	2010, May 11-13
21	Aruna, M., Rao, Y. V. & Karmakar, N. C.	Artificial Illumination System for Surface Mine Haul Roads	Proceedings of International Symposium on Emerging Trends in Environment, Health and Safety Management in Mining and Mineral Based Industries, India,	August 21-22, 2010, pp. 102-107
22	Sunil Jaraliker & Mangalpady Aruna	Performance Analysis of Hybrid (Wind & Power) Power Plant – A Case Study	Proceedings of 4th IASTED International Conference on Power and Energy Systems, Thailand	November 24-26, 2010 Scopus
23	Sunil Jaraliker & Mangalpady Aruna	Energy Audit of a 400/220 kV Substation – A Case Study	Proceedings of The International Conference & Utility Exhibition on Power and Energy Systems: Issues and Prospects for Asia, Thailand	September 28-30, 2011 Scopus
24	Mangalpady Aruna	Utilization of Iron Ore Tailings in Manufacturing of Paving Blocks for Eco-friendly Mining	Proceedings of International Conference on Green World in Business and Technology – 2012, Indonesia	March, 2012, 240-251
25	Shanth A Themmaiah, Ravi D. R, Y. V. Rao & M. Aruna	Corporate Social Responsibility & Sustainable Development in Mining Industry - A Case Study	Proceedings of International Conference on Corporate Social Responsibility & Sustainable Development, Thailand	CSR 2013, June
26	Jaya Mary Jacob, Soubhik Kumar Bardhan, Raj	Selenium and Lead Tolerance in Marine Aspergillus Terreus for Biosynthesis of Nano Particles - Quantum	Proceedings of International Conference on Civil, Biological and Environmental Engineering, Thailand	November, 2013

	Mohan B, P. E. Jagadeesh Babu and Aruna M	Dots		
27	Tripti Maurya, Kailash Karena, Harsha Vardhan, M. Aruna and M. Govinda Raj	Potential Sources of Heat in Underground Mines - A Review	Procedia Earth and Planetary Science 11	Vol. 11, 2015, pp 472-478 SCI
28	Tripti Maurya, Kailash Karena, Harsha Vardhan, M. Aruna and M. Govinda Raj	Effect of Heat on Underground Mine Workers	Procedia Earth and Planetary Science 11	Vol. 11, 2015, pp 502-510 SCI
29	G. P. Singh, Sundeeep, R. P. Choudhary, H. Vardhan, M. Aruna and A. B. Akolkar	Iron Ore Pelletization Technology and its Environmental Impact Assessment in Eastern Region of India - A Case Study	Procedia Earth and Planetary Science 11	Vol. 11, 2015, pp 600-616 SCI
30	Abhishek Kumar Tripathi, M.Aruna and Ch.S.N.Murthy	Effect of Shading on PV Panel Technology	IEEE International Conference on Energy, Communication, Data Analytics and SOT Computing (ICEDS)-2017 at SKR Engineering College Chennai, India.	1 -2 August, 2017 Scopus DOI:10.1109/ICECDS.2017.8389814
31	Ravindra M, M. Aruna and Harsha Vardhan	Usage of Bio Fuels for Mining Application : A Review	Proceedings of Sixth Annual Rock Conference – INDOROCK 2016, June 17-18, IIT, Bombay, India	2016, pp 1001-1009
32	Abhishek Kumar Tripathi, M. Aruna, Ch.S.N.Murthy	Performance analysis of PV panel under varying surface temperature	International Conference On Research in Mechanical Engineering Sciences, 21-23, December, 2017 P. 04004	MATEC Web of Conferences 144, 04004 (2018) Scopus
33	Ravindra M, M. Aruna and Harsha Vardhan	Performance Testing of Diesel Engine using Cardanol-Kerosene oil blend	International Conference On Research in Mechanical Engineering Sciences, 21-23, December, 2017 P. 04005	MATEC Web of Conferences 144, 04005 (2018) Scopus
34	Abhishek Kumar Tripathi, Mangalpady Aruna, Ch.S.N. Murthy, Bodapati Prasad	Quantitative Analysis of Photovoltaic Panel Performance in Mine Environment Conditions	International Conference on Opencast Mining Technology & Sustainability, ICOMS-2018, Singrauli, MP.	14-15 December, 2018. pp.
35	Abhishek Kumar Tripathi, Mangalpady Aruna, Ch.S.N.	Performance Analysis of PV Panel Under Dusty Condition	33 rd Indian Engineering Congress, Udaipur.	21-23, December, 2018. pp. 260-264

	Murthy			
36	Abhishek Kumar Tripathi, Mangalpady Aruna, Ch.S.N. Murthy, Bodapati Prasad	Experimental Investigation on the Influence of Humidity on PV Panel Performance	2 nd International Conference on Paradigms in Engineering & Technology, Hyderabad,	28-29, December, 2018 pp.
37	Sharath Babu, Ch.S.N. Murthy, Mangalpady Aruna	Prediction of Energy Efficiency of Mine Transport System Used in Underground Coal Mines – A Statistical Approach	International Conference on Emerging Trends in Engineering (ICETE), Hyderabad 22-23, March 2019 Published by Springer	https://doi.org/10.1007/978-3-030-24314-2_42 Scopus Indexed
38	Sandeep Jaripotla, Mangalpady Aruna, M. Govinda Raj	Evaluation of Whole Body Vibration (WBV) of Heavy Earth Moving Machinery (HEMM)	International Conference on Emerging Trends in Engineering (ICETE), Hyderabad 22-23, March 2019 Published by Springer	https://doi.org/10.1007/978-3-030-24314-2_45 Scopus Indexed
39	Abhishek Kumar Tripathi, Mangalpady Aruna, Ch.S.N. Murthy	Investigation on the Performance of PV Panel Under Shaded Condition	International Conference on Materials and Energy (ICME 2019), Warangal, Telangana 26-27 July, 2019	Scopus Indexed
40	Abhishek Kumar Tripathi and Mangalpady Aruna,	Performance Evaluation of PV Panel Under Different Dust Pollutants – An Experimental Approach	2 nd International Conference on Opencast Mining Technology & Sustainability, NCL, Singrauli	-
41	Abhishek Kumar Tripathi and Mangalpady Aruna,	Laboratory Investigation of Photovoltaic Panel Performance Under the Shaded Condition	First IEEE International Conference on Power Control and Computing Technologies (ICPC ² T)2020, Raipur	Scopus Indexed

National Conferences

S.No	Authors	Title	Conference Name	Vol, Issue, Year, Page No.
1	Rao, Y. V., Aruna, M & Harsha Vardhan	Blast Casting – A Economic Technique for Sidecasting Overburden	National Seminar on Specific Problems in Mining – Both for Coal & Non-Coal Mines, Bhubaneswar	September 24-25, 1999, pp 62-65
2	Rao, Y. V., Harsha Vardhan & Aruna, M	Benchmarking – The Search For Best Practices for Superior Performance	All India Seminar on Problems and Prospects of Opencast Mining, Rourkela,	November 12-13, 1999, pp 34-37
3	Rao, Y. V., Aruna, M & Harsha Vardhan	Off-The-Road Tyres – Care, Maintenance & Management	National Seminar on Specific Problems in Mining – Both for Coal & Non-Coal	September 24-25, 2000, pp 41-45

			Mines, Bhubaneswar	
4	Aruna, M & Rao, Y. V.	Value Engineering in Mining Industry	Proceedings of Mine Environment and Ventilation Symposium, Dhanbad	December 12-13,2000, pp 25-27
5	Rao, Y. V., Aruna, M & Harsha Vardhan	Calculation of Volumes of Overburden and Minerals in Opencast Mines	Proceedings of 4th Indian Conference on Coal Mine Surveying – 2001, SCCL, Andhra Pradesh	November 12-15, 2001 pp 69-84
6	Aruna, M., Ram Chandar, K. & Suresh Kumar, D.	Application of Robotics in Mining Industry	Proceedings of National Symposium on Sustainable Mining Technology: Present and Future, Chennai	March 14-15,2002 pp 33-39
7	Aruna, M, Karmakar, N. C. & Rao, Y. V.	Problems in Surface Mine Lighting and Factors To Be Considered in Lighting Design	Proc. of the National Seminar on Environmental Engineering with Special Emphasis on Mining Environment, NSEEME-2004	March 19-20, 2004, pp 34-40
8	Ch. S. N. Murthy, M. Aruna, Harsha Vardhan & Saurabh Khare	Air Pollution and Its Control Measures In Mining Industry	National Workshop on Pragmatic Management of Industrial Pollution, Rourkela	November 20-21, 2004 pp 121-127
9	Y. V. Rao, Aruna, M. & Harsaha Vardhan	Management and Rehabilitation of Spoil Dumps – A Vase Study	Proceedings of One Day Seminar organized by MEAI, Hospet	July 16, 2006, pp 23-28
10	Praveen, R. K., Uday Kumar, R. Y. & Mangalpaday Aruna	Reforms and Present Status of Power Sector in India	Proceedings of National Seminar on Energy – The Future Scenario, IT, BHU	March 12-13, 2007, pp 148-154
11	Ch. S. N. Murthy, M. Aruna & Harsha Vardhan	Studies on Seasonal Variation of Water Quality of Mine Water Discharge	Sixth Symposium on New Equipment – New Technology, Management & Safety in Mines & Mineral Based Industries, Bhubaneswar	May 11-12, 2007, pp 13-17
12	Aruna, M., Rao, Y. V. & Karmakar, N. C.	Study of Illuminance Levels in the Surface Coal Mines – An Investigation for Better Design Concepts in Illumination System	Proceedings of National Seminar on Synergy in Mineral Sector for Sustainable Development (SMSSD) – Vision 2020, NITK, Surathkal	October 4-5, 2008, pp. 45-49
13	Aruna, M., Rao, Y. V. & Karmakar, N. C.	Design of Lighting System in Surface Mines – A New Strategy	Proceedings of National Seminar on Policies, Statutes & Legislation in Mines – POSTALE 2008, Dhanbad	December 20-21 2008, pp. 32-38
14	Sunil Jaralika	Performance Analysis of an	Proceedings of 34th	December 10-12,2010,

	& Mangalpady Aruna	EHV Sub Station – A Case Study	National Systems Conference NSC-2010 on System Solutions for Global Challenges: Energy, Environment and Security	India
15	Lakshmi Pathy, Ch. S. N. Murthy and M. Aruna	A Comparison of Different Lighting Systems Generally Used in Surface Mining Projects	Proceedings of National Conference on Recent Advancement in Engineering & Technology,	March, 2011 India
16	M. Aruna, Harsha Vardhan and Kashinath Pal	Scientific Evaluation of Slope Stability of Goan Iron Ore Mine	Proceedings of National Seminar on Geology, Mining, Processing, Metallurgy and Environmental Issues of Economic Mineral Deposits (GEOPME)	April, 2011, Sandur, India
17	N. Lakshmi Pathy, Ch. S. N. Murthy & M. Aruna	Development of Optimum Lighting Design Parameters for Street Lighting Projects Using MTALAB	Proceedings of National Conference on Recent Trends in Electrical Engineering RTEE - 2013	April, 2013, pp. 48-68
18	Abhishek Kumar Tripathi, Ch.S.N.Murthy & M. Aruna	Influence of Mine Environmental Parameters on the Performance of Solar Energy System – A Review	Proc. of National Conference on Futuristic Advancements in Mechanical Engineering (FAME-2K16)	August 8-9, 2016, pp 55-58, Thalassery.

News Letter / Souvenir / Bulletin

1. Rao, Y. V., Harsha Vardhan & Aruna, M., (2000): “Noise Control and The Law – A Critical Appraisal”, Souvenir of Mines and Environmental Conservation Week, Goa, April, pp 99-108.
2. Aruna, M., Rao, Y. V., Harsha Vardhan & Karmakar, N. C., (2003): “Illumination of Opencast Metalliferous Mines – A Case Study”, Indian Society of Lighting Engineers, Light Newsletter, Vol. III, No. II, April, pp 22-24.
3. Aruna, M., Karmakar, N. C. & Rao, Y. V., (2004): “Some Problems in Mine Lighting”, Indian Society of Lighting Engineers, Light Newsletter, Vol. III, No. II, January, pp 34-38.

General Articles

1. M. Aruna, (2005): “Lighting Up The Eye”, Science Reporter, December, pp 19-23.

Books

1. "Lighting Mine Haul Roads", LAP LAMBERT Academic Publishing, Germany, 2012.

5. AREAS OF RESEARCH INTEREST

- Mine planning
- Environmental management
- Mine illumination
- Slope stability

6. PROJECTS HANDLED

R&D Projects

1. **Co-Investigator:** "Study of Generation, Measurement and Control of Noise Pollution for Opencast Coal Mines", Sponsored by KREC, Surathkal, 2000.
(Sanction order no. KREC/SRP/MTG-Proc/2001 dated 12-09-2000: Rs. 10,000/-).
(PI: Prof. Y.V.Rao; CI: Harsha Vardhan & M. Aruna)
2. **Co-Investigator:** "Frequency Analysis and Modelling of Noise Pollution for an Opencast Coal Project", Sponsored by Ministry of Human Resources and Development (MHRD), Government of India, 2003-06.
(Sanction order no. 34012/5/2001-CRC dated 28-06-2001: Rs. 6.5 lakhs).
(PI: Prof. Y.V.Rao; CI: Harsha Vardhan & M. Aruna)
3. **Co-Investigator:** "Assessment and Design of Illumination System With Respect to an Opencast Iron ore Project", Sponsored by Indian Society of Lighting Engineers (ISLE), 2003-06
(Sanction order no. RD/ISLE/123/03 dated 18-01-2001: Rs. 1.6 lakhs).
(PI: Prof. Y.V.Rao; CI: M. Aruna)
4. **Principal Investigator:** "Evaluation, Design and Cost Analysis of Illumination System in Surface Mine Projects", Sponsored by Ministry of Human Resources and Development (MHRD), Government of India, 2005-08.
(Sanction order no. F26-11/2004/TS V dated 31-03-2005: Rs. 6.5 lakhs).
(PI: M. Aruna; CI: Harsha Vardhan)
5. **Co-Investigator:** "Application of Biodiesel for Heavy Earth Moving Machinery in Surface Mines", Sponsored by Madras Cements Limited, 2006-09.
(Sanction order no. CO-GEN/2135 dated 30-03-2006 : 1.46 lakhs).
(PI: Prof. Ch.S.N.Murthy; CI: Dr.R.P.Reddy, Harsha Vardha, M. Aruna, Dr.M.Govinda Raj, Dr. A.V.Adhikari & Mr.V.S.Sambasivam)

6. **Project Guide:** “Investigation of The Use of Quarry Dust as Construction Material”, Sponsored by Karnataka State Council for Science and Technology, 2008-09 (for final year B.Tech students Rithesh Mishra and Neelakanth Prabhu).
(Sanction order no. 7.1.03/SPP/995 dated. March 31, 2009: Rs. 5000/-)
(Guides: Dr. M. Aruna & Dr. Harsha Vardhan)
7. **Principal Investigator:** “Design and Cost Analysis of Illumination System for Underground Coal Mines”, Sponsored by Department of Science and Technology, Govt. of India, 2009-2012.
(Sanction order no. SR/FTP/ETA-14/2009 dated. April 30, 2009: Rs. 3.6 lakhs)
(PI: M. Aruna)
8. **Principal Investigator:** “Study for Utilization of Fine Material of Mines Waste”, Sponsored by The Sandur Manganese & Iron Ore Limited, Sandur, Bellary, 2013-2015.
(Sanction order no. MN:GSSK:GEN:2566 dated 18/10/2013: Rs. 14.3 lakhs)
(PI: M. Aruna; CI: Harsha Vardhan)
9. **Principal Investigator:** “Feasibility Study for Utilization of Gold Mill Tailings at Hutti Gold Mines in Making Bricks”, Sponsored by The Hutti Gold Mines Company Limited (A Govt. of Karnataka Enterprise), Hutti, Raichur, 2015-2017.
(Sanction order no. PSO/21/WO/2015 dated 20/04/2015: Rs. 13.26 lakhs)
(PI: M. Aruna; CI: Harsha Vardhan)
10. **Co-Investigator:** “Investigations in to the Reduction of Phosphorous in Iron Ore Using Microwave Technology for its Suitability to the Iron & Steel Industries”, Sponsored by R. Praveen Chandra, Mine Owner & Entrepreneur (ERM Group), Bangalore, 2017-2020. (ongoing)
(Sanction order no. RPC/NITK/2017-18/170 dated 18/08/2017: Rs. 10.06 lakhs)
(PI: Dr. Harsha Vardhan; CI: Dr.M.Aruna & Dr. Shreekanth R Lamani)
11. **Co-Investigator:** “Development and Characterizations of Advanced Solar Cells”, Sponsored by Vision Group on Science and Technology, Govt. of Karnataka, 2017-2020. (ongoing)
(Sanction order no. KSTePS/VGST-CISEE/2017/271 dated 21/11/2017: Rs. 30.00 lakhs)
(PI: Prof.Ch.S.N.Murthy; CI: Dr. M. Aruna & Dr, Kartick Tarafder)
12. **Co-Investigator:** “Predictive Assessment of Postural Risk and Biomechanical Analysis of Musculoskeletal Disorder (MSD) Related Problems of Dump Truck Operators in Indian Opencast Metal Mines”, Sponsored by Science and Engineering Research Board, DST, Govt. of India, 2019-2022. (ongoing)
(Sanction order no.dated: Rs.lakhs)
(PI: Dr. Bijay Mihir Kunar; CI: Dr. M. Aruna)

Consultancy Projects

- 1 Co-coordinator: “Scientific Study of Slope Stability and Ultimate Optimum Size of Benches of Vyasankere Iron Ore Mine – MSPL Limited”, Bellary, October 2003 (Rs. 10,000/-)
- 2 Co-coordinator: “Study of Slope Stability and Design of Optimum Slopes of Pathikonda Iron Ore Mines - M/s. Venganna Setty & Bros.”, Hospet, December 2003 (Rs. 10,000/-)
- 3 Co-coordinator: “Control Measures for Prevention of Pollution in Mines/River Bhadra”, KIOCL, Kudremukh, June 2006 (Rs. 1, 00, 000/-)
- 4 Co-coordinator: “Highwall and Slope Stability Studies at OCP-I Project, Ramagundam, SCCL”, Andhra Pradesh, August 2006 (Rs. 1,20,000/-)
- 5 Co-coordinator: “Planning of Rock Excavation and Disposal at Mangalore SEZ Site”, M/s. Mangalore SEZ Limited, Bangalore, February 2008 (Rs. 2, 00, 000/-)
- 6 Coordinator: “Scientific Study of Slope Stability of M/s. Deccan Minerals Private Limited”, Maharashtra, February 2008 (Rs. 33,708/-)
- 7 Coordinator: “Scientific Study of Slope Stability of M/s. Associated Mining Company”, Bellary, May 2008 (Rs. 1,03,371/-)
- 8 Coordinator: “Scientific Study of Slope Stability of M/s. V. G. Quenim Sonshi Mine”, Goa, March 2009 (Rs. 29,775/-)
- 9 Coordinator: “Scientific Study of Slope Stability of M/s. V. N. Agrawal”, Goa, March 2009 (Rs. 33708/-)
- 10 Coordinator: “Illumination Survey of Thimmappanagudi Iron Ore Mines”, Bellary, March 2009 (Rs.22,472/-)
- 11 Coordinator: “Scientific Study of Slope Stability of Velguem Surla Mines and Sigao Mines of V. M. Salgaocar & Bro. Pvt. Ltd.”, Goa, October, 2009 (Rs. 3,30,900/-)
- 12 Coordinator: “Scientific Study of Slope Stability of Kalay Mines and Cuddegalivorli Soddo Iron Ore Mines” of M/s. Siciidade de Fomento Industrial Private Limited, Goa, February, 2010 (Rs. 3,30,900/-)
- 13 Coordinator: “Scientific Study of Slope Stability of Dignem Openblast Iron Ore Mines” of Timblo Private Limited, Goa, January, 2010 (Rs. 2,20,600/-)

- 14 Coordinator: “Scientific Study of Slope Stability of Sacordem Iron Ore Mines” of M. S. Talaulicar & Sons Pvt. Ltd, Goa, January, 2010 (Rs. 2,04,055/-)
- 15 Coordinator: “Scientific Study of Slope Stability of Bateagal Iron Ore Mine” of M/s. Magnum Minerals Private Limited, Goa, March, 2010 (Rs. 1,65,450/-)
- 16 Coordinator: “Lease Boundary Survey”, of South West Mining Limited, Bellary, April, 2010 (Rs. 20,000/-)
- 17 Coordinator: “Lease Boundary Survey”, of Tungabhadra Mineral Pvt. Ltd., Bellary, May, 2010 (Rs. 40,000/-)
- 18 Coordinator: “Scientific Study of Slope Stability of Tembechem Dongor Iron Ore Mine”, Minescape Minerals Pvt. Ltd., Goa, May, 2011 (Rs. 1,65,450/-)
- 19 Principal Investigator: “Scientific Study of Slope Stability of Vangi Bindi Advona Iron Ore Mine”, Minescape Minerals Pvt. Ltd., Goa, May, 2011 (Rs. 1,65,450/-)
- 20 Coordinator: “Mine Lease Boundary Survey of Bellay – Sandur – Hospet Sectors”, Department of Mines and Geology, Govt. of Karnataka, June-September, 2011 (approx. Rs. 4.20 crores)
- 21 Coordinator: “Scientific Investigation Related to the Stability of Slopes at Lakkihalli Iron Ore Mine”, Sri Lakshmi Narasimha Mining Co. Pvt. Ltd., Chitradurga, June, 2011 (Rs. 1,65,450/-)
- 22 Co-coordinator: “Preparation of Reclamation and Rehabilitation Plan for Mining in Bheemasamudra Sector”, M/s. Mineral Enterprises Limited, Bangalore, September, 2011 (Rs. 8,82,400/-)
- 23 Coordinator: “Mine Lease Boundary Survey”, Doddonanavar Brothers, Belgaum, November, 2011 (Rs. 4,77,092/-)
- 24 Co-coordinator: “Verification of Depth of Virgin Ground Towards the Southern Side of Lease No. 2566”, Sri Lakshmi Narasimha Mining Co. Pvt. Ltd., Chitradurga, November, 2011 (Rs. 2,24,750/-)
- 25 Coordinator: “Scientific Study of Slope Stability at Tollem Mines”, Samruddha Resources Ltd., Maharashtra, July, 2012 (Rs. 2,80,900/-)
- 26 Coordinator: "Rock Testing of Samples Obtained from ISPRL Padur Site and Its Assessment", Udupi, June , 2012 (Rs. 46,068)
- 27 Coordinator: “Scientific Study of Slope Stability at Kalane Iron Ore Mine”, Timblo Co. Pvt. Ltd., Goa, July, 2012 (Rs. 2,80,900/-)

- 28 Coordinator: "Scientific study of slope stability at Tollem MINES of Smt. Kunda Raghuvir Gharse", Goa, August 2012 (Rs. 2,80,000/-)
- 29 Coordinator: "Testing of Rock Samples from Arasikeri Taluk, Karnataka", January, 2013 (Rs. 7304/-)
- 30 Coordinator: "Testing of Rock Samples", Associated Construction Equipment, Baikampady, September, 2013 (Rs. 8989/-)
- 31 Coordinator: "Scientific study of slope stability of Ramghad Iron Ore Mine", Zeenath Transport Company, Bellary, April 2014 (Rs. 2,00,000/-)
- 32 Coordinator: "Slope stability studies at C. N. Halli Mines", Mineral Enterprises Limited, Bangalore, April 2014 (Rs. 2,00,000/-)
- 33 Coordinator: "Slope stability study and risk assessment at Kattupiringium & Periyanaagalm limestone mines", The Ramco Cements Limited, Tamilnadu, June 2014 (Rs. 4,49,440/-)
- 34 Coordinator: "Scientific study to determine optimum pit slope angle in opencast mines in the state of Karnataka", Dept. of Mines & Geology, Govt. of Karnataka, May 2014 - April 2014 (Rs. 19,50,000/-)
- 35 Coordinator: "Demarcation of 1 km and 2 km core zone around Sri Jambunatheshwara Temple, Sandur, Hospet", Dept. of Mines & Geology, Govt. of Karnataka, May 2014 (Rs. 1,51,687/-)
- 36 Coordinator: "Certification of survey work of M/s. SAIL/VISL in Joga/Bavihalli village", Dept. of Mines & Geology, Govt. of Karnataka, March 2014 (Rs. 16,854/-)
- 37 Coordinator: "Survey and demarcation of M/s. Zeenath Transport Company, Hospet" , Dept. of Mines & Geology, Govt. of Karnataka, April 2014 (Rs. 40,000/-)
- 38 Coordinator: "Survey and demarcation of M.L.No.2516 of Sri. B. Rudra Gouda L/R of late Sri. B. Kumar Gouda", Dept. of Mines & Geology, Govt. of Karnataka, April 2014 (Rs. 40,000/-)
- 39 Coordinator: "Survey and demarcation of M.L.No.2394 and M.L.No.2495 of M/s. Doddonovar Brothers in Hiremagi & Ramthal villages of Hungund Talu, Bagalkot", Dept. of Mines & Geology, Govt. of Karnataka, June 2014 (Rs. 80,000/-)
- 40 Coordinator: "Survey of Khanaiahll Dhuderia, Sandur, Hospet", Dept. of Mines & Geology, Govt. of Karnataka, June 2014 (Rs. 80,000/-)

- 41 Coordinator: "Scientific study of slope stability of Ramghad Iron Ore Mines", M/s. Zeenath Transport Company, Hospet, July 2014 (Rs.2,24,720/-)
- 42 Coordinator: "Survey and Demarcation of R. Mallamma, Sandur, Hospet", Dept. of Mines & Geology, Govt. of Karnataka, July 2014 (Rs. 40,450/-)
- 43 Coordinator: "Survey and Demarcation of C-Category Mines in Bellary and Chithradurga Districts", Dept. of Mines & Geology, Govt. of Karnataka, November 2014 - March 2015 (Rs. 41,11,935/-)
- 44 Coordinator: "Contour Survey of C-Category Mines in Bellary and Chithradurga Districts", Dept. of Mines & Geology, Govt. of Karnataka, November 2014 - March 2015 (Rs. 48,84,926/-)
- 45 Coordinator: "Contour Survey of Open Area of C-Category Mines in Bellary and Chithradurga Districts", Dept. of Mines & Geology, Govt. of Karnataka, June 2015 (Rs. 5,52,717/-)

Modernization Projects

1. Co-coordinator: "Modernization of Mining Machinery Laboratory", Grant by MHRD, Govt. of India, 2004 (Rs. 12.00 lakhs)
2. Co-coordinator: "Project on Mine Model", Grant by MHRD, Govt. of India, 2004 (Rs. 10.00 lakhs).

Students Projects Handled

Under Graduate – 56

Post Graduate – 11

7. Ph.D GUIDANCE

Sl. No	Name of the Student with Reg. No.	Title of the Project	Status
1	Masood (MN09F01FT)	Design and fabrication of drilling equipment for estimating rock properties	Completed (December, 2015)
2	Sreekanth R Lamani (MN12P02)	Investigating the potential usage of iron ore waste in brick making and development of a model for optimizing physico-mechanical properties	Completed (September, 2016)
3	N. Lakshmipathy	Design of illumination system for	Completed

	(MN10P001)	surface mines and development of optimum design parameters	(November, 2017)
4	Ravindra (MN15F05)	Investigations on the performance of a diesel engine operated with raw cardanol and kerosene blends	Completed (February, 2019)
5	Abhishek Kumar Tripathi (MN15F01)	Investigation of Environmental Parameters Influencing the Performance of Solar Panel and Optimize Its Performance in Dusty Environment	Completed (July, 2019)
6	N.V.Sharathbabu Goriparti (MN15F09)	Design of Direct Torque Control of Induction Motor Drive for Mining Applications	Ongoing (Registered: July, 2016)
7	Jeripotula Sandeep Kumar (MN003)	Ergonomics Study in Surface Mines	Ongoing (Registered: July, 2017)
8	Sridhar S (MN004)	Ergonomics Study in Underground Mines	Ongoing (Registered: July, 2017)
9	Dayanand	Mine Power Systems	Ongoing (Registered: December, 2019)
10	Vikram	Mine Environment	Ongoing (Registered: December, 2019)

8. MEMBERSHIP OF PROFESSIONAL BODIES

- i. Life Member, Mining Engineers Association of India (1598,LM)
- ii. Member, Indian Society of Lighting Engineers (M-0976)
- iii. Member, The Institution of Engineers India (M128231-4)
- iv. Life Member, The Indian Society for Technical Education(LM;47902)
- v. Life Member, The Mining, Geological and Metallurgical Institute of India (LM;8985)
- vi. Member, International Society for Rock Mechanics (IM:1455)

9. IMPORTANT ASSIGNMENTS HANDLED

- Provided technical support for the **Central Empowered Committee (CEC)** appointed by Honorable Supreme Court of India for surveying Mine Lease Boundary in Bellary, Tumkur and Chithradurga districts (2011–2015).

- Provided technical support for **Central Bureau of Investigation (CBI)**, Government of India for surveying Mine Lease Boundary in Bellary-Sandur-Hospet sectors (2013-2014).
- Nominated as a member of **District Level Environmental Appraisal Committee (DEAC)** for Udupi District (2016-17). (since 07.05.2016)
- Nominated as a member of **District Level Environmental Appraisal Committee (DEAC)** for Karwar District (2016-17). (since 22.06.2016)
- Member of **Board of Studies (BOS)**, Vijayanagara Sri Krishnadevaraya University, Ballari for 3 years (2016-2019) (since 18.05.2016)
- Member of **Board of Studies (BOS)**, Aditya Engineering College, Kakinada, Andhra Pradesh (2019-2022) (since 06.07.2019)

10. SEMINAR / WORKSHOP ORGANISED

Topic	Place	Sponsored by	Period
Workshop on 'Development of Skills in Surveying and Earth Work Calculations' : Co-ordinator	NITK	TEQIP	5 to 8, December 2005
International seminar on 'Synergy in Mineral Sector for Sustainable Development (SMSSD) – Vision 2020' : Co-coordinator	NITK	TEQIP	4 to 5 October, 2008
International Workshop on 'Winning Strategies to Revitalize the Mineral/Coal Sector (WSRMS-2009)' : Co-ordinator	NITK	Various industries	8 to 9, August 2009
International Conference on "Global Challenge, Policy Framework and Sustainable Development for Mining of Mineral and Fossil Energy Resources: 2015-20 (GCPF:2015-20": Convener	NITK	Various industries	17 to 18 April, 2015

11. LECTURES / GUEST LECTURES DELIVERED

1. 'Evaluation of Illumination System in Opencast Mine and Development of Optimum Design Parameters', MHRD/AICTE sponsored summer school on 'Developments in Rock Excavation Technology and Management'. 17 – 23 July 2009 at NITK, Surathkal.
2. Series of lectures delivered at 'Certificate Course on Mine Surveying', Sponsored by various industries during 19.06.2009 to 18.07.2009 at NITK, Surathkal.
3. Series of lectures delivered at 'Certificate Course on Mine Surveying', Sponsored by Singareni Collieries Company Limited, Andhra Pradesh during 01.10.2009 to 20.10.2009 at NITK, Surathkal.
4. Guest lecture on 'Design and cost analysis of illumination system in surface mine projects' at Chulalongkorn University, Thailand on 23.2.2010.
5. Series of lectures delivered at 'Certificate Course on Mine Surveying', Sponsored by Singareni Collieries Company Limited, Andhra Pradesh during 20.10.2009 to 12.11.2009 at NITK, Surathkal.
6. Series of lectures delivered at 'Certificate Course on Mine Surveying', Sponsored by Singareni Collieries Company Limited, Andhra Pradesh during 04.06.2011 to 03.07.2011 at NITK, Surathkal.
7. Delivered Guest Lecture on 'Design of Lighting System for Surface Mine Projects' at National Level Technical Event "SPECTRUM 2017" held in Goa Engineering College, Goa on 17-03-2017.
8. Delivered Expert Lecture on 'Development of Value Added Products Using Mine Wastes for Its Effective Utilization' at National Workshop on 'Promising Bio-geotechnologies for Mine Site Reclamation' held in Periyar University, Tamilnadu on 13-12-2017.

12. BOOKS/PROCEEDINGS PUBLISHED

1. Edited Proceedings of 'International Workshop on Winning Strategies to Revitalize the Mineral/Coal Sector' Organized by the Department of Mining Engineering during 8 – 9, August 2009.
2. Edited Souvenir of 'Silver Jubilee Celebrations' of Department of Mining Engineering, 2009.
3. Book on 'Lighting Mine Haul Roads', LAP LAMBERT Academic Publishing, Germany, 2012.
4. Edited Procedia-Earth and Science 'Global Challenges, Policy Framework & Sustainable Development for Mining of Mineral and Fossil Energy Resources (GCPF:2015-20)', Vol. 11, 2015 along with Harsha Vardhan and M. Govinda Raj.