

## Brief Bio-data

1. Name: Manish Kumar

2. Date of Birth: 10-01-1975

3. Current Position and Address (Include Email ID and Contact Number) :

Senior Technical Officer (1)

Slope Stabilisation and Landslide Management Division, CSIR-CIMFR, Barwa Road Campus, Dhanbad-826015 (Jharkhand)

Email ID: [mkslope@cimfr.nic.in](mailto:mkslope@cimfr.nic.in) , [mk\\_4240cmri@yahoo.co.in](mailto:mk_4240cmri@yahoo.co.in) , [mk4240cmri@gmail.com](mailto:mk4240cmri@gmail.com)

Contact No: +919431723907

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1.	Diploma in Mining Engineering & Mine Surveying	1996	Board of Technical Examination, Mumbai(Maharashtra)	Mining (Method of working coal/non coal, mine ventilation, mine surveying, mine machinery, mine Legislation & General Safety, mine economics etc.

5. Work experience:

Designation	Institute/company	From	To	Nature of Work
Post Diploma (PDPT Trainee)	IISCO, Chasnalla, Dhanbad	08-01-1997	07-01-1998	Underground coal mines
Addl. Mining Engineer	Yuthika Limestone Opencast Mine, wani, Dist- Yavatmal(Maharashtra)	15-06-1998	15-03-1999	Opencast metal mines
Sales/Service Engineer	ALMINCO Pty. Limited, Nagpur(Maharashtra)	22-03-1999	31-07-2002	Underground coal mines (strata control)
JSA	CSIR-CIMFR, Dhanbad	23-08-2002	22-08-2007	Opencast mining (Slope Stability)
SSA	CSIR-CIMFR, Dhanbad	23-08-2007	20-07-2010	Opencast mining (Slope Stability)
Technical Officer	CSIR-CIMFR, Dhanbad	21-07-2010	20-07-2015	Opencast mining (Slope Stability)
Senior Technical Officer(1)	CSIR-CIMFR, Dhanbad	21-07-2015	Till date	Opencast mining (Slope Stability)

6. Work Area(s)/ Specialization: R & D work on pit and dump slope stability of open cast mines and slope monitoring of pits and dumps for the safety of workers and machines.

7. Major contributions: (Max. 100 words):

Research and Development work has been done in the area of slope design and slope monitoring. Methodology of precise sampling from pit and dump has been developed by us and implementation of the same for sampling is being done regularly from various mines coal and non coal. Generation of input data for slope stability modelling and analysis is being carried out for

different mines such as HZL, HCL, OMC, NMDC, IMFA, Tata Steel Mining Limited, FACOR (Vedanta), NALCO, RSMML, GIPCL, Reliance Sasan, Adani mining group and Coal India Limited. Technical papers have been published based on the R& D work carried out as mentioned above. Some innovative R&D design work has also been started for mixing of fly ash with external and internal OB dumps. Research work has also been done for dewatering of fly ash slurry for disposal of dewatered ash in overburden dump using geo textile tubes.

#### 8. No. of Research Publications:

- Papers in Journals: 04
- In conference proceedings: 09
- Invited lectures delivered: Nil

List of best 05 publications:

1. आर.के सिंह एवं एम. कुमार “ झामरकोठरा रॉक फॉस्फेट खान के खंड-डी के ढलान स्थिरता का अध्ययन एवं विश्लेषण” Minetech, October- December, 2007, Vol.28 No.4 P 34-37
  2. आर.के. सिंह, एम. कुमार एवं वी.के. सिंह “ डंप डिजाइन एवं स्थिरीकरण हेतु सुरक्षात्मक उपाय” भारतीय वैज्ञानिक एवं अनुसंधान पत्रिका वर्ष 20, अंक 2 दिसम्बर 2012 पृ° .251-256
  3. J.K. Singh, V.K Singh and M. Kumar “Surveying 3D Modelling and Precise Volume Computation of a hilly limestone mine using Survol-a new technology” Journal of Mines, Metals& Fuels, July-August, 2008,Vol.No 56,P-135-139.
  4. आर.के सिंह, एम. कुमार, एस.के. रॉय, जे.के. सिंह एवं वी.के. सिंह “अस्थिरता के पूर्वानुमान के लिए खुली खदान एवं डम्प का ढलान अवलोकन” प्रकाशित भारतीय वैज्ञानिक एवं औद्योगिक अनुसंधान पत्रिका, वर्ष 2020, अंक(2), दिसम्बर2020, पृ.संख्या 173-181
  5. S.K. Roy, R.K. Singh, M. Kumar, J.K. Singh, A. Kumar and V.K.Singh. Paper published on the topic “quantification of dumping area requirement for long term planning of waste dump- a case study”, International conference and exhibition on energy and environment: challenges and opportunities ( ENCO 2019) , February 20-22, 2019 at Vigyan Bhawan, New Delhi. Page no- 952-956, ENCO, 2019 Vol. II.
- Books/Chapters authored/edited : Nil

#### . List of 5 Major Contract R&D Projects:

1. Advice for optimum slope design of pits and dumps at Noamundi Iron mine, Katamati Iron mine, Joda East Iron mine and Khonband iron ore mine, Noamundi, Jharkhand, Tata Steel. V.K. Singh, J. K. Singh, A. Kumar, R.K.Singh, S.K. Roy, M.Kumar, U.K.Thakur and B.L. Sharma
2. Slope stability study of external dump and open pit of Agucha mine, HZL. V.K. Singh, J. K. Singh, A. Kumar, S.K. Roy, R.K.Singh, M.Kumar, U.K.Thakur and B. L. Sharma
3. Slope monitoring studies at Donimalai Iron ore mines(DIOM) and Kumaraswamy Iron ore mine(KIOM) of NMDC Ltd. Bellary, Karnataka. V.K.

Singh, J. K. Singh, A. Kumar, S.K. Roy, R.K.Singh, M.Kumar, U.K.Thakur and B.L. Sharma.

4. Scientific study for stability of pit and dump at Sukinda mines(Chromite) of IMFA, Orissa. V.K. Singh, J. K. Singh, A. Kumar, S.K. Roy, R.K.Singh, M.Kumar, U.K.Thakur and B.L. Sharma.
5. Scientific study and Advice thereon for the design of Bansdeopur opencast mine, Sijua area, BCCL, Dhanbad. J. K. Singh, S.K.Roy, A. Kumar, Kartik Varwade, R.K.Singh, M.Kumar, Prince Kumar and Swapan Mahato.

10. (a) Name of Patents/Copyrights applied /granted/commercialized: Nil

(b) Technologies/Products /knowhow/Services developed: Nil

11. Honors/Awards/Recognitions/Fellowships/Scholarships/Professional Memberships received:

I. Senior technician membership (Student chapter), Institution of Engineers (India).

II. Life member, Vigyan Bharati

III. हिन्दी पखवारा , 02-16 सितंबर, 2013, सीएसआईआर- सिंफर, धनबाद द्वारा आयोजित वर्ष 2013 की राजभाषा संवधन संबंधी "वैज्ञानिक शोध लेख प्रतियोगिता" में प्रथम स्थान

12. Societal Contributions

1. Optimum slope design and slope safely monitoring for saving the life of men and machinery in surface mines. Workers feel more safe through scientific mining and monitoring.
2. Worked for Vigyan Bharati for the upliftment of scientific temperament of society.
3. Cost of electricity generation for the use of society has decreased due to the work done by us in coal quality sampling, analysis and monitoring at different organisation such as NCL, CCL, ECL & MCL of CIL.