

## **Brief Curriculum Vitae**

1. **Name** **DR. SUJIT KUMAR MANDAL**
2. **Date of Birth** 4<sup>th</sup> Day of November, 1964
3. **Current Position and Address** SENIOR PRINCIPAL SCIENTIST,  
MINE MECHANIZATION & TECHNOLOGY DEVELOPMENT  
CSIR-CIMFR, BARWA ROAD, DHANBAD-826001
- E-mail & Phone no.** [E-MAIL-skm.cimfr@gmail.com](mailto:E-MAIL-skm.cimfr@gmail.com); 9431123474



#### 4. **Educational qualifications: (Graduation and above)**

Sl. No.	Degree/Certificate	Year of Passing	University	Subject
1.	BE	1986	Calcutta University	Mining
2.	M. Tech	1994	Indian School of Mines	Longwall Mine Mechanization
3.	Ph D (Mining)	2011	Bengal Engineering & Science University	Smooth Blasting

#### 5. **Work Experience**

Sl No.	Designation	Organisation	From	To	Job Description
a)	Jr. Executive Trainee	Bharat Coking Coal Limited	06.08.1986	05.08.1987	Worked as shift incharge Manager, Mines, Moonidih Project
b)	Assistant Colliery Manager	Bharat Coking Coal Limited	05.08.1987	08.12.1991	Worked in Longwall panel as shift incharge Manager, Mines, Moonidih Project
c)	Scientist-B	CSIR-Central Mining Research Station, Dhanbad	09.12.1991	08.12.1996	Engaged in R&D activities "Rock Blasting"
d)	Scientist-C	CSIR-Central Mining Research Institute, Dhanbad	09.12.1996	31.12.1999	Engaged in R&D activities "Rock Blasting"
e)	Scientist-E1	CSIR-Central Mining Research Institute, Dhanbad	01.01.2000	31.12.2004	Engaged in R&D activities "Rock Blasting"
f)	Scientist-E2	CSIR-Central Mining Research Institute, Dhanbad	01.01.2005	31.12.2009	Engaged in R&D activities "Rock Blasting"
g)	Senior Principal Scientist	CSIR-Central Institute of Mining & Fuel Research Dhanbad	01.01.2010	Till date	Engaged in R&D activities "Rock Blasting & Mine Planning"

6. **Area of Specialization**

- Rock blasting with experience in excavation of large caverns, tunnels
- Controlled Blasting with minimum overbreak
- Blast Vibration study and analysis
- Improvement in Fragmentation by blasting
- Smooth Blasting, trench blasting,
- Demolition Blasting
- Mine Planning & Design for open and underground excavations for both coal and non-coal projects

7. **Honours/Awards received** Two times merit award from Institution of Engineers (India) for publication of papers

8. **Fellowships/Scholarships**

9. **No. of Research Publications**

Papers in Journals	34
In Conference proceedings	30
Invited/Key-note address	

List of best 05 publications

1. S. K. Mandal, M. M. Singh and S. Dasgupta: A theoretical concept of structural dynamics to evaluate blast-induced damage on structures. *Mining Technology (Trans. Inst. Min. Metall. A)* Vol. 114, December 2005, pp A219-226.
2. S. K. Mandal, M. M. Singh and S. Dasgupta: Air overpressure and noise vis-à-vis detonating fuse, *CIM Magazine*, 2007, Vol.2 , No. 3.
3. S. K. Mandal, M. M. Singh and S. Dasgupta: Two-dimensional theoretical model for design of burn-cut pattern, *Mining Technology-2007*, Vol. 116, No.1, pp 32-39
4. S. K. Mandal, M. M. Singh and S. Dasgupta: Theoretical Concept To Understand Plan And Design Smooth Blasting Pattern., *Geotechnical and Geological Engineering*, 2008, Vol. 26, No. 4, pp 399-416.
5. S. K. Mandal and M. M. Singh: Evaluating extent and causes of overbreak in tunnels, *Tunneling and Underground Space Technology*, 2009, Vol. 24, pp 22-36.

10. Number of Books authored/edited Wrote an article "Parameters for controlling Damage & Overbreak" in Nanotechnology for Construction Engineering, Chapter-11, Vol. 9, pp 303-327
11. Technologies developed, licensed and/or commercialized
12. Foreign Visits
- i) Made several visits to Bhutan as a consultant for Tala Hydrel Project
  - ii) Visited Spain for presentation of paper for FRAGBLAST9
13. Details of professional memberships Institute of Engineers (India), MGMI, NISM
14. Major contributions (Max. 150 words) With more than five years experience in Longwall Project at Moonidih, I worked in different fields for rock fragmentation by blasting. Having more than 15 years experience in rock blasting, I have completed four projects for Mining Plan and Progressive Mine Closure Plan and is presently working in Mine Mechanization and Technology Development Group.
15. Technologies and Products/Services
- (i) Developed
  - (ii) Licensed
  - (iii) Commercialized
16. Design and Prototype Developed
17. Honours and awards won for technological contributions or sociological impact of R&D:

  
Signature