Brief Bio-data

1. Name : RAMA SHANKAR YADAV

2. Date of Birth : 20-05-1972

3. Current Position and Address (Include Email ID and Contact Number)
Rock Excavation Engineering, E Mail- **rsycfri@yahoo.co.in** / rsyadav@cimfr.nic.in
Mob: +91-9431318084/8789920294

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1.	Diploma in Chemical Technology	1997	Govt. Polytechnic Badaun (U.P.) Uttar Pradesh Technical Board, Lucknow	Unit operation, Heat Transfer, Mass Transfer, Fluid Mechnics etc.
2.	Degree in Mining Engineering	Winter-2019	Institution of Engineers (India), Kolkata	Exploitation of Mineral Deposits, Advanced Method of Mining, Mine Ventilation, Mine Machinary, Geomechanics and Mine Designe, Engg. Management, Geology, Mine Planing, Legislation & Mine Safety. etc.

5. Work experience:

Designation	Institute/company	From	To	Nature of Work
Jr. Technical assistant	Central Institute of Mining and Fuel Research, Dhanbad	20.10.1998	20.10.2003	coal and coke analysis/ characterization
Sr. Technical assistant	Central Institute of Mining and Fuel Research, Dhanbad	20.10.2003	20.10.2008	coal and coke analysis/ characterization
Technical Officer	Central Institute of Mining and Fuel Research, Dhanbad	20.10.2008	20.10.2013	coal and coke analysis/ characterization
Sr. Technical Officer	CSIR - Central Institute of Mining and Fuel Research, Dhanbad	20.10.2013	Till date	Field investigations, data analysis and publication of scientific outputs in the form of report and research papers

6. Work Area(s)/ Specialization: Rock blasting technology / engineering research.

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

Actively involved in several sponsored and consultancy projects of mining and infrastructure for mitigation of blasting related problems.

Research includes Rock excavation by controlled blasting, in mines, quarries, tunnels for enhancement of production, productivity and safety. Monitoring of ground vibration, fly-rock, noise / air over pressure for maintaining regulatory compliance etc.

8. No. of Research Publications:

- Papers in Journals:02
- In conference proceedings: 05
- Invited lectures delivered:NIL
- List of best 05 publications

1. Vivek Kumar Himanshu, A K Mishra, V. Priyadarshi, R. Shankar, **R. S. Yadav**, P. K. Singh (2021), "Estimation of optimum burden for blasting of different rock strata in an Indian Iron Ore Mine", Journal of the Geological Society of India, 97, 760-66. https://doi.org/10.1007/s12594-021-1757-4.
2. Vivek K Himanshu**, R S Yadav,** M P Roy, R K Paswan, C Sawmliana & P K Singh (2020), "धात्विक अयस्क के भूमिगत उत्खनन में हाल की तकनीकियों में प्रगति", MineTech Journals, vol.41, No.02, pp 45-54.
3. Dr. Pijush Pal Roy1, Dr. Chhangte Sawmliana1, Rakesh Kumar Singh1, **Rama Shankar Yadav1**, Narayan Kr. Bhagat1, Panchanan Hembram1, Sudhamoy Ghanti2, Anshuman Mazumder3, "Demolition of over-bridge on active railroad tracks in populated areas", 7th Asian Mining Congress 8-11, November 2017, Kolkata, pp 263-270 (MGMI).
4. Aditya Rana, **R. S. Yadav** and V. Priyadarshi "Controlled Demolition of Cliffs for Land Development of an International Airport in Navi Mumbai" National Conference on Rock blasting Techniques-challenges and opportunities, CSIR-CIMFR, Dhunbad India, Nov.23-24, 2018 pp-324-330.
5. M. M. Singh, N. K. Bhagat**, R. S. Yadav** and P. K. Singh" Effective Tunnel Blast Design to Enhance Progress with Minimal Overbreak " National Conference on Rock blasting Techniques-challenges and opportunities,CSIR-CIMFR, Dhunbad India, Nov.23-24, 2018 pp-110-122.

- Books/Chapters authored/edited:NIL

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

(i) Konkan Railway(KR) slope stabilization work using control blasting technique resulted into successful upliftment of safety standard against slope failure/boulder fall over KR track which ultimately facilitate uninterrupted movement of trains on this section.

(ii) Hydro-electric projects viz. Baglihar & Sawra-Kuddu for excavation of rock using controlled blasting techniques.

(iii) Study and advice for optimisation of blast design parameters for flattening of southern portion of Ulwe Hill and as a part of the land development works for construction of Navi Mumbai International Airport (NMIA) (SSP/481/20-21).

(iv) Design and continuous supervision of foundation blasting work at Betwa river for construction of Jhansi-Bina 3rd railway line bridge considering the safety and stability of existing bridge situated at a distance of 25 m (SSP/468/20-21).

(v) Scientific study for designing and execution of controlled blasting at dam site of Punatsangchu-I Hydroelectric Project Authority (PHPA-I), Bhutan (SSP/486/20-21)

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) Associate Member of the Institution of Engineers of India
ii) Life Member of Mining, Geological and Metallurgical Institute of India
iii) Life Member of Indian Carbon Society
iv) Life Member of Vigyan Bharti

12. Societal Contributions

Actively involved in developing air decking tool from the waste of the explosives cartridges packaging material and successfully used it in blast holes to create air gap of 1.5 to 2 m between the explosives columns. The air deck tools have been extensively used by mines and have saved about 15% in the cost of explosives and have improved the rock fragmentation too which is in accordance to Waste to Wealth.

The concept of differential decking and multiple decking in blastholes not just improved the fragmentation level but also reduced the expenses of Explosives and unwanted outcomes of blasting viz. ground vibration, air-overpressure etc. with enhanced safety, productivity and sustainability of opencast mines.

(Rama Shankar Yadav)
Sr.Technical Officer (1), REE Research Group
CSIR-CIMFR, Dhanbad