## Brief Bio-data

- 1. Name: Amar Prakash Kaushik
- 2. Date of Birth: 15/12/1996
- Current Position and Address (Include Email ID and Contact Number) Technical Officer (Mining) & Q. No. – Type 3/42, CIMFR Colony, Barwa Road, Dhanbad, Jharkhand 826001, <u>amarkaushik@cimfr.nic.in</u> & 6260391824
- 4. Educational qualifications: (Graduation and above)

SI.	Degree	Year of	University/Institute	Subject
No.		Passing		
1.	Matriculation	2012	DAV Public School,	Mathematics,
			Sawang	Science, Social
				Science, English,
				Sanskrit, Hindi
2.	Intermediate	2014	DAV Public School,	PCM
			Sawang	
3.	B.Tech	2018	AKS University	Basic & Advanced
	(Mining)		Satna, MP	Mining Engineering
				Subjects

5. Work experience:

Designation	Institute/company	From	То	Nature of Work
Technical Officer (Mining)	CSIR-CIMFR	4/12/2018	Till date	Research & Development in the field of Rock Excavation

- 6. Work Area(s)/ Specialization: The area of specialization encompasses -
  - Controlled blasting technique for (Land development work by flattening the mountain, Fresh Road cutting and widening)
  - Underwater blasting
  - Foundation blasting for development of railway bridges
  - Production & development blasting in Underground mines, while maintaining the stability of natural and artificial support system
  - Controlled blasting in opencast mines (Coal and non-coal) working and simultaneously minimizing the nuisances generated from blasting.
  - Coal Quality evaluation for its optimum utilization in power generation

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

Assisted in implementation of safe blasting practice to different mining and civil industry having national importance, which could be rated as noteworthy and helped in advancing the state of the art of blasting practice globally.

8. No. of Research Publications:

- Papers in Journals: 1
- In conference proceedings: 1
- Invited lectures delivered:

- List of best 05 publications
- Books/Chapters authored/edited
- Himanshu, V. K.; Roy, M. P.; Kaushik A. P.; Kumar, S. and Kushwaha, S. Directional controlled blasting for extraction of composite strata in an Indian coal mine. Journal of mining technologies and mineralogy. (2020), Volume 01, Issue (1), pp- 05 12.
- Himanshu, V. K.; Roy, M. P.; Paswan, R. K.; Kaushik A. P.; and Priyadarshi, V. K. Recent advancements in underground blasting for excavation of metalliferous ore deposits. Proceeding of National Conference on Advances in Mining (AIM-2020), February 14-15, 2020, Volume 01, pp-299-309.
- 9. List of 5 Major Contract R&D Projects:
  - 1. Advice for designing of safe and efficient blast design patterns for rock excavation works of different strategic roads of Border Roads Organization
  - 2. Advice for blast design optimization at Kayad underground mine of Hindustan Zinc Limited to control blast induced ground vibration within stipulated limit considering safety and stability of surface structures in and around the mine
  - 3. Scientific and Technical services for quality evaluation of coal for its optimum utilization in power generation
  - Design and continuous supervision of foundation blasting work at Betwa river for construction of Jhansi – Bina 3<sup>rd</sup> railway line bridge considering the safety and stability of existing bridge situated at a distance of 25m.
  - 5. Study and advice for optimization 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)
- 10. (a) Name of Patents/Copyrights applied /granted/commercialized:(b) Technologies/Products /knowhow/Services developed:
- 11. Honors/Awards/Recognitions/Fellowships/Scholarships/Professional Memberships received:
- 12. Societal Contributions

Haphazard mining and rock excavation work create nuisance in the environment. It creates problems for the dwellers residing near the area of excavation. Excess problems compelled them to migrate to some other location, even the fauna density of the area declines due to blasting nuisances.

In order to safeguard the interest of the dwellers, the physio mechanical properties of the rock mass are calculated. Later blast design parameters are decided based on those rock properties. So that productivity of the industry is maintained and simultaneously the safety of the people is taken care of.

In order to safeguard our frontiers, road connectivity to every extreme of India is important. In order to fasten the road connectivity work in the Northernmost and Northeastern borders, BRO personnel are onsite trained and demonstrated the latest blasting technique to achieve a faster progress rate. It will help the defense sector to continuously provide ammunition and Rason to the soldiers in the remote areas during wartime.