## Bio data of Subhashish Tewari

1. Name: SUBHASHISH TEWARI

2. Date of Birth: 31/12/1971

3. Current Position and Address: Senior Technical Officer (1)

Mine Design & Simulation Section

CSIR-Central Institute of Mining and Fuel Research

Barwa Road, Dhanbad, PIN- 826 015

Mob. No. 9431158865, E-mail:- tewari\_s@yahoo.com

4. Educational qualifications:

Degree/Diploma/Certificate	Subject(s)	Year	University/ Institute
AMIE (Mining)	Eng. Management, Mining Geology, Exploitation of mineral deposits, Mining machinery, Mine Ventilation, Geomechanics, Advanced Rock Mechanics, Advanced methods of mining, Mine Management and Legislation	2015	The Institution of Engineers (India)
Advance Diploma in Forge Technology	Free Forging, Die Forging, Forging Die Design, Heat treatment	1997	National Institute of Foundry and Forge Technology, Ranchi
Diploma in Mechanical Engineering	Fluid Mechanics, Automobile, machine Tools, Heat Engine, Theory of Machine, Machine Design	1995	State Council of Technical Education, West Bengal

## 5. Work experience

Designation	Institution/company	From	То	Nature of
				work
Gr.III (1) JSA	CSIR-CIMFR, Dhanbad	1999	2004	R&D work
Gr.III (2) SSA	CSIR-CIMFR, Dhanbad	2004	2009	R&D work
Gr.III (3) Technical Officer	CSIR-CIMFR, Dhanbad	2009	2014	R&D work
Gr.III (4) Sr. Technical Officer (1)	CSIR-CIMFR, Dhanbad	2014	Cont.	R&D work

6. Area of specialization: Rock Mechanics, Ground Control, Underground Mining

Methods and Numerical Modelling.

7. Honors/Awards received: NIL

8. Fellowships/Scholarships: NIL

9. No. of Research Publications:

Papers in journals: 04 papersIn conference proceedings: 16 papers

Invited/key-note addresses: NIL

List of best 05 publications:

- i) Kushwaha A, Singh S.K, Tewari. S, Sinha .A, "Empirical approach for designing of support system in mechanized coal pillar mining" International Journal of Rock Mechanics & Mining Sciences. Volume-47, Number-7, October-2010.
- ii) Kushwaha A, Sharma D. N, Tewari S, Bhattacharjee R. and Sinha, A, "Evaluation of roadway in-stability in the presence of stress anisotropy in underground coal mines" 46<sup>th</sup> US Rock Mechanics / Geo-mechanics Symposium held in Chicago, IL, USA, 24-27 June 2012.
- A. Kushwaha, R. Bhattacharjee, S. Tewari and A. Sinha, "Extraction of Locked-Up Coal in Standing Pillars in Indian Underground Coal Mines",
   Journal of Rock Mechanics & Tunnelling Technology (JRMTT) Volume 21
   Number 2, July 2015, pp 115-129
- iv) Himunshu V K, Kushwaha A, Tewari S and Sinha A, "Optimization of support parameters for safe and productive mining in underground metalliferous mines using numerical modelling technique, Journal of Mines Metals and Fuel (2015)
- v) A. Kushwaha, R. Singh, R. Bhattacharjee and S. Tewari " *Coal pillar extraction in King Seam using CM technology at VK-7 incline, SCCL Experiences and key success elements*" pp 381-400 at International Conference on Coal and Energy- Technological and future challenges (CETAFC 2013), organised by Department of Mining Engineering, Bengal Engineering and Science University, Shibpur, December 15-17, 2013

10. Number of Books authored/edited: NIL

11. (a) No. of Patents granted/applied for:

Patent Granted: - 10 Numbers
Patent applied: - 05 Numbers

PATEN	PATENT GRANTED				
SL.	NAME OF THE ITEM	INVENTOR (S)	NUMBER		
NO.					
1.	A DEVICE USEFUL FOR HOLDING A SENSOR	DR.S.N.MAITY,	Patent No. IN218334		
	INSIDE A DRILLED HOLE.	S.PRASAD,			
		S. TEWARI			
2.	AN IMPROVED COG USEFUL FOR	DR. S.N. MAITY	Patent No. IN242288		
	SUPPORTING UNDERGROUND MINE	S.PRASAD			
	ROOFS/TUNNELS	S.TEWARI			
3	A DEVICE USEFUL FOR SUPPORTING	S.K.KASHYAP	Patent No. IN240619		
	UNDERGROUND MINE	S.TEWARI			
	TUNNELS/ROADWAYS.	S.PRASAD			
4.	A DEVICE FOR COLLECTING AIR BORNE	S.K.KASHYAP	Patent No. IN241684		
	DUST GENERATED BY MOVING VEHICLE.	S.TEWARI			

5.	A DEVICE FOR LOADING BLASTED COAL	S.K.KASHYAP	Patent No. IN241105
J.	FROM THE WORKING FACE IN	S.TEWARI	ratent No. m241105
	CONVENTIONAL LONGWALL MINING.	S.PRASAD	
6.	SIMPLE ATTACHMENT DEVICE IN		Patent No. IN266941
0.	COMMON HAND HELD DRILLING MACHINE	S.TEWARI	Patent No. 111200341
		3. IEWANI	
	USED IN UNDERGROUND MINES TO		
	PREVENT FALL OF COAL DUST ON THE FACE		
	OF WORKERS DURING VERTICAL DRILLING		
	IN THE MINE ROOF.	0.1/./.01.11/.0	
7.	AN IMPROVED DEVICE USEFUL FOR		Patent No. IN251110
	MEASURING CONVERGENCE OF THE ROOF	S.TEWARI	
	IN A MINE FASTER AND MORE		
	ACCURATELY		
8.	AN IMPROVED DESIGN OF SAND STOWING		Patent No. IN267936
	BUNKER FOR HYDRAULIC STOWING OF	S.K.KASHYAP	
	POND ASH IN COAL MINES	D. KUMBHAKAR	
		S. TEWARI	
9	A DEVICE FOR MEASURING ROOF	A. KUSHWAHA	Patent No. IN266305
	CONVERGENCE IN MECHANISED	S.K.KASHYAP	
	UNDERGROUND COAL MINE WORKINGS	S.K.SINGH	
		S.TEWARI	
		R.BHATTACHARJEE	
10	A DEVICE FOR IMPROVED MANUAL	S.K.KASHYAP	Patent No. IN271486
	GROUTING OF ROOF BOLTS IN MINES	S.TEWARI	
		A. SINHA	
PATEN	T FILED IN INDIA	ı	
1.	AN IMPROVED COG USEFUL FOR	S.K.KASHYAP	0010/DEL/2004
	SUPPORTING UNDERGROUND MINE.	S.TEWARI	' '
		S.PRASAD	
2.	MODIFICATION OF HYDRO MECHANICAL	S.K.KASHYAP	46/DEL/2004
	STEEL COG	S.TEWARI	, ,====
		S.PRASAD	
		A. SINHA	
3	A DEVICE FOR SUPPORTING	S.K.KASHYAP	47/DEL/2004
	UNDERGROUND MINE ROOF/TUNNELS	S.TEWARI	, 522, 2007
	STREET OF THE ROOT / TOWNED	S.PRASAD	
		A. SINHA	
3.	A DEVICE FOR COLLECT BLASTED COAL	S.K.KASHYAP	1731/DEL/2006
٥.	FROM AND TRANSFER IT TO THE HAULAGE	S.TEWARI	1/31/011/2000
	POINT IN BORD & PILLAR MINING	J.ILVVANI	
1	I OHN HIN DOND & FILLAN MINIMU		0864/DEL/2006
4.	A DEVICE EOD CHIDDDECCION OF DUCT	$ C V V X C \square V X D$	
ii I	A DEVICE FOR SUPPRESSION OF DUST	S.K.KASHYAP	0804/DEL/2000
	PRODUCED DURING BLASTING OF COAL	S.K.KASHYAP S.TEWARI	0864/DEL/2006
	PRODUCED DURING BLASTING OF COAL FACE IN BORD & PILLAR MINING AND ALSO		0004/ DEL/ 2000
	PRODUCED DURING BLASTING OF COAL FACE IN BORD & PILLAR MINING AND ALSO USEFUL TO PREVENT THE SPREADING OF		0804/ DEL/ 2006
_	PRODUCED DURING BLASTING OF COAL FACE IN BORD & PILLAR MINING AND ALSO USEFUL TO PREVENT THE SPREADING OF DUST	S.TEWARI	
5.	PRODUCED DURING BLASTING OF COAL FACE IN BORD & PILLAR MINING AND ALSO USEFUL TO PREVENT THE SPREADING OF DUST  A DEVICE FOR MEASURING ROOF	S.TEWARI  A.KUSHWAHA,	0174NF2011
5.	PRODUCED DURING BLASTING OF COAL FACE IN BORD & PILLAR MINING AND ALSO USEFUL TO PREVENT THE SPREADING OF DUST	S.TEWARI	

- 12. Foreign visits: Nil
- 13. Details of Professional memberships: THE INSTITUTION OF ENGINEERS (INDIA)
  Associate Member (AM1603038)

## 14 . Major contributions:

Subhashish Tewari, currently Sr. Technical Officer (1) in "Mine Design & Simulation Section" at CSIR-Central Institute of Mining and Fuel Research, Dhanbad. He has been associated with 4 completed Grant-aid projects and more than 100 industry sponsored projects as a team member. He is actively involved in 'Ground Control in Bord and Pillar Mining' and 'Continuous Miner Technology'. He has ten patents as co patentee and 20 publications to his credit in national / international journals and conference proceedings as co author.

- 15. Technologies and Products/ Services NIL
  - (i) Developed:
  - (ii) Licensed:
  - (iii) Commercialized:
- 16. Designs and Prototype Developed: NIL
- 17. Honours and awards won for technological contributions or sociological impact of R&D: NIL

Signature