Brief CV of Dr. R.D. Dwivedi

1. Name : **Dr. RAMA DHAR DWIVEDI**

2. Date of Birth : 30.06.1968

3. Current Position and Address with E-mail & Phone : **Chief Scientist**
CSIR-CIMFR Regional Centre
CBRI Campus
ROORKEE-247 667 (Uttarakhand)
Email: rddwivedi@cimfr.nic.in
Mob: 9412929282

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree/ Certificate	Year of Passing	University/ Institute	Subjects
i	B. E.	1993	VNIT (formerly VRCE), Nagpur	Mining Engg.
ii	M. Tech.	1996	IT BHU, Varanasi	Mining Engg.
iii	Ph. D.	2015	IIT Roorkee, Roorkee	Civil Engg.

Topic of PhD: Behaviour of underground excavations under squeezing ground conditions

5. Work experience: **26 Years**

	Designation	Institution	From	To	Nature of work
i	Group IV (1)	CIMFR	18.09.1996	31.12.2000	Sub-zero temp rock testing; Tunnelling
ii	Group IV (2)	CIMFR	01.01.2001	31.12.2006	High temp rock testing; Tunnelling
iii.	Group IV (3)	CIMFR	01.01.2007	31.12.2010	High temp rock testing; Tunnelling
iv.	Group IV (4)	CIMFR	01.01.2011	31.12.2015	Tunnelling and U/g space
v.	Group IV (5)	CIMFR	01.01. 2016	31.12.2020	Tunnelling and U/g space
vi.	Group V (6)	CIMFR	01.01.2021	----------	Tunnelling and U/g space

6. Area of specialization : Tunnelling and Underground space technology; Rock testing

7. Honors/Awards received:
1. HEICO-Biennial best paper award in 2003
2. Institutional award for a patent in 2008
3. ISRMTT-Best paper award in 2013; 2017; 2019
4. Associate editor of journal, JRMTT (since, Oct. 2014)
5. CSIR Technology Award 2021 for significant contribution in Strategic Sector

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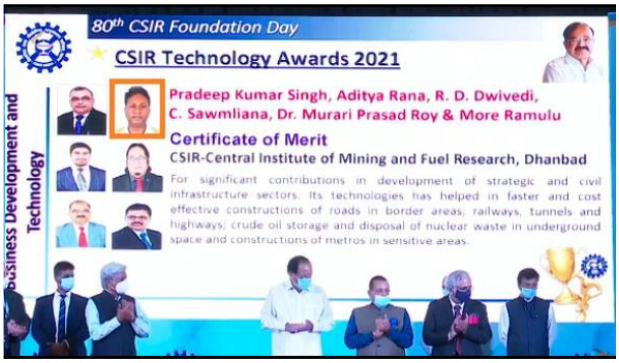

8. No. of Research Publications (Total) : **72**

- Papers in journals : 19
- In conference proceedings/Magazines : 53
- Chapter in Book (InTechOpen) : 1
- Invited lectures/key-note addresses : 21
- List of best 07 publications:

(i) **Dwivedi R. D.**, Soni A. K. (2021). Eco-friendly hill mining by tunnelling method. In: Mining Techniques - Past, Present and Future, Open Access.

(ii) **Dwivedi RD,** Goel RK, Singh M, Viladkar MN, Singh PK (2019). Prediction of ground behaviour for rock tunnelling. J Rock Mech Rock Engg, 52(4):1165-1177

(iii) **Dwivedi RD**, Singh M, Viladkar MN, Goel RK (2014). Estimation of support pressure during tunnelling through squeezing grounds. Engineering Geology, 168:9-22.

(iv) **Dwivedi RD**, Singh M, Viladkar MN, Goel RK (2013). Prediction of tunnel deformation in squeezing grounds. Engineering Geology, 161: 55-64.

(v) Lokajíček Tomáš, Rudajev Vladimir, **Dwivedi RD,** Goel RK, Swarup A (2012). Influence of thermal heating on elastic elastic wave velocities in granulites. **Int J Rock Mech and Ming Sci, 54:1-8.**

(vi) **Dwivedi RD,** Goel RK, Prasad VVR, Sinha Amalendu (2008). Thermo-mechanical properties of Indian and other granites. ***Int J Rock Mech Min Sci***,; 45(3):303-315.

(vii) **Dwivedi RD**, Soni AK, Goel RK, Dube AK (2000). Fracture Toughness of Rocks under Sub-zero Temperature Conditions, **Int J Rock Mech Min Sci,** Vol.37, pp.1267-1275.

9. Number of Books authored/edited: Edited (1) Course volume “Underground Engineering”
(2) Conf. Proc. “INDOROCK 2011”

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

(b) Technologies developed, Licensed and/or commercialized:
Developed an environmental chamber for rock testing upto 200^{o}C

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11. Foreign visits:

Sl. No.	*Duration & year of Visit*	*Purpose of visit(s) & programme(s) under which visit(s) was/were made*	*Country*
1.	18 days (16th September to 4th October, 2003)	Under S&T cooperation project entitled "Assessment of Stability & Reinforcement of Underground Structure through Numerical Modelling and Back Analysis" sponsored by CSIR, India & Academy of Sciences, Czech Republic.	Czech Republic
2.	20 days (June 22nd - 13th July, 2009)	Under S&T cooperation project entitled "Assessment of Stability & Reinforcement of Underground Structure through Numerical Modelling and Back Analysis" sponsored by CSIR, India & Academy of Sciences, Czech Republic.	Czech Republic
3.	14 days 28 Oct – 10 Nov, 2012	Study of stress-state in underground structure by back analysis for assessing the time deformation " between CSIR, India & Academy of Sciences, Czech Republic	Czech Republic

13. Details of Professional memberships:

ISRMTT	Life member
ISRM	Member
MMGI	Associate
IMEJ	Life member

14 . Major contributions:

- Worked on more than 51 tunnelling/mining projects and he also disseminated his knowledge and imparted trainings to the site personal engaged in tunnelling. He has also used his expertise to develop facilities for defence purposes.
- Has been engaged in testing of rocks in the temperature range from -50^{o}C to 200^{o}C for defence and civil utility projects.
- Received CSIR Technology Award 2021 for significant contribution in Strategic Sector
- Received four best paper awards; one by Indian Geotechnical Society in 2003 and other by ISRMTT in 2013, 2017 & 2019.
- Received an Institutional Award for filing a patent in the field of Mining Technology and safety in the year 2008.
- Published 72 research papers in International/National journals and conferences. He has also reviewed papers for some international journals; notable amongst these are *International Journal of Rock Mechanics and Mining Sciences*, *Rock mechanics and*

Rock Engineering, Tunnelling and Underground Space Technology and Engineering Geology.

- Organized a course on "Underground Engineering" during 15-17 Feb., 2010 for geologists and engineers engaged in tunneling and related projects in India and Bhutan. He is a faculty of *Academy of Scientific & Innovative Research (AcSIR).*

- Organized short-term training courses on Tunnel Engineering during 7-9 May 2019 and 17-19 July 2019 for executives, site engineers and geologists of RVNL engaged in tunnelling works.

- Accepted a responsibility of (i) editing *Journal of Rock Mechanics and Tunnelling Technology* as Associate Editor; (ii) Secretary of ISRMTT

15. Technologies and Products/ Services

(i) Developed: Environmental Chamber and a lateral deformation measuring device
(ii) Licensed: Lateral deformation measuring device has been patented

16. Designs and Prototype Developed:

Environmental Chamber and a lateral deformation measuring device and a Lateral deformation measuring device has been patented

Date: 24.5.2023, Roorkee (**Dr. R.D. Dwivedi**)