

Brief Bio-data

1. Name: Vivek Singh
2. Date of Birth: 20/03/1991
3. Current Position and Address (Include Email ID and Contact Number)

Technical Assistant,

Rock Mechanics Laboratory

CSIR-Central Institute of Mining and Fuel Research

Barwa Road, Dhanbad, Jharkhand, 826001

vivekparihar108@gmail.com, vsparihar@cimfr.nic.in,

+91- 9670727370

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1.	B. Sc	2013	M.G.C.G.V., Chitrakoot (M. P.)	Geology
2.	M.Sc	2015	M.G.C.G.V., Chitrakoot (M. P.)	Geology
3.	Ph. D	ongoing	AcSIR	Rock Mechanics

5. Work experience:

Designation	Institute/company	From	To	Nature of Work
Hydro Geologist	Centre For Groundwater Recharge, Raipur (Chhatisgarh)	01/10/2015	02/10/2016	Geo-Physical Resistivity Sounding, Geological mapping and Hydro-Geological Study for Lift-irrigation Department Odisha
Project Associate-I	CSIR-CIMFR	05/10/2016	30/07/2019	Coal Sampling, TM analysis, Coal Grading (Coal quality mega project)
Technical Assistant	CSIR-Central Institute of Mining and Fuel Research	02/08/2019	Continuing	Analysis of borehole cores, interpretation of results, operation of MTS 815.02, FE-SEM and Rock-Eval. Involved in R&D works

6. Work Area(s)/ Specialization: Rock Mechanics; Microscopy; Petroleum geochemistry

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

About 35 projects have been carried out successfully till date, since joining in 2019 at Rock Mechanics Laboratory, CSIR-CIMFR Dhanbad. During this period a sum of more than Rs. 10 crores (Rupees Ten crores) of external cash flow has been generated through the departmental projects, testing and calibration activities. Laboratory and field investigations were carried out to understand the characteristics of intact rock and rock mass. Most of these projects are industry sponsored and are related to study of rock mechanical properties for

design of different surface or underground structures of short, medium- and long-term stability, coal bed methane extraction etc.

8. No. of Research Publications:

- Papers in Journals: 04
- In conference proceedings: NIL
- Invited lectures delivered: NIL
- List of best 05 publications
 - A) Raghuvanshi, G., Chakraborty, P., Hazra, B., Adak, A.K., Singh, P.K., Singh, A.K. and **Singh, V.**, 2020. Pyrolysis and combustion behavior of few high-ash Indian coals. *International Journal of Coal Preparation and Utilization*, pp.1-21.
 - B) Hazra, B., Singh, D.P., Crosdale, P.J., **Singh, V.**, Singh, P.K., Gangopadhyay, M. and Chakraborty, P., 2021. Critical insights from Rock-Eval analysis of vitrains. *International Journal of Coal Geology*, 238, p.103717.
 - C) Singh, D.P., **Singh, V.**, Singh, P.K. and Hazra, B., 2021. Source rock properties and pore structural features of distinct thermally mature Permian shales from South Rewa and Jharia basins, India. *Arabian Journal of Geosciences*, 14(10), pp.1-16.
 - D) Singh, D., Wood, D., **Singh, V.**, Hazra, B., Singh, P., 2021. Impact of particle crush-size and weight on Rock-Eval S2, S4, and kinetics of shales. *Journal of earth Sciences*. In Press, Accepted Manuscript.
- Books/Chapters authored/edited- NIL

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

1. Study to estimate Geo-technical properties of BH# MTVG-49 for mine design and coal exploration of Vijaynagar-Giddhi Block Ramkola-Tatapani Coalfield.
2. Study to estimate Geo-technical properties of BH# MGR-93 for mine design and coal exploration of Girari Block of Mand-Raigarh coalfield.
3. Study to estimate Geo-technical properties of BH# CMITS-12 for mine design and coal exploration of Itapara South Block, Raniganj coalfield.
4. Study to estimate Geo-technical properties of BH# MLP-179 for mine design and coal exploration of Labji Pusla Block, Sonhat Coalfield.
5. Study to estimate Geo-technical properties of BH# MTR-81 for mine design and coal exploration of Tatapani-I Block of Ramkola-Tatapani Coalfield.

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: NIL

12. Societal Contributions:

Contributed a lot in coal mining for pillar and slope design, in railways for tunnel design, in hydro electric projects for foundation and different tunnel design, using the rock mechanical knowledge, for the safety and benefit of the society and to meet the energy demand of the country. Involved in national-level Coal Quality Mega Project, for coal quality assurance and monitoring. As a result of this project the quality of coal being supplied to the thermal power plants improved, and hence the price of electricity to consumer dropped.