

Brief Bio-data

1. Name: NIRAJ KUMAR SHUKLA
2. Date of Birth: January 21, 1976
3. Current Position and Address (Include Email ID and Contact Number): Senior Technical Officer (1), Project Planning and Monitoring, Project Planning and Industry Interface, CSIR- CIMFR, Digwadih Campus, P.O-FRI, Dhanbad, Jharkhand-828108, Mob: 09939159930, e-mail: shuklank@cimfr.nic.in; shuklank1@rediffmail.com

4. Educational qualifications:

Sl. No	Degree	Year of Passing	University/Institute	Subject
1	Degree in Mining Engineering	2013	The Institution of Engineers (India)	Advance Method of Mining, Mine Ventilation etc.
2	Diploma In Mining and Mine Surveying	1993	S.B.T.E., Jharkhand	Mining Technology, Mine Surveying etc.

5. Work experience:

Designation	Institute/company	From	To	Nature of Work
Senior Technical Officer (1)	CSIR-CIMFR, Dhanbad	January 24, 2015	Till date	Monitoring of Projects, Coal Petrography and Coal Sampling
Technical Officer	CSIR-CIMFR, Dhanbad	January 24, 2012	January 23, 2015	Coal Petrography, Assistance in other projects,
Technical Assistant	CSIR-CIMFR, Dhanbad	January 24, 2005	January 23, 2012	Assistance in execution of projects
Junior Engineer	Jindal Steel and Power Ltd.	June, 2004	January 2005	Supervision of mining works

6. Work Area(s)/ Specialization: Project Planning and Monitoring, Coal Quality Monitoring, Coal Petrology and Resource Quality Assesment
7. Major contributions: (Max. 100 words): After joining CSIR-CIMFR in 2005, worked as a team member for different projects. (a) Industrial utilization of heat altered coal in making artificial graphite, (b) Petrographic studies of Indigeneous and foreign coals, (c) Study of bore hole coal cores of virgin seams, (d) Application of Spectro-radiometry for coal quality assessment in the field, (e) Quality monitoring of coals by BIS and other standard methods, (f) GCV profiling at different stages of Power plants, (g) Development of method of coal sampling by mechanical auger, (h) Participated in initiation and monitoring of mega coal sampling and other projects, (i) Financial monitoring of Mega Coal Sampling Projects,
8. No. of Research Publications:
 - Papers in Journals: 07
 - In conference proceedings: 24

- List of best 05 publications:

- (a) Ashok K. Singh, R. V. K. Singh, Mahendra P. Singh, Hem Chandra, N K Shukla; 2007, Mine fire gas indices and their application to Indian underground coal mine fire, International Journal of Coal Geology (Elsevier), vol.69, pp.192-204, Impact Factor – 6.810, Citation – 160.
- (b) Ashok K. Singh, N. K. Shukla, S. K. Srivastava, D. D. Haldar, B. N. Roy & Mamta Sharma, 2009, Precautionary Measures in Determining Volatile Matter in Natural Coke Washability Fractions, International Journal of Coal Preparation and Utilization (Taylor & Francis). Vol. No. Issue 1; Page No.34-47.
- (c) Ashok K Singh, Niraj K. shukla, M. Sharma, S. Kumar, Alpana Singh, B. D. Singh, 2008, Coal Bed Methane Genesis and its status in Indian Context, Geological Society of India (Golden Jubilee Volume), Bangalore, Memoir, Vol. No.: 71; Page No.: - 149-172.
- (d) Ashok K. Singh, N. K. Shukla and Priya Kumari, 2015, An insight on natural coke studies for better industrial utilization – A case study from Indian mines, Minetech, Volume 36, No. 4, Oct-Dec, 2015.
- (e) Ashok Kumar Singh, Niraj Kumar Shukla, Vivek Singh, S. K. Chaudhary and S. K. Srivastava, 2007, Indian Coal: A Source of Carbon for artifact Industries, Minetech, Vol No.: 28 (1), Page No.: 55-60.

9. List of 5 Major Contract R&D Projects in which contributed as a member:

- (a) R&D leading to gainful industrial utilization of heat affected Jharia Coals.
- (b) An approach to explore the applicability of Spectroradiometry as a tool for assessment of coal quality.
- (c) Quality Assesment and Washability Study of Borehole Coal Cores from Gomia Block, East Bokaro Coalfield.
- (d) Auger Sampling study at MCL siding.
- (e) Coal Quality Monitoring projects at loading and unloading ends for various power plants.

10. (a) Name of Patents/Copyrights applied /granted/commercialized: NIL

(b) Technologies/Products /knowhow/Services developed:

Worked as a team member for (a) preparation of artificial graphite from Natural Coke (b) Application of Auger sampling from railway rakes.

11. Honors/Awards/Recognitions/Scholarships/Professional Memberships received: -

- (a) Corporate member of Institution of Engineers (India), Membership No. AM152529-O
- (b) Peravadhanulu Award – 2008 for Best paper presentation in the area of Mineral Characterization, MPT2008 at CSIR-NIIST, Thiruvananthapuram.
- (c) Merit Certificate from Institution of Engineers (India) for securing highest marks in Mining Engineering Examination, November 16, 2014.

12. Societal Contributions:

- (a) During execution of Watershed development project, participated in formation of Self Help Groups, renovation of ponds and othe village development works in different villages of Baliapur block, Dhanbad
- (b) Participated in training of young people in field of coal sampling.