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1. Name: Dr. Siddharth Singh

2. Date of Birth: 27.09.1970

3. Current Position and Address: Principal Scientist,  
Natural Resource & Environmental Management,  
ODB, CSIR-CIMFR, Barwa Road, Dhanbad-826015  
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(with E-mail & Phone no.)

4. Educational qualifications: (Graduation and above)

S. N.	Degree	Year	University	Subjects
1.	B.Sc.	1991	UP Autonomous College, Varanasi/Purvanchal University	Chemistry, Botany, Zoology
2.	M. Sc.	1994	School of Environmental Biology, APSU, Rewa	Environmental Biology
3.	Ph. D.	2000	BHU, Varanasi	Botany/ Ecology

5. Work experience

Sl. No.	Designation	Institution/company	From	To	Nature of Work
1.	Scientist 'B'	Central Mining Research Institute, Dhanbad	05.12.2001	05.12.2004	R & D
2.	Scientist 'C'	Central Institute of Mining and Fuel Research, Dhanbad	05.12.2004	05.12.2008	R & D
3.	Senior Scientist (E-I)	- do -	05.12.2008	05.12.2012	R & D
4.	Principal Scientist (E-II)	- do -	05.12.2012	Till date	R & D

6. Area of specialization: Climate Change, Particulate matter and Greenhouse gas estimation, fly ash utilization in agriculture, Impact of coal mining on ecology and environment

7. Honors/Awards received: NA

8. Fellowships/Scholarships: NA

9. No. of Research Publications:

- Papers in journals: 10
- In conference proceedings: 06
- Invited/key-note addresses: 02
- List of best 05 publications:

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1.	<b>Siddharth Singh</b> , S. Tiwari, D.P. Gond, U.C. Dumka, D.S. Bisht, Shani Tiwari, G. Pandithurai, A. Sinha	Intra-seasonal variability of black carbon aerosols over a coal field area at Dhanbad, India.	<i>Atmospheric Research 161-162(2015) 25-35</i> <b>(<i>impact factor-2.84</i>)</b> ,
2.	<b>Siddharth Singh</b> , D. P. Gond, A. Pal, B K Tewary & A Sinha	Performance of several crops grown in fly ash amended soil	World of Coal Ash(WOCA) Conference, May 9-12, 2011, University of Kentucky, USA
3.	Bhanu Pandey, Madhoolika Agrawal & <b>Siddharth Singh</b>	Coal mining activities change plant community structure due to air pollution and soil degradation.	Ecotoxicology, <b>(<i>impact factor- 2.706</i>)</b> , <i>Vol. 23, No. 6, August 2014</i>
4.	S. Tiwari, R. Kumar, P. Tunved, <b>Siddharth Singh</b> , and A. S. Panicker	Seasonal heterogeneity in soot particle and carbon monoxide over Brahmaputra River Valley, India: An impact on regional climate.	Science of the Total Environment <b>(<i>impact factor - 4.099</i>)</b> , Vol.562, (2016), pp. 504-516
5.	Bhanu Pandey, Madhoolika Agrawal & <b>Siddharth Singh</b>	Ecological risk assessment of soil contamination by trace elements around coal mining area.	J Soils Sediments ( <b><i>impact factor-2.139</i></b> ), Vol. 16, Issue 1, pp 159 – 168. Jan 2015 10.1007/s11368-015-1173-8

10. Number of Books authored/edited: NA

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

(b) Technologies developed, Licensed and/or commercialized:

12. Foreign visits: (Denver, USA) and (Tampere, Finland)

13. Details of Professional memberships:

International Society of Environmental Botanists, NBRI, Kucknow

Indian Aerosol Science & Technology Association,

Indian Science Congress Association

14 . Major contributions: ( Max. 150 words)

Developed a methodology and estimated greenhouse gas (Carbon dioxide and Methane) emission from fire affected Opencast and Underground Colliery of under Coal S&T funding of Ministry of Coal. Derived Carbon dioxide and methane emission factor for opencast and underground mines. The adverse impact of coal mining activities on plant community structure and soil quality have been studied and identified major soil limiting factors and tolerant plant species in Jharia and Raniganj Coalfields. Initiatives have been taken to study the black carbon flux and its source apportionment in the Jharia Coalfields. Black carbon Radiative forcing has been derived for Jharia Coalfields.

Fly ash has been assessed successfully as a soil amendment to enhance crop productivity without any ill effect in various crops. Carried out the Environmental Impact Assessment of coal

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and non-coal mines and coal washery as a group activity and prepared Environmental Management Plan. About 36 such studies have been successfully completed in the last ten years.

15. Technologies and Products/ Services

- (i) Developed:
- (ii) Licensed:
- (iii) Commercialized:

16. Designs and Prototype Developed:

- Developed a methodology for estimation of direct and diffuse greenhouse gas emission from coal mine fire areas.

17. Honours and awards won for technological contributions or sociological impact of R&D:

- Accredited by NABET as a consultant for Ecology and Biodiversity to carry out Impact Assessment and propose Management Plan for Mining and coal washery projects.

Signature

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