

1. Name: AJAY KUMAR SINGH
2. Date of Birth: 30th June 1957
3. Current Position and Address (with E-mail & Phone no.):



Senior Scientist, Nonconventional Gases-SMNG Group
 CSIR-Central Institute of Mining and Fuel Research
 Barwa Road, Dhanbad 826 015 JH [INDIA]
 E-mail: ajay.cimfr@gmail.com / **ajay@cimfr.res.in (not in use now)**
 Phone: +91 326 2296007 (Direct), Mobile: +91 9431725858 (M)
 EPABX: (DID) 2296 003/004/005, (Operator) 2296027/028/029 EXTENSION 4265

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree/Certificate	Year of Passing	University/ Institute	Subjects
i.	B.Sc. (Hons)	1981	Bhagalpur University	Mathematics (Hons), Physics, Chemistry
ii.	M.Sc.	1983	Bhagalpur University	Mathematics
iii.	Ph. D.	1991	IIT Kanpur	Mathematics

5. Work experience

Sl. No.	Designation	Institution/company	From	To	Nature of work
.	Scientist 'B'	CSIR – CIMFR	1988	1991	R&D
.	Scientist 'C'	CSIR – CIMFR	1991	1996	R&D
.	Sr. Scientist	CSIR – CIMFR	1996	Cont.	R&D

6. Area of specialization:

(), Coaled Methane (CBM), (), CO₂ sequestration in geologic formations, underground coal gasification (UCG).

7. Honors/Awards received:

(), 2007

8. Fellowships/Scholarships:

- National Scholarship (1978-1983)
- (1983-1988)

9. No. of Research Publications:

- Papers in journals: 12
- In conference proceedings: 23
- Invited/key-note addresses: 02
- List of best 05 publications:

1. **Singh, A. K.** and Misra, J. K., 1992, Natural Convection Adjacent to a Vertical Wall in a Saturated Porous Medium, Indian Journal of Technology, Vol. 30, p. 392.
2. Banerjee B. D., **Singh, A. K.** and Garg P. C., 1994, Modelling Inflow of Methane from Coal seams, into Longwall Workings, Int. J. Rock Mech. Min. Sci. and Geomech Astr., Vol. 31, p.85.
3. Banerjee, B.D., **Singh, A.K.**, Kispotta, J., Dhar, B.B, 1994, Trend of methane emission to the atmosphere from Indian coal mining, Atmospheric Environment, Vol.28, p.1351.
4. **Singh A. K.** and Rani A., 1997, Finite Element analysis of Natural Convection in a Vertical Cylindrical Porous Annulus, Geomechanics 96, Eds. Rakowski, Z., Balkema A.A., Rotterdam, p.201.

5. Sharma Subodh, Choudhury Asim, **Singh A. K.** et. al., 2011, Greenhouse Gas Inventory Estimates for India, Current Science, Vol. 101, p. 405.

10. Number of Books authored/edited: 02

11.

- a) No. of Patents granted/applied for: None
b) Technologies developed, Licensed and/or commercialized: None

12. Foreign visits:

- To be provided later

13. Details of Professional memberships:

- Life Member; Indian Science Congress Association
- Life Member; Indian ()
- Life member; The Mining, Geological and Metallurgical Institute of India ()

14. Major contributions: (Max. 150 words)

Dr. Ajay Kumar Singh is a Sr. Scientist and is one of the most established scientists in India in the field of coalbed gases. With a Ph.D. degree from Indian Institute of Technology, Kanpur, Dr. Singh joined CIMFR in March 1988. He has more than forty research papers to his credit in the national and international arena and has published 127 technical reports. His research is primarily concerned with the prediction of methane emission in mines, resource evaluation for production of coalbed methane, CBM reservoir modeling, underground coal gasification (UCG) and carbon storage in geologic formations. Dr. Singh is the key person to determine the national methane emission factor for coal mining and handling activities in India and also to prepare the estimates of fugitive emission to the atmosphere from India's coal and oil and natural gas systems on behalf of the Ministry of Environment and Forests, Government of India as a part of India's National Communication to the United Nations Framework Convention on Climate Change. He is one of the lead authors of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Fugitive Emission Section, Energy Volume) published by the Intergovernmental Panel on Climate Change (IPCC), the elite panel that received Nobel Peace Prize in 2007. He is managing many projects on coalbed methane and coal mine methane sponsored by the coal mining industry and other funding agencies including the one funded by the United States Environmental Protection Agency (US EPA).

15. Technologies and Products/ Services

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

16. Designs and Prototype Developed:

- High Pressure Adsorption Isotherm Construction Experimental Set Up

17. Honours and awards won for technological contributions or sociological impact of R&D: None

Signature