1. Name: DEBADUTTA MOHANTY

2. Date of Birth: 10th March 1978

3. Current Position and Address (with E-mail & Phone no.):

Senior Scientist, Nonconventional Gases-SMNGGroup
Central Institute of Mining and Fuel Research
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4. Educational qualifications: (Graduation and above)

Sl. No.	Degree/ Certificate	Year of Passing	University/ Institute	Subjects
i.	B. Sc. (Hons)	1998	Ravenshaw University, Cuttack	Geology(Hons), Mathematics, Physics
ii.	M. Sc. Tech.	2001	ISMDhanbad	Applied Geology
iii.	Ph. D.	2008	IIT Roorkee	Earth Sciences

5. Work experience

	Designation	Institution/company	From	To	Nature of work
i.	Scientist 'B'	CSIR – CIMFR	2005	2008	R&D
ii.	Scientist 'C'	CSIR – CIMFR	2008	2012	R&D
iii.	Sr. Scientist	CSIR – CIMFR	2012	Cont.	R&D

6. Area of specialization:

Application of Petrology (Coal/ Ore), Geochemistry (Organic/Inorganic), Petrophysics (Coal/Rock) in Coal Bed Methane (CBM), CO_2 sequestration in geologic formations, Coal Conversion processes [Combustion, Gasification including underground coal gasification (UCG), Liquifaction, Carbonization etc.] and, Ore Geology and Mineral Exploration

7. Honors/Awards received: None

8. Fellowships/Scholarships:
   - National Scholarship (1993-1998)
   - ISM/MHRD Scholarship (1998-2000)
   - ISM/UGC Scholarship (2000-2001)
   - CSIR – JRF/NET: IITR (2002-04)
   - CSIR – SRF/NET: IITR (2004-05)

9. No. of Research Publications:
   - Papers in journals: 10
   - In conference proceedings: 17
   - Invited/key-note addresses: 02
   - List of best 05 publications:

i. Bandopadhyay A. K. and Mohanty D. (2014). Variation in hydrogen content of vitrinite concentrates with rank advance. Fuel, 134: 220-225
ii. Choudhury N., Mohanty D., Boral P., Kumar S., Hazra S. K. (2008). Microscopic evaluation of coal and coke for metallurgical usage: A case study. Current Science, 94-1: 74-81.
iii. Mohanty D., Kumar S., Boral P., Choudhury N. (2011). Petrographic signatures of marine inundation from the Barakar coal measures of Mahanadi–Ib Valley, Orissa, India. Current Science, 101-9: 1149-1151.

iv. Singh, P.K., Singh, V.K., Rajak, P.K., Singh, M.P., Naik, A.S., Raju, S.V., Mohanty, D. (2015) Eocene lignites from Cambay basin, Western India: an excellent source of Hydrocarbon, Geoscience Frontiers (Article in Press, available online).

v. Misra A., Mohanty D., Sen A. K. (2011). Landsat ETM+ Image Analysis for Alteration Mapping in Sukinda Chromite Deposit, Orissa: Case of a Vegetated Mineralized Region. International Journal of Earth Science and Engineering, Special Issue on RS and GIS, 4-3: 30-38.

10. Number of Books authored/edited: 01

11.

a) No. of Patents granted/applied for: None

b) Technologies developed, Licensed and/or commercialized: None

12. Foreign visits:
- May 2008 – May 2009: Post-Doctoral Fellow at Southern Illinois University at Carbondale, Illinois, USA
- 23-28 March 2015: Visiting Scientist to Ergo Exergy Technology Incorporated, Montréal, Québec, Canada
- 01-05 February 2016: Visiting Scientist toThe University of Queensland, Brisbane, Australia

13. Details of Professional memberships:
- Fellow and Life Member; Geological Society of India
- Alternate Member; BIS for Coal Petrology
- Life Member; Indian Science Congress Association
- Life Member; Indian Institute of Mineral Engineers
- Life member; The Mining, Geological and Metallurgical Institute of India

14. Major contributions: (Max. 150 words)

Dr. DebaduttaMohanty is working closely with the Industry for mine gassiness study for mine ventilation planning and designing; for gas-in-place estimation and reservoir evaluation etc. for oil and gas companies; for C-foot print study etc.

He is keen in investigation on organic maturation, gas generation, cleat/micro-fractures and storage capacity of coal/shale reservoirs. He contributed towards delineation of potential zones for CMM recovery and utilization, and identification of probable sites for CO_2-sequestration in Indian coalfields. He had addressed to the much debated issue of Palaeozoic marine incursion in the Indian Peninsular through petrographic investigation. He contributed to the prediction of optimum blend proportion and coke quality for metallurgical usage, and assisted in the preparation of BIS report on coal and lignite.

He designed and developed indigenously a unique high pressure adsorption isotherm experimental setup at CSIR-CIMFR for research on unconventional gas reservoir systems and CO_2-sequestration under replicated in situ conditions.

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

D. Mohanty