

Brief Bio-data

1. Name: DR PINAKI SARKAR

2. Date of Birth: 05. 07.1968

3. Current Position and Address (Include Email ID and Contact Number) :

Senior Principal Scientist, CSIR- Central Institute of Mining and Fuel Research (Digwadih Campus); PO- FRI; Dist.- Dhanbad; Jharkhand; PIN 828108

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1.	B. Tech	1990	Calcutta University	Chemical Technology (Specialization in Ceramic Engineering)
2.	M. Tech	1991	Calcutta University	Ceramic Engineering
3.	PhD (Tech)	1998	Calcutta University	Ceramic Engineering

5. Work experience:

Designation	Institute/company	From	To	Nature of Work
Scientist (Presently, Senior Principal Scientist)	CSIR-CIMFR	1997	Continuing	R & D

6. Work Area(s)/ Specialization: Coal combustion, Thermal Analysis, Energy sector GHG emission estimation.

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

- Contribution in heavy residue processing projects (Sponsor IOCL, HPCL)
- Contribution in development of mesophase pitch for carbon fibre (Sponsor VSSC ISRO)
- Contribution in coal combustion projects to address various problems of industries (sponsor: NTPC, NALCO, TATA STEEL, RELIANCE, Gondwana Geo Tech, WBPDC, etc.)
- Leading NATCOM projects for estimation of GHG emission in energy and manufacturing industries towards National communication (NATCOM) of Govt. of India to UNFCCC since the year 1999-2000
- Reviewer IPCC
- Contributed to 2019-refinement of IPCC 2006 guidelines

8. No. of Research Publications:

- Papers in Journals: 32 (in esteemed SCI journals)
- In conference proceedings:
- Invited lectures delivered: More than 30
- List of best 05 publications;

i.) **Revision of NCVs and CEFs for Indian coal categories for estimation of GHG emission Fuel, 236 (2019) 461-467**

ii.) **Impacts of changes in commercial non-coking coal grading system and other coal policies towards estimation of CO₂ emission in Indian power sector CARBON MANAGEMENT VOL. 12, NO. 1, 69–80**

iii.) **Agglomeration behaviour of high ash Indian coals in fluidized bed gasification pilot plant Applied Thermal Engineering, 86 (2015), 222-228**

iv.) **Combustion characteristics of blends of a coal with different biomass chars Fuel Processing Technology, 91 (2010) 369–378**

v.) **Predictive equations for CO₂ emission factors subsequent assessment of uncertainty in CO₂ estimation, Fuel, 88 (2009) 792–798**

- Books/Chapters authored/edited : Contribution to 6 books published by MoEF-CC On GHG emission estimation out of which 5 books are basically National communications of Govt. of India to UNFCCC.

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

- i.) Various projects on energy sector inventory of GHG emission for national communications to UNFCCC (GOI-UNDP-GEF projects)
- ii.) Projects to address combustion related problems in power plants (Sponsor: (sponsor: NTPC, NALCO, TATA STEEL, RELIANCE, Gondwana Geo Tech, WBPDC, etc.)
- iii.) Projects on Normative requirement of coal by user industries (Sponsor: CIL)
- iv.) Projects on upgradation of heavy residue/ heavy oil (Sponsor IOCL, HPCL)
- v.) Project on development of mesophase pitch from coal tar for its subsequent utilisation for the production of carbon fibre. (Sponsor: VSSC, ISRO)

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

Patent Filed: 03

i.) on 'Heavy residue-water emulsion as alternative fuel'

ii.) on 'Utilization of SPL of Aluminium Industry as co-fuel with coal'- Jointly with NALCO

iii.) on 'System and process for conversion of heavy oil into lighter fractions'- Jointly with HPCL

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

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

Professional Membership:

- Life member Indian Institute of Chemical Engineers (IICChE)
- Life member Indian Ceramic Society (ICS)
- Life member Material Research Society of India (MRSI)

12. Societal Contributions : Contributed to the children education programme of CSIR for deprived class of students in surrounding areas as coordinator, Chemical Science group.