



**1. Name: Sudipta Datta**

2. Date of Birth: 25.01.1971

3. Current Position and Address: Principal Scientist, Gasification Division  
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4. Educational qualifications: (Graduation and above)

Sl. No.	Degree/ Certificate	Year of Passing	University/ Institute	Subjects
i	B.Sc. (Chem. Hons)	1992	Calcutta University	Phy, Chem, Maths
ii	B.Tech.	1995	Calcutta University	Chemical
iii	M.Tech.	1997	Calcutta University	Petroleum

5. Work experience

	Designation	Institution/company	From	To	Nature of work
I	Jr. Scientist	CFRI, Dhanbad	1997	2002	Petroleum heavy residue upgradation to different value added product through aqua conversion route
ii	Scientist	CFRI, Dhanbad	2002	2007	Development of Coal water emulsion for power generation
ii	Sr.Scientist	CIMFR, Dhanbad	2007	2012	Fluidized bed

				gasification of high ash Indian coal in pilot scale gasifier
iv	Principal Scientist	CIMFR, Dhanbad	2012	Continue
				Study the co-gasification performance of coal and biomass in Fluidized bed Gasifier

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6. Area of specialization: Coal Gasification, Petroleum Heavy Residue upgradation, co-gasification of coal and biomass, Fluidized bed gasification and Reactivity of Gasification

7. Honors/Awards received:

8. Fellowships/Scholarships:

9. No. of Research Publications:

- Papers in journals: 07
- In conference proceedings: 12
- Invited/key-note addresses: 01
- List of best 05 publications:

- **Studies on CO<sub>2</sub> Gasification reactivity of high ash Indian coal** S Saha, G.Sahu, S.Datta, P.Chavan, A.K.Sinha, B.K.Sharma and T.Sharma. International Journal of Emerging Technology and Advanced Engineering 3 (2013) 29-33.
- **Agglomeration behaviour of high ash Indian coals in fluidized bed Gasification pilot plant** S Datta, P Sarkar, S Saha, G Sahu, P Chavan, A.K.Sinha and V.K.Saxena. International Journal of Applied Thermal Engineering 86 (2015) 222-228.
- **Modeling and simulation of a pilot scale bubbling fluidized bed gasifier for the gasification of high ash Indian coal using Eulerian Granular Approach** (ijcre-2014-0057) International Journal of Chemical Reactor Engineering by G. K. Singh, B. Mohanty, P. Mondal, P.D. Chavan & S. Datta. DE Gruyter Publisier
- **Synthesis of Biodiesel by pyrolysis of castor oil** Sudipta Datta, Prakash Chavan, Sujan Saha, Gajanan Sahu and B.K.Mall. Asian Journal of Chemistry 23(6) (2011) 2614-2618.
- **Influence of high ash Indian coals in fluidized bed gasification under different operating conditions-** P Chavan, S.Datta, S Saha, G.Sahu and T.Sharma. Solid Fuel Chemistry 46 (2012) 108-113

10. Number of Books authored/edited: One

11. (a) No. of Patents granted/applied for: Three nos. of patent granted.  
(b) Technologies developed, Licensed and/or commercialized:

12. Foreign visits:

13. Details of Professional memberships:

14 . Major contributions: ( Max. 150 words)

Involved mainly in the R&D activity of coal and biomass gasification. Inputs to develop different pilot plant facility at CIMFR. Provided basic design, installation and commissioning of Fluidized Bed Gasification test facility having capacity of 20kg/h coal feed rate at CIMFR. This is a unique facility first time developed in our country to study the gasification performance of high ash Indian coal, biomass or other feed materials to provide inputs towards the development of commercial gasifier for different feed materials. Basic design, installation and commissioning of pilot plant like Modular Continuous Stirred Tank Reactor System (MCRS) for new fuel like coal water emulsion and to generate different value added products from petroleum heavy residue and other refinery waste.

15. Technologies and Products/ Services

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

16. Designs and Prototype Developed: Fluidized bed gasifier, Thermo gravimetric reactor (TGR) for gasification kinetics. One copy right has been taken on design of fluidized bed gasification unit.

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

Signature

S Datta