1. Name: Dr. Sujan Saha

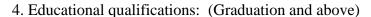
2. Date of Birth: 09.02.1976

3. Current Position and Address: Senior Scientist, Gasification Division

CIMFR (DC), PO-FRI, Dhanbad-828108

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Sl. No.	Degree/ Certificate	Year of Passing	University/ Institute	Subjects
i	B.Sc. (Chem. Hons)	1997	University of North Bengal, Darjeeling, W.B.	Phys, Chem, Math.
ii	M.Sc.	1999	University of North Bengal	Chemistry (Spcl: Organic)
iii	Ph.D	2013	ISM, Dhanbad Mine	eral Engineering

5. Work experience

Designation	Institution/company	From	To	Nature of work
i. Jr. Scientist	CSIR-CIMFR, Dhanbad	16.08.2001	15.08.2005	R&D in coal science
ii. Scientist	CSIR-CIMFR, Dhanbad	16.08.2005	15.08.2010	R&D in coal science, coal gasification
iii Sr. Scientist	CSIR-CIMFR, Dhanbad	16.08.2010	C	R&D in coal science, coal, biomass and etcoke gasification & co-gasification

6. Area of specialization: Energy: Resource and Technology

Coal/biomass/petcoke gasification, Surface characterization of solids.

- 7. Honors/Awards received:
- 8. Fellowships/Scholarships:
 - i. GATE qualified in Chemistry in 2001. Percentile: 98.80. All India Rank: 23
 - ii. NET: Joint CSIR-UGC JRF, Chemical Sciences, 2001.
- 9. No. of Research Publications:
 - Papers in journals: 12
 - In conference proceedings: 10
 - Invited/key-note addresses:
 - List of best 05 publications:
 - 1 "Density measurements of coal samples by different probe gases and their interrelation". Sujan Saha, B.K.Sharma, S.Kumar, G.Sahu, Y.P.Badhe, S.S.Tambe and B.D.Kulkarni. Fuel (2007), Volume no. 86, Issue no. 10-11, Page: 1594 1600.
 - **2** "Studies on CO2 Gasification reactivity of high ash Indian coal". Sujan Saha, G.Sahu, S.Datta, P.Chavan, A.K.Sinha, B.K.Sharma and T.Sharma. International Journal of Emerging Technology and Advanced Engineering (2013), Vol. 3, Page 29 33.
 - 3 Variation of CO₂ gasification reactivity in gravity separated coal samples". Sujan Saha, G.Sahu, T.Sharma and B.K.Sharma. Journal of mines, metals and Fuels (2012) 156-161.
 - **4 Estimation of gross calorific value of coals using artificial neural networks".** S.U.Patel, B.J.Kumar, Y.P.Badhe, B.K.Sharma, Sujan Saha, S.Biswas, A.Chaudhury, S.S.Tambe and B.D.Kulkarni. Fuel (2007), Volume no. 86, Issue no. 3, Page: 334-344.
 - 5 Agglomeration behaviour of high ash Indian coals in fluidized bed Gasification pilot plant". Sudipta Datta, Pinaki Sarkar, Sujan Saha, Gajanan Sahu, Prakash Chavan, A.K.Sinha and V.K.Saxena. International Journal of Applied Thermal Engineering 86 (2015) 222-228.
- 10. Number of Books authored/edited: 1
- 11. (a) No. of Patents granted/applied for: 1 granted.
 - (b) Technologies developed, Licensed and/or commercialized:
- 12. Foreign visits:

13. Details of Professional memberships:

Life Membership of Indian Institute of Mineral Engineers, Membership No. LM – 1091.

14. Major contributions: (Max. 150 words)

Introduction of a new and economic methodology for the determination of true density of coal using nitrogen as probe gas instead of commonly used helium.

Data base generation on surface characteristics of high ash Indian coals. Setting up of laboratory scale gasification R&D facility (Thermo gravimetric method) to study gasification reactivity & kinetics in different conditions.

Data base and knowledge base generation on gasification reactivity and kinetics of high ash Indian coals, biomass, petcoke and their blends.

Operation maintenance of different sophisticated instruments like surface area analyzer, TGA, XRF etc. and interpretation of results.

- 15. Technologies and Products/ Services
 - (i) Developed:
 - (ii) Licensed:
 - (iii) Commercialized:
- 16. Designs and Prototype Developed:

Development of TGR for gasification reactivity and 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:

S Saha Signature