



1. Name: **Dr.Gajanan Sahu**

2. Date of Birth: 25.05.1977

3. Current Position and Address: Technical Officer, Gasification Division  
CIMFR (DC), PO-FRI, Digwadih, Dhanbad-828108  
(with E-mail & Phone no.) Jharkhand, India  
E-mail: [gajanansahu@rediffmail.com](mailto:gajanansahu@rediffmail.com)  
Phone no: 03262388389/ Mob no: 9931106448

4. Educational qualifications: (Graduation and above)

| Sl. No. | Degree/<br>Certificate | Year of<br>Passing | University/<br>Institute | Subjects          |
|---------|------------------------|--------------------|--------------------------|-------------------|
| i       | B.Sc. (Chem. Hons)     | 1998               | Sambalpur University     | Phy, Chem, Maths  |
| ii      | M.Sc.                  | 2000               | Sambalpur University     | Chemistry         |
| iii     | M.Phil.                | 2002               | Sambalpur University     | Organic Chemistry |
| iv      | Ph.D                   | 2012               | IIT-Delhi                | Chemistry         |

5. Work experience

|     | Designation         | Institution/company | From       | To         | Nature of work  |
|-----|---------------------|---------------------|------------|------------|---|
| I   | Project Associate   | CES, IIT-Delhi      | 24.02.2004 | 08.05.2005 | Study the transesterification reaction using homogeneous catalysts  |
| ii  | Technical Assistant | CIMFR-Dhanbad       | 25.05.2005 | 24.05.2012 | To determine the surface properties of coal, catalyst and biomass using sophisticated instruments                   |
| iii | Technical Officer   | CIMFR-Dhanbad       | 25.05.2012 | Continuing | To study the gasification reactivity of coals, biomass and co-gasification of coal and biomass using TGA Instrument |

6. Area of specialization:

Coal Gasification, Surface Characterization of coal, Reactivity of coal, Heterogeneous Catalysts, Biodiesel

7. Honors/Awards received:

8. Fellowships/Scholarships:

i. GATE qualified in Chemistry, Percentile 94.90

9. No. of Research Publications:

- Papers in journals: 09
- In conference proceedings: 06
- Invited/key-note addresses:
- List of best 05 publications:
- **“Pilot plant study on biodiesel production from karanja and jatropha oils”**. Gajanan Sahu, L.M.Das, B.K.Sharma and S.N.Naik. Asia Pacific Journal of Chemical Engineering 6 (2011) 38-43.
- **“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 86 (2007) 1594 – 1600.
- **Studies on CO<sub>2</sub> 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 3 (2013) 29-33.
- **“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.
- **“Variation of CO<sub>2</sub> 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.

10. Number of Books authored/edited: One

11. (a) No. of Patents granted/applied for: One granted.

(b) Technologies developed, Licensed and/or commercialized:

12. Foreign visits:

13. Details of Professional memberships:

14 . Major contributions: ( Max. 150 words)

New method has been introduced for true density determination of coal samples using nitrogen as probe gas instead of commonly used helium. Surface properties have been studied for high ash Indian coals. The data obtained from surface properties is very much useful to select the coal for specific end uses. Gasification reactivity study of high ash Indian coals and different biomass has been done in TGA. The generated data will be helpful in the development of suitable gasifier for high ash Indian coals.

15. Technologies and Products/ Services

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

16. Designs and Prototype Developed:

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:

G Sahu  
Signature