

1. Name: **Dr Sudip Maity**
2. Date of Birth: 1<sup>st</sup> August, 1968
3. Current Position and Address: **Principal Scientist**  
(with E-mail & Phone no.)



- a) Official:  
**Central Institute of Mining and Fuel Research (Digwadih)**  
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4. Educational qualifications: (Graduation and above)

S. No	Year	Degree	University	Subjects
1	Ph.D	Ph.D	Allahabad University	High P-T Mineral Phase Transitions
2	M.Sc	M.Sc	Jadavpur University	Applied Geology
3	B.Sc (Hons)	B.Sc (Hons)	Jadavpur University	Geology, Mathematics, Chemistry

5. Work experience

Sl No	Designation		From	To	Nature of Work
1	Scientist B	Central Fuel Research Institute , Dhanbad	27/10/1998	26/10/2003	Research

<b>2</b>	<b>Scientist C</b>	<b>Central Fuel Research Institute , Dhanbad</b>	<b>27/10/2003</b>	<b>26/10/2007</b>	<b>Research</b>
<b>3</b>	<b>Senior Scientist</b>	<b>Central Institute of Mining and Fuel Research, Dhanbad</b>	<b>27/10/2007</b>	<b>26/10/2010</b>	<b>Research and Head of Section</b>
<b>4</b>	<b>Principal Scientist</b>	<b>Central Institute of Mining and Fuel Research, Dhanbad</b>	<b>27/10/2010</b>	<b>Contd...</b>	<b>Research and Head of Section</b>

6. Area of specialization:

Coal – to – Liquid Technology (CTL), Heterogeneous Catalysis, Molecular Structure of Coal and Mineralogy (coal, fly ash, dust fall etc), Hydrogen production from Renewable Sources by Non-thermal Plasma Reformation.

7. Honors/Awards received:

- i. Received Fast Track Young Scientist Project Proposal-2003. SERC, DST, Govt of India.
- ii. Received the Bilateral Exchange of Scientists Program – 2006 of Indian National Science Academy, New Delhi to visit the Institute of Coal Chemistry, Poland Academy of Sciences, Gliwice, Poland during June – August, 2006
- iii. DST International Travel Support grant (No.: SR/ITS/00807/2009-2010, Dt 11/06/2009) to visit Colorado, USA to attend Denver X-ray Conference – 2009.
- iv. Received the 2<sup>nd</sup> Best Award for Paper Presentation (Coal Session) in the International Seminar: PetroCoal Congress & Expo-2011 held at New Delhi during 12<sup>th</sup> to 15<sup>th</sup> Feb, 2011.

8. Fellowships/Scholarships:

- i. Junior Research Fellow (1992 – 1994, CSIR, NET)
- ii. Senior Research Fellow (1994 – 1997, CSIR, NET)
- iii. Research Associate (Provisional, 1997 – 1998), CSIR

9. No. of Research Publications:

- Papers in Peer Reviewed Journals: 38
- In conference proceedings: 12
- Invited/key-note addresses: 2
- List of best 05 publications:

Sl No.	Title of the Publications	Journal Details	Impact Factor/No. of Citations	Authors
1	A review on development of industrial processes and emerging techniques for production of hydrogen from renewable and sustainable sources	Renew. Sust. Energ. Rev., 2013, V 23, 443–462	6.577/113	Rashmi Chaubey, Satanand Sahu, Olusola O. James, Sudip Maity*
2	Reflections on the chemistry of the Fischer–Tropsch synthesis	RSC Advances 2012, 2, 7347–7366	5.4/30	Olusola O. James, Biswajit Chowdhury, M. Adediran Mesubi and Sudip Maity*
3	Increasing carbon utilization in Fischer–Tropsch synthesis using H <sub>2</sub> deficient or CO <sub>2</sub> -rich syngas feed	Fuel Processing Technology, 91 (2010) 136–144	2.321/54	Olusola O. James, Adediran M. Mesubi, Tiena C. Ako, Sudip Maity
4	Influence of nitric acid treatment in different media on X-ray structural parameters of coal	Energy and Fuels, 2008, 22(6),	2.853/2	Sudip Maity* and Ashim Choudhury

		<b>p: 4087-91.</b>		
<b>5</b>	<b>X-ray structural parameters of some Indian coals</b>	<b>Current Science, 2006, 91 (3), 337 - 340</b>	<b>0.84/19</b>	<b>Sudip Maity* and Pinaki Mukherjee</b>

10. Number of Books authored/edited: Nil
11. (a) No. of Patents granted/applied for: 3  
(b) Technologies developed, Licensed and/or commercialized: Nil
12. Foreign visits:
- Institute of Coal Chemistry, Poland Academy of Sciences, Gliwice, Poland (Bilateral Exchange of Scientists Program of Indian National Science Academy, New Delhi), June – August, 2006.
13. Details of Professional memberships:
- i. Member, The Mining, Geological & Metallurgical Institute of India, Salt Lake, Kolkata, India
  - ii. Life Member, Indian Crystallographic Association, Bangalore
14. Major contributions: ( Max. 150 words)
- i. Designed and developing a Multi Fuel Fuel-reformer for production of hydrogen from renewable sources as well as conventional liquid and gaseous hydrocarbons using Non-thermal Plasma.
  - ii. Developed indigenous catalysts and process which will lead to CTL and BTL technology in India.
  - iii. Leading a Mega-project for setting up a Process Development Unit (PDU) for CTL technology where Coal gasification and Fischer-Tropsch synthesis will be done together. This is first of its kind in India.
  - iv. Introduced use of X-ray diffraction technique for determination of Micro-molecular structure of raw and structurally modified Indian Coals. It has been shown that X-ray structural parameters and aromaticity of structurally

modified coals are dependent on coal type and the medium of treatment of coal. Nitration is a major phenomenon during nitric acid treatment of coal in acetic acid medium.

- v. Reported quantitative estimation of mineral matter in some Indian raw coals for the first time for Indian coals using SIROQUANT™ software.

15. Technologies and Products/ Services: Nil

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

16. Designs and Prototype Developed:

Designed and developing a Multi Fuel Fuel-reformer for production of hydrogen from renewable sources as well as conventional liquid and gaseous hydrocarbons using Non-thermal Plasma.

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

Sudip Maity