

1. Name: **Dr. Debapriya Choudhury**
2. Date of birth: 09.09.1956
3. Current Position and Address: Senior Technical Officer (3)
(with E-mail & Phone no.) : CSIR-Central Institute of Mining & Fuel Research
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4. Educational qualifications: (Graduation and above)

Sl. No.	Degree/ Certificate	Year of Passing	University/ Institute	Subjects
I	Ph.D	2012	Vinoba Bhave University	Chemistry
Ii	M.Sc.	2004	Vidyasagar University	Env.Science
Iii	AIC	1983	Institute of Chemists (India)	General Chemistry Analysis of Fuel, gas, Minerals, Silicates, Ores & alloys
Iv	B.Sc.	1974	The University of Burdwan	Physics, Chemistry, Math

5. Work Experience

Designation	Institution/company	From	To	Nature of work
Sr. Technical Officer (3)	CSIR-CIMFR	28-6-1982	Continued	R&D on coal & Lignite

6. Area of specialization: Categorization coal/lignite towards their proneness of spontaneous combustion based on their intrinsic self-oxidation potential. Determination of Crossing and Ignition Point Temperature (CPT/IPT) of coal & lignite. Investigations of reactivity of Coal and Lignite towards auto-oxidation leading to spontaneous combustion fire at the site of stock yard of power plants and mines. Basic studies on nature and constitution of coal and lignite. Preparation of value added products from coal.
7. Honors/Awards received:

- I) Recognized in 2014 as Assistant Professor of the Academy in the Faculty of Chemical Sciences towards contribution in research; commensuration with the eligibility criteria to be a Faculty in Academy of Scientific & Innovative Research (AcSIR).
- II) Golden Jubilee award of the Institute (CFRI) for the Research for the year 1996-97
8. Fellowships/Scholarships: nil
9. No. of Research Publications:
- Papers in journals: 14
- In conference proceedings: 6
- Invited/key-note addresses: nil
- List of best 05 publications:
- An autopsy of spontaneous combustion of lignite. Debapriya Choudhury, Abijit Sarkar, Lal Chand Ram, **Review article**, International Journal of Coal Preparation & Utilization (in press) <http://dx.doi.org/10.1080/19392699.2015.1060968> in 2015
 - Role of nitro groups on coal solubilization in aqueous organic solvents. Debapriya Choudhury, S.S. Choudhury, R.Sen, J. Mukherjee, G. Ghosh, S.K. Srivastava. **Original Research Article**: Energy & Fuels (American Chemical Society) 2007, 21, 1006- 1013
 - Effect of hydrothermal treatment on caking propensity of coal. D. K. Mukherjee, A. N. Sengupta, D.P. Choudhury, P.K. sanyal. S.R. Rudra. Fuel (London, Elsevier), 1996, 75. 477-482
 - Chemical changes accompanying oxygenation of coal by air and deoxygenation of oxidized coal by thermal treatment. A. K. bannerjee, D P. Choudhury, S.S.Choudhury, **Original Research Article**: Fuel (London, Elsevier). 1989,68, 1129-1133
 - Investigation on PAHs and trace elements in coal and combustion residues from a power plant S.K. Verma, R.E. Mastro, D.P. Choudhury. L. C. Ram, S. K. Mani, S. Maity **Original Research Article**: Fuel 162 (2015) 138-147
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10. Number of Books authored/edited:

10. (a) No. of Patents granted: 1 (US & EU)

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

12. Foreign visits: Nil

13. Details of Professional memberships:

14. Major contributions: (Max. 150 words):

Service to Industry- (i) Categorization coal/lignite towards their proneness of spontaneous combustion based on their intrinsic self-oxidation potential (Ii) Determination of Crossing and

Ignition Point Temperature (CPT/IPT) and other endogenous factors of spontaneous combustion of coal & lignite to determine their incubation period during storage. (iii) Investigations of reactivity of Coal and Lignite towards auto-oxidation leading to spontaneous combustion fire at the site of stock yard of power plants and mines.

Coal Science- (i) Understanding nature and constitution of coal and lignite in relation to their behaviour. (ii) Cause of significant delay to catch fire in the bed of lignite stack even after attaining critical temperature ($>70^{\circ}\text{C}$) and some anomalous behavior observed during low-temperature oxidation of lignite has been explained in the light of chemical structural parameters. The present study is expected to facilitate prevention of spontaneous combustion and determination of incubation period of coal/lignite during storage/transportation at industrial stockyard of power plant/mines. (iii) Direct sourcing of coal for value added products.

15. Technologies and Products/ Services

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

16. Designs and Prototype Developed: Nil

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

Signature