

Brief Bio-data

1. Name: Dr. Pavan Kumar Gupta

2. Date of Birth: 25/12/1991

3. Current Position and Address: Senior Scientist, Gasification and Catalysis Research Group, CIMFR (DC), PO-FRI, Digwadih, Dhanbad-828108, email: pavan@cimfr.nic.in, pavancimfr@gmail.com

4. Educational Qualifications

Degree	Institution	Year
PhD (Chemical Engg.)	IIT-ISM	2024
B.Tech (Chemical Engg.)	HIT, Haldia	2013
M.Tech (Chemical Engg.)	IIT-BHU	2015

5. Work Experience

Designation	Institute/company	From	To	Nature of Work
Senior Scientist	CSIR-CIMFR	16/04/2021	Continue	R&D in the area of catalytic conversion of syngas to value added products, CO ₂ Utilization
Scientist	CSIR-CIMFR	15/04/2016	Continue	R&D in the area of catalytic conversion of syngas to value added products, CO ₂ Utilization

6. Work Area(s)/ Specialization: Heterogeneous Catalysis, Fischer-Tropsch Synthesis, Gas-Solid Catalytic Reaction, CO₂ utilization

7. Major contributions: (Max. 100 words):

- Contributed in process development of the CTL Pilot Plant
- Developed Cu-based methanol Catalyst, performance evaluation and process optimization
- Developed coal fly ash based SBA-15 supported catalysts for Fischer-Tropsch
- Process optimization for water gas shift reaction

8. No. of Research Publications: 20

- Papers in Journals: 18
- In conference proceedings: 02
- Invited lectures delivered: Nil

List of best 05 publications

Name of all Authors	Paper Title	Name of Journal	DOI of the paper
Pavan K. Gupta, Dr. Vineet Kumar, Dr. Sudip Maity, Dr. Goutam Kishore Gupta, Dr. Sudipta Datta, Dr. Arvind Singh, Dr. Siddhartha Sengupta	Comparative Studies of Co/SBA-15 Catalysts Synthesized with Different Silica Sources Including Coal Fly Ash for Fischer-Tropsch Synthesis	Chemistselect	doi: 10.1002/slct.202204962
Pavan K. Gupta, Dr. Vineet Kumar, Dr. Sudip Maity, Dr. Sudipta Datta, Dr. Goutam Kishore Gupta	A Review on Conversion of Biomass to Liquid Fuels and Methanol through Indirect Liquefaction Route	Chemistselect	doi: 10.1002/slct.202203504.
Pavan K. Gupta, Abhishek Mahato, Pikkoo Oraon, Goutam Kishore Gupta, Sudip Maity	Coal Fly Ash (CFA) derived mesoporous SBA-15 as support material for production of liquid hydrocarbon through Fischer-Tropsch route	Asia-Pacific Journal of Chemical Engineering	doi: 10.1002/apj.2471.
Pavan K Gupta, Vineet Kumar, Sudip Maity	Renewable fuels from different carbonaceous feedstocks: A sustainable route through Fischer-Tropsch synthesis	journal of chemical technology & biotechnology	doi: 10.1002/jctb.6644
Sandip Mandal, Sudip Maity, Pavan K. Gupta, Abhishek Mahato	Fischer-Tropsch Conversion of H ₂ Lean Syngas Over Mesoporous Silica-Carbon Composite Supported and Cu Promoted Fe Catalysts	Catalysis Letters	https://link.springer.com/article/10.1007/s10562-023-04358-3

9. List of 5 Major Contract R&D Projects

Sl. No	Title of Project	Project Category	Participating Agencies	Your Role as defined
1.	Coal-Syngas to Methanol (CoSynol)	Mission-Mode	CSIR-CIMFR	Team member
2.	A Study to Explore the Potentiality of using Coal Fly Ash (CFA) derived from Indian Thermal Power Plants as a resource of Rare Earth Elements (REEs)	GAP	CSIR-CIMFR	Team member/Co-PI
3.	Development of catalyst for synthesis of methanol from syngas	In-house	CSIR-CIMFR	PI
4.	Development of Indigenous Catalyst through Pilot Scale studies of Coal-to-Liquid Conversion Technology	GAP	CSIR-CIMFR & CMPDI Ranchi	Team member
5.	Enrichment of H ₂ in Syngas using Water-Gas Shift Reaction (WGS) and removal of CO ₂ by alkaline solvent	In-house R&D Project	CSIR-CIMFR	Project Leader

10. Honours/Awards/Recognitions/Fellowships/Scholarships/Professional

- Received BEST PAPER AWARD for oral presentation “Effect of Zr-Ru promotion on SBA-15 supported Fe catalysts for Fischer-Tropsch production” at IICHE-CHEMCON 2023, HIT, Kolkata.
- Life Member of Mining Engineer’s Association of India. Membership No. LM-5266/DNB
- Life Member of The Institution of Engineers (India). Membership No. M-1803578
- Life member of Vigyan Bharati
- MHRD fellowship for M.Tech during 2013-2015.