

Brief Bio-data

1. Name: DR. GAUTAM CHANDRA MONDAL
2. Date of Birth: 31.12.1967
3. Current Position and Address (Include Email ID and Contact Number):
Principal Scientist, Water Resource Management, CSIR-CIMFR, Dhanbad
E-mail: gmondal@cimfr.nic.in; gc_mondal@yahoo.co.in Mobile: 9835383060
4. Educational qualifications: (Graduation and above)

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1.	Graduation (Hons.)	1990	Ranchi University	Chem, Botany, Zoology
2.	Post-graduation	1995	Ranchi University	Chemistry
3.	Ph. D	2011	Vinoba Bhave University	Chemistry

Ph.D. Thesis: “Studies on Chemistry of Precipitation and Suspended Particulate Particulate Matter in and around Mining areas: Dhanbad – Bokaro Region, Jharkhand”

5. Work experience:

Designation	Institute	From	To	Nature of Work
Scientist – B	CSIR-CIMFR	05-12-2001	05-12-2005	Air & Water Chemistry
Scientist – C	CSIR-CIMFR	05-12-2005	05-12-2009	Air & Water Chemistry
Sr. Scientist	CSIR-CIMFR	05-12-2009	05-12-2014	Air & Water Chemistry
Pr. Scientist	CSIR-CIMFR	05-12-2014	to till date	Air & Water Chemistry

6. Work Area(s)/ Specialization: Environmental Chemistry/Water and Air Pollution

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

Dr. Mondal has more than 20 years of research experience in the field of air and water pollution and control measures in Coal & Metal Mines. He involves sampling, analysis, data interpretation, EIA/EMP, application of different software and remedial measures for pollution management. He has been associated with the projects sponsored by MoEF&CC, CSIR, MoC, MoS, DST, MSPCB and MeitY.

He has associated with 12 R&D/S&T projects and more than 40 sponsored/consultancy projects. He has published 21 papers in International/national journals and 14 papers in Seminar. He has guided 20 students for their dissertation work for M.Sc./B. Tech degree.

8. No. of Research Publications:

- Papers in Journals: 21
- In conference proceedings: 14
- Invited lectures delivered: N/A
- List of best 05 publications:

1. Abhay Kumar Singh, **G.C. Mondal**, Suresh Kumar, K.K. Singh, K.P. Kamal, A. Sinha (2007) Precipitation chemistry and occurrence of acid rain over Dhanbad, coal city of India, ***Environmental Monitoring & Assessment***, V. 125, pp 99-110. (**Impact Factor: 2.513, Citation: 50**).

2. Abhay Kumar Singh, **G. C. Mondal**, Suresh Kumar, T.B. Singh, B.K. Tewary and A. Sinha (2008) Major ion chemistry, weathering processes and water

quality assessment in upper catchment of Damodar River Basin, India. ***Environmental Geology***, V.54,pp.745–758. (**Impact Factor: 2.784, Citation: 281**)

3. Abhay Kumar Singh and **G. C. Mondal** (2008) Chemical characterization of wet precipitation events and deposition of pollutants in coal mining region, India. ***Atmospheric Chemistry***,V.59,pp.1–23. (**Impact Factor: 2.158, Citation: 27**)
4. Raja Kumar, Alok Sinha, **G.C. Mondal** and Reginal E. Masto (2017) Effective scrap iron particles (SIP) pre-treatment for complete mineralization of benzidine based azo dye effluent. ***Arabian Journal of Chemistry***, V.13, pp.134 – 145. (**Impact Factor: 4.762, Citation: 3**)
5. Aaditya Chaturvedi, Santanu Bhattacharjee, **G. C. Mondal**, Vipin Kumar, Pradeep K. Singh and Abhay K.Singh (2019) Exploring new correlation between hazard index and heavy metal pollution index in groundwater, V.97, pp.239–246. ***Ecological Indicators*** (**Impact Factor: 4.229, Citation: 25**)

- Books/Chapters authored/edited: **01**

Title of the Book: **The Indian Rivers: Scientific and Socio-Economic Aspects (Springer Hydrogeology)**, Springer Verlag,(2017)

Topic of the Chapter: **“Damodar River Basin: Storehouse of Indian Coal.”**

Authors: **Gautam Ch. Mondal**, Abhay Kumar Singh and T. B. Singh.

9. List of 5 Major Contract R&D Projects:

1. Development of cost effective mine water reclamation technology for providing safe drinking water. (Sponsored by CSIR, IAP- XIth Five year plan)
2. Development of Methodology for Estimation of Greenhouse Gas Emission from Coal Mine Fire Areas and their mitigation through terrestrial sequestration.(Sponsored by Ministry of Coal)
3. Technology development for treatment of acid mine water for its reuse and safe disposal (Sponsored by MSPCB)
4. Integrated Cost-effective Technology for Attaining Zero Liquid Discharge in Steel Plants with Emphasis on Steel Slag Utilization. (Sponsored by DST)
5. Setting-up of information and facilitation centre for empowering living of SC in Jharkhand State (Sponsored by MeitY)

10. (a) Name of Patents/Copyrights applied /granted/commercialized:

Title	Reg. No. with date	Names of other inventors
Soil and Water Health Reporting Software	Copyright Registration No.: SW-14170/2021, dt.: 11.02.2021	S. K. Chaulya, G.M. Prasad, R. S. Singh, D.B. Singh, K. Nikhil, G.C. Mondal , Preity, M. Mitra, A. Kumari, and R. Kumar

(b) Technologies/Products/knowhow/Services developed : N/A

11. Honors/Awards/Recognitions/Fellowships/Scholarships/Professional Memberships received:

- ❖ Life Member of the Indian Science Congress Association, INDIA
- ❖ Life Member of Indian Institute of Mineral Engineers, INDIA

12. Societal Contributions:

Under IAP- XIth Five year plan project, two villages were connected to supply drinking water from Pilot Plant installed at PB area, BCCL, Dhanbad.