


Prof. Sunil Kumar Gupta

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RESEARCH INTERESTS:

1. Disinfection by-product formation and their control
2. Rapid organic waste stabilizer (ROWS)
3. Pollution exposure and human health risk assessment.
4. Fate and transportation of micro-plastics in water
5. Electrochemical treatment of dyes/Electro-chlorination

ACADEMIC BACKGROUND:

1. Ph.D., Environmental Science & Engineering, IIT Bombay, India.
2. M. Tech, Environmental Engineering, RDVV, Jabalpur, MP, India.
3. B. Tech, Civil Engineering, APS University, Rewa, MP, India.

PROFESSIONAL APPOINTMENTS:

2018 - HOD, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad from
2016 – Professor, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
2010 - Associate Professor, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
2017 - Assistant Professor, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
2005 - Sr. Lecturer, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
2005 - Sr. Lecturer, Department of Civil Engg., RBIT, Bhutan

LIST OF PUBLICATION:

1. International Journal (SCI/SCIE Index): **60**
2. Book Chapter: **05**
3. International & National Conference: **25**

RESEARCH GUIDANCE:

1. Ph. D Guidance: **13 (Awarded)** + 06 (Ongoing)
2. M. Tech Guidance: **20 (Awarded)** + 01 (Ongoing)

RESEARCH PROJECTS:

1. Research Projects: **02 (Completed)**+ 04 (Ongoing)
2. Major Industrial consultancy Projects: **27**

Details of Professional Qualification

S.N.	Examinations/ degrees	Board / University/Institute	Year	Grade / Division
1	B.E. (Civil Engg.)	APS University Rewa	1994	First class
2	M.E. (Env. Engg.)	Jabalpur University	1997	First class
3	Ph. D. (Env. Sci. & Engg.)	IIT Bombay, Mumbai	2004	Awarded

Details of Professional Experience

S.N.	Positions held	Organization/Institute	Duration
1.	Professor & HOD	IIT (ISM), Dhanbad	Since 25 May 18
2.	Professor	IIT (ISM), Dhanbad	20/01/2016
3.	Associate Professor	IIT (ISM), Dhanbad	06/02/10 to 19/01/2016
4.	Assistant Professor	IIT (ISM), Dhanbad	06/02/07 to 05/02/10
5.	Sr. Lecturer	IIT (ISM), Dhanbad	18/08/05 to 05/02/07
6.	Sr. Lecturer	RBIT, Bhutan	24/04/04 to 15/08/05
7.	Project Engineer	IIT Bombay, Powai, Mumbai	01/01/04 to 20/04/04
8.	Research Associate (Part time)	IIT Bombay, Powai, Mumbai	28/12/98 to 27/12/99
9.	Senior Research Fellow	National Environmental Engineering Research Institute (NEERI), Nagpur	27-08-97 to 15-12-98
Total Experience: 20 years			

Details of Research & Development (R&D) Project

S.N.	Project Title	Sponsoring Agency	Duration	Total Amount (Rs. in lakh)	Status
1.	Potential and validation of sustainable nature and advanced technologies for water and waste-water treatment, monitoring and safe water reuse in India	DST and European Union	4 Years	76937.56 (Amt.. in Euro)	Ongoing
2.	Study to Develop & Improve Nitrification in AIS (Advent Integral System) at BOT Plant	Tata Steel, Jamshedpur, Jharkhand.	2 Years	23.60	Ongoing
3.	Control of disinfection by-products formation in drinking water supplies of India	Ministry of Drinking Water and Sanitation, (GOI), New Delhi.	2 Years	25.20	Ongoing
4.	Remediation of Ground Water Contaminated with Hexavalent Chromium in Sukhina Valley, Odisha, using Nano Zero Valent Iron (nZVI) Technology	Ministry of Environment forest & Climate Change, MOEF&CC, (GOI) New Delhi	3 Years	24.80	Ongoing
5.	Influence of chlorine	SERB-DST, New	2 Years	23.20	Completed

	disinfectant and natural organic matter gradient on disinfection by-product formation in drinking water of some Indian cities"	Delhi			
6.	Disinfection By-products Formation and its Management in Drinking Water Supplies of India	Ministry of Drinking Water and Sanitation, (GOI), New Delhi.	2 Years	7.80	Completed

Details on PhD. Thesis Supervised:

Sl. No.	Student Name / Registration No.	Name of Guide/ co-guide	Title of Ph.D Thesis	Year of Award
1.	Mr. Shahjad Ali	Prof. S.K. Gupta & Prof. Alok Sinha	Detailed Investigation of Fluoride and its Control in Agra Region	2020
2.	Awanindra Pratap Singh	Prof. S.K. Gupta	Appraisal of Coalbed Methane Produced Water and Aquifer Impact Modeling in Raniganj Coalfield, West Bengal	2020
3.	Rachit Ghosh	Prof. S.K. Gupta	Studies on Geopolymer Concrete using synergistically Fly ash and Bottom ash	2020
4.	Anand Govind More (2014DR0253)	Prof. S.K. Gupta	Investigation into Feasibility of Bio-Electrochemical reactor for recovery of metals from Electroplating wastewater	2019
5.	Jayeeta Saha (2014DR0034)	Prof. S.K. Gupta	Development of a cost effective Electrochlorination system, A sustainable approach towards drinking water disinfection	2018
6.	Brahmdeo Yadav (2010DR0106)	Prof. Sunil Kumar Gupta	Geotechnical Investigation and Design of Compacted Clay Liner (CCL) using Local Soil of Jaduguda Uranium Ore Mines	2017
7.	Minashree Kumari (2013DR0241)	Prof. Sunil Kumar Gupta	Risk Assessment, Modelling and Control of Trihalomethanes (THMs) from Drinking Water	2017
8.	Aliya Naz (2013DR0064)	Prof. Sunil Kumar Gupta & Prof. B.K. Mishra	Risk assessment of chromium in the chromite mine water and its Bio remediation	2017
9.	Debleena Bhattacharya	Prof. Sunil Kumar Gupta	"Biodegradation of Antibiotic residuals in the effluent of	2017

	(2011DR0038)		Pharmaceutical Industry”	
10.	Swati Tomar (2012DR0046)	Prof. Sunil Kr Gupta	“Performance Evaluation of Anammox Hybrid Reactors for the treatment of ammonical nitrogen rich waste water.”	2016
11.	Brijesh Kumar Mishra	Prof. S. K. Gupta & Prof. Alok Sinha	Predictive Modelling Approach of Disinfection by Product in Drinking Water	2014
12.	Shibam Mitra	Prof. S K Gupta	Bio-degradation of chlorinated ethenes in anaerobic hybrid reactor	2012
13.	Richa Sharan	Prof. S K Gupta & Prof. Gurdeep Singh	Impact of Mining and Urbanization on Land use and Vegetation Diversity in Angul-Talcher Region, Orissa	2011

Ongoing PhD. Thesis Supervision:

Sl. No.	Student Name / Registration No.	Name of Guide/co- guide	Title of Ph.D Thesis	Mode of Registration
1.	Aakansha Kumari (18DR000697)	Prof. S.K. Gupta	Assessment of and evaluation of microplastic in water resource -	Full Time
2.	Lobzang Chorol (17DR000444)	Prof. S.K. Gupta	Impact of Urbanisation on Groundwater Quality on Leh, Ladakh.	Full Time
3.	Nitin Kumar (17DR000512)	Prof. S.K. Gupta	Assessment of Energy Recovery Potential of Bio-Digester Fed with Organic Fraction of Municipal Solid Waste.	Full Time
4.	Suyog Gupta (17DR000525)	Prof. S. K. Gupta	Water Quality Modelling of Damodar River using Statistical Concepts & Hybrid Soft Computing Techniques.	Full Time
5.	Diwakar Kumar (17DR000303)	Prof. S.K. Gupta	Removal of Direct Blue 86 Dye From Wastewater Using Electrochemical Method.	Full Time
6.	Jaydev Kumar Mahato (17DR000289)	Prof. S.K. Gupta	Development of Novel Adsorbent for NOM (Natural Organic Matter) removal from Drinking Water.	Full Time

Ongoing Consultancy Projects

Sl. No.	Project No.	Title of the Consultancy Project	Consultant In-Charge	Sponsoring Organization	Value (in Rs.)
1.	3300	Feasibility Study of STP at West Bokaro Division (WBD)	Prof. S. K. Gupta Prof. Alok Sinha	TATA	1013175.00

Sl. No.	Project No.	Title of the Consultancy Project	Consultant In-Charge	Sponsoring Organization	Value (in Rs.)
2.	3429	Techno Economic Study for Transportation of Ash from NTPC Korba to Bishrampur & Manikpur Open Cast Mines for its Utilization.	Prof S. K. Gupta Prof. SR. Samaddar	NTPC	1140000.00
3.	3469	Techno Economic Study for Transportation for Fly ash from CSPGCL Korba Manikpur Open Cast Mines.	Prof. B. K. Mishra Prof. S. K. Gupta	CSPGCL	1200000.00
4.	1955	Preparation of Environmental Management Report for DVC Mines.	Prof. B. Paul Prof. S.K.Gupta	DVC	112360.00

Industrial Consultancy/Testing work completed

Sl. No.	Project Number	Title of the Consultancy Project	Consultant In-Charge	Sponsoring Organization
1.	1080	Monitoring of environmental parameters in respect of ambient air, stack monitoring, noise level and effluent, BTPS'B' Bokaro Thermal, Bokaro	Prof. Gurdeep Singh, Prof. S. K. Gupta,	DVC, Bokaro
2.	1093	Preparation of Environmental Statement Report of DVC, Bermo Mines, Bermo, Bokaro	Prof. G. Singh, Prof. S. K. Gupta	DVC Bermo Mines, Bokaro
3.	1096	Design of Particulate emission control system and preparation of environmental management plant for coke oven plants in Dhanbad	Prof. S. K. Gupta	M/s S. S. Coke Mfg. Industries P Ltd., Kolkata, and others
3.	1238	Rapid comprehensive environmental audit of 4X250 MW OP Jindal Power Plant	Prof. Gurdeep Singh, Prof. S.K.Gupta,	Jindal Power Ltd. Raigarh
4.	1333	Preparation of pre-feasibility from I Report for Coal washery of Kaphila Industries	Prof. Gurdeep Singh Prof. S. K. Gupta,	M/s Kaphila Industries Katras Dhanbad
5.	1235	Monitoring of Environmental Parameters in respect of Air, noise, water and stocle unit 7&8 of CTPS Chandrapura	Prof. S. K. Gupta	DVC
6.	1515	Stack Monitoring of SRI Aurobindo Fuels Ltd	Prof. S. K. Gupta	SAFL
7.	13/2011-12/294/E SE	Regional Environmental Impact Assessment study of Goa region	Co-PI	MoEF & CC, New Delhi,
8.	1521	Design of Rainwater Harvesting Scheme	Prof. S K Gupta	KI
9.	1631	Rapid Env. Audit of 4 x 250 MW	Prof. S. K. Gupta	JPL

		Power Plant of JPL		
10.	1691	Analysis of Bleaching Powder	Prof. S. K. Gupta	CCL
11.	2367	Effluent Analysis as Per EP Act 1986	Prof. S. K. Gupta	TATA
12.	2371	Environmental Monitoring by Third Party	Prof. S. K, Gupta	NTPC.
13.	2412	Study of Leaching of Heavy Metals	Prof. S.K. Gupta	TATA
14.	2483	Water Table Study of Sarabh Automobile Plant	Prof. S. K. Gupta	SA
15.	2484	Water Table Study of Sarabh Automobile Plant	Prof. S. K. Gupta	SA
16.	2556	Testing of two Waste Water Samples for M/S ENC Ltd.	Prof. S. K. Gupta	ENCL
17.	2557	Testing of two Waste Water Samples for M/S ENC Ltd.	Prof. S. K. Gupta	ENCL
18.	2568	Design of Settling Pond at Ambuja Cement Plant	Prof. S. K. Gupta	ACL
19.	2674	Impact of Mining Activities on Hydrology and Hydrogeology of Core Zone Covering all 5 underground Mines of Tata Steel.	Prof. S. K Gupta	TSL
20.	2675	Monitoring of Environmental Parameters in Respect of (i) Stack Emission test (ii) Effluent discharge test (iii) Ambient air quality test (iv) Noise level Measurement for unit 1,2,3,7 & 8 DVC CTPS Chandrapura	Prof. S. K. Gupta	DVC
21.	2794	Technical Consultancy for Wastewater Management and Control of Water Pollution from plant and Mines of Kirandul Complex	Prof. S. K. Gupta	NMDC
22.	2674	Impact of Mining Activities on Hydrology and Hydrogeology of Core Zone Covering all 5 underground Mines of Tata Steel.	Prof. S. K Gupta Prof. B.K. Mishra	TSL
23.	2675	Monitoring of Environmental Parameters in Respect of (i) Stack Emission test (ii) Effluent discharge test (iii) Ambient air quality test (iv) Noise level Measurement for unit 1,2,3,7 & 8 DVC CTPS Chandrapura	Prof. S. K. Gupta Alok Sinha	DVC

Training Programme, Seminars, Symposia, Workshops, Conferences organized

Sl No	Topic/Field	Sponsoring Authority
1.	3- Days residential training programme on “Advances in water quality assessment and its management for rural water supply schemes” during 28 to 30 December, 2017.	MDWS, (GOI), New Delhi
2.	2 Days workshop on “Challenges and Opportunities for Management of Water Supplies in Rural Areas (COMWRA 2015)” during 23-24 Jan, 2015.	MDWS, New Delhi

3.	3-days residential training program on “Assessment of Water Quality and Low Cost Treatment Methods for Rural Water Supply” proposed during October, 2013.	MDWS, (GOI), New Delhi
4.	3 Days residential training program on “Design and Implementation of Rainwater Harvesting System for Augmentation of Rural Water Supply”	MDWS, New Delhi
5.	3 Days training programme on Junior & Middle level Executives of DWSD Ranchi Water & Waste Water Treatment & Management during 7-9 Nov., 2012	DWSD, Ranchi
6.	Five day training programme on “Recent Advances in Water Resources and Environmental Engineering Computation” was organised by Centre of Mining Environment & Department of Civil Engineering, ISM in association with Water Resources Center, Texas Tech University, Lubbock, USA at ISM IIF, Kolkata during 22-26 December, 2015.	Open

RESEARCH PUBLICATIONS

1. Kumari, M., Gupta, S.K., (2020). A novel process of adsorption cum enhanced coagulation-flocculation spiked with magnetic nanoadsorbents for the removal of aromatic and hydrophobic fraction of natural organic matter along with turbidity from drinking water. *Journal of Cleaner Production* 244,118899.
2. Puja Anchall & Minashree Kumari & Sunil Kumar Gupta (2020). Human health risk estimation and predictive modeling of halogenated disinfection by-products (chloroform) in swimming pool waters: a case study of Dhanbad, Jharkhand, India. *Journal of Environmental Health Science and Engineering*: <https://doi.org/10.1007/s40201-020-00578-6>
3. Kumari, M., **Gupta, S.K.**, (2020). Water quality assessment, statistical analysis and kinetics of trihalomethanes formation in drinking water supplies - a complete batch study. *Environmental Engineering and Management Journal*, 19 (3) 427-438. (Q4, IF. 1.186)
4. Mahato, J. K., & Gupta, S. K. (2020). Modification of Bael fruit shell and its application towards Natural organic matter removal with special reference to predictive modeling and control of THMs in drinking water supplies. *Environmental Technology & Innovation*, 18, 100666.
5. Kumari, M., Gupta, S.K., (2019). Response surface methodological (RSM) approach for optimizing the removal of trihalomethanes (THMs) and its precursor's by surfactant modified magnetic nanoadsorbents (MNPs) - An endeavor to diminish probable cancer risk. *Scientific Reports* 9(1),18339
6. Ghosh, Rachit and Gupta, S K and Kumar, A and Kumar, S (2019). Durability and Mechanical Behavior of Fly Ash-GGBFS Geopolymer Concrete Utilizing Bottom Ash as Fine Aggregate. *Journal Transactions of the Indian Ceramic Society*, 78(1) . pp. 24-33.
7. Rabindra Nath Thakura, Sunil Kumar Gupta, Alok Sinha, Sowmiya Chawla and Shilpa S Vadavdagib (2019). A Durability Study of Jute Geotextile Treated with Bitumen Emulsion. *JOURNAL OF NATURAL FIBERS*: <https://doi.org/10.1080/15440478.2019.1623749>
8. Gupta, R., Gupta, S. K., & Pathak, D. D. (2019). Selective adsorption of toxic heavy metal ions using guanine-functionalized mesoporous silica [SBA-16-g] from aqueous solution. *Microporous and Mesoporous Materials*, 288, 109577.

9. Kumari, M., & Gupta, S. K. (2018). Removal of aromatic and hydrophobic fractions of natural organic matter (NOM) using surfactant modified magnetic nanoadsorbents (MNPs). *Environmental Science and Pollution Research*, 25(25), 25565-25579.
10. More, A. G., & Gupta, S. K. (2018). Evaluation of chromium removal efficiency at varying operating conditions of a novel bioelectrochemical system. *Bioprocess and biosystems engineering*, 41(10), 1547-1554.
11. Singh, A. P., Gupta, S. K., Mendhe, V. A., & Mishra, S. (2018). Variations in hydro-chemical properties and source insights of coalbed methane produced water of Raniganj Coalfield, Jharkhand, India. *Journal of Natural Gas Science and Engineering*, 51, 233-250.
12. Saha, J., & Gupta, S. K. (2018). The production and quantification of hydroxyl radicals at economically feasible tin-chloride modified graphite electrodes. *Journal of Environmental Chemical Engineering*.
13. More, A. G., & Gupta, S. K. (2018). Predictive modelling of chromium removal using multiple linear and nonlinear regression with special emphasis on operating parameters of bioelectrochemical reactor. *Journal of bioscience and bioengineering*.
14. Kumari, M., & Gupta, S. K. (2018). Age dependent adjustment factor (ADAF) for the estimation of cancer risk through trihalomethanes (THMs) for different age groups-A innovative approach. *Ecotoxicology and Environmental Safety*, 148, 960-968.
15. Saha, J., & Gupta, S. K. (2018). Application of response surface methodology for optimization of an onsite electro-chlorinator for drinking water treatment. *Ionics*, 1-12.
16. Ghosh, R., Sagar, S. P., Kumar, A., Gupta, S. K., & Kumar, S. (2018). Estimation of geopolymer concrete strength from ultrasonic pulse velocity (UPV) using high power pulser. *Journal of Building Engineering*, 16, 39-44.
17. Ghosh, Rachit and Gupta, S K and Kumar, Anil and Kumar, Sanjay (2018) Leaching and efflorescence effects in geopolymer concrete. *Journal of Metallurgy and Materials Science*, 60(2), pp. 79-88.
18. Ghosh, Rachit and Gupta, S K and Kumar, Anil and Kumar, Sanjay (2018) Replacement of conventional fine aggregate with bottom ash in geopolymer concrete. *Journal of Metallurgy and Materials Science*, 60(3). pp. 173-187.
19. Saha, J., & Gupta, S. K. (2017). Endeavour toward competitive electro chlorination by comparing the performance of easily affordable carbon electrodes with platinum. *Chemical Engineering Communications*, 204(12), 1357-1368.
20. Saha, J., & Gupta, S. K. (2017). A novel electro-chlorinator using low cost graphite electrode for drinking water disinfection. *Ionics*, 23(7), 1903-1913.
21. Ali, S., Kumari, M., Gupta, S. K., Sinha, A., & Mishra, B. K. (2017). Investigation and mapping of fluoride-endemic areas and associated health risk—A case study of Agra, Uttar Pradesh, India. *Human and Ecological Risk Assessment: An International Journal*, 23(3), 590-604.
22. Tomar, S., & Gupta, S. K. (2017). Symbiosis of denitrification, anammox and anaerobic pathways—An innovative approach for confiscating the major bottlenecks of anammox process. *Chemical Engineering Journal*, 313, 355-363.
23. Tomar, S., & Gupta, S. K. (2016). Investigating the role of co-substrate–substrate ratio and filter media on the performance of anammox hybrid reactor treating nitrogen rich wastewater. *Journal of bioscience and bioengineering*, 121(3), 310-316.
24. Tomar, S., Gupta, S. K., & Mishra, B. K. (2016). Performance evaluation of the anammox hybrid reactor seeded with mixed inoculum sludge. *Environmental technology*, 37(9), 1065-1076.

25. Tomar, S., & Gupta, S. K. (2016). Effect of Shock Loads on the Process Stability and Behavior of an Anammox Hybrid Reactor. *CLEAN–Soil, Air, Water*, 44(9), 1131-1139.
26. Gupta, S. K., & Tomar, S. (2016). Effects of Seed Culture and Attached Growth System on the Performance of Anammox Hybrid Reactor Treating Nitrogenous Wastewater. *International Journal of Research in Science*, 2(1), 19-25.
27. Mishra, B. K., Priya, T., Gupta, S. K., & Sinha, A. (2016). Modeling and characterization of natural organic matter and its relationship with the THMs formation. *Global NEST*, 18(4), 803-816.
28. Naz, A., Mishra, B. K., & Gupta, S. K. (2016). Human health risk assessment of chromium in drinking water: a case study of Sukinda chromite mine, Odisha, India. *Exposure and Health*, 8(2), 253-264.
29. Naz, A., Chowdhury, A., Mishra, B. K., & Gupta, S. K. (2016). Metal pollution in water environment and the associated human health risk from drinking water: A case study of Sukinda chromite mine, India. *Human and Ecological Risk Assessment: An International Journal*, 22(7), 1433-1455
30. Yadav, B.D., Gupta, S.K., Singh, S; (2016) Study of Suction Vs Water Content of Soil of Turamdih Area Mixed with Bentonite and its implication on the Liner Property of Tailing Dam: A Case Study from East Singhbhum Jharkhand, Eastern India. *Water Resource management*, Springer Nature. doi 10.1007/978-981-10-5711-3_14.
31. Yadav, B.D; Gupta, S.K., Singh, S; (2016). Interface Shear Strength of Compacted Clay Liner with Parent Foundation Soil of Turamdih Dam Site and Some Geo Textile Materials in Composite Liner System. Accepted for publication in *Journal of Mines, Metal & Fuel (JMMF)*.
32. Tomar, S., Gupta, S. K., & Mishra, B. K. (2016). Effects of Seed Culture and Attached Growth System on the Performance of Anammox Hybrid Reactor Treating Nitrogenous Wastewater. *International Journal of Research in Science (ISSN Online: 2412-4389)*2 (1) 9-16.
33. Tomar, S., Gupta, S. K., & Mishra, B. K. (2015). A novel strategy for simultaneous removal of nitrogen and organic matter using anaerobic granular sludge in anammox hybrid reactor. *Bioresource technology*, 197, 171-177.
34. Tomar, S., & Gupta, S. K. (2015). A new mathematical model for nitrogen gas production with special emphasis on the role of attached growth media in anammox hybrid reactor. *Applied microbiology and biotechnology*, 99(21), 9245-9254.
35. Tomar, S., & Gupta, S. K. (2015). Investigating the Process Kinetics and Nitrogen Gas Production in Anammox Hybrid Reactor with Special Emphasis on the Role of Filter Media. *World Academy of Science, Engineering and Technology, International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering*, 9(9), 1091-1097.
36. Kumari, M., & Gupta, S. K. (2015). Modeling of trihalomethanes (THMs) in drinking water supplies: a case study of eastern part of India. *Environmental Science and Pollution Research*, 22(16), 12615-12623.
37. Kumari, M., Gupta, S. K., & Mishra, B. K. (2015). Multi-exposure cancer and non-cancer risk assessment of trihalomethanes in drinking water supplies–A case study of Eastern region of India. *Ecotoxicology and environmental safety*, 113, 433-438.
38. Kumari, M., & Gupta, S. K. (2015). Speciation and kinetics of trihalomethanes formation in drinking water supplies. *History*, 1(4), 157-163.
39. More, A. G., & Gupta, S. K. (2015). Bio-electrochemical system-a novel technology for metal recovery. *Science & Technology* 1 (4), 174-178.
40. Tomar, S., & Gupta, S. K. (2015). Anammox hybrid reactor-a promising technology to treat nitrogen laden wastewater. *History* 41 (187), 33-39

41. Mishra, B. K., Gupta, S. K., & Sinha, A. (2014). Human health risk analysis from disinfection by-products (DBPs) in drinking and bathing water of some Indian cities. *Journal of Environmental Health Science and Engineering*, 12(1), 73.
42. Mitra, S., & Gupta, S. K. (2014). Pilot-scale treatment of a trichloroethylene rich synthetic wastewater in anaerobic hybrid reactor, with morphological study of the sludge granules. *Clean Technologies and Environmental Policy*, 16(5), 947-956.
43. Mitra, S., & Gupta, S. K. (2013). Biodegradation of tetrachloroethylene-rich synthetic wastewater in anaerobic hybrid reactor. *Desalination and Water Treatment*, 51(22-24), 4506-4513.
44. Tomar, S., & Gupta, S. K. (2013). Early start-up of Anamox Reactor....A Review. *Int. J. of Environmental Research and Development*, 3(4), 36-41.
45. Mitra, S., & Gupta, S. K. (2013). Biodegradation of trichloroethylene in anaerobic hybrid reactor. *Environmental Progress & Sustainable Energy*, 32(4), 1055-1060.
46. Chatterjee, Papia; Sharan, Richa; Gupta, S.K.; Wani, Khursheed Ahmad (2012). Performance of Anaerobic Batch Reactor for Removal of Cyanide from Coke Oven Effluent. *Asian Journal of Experimental Biological Sciences*. 3(2), 259-266.
47. Grandhi, S. C., Pandey, L. M. S., Gupta, S. K., & Singh, G. (2011). Journal of Industrial Research & Technology. *Journal of Industrial Research & Technology*, 1(1), 17-23.
48. Basu, M., Gupta, S. K., Singh, G., & Mukhopadhyay, U. (2011). Multi-route risk assessment from trihalomethanes in drinking water supplies. *Environmental monitoring and assessment*, 178(1-4), 121-134.
49. Gupta, S. K., Gupta, S. K., & Singh, G. (2010). Anaerobic hybrid reactor: a promising technology for treatment of distillery spent wash. *International Journal of Environment and Pollution*, 43(1-3), 221-235.
50. Giri, S., Singh, G., Gupta, S. K., Jha, V. N., & Tripathi, R. M. (2010). An evaluation of metal contamination in surface and groundwater around a proposed uranium mining site, Jharkhand, India. *Mine Water and the Environment*, 29(3), 225-234.
51. Richa Sharan, Sunil Kumar Gupta and Gurdeep Singh (2010). Removal of Cyanide from aqueous solution using Fly Ash. *International Journal of Applied Environmental Sciences*, 5 (3) 463-473.
52. Mitra, S., Gupta, S. K., & Singh, G. (2010). Anaerobic pilot-scale treatment of a tetrachloroethylene-rich synthetic effluent with morphological study of granules. *International Journal of Applied Environmental Sciences*, 5(5), 749-764.
53. Gupta, S. K., Gupta, S. K., & Singh, G. (2010). Anaerobic hybrid reactor: a promising technology for treatment of distillery spent wash. *International Journal of Environment and Pollution*, 43(1-3), 221-235
54. Sharan, R., Singh, G., & Gupta, S. K. (2009). Adsorption of phenol from aqueous solution onto fly ash from a thermal power plant. *Adsorption Science & Technology*, 27(3), 267-279.
55. Gupta, S.K. and Singh, Gurdeep (2008). A Review of Municipal Solid Waste Generation and Characteristics in Indian Cities. *Int. Journal of Indian School of Mines III*, 25-34.
56. Kumar, G. S., Gupta, S. K., & Singh, G. (2007). Biodegradation of distillery spent wash in anaerobic hybrid reactor. *Water research*, 41(4), 721-730.
57. Singh, G., Gupta, S. K., Kumar, R., & Sunderarajan, M. (2007). Mathematical modeling of leachates from ash ponds of thermal power plants. *Environmental monitoring and assessment*, 130(1-3), 173-185.
58. Gupta, S. K., & Singh, G. (2007). Assessment of the efficiency and economic viability of various methods of treatment of sanitary landfill leachate. *Environmental monitoring and assessment*, 135(1-3), 107-117.

59. Singh, G., Gupta, S. K., Kumar, R., & Sunderarajan, M. (2007). Mathematical modeling of leachates from ash ponds of thermal power plants. *Environmental monitoring and assessment*, 130(1-3), 173-185.
60. Gupta, S. K., & Gupta, S. K. (2005). Morphological study of the granules in UASB and hybrid reactors. *Clean Technologies and Environmental Policy*, 7(3), 203-212.

Book Chapter

1. Jaydev Kumar Mahato and Sunil Kumar Gupta (2021). Efficacy Evaluation of Conventional Water Treatment Process and THMs Modeling in Drinking Water of Five Cities in India. In book: *Sustainability in Environmental Engineering and Science*. DOI: 10.1007/978-981-15-6887-9_10
2. Mendhe, V. A., Mishra, S., Singh, A. P., Kamble, A. D., Bannerjee, M., & Gupta, S. K. (2018). Management of Coalbed Methane and Coal Mine Produced Water for Beneficial Use in Damodar Basin of India. In *Water Resources Management* (pp. 283-296). Springer, Singapore.
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Membership of Professional Bodies

- Member Expert Appraisal Committee (EAC) of MoEF & CC, GoI, New Delhi for Coal and Thermal power projects (2018-Ongoing)
- Life Member (Reg. No. 10153) Mining Geology and Metallurgical Institute of India (Since 25 Aug, 2012)
- Life member (LM-7264) Indian Water Works Association (Since 10 Aug, 2012)
- Life Member, Administrative staff College of India, Hyderabad (Since 10 Dec, 2005)
- Life Member, of Environmental Science & Engg. Society, IIT, Powai, Mumbai (Since 28 Dec, 1998)

Recognition/Awards

- Achieved Young Scientist Paper Award for the best research in the Int. Conf. on Environmental Science and Technology held at Houston, Texas, USA on Aug. 6-9, 2007, organized by American Academy of Science.
- Awarded with MHRD Scholarship for M.E. (Env. Engg.) after qualifying GATE, 1995 at Govt. Engg. College, Jabalpur.

- Ranked First in M.E. (Env. Engg.), 1990 batch with 80.31 % marks at at Govt. Engg. College, Jabalpur.

Administrative/Organizational/Committee work done:

Department Level
<ul style="list-style-type: none"> • Head of Department, Environmental Science & Engineering. • Incharge of Wastewater Engineering Lab, Fluid Mechanics Lab, Instrumentation Lab • Member of Departmental Research Committee • Member of Departmental Purchase Appraisal Committee • Organization of 9th Professor S. K. Bose Memorial Lecture • Co-Coordinator for B.Tech (Env.Eng.) • Member of DRC of Civil Engg Dept.
Institute Level
<ul style="list-style-type: none"> • Member of Expert Appraisal Committee (EAC) of MOEF& CC, GoI, New Delhi for Coal & Thermal Projects • Nodal Officer, Key Resource Centre, MDWS, New Delhi • Coordinator, ENVIS, of MOEF& CC, GoI, New Delhi • Member of Selection Committee for recruitment of Assistant/EE Engineer of CMU, ISM Dhanbad • Member of Selection Committee for recruitment of Junior Engineer of CMU, ISM Dhanbad • Member of Selection Committee for recruitment of Project Assistant Level I and II Engineer Group –III(4) at CIMFR, Dhanbad on 13/02/2013 • Member of Selection Committee for recruitment of Assistant and Executive Engineer Group –III(4) at CIMFR, Dhanbad on 27/08/2012 • Member of Assessment Committee for assessment of Group –III(3) to Group (6) Technical Officer at CIMFR, Dhanbad on 26/04/2013 • Member of committee constituted for finalization of course structure for 5 year integrated M. Tech course in civil Engg at BIT, Sindary, Dhanbad 25/03/2013 • Member of Selection Committee for Recruitment of JRF of ESE Dept. • Member of handing taking over of civil works at ISM Dhanbad • Member of Tender Opening & Negotiation Committee for Civil & Electrical Works • Member of Scrutiny Committee for Civil & Electrical Works • Faculty member & Head (CD), Civil Engg Dept.