Prof. Sunil Kumar Gupta

Professor **Department of Environmental Science and Engg.** **IIT(ISM) Dhanbad – 826 004 (India)**	**Contacts:** sunil@iitism.ac.in , skgsunil@iitism.ac.in +91-326-2235474 (O) **+91-326-2296624 (Fax);** +91-9431126495 (Mobile)	

RESEARCH INTERESTS:

1. Disinfection by-production 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
6. Natural Organic Matter (NOM) in drinking water.

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.

LIST OF PUBLICATION:

1. International Journal (SCI/SCIE Index): **95**
2. Book Chapter: **15**
3. Books and Monographs: **01+01**
4. International & National Conference: **30**

RESEARCH GUIDANCE:

1. Ph. D Guidance: **18 (Awarded)** + 01 (Ongoing)
2. M. Tech Guidance: **30 (Awarded)** + 02 (Ongoing)

RESEARCH PROJECTS:

1. Research Projects: **05** (Ongoing) **+ 04** (Completed)
2. Major Industrial consultancy Projects: **04** (Ongoing) + **43** (Completed)

PATENTS:

- "***Apparatus for rapid treatment of solid organic waste***" Indian Patent Application number: 202031046099, **Patent Number: 373169**. [Filed: 22nd October, 2020 and **Granted: 29th July, 2021**, Inventors: **Prof. S. K. Gupta** and Nitin Kumar]

- "***Integrated River-Health Investigation System (IRIS)***" Indian Patent Application number: 202331012411. [Filed: 23rd February, 2023, Inventors: **Prof. S. K. Gupta** and Suyog Gupta]

PROFESSIONAL APPOINTMENTS:

- 1st July 2024 - till date: Dean Student Welfare (DSW), IIT (ISM), Dhanbad
- 2018 - 2021: HOD, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad (25/05 2018 – 24/05/2021)
- 2016- Till date: Professor, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
- 2010 - 2016: Associate Professor, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
- 2007 - 2010: Assistant Professor, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
- 2005 - 2007: Sr. Lecturer, Department of Environmental Sci. & Engg., IIT (ISM), Dhanbad
- 2004 -2005: Sr. Lecturer, Department of Civil Engg., RBIT, Bhutan

MEMBERSHIP OF PROFESSIONAL BODIES:

- **Editorial Board Member** of ***Green & Low Carbon Economy***, Bon View Publishing, Singapore: From February, 2023.
- **Editorial Board Member** of ***Biostatistics Research Journal***, Universal Wiser Publisher, Singapore: From August, 2022.
- **Editor** of ***Pesticide Science and Pest Control Journal***, Medires Publishing LLC, WY, USA: From August, 2022.
- **Member Expert Appraisal Committee (EAC) of MoEF&CC**, GoI, New Delhi for Coal mines and Thermal power projects (2018-2020).
- **Fellow** (F-1279366) of ***Institution of Engineers (India)*** (Since 05/07/2021)
- **Life Member** (Reg. No. 10153) ***Mining Geology and Metallurgical Institute of India*****:** Since 25 Aug, 2012.
- **Life member** (LM-7264) ***Indian Water Works Association (IWWA)***: Since 10 Aug, 2012.
- **Life Member**, **Administrative Staff College of India (ASCI)**, Hyderabad: Since 10 Dec, 2005.
- **Life Member**, of Environmental Science & Engg. Society, ***IIT, Powai, Mumbai***: Since 28 Dec, 1998.

RECOGNITION/AWARDS:

- **Young Scientist 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**.
- **MHRD Fellowship** during M.E. (Env. Engg.) through **GATE, 1995**.

- **First rank** in M.E. (Env. Engg.) in 1990 at Govt. Engg. College, Jabalpur.

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 - 1st rank
3	Ph. D. (Env. Sci. & Engg.)	IIT Bombay, Mumbai	2004	Awarded

Details of Professional Experience

S.N.	Positions held	Organization/Institute	Duration
1.	Dean/DSW	IIT (ISM), Dhanbad	01/07/2024 till date
2.	HOD/ESE	IIT (ISM), Dhanbad	25/05/2018 to 24/05/2021
3.	Professor	IIT (ISM), Dhanbad	Since 20/01/2016
4.	Associate Professor	IIT (ISM), Dhanbad	06/02/10 to 19/01/2016
5.	Assistant Professor	IIT (ISM), Dhanbad	06/02/07 to 05/02/10
6.	Sr. Lecturer	IIT (ISM), Dhanbad	18/08/05 to 05/02/07
7.	Lecturer	RBIT, Bhutan	24/04/04 to 15/08/05
8.	Project Engineer	IIT Bombay, Powai, Mumbai	01/01/04 to 20/04/04
9.	Research Associate (Part time)	IIT Bombay, Powai, Mumbai	28/12/98 to 27/12/99
10	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/Project No.	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/ DST (238)/2019-2020/664/ESE	4 Years	76937.56 (Amt. in Euro)	Ongoing
2.	Evaluating the Impacts of Structural Interventions on to the Environment with reference to Water regime of the area	TataSteel/2020-2021/735/ESE	1 year	7.08	Completed
3.	Preparation of Nalla diversion with Surface	Orisa Mining Corporation/	1 year	27.00	Completed

	Run-off management study pertaining to Guali Iron Ore Mines of M/s OMC Ltd. in Keonjhar district of Odisha	OMC/2021-2022/806/ESE			
4.	Study of Dust Suppression Chemical	Tata Steel/2020-2021/738/ESE	1 Year	14.75	Completed
5.	Study to develop and improve nitrification in AIS (Advent integral system) at BOT plant.	Tata Steel/2017-18/535/ESE	2 Years	20.00	Completed
6.	Control of disinfection by-products formation in drinking water supplies of India	Ministry of Drinking Water and Sanitation, (GOI), New Delhi/ MDWS/2015-16/453/ESE	2 Years	25.20	Completed
7.	Remediation of Ground Water Contaminated with Hexavalent Chromium in Sukhina Valley, Odihsa, using Nano Zero Valent Iron (nZVI) Technology	Ministry of Environment Forest & Climate Change, MOEF&CC, (GOI) New Delhi/MoEF(1)/2015-16/443/ESE	3 Years	24.80	Completed
8.	Influence of chlorine disinfectant and natural organic matter gradient on disinfection by-product formation in drinking water of some Indian cities"	SERB-DST, New Delhi/ DST (95)/2013-2014/381/ESE	2 Years	23.20	Completed
9.	Disinfection By-products Formation and its Management in Drinking Water Supplies of India	Ministry of Drinking Water and Sanitation, (GOI), New Delhi./MRD (1)/2010-2011/290/ESE	2 Years	7.80	Completed

Details on PhD. Thesis Supervised: 18 Nos

Sl. No.	Student Name / Registration No.	Name of Guide/ co-guide	Title of Ph. D Thesis	Year of Award
1.	Diwakar Kumar	Prof. S.K. Gupta	Sustainable solutions for DB 86 Dye Abatement: A Comprehensive Study on Adsorption, Advanced Oxidation and Electrochemical Degradation	2024
2.	Lobzang Chorol	Prof. S.K. Gupta	Integrated Approaches for Groundwater Assessment and Treatment of Trans Himalayan Ranges: MCDM-Based	2024

			Hydrogeochemical Analysis, Health Risk Assessment & Time Series Forecasting	
3.	Suyog Gupta	Prof. S.K. Gupta	Modelling, Assessment and Real Time Monitoring of River Health Using GIS And Hybrid Soft Computing Techniques	2023
4.	Nitin Kumar	Prof. S.K. Gupta	Development, Modeling and Validation of a Novel Technique - Thermal Digestion Process for Rapid Conversion of Solid Organic Waste into Organic Fertilizer	2023
5.	Mr. Jaydev Kumar Mahato	Prof. S.K. Gupta	Development of Novel Adsorbent for the Removal of Natural Organic Matter (NOM) from Drinking Water	2022
6.	Mr. Shahjad Ali	Prof. S.K. Gupta & Prof. Alok Sinha	Detailed Investigation of Fluoride and its Control in Agra Region	2020
7.	Awanindra Pratap Singh	Prof. S.K. Gupta	Appraisal of Coalbed Methane Produced Water and Aquifer Impact Modeling in Raniganj Coalfield, West Bengal	2020
8.	Rachit Ghosh	Prof. S.K. Gupta	Studies on Geopolymer Concrete using synergistically Fly ash and Bottom ash	2020
9.	Anand Govind More (2014DR0253)	Prof. S.K. Gupta	Investigation into Feasibility of Bio-Electrochemical reactor for recovery of metals from Electroplating wastewater	2019
10.	Jayeeta Saha (2014DR0034)	Prof. S.K. Gupta	Development of a cost effective Electrochlorination system, A sustainable approach towards drinking water disinfection	2018
11.	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
12.	Minashree Kumari (2013DR0241)	Prof. Sunil Kumar Gupta	Risk Assessment, Modelling and Control of Trihalomethanes (THMs) from Drinking Water	2017
13.	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
14.	Debleena Bhattacharya	Prof. Sunil Kumar Gupta	“Biodegradation of Antibiotic residuals in the effluent of	2017

	(2011DR0038)		Pharmaceutical Industry"	
15.	Swati Tomar (2012DR0046)	Prof. Sunil Kr Gupta	"Performance Evaluation of Anammox Hybrid Reactors for the treatment of ammonical nitrogen rich waste water."	2016
16.	Brijesh Kumar Mishra	Prof. S. K. Gupta & Prof. Alok Sinha	Predetective Modelling Approach of Disinfection by Product in Drinking Water	2014
17.	Shibam Mitra	Prof. S K Gupta	Bio-degradation of chlorinated ethenes in anaerobic hybrid reactor	2012
18.	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.	Partha Pratim Pal (17DP000246)	Prof. S.K. Gupta & Dr. Sanchita Chakravarty (CSIR-NML, Jamshedpur)	Chemical, mineralogical, and morphological characterization of Ladle Furnace (LD) Slag generated from Iron & steel Industry as a Potential Adsorbent for removal of heavy metals from contaminated water	Part Time
2.	Saurabh Kumar (24DR0182)	Prof. S.K. Gupta	-	Full Time
3.	Devendra Meghwal (24DR0066)	Prof. S.K. Gupta	-	Full Time
4.	Adityarup Das (24DR0026)	Prof. S.K. Gupta	-	Full Time

Ongoing Consultancy Projects

Sl. No.	Project No.	Title of the Consultancy Project	Consultant In-Charge	Sponsoring Organization	Value (in Rs.)
1.	CONS/7029 /2022-2023	Performance Evaluation and Wastewater management system at Bhilai Steel Plant	Prof. S. K. Gupta & Prof. Alok Sinha	SAIL, Bhilai	3422000
2.	CONS/6096	Cumulative Impact	Prof. S. K.	NCL,	11070000

Sl. No.	Project No.	Title of the Consultancy Project	Consultant In-Charge	Sponsoring Organization	Value (in Rs.)
	/2021-2022	Assessment Study, Carrying Capacity Study and Ecosystem Services Study of Nigahi Opencast Mining Project	Gupta & Prof. Anshumali	Singrauli, MP	

Industrial Consultancy/Testing work completed

Sl. No.	Project Number	Title of the Consultancy Project	Consultant In-Charge	Sponsoring Organization
1.	CONS/4099/2018-2019	3rd Party Evaluation of DPR/Agency appointed for Water Supply Project under JMADA.	Prof. S. K. Gupta & Prof. Alok Sinha	JMADA
2.	TEST/4008/2018-2019	Validation of Data Quantitative for Coal Jal App with respect to CCL	Prof. S. K. Gupta & Prof. B. K. Mishra	CCL
3.	CONS/1235	Monitoring of Environmental Parameters in respect of Air, noise, water and stocle unit 7&8 of CTPS Chandrapura	Prof. S. K. Gupta	DVC
4.	CONS/5005/2018-2019	Treatability Study of Sewage/Effluent at different locations of ECL.	Prof. S. K. Gupta & Prof. Alok Sinha	ECL
5.	CONS/4096/2018-2019	Assessment of heavy Metal Pollution Index (HPI) in Water Sediments and Aquatic Samples in and Around Manikpur Opencast Mine fly ash fill site	Prof. S. K. Gupta, Prof. Alok Sinha, & Prof. B. K Mishra	National Thermal Power Corporation Ltd.
6.	CONS/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
7.	CONS/1093	Preparation of Environmental Statement Report of DVC, Bermo Mines, Bermo, Bokaro	Prof. G. Singh, Prof. S. K. Gupta	DVC Bermo Mines, Bokaro
8.	CONS/1238	Rapid comprehensive environmental audit of 4X250 MW OP Jindal Power Plant	Prof. Gurdeep Singh, Prof. S.K.Gupta,	Jindal Power Ltd. Raigarh
9.	CONS/1333/2010-2011	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
10.	CONS/1515	Stack Monitoring of SRI Aurobindo Fuels Ltd	Prof. S. K. Gupta	SAFL
11.	CONS/1294	Regional Environmental Impact Assessment study of Goa region	Co-PI	MoEF & CC, New Delhi,
12.	CONS/1521	Design of Rainwater Harvesting Scheme	Prof. S K Gupta	KI
13.	CONS/1631	Rapid Env. Audit of 4 x 250 MW Power Plant of JPL	Prof. S. K. Gupta	JPL

14.	CONS/ 1691	Analysis of Bleaching Powder	Prof. S. K. Gupta	CCL
15.	CONS/ 1955/20 12-2013	Preparation of Environmental Management Report for DVC Mines.	Prof. S. K. Gupta	Mahuda Coal Washery, BCCL
16.	CONS/ 2367	Effluent Analysis as Per EP Act 1986	Prof. S. K. Gupta	TATA
17.	CONS/ 2371	Environmental Monitoring by Third Party	Prof. S. K, Gupta	NTPC.
18.	CONS/ 2412	Study of Leaching of Heavy Metals	Prof. S.K. Gupta	TATA
19.	CONS/ 2483	Water Table Study of Sarabh Automobile Plant	Prof. S. K. Gupta	SA
20.	CONS/ 2484	Water Table Study of Sarabh Automobile Plant	Prof. S. K. Gupta	SA
21.	CONS/ 2556	Testing of two Waste Water Samples for M/S ENC Ltd.	Prof. S. K. Gupta	ENCL
22.	CONS/ 2557	Testing of two Waste Water Samples for M/S ENC Ltd.	Prof. S. K. Gupta	ENCL
23.	CONS/ 2568	Design of Settling Pond at Ambuja Cement Plant	Prof. S. K. Gupta	ACL
24.	CONS/ 2674/20 14-2015	Impact of Mining Activities on Hydrology and Hydrogeology of Core Zone Covering all 5 underground Mines of Tata Steel.	Prof. S. K Gupta	TSL
25.	CONS/ 2927/20 15-2016	Geo-Enviro Study of Abandoned Mines for 2 x 525 MW Maithon Power Plant.	Prof. S. K Gupta	Maithon Power Ltd. Maiothon Dhanbad
26.	CONS/ 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
27.	CONS/ 2675/20 14-2015	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
28.	TEST/4 012/201 8-2019	Validation of Data quantitative for Coal Jal App with respect to ECL.	Prof. Alok Sinha, Prof. S. K. Gupta, & Prof. B. K Mishra	ECL
29.	TEST/4 010/201 8-2019	Validation of Data Quantitative for Coal Jal App with respect to ECL	Prof. S. K. Gupta, Prof. Alok Sinha, & Prof. B. K Mishra	ECL
30.	TEST/4 009/201 8-2019	Validation of Data Quantitative for Coal Jal App with respect to BCCL	Prof. B. K Mishra, Prof. S. K. Gupta, & Prof. Alok Sinha	BCCL
31.	TEST/4 008/201 8-2019	Validation of Data Quantitative for Coal Jal App with respect to CCL	Prof. B. K Mishra, Prof. S. K. Gupta, & Prof. Alok Sinha	CCL
32.	TEST/4	Validation of Data Quantitative for	Prof. S. K. Gupta,	ECL

	010/2018-2019	Coal Jal App with respect to ECL	Prof. Alok Sinha, & Prof. B. K Mishra	
33.	CONS/3870/2018-2019	Assessment of ground and surface water at Muri	Prof. B. K Mishra, Prof. S. K. Gupta, & Prof. Alok Sinha	Hindalco Industries Ltd.
34.	CONS/3864/2018-2019	Study of IRR in its Ecological Dimension to Know the pollution load bearing capacity of the surrounding Ecosystem	Prof. S. K. Maiti, Prof. S. R. Samadder, Prof. S. K. Gupta	SECL
35.	CONS/3627/2017-2018	Analysis of Water Quality (M/s CCL)	Prof. S. K. Gupta	CCL
36.	CONS/3519/2017-2018	Assessment of Ground Water and Surface Water at Muri.	Prof. B. K Mishra, Prof. S. K. Gupta, & Prof. Alok Sinha	Hindalco Industries Ltd. Muri, Ranchi
37.	CONS/3469/2016-2017	Techno Economic Study for Transportation for Fly ash from CSPGCL Korba to Manikpur Open Cast Mines	Prof. B. K Mishra, Prof. S. K. Gupta, & Prof. Alok Sinha	Chhattisgarh State Power Generation Company Ltd.
38.	CONS/3429/2016-2017	Techno Economic Study for Transportation of Ash from NTPC Korba to Bishrampur & Manikpur Open Cast Mines for its Utilization	Prof. S. K. Gupta, Prof. Alok Sinha, & Prof. B. K Mishra	NTPC
39.	CONS/3408/2016-2017	Environmental Audit of Matrix Fertilizer by Third Party.	Prof. B. K Mishra, Prof. Alok Sinha & Prof. S. K. Gupta	Matix Fertilisers and Chemicals Ltd., Burdwan, W.B
40.	CONS/3404/2016-2017	Water Quality and Treatment Plant Operation.	Prof. B. K Mishra, Prof. Alok Sinha & Prof. S. K. Gupta	NCL
41.	CONS/3300/2016-2017	Feasibility Study of STP at West Bokaro Division (WBD).	Prof. S. K. Gupta & Prof. Alok Sinha	Tata Steel
42.	CONS/3180/2016-2017	Suitability test water of Tata Steel , Jamadoba	Prof. S. K. Gupta	Tata Steel Ltd. Jamadoba
43.	CONS/3049/2015-2016	Technical Consultancy for Wastewater Management and Control of Water Pollution from Plant and Mines of BIOM Kirandul Complex.	Prof. Alok Sinha, Prof. S. K. Gupta, & Prof. B. K Mishra	N.M.D.C
44.	CONS/3032/2015-2016	Suitability test of water.	Prof. B. K Mishra, Prof. Alok Sinha & Prof. S. K. Gupta	CCL
45.	CONS/3021/2015-2016	Testing of Water Sample near Rajrappa Area.	Prof. B. K Mishra, & Prof. S. K. Gupta	Hindalco Industries Ltd.

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 Centre, Texas Tech University, Lubbock, USA at ISM IIIF, Kolkata during 22-26 December, 2015.	EDP Course
7.	Three days Training programme on Water Quality and Management for Thermal Power Plants.	Thermal power Plant
8.	Sustainable Coal Mining Practices for the students of University of South Florida-St. Peterburg, USA	University of South Florida
9.	Three days Training Program on "Water Quality & Treatment".	KRC, MDWS, (GoI), New Delhi
10.	Recent Advances in Water Resources and Environmental Engineering Computation	KRC, MDWS, (GoI), New Delhi

RESEARCH PUBLICATIONS

1. Pal, P. P., Mahato, J. K., & **Gupta, S. K. (2024).** Investigation on modified Linz-Donawitz slag for the treatment of Pb2+ ion-laden wastewater-A Slag utilization sustainable approach. *Physics and Chemistry of the Earth, Parts A/B/C*, 103676. https://doi.org/10.1016/j.pce.2024.103676

2. Jaydev Kumar Mahato, Shivani Rawat, **Sunil Kumar Gupta**, Brahmdeo Yadav **(2024)**. Adsorptive Remediation of Coal Bed Methane Produced Water (CBMW) using a Novel bio-adsorbent and Modern Enable Artificial Intelligence Modeling. *Chemical Engineering Research and Design, https://doi.org/10.1016/j.cherd.2024.05.029.*

3. Gupta, S., & **Gupta, S. K. (2024)**. Development of AI-based hybrid soft computing models for prediction of critical river water quality indicators. *Environmental Science and Pollution Research* https://doi.org/10.1007/s11356-024-32984-w

4. Kumar, D., & **Gupta, S. K. (2024).** Sustainable approach for the treatment of dye-containing wastewater–a critical review. Reviews in Chemical Engineering. https://doi.org/10.1515/revce-2023-0030

5. Chorol, L., & **Gupta, S. K. (2023).** Hybrid analytic network process (ANP)-Entropy model, time series analysis for predicting nitrate and fluoride in groundwater and cumulative health risk assessment. *Journal of Cleaner Production***,** 428; 139316 **(Q1, IF. 11.1)**

6. Kumar, D., & **Gupta, S. K. (2023).** Green synthesis of novel biochar from Abelmoschus esculentus seeds for direct blue 86 dye removal: Characterization, RSM optimization, isotherms, kinetics, and fixed bed column studies. *Environmental Pollution*, 122559. **(Q1, IF 8.9)**

7. Kumar, N., **Gupta, S. K.,** & Yadav, B. (2023). Optimization of process parameters of a thermal digester for the rapid conversion of food waste into value-added soil conditioner. *Waste Management & Research*, 0734242X231167078. **(Q2, IF 3.9)**

8. Chorol, L., & **Gupta, S. K.** (2023). Hydrochemical investigation of groundwater in a trans-Himalayan region of Ladakh, India, using geochemical modelling and entropy technique. *Environmental Geochemistry and Health*, 1-17. **(Q2, IF 4.898)**

9. Chorol, L., & **Gupta, S. K. (2023)**. Evaluation of groundwater heavy metal pollution index through analytical hierarchy process and its health risk assessment via Monte Carlo simulation. *Process Safety and Environmental Protection*. **(Q1, IF 7.926)**

10. Gupta, S., & **Gupta, S. K. (2022)**. Application of Monte Carlo simulation for carcinogenic and non-carcinogenic risks assessment through multi-exposure pathways of heavy metals of river water and sediment, India. *Environmental Geochemistry and Health*, 1-22. **(Q2, IF 4.898)**

11. Kumar, N., Gedam, P., & **Gupta, S. K. (2022)**. Investigating the dynamics of ammonia volatilization and the role of additives in thermal digestion of food waste. *Journal of Environmental Management*, 323, 116312. **(Q1, IF 8.91)**

12. Kumar, A., Kumari, M., & **Gupta, S. K. (2022)**. Performance study of fly-ash-derived coagulant in removing natural organic matter from drinking water: synthesis, characterization, and modelling. Environmental Monitoring and Assessment, 194(11), 821. **(Q3, IF 3.42)**

13. Kumar, D., & **Gupta, S. K. (2022).** Electrochemical oxidation of direct blue 86 dye using MMO coated Ti anode: modelling, kinetics and degradation pathway. Chemical Engineering and Processing-Process Intensification, 109127. **(Q2, IF 4.264)**

14. Teja, D. R., Gupta, S., Yadav, B., & **Gupta, S. K.** (2022). Development of fuzzy leachate pollution index for treatability-based classification of solid waste landfills. Environmental Science and Pollution Research, 1-10. **(Q2, IF 5.19)**

15. Mahato, J. K., & **Gupta, S. K.** (2022). Relative assessment of activated carbon and Nano-Material based adsorbents used for obliteration of THMs precursors-regeneration and techno-economic feasibility analysis. Advanced Powder Technology, 33(8), 103700. **(Q1, IF 4.96)**

16. Kumari, M., & **Gupta, S. K.** (2022). Cumulative human health risk analysis of trihalomethanes exposure in drinking water systems. Journal of Environmental Management, 321, 115949. **(Q1, IF 8.91)**

17. R N Thakur, Randhir Kumar Gupta, **Sunil Kumar Gupta** (2022). Performance of jute geotextile treated with bitumen emulsion for subgrade improvement: Arabian Journal of Geosciences 15(13):1187. **(Q3, IF 1.985)**

18. Kumari, M., & **Gupta, S. K.** (2022). Occurrence and Exposure to Trihalomethanes in Drinking Water: A Systematic Review and Meta-analysis. Exposure and Health, 1-25. **(Q1, IF 11.422)**

19. Kumar, N., & **Gupta, S. K.** (2022). Exploring drying kinetics and fate of nutrients in thermal digestion of solid organic waste. Science of The Total Environment, 155804. **(Q1, IF 7.9)**

20. Mahato, J. K., & **Gupta, S. K.** (2022). Advanced oxidation of Trihalomethane (THMs) precursors and season-wise multi-pathway human carcinogenic risk assessment in Indian drinking water supplies. Process Safety and Environmental Protection, 159, 996-1007. **(Q1, IF 7.926)**

21. Mahato, J. K., & **Gupta, S. K.** (2022). Exploring applicability of artificial intelligence and multivariate linear regression model for prediction of trihalomethanes in drinking water. International Journal of Environmental Science and Technology, 19(6), 5275-5288. **(Q2, I.F- 3.519)**

22. Khatri, V. N., Kumar, A., **Gupta, S. K.**, Dutta, R. K., & Gnananandarao, T. (2022). Numerical study on the uplift capacity of under-reamed piles in clay with linearly increasing cohesion. International Journal of Geotechnical Engineering, 16(4), 438-449. **(Q2, I.F-1.421)**

23. Kumar, A., Khatri, V. N., & Gupta, S. K. (2022). Numerical and analytical study on uplift capacity of under-reamed piles in sand. Marine Georesources & Geotechnology, 40(1), 104-124. **(Q2, I.F-2.673)**

24. Ali, S., **Gupta, S. K.**, Sinha, A., Khan, S. U., & Ali, H. (2022). Health risk assessment due to fluoride contamination in groundwater of Bichpuri, Agra, India: a case study. Modeling Earth Systems and Environment, 8(1), 299-307.

25. Kumar, N., & **Gupta, S. K.** (2021). Exploring the feasibility of thermal digestion process: A novel technique, for the rapid treatment and reuse of solid organic waste as organic fertilizer. Journal of Cleaner Production, 318, 128600. **(Q1, IF 9.29)**

26. Mahato, J. K., & **Gupta, S. K.** (2021). Exceptional adsorption of different spectral indices of natural organic matter (NOM) by using cerium oxide nanoparticles (CONPs). Environmental Science and Pollution Research, 1-10. **(Q2, I.F- 5.19)**

27. Kumar, A., Khatri, V. N., & **Gupta, S. K.** (2021). Numerical and analytical study on uplift capacity of under-reamed piles in sand. Marine Georesources & Geotechnology, 1-38. **(Q2, IF 2.673)**

28. Ali, S., Khan, S. U., **Gupta, S. K.**, Sinha, A., Gupta, M. K., Abbasnia, A., & Mohammadi, A. A. (2021). Health risk assessment due to fluoride exposure from groundwater in rural areas of Agra, India: Monte Carlo simulation. International Journal of Environmental Science and Technology, 18(11), 3665-3676. **(Q2, I.F-2.86)**

29. More, A. G., & **Gupta, S. K.** (2021). Removal of Chromium from Electroplating Industry Wastewater Using Bioelectrochemical System: Kinetic Study and Statistical Analysis. Journal of Hazardous, Toxic, and Radioactive Waste, 25(2), 04020069. **(Q3, IF 1.44)**

30. Gupta, S., & **Gupta, S. K.** (2021). A critical review on water quality index tool: Genesis, evolution and future directions. Ecological Informatics, 63, 101299. **(Q2, I.F-3.142)**

31. Gupta, S., & **Gupta, S. K.** (2021). Development and evaluation of an innovative Enhanced River Pollution Index model for holistic monitoring and management of river water quality. Environmental Science and Pollution Research, 1-14. **(Q2, IF 4.223)**

32. Ali, S., Mahato, J. K., **Gupta, S. K.**, Sinha, A., & Islam, R. (2021). Defluoridation of Ground-water Using Formaldehyde-Treated Agricultural Waste-Wheat, Oats, And Pea Straw. Eart & Envi Scie Res & Rev, 4 (2): 109-115.

33. 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. **(Q1, IF 9.29)**

34. Kumar, A., Khatri, V. N., & **Gupta, S. K.** (2020). Effect of linearly increasing cohesion on the compression and uplift capacity of the under-reamed pile in clay. SN Applied Sciences, 2(2), 1-17.

35. Puja Anchal & 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

36. 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).

37. 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. **(Q1, IF 7.758)**

38. Kumar, A., Khatri, V. N., & **Gupta, S. K.** (2020). Uplift Capacity Determination for an Under-Reamed Pile in Non-homogeneous Clay. In Advances in Offshore Geotechnics (pp. 337-345). Springer, Singapore.

39. Singh, A. P., Mendhe, V. A., Gupta, S. K., Kamble, A. D., Mishra, S., Pophare, A. M., & Varade, A. M. (2020). Insights of CBM Produced Water Composition Influenced by Rock Interaction and Seasonal Variations in Raniganj Coalfield, India. Journal of Geosciences Research, 5(1), 73-88.

40. 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

41. 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.

42. Rabindra Nath Thakura, Sunil Kumar Gupta, Alok Sinha, Sowmiya Chawla and Shilpa S Vadavadagib (2019). A Durability Study of Jute Geotextile Treated with Bitumen Emulsion. JOURNAL OF NATURAL FIBERS: 18(3), pp. 400-418.

43. 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.

44. 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.

45. 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.

46. 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.

47. 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.

48. 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.

49. 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.

50. 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.

51. 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.

52. 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.

53. 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.

54. 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.

55. 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.

56. Saha, J., & Gupta, S. K. (2017). A novel electro-chlorinator using low cost graphite electrode for drinking water disinfection. Ionics, 23(7), 1903-1913.

57. 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.

58. 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.

59. 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.

60. 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.

61. 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.

62. 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.

63. 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.

64. 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.

65. 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

66. 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.

67. 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).

68. 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.

69. 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.

70. 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.

71. 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.

72. 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.

73. 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.

74. Kumari, M., & Gupta, S. K. (2015). Speciation and kinetics of trihalomethanes formation in drinking water supplies. History, 1(4), 157-163.

75. More, A. G., & Gupta, S. K. (2015). Bio-electrochemical system-a novel technology for metal recovery. Science & Technology 1 (4), 174-178.

76. Tomar, S., & Gupta, S. K. (2015). Anammox hybrid reactor-a promising technology to treat nitrogen laden wastewater. History 41 (187), 33-39

77. 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.

78. Mitra, S., & Gupta, S. K. (2014). Pilot-scale treatment of a trichloethylene rich synthetic wastewater in anaerobic hybrid reactor, with morphological study of the sludge granules. Clean Technologies and Environmental Policy, 16(5), 947-956.

79. 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.

80. 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.

81. Mitra, S., & Gupta, S. K. (2013). Biodegradation of trichloroethylene in anaerobic hybrid reactor. Environmental Progress & Sustainable Energy, 32(4), 1055-1060.

82. 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.

83. 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.

84. 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.

85. 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.

86. 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.

87. 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.

88. Mitra, S., Gupta, S. K., & Singh, G. (2010). Anaerobic pilot-scale treatment of a tetrachloethylene-rich synthetic effluent with morphological study of granules. International Journal of Applied Environmental Sciences, 5(5), 749-764.

89. 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

90. 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.

91. 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.

92. Kumar, G. S., Gupta, S. K., & Singh, G. (2007). Biodegradation of distillery spent wash in anaerobic hybrid reactor. Water research, 41(4), 721-730.

93. 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.
94. 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.
95. 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.
96. 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. Kumar, N., Mahato, J. K., & Gupta, S. K. (2024). Design and operation of advanced waste biomass processing system. In *Processing of Biomass Waste* (pp. 55-70). Elsevier.
2. Kumar, N., & Gupta, S. K. (2024). Thermal digestion process—a novel technique for converting solid organic waste into nutrient-rich organic fertilizer. In *Processing of Biomass Waste* (pp. 275-284). Elsevier.
3. Kumar, D., & **Gupta, S. K.** (2022). Current Biological Approaches in Dye Wastewater Treatment Review on Sequential Aerobic/Anaerobic Batch Reactors for Dye Removal. Biological Approaches in Dye-Containing Wastewater, 229-244.
4. Kumari, M., & **Gupta, S. K.** (2022). Trihalomethanes (THMs) in Wastewater: Causes and Concerns.
5. Gupta, S., & Gupta, S. K. (2021, December). Evaluation of River Health Status Based on Water Quality Index and Multiple Linear Regression Analysis. In *International conference Sustainable Environmental Engineering and Science* (pp. 77-85). Singapore: Springer Nature Singapore.
6. Mahato, J. K., & **Gupta, S. K.** (2021). Distribution of Natural Organic Matter (NOM) in Full-scale Drinking Water Utilities of India in Eastern Region-Challenges and Issues. Advanced Aspects of Engineering Research Vol. 5, 134-140.
7. 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
8. Ajay Kumar, V. N. Khatri, and **S. K. Gupta** (2020). Uplift capacity determination for an under-reamed pile in non-homogeneous clay. Advances in Offshore Geotechnics, Springer, doi.org/10.1007/978-981-15-6832-9_19.
9. Mahato, J. K., Kumar, A., & **Gupta, S. K.** (2019, April). Efficiency evaluation of alternative disinfectant for the removal of THMs precursors in drinking water supplies of India. In AIP conference proceedings (Vol. 2091, No. 1, p. 020005). AIP Publishing LLC.
10. 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.

11. Yadav, B. D., **Gupta, S. K.,** & Singh, S. (2018). Study of Suction Versus Water Content of Soil of Turamdih Area Mixed with Bentonite and Its Implication on the Liner Property of Tailing Dam: A Case Study of East Singhbhum, Jharkhand, Eastern India. In Water Resources Management (pp. 179-191). Springer, Singapore.
12. Kumari, M., & **Gupta, S. K.** (2017). Multi-pathway risk assessment of trihalomethanes exposure in drinking water supplies. In Trends in Asian Water Environmental Science and Technology (pp. 223-235). Springer, Cham.
13. Gupta, S.K., **Gupta Sunil Kumar** and Hung, Young-Tse (2004)."Treatment of Pharmaceutical Waste" In: *Handbook of Industrial and Hazardous Waste Management, Second Edition, Ed. Lawrence K. Wang, Young-Tse, Hung, Howard H. Lo and Constantine Yapijakis, Marcel Dekker* Inc., NY, USA. **(3)** 63-129.

Books & Monograph:

- Gupta and Kumar (2015). "Land Surveying-I". Asian Publishers, U.P., India.
- Jaydev Kumar Mahato and **Sunil Kumar Gupta** (2021). Distribution of natural organic matter (nom) and trihalomethane compounds (THMs) in drinking water supplies of India-a case study. ENVIS Centre on Environmental Problems of Mining, Indian Institute of Technology, Indian School of Mines, Dhanbad. Volume Number: 20; ISSN No: 0972-4656

Administrative/Organizational/Committee work done:

Department Level
• Head, Department of Environmental Science & Engineering, IIT(ISM), Dhanbad • Head, Department of Civil Engineering, IIT(ISM), Dhanbad • 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
• 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, Sindri, 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.

Dr. Sunil Kumar Gupta
Professor
Dept. of Environmental Science & Engineering
INDIAN INSTITUTE OF TECHNOLOGY
(INDIAN SCHOOL OF MINES)
Dhanbad - 826 004 (Jharkhand)