# **BIODATA**

### PERSONNEL INFORMATION

Name : Dr. Manish Kumar Jain
 Father's name : Er. Sudhir Kumar Jain
 Address : Dr. Manish Kumar Jain

Professor,

Room No 007, Department of Environmental Science and

Engineering,

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4. Date of birth : 14<sup>th</sup> December 1974

6. Category : General7. Sub Category : Minority

8. Field of activity : Mine Environment



### **ACADEMIC PROFILE**

S.	Qualification	Year	Board/	%of	Grade/	Major Subjects
No.			University	marks	Division	
1.	Ph.D.	2005	Indian Institute	-	-	Fly ash as a mine void-filling
	(Mining Engineering)		of Technology			material
			Kharagpur			
2.	M.Tech.	2000	Indian School	OGPA	First	Air, water, soil, noise and
	(Environmental		of Mines	4.19/*	With	social pollution, their control
	Science &		Dhanbad	5.00	Distinction	measures and equipment,
	Engineering)					EMP, EIA and legislation
3.	B.E.	1997	Nagpur	71.8	First	All subjects related to Mining
	(Mining Engineering)		University			and allied science

<sup>\*</sup>OGPA (Overall Grade Point Average on Five Point Scale)

### **EXPERIENCE**

S.	Post	Organization	Duration	NatureofJob
No.				
1.	Professor	Dept. of Environmental Science &	On Going	Teaching &
		Engineering, Indian Institute of Technology (ISM) Dhanbad, Jharkhand	(2023-till date)	Research
2.	Associate Professor	Dept. of Environmental Science &	(2010 - 2023)	Teaching &
		Engineering, Indian Institute of Technology (ISM) Dhanbad, Jharkhand		Research
3.	Assistant Professor	Dept. of Environmental Science &	(2007-2010)	Teaching &
		Engineering, ISM Dhanbad, Jharkhand		Research
4.	Lecturer	Dept. of Mining Engineering, NIT Rourkela, Orissa	(2006 - 2007)	Teaching & Research
5.	Lecturer	Dept. of Mining Engineering,	(2004 - 2006)	Teaching &
		Anna Univ. Main Campus, Chennai, Tamilnadu		Research
6.	Research Associate	Department of Mining	(2004 - 2004)	Research
	(CSIR)	Engineering, IIT Kharagpur, West		
7.	Research Scholar	Department of Mining Engineering, IIT Kharagpur, West	(2000 -2004)	Research

# **Research and Development**

S.No	Project Title	Sponsoring Authority	Role	Duration	Amount Sanctioned	Sanction/Status
9	Studies of Eco System services at GP-II, coal block, Tanmar, Chattisgarh	Adani Enterprise Limited	Co-PI	2023-25	25,05,140	Adani/2023-24/1097/ESE Service Order 8130061510 dated 29:03:2024
8	Analysis of CO, CO <sub>2</sub> , Methane and its homologues, measurement for the presence of above gases and their potential danger/harmful effects on human, Random analysis of ambient air quality and Water quality analysis for the mine discharge water in Sijua Area of BCCL	BCCL	PI	2021-22	11,80,000	BCCL/2021-22/848/ESE GM/SA/ENV/2022/02 Dated11.02.2021
7	Recovery of copper from water bodies nearby copper mines using microbial electrochemical systems	Ministry of Mines	Co-PI	2021-22	25,00,000	MoM/2020-21/773/ESE F.No. Met 4-14/1/2021/- Met IV dated 10/02/2021
6	Land use Land cover study for Jharia group of collieries and washeries, Tata Steel"	Tata Steel	PI	2020- 2022	23,60,000	Tata Steel/2020- 2021/719/ESE, Order No. :- 3000133692/932 Order Date 21.07.2020
5	Development of Approach and Methodology for Environmental Performance Rating Index (EPRI) for coal mines of Coal India Ltd. with reference to air quality	ICFRE, Dehradun	PI	2018-20	11,80,000	ICFRE/2018-19/605/ESE , P.O. No-I-94/2017- ADG(EM)EPI/IPMA /CIL/ICFRE Dated 21- 02-2018
4	ENVIS Centre on Environmental Problems of Mining	MoEF & CC	Coordinator	2015- 16 2016- 17 2017- 18	13,54,536 14,35,754 50,000 17,09,184	May 25, 2015 June 17, 2016 September 19, 2017 MOEF&CC (EI Division)
3	Estimation of Aquifer Potential in Jharia Coal Mining Region with suitable techniques to improve the recharge	MoWR	Co- Investigator	2012-15	28,54,700	March 2012, 24 Months MoWR (3)/2012- 13/308/ESE Report submitted in March 2017
2	Regional Environmental Impact Assessment Study of Mining in Goa Region	MoEF & CC	Co- Investigator	2011- 2013	2,02,21,800	MOEF, J-20012/2/2009- IA.II(T)
1	Paste flow behaviour of Neyveli lignite fly ash and its derivative mixtures for mine void fill— a laboratory scale investigation	ISM Dhanbad	Principle Investigator	2007-09	43,000	Minor Research project/2008

# Consultancy

S.	Project Title	Sponsoring Authority	Role		Amount Sanctioned	Status
	As CI					
11	Air Quality Monitoring at Govindpur area, BCCL	BCCL		CONS/6092/ 2021- 22	1.18	Completed

	Air sampling in core and buffer zone of Sijua Area, BCCL	BCCL	CI	CONS/5063/19-20	2.36	Completed
	Random Verification of Air sample for cluster II group of Mines	BCCL	CI	CONS/5064/19-20	1.18	Completed
	Monitoring of Ambient Air Quality of Katras Area BCCL as per NAAQS 2009	BCCL	CI	CONS/3504/17-18	2.30	Completed
7	Water quality assessment of samples from BCCL	BCCL	CI	CONS/3053/15-16	0.1145	Completed
6		JRDA	CI	CONS/2838/15-16	0.15	Completed
5		BCCL	CI	CONS/1459/11-12	0.11030	Completed
4	System & Preparation of Environmental	Group of Coke Oven Plant Owners	CI	CONS/1091/10-11	12.25	Completed
3	Monitoring of Environmental parameters in respect of stack Monitoring and effluent discharge of CTPS	CTPS, DVC	CI	CONS/1505/11-12	1.00373	Completed
2		JRDA	CI	CONS/0925/09-10	36.26451	Completed
-	Scientific Investigation for Assessment of Status of Fire around Lodna Coke Plant	BCCL	CI	CONS/0566/08-09	3.93260	Completed
,	As CO-CI			I		
	Flora-fauna and socio-economic study for baseline data generation of Cluster X of BCCL, Dhanbad	BCCL	Co-CI	CONS/7321/2024 -2025	2360000	Ongoing
13		KTMPL, Sindri, Dhanbad(SAIL )	Co-CI	CONS/7258/2024 -2025	50,15,000	Ongoing
	Preparation of plan for protection of ecology & post mining ecological restoration plan at Gare Palma Sector II coal project of MAHAGENCO at Dist. Raigarh, Chattisgarh		Co-CI	CONS/7234/2023- 24	11,80,000	Ongoing
	impact of mine blasting operations on Environmental Pollution and important	Birla Corporation Limited, Kolkatta	Co-CI	CONS/7214/2023- 24	2,06,50,000	Completed
	Environment sustainability management study of the surajgarh Iron ore mining project	Lloyds Metals and Energy Limited	CO-CI	CONS/7176/23-24	23,60,000	Completed
)	Environmental studies for filling of Pond	NTPC	CO-CI	CONS/7069/22-23	47.20	Completed

8	Cumulative impact assessment study, carrying capacity study and ecosystemcservices study as epr condition of terms of references(ToR) for expansion of Nighai Opencast Mining Project from 21MTPA to 25 MTPA with increase in leasehold area from 3018.40 ha to 3582.723 ha	NCL	CO-CI	CONS/6096/21-22	103.626	Completed
7		SECL	CO-CI	CONS/6O56/21-22	25.96	Completed
6	Study to understand the Impact of Socio- economic Factors Due to Mining suspension in Goa.	Goa Ore Mineral Exporters Association	CO-CI	CONS/5010/18-19	13.00	Completed
5	Evaluation of sustainable Development Project of ECL under MOU 2013 (First Phase)	ECL	CO-CI	CONS/2356/13-14	5.00	Completed
4	Study of Illegal Mines in CIL Subsidiaries (ECL, BCCL, CCL).	CIL	CO-CI	CONS/2116/12-13	35.00	On going
3	Design of Particulate Emission Control System & Preparation of Environmental Management Plan for Coke Oven Plants in Dhanbad	Group of Coke Oven Plant Owners	CO-CI	CONS/1116/10-11	12.25	Completed
2	Design of Particulate Emission Control System & Preparation of Environmental Management Plan for Coke Oven Plants in Dhanbad	Group of Coke Oven Plant Owners	CO-CI	C0NS/1096/10-11	10.50	Completed
1	Preparation of Thematic Cluster of Mining as per CSD Guidelines As Member	MOEF	CO-CI	CONS/0825/09- 10	5.00	Completed
22	Health Safety and Environmental Risk Assessment	VLPG	Member	CONS/3759/17-18	8.75	Completed
21	Source sustainability study of Water Requirement	RKMPPLC	Member	CONS/3766/17-18	6.75	Completed
20	Hydrological Study and Source Sustainability Study of Water Requirement	DB Power	Member	Cons/3748/17-18	12.25	Completed
19	Environmental impact study of back filing of chotia mines with fly- ash	BALCO	Member	CONS/3367/16-17		Completed
18	Soil and fly-ash characterization study	BALCO	Member	CONS/3252/16-17	1.603	Completed
17	Testing of ground water quality. Kirandul, NMDC	NMDC	Member	CONS/3274/16-17		Completed
16	Technical Consultancy for Waste Water Management and Control of Water Pollution from Plant and Mines of BIOM, Bacheli Complex.	NMDC	Member	CONS/2958/15-16	13.25	Completed
15	Biodiversity study of Rolep Hydro Electric Project	Rolep	Member	CONS/2731/15-16		Completed
1	Three Day training program Evaluation	Group of	Member	CONS/1972/12-13	2.00	Completed
14	of water resources and its management	companies				

12	Monitoring of Environmental parameters in respect of ambient air, stack monitoring, noise level and effluent discharge at BTPS'B"(O&M)	BTPS	Member	CONS/1440/11-12	5.22822	Completed
11	Preparation of Environmental Statement Report of Bermo Mines, DVC, Bermo, Bokaro, Jharkhand	DVC, Bermo Mines	Member	CONS/1516/11- 12)	1.10300	Completed
10	Compliance of Forestry Clearance Conditions in respect of Ghanoodih and Bera Projects of Bastacolla Area	BCCL	Member	CONS/1285/10-11	11.68	Completed
9	Sustainable Management of Mineral Resources in Nigerian Mining Sector	Word Bank	Member	CONS/1171/10-11	22.50	Completed
	Design of Particulate Emission Control System & Preparation of Environmental Management Plan for Coke Oven Plants in Dhanbad	Group of Coke Oven Plant Owners	Member	CONS/1168/10-11	10.5	Completed
	Preparation of Mining Plan for rock materials at Little Andaman, island for Ministry of Shipping	MSRT	Member	CONS/0799/12-13	10.00	Completed
	- J	Group of Coke Oven Plant Owners	Member	CONS/1118/10-11	10.5	Completed
	Building Institutional Capacity for Sustainable Environment and Social Management in Mining Sector in Afghanistan	World Bank	Member	CONS/1273/09-10	45.00	Completed
	Feasibility Study of Cluster Concept in Jharia coalfields	BCCL	Member	CONS/835/09-10	11.03	Completed
	Preparation of Mining Plan for TESRA Block, TISCO	TISCO	Member	CONS/0339/08-09	5.00	Completed
	EIA/EMP Studies of Sand Mining Leases of TISCO	TISCO	Member	CONS/0568/08-09	20.00	Completed
	Regional Environmental Management Plan of Angul – Talcher – Meramundali Area	SPCB-Orissa	Member	CONS/0267/07-08	54.00	Completed

### PROFESSIONAL DEVELOPMENT PROGRAM ORGANIZED

S. No.	Title	Sponsoring agency	Status	Rs. In Lakhs	Status
AS CI					
6	Training program on Air Quality Assessment, Prediction and Control for Industrial Areas(EDP/7131/23-24)	Group of Co.	CI	7.8	Completed
5	One Week Training Program on Mining and Environment (EDP/5061/19-20)	Hindustan Copper Limited	CI	5.31	Completed
4	Training Program on Air and Nosie quality assessment, Prediction and Control for Industrial Areas CONS/3828/18-19	Group of Co.	CI	3.30	Completed
3	Training Program on Environmental Clearance Procedures and Impact Assessment for Mining Projects (CONS/3520/17-18)	Group of Co.	CI	2.58	Completed
2	Training Program on Ambient air quality assessment, prediction and control (cons/3236/16-17)	Group of Co.	CI	2.40	Completed

1	Training program on Air Quality Assessment, Prediction and Control for Industrial Areas (CONS/2931/15-16)	Group of Co.	CI	3.30	Completed
AS	S CO-CI				
5	Training program on Waste to Energy	Group of Co.	Co-CI	3.60	Completed
4	Six Days Training program on Application of Remote Sensing and GIS for Environmental Management Near Mining and Industrial Areas (EDP/5059/2019-20)	Group of Co.	Co-CI	11.40	Completed
3	Short-term course on advanced treatment of solid and hazardous waste: Current Perspectives. (cons/3329/16-17)	Group of Co.	CO-CI	3.30	Completed
2	Short-term course on recent trends in waste management practices. (CONS/3221/16-17)	Group of Co.	CO-CI	3.30	Completed
1	Short-term course on sustainable waste management practices. (cons/3097/15-16)	Group of Co.	CO-CI	2.55	Completed

**Conference Organized** 

S.	Title	Duration	Status
No.			
1	Technological Advancements in Waste Management:	December 03-04, 2024	Co-Convener
	Challenges and Opportunities – 2023 (TAWMCO-2023) IITISM		
	CONFERENCE TAWMCO/2023-24/34/ESE		
2	National Conference on Recent Trends in Environmental Pollution and	6-7 February 2020	Advisory Committee
	Disaster Risk Reduction at FICCI, New Delhi		
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### PH.D. SCHOLAR GUIDANCE (AWARDED)

S.NO.	Name of Scholar	Title	Role	Status
1.	Rizwan Reza 0254/2007	Water Quality Assessment from Various Coal Mines and Industries and its Impact on River Water System in Talcher- Angul Region of Orissa India	Co- Guide	Awarded 28-03-2012
2.	Arpita Das 2008DR0010	Environmental Evaluation of Coal and Lignite Fly Ash from various Thermal Power Plants in India	Principal Guide	Awarded 04-01-2013
3.	Avantika Chandra 2011DR0	An investigation on Environmental Impact of Mine Waste Leachate Contaminants : Sustainable Approach for Mine Waste Management	Sole Guide	Awarded 27-08-2014
4.	Jitin Rahul 2013DR0065	An investigation into the effect of particulate matter on vegetation along the highway	Sole Guide	Awarded 04-03-2017
5.	Sumit Kumar Chaudhary 2012DR0165	Satellite Image Fusion and Quality Assessment Techniques for applications in Earth observation and resource monitoring: An application for urban object extraction	Co- Guide	Awarded 31-03-2017
6.	Radha Rani 2013DR0239	Environmental Evaluation of Fly Ash from Selected thermal Power Plants with reference to Mine Filling	Sole Guide	Awarded 22-12-2017
7.	Krishnendu Banerjee 2012DR1021	Study of Copper Ore Deposits and Environmental Impact Assessment of Mining using Geospatial Technology in some part of East Singhbhum district, Jharkhand	Principal Guide	Awarded (Part Time) 20-03-2018
8.	Surajit Panda 2012DR1022	Study of Sustainable Iron Ore Exploration and its Mapping using Geospatial Technology in some part of West Singhbhum district, Jharkhand.	Principal Guide	Awarded (Part Time) 04-04-2018
9.	Shiv Kumar Yadav 2014DR0020	An Investigation into Emission Inventory and Source Apportionment Study for Jharia Coalfield, India	Sole Guide	Awarded 17-09-2018
10.	Shruti Mishra 2015DR1167	Dynamics of Soil CO2 sequestration in Tropical Deciduous Forest Ecosystem of Northern India	Principal Guide	Awarded (Part Time) 20-06-2020

11	Azeem Uddin Siddiqui 2016DR0007	Identification and Validation of Point Source Contamination In Mineral Bearing Area with the Help of Remote Sensing and GIS	Principal Guide	Awarded 20-02-2022
12	Yuvraj Singh 2015 DR 1121	Surface Water Quality Assessment and Management of The Jalmahal (Mansagar) Lake Jaipur, Rajasthan, India affected by various Activities	Sole Guide	Awarded (Part Time) 08-04-2022
13	Priya Pariyar 2016DR0033	A Study on Release of Major Green House Gasses from Degraded Land Due to Mining Activities against Vegetated Land	Principal Guide	Awarded 13-10-2022 (V) 01-11-2022 (N)
14	Shilpi Mondal 17DR000609	Assessment of the Impact of Mine Fire on Ambient Air Quality, Human health and Plant Species in Some Selected Coal Mining areas of Jharia Coalfield, Dhanbad, India	Co Guide	Awarded 14-11-2022 (V) 25-11-2022 (N)
15	Shweta Kumari 2015DR0030	An investigation into the Air Quality Status and its Impact on quality of soil along National Highway in Dhanbad	Principal Guide	Awarded 20-02-2023 (V) 17-03-2023(N)
16	Shravan Kumar 17DR000518	An Investigation Into The Indoor Air Quality Of Sub-Urban Areas And Associated Health Impacts	Sole Guide	Awarded 26-07-2023 (V) 01-08-2023 (N)
17	Ravi Ranjan Kumar 17DP000257	Characterization of Black Carbon Aerosol using In-Situ And Satellite Data and Its Impact on Total Column Ozone Over India	Principal Guide	Awarded (Part-Time) 19-10-2023 (V) 03-11-2023 (N)
18	Dinesh Kr Patel 2015DR0092	Air Quality Monitoring, Emission Inventory & Source Apportionment Studies Along Highway in Dhanbad, India	Sole Guide	Awarded 06-11-2023 (V) 00-00-2023 (N)
19	Ambikesh Kumar Mishra 2016DR1135	Air Quality Assessment and Management Around OCL India Limited Rajgangpur, Dist-Sundargarh, Odisha, India	Sole Guide	Thesis Submitted (Part-Time)
20	Pritam Mazinder Baruah 17DR000479	Augmentation of Mine water For Potable Purpose from the Coal Mines of Jharia Coalfield	Co Guide	Thesis Submitted

# PH.D. SCHOLAR GUIDANCE (ONGOING)

1.	Silvia Dutta 17dr000311	Assessment of land use changes in a coalfield area and its impact on natural resources	Principal Guide	On Going
2.	Wilson Kandulna 20DR0164	Impact of Coal mining on Surface Urban Heat Island	Sole Guide	On Going
3.	Jayati Priya 22DR0100	Investigations on the design and development of green processing route for valorization of metallurgical waste	Principal Guide	On Going
4.	Smriti Zenifer LAKRA 23DR0169		Sole Guide	On Going
5.	Suraj Kumar 23DP0038		Sole Guide	On Going (PT)
6.	Ritesh Ranjan 23dp0031		Sole Guide	On Going (PT)
7.	Pradeep Kumar Gour 24DP0146		Sole Guide	On Going (PT)
8.	Sameer Shekhar 24DP0151		Sole Guide	On Going (PT)
9.	Parth Banethiwal 24DR0117		Sole Guide	On Going
10.	Akhand Pratap Singh 24DR0028		Sole Guide	On Going

# M.TECH STUDENT GUIDANCE

S	.No.	Student Name	Title	Year

1.	Md. Sanaullah	Environmental Evaluation and Hydraulic Transportation Aspects of fly ash from	2009
	Saudagar	Neyveli Lignite Thermal Power Plant With Reference to Mine Void Filling	
2.	Sachin Sharma	Land Capability Classification of degraded Jharia Coalfield	2010
3.	Ashwani Kumar	Assessment of soil quality and soil respiration of Dugda Coal Washery of Jharia Coalfield	
4.	Sudhir Kumar	ticulate Dispersion Modelling: Design of its Emission Control System I Preparation of Environmental Management Plan for Coke-Oven Plants Γundi Road, Dhanbad	
5.	Bhaskar Singh Rawat	Assessment and Modelling of Air Quality and Design of Particulate Emission Control System for Coke Oven Plants	2011
6.	Anshul Sandeja	Assessment of Impact on Ambient Air Quality in and Around Chandrapura and Bokaro Thermal Power Stations using Air Quality Index and Air Quality Model	2012
7.	Vipin Singh Rawat	Flow Properties of fly ash through Viscometer: Fly ash utilisation	2012
8.	Ashish Kumar	Effect of Highway traffic on soil and particulate matter concentration at NH-2, Dhanbad	2013
9.	Samiksha	An investigation of particulate matter in coal mining area using remote sensing & GIS	2013
10.	Vinod Babu V.	Evaluation of Spatial distribution of erosion potential of Jharia coalfields by geographic information system	2013
11.	Meena Kumari	Flow properties of Flyash and its derivatives for their bulk utilization in Mining Sector	2014
12.			2014
13.	Lilly Gogoi	Assessment of air pollution concentration around road network for Jharia coalfield	2015
14.	Susmita Jha	Land use classification of east singhbhum district, Jharkhand with special emphasis on ground water analysis through remote sensing and GIS	
15.	Somdipta Bagchi	Removal of ammonia from air stream using biotrickling filter	2016
16.	Shashi Ranjan	Utilisation of mine waste for unpaved road construction in black cotton soil	2016
17.	Prince Raj 15MT000404	Effect of Surface Runoff on Water and Soil Quality of Katras Mining Area, Dhanbad	2017
18.	Alka Kumari 15MT000378	Air Quality Assessment in and around IIT(ISM) Dhanbad	2017
19.	Uttam Kumar Jha 15MT000139	Effect of surface Runoff on Water Bodies in Urban and Mining Area	2017
20.	Sudhanshu Ranjan 16MT001431	Environmental impact of coal mining on soil and water in and around mining areas	2018
21.	Anamika Masoom 16MT001265	Preparation of fly ash granules with reference to mine filling	2018
22.	Manish Kumar 16MT000880	Qualitative analysis of soil and water in and around Coal mining areas	2018
23.	Deepjyoti Preparation of fly ash-based alternative material Chakravorti 17MT0015O1		2019
24.	Mukesh Tiwari 17MT002113	vari Development Of Environmental Evaluation Template For Kusmunda Mines Of	
25.	Rishi Raj Kashyap 17MT001762	shyap Performance Evaluation Of A Surface Mine With Special Emphasis To Air Quality	
26.	Amit Kumar Tiwari 18MT0434	Analysis of Soil for Heavy Metal Contamination of Unnao (U. P.) Industrial Area	2020
27.	Monu 18MT0134	Assessment of Heavy Metal Contamination In Ground Water Of An Industrial Area	2020

28.		Status of Indoor Air Pollution Under Varied Fuel Type Kitchens In Semi Urban Areas	
29.		Evaluation of Flyash as It's Suitability as an Environmental Friendly Material for Mine Void	2021
30.	Bishal Mondal 20MT0120	Application of Remote Sensing & GIS in LULC, NDVI & Watershed Delineation	2022
31.	Nehal Pramod 20MT043	Study on impact of land use/land cover and COVID -19 induced lockdown on ambient air quality	2022
32.	Aashish Kumar Verma 21MT0003	Environmental Evaluation of Fly Ash with Reference to Mine Void Filling	2023
33.	•	Study of Polycyclic Aromatic Hydrocarbons (PAHs) in Ambient Air of Coal Mining Zone	2023
34.	Prasenjit Das 22MT0265	A Study of Urban Air Quality in Kolkata Metropolitan City	2024
35.		An Investigation Towards Air Quality Assessment of An Industrial City	2024
36.	Gurleen Kaur 23MT0148		2025
37.	Abhishek Kumar 23MT0013		2025

### **Award and Recognition**

- 1. Expert Member in NGT Case vide order dt. 29.11.2021 in OA 40/2016 (Manbodh Biswal Vs Union of India & Ors)
- 2. Expert Member in NGT Case vide order dt. 23.09.2020 in O.A. No. 23/2017(EZ) with O.A. No 776/2018.
- 3. Awarded with the Prof (Dr) H.R.Anireddy Award for Mining Engineering Research for 2018 in recognition of research in the field of Environment concerning Mining and allied areas by THE INDIAN MINING & ENGINEERING JOURNAL in the Annual Awards Function of 2019 at Hotel Malligi, Hospet (Karnataka) on 21 September 2019.
- 4. Appointed as an expert member on Air Pollution at ICFRE, Dehradun for the development the of Environmental Performance rating index for Indian coal mines in 2018.
- 5. Appointed as an expert auditor on Air Pollution at ICFRE, Dehradun, for Environmental Audit of various Mines.
- 6. Appointed as an expert member by the High Court of Jharkhand, Ranchi for environmental issues and safety of workers in thermal power stations of Jharkhand on the order of the Supreme Court of India in 2018.
- 7. Appointed as an expert member for control of air pollution at MOEFCC under the chairmanship of the Honorable Minister of Environment, Govt. of India in 2017
- 8. NABET-QCI accreditation for preparation of EIA as Functional Area Expert for Land use, Air Pollution & Solid waste

#### MEMBERSHIP OF PROFESSIONAL BODIES

- 1. Mining Engineers Association of India Life Membership (LM-2449)
- 2. The Mining, Geological & Metallurgical Institute of India Life Membership (LM 9440)
- 3. The Institution of Engineers (India) Member (M-141042-8)
- 4. Indian Association of Environmental Management
- 5. Life member Indian Water Works Association(LM-7265)
- 6. Life Member Indian Society of Remote Sensing (L-4960)

#### **DETAILS OF COURSES ATTENDED**

### (SHORT TERM / CONFERENCES / SEMNIARS / WORKSHP / ORIENTAION PROGRAMME)

(DITOI	GHORT TERM / CONTERENCES / SEMINIMS / WORKSHIT / ORIENTHON ROGRAMME)						
S.	<b>Detail of Courses</b>	Institution&Place	Period	Total			
No.				duration			
				(Days)			

1.	Net-zero Emission Technologies for Sustainable Development: Challenges and Opportunities (N0ET-2024)	IIT(ISM) Dhanbad	December 06– 07, 2024	2
2.	National Conference on Emerging Trends in Earth Sciences: Geohazards and Resource Management	IIT(ISM) Dhanbad	27-29, September , 2024	2
3.	International Conference on "Sustainable Development and Management Practices	IIT(ISM) Dhanbad	09-10 February 2024	2
4.	Industry-Institute Interaction (III)-2024	IIT(ISM) Dhanbad	February 03, 2024	1
5.	Advances in Spectroscopic Techniques and Materials (ASTM-2024)	IIT(ISM) Dhanbad	January 18-20, 2024	3
6.	National conference on "Green Mining Initiatives – Indian Mineral Industry Perspective "	The Indian Mine Managers' Association, Nagpur Chapter (IMMA)	13-14 January, 2024	2
7.	International Conference on "Safe, Smart and Sustainable Mining (3SM)	Goa, by IIT(ISM) Dhanbad	December 16-18, 2024	3
8.	National Conference on Technological Advancements in Waste Management: Challenges and Opportunities (TAWMCO – 2023)	IIT(ISM) Dhanbad	December 04-05, 2023,Venue:	02
9.	Industry-Institute Interaction (III)-2023	IIT(ISM) Dhanbad	February 04, 2023	1
10.	Two day International conference on Net-zero Emission Technologies for Systainable Devlopment: Challenges and Opportunities	IIT(ISM) Dhanbad	12-14 December, 2022	2
11.	International Virtual Conference on Advances In Agricultural & Food Sciences To Face The Challenges To Environment And Biosecurity	Sharda University, Greater Noida (NCR), U.P.	Jan16-20,2021	5
12.	Webinar on Mining Environment	MINENVIS, IITISM Dhanbad	Dec 14-15, 2020	2
13.	Online National Conference on Environment & Energy Materials	Sharda University, Greater Noida (NCR), U.P.	June 27-28, 2020	2
14.	Recent Trends in Environmental Pollution and Disaster Risk Reduction	FICCI New delhi	February 06-07, 2020	2
15.	Industry Institute Interaction ( III-2020)	IIT(ISM), Dhanbad	Feb 01, 2020	1
16.	National Symposium on Advanced Technology Infusion for Efficiency Enhancement in Energy Sector	Coal Bhawan, CIL , Kolkata	Jan 12. 2020	1
17.	National seminar on Mining & Processing of Raw materials for Steel, Cement & Power	Hosapete, The IME Journal	Sept 21-22, 2019	2
18.	Recent Advances in Mining Technology	Acharya Institute of Technology Bengaluru	May, 23-24, 2019	2
19.	Industry Institute Interaction ( III-2019)	IIT(ISM), Dhanbad	Feb 02, 2019	1
20.	Workshop on Environment safeguards	SGSITS, Indore NPIU, MHRD	Jan 11, 2019	1
21.	8 <sup>th</sup> International Conference on Environment Science and Biotechnology	Chulalongkorn university, Bangkok, Thailand	Dec 19-21, 2018	3
22.	Mineral processing Technology 2018	IIT(ISM) Dhanbad	Oct 10-12, 2018	3
23.	Conference on Biogeochemical cycles and climate change	IIT(ISM) Dhanbad	Aug 10-11, 2018	2
24.	Emerging Trends in Geophysical Research for Make-in-India	IIT(ISM) Dhanbad	March 09-11, 2018	3

25.	3 <sup>RD</sup> International Conference on Microwave and Photonics,	IIT(ISM), Dhanbad	Feb 09-11, 2018	3
26.	ICMAP-2018 Industry Institute Interaction ( III-2018)	IIT(ISM), Dhanbad	Feb 03, 2018	1
		, , , , ,	·	
27.	2nd conference on GIS and Other Geospatial Technologies for Infrastructure	India Infrastructure Publishing,Le Meridien, New Delhi	July 27-28, 2017	2
28.	National Evaluation Workshop for ENVIS Centres: Summary, Evaluation and Roll out of the Revamped ENVIS Scheme	Gandhi Nagar , Gujarat	March 17-18, 2017	2
29.	Workshop on Energy Resources: Future Prospects of Fuel and Chemicals	IIT(ISM) Dhanbad	Nov 07-08, 2016	2
30.	Workshop on Intellectual Property Rights	IIT(ISM) Dhanbad	Nov 08, 2016	1
31.	Industry Institute Interaction ( III-2017)	IIT(ISM) 2017	Feb 04, 2017	1
32.	National Conference on Sustainable Mining Practices	NIT Rourkela	December 02- 03, 2016	2
33.	National Evaluation workshop for ENVIS Centres	MoEF, New Delhi	Fenruary17-20, 2016	4
34.	Regional Workshop for Evaluation and Training of ENVIS centres (Eastern and North-Eastern Region	ASTEC, Guwahati	March 23-24, 2015	2
35.	Workshop on Challenges and Opportunities for Management of Water Supplies in Rural Areas	ISM Dhanbad	Jan 23-24, 2015	2
36.	Training Program on Satellite Ground System	NRSC, Hyderabad	Oct 28-31, 2014	4
37.	National Interaction cum Evaluation workshop 2014 for ENVIS Scheme	Gangtok, Sikkim	March 28-30, 2014	3
38.	5 <sup>th</sup> Asian Mining Congress	MGMI, Kolkata	February 13- 15, 2014	3
39.	National Seminar on Recent Approaches to Water Resource Management	ISM Dhanbad	Dec. 9-10, 2013	2
40.	TEQIP II Project Review Workshop	ITC Windsor, Bengaluru	Sept 24, 2013	1
41.	23rd World Mining Congress	Montreal, Canada	Aug 11-15, 2013	5
42.	National user Workshop on ENVIS Network Websites Restructuring	IIC, Annex, New Delhi	February, 19, 2013	1
43.	National user Workshop on India State-Level Basic Environmental Information Database(ISBEID)	IIC, Annex, New Delhi	February, 18, 2013	1
44.	India Mineral Congress & Exhibition on Sustainable Mineral Development Integrating CSR and Ecological	ISM Dhanbad	February 2, 2013	1
45.	National Evaluation Workshop for ENVIS Centers	DMI Bhopal	Aug 13- 14,2012	2
46.	Indian Conference on Mine Surveying	ISM Dhanbad	Oct 28-29,2012	2
47.	Training on MIS:WEB –Based Management Information system	Jadavpur Univ (2nd Campus), Kolkata	10-11 July 2012	2
48.	9th International Mining History Congress	Johannesburg, South Africa	April 17-20, 2012	4
49.	Sustainable Development of Groundwater Resources in Industrial Regions	ISM Dhanbad	March 22-23, 2012	2
50.	4th Asian Mining Congress	MGMI, Kolkata	January 29-31, 2012	3
51.	All India Seminar on Advances in Mine Production and Safety	CIMFR, Dhanbad	August 26-27, 2011	2
52.	National Seminar on Drills & Drilling – An update ( D&DU – 2010)	ISM, Dhanbad	Sep 23 – 24, 2010	2
53.	National Seminar on Fly Ash Opportunity for Mining Sector	C-Farm & CPSI NEW DELHI	August 26-27, 2010	2
54.	3rd Asian Mining Congress	MGMI, Kolkata	January 22-25, 2010	3

56.	Statuary Requirements (As per MoEF Guidelines)			
56.			2009	
	National Workshop on Mining, Natural Resources and	By SPWD New	March 19-20,	2
1	Livelihoods	Delhi at Ashok Nagar	2009	
57.	Management of Energy Resources – Issues And Challenges	ISMU Dhanbad	January 31-	2
	(MERIC-2009)		February 0,	
58.	National Seminar on Crushing, Screening & Conveying	ISMU Dhanbad	September 11-	2
			12, 2008	
59.	19th National Convention of Mining Engineers & National	ISMU Dhanbad	March 10-11,	2
	Seminar on Disaster in Mines		2008	
60.	Conference on Emerging Trends in Mining and Allied	NIT Rourkela	February 2-3,	2
	Industries		2008	
61.	1st International Conferences on Managing the Social and	IIC, New Delhi	November 19-21,	3
	Environmental Consequences of Coal Mining in India		2007	
62.	Workshop on Information Management in digital age	CSE, New Delhi	August, 21 – 24,	4
			2007	
63.	National Seminar on Industrial Waste Management	NIT Rourkela	January, 13,	1
			2007	
64.	Geo statistical Models in Grade Control	IIT Kharagpur	September 05-	5
			09, 2005	
65.	National Seminar on Mineral Exploration Mining and	MEAI & Anna univ.	May 20-21, 2005	2
	Mineral Beneficiation: A Road map to vision 2020	at CLRI Chennai		
66.	Faculty Orientation Program	Anna University,	May $3 - 5$ , 2005	3
	, c	Chennai		
67.	International Conference on Technology and Management	IIT Kharagpur	February 5-7,	3
	for Sustainable Exploitation of Minerals and Natural		2004	
68.	National workshop and seminar on "Sustainable	NISM, Kolkata &	January 31 –	3
	Development of Coastal placer Minerals" (PLACER-2004)	CMRI Dhanbad at	February 02,	
69.	3rd International Conference on Fly Ash Utilisation and	CBIP, New Delhi	February 19-21,	3
	Disposal" Central Board of Irrigation and Power	,	2003	
70.	'National Seminar on Status of Environmental management in	IT BHU Varanasi	January 17 -18,	2
	Mining Industry - SEMMI-2003		2003	
71.	RDBMS with Oracle and Java JDBC	IIT Kharagpur	June 18 – July	15
/1.	ADDIVIS WIth Gracic and Java JDDC	III Kilaragpui	04. 2001	13
72.	Object Oriented Programming with C++ and JAVA	IIT Kharagpur	May 21 –June	15
			06, 2001	
73.	International Conference on Technology Management for	IIT Kharagpur	December 1-3,	3
1	Mining Processing and Environment (TMMPE-2000),		2000	

#### SPECIAL LECTURES AT VARIOUS SHORT TERMS & TRAINING COURSES

- Delivered invited talk on "Ambient air, land, water & noise management" as a resource person on 15th of November, 2023 in one day training program on "TECHNICAL/ FUNCTIONAL COMPETENCY DEVELOPMENT PROGRAM FOR ENVIRONMENT" at HRD, BCCL.
- Guest Lecture on First International Day of Clean Air for Blue Skies, through webinar organized by Tata Steel on September 07, 2020.
- Guest Lecture in 6th Environment Meet: +EMPACT 2020 organized bt Tata Steel during 29<sup>th</sup>-31<sup>st</sup> Jan 2020 at Russi Modi Center for Excellence, Jamshedpur 831001.
- Series of Lecture taken in Green Skill Development Program (GSDP) sponsored by MOEF & CC organized by ENVIS Centre, Dept of ESE, IIT(ISM) Dhanbad during Sep 19, 2019 to Oct 10, 2019.
- Series of Lecture taken in Green Skill Development Program (GSDP) sponsored by MOEF & CC organized by ENVIS Centre, Dept of ESE, IIT(ISM) Dhanbad during Aug 13, 2018 to Oct 12, 2018.
- Lecture on Noise Pollution at Executive Development Program Course condition based maintenance of equipment at IIT(ISM) on September 28, 2019.
- Lecture in Refresher course On Environmental Science and Disaster Management on at UGC-HRD, Ranchi University June 27, 2018.
- Lecture on EIA of mining projects for Four weeks advanced training on Mining operations for HZL young underground mining engineers during Jan 22 -Feb 15, 2015.
- Lecture on remote sensing & GIS in two weeks training program on EIA of Mining Projects for Afghanistan officials sponsored by Ministry of External Affairs, Govt of India at ISM Dhanbad, December 06-22, 2014.
- · Lecture on remote sensing & GIS in two weeks training program on Mining Environment and

- Sustainable Development for Afghanistan officials sponsored by Ministry of External Affairs, Govt of India at ISM Dhanbad, August 2014.
- Lecture on remote sensing & GIS. Air pollution and Mine fire in two week short course on Mining Environment and sustainable development for the study Abroad-India Program for University of South Florida-St. Petersberg at ISM Dhanbad, August 2014
- Lecture on Role of remote sensing & GIS in surveying and role of surveying in EIA preparation in 6 weeks Intensive Course on advances in Mine Surveying Technology at ISM Dhanbad, Sep 2013.
- Guest Lecture at Tata Steel Jamadoba on Environmental laws on April 06, 2013
- Lecture on Air Pollution and its impact on Mining at one week Executive Development Program for participants from Mozambique and Tata Steel, 2011 at ISM Dhanbad.
- Lecture on Artisanal and small scale mining at one week Executive Development Program on Sustainable Management of Mineral Resources for Nigerian Official Sponsored by the World Bank, August September, 2011 ISM, Dhanbad
- Lecture on Air Pollution and Remote Sensing & GIS at off-campus program on Mining Environment & Ecology" for Steel Authority of India Limited (SAIL) at Management Training Institute, Ranchi from June 13-15, 2011.
- Lecture at Department of Mining Engineering, NIT Rourkela on remote sensing & GIS on April 21, 2011.
- Lecture at one week Executive Development Program on Sustainable Management of Mineral Resources for Nigerian Official Sponsored by the World Bank, August 30- September 5,2010 ISM, Dhanbad
- Invited Talk at Department of Mining Engineering, NIT Rourkela on Air pollution control & Management and Remote sensing & GIS on August 24, 2010.
- Lecture at two week Executive Development Program on Capacity building for Sustainable Environment and Social Management in Mining Sector in Afghanistan Management in Coal Mining Areas, Dec 30, 2009 Jan 13, 2010 ISM, Dhanbad
- Invited Talk on Fly ash utilisation and impact on society at National Workshop on Mining, Natural Resources and Livelihoods Organised by SPWD, New Delhi, March 2009
- Lecture at one week Executive Development Program on Environmental Management in Coal Mining Areas, April 28-May 3, 2008, ISM University, Dhanbad
- Special Lecture at MEAI Annual Meeting at Chennai, India on Noise Pollution and its impact on Society, 2006

#### **ACHIVEMENTS**

- Participated and presented a paper at 23<sup>rd</sup> World Mining Congress, Montreal, Canada, August 11-15, 2013.
- Observer for ISM Entrance Examination for JRF & MSc & MSc. Tech at Chennai 2012 and Indore 2013.
- External Examiner for Viva Voce of M.Tech. Practical exam and Thesis at NIFFT, Ranchi
- Participated and presented a paper at 9<sup>th</sup> International Mining History Congress, Johannesburg, South Africa, during April 17-20, 2012
- Member for BOCs for Syllabus revision of M.Tech. Environmental Engineering, NIIFT Ranchi
- Question paper setter for JRF entrance of Environmental Engineering at Sharda University, Noida, U.P.
- Observer for ISM Entrance Examination for JRF & M.Tech at Chennai in 2012
- Selected as External Question paper setter for various examination of M.Tech. -Environmental Engineering at NIFFT Ranchi.
- Member of the Organizing committee in 1<sup>st</sup> International Conferences on Managing the Social and Environmental Consequences of Coal Mining in India, IIC, New Delhi, 19-21 Nov. 2007
- Selected as a Reviewer at Journal of Environmental Management, Publication of Elsevier Publication.
- Member of the technical committee of National Seminar on Mineral Exploration Mining and Mineral Beneficiation: A Road map to vision 2020, May 20-21, 2005.
- Award of Research Associate (R.A.) fellowship by CSIR, New Delhi, India (2004)
- One of the editor for the proceedings of International Conference on Technology and Management for Sustainable Exploitation of Minerals and Natural resources, IIT Kharagpur, February 5-7, 2004.
- Award of additional financial assistantship for meritorious scholar by I.I.T. Kharagpur (2002-2003).
- Merit scholarship in Junior high school & Intermediate.

#### **Institutional Activities**

- 1. Chairperson IIT JEE (Advanced) 2025
- 2. Convener III 2024
- 3. Chairman Admission (PG-PhD) 2023-24,2024-25
- 4. Vice Chairman GATE-JAM 2022-23
- 5. Member high level monitoring and advising committee for new admission portal
- 6. Member online course integration Committee

- 7. Environmental Coordinator for TEQIP III
- 8. Member GATE-JAM 2019,2020, & 2021
- 9. Coordinator MIS & Team Member Core Group for TEQIP-II
- 10. Member for TEQIP-II for Industry-Institute interaction
- 11. Departmental representative for Central Library Committee
- 12. Member for Mission for societal development
- 13. Member for organization of 86<sup>th</sup> and 87<sup>th</sup> Institute Foundation day
- 14. Organizing Secretary for organization of 88th and 91st Institute Foundation day
- 15. Co-coordinator BASANT 2k16
- 16. Member for Gender sensitization Committee till May 2015
- 17. Member for reception committee for Convocation
- 18. President ISM Teacher Association 2014- 2015
- 19. Observer for ISM M.Tech. & JRF Entrance Examination 2012 at Chennai
- Observer for All India Entrance for M.Sc., Msc. Tech & JRF at Indore conducted by ISM/Dhanbad DURING 2013 & 2014
- 21. Member organizing committee Basant 2k15.
- 22. Faculty in charge for Fund generation at CONCETTO'13
- 23. Member for organization of India Mineral Conclave 2013
- 24. Anti-ragging Team member
- 25. Judge for Annual Sports Day
- 26. Observer for checking of food quality in mess
- 27. Member for ISM JRF selection committee at PE Department ,Geology Department & HSS Department

#### **Departmental Activities**

- 1. DUGC Convener (2018- 2022)
- 2. Training and Placement Incharge (2014-2018)
- 3. Faculty in charge Computer Lab
- 4. Faculty in charge Air Pollution Monitoring Lab
- 5. Faculty in charge of Remote Sensing & GIS Lab
- 6. Faculty in charge for Centre of Mining Environment ( 2011-2014)
- 7. Faculty Advisor for Final Year B.Tech.- Environmental Engineering
- 8. Coordinator for Centre of MIN-ENVIS till OCTOBER 2016
- 9. Faculty in charge for Dept webpage at ISM website
- 10. Departmental supervisor for student feedback system
- 11. Member for organization of World Environment Day and planted plants on the occasion
- 12. Member for selection committee for ISM –JRF at ESE Dept,

#### **EXTRA ACIMIES**

- Gas testing certificate.
- First aid certificate.
- "B" certificate of public welfare committee.
- Indian scouts and guides association certificate.

#### **TRAININGS**

S.No.	Organisation	Nature	Duration
1.	Silewara Mine, Western Coalfields.Ltd., Nagpur	Underground	30 days (1.6.95-30.6.95)
2	Bina Project, Northern Coalfields Ltd., Singrauli	Opencast	32 days (6.10.95-7.11.95)
3.	Girgita Mine, Maihar Lime & Stone Co. Ltd., Maihar	Opencast	47 days (15.5.95-30.6.96)
4.	Gevra Project, South Eastern Coalfields Ltd., Bilaspur	Open cast	29 days (29.9.96- 28.10.96)

#### **COMPUTER EXPOSURE**

OperatingSystemWindows-9x/NT/2000/XP, MS - DOS, Linux

ProgrammingLanguage-Fortran-77, C++, HTML, JAVA

RDBMS- FoxPro, Oracle,

Different software for statistics analysis, FEM Packages, GIS and its application and related software, Fm-pro, MS-Access, Dspace, Koha

> System administration - Linux server, Departmental web site and daily handling of departmental computer wealth.

(MANISHKUMARJAIN)

Date 01-02-2025 Place Dhanbad