

CURRICULUM VITAE

Jaiprakash Nayak

Designation: Assistant Professor

Department of Civil Engineering,

Harcourt Butler Technical University, Kanpur

E mail: jnayak@hbtu.ac.in

Academic Qualification: B. Tech, M.Tech, Ph.D. (P)



Teaching experiences:

1. Assistant Professor (Permanent): **Harcourt Butler Technical University, Kanpur, Uttar Pradesh** from to 30th Dec, 2021 to till date
2. Guest Faculty : **Harcourt Butler Technical University, Kanpur, Uttar Pradesh** from 20th Sept, 2021 to 29th Dec, 2021
3. Guest Faculty : **Govt. Rajkiya Engineering College, Ambedkar Nagar** from 27th Jan, 2020 to 31st July, 2021
4. Assistant Professor : **PDM University, Bahadurgarh** from Sept 2017 to Oct 2018

Research experience:

1. Research Associate (Contractual): **IIT Kharagpur** from October, 2018 to 4th January, 2019.
 2. Junior Research Fellowship (Contractual): **IIT Kharagpur** from 6th Jan, 2019 to 25th Jan, 2020
- JRF Research:** “Landslide Hazard Assessment in NE India along the Gangtok- Tsomgo/ Chango Lake and Gangtok Chuanthang – Lachen Corridor”, sponsored by Ministry of EARTH SCIENCES (Government of India, Ministry of EARTH SCIENCES, India Meteorological Department)
1. M.Tech Dissertation Topic: “Hydro-ecological Assessment of Environmental Flow for Western Himalaya Region.” Collaboration from National Institute of Hydrology, Roorkee.
 2. B.Tech Project Topic: “Design of Base Isolator for the R.C.C. Building”.

Technical Skills:

1. MS Office (Word, Excel, PowerPoint).
2. Having basic knowledge of AUTO CADD.
3. Having knowledge of Geo- Slope Software and FLAC Software.

Courses taught/teaching:**Under Graduate Level**

1. Water Supply Engineering.
2. Sewage Disposal and Air Pollution Engineering.
3. Remote Sensing & GIS Application in Civil Engineering
4. Engineering Graphics
5. Environment & Ecology
6. Environmental Management
7. Environmental Engineering Laboratory

Post Graduate Level

1. Environmental Systems Analysis
2. Environmental Impact Assessment
3. Solid and Hazardous Waste Management

Department Responsibility:

1. Survey laboratory Incharge in Civil Engineering Department at HBTU, Kanpur
2. Environmental laboratory Incharge in Civil Engineering Department at HBTU, Kanpur
3. Incharge, Departmental Maintenance, renovation and Infrastructure development/ General unkeep at HBTU, Kanpur
4. Departmental IV Year B. Tech Coordinator
5. Departmental B. Tech Project Incharge
6. Departmental NAAC Co- ordinator at REC Ambedkar Nagar.
7. Departmental NBA Co- ordinator at REC Ambedkar Nagar.
8. Departmental Exam Cell Co- ordinator at REC Ambedkar Nagar.

Professional Membership:

- | | | |
|----|--|---------------|
| 1. | Fellow of Institution of Engineers (FIE) | AM3122851 |
| 2. | Indian Water Resource Society (IWRS). | LM- 2024-8048 |

Administrative Responsibility:

1. Warden of Shridharacharya Boys' Hostel (LV Old) from Feb 2023 to September, 2024 at HBTU Kanpur
2. Nodal officer of "Digital Communication readiness Index at HBTU Kanpur.
3. Assistant Coordinator of B. Tech Lateral Admission for the session 2024-25 and 2025-26.
4. Member of B. Tech online/offline Document Verification Committee.

Field of Interests: River water quality assessment & modelling, Environmental Flow assessment & Solid waste management.

Reviewer:

1. Reviewer of peer reviewed International Journals (SCOPUS indexed international *Journals Only*) *SAGE Journal in Air, Soil and Water Research*.
2. Reviewer of peer reviewed International Journal of Environmental Quality *Journal of Environmental Quality*.

Plenary/Invited Speaker:

1. Delivered a lecture on topic "Only One Earth" on World Environment Day organized by Institution of Engineers (India), Kanpur Local Centre on June 5th, 2022.
2. Delivered a lecture on topic "Glacier Preservation" on World Water Day organized by Institution of Engineers (India), Kanpur Local Centre on March 22nd, 2025.

PUBLICATIONS:**List of Journal Publication**

- **Nayak,J.,(2018)** "Low Flow Characterzation of Satluj River" **.International Journal of Research in Engineering & Technology journal**, Vol. 6, Issue 7, 7-12.
- Suglo, L.F. and NAYAK, J., (2018). STRUCTURALDESIGN; TECHNOLOGY and COMPUTERIZATION NOT THE PROBLEM. IISTE Journal in Civil and Environmental Research, Vol.10, No.6, pp 53-59,
- Shukla, N., **Nayak, J.**, Mittal, A. & Singh, A. (2020). Performance of Selfsocially Acceptable and Environmental Eco-Friendly Solid Waste Management top 10 cities In India. Pensee International Journal, Volume 50, ISSUE 12.
- **Nayak, J.**, Singh, R. & Ganguly, R. Seasonal Water Quality Assessment of Ganga River in Kanpur: Integrated WQI Approaches and Multivariate Statistical Analysis. *Int J Environ Res* **20**, 174 (2026). <https://doi.org/10.1007/s41742-026-01137-x>.

List of Book Chapter

- Nayak, J., S. Ram, Shakya, N., (2017). An Evaluation and Performance Study of Sewage Treatment Plants in India. IJSIET ISSUE VOLUME 2.
- Kumar p., Nayak J., S. Ram (2021) Hydro-ecological Assessment of Environmental Flows for Satluj River In: Department of Civil and Environmental Engineering, Texas A&M University, USA Springer Nature Switzerland AG 2021. Book Title: Climate Impacts on Water Resources in India Environment and Health pp. 157-165, (eBook) (<http://www.springer.com/series/6689>). https://doi.org/10.1007/978-3-030-51427-3_13.
- Nayak, J., Singh, R., Ganguly, R. (2024). Water Quality Assessment and Designated Best Use Determination of Ganga River, Kanpur. In: Sharma, C., Shukla, A.K., Pathak, S., Singh, V.P. (eds) Sustainable Development and Geospatial Technology. Springer, Cham. https://doi.org/10.1007/978-3-031-65683-5_16
- Nayak, J., Singh, R., Ganguly, R. (2024). Assessment of Water Quality in Terms of the Water Quality Index. In: Yadav, A.K., Yadav, K., Singh, V.P. (eds) Integrated Management of Water Resources in India: A Computational Approach. Water Science and Technology Library, vol 129. Springer, Cham. https://doi.org/10.1007/978-3-031-62079-9_6
- Kapoor, A., Chaudhari, P., Awasthi, A., Nayak, J., & Kannan, D. (2025). Advances in microfluidics for detection of infectious diseases. In *Advances in Separation Sciences* (pp. 345-365). Elsevier. <https://doi.org/10.1016/B978-0-323-95292-7.00013-X>

Papers in National Journals

- Suglo. L.M, Malhotra. M., **Nayak.J.P.** “A Comparative Seismic Analysis and Design using ETABS and STADD Pro” published in Indian journal of “The Indian Concrete Journal” Nov- May 2019.
- Kumar.P., Kumar .S., kumar.M., Chaubey,M., Nayak.JP.,” Groundwater Flow and Solute Transport Modelling: A Mathematical Analysis” Indian J. Environmental Protecion, Vol.44No. 3, March 2024, ISSN 0253-7141.

(Short term courses/training programmes/ FDP attended)

S. No.	Course	Title	Duration	Organization by
1	FDP	Overcoming Covid-19 Challenges through Innovation in Construction Industry	28 December, 2020- 01 January, 2021	PSIT College of Engineering, Kanpur
2	FDP	Green Technologies and Environmental Sustainability	07-12 september, 2020	J.C. Bose University of Science & Technology YMCA, Faridabad
3	FDP	Construction Practices	12-16 October, 2020	J.C. Bose University of Science & Technology YMCA, Faridabad
4	FDP	Technological Industrial Practices	01-06 June, 2020	J.C. Bose University of Science & Technology YMCA, Faridabad
5	FDP	Developments in Concrete and Construction	23-29 July, 2020	SRM Institute of Technology, Chennai
6	FDP	Sustainable Environmental Challenges	05-09 October, 2020	Sagi Rama Krishnam Raju Engineering College, A.P.
7	National Workshop as coordinator	Emerging Trends in Civil Engineering Impacting the Construction Industry	03-07 November	REC, Ambedkar Nagar
8	Short Term Course	Soil and Rock Geotechnics for Sustainable Infrastructures (SRGSI)	04-08 April, 2022	NIT Patna
9	Traing Program	Hands – on Traing Program on Tools & Techniques of Experimental Hydrology	24-30 May, 2022	IIT Roorkee
10	FDP	Research Methodology and authoring, reviewing Manuscripts	25th July – 5th Aug 2022	Jointly organized by EICT Academies- NITP, MNITJ, IIITDMJ, & IITR Online Programme
11	FDP	GROUND MOTION MODELLING AND RESPONSE COMPUTATIONS IN EARTHQUAKE ENGINEERING	4–13 August 2022	NIT Warangal
12	FDP	Advancements in Concrete technology and Construction Management Course Code: ACTCM	22-26 August 2022	Center for Continuing Education NIT Warangal
13	Short Term Course	Recent Advances in Environmental Engineering towards Sustainability (RAEES 202)	10- 14 October, 2022	Department of Civil Engineering, NIT Patna
14	One Week Online Short Term Course On	RESEARCH METHODOLOGY AND QUANTITATIVE TECHNIQUES	October 13- 19, 2022	Department of Mathematics School of Basic and Applied Sciences Harcourt Butler Technical University Kanpur-208002, Uttar

				Pradesh
15	FDP Online	FDP On Innovative Teaching and Learning Pedagogy	1 to 8 April 2023	Research and Journal Committee and IQAC, St. Paul Institute of Professional Studies Research Foundation of India & RFI-CARE
16	Short-Term Course (Online)	Sustainable Solutions to Solid Waste Management'	September 4–8, 2023.	Department of Civil Engineering, National Institute of Technology Patna,
17	NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme of University Grants Commission	13-02-2024 to 21-02-2024	Malaviya Mission Teacher Training Centre, National Institute of Technology Warangal
18	FDP	Recent trends in scientific Programming using MATLAB	26th February, 2024 to 1st March, 2024	Central University of Rajasthan School of Engineering and Technology
19	FDP	Challenges & Recent Trends in Mathematical Modelling and Scientific Computing	December, 18-22, 2023	Harcourt Butler Technical University, Kanpur, Kanpur, Uttara Pradesh
20	FDP	Advance Tools and Techniques for Research Methodology	26 th February- 7 th March, 2024	Research Foundation of India
21	FDP	DST sponsored Faculty Development Programme on ENTREPRENEURSHIP DEVELOPMENT	19th February 2024 to 5th March 2024	Amity University Uttar Pradesh
22	FDP	Advanced Material Characterization Techniques	20 th -24 th May, 2024	HBTU Kanpur
23	FDP	Advance Pedagogical Learning and University Administration	May 27 th – June 01 st , 2024	HBTU Kanpur
24	Short-Term Course (Online)	Current Research Trends in Civil Engineering	28-Oct-2024 to 02-Nov-2024	NIT-Rourkela (CRTCE-NITRKL: 2024)
25	Short-Term Course (Online)	Recent Advancements in wastewater Treatment Techniques (RAWIT-2024)	21 st Oct- 25 th Oct, 2024	NIT Srinagar
26	Online Workshop	Use of Artificial Intelligence (AI) in Teaching	25th and 26th November 2024	HBTU Kanpur
27	FDP (Online)	Statistical Analysis with Excel	7 th – 12 th December, 2024	RFI
28	5-Day Online Winter Course	Skill Development Program on Research and Publications	16th to 20th December	Indian Institute of Technology, Dharwad,

			2024	Karnataka
29	One Week Online Short Term Course On	Emerging Trends in ENVIROMENTAL Engineering For Sustainable Developent	20 th Jan- 24 th Jan, 2025	HBTU Kanpur
30	e-STC	Chemistry for Energy, Environment and Biomedical Applications	17th-21st December 2024	Department of Chemistry, NIT Hamirpur
31	Training Program	NAAC- New Reforms – 2024 An Introduction to Binary Accreditation Framework New Education Policy 2020	30-31 December 2024	RFI
32	Online Faculty Development Programme (FDP)	Futuristic Trends in Clean Energy and Manufacturing Technologies	Dec. 30, 2024 – Jan. 04, 2025,	HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR
33	ALL INDIA COUNCIL FOR TECHNICAL EDUCATION FDP	Integrating Disaster Management with Resilient Structural Engineering : New Horizons	13/01/2025 to 18/01/2025.	RAJKIYA ENGINEERING COLLEGE MAINPURI, UP
34	ALL INDIA COUNCIL FOR TECHNICAL EDUCATION FDP	Green Technology towards Sustainable Future	03/02/2025 to 08/02/2025	LAXMINARAYAN INNOVATION TECHNOLOGICAL UNIVERSITY
35	ALL INDIA COUNCIL FOR TECHNICAL EDUCATION FDP	Disaster Risk Management Analysis and Mitigation	17/02/2025 to 22/02/2025	K.S.RANGASAMY COLLEGE OF TECHNOLOGY
36	One Week Online Short Term Course On	Emerging Trends in ENVIROMENTAL Engineering For Sustainable Development	20 th Jan- 24 th Jan, 2025	HBTU Kanpur
37	One Week Online Short Term Course On	Emerging Trends in ENVIROMENTAL Engineering For Sustainable Development	20 th Jan- 24 th Jan, 2025	HBTU Kanpur
38	AICTE FDP	SUSTAINABLE BIOFUELS FROM AGRI AND AGRO-INDUSTRIAL WASTES BY MICROBES	24/02/2025 to 01/03/2025	SHREE VENKATESHWARA HI-TECH ENGINEERING COLLEGE
39	10 DAYS FDP	Optimization Techniques and their applications in water supply system Design	20 th Jan- 30 th Jan 2025	NIT Kurukshertra
40	Five-Day Online	Interdisciplinary Approaches in Geotechnical and Geoenvironmental Engineering	February 17 – 21, 2025	HBTU Kanpur

	Workshop			
41	One-week online Faculty Development Program	Innovative Approaches in Dynamics of Soils and Structures	July 21-25, 2025	HBTU Kanpur
42	One-week online Faculty Development Program	Sustainable Practices in Civil Engineering (SPiCE- 2025)	October 6 to 10, 2025	National Institute of Technology Patna
43	7 Days online Faculty Development Program	Emerging Technologies and sustainable Innovations in Civil Engineering (ETSICE 2025)	November 13- 19, 2025	Department of Civil Engineering, Government Engineering College, West Champaran, Bihar and Department of Civil Engineering, IIMT University, Meerut U.P.
44	INDUSTRIAL TRAINING (2 weeks)	DATA SCIENCE, AI, MACHINE LEARNING USING PYTHON	October 20, 2025 to November 3, 2025 (2 Weeks)	ACADEMY OF SKILL DEVELOPMENT A NON-PROFIT TRUST REGISTERED WITH GOVERNMENT OF WEST BENGAL U/S 60 AND RULE 69 (REGISTRATION NUMBER-190307248)
45	INDUSTRIAL TRAINING (4 weeks)	DATA SCIENCE, AI, MACHINE LEARNING USING PYTHON	December 1, 2025 to February 5, 2026 (4 Weeks)	ACADEMY OF SKILL DEVELOPMENT A NON-PROFIT TRUST REGISTERED WITH GOVERNMENT OF WEST BENGAL U/S 60 AND RULE 69 (REGISTRATION NUMBER-190307248)
46	Teacher Training Program	NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	19.01.2026 to 30.01.2026	Indian Institute of Technology, Kharagpur
47	40 hour FDP	Cyber Security in AI		CSJMU KANPUR
48	UBA National Workshop on	UBA National Workshop on Rural Water Management & Treatment Technologies	16-17 March, 2026	IIT Kanpur
49	REFRESHER COURSE ON SUSTAINABILITY BENCHMARKING AND PERFORMANCE METRICS	Sustainability Benchmarking and Performance Metrics:Tools forAssessing Long Term Environmental	25.05.2026 to 06.06.2026	IIT Kharagpur

Conferences attended

2022-23					
S.No.	Title	Conference Name	Conference Place	Online/ Offline	Date
1	Environmental flow requirement of Godavari River	ICCAES, 2022	Kolakata	Online	16-18 th December, 2022
2	Life Cycle Assessment of Municipal Solid Waste in Kanpur City	CHEM-TECHNOVA 2023	Harcourt Butler Technical University Kanpur, Uttar Pradesh	Offline	26th - 27th May, 2023
3	Assessment of Methane Emission from a Solid waste Dumpsite in Lucknow City	CHEM-TECHNOVA 2023	Harcourt Butler Technical University Kanpur, Uttar Pradesh	Offline	26th - 27th May, 2023
2023-24					
S.No.	Title	Conference Name	Conference Place	Online/ Offline	Date
4	Life Cycle Assessment of current Municipal Solid Waste Management Practices in Kanpur city.	CISCE 2023	MNIT, Jaipur, Rajasthan, India	Online	11-12, August 2023
5	Assessment of Methane Emission from a Solid waste Dumpsite in Luknow City	CISCE 2023	MNIT, Jaipur, Rajasthan, India	Online	11-12, August 2023
6.	Water Quality Assessment and Designated Best Use (DBU) determination of Ganga River, Kanpur	HYDRO-2023 INTERNATIONAL	Department of Civil Engineering, National Institute of Technology, Warangal,	Offline	December 21-23, 2023.
7.	RCRM112 Environmental Flow Requirement Of Godavari Lower Subbasin	RCRM2024 INTERNATIONAL	IIT GUWAHATI	Offline	March, 7 th -9 th , 2024

8.	RCRM050 Environmental Flow Requirement for a Critical Reach of Beas River	RCRM2024 INTERNATIONAL	IIT GUWAHATI	Offline	March, 7 th -9 th , 2024
9.	CHEM- TECHNOVA- 2024 Assessment of Air Quality Index of Agra City in Uttar Pradesh	CHEM- TECHNOVA- 2024 INTERNATIONAL	HBTU KANPUR	Offline	March, 21 st - 23 rd , 2024
10.	Statistical Assessment of Air Quality in Lucknow City	CHEM- TECHNOVA- 2024 INTERNATIONAL	HBTU KANPUR	Offline	March, 21 st - 23 rd , 2024
2024-25					
11	Surface Water Quality Assessment of Motijheel Lake, Kanpur: An Integrated Analytical Study.	INTERNATIONAL CONFERENCE InDACON - 2025	HBTU KANPUR	Offline	February 20th- 22nd
12	Integrated Solid Waste Management Strategies for Shivari Dump Site, Lucknow: A Comprehensive Quality Analysis	CHEM-TECHNOVA 2025	HBTU KANPUR	Offline	3 rd – 5 th April
13	Air Quality Assessment During Holika Dahan and Effect of Vegetation along Roads in Kanpur	CHEM-TECHNOVA 2025	HBTU KANPUR	Soft Copy	3 rd – 5 th April
14.	Integrated Modeling and Optimization of Environmental System for Sustainable Resource Management	FFMSDEE-2025	HBTU KANPUR	Offline	May 19-20, 2025
2025-26					
15	Comprehensive Air Quality Assessment in Institutional Area	CHEM-TECHNOVA 2026	HBTU KANPUR	Offline	12-14 March, 2026

Papers in International Conferences

- **J.P.Nayak**, Dr. Shobharam, Shakya Nishant (2017) “An Evaluation and Performance Study of Sewage Treatment Plants in India” has been presented and published in the proceedings of 2017 in ICCET-2017 Conference, Vijayawada, Andhra Pradesh, India on 31st, March- 1st April, 2017 (IJSIET MAY 2017 ISSUE VOLUME 2, ISBN 978-81-904760-9-6).
- Kumar, P., **Nayak, J.** and Ram, S. 2018. . In Proceedings of International Conference on “Sustainable Technologies for Intelligent Water Management” 333, organized by IIT Roorkee and Indian Water Resources Society during Feb 16-19, 2018, pp. 263.

Seminar / FDP / Workshop Organized

- Organized One Week Online Short-Term Course on "Emerging Trends in Environmental Engineering for Sustainable Development (ETESD-2025)", during 20th to 24th January 2025.
- Organized One day Workshop on Geospatial Technology Products by APSL Solutions including Surveying Mapping Instruments on August 30, 2025.
- Organized a One Week Online Faculty Development Program (FDP) on “Integrated Approaches in Structural and Environmental Engineering (IASSEE-2026)” during 2–7 February 2026.

Details of Thesis Supervised (M. Tech)

S.No.	Name of Student	Thesis Title	Year
1	Shardul Singh	Environmental Flow Requirement of Godavari Lower Sub Basin	2022
2	Sharad Chaudhary	Leachate Characterization of Generated from MSW AT Landfill Site Ghazipur, New Delhi	2022
3	Rishabh Katiyar	Life Cycle Assessment of MSW in Kanpur City	2023
4	Aliya Zaidi	Assessment of Methane Gas Emission from a Solid Waste Dumping site in Lucknow City	2023
5	Pulkrit Singh	Assessment of Noise Quality in Educational Building at Kanpur City	2024

Guidance of B. Tech Projects

S.No.	Project Title	Year
1.	Assessment of Air Quality at Agra City	2022-23
2.	Ground Water Quality Assessment at selected location s of Kanpur City	2023-24
3.	Surface Water Quality Assessment of Motijheel Lake	2023-24
4.	Assessment of Noise Quality in Educational Building at Kanpur City	2024-25
5.	Assessment of Air Quality in Educational Building at Kanpur City	2024-25
6.	Environmental Flow Requirement of Satluj River	2025-26

DECLARATION

I hereby declare that the above written particulars are true and correct to the best of my knowledge and belief.

Date :

Place:

(Jai Prakash Nayak)