BRIEF ACADEMIC & RESEARCH PROFILE

Prof. Koijam K K Mani Bhushan Singh

Professor; Director, Research and Development Cell
Department of Environmental Science
D.M. College of Science, Imphal, Dhanamanjuri University
Manipur, India
Mobile: +91 96129 50567
Email: koibhushan123@dmu.ac.in



Profile Summary

Prof. Koijam K K Mani Bhushan Singh has served for an extended period as Head of UG and PG in the Department of Environmental Science at D.M. College of Science and as Director of the Research and Development Cell, Dhanamanjuri University, Manipur. A faculty member since 1995, he has 27 years of UG and 8 years of PG teaching experience. He holds an M.Sc. in Environmental Science from Bharathidasan University, Trichy (T.N.), a Ph.D. from the Forest Research Institute, Dehradun, and an IIRS (ISRO, Dehradun) certificate in Remote Sensing, GIS, and GPS.

His research spans environmental impact assessment, wetland, river and groundwater quality, macro- and microplastics, solid waste, air and noise pollution, carbon sequestration, nanomaterials and hydrothermal processes in Manipur and North East India. He has published 16 journal papers and 9 book chapters and completed a UGC (NERO) research project. He supervises three Ph.D. scholars at DMU, co-supervises one at Mizoram University, and has examined theses for CMJ and Bharathidasan University. A regular speaker on climate change and microplastics, including keynote and plenary talks at ICBSE 2021 and ICORE 2021, he chaired the ICBSE-2021 technical session, serves on the DMU Syndicate, and was the State Academic Coordinator of the National Children's Science Congress, Manipur.

Key Details

Name	Dr. Koijam K. K. Mani Bhushan Singh
Designation	Professor, Department of Environmental Science; Director, Research and Development Cell, Dhanamanjuri University
Department / Institution	Department of Environmental Science, D.M. College of Science, Dhanamanjuri University, Imphal, Manipur
Areas of Specialization	Environmental Impact Assessment; Hydrothermal; Macro and Microplastics; Ecological Studies on Wetlands; Nanomaterials; Air and Noise Pollution; Carbon Sequestration; Solid Waste.
Teaching Experience	UG: 27 years; PG: 8 years

Academic Qualifications

Degree	Institution	Subject
Ph.D.	Forest Research Institute (Deemed University), Dehradun	Forest Ecology and Environmental Division (2009)
M.Sc.	Bharathidasan University, Tiruchirappalli, Tamil Nadu	Environmental Science
Off-Campus Outreach Certificate Programme	Indian Institute of Remote Sensing (ISRO), Dehradun	Remote Sensing and GIS & GPS
Certificate Course	CEDTI, Imphal	Computer Applications

Areas of Specialisation

- Environmental Impact Assessment
- Hydrothermal
- Macro and Microplastics
- Ecological Studies on Wetlands
- Nanomaterials
- Air and Noise Pollution
- Carbon Sequestration
- Solid Waste

Publications

A. Research Papers in Peer-Reviewed Journals

Sl.	Title of Paper	Journal (ISSN)	Volume, Year and Pages
1.	Silent streets and urban soundscapes: Examining noise levels in Imphal, Manipur amid COVID-19	Journal of Scientific & Industrial Research, CSIR-NIScPR (0022-4456)	84(4), 2025
2.	A review on heavy metal bioaccumulation in edible plants	Ecology, Environment & Conservation (0971-765X)	31(1), 2025
3.	Urban green campus as atmospheric carbon sink: Dhanamanjuri University, Imphal, Manipur	Journal of Agricultural, Earth & Environmental Sciences (3064-9846)	4(3), May 2025, pp. 1–10
4.	Assessment of groundwater quality of densely populated areas of Imphal West District, Manipur	African Journal of Biomedical Research (1119-5096)	27(3s), October 2024
5.	Comparative studies of macrophyte productivity in three urban traditional water reservoirs of Imphal (Manipur), North East India	Ecology, Environment & Conservation (0971-765X)	30 (July Suppl.), 2024, pp. S508–S517
6.	Household solid waste in semi-urban area: A case study in Lamlongei (Mantripukhri), Imphal, Manipur	Ecology, Environment & Conservation (0971-765X)	30 (July Suppl.), 2024, pp. S535–S538
7.	Studies on soil physico-chemical parameters of different vegetable crop fields of Cachar District, Assam	Ecology, Environment & Conservation (0971-765X)	30 (May Suppl.), 2024, pp. S235–S239

Sl.	Title of Paper	Journal (ISSN)	Volume, Year and Pages
8.	Quantification of solid waste and appraisal of community attitude towards management of solid waste in Jant Village of Haryana, India	Ecology, Environment & Conservation (0971-765X)	29 (Nov. Suppl.), 2023, pp. S538–S543
9.	Spatio-temporal studies of physico-chemical and biological parameters of three urban traditional water reservoirs in Imphal, Manipur, North East India	International Journal of Lakes and Rivers (0974-4797)	16(2), February 2023, pp. 121–140
10.	Analysis of seasonal variation in water pollution index of Nambul River, Manipur, North-East India	International Journal of Lakes and Rivers (0974-4797)	16(2), February 2023, pp. 141–158
11.	Distribution of macrophytes in urban traditional water reservoirs of Imphal (Manipur), India	International Journal of Lakes and Rivers (0974-4797)	16(2), February 2023, pp. 159–171
12.	Water quality assessment of Kongba River, Manipur, India	Pollution Research, EM International (0257-8050)	41(4), August 2022
13.	Effect of chromium in plant growth on Brassica nigra, fenugreek and Spinacia oleracea plants	European Chemical Bulletin (2063-5346)	10(4), 2021, pp. 1858–1865
14.	A study on fluoride contents of the groundwater of Bishenpur district, Manipur	Indian Journal of Environment & Ecoplanning, Society of Environmental Sciences (0972-1215)	15(1–2), 2008, pp. 255–258
15.	Noise levels in select urban areas of Imphal Valley	Indian Journal of Environmental Protection, Kalpana Corporation (0253-7141)	18(3), March 1998, pp. 215–217
16.	Airborne carbon particulate matter with reference to a cement plant at Ariyalur	Indian Journal of Environmental Protection, Kalpana Corporation (0253-7141)	16(5), May 1996, pp. 356–358
17	Green Synthesis of Iron Oxide-doped Carbon Nanocomposites from Avocado Leaves for Photocatalytic Removal of Methyl Orange from Water.	Journal of Trace Elements and Minerals, Elsevier	Under Final Review (2026)

B. Book Chapters

Sl.	Title of Chapter	Book (Editors)	Publisher, Year and Pages	ISBN
1.	The Potential Human Impacts of Environmental Contamination by Microplastics and Nanoplastics: A Review	Microplastics in African and Asian Environments	Springer Nature, Cham, 2024, pp. 395–425	978-3-031-64252-4
2.	Climate change trends in Manipur and its effect on the ecosystem	Science for Sustainable Development (ed. N. Uma Devi)	Akansha Publishing House, New Delhi, 2024, pp. 254–261	978-81-8370-656-8
3.	A solid waste management perspective	Research Trends in Environmental Sciences (ed. Poonam Sharma)	AkiNik Publications, New Delhi, 2023, pp. 55–69	978-93-5570-963-9
4.	Microplastics in marine environment	Research Trends in Environmental Sciences (ed. Poonam Sharma)	AkiNik Publications, New Delhi, 2023, pp. 71–91	978-93-5570-963-9
5.	Current water quality status of Nambul River, Manipur, North-East India	Research Trends in Environmental Sciences (ed. Poonam Sharma)	AkiNik Publications, New Delhi, 2023, pp. 93–103	978-93-5570-963-9

Sl.	Title of Chapter	Book (Editors)	Publisher, Year and Pages	ISBN
6.	Noise pollution	Introduction to Environmental Sciences (eds. R.S. Khoiyangbam and N. Gupta)	TERI Press, New Delhi, 2012	978-81-7993-455-5
7.	River pollution due to unauthorised dumping of urban solid wastes: A case study of two important rivers in Imphal City, Manipur	Biodiversity, Ecology and Conservation of Rivers and Streams of North East India (ed. L. Kosygin)	Akansha Publishing House, New Delhi, 2011, pp. 317–329	978-81-8370-187-8
8.	Water quality assessment of two water reservoirs of Imphal, Manipur	Wetlands of North East India (ed. L. Kosygin)	Akansha Publishing House, New Delhi, 2009, pp. 77–85	978-81-8370-187-7
9.	Breaking Down Microplastics: Nanoparticle-Assisted Degradation Mechanisms	Nanomaterials for Microplastic Removal	Springer Singapore	978-981-95-4700-5 Due: 29-01-2027

Research Project

Sl.	Title of Project	Role	Year	Funding Agency	Amount	Duration
1.	Ecological studies on water quality, plant biomass and nutrient enrichment in traditional water reservoirs in Imphal, Manipur	Principal Investigator	2009	UGC (NERO)	₹2 lakh	2 years

Research Supervision and Ph.D. Evaluation

- Recognised and approved research guide, Dhanamanjuri University; has guided Master's dissertations for Dhanamanjuri University and other universities.
- External examiner for Ph.D. viva-voce examinations.

Ph.D. Scholars Currently Supervised

Sl.	Scholar	Research Topic	Registered	University / Role
1.	Naorem Nanda Singh	Macroplastics	2022	DMU, Supervisor
2.	L. Chandishor Singh	Phytoremediation of Kongba River, Manipur	2022	DMU, Supervisor
3.	Thaothuingam Malangmei	Solid waste management	2022	DMU, Supervisor
4.	Irom Anita Devi	Study of the quality of water and role of aquatic macrophytes in phytoremediation on Waishel Stream, Manipur, India	2022	Mizoram University, Co-Supervisor
5	Shougrakpam Poireiton Meitei	Study on Springshed	2024	DMU, Supervisor

Ph.D. Theses Examined

Sl.	University	Thesis Title	Year
1.	CMJ University	Role of Church in Environmental Education with special reference to Barak Valley	2018
2.	Bharathidasan University, Tiruchirappalli, Tamil Nadu	Study of coexistence pattern and molecular identification tool of ecologically valued vulture species in Sathyamangalam Tiger Reserve, Tamil Nadu	2021

Invited Talks, Keynote Addresses and Resource Person Engagements

Sl.	Topic	Event, Organizer and Date	Level	Role
1.	Land Resource: Use for Prosperity, Save for Prosperity	State Level 19th National Children's Science Congress; Science Teachers' Forum, Manipur (DST); 22–24 Oct. 2011	State	Resource Person
2.	Urban Traditional Water Reservoirs in Manipur	National Workshop on Integrated Water Resources Management: Strategies & Challenges in North East India; Dept. of Environmental Science, DMC(Sc) & SLNA for Watershed Management, Planning Dept., Govt. of Manipur; 2017	National	Invited Lecture
3.	Global Climate Change	Interdisciplinary UGC Refresher Course in Earth Sciences and Geography; UGC-HRDC, Manipur University; 14–26 Oct. 2019	National	Resource Person
4.	A Sustainable Environment	International Conference on Building a Sustainable Environment (ICBSE-2021); Dept. of Environmental Science, DMC(Sc), DMU; Feb. 2021	International (within country)	Keynote Speaker
5.	Global Climate Change: An Overview	International Conference on Restore Our Earth (ICORE 2021, virtual); Bishop Heber College (Autonomous), Tiruchirappalli; 22 April 2021	International (within country)	Plenary / Keynote Talk
6.	Climate Change Perspective in Manipur	National Workshop on Ecosystem Restoration (virtual); IQAC, N.G. College, Imphal with ENVIS Hub, Directorate of Environment & Climate Change, Govt. of Manipur; 5 June 2021	National	Resource Person
7.	Ozone in the Atmosphere & its Protection	Lions Club of Imphal, 322D; 30 Sept. 2022	State	Invited Talk
8.	Climate Change & Disaster Management: Making Sustainability a Way of Life	Youth-20 Talk / Awareness Programme; Dept. of Environmental Science, DMC(Sc), DMU; 21–22 Feb. 2023	University	Keynote Speaker
9.	Swasth Bharat, Carbon Shunya Bharat	Regional Institute of Medical Sciences (RIMS), Imphal; 26 Feb. 2023	State	Invited / Expert Talk

Sl.	Topic	Event, Organizer and Date	Level	Role
10.	Prospect of Eco-tourism in Manipur	Workshop on Eco-tourism in Manipur through Green & Responsible Tourism: The Road Ahead; Himalayan Knowledge Network (Manipur Chapter) & Dept. of Forestry & Environmental Science, Manipur University; 31 March 2023	State	Resource Person
11.	An Overview of Microplastics Pollution: Global Distribution, Environmental Impacts and Sustainable Solution	National Conference on Emerging Trends in Environmental Research (NACETER 2023); Dept. of Forestry & Environmental Science, Manipur University; 14–15 Dec. 2023	National	Invited Talk
12.	Microplastic Pollution in the Environment	One-week Faculty Development Programme on Environmental Ethics; Dept. of Environmental Science & IQAC, Y.K. College, Wangjing, Manipur; 16–22 March 2024	State	Resource Person

Paper and Poster Presentations

Sl.	Title Presented	Conference, Organiser and Date	Level	Type
1.	People's movement for environment protection & conservation	State-level Awareness Workshop on Living with Wildlife: Conflict in Keibul Lamjao National Park; Dept. of Environmental Science, DMC(Sc), sponsored by ATREE, Bangalore; 2011	State	Paper
2.	Parking management and strategy in urban areas: A case study of Imphal city	National Conference on Recent Trends in Operations Research (NCRTOR-2013); Dept. of Applied Sciences, ASET (Amity), New Delhi; 11–12 April 2013	National	Paper
3.	A model for reduction of noise pollution in cities: A case study of Imphal city	International Conference on Emerging Trends in Science and Engineering Research (ETSER-2015); Dept. of Basic Sciences & Humanities, NIT Manipur; 2–4 Dec. 2015	International (within country)	Paper
4.	Traffic noise levels in select areas in Imphal	105th Indian Science Congress; Manipur University, Imphal; 16–20 March 2018	National	Poster
5.	Study of water quality assessment at Waishel Stream, Manipur, India	International Conference on Sustainable Development – Towards 2030; Dept. of Environmental Sciences, Bishop Heber College (Autonomous), Tiruchirappalli; 5–7 March 2024	International (within country)	Paper
6.	Hydrothermal carbonization of organic solid waste: Sustainable biomass valorization in circular bioeconomy	International Conference GETS' 2026, Bali, Indonesia; organised by NEMA; 24 Aug. 2026 (2 days)	International	Paper

Chairing of Sessions and Rapporteur Roles

Sl.	Conference / Seminar	Level	Role	Date
1.	Seminar on Plant Diversity Resources of Indo-Burma Biodiversity Hotspots & their Conservation	National	Rapporteur, Technical Session III	16–17 April 2012
2.	State Level School Teachers' Science Congress	State	Rapporteur	4 Feb. 2016
3.	International Conference on Building a Sustainable Environment (ICBSE-2021)	International	Chairperson, Technical Session	15 March 2021
4.	International Conference on Recent Advances in Human and Environmental Sciences: Bridging Indian Knowledge System with Modern Innovations (ICRAHES 2026); School of Human & Environmental Sciences, Manipur University, Canchipur, Imphal	International	Session Chaired	16–18 March 2026
5	Conclave on Climate-Resilient Springsheds	State	Session Chaired	October 17, 2026

Conferences and Workshops Organised

Sl.	Event and Role	Level	Date and Venue
1.	Two-day National Workshop on Recent Trends in Operations Research – Member, Organising Committee	National	19–20 Aug. 2017; Dept. of Mathematics, DMC(Sc), Imphal
2.	One-day Workshop on Paper Writing Skills – Organiser	International	18 Dec. 2019; Dept. of Environmental Science, DMC(Sc), Imphal
3.	One-day Workshop on Environmental Leadership Program – Organiser	International	19 Dec. 2019; Dept. of Environmental Science, DMC(Sc), Imphal
4.	Seminar on Advances in Mathematical Sciences – Member, Organising Committee	National	26–28 Dec. 2019; Dept. of Mathematics, DMC(Sc), Imphal
5.	International Conference on Building a Sustainable Environment (ICBSE-2021) – Chairman, Working Committee	International	24–25 Feb. 2021; Dept. of Environmental Science, DMC(Sc), Imphal

Seminars, Conferences, Symposia and Workshops Attended

Sl.	Seminar / Conference / Workshop / Training	Sponsoring Agency	Venue and Date
1.	Two-day State-Level Seminar on Problems of Science Education in Colleges and University	Directorate of Higher Education & University	D.M. College of Science, Imphal; 16–17 Oct. 2007
2.	Two-day Workshop on Prospects of NTFP Certification and Sustainable NTFP Management	IIFM, Bhopal & RCDC, Bhubaneswar	NERIST, Itanagar (A.P.); 28–29 May 2008
3.	UGC-sponsored Conference on Integrating IPR Culture with R&D in Life Sciences	UGC	Modern College, Imphal; 23–25 Sept. 2008
4.	Two-day Training Programme on Application of Bioinformatics in Biology Teaching and Research	DBT, Govt. of India	D.M. College of Science, Imphal; 30–31 March 2009

Sl.	Seminar / Conference / Workshop / Training	Sponsoring Agency	Venue and Date
5.	Staff Development Programme (SDP) on Fabrication of Sub-100 nm Patterning of Biochip for Next Generation Health Care	AICTE, New Delhi	Periyar Maniammai University, Thanjavur (T.N.); 3–14 May 2010
6.	Two-day State Level Seminar on Tourism & Biodiversity	D.M. College of Science	D.M. College of Science, Imphal; 26–27 Sept. 2010
7.	North Eastern Regional Orientation Meet for the State/District Academic Coordinators & Evaluators on Improving the Overall Quality & Outreach of NCSC (organised by State Council of Science, Technology & Environment, Meghalaya)	RVPSP, DST, Govt. of India	Shillong Science Centre, NEHU; 8–10 Oct. 2010
8.	National Seminar on Education and Communication of Climate Change for Biodiversity Conservation (Botanical Society of Manipur)	UGC	Nambol L. Sanoi College; 30–31 Dec. 2010
9.	Two-day State Level Seminar on Role of IQAC in Re-accreditation of Affiliated Colleges	NAAC	D.M. College of Science, Imphal; 16–17 Feb. 2011
10.	Short Term Course in Disaster Management	UGC	Manipur University; 24–27 March 2012
11.	North Eastern Regional Workshops on Environmental Service Learning, Conservation of Hotspots of Biodiversity and Ecotourism	UBHPEA & BHC, Trichy	21–23 Nov. 2012
12.	National Orientation Workshop on Finalisation of Activity Guide 2012–13 for National Children's Science Congress	DST, Govt. of India	RIE, Mysore; 11–13 June 2012
13.	20th National Children's Science Congress (as State Academic Coordinator)	DST, Govt. of India	Banaras Hindu University; 27–31 Dec. 2012
14.	Two-day Workshop for State Coordinators to Design Roadmap of Children's Science Congress	DST, Govt. of India	Nashik (Maharashtra); 26–27 July 2013
15.	XVI Annual Conference of the International Academy of Physical Sciences on Science and Technology for Sustainable Development	CONIAPS	PDPM IIITDM, Jabalpur; 20–22 March 2014
16.	National Orientation Workshop for Finalisation of the NCSC Activity Guide Book for 2014–2015	DST, Govt. of India	3–5 July 2014
17.	International Conference on Sustainable Development and North East India in the Globalised Era	FEGOCTA	20–30 Dec. 2017
18.	Indian Science Congress	Ministry of Science & Technology, Govt. of India	Manipur University, Imphal; 16–20 March 2018

Professional Memberships

- Life Member, Indian Science Congress Association (since 2018; Membership No. L34815).
- Life Member, Science Teachers' Forum, Manipur.

Administrative and Committee Responsibilities

- Director, Research and Development Cell, Dhanamanjuri University.
- Member, Syndicate, Dhanamanjuri University.
- Member, Academic Council, Dhanamanjuri University; Convener and Co-convener of the Examination Committee and the Infrastructure Development Committee.

- Member, College Development Committee, DMC(Sc).

Examination and Other Confidential Works

- Paper setter, moderator, evaluator and head examiner for undergraduate and postgraduate examinations of Manipur University since 1998.
- Paper setter, moderator and evaluator for UG and PG examinations of Dhanamanjuri University, and in the conduct of its admission tests.
- External examiner for postgraduate courses, Manipur University.

Curriculum and Syllabus Development

- Involved in framing undergraduate syllabi for Manipur University, and both undergraduate and postgraduate syllabi for Dhanamanjuri University.

Extension and Outreach

- State Academic Coordinator (2010–2014), resource person and jury member, National Children's Science Congress, Manipur, organised by the Science Teachers' Forum, Manipur and catalysed by NCSTC Network, DST, New Delhi.
- Radio talk “Akoibagi phibam sokchil laklibasing” broadcast on All India Radio (Prasar Bharati), 5 June 2010.
- Radio talk “Role of youth in water pollution” on the Naharolgi Khonjel programme, All India Radio, 6 November 2018.
- Scripts and articles on the environment broadcast on All India Radio, Imphal, from time to time.
- Jury member for state-level scientific model-making competitions and school-level national seminars.