CURRICULUM VITAE

NAME: **DR. KARTIKEY KUMAR GUPTA**
D.O.B: February 02, 1977
DESIGNATION: Assistant Professor (Stage-2) in Microbiology, Department of Botany and Microbiology, Gurukula Kangri (Deemed to be University)
Haridwar – 249404, Uttarakhand
DATE OF JOINING: March 26, 2011
MOBILE NO: +91-7895741529
E-MAIL: kartikey.gupta@gkv.ac.in
kartikey77@gmail.com

❖ ACADEMIC QUALIFICATIONS

- ✓ **Ph.D. Microbiology** (2006) from Kurukshetra University, Kurukshetra (Haryana).
- ✓ **M.Sc. Microbiology** (2000) from Kurukshetra University, Kurukshetra (Haryana).

❖ RESEARCH PAPERS/REVIEW ARTICLES/BOOK CHAPTERS

1. H. Panwar, S. Rani, D. Malik, and **K.K. Gupta** (2026). Biosorption and metal tolerance of *Bacillus pumilus* KHP5 isolated from cow dung for Cr^{6+}, Cu^{2+}, and Zn^{2+} bioremediation. ***Biocatalysis and Agricultural Biotechnology***, **73,** 104004. **DOI:** https://doi.org/10.1016/j.bcab.2026.104004.

2. S. Rani, H. Panwar, D. Malik, and **K.K. Gupta** (2026). Plastic-contaminated soil inherent novel strain *Microbacterium hydrocarbonoxydans* KRS13 demonstrates significant applicability toward biofilms formation and degradation of polypropylene. ***Preparative Biochemistry & Biotechnology***, **56 (3)**, 409-426. **DOI:** https://doi.org/10.1080/10826068.2025.2543283

3. D. Malik, P. Dikshit, H. Panwar, S. Rani, and **K.K. Gupta** (2025). RSM based optimization of bioactive metabolites in culture supernatant derived from *Bacillus stercoris* strain GRS6 demonstrates significant enhancement of bioactive potential against *Escherichia coli* and *Listeria monocytogenes*. ***Environment Conservation Journal***, **26 (4)**, 1167–1187.
DOI: https://doi.org/10.36953/ECJ.37252025.

4. D. Malik, H. Panwar, S. Rani, and **K.K. Gupta** (2025). Investigation of anti-microbial and cytotoxic potential of *Streptomyces werraensis* GRS9 derived from the sediments of river Ganga. ***Brazilian Journal of Microbiology*, 56 (2),** 863-882. **DOI:** https://doi.org/10.1007/s42770-025-01642-9

5. S. Chand, A. Katara, V. Chaudhry, S. Vishwakarma, **K.K. Gupta**, A. Yadav, and H. Chandra (2025). Harnessing nanofertilizers potential for effective plant disease management: Impact and sources. **In:** Nanofertilizers for Sustainable Agriculture, **Eds:** P. Kumar and R.C. Dubey. **Springer, Cham**. pp 205-233, **DOI:** https://doi.org/10.1007/978-3-031-78649-5_9

6. K. Sagar, P. Kumari, **K.K. Gupta**, A. Katara, A. Yadav, and H. Chandra (2024). The Prospect of Gene Exploitation through Soil Metagenomics. ***Journal of Pure and Applied Microbiology*, 18 (4),** 2228-2243.

7. H. Panwar, D. Malik, S. Rani, and **K.K. Gupta** (2024). Exploring biosorption potential of cow dung derived novel strain *Cellulosimicrobium cellulans* KHP3 in the remediation of Chromium (Cr), Copper (Cu) and Zinc (Zn). ***Bioremediation Journal***, 1–20.
DOI: https://doi.org/10.1080/10889868.2024.2427087

8. S. Vishwakarma, V. Chaudhry, S. Chand, K. Sagar, **K.K. Gupta**, N. Bhardwaj, R. Prasad, P. Kumar, and H. Chandra (2024). The Potential of Fungal Endophytes in Plants: Sources of Bioactive Compounds. ***Indian Journal of Microbiology***, **65**, 1813-1827.
DOI: https://doi.org/10.1007/s12088-024-01406-3

9. H. Chandra, A. Yadav, R. Prasad, K. Sagar, N. Bhardwaj, **K.K. Gupta**, G.S. Thakur, M. Nigam, R. Pezzani, J.P.M. de Lima, H.D.M. Coutinho, and A.P. Mishra (2024). COVID 19: Prevention and treatment through the Indian perspective**.** ***Cytokine*****, 183,** 156756.

10. K.K. Sharma, H. Panwar, and **K.K. Gupta** (2024). Isolation and characterization of bio-prospecting gut strains *Bacillus safensis* CGK192 and *Bacillus australimaris* CGK221 for plastic (HDPE) degradation. ***Biotechnology Letters,*** **46 (4),** 671-689.

11. H. Chandra, A. Yadav, R. Prasad, S.J.S. Kalra, A. Singh, N. Bhardwaj, and **K.K. Gupta** (2024). Fungal endophytes from medicinal plants acting as natural therapeutic reservoir. ***The Microbe***, **3**, 100073.

12. D. Devi, **K.K. Gupta**, H. Chandra, K.K. Sharma, K. Sagar, E. Mori, P.A..M. de Farias, H.D.M. Coutinho, and A.P. Mishra (2023). Biodegradation of low-density polyethylene (LDPE) through application of indigenous strain *Alcaligenes faecalis* ISJ128. ***Environmental Geochemistry and Health***, **45 (12)**, 9391–9409.

13. **K.K. Gupta**, K.K. Sharma, and H. Chandra (2023). Utilization of *Bacillus cereus* strain CGK5 associated with cow feces in the degradation of commercially available high-density polyethylene (HDPE). ***Archives of Microbiology,*** **205 (3)**, 101.

14. **K.K. Gupta**, H. Chandra, K. Sagar, K.K. Sharma, and D. Devi (2023). Degradation of high density polyethylene (HDPE) through bacterial strain from Cow faeces. ***Biocatalysis and Agricultural Biotechnology***, **48,** 102646.

15. **K.K. Gupta**, K.K. Sharma, H. Chandra, H. Panwar, N. Bhardwaj, N.A. Altwaijry, A.A. Alsfouk, Z. Dlamini, O. Afzal, A.S.A. Altamimi, S. Khan, and A.P. Mishra (2022). The integrative bioinformatics approaches to predict the xanthohumol as anti-breast cancer molecule: Targeting cancer cells signaling PI3K and AKT kinase pathway. ***Frontiers in Oncology*****, 12**, 950835.

16. **K.K. Gupta**, K.K. Sharma, and H. Chandra (2022). *Micrococcus luteus* strain CGK112 isolated from cow dung demonstrated efficient biofilm-forming ability and degradation potential toward high-density polyethylene (HDPE). ***Archives of Microbiology***, **204 (7)**, 402.

17. N. Bhardwaj, A. Singh, H. Chandra, and **K.K. Gupta** (2022). Paraquat treatment modulates the stress erythropoiesis response in bone marrow and liver of splenectomized mice. ***Chemical Biology Letters*****, 9 (2)**, 306.

18. **K.K. Gupta** and D. Rana (2021). Spectroscopic and chromatographic identification of bioprospecting bioactive compounds from cow feces: Antimicrobial and antioxidant activities evaluation of gut bacterium *Pseudomonas aeruginosa* KD155. ***Biotechnology Reports*****, 29,** e00577.

19. **K.K. Gupta** and D. Devi (2020). Biofilm mediated degradation of commercially available LDPE films by bacterial strains isolated from partially degraded plastic. ***Remediation*****, 30 (4),** 39-47.

20. D. Rana. and **K.K. Gupta** (2020). In vitro antibacterial and antifungal activity of extra and intracellular metabolites extracted from *Alishewanella fetalis* KD167 and *Bacillus thuringiensis* KD168 isolated from cow dung**.** ***Plant Archives (Special Issue: AIAAS-2020)*****, 20,** 145-155.

21. **K.K. Gupta** and D. Devi (2020). Characteristics investigation on biofilm formation and biodegradation activities of *Pseudomonas aeruginosa* strain ISJ14 colonizing low density polyethylene (LDPE) surface. ***Heliyon,*** **6 (7),** e04398.

22. **K.K. Gupta** and D. Devi (2019). Biodegradation of Low Density Polyethylene by Selected Bacillus sp. ***Gazi University Journal of Science*****, 32 (3),** 802-813.

23. **K.K. Gupta** and D. Rana (2018). Preliminary study on inhibitory activity of Enterobacter sp. strain KD111 isolated from the Cow feces. ***Environment Conservation Journal*****, 19 (3),** 139-144.

24. **K.K. Gupta** and D. Rana (2018). Bioactivity of Alcaligenes spp. isolated from cow dung against certain human pathogens. ***Environment Conservation Journal*****, 19 (1&2),** 59-64.

25. **K.K. Gupta** and D. Rana (2017). Evaluation of antagonistic activities of Bacillus spp. against certain bacteria of medical importance. ***Archives of Agriculture and Environmental Science*****, 2 (5),** 353-356.

26. **K.K. Gupta** and D. Devi (2017). Isolation and characterization of low density polyethylene degrading Bacillus spp. from garbage dump sites. ***World Journal of Pharmaceutical Research***, **6 (11)**, 609-617.

27. **K.K. Gupta**, K.R. Aneja, and D. Rana (2016). Current status of cow dung as a bioresource for sustainable development. ***Bioresources and Bioprocessing***, **3 (1)**, 1-11.

28. **K.K. Gupta**, D. Devi, and D. Rana (2016). Isolation and screening of low density polyethylene (LDPE) degrading bacterial strains from waste disposal sites. ***World Journal of Pharmaceutical Research***, **5 (11)**, 1633-1643.

29. **K.K. Gupta** and D. Rana (2016). Antimicrobial activity of certain bacterial isolates – a screening study. ***Biotechnology International***, **9 (3)**, 55-59.

30. **K.K. Gupta** and D. Rana (2016). Isolation and evaluation of cow dung bacteria for their antimicrobial potential. ***Biotechnology International***, **9 (2)**, 47-54.

31. Alpa, Neetu, A. Tanwar, A. Aggarwal, and **K.K. Gupta** (2012). Impact of endomycorrhizal fungi and other bioinoculants on growth enhancement of *Glycine max* (L.) Merrill. ***Journal of Applied and Natural Sciences***, **4 (1)**, 111-116.

32. A. Aggarwal, N. Kadian, Karishma, Neetu, A. Tanwar, and **K.K. Gupta** (2012). Arbuscular mycorrhizal symbiosis and alleviation of salinity stress. ***Journal of Applied and Natural Sciences***, **4 (1)**, 144-155.

33. B. Siddhardha, Ramakrishna G., V. Anil Kumar, **K.K. Gupta**, R.C. Dubey, and Basaveswara Rao M.V. (2012). *In vitro* antimicrobial and larvicidal spectrum of certain bioactive fungal extracts. ***International Journal of Research in Pharmaceutical and Biomedical Sciences***, **3 (1)**, 152-155.

34. **K.K. Gupta**, K.R. Aneja, and G. Khandelwal (2011). Evaluation of antifungal potency of certain Indian drug plants *in vitro*. ***Advances in Plant Sciences***, **24 (2)**, 669-674.

35. A. Aggarwal, N. Kadian, A. Tanwar, A. Yadav, and **K.K. Gupta** (2011). Role of arbuscular mycorrhizal fungi (AMF) in global sustainable development. ***Journal of Applied and Natural Sciences***, **3 (2)**, 340-351.

36. **K.K. Gupta**, G. Khandelwal, G. Prasad, A.K. Chopra, and A. Mishra (2010) A review on scientific technologies in practice to innovate plant based molecules and to improve herbal drug quality to overcome health problems. ***Journal of Applied and Natural Sciences***, **2 (1)**, 165-181.

37. R.C. Dubey, **K.K. Gupta,** and R.R. Pandey (2010). Antimicrobial properties of essential oils and their potential applications in pharmaceutical industries. **In:** *Industrial Exploitation of Microorganisms*, **Eds:** D.K. Maheshwari, R.C. Dubey & R. Saravanamuthu. **I.K. International Publishing House Pvt. Ltd.**, New Delhi. pp 406-429.

❖ RESEARCH GUIDANCE AS PH.D. SUPERVISOR

As a mentor providing expert advice on the selection, planning, and design of an original and appropriate research work to support the student's long-term development as a scholar and researcher.

S. No.	Student's Name	Registration Number	Title of the Ph.D. Thesis	Research Papers Published	Status
1.	Deepanshu Rana	14002	Antimicrobial Potential of Bacteria from Cow Dung	2	Awarded
2.	Deepa Devi	15029	Screening and Characterization of Low Density Polyethylene Degrading Biofilm Forming Bacteria from Waste Disposal Sites	5	Awarded
3.	Kamal Kant Sharma	19527002	Biodegradation of High Density Polyethylene (HDPE) by using Biofilm Forming Bacteria Isolated from Cow Dung	4	Awarded
4.	Deepa Malik	21527002	Bioprospecting Bioactive Metabolite from Certain Bacteria Associated with Sediments of River Ganga in Haridwar	2	Awarded
5.	Himalaya Panwar	21527003	Investigation on Metal Tolerant Bacterial Strains derived From Cow Feces in the Remediation of Copper (Cu), Chromium (Cr), and Zinc (Zn)	2	Pursuing
6.	Swati Rani	22527003	Biodegradation of	1	Pursuing

Polypropylene Films through Applications of Indigenous Bacterial Strains Isolated from the Soil Associated with Degraded Plastic of a Waste Dump Site in Rishikesh

❖ CONFERENCES/SEMINARS/ORIENTATION/REFRESHER/FDP/FIP

1. Participated in UGC Sponsored **Inter Disciplinary Refresher Course** on **Life Science** (Off-line) from December 10 to December 23, 2024, organised by Malviya Mission Teacher Training Centre (MMTTC), Punjabi University, Patiala (Punjab).

2. Participated as **Organizing Secretary** in the Two days Hands on training on **"Immunological Techniques in Disease Diagnosis"** from September 26 to 27, 2024, organised by the Department of Botany and Microbiology, Gurukula Kangri (Deemed to be University), Haridwar (Uttarakhand).

3. Participated in UGC Sponsored **Refresher Course** on **Life Sciences** (On-line) held at Human Resource Development Centre, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur (Uttar Pradesh) from July 23, 2022 to August 05, 2022.

4. Participated in One Month Mandatory **Faculty Induction Programme** from November 05 to December 04, 2019, organised by Teaching Learning Centre, **Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha** under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching Scheme, **Ministry of Human Resource Development (MHRD)**, Govt. of India.

5. Participated as **Organizing Secretary** in the Two Days Webinar on **"Tackling Covid-19 Through Traditional Ways"** from June 19 to 20, 2019, organised by the Department of Botany and Microbiology, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand).

6. Participated as **Co-Coordinator** in the National Seminar on **"Innovative Approaches in Microbial Technology"** (IAMT-2019) from March 08 to 09, 2019, held at the Department of Botany and Microbiology Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand).

7. Participated in the National Workshop on **"Research Methodology in Sciences and Technology"** (Multi-Disciplinary) from October 04 to October 13, 2018, Organized by the Department of Zoology and Environmental Science, Gurukul Kangri Vishwavidyalaya, Haridwar (Uttarakhand), Sponsored by UCOST Dehradun.

8. Participated as **Joint Organizing Secretary** in a National Conference on **"Microbial Inoculants for Agriculture and Environmental Sustainability"** (MAES-2018) held at the Department of Botany and Microbiology, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) from September 28 to 30, 2018.

9. Participated as **Co-Coordinator** in the workshop on **"Hands on Training on Molecular and Microbiological Techniques"** held at the Department of Botany and Microbiology, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) from March 9 to 10, 2018.

10. Participated in **Refresher Course** on **Research Methodology in Sciences (Inter-Disciplinary)** held at UGC-Academic Staff College, Kurukshetra University, Kurukshetra (Haryana) from June 11 to July 01, 2014.

11. Participated in **"Workshop on Advanced Microbiological Techniques in Pharmaceutical Industries"** held at the Department of Botany and Microbiology, Gurukula Kangri University, Haridwar on October 06, 2013.

12. Participated in **Orientation Course** from July 26 to August 22, 2012, being organized by the UGC-Academic Staff College, Kurukshetra University, Kurukshetra (Haryana).

13. Participated as **Joint – Organizing Secretary** in the International Conference - World Congress for Man and Nature focusing on "Global Climate Change and Biodiversity Conservation" (WCMANU-2011) from 11/11/2011 to 13/11/2011, organized by the Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar (Uttarakhand).

❖ LIFE MEMBERSHIPS

1. The Indian Science Congress Association – Haridwar Chapter (0565)
2. Association of Microbiologists of India (3936-2014).
3. Indian Science Congress Association (L26144).
4. Mycological Society of India (LM-31-14).
5. Society of Natural and Applied Science Foundation.

Date : ……..
Place : Haridwar **(Dr. Kartikey Kumar Gupta)**