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)
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❖ 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. S. Rani, H. Panwar, and **K.K. Gupta** (2026). Bioprospecting of waste dump site reveals degradation potential among *Bacillus cereus* KRS102 and *Bacillus tropicus* KRS236 against UV-treated polypropylene. ***Biodegradation***, **37**, 86. **DOI:** https://doi.org/10.1007/s10532-026-10311-z

2. 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.

3. 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

4. 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.

5. 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

6. 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

7. 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.

8. 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

9. 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

10. 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.

11. 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.

12. 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.

13. 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.

14. **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.

15. **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.

16. **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.

17. **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.

18. 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.

19. **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.

20. **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.

21. 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.

22. **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.

23. **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.

24. **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.

25. **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.

26. **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.

27. **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.

28. **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.

29. **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.

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

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

32. 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.

33. 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.

34. 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.

35. **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.

36. 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.

37. **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.

38. 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	2	**Pursuing**

			derived From Cow Feces in the Remediation of Copper (Cu), Chromium (Cr), and Zinc (Zn)		
6.	Swati Rani	22527003	Biodegradation of Polypropylene Films through Applications of Indigenous Bacterial Strains Isolated from the Soil Associated with Degraded Plastic of a Waste Dump Site in Rishikesh	2	**Pursuing**

❖ 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)**