

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. S. Rani, H. Panwar, D. Malik, and **K.K. Gupta** (2025). Plastic-contaminated soil inherent novel strain *Microbacterium hydrocarbonoxydans* KRS13 demonstrates significant applicability toward biofilms formation and degradation of polypropylene. ***Preparative Biochemistry & Biotechnology***, 1-18. **DOI:** <https://doi.org/10.1080/10826068.2025.2543283>
2. 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>
3. 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
4. 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.
5. 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>
6. 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***. **DOI:** <https://doi.org/10.1007/s12088-024-01406-3>
7. 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.

8. 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.
9. 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.
10. 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.
11. **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.
12. **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.
13. **K.K. Gupta**, K.K. Sharma, H. Chandra, H. Panwar, N. Bhardwaj, N.A. Altwaijry, A.A. Alsouk, 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.
14. **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.
15. 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.
16. **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.
17. **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.
18. 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.
19. **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.
20. **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.

21. **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.
22. **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.
23. **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.
24. **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.
25. **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.
26. **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.
27. **K.K. Gupta** and D. Rana (2016). Antimicrobial activity of certain bacterial isolates – a screening study. *Biotechnology International*, **9** (3), 55-59.
28. **K.K. Gupta** and D. Rana (2016). Isolation and evaluation of cow dung bacteria for their antimicrobial potential. *Biotechnology International*, **9** (2), 47-54.
29. 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.
30. 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.
31. 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.
32. **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.
33. 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.
34. **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.

35. 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	Submitted
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)	1	Pursuing
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	1	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)