

CURRICULUM-VITAE

Dr. Rajat Pratap Singh, M.Sc., Ph. D.

Assistant Professor

Department of Biotechnology

Guru Ghasidas Vishwavidyalaya (A Central University)

Koni, Bilaspur - 495009 (C.G.), India

Contact No: +91-9919481090

E-mail: rajat2330@gmail.com

rajatp.singh@ggu.ac.in

ORCID: 0000-0002-5412-1073

Scopus: 56241218500

Vidwan: 518641

Google scholar: 20Iq6VcAAAAJ



Career objective

To attain challenging task responsibility in a growing organization that will provide me with learning opportunities and enable me to leverage my potentials the best, thereby making significant to organization. I work for and to the society at large.

Present Status

Working as Assistant Professor in Department of Biotechnology, Guru Ghasidas Vishwavidyalaya (A Central University), Koni, Bilaspur - 495009 (C.G.), India

Teaching / Research Experience

Teaching experience

- From August 09, 2019 to till date as Assistant Professor in Department of Biotechnology, Guru Ghasidas Vishwavidyalaya (A Central University), Koni, Bilaspur - 495009 (C.G.), India
- From December 28, 2008 (Session 2008-09) to July 31, 2019 (Session 2018-19) as Guest Faculty in Department of Biotechnology, Dr. Rammanohar Lohia Avadh University, Ayodhya, (U.P.).

Research experience

- June 11, 2010 to September 11, 2015 as Research Scholar (Ph. D.) on topic entitled "Studies on Microbial Decolorization of Textile Effluents" at Department of Biochemistry, Dr. Rammanohar Lohia Avadh University, Ayodhya, (U.P.).
- September 07, 2005 to March 24, 2008 as Junior Research Fellow (JRF) in a DBT sponsored project entitled "Development of Sustainable management strategies for the control of *Parthenium* weed using Biotechnological approaches in U.P." at National Bureau of Agriculturally Important Microorganisms (NBAIM), Kushmaur, Mau (U.P.) 275101.

Research Interest: Environmental Biotechnology, Bioremediation, Microbial Technology, Bioactive Compounds, Nanoparticles.

Academic Overview

- Ph. D. (Biochemistry) from Dr. Rammanohar Lohia Avadh University, Ayodhya.
- M.Sc. (Biochemistry) from Dr. Rammanohar Lohia Avadh University, Ayodhya.
- B.Sc. from Deendayal Upadhyay Gorakhpur University, Gorakhpur.
- Intermediate from UP Board, Allahabad.
- High School from UP Board, Allahabad.

Professional Recognition/ Awards/ Fellowships

- CSIR-UGC-NET December - 2013 (Life Sciences) (All India Rank: 50)
- ICAR-ASRB-NET-2010 (Basic Plant Science)
- GATE-2008 (Life Sciences) (97.46 Percentile)
- GATE-2005 (Life Sciences) (86.01 Percentile)
- CET-Ph. D. – 2012

Publications: 43

Research Papers: 20

1. Singh D, Gupta D, Tiwari A, Naik J, Quraishi F, **Singh RP***, Singh SK, Singh AK (2025). *Schleichera oleosa* (Kusum) leaf extract mediated green synthesis of bimetallic Ag-Fe nanoparticles: *in-vitro* evaluation of antimicrobial and antioxidant activities. *Discov Appl Sci*, 7, 957. (DOI: <https://doi.org/10.1007/s42452-025-07211-x>) [ISSN: 3004-9261 (Online)]. **(SCOPUS Indexed)**
2. Gupta D, Singh D, Koranne A, Singh C, Singh SK, **Singh RP**, Singh AK (2025). Chromic Schiff Bases: Transformative Stimuli-Responsive Systems for Next-Generation Soft Materials *Mater. Adv.*, (DOI: 10.1039/D5MA00109A) [ISSN: 2633-5409 (Online)] **(Impact Factor: 4.7) (SCOPUS Indexed)**
3. Singh P, Mishra A, **Singh RP**, Tripathi PK, Tripathi M (2025). Nanoformulation-based medicines for the treatment of reactive oxygen species-induced diseases: A review. *Nanofabrication*, 10. (DOI: <https://doi.org/10.37819/nanofab.10.2055>) [ISSN: 2299-680X (Online)]. **(SCOPUS Indexed)**
4. Kusumlata, **Singh RP**, Ambade B, Kumar A (2024). Biodecolorization and degradation of textile wastewater and RR120 dye using *Acinetobacter baumannii* bacteria isolated from textile industry. *African Journal of Biological Sciences*, 6(14): 12672 – 12689. (DOI: 10.48047/AFJBS.6.14.2024.12671-12689) [ISSN: 2663-2187 (Online)]. **(SCOPUS Indexed)**
5. Kusumlata, **Singh RP**, Kumar A (2024). Biodecolorization of Azo Dye by Bacteria *Alcaligenes faecalis* Sub Sp. *Phenolicus* Isolated from a Bark-Beetle Tunnel Developed in *Peltophorum Pterocarpum* Plant. *Current World Environment*, 19(2): 824-840. (Doi: <https://dx.doi.org/10.12944/CWE.19.2.25>) [ISSN: 2320-8031 (Online), 0973-4929 (Print)]. **(UGC-CARE Listed)**
8. Singh D, Tiwari A, **Singh RP***, Singh AK (2024). Clove bud extract mediated green synthesis of bimetallic Ag-Fe nanoparticles: Antimicrobial, antioxidant and dye adsorption behavior and mechanistic insights of metal ion reduction. *Materials Chemistry and Physics*, 311: 128529. (DOI: 10.1016/j.matchemphys.2023.128529)

- [ISSN: 1879-3312 (Online), 0254-0584 (Print)] (**Impact Factor: 4.6**) (**Google Scholar Citation: 13**). (**SCOPUS Indexed**)
9. Singh P, Pandey P, Singh PK, Tripathi M, **Singh RP**, Shukla S, Pathak N, Singh RL (2023). A comprehensive review on phytochemistry, nutritional and pharmacological properties of *Momordica charantia*. IP International Journal of Comprehensive and Advanced Pharmacology, 8(2): 73–79. (<https://doi.org/10.18231/j.ijcaap.2023.013>) [ISSN: 2456-9542 (Online), 2581-5555 (Print)]. (**Google Scholar Citation: 05**).
 10. Pathak N, Singh P, Singh PK, Sharma S, **Singh RP**, Gupta A, Mishra R, Mishra VK, Tripathi M (2022). Biopolymeric Nanoparticles based Effective Delivery of Bioactive Compounds towards the Sustainable Development of Anticancerous Therapeutics. Frontiers in Nutrition Sec. Nutrition and Food Science Technology, 9: 963413. (DOI: 10.3389/fnut.2022.963413) [ISSN: 2296-861X (Online)] (**Impact Factor: 5.1**) (**Google Scholar Citation: 38**). (**SCOPUS Indexed**)
 11. Mehta A, Kumar Ratre Y, Sharma K, Soni VK, Tiwari AK, **Singh RP**, Dwivedi MK, Chandra V, Prajapati SK, Shukla D, Vishvakarma NK (2021). Interplay of Nutrition and Psychoneuroendocrineimmune Modulation: Relevance for COVID-19 in BRICS Nations. Frontiers in Microbiology Sec. Virology, 12: 769884. (DOI: 10.3389/fmicb.2021.769884) [ISSN: 1664-302X (Online)] (**Impact Factor: 4.5**) (**Google Scholar Citation: 10**). (**SCOPUS Indexed**)
 12. Singh PK, **Singh RP**, Singh P, Singh RL (2021). Efficient decolorization of dye Acid Blue 113 by Soil Bacterium *Bacillus subtilis* RMLP2. Toxicology International, 28(3): 269-280. (DOI: 10.18311/ti/2021/v28i3/27736) [ISSN: 0976-5131 (Online), 0971-6580 (Print),] (**Google Scholar Citation: 04**) (**Google Scholar Citation: 04**). (**SCOPUS Indexed**)
 13. Singh PK, Singh P, **Singh RP**, Singh RL (2021). Biodecolorization of Azo Dye Acid Blue 113 by Soil Bacterium *Klebsiella variicola* RMLP1. Journal of Ecophysiology and Occupational Health, 21(2): 64-71. (DOI: 10.18311/jeoh/2021/27108) [ISSN: 0974-0805 (Online), 0972-4397 (Print)] (**Google Scholar Citation: 07**). (**SCOPUS Indexed**)
 14. Soni VK, Mehta A, Ratre YK, Tiwari AK, Amit A, **Singh RP**, Sonkar SC, Chaturvedi N, Shukla D, Vishvakarma NK (2020). Curcumin, a traditional spice component, can hold the promise against COVID-19? European Journal of Pharmacology, 886, 173551. (DOI: 10.1016/j.ejphar.2020.173551) [ISSN: 1879-0712 (Online), 0014-2999 (Print)] (**Impact Factor: 4.7**) (**Google Scholar Citation: 125**). (**SCOPUS Indexed**)
 15. **Singh RP**, Singh PK, Singh RL (2017). Role of Azoreductases in Bacterial Decolorization of Azo Dyes. Current Trends in Biomedical Engineering & Biosciences, 9(3): 555764. (DOI: 10.19080/CTBEB.2017.09.555764) [ISSN: 2572-1151] (**Google Scholar Citation: 21**).
 16. **Singh RP**, Singh PK, Singh RL (2017). Present Status of Biodegradation of Textile Dyes. Current Trends in Biomedical Engineering & Biosciences, 3(4): 555618. (DOI:

10.19080/CTBEB.2017.03.555618) [ISSN: 2572-1151] (**Google Scholar Citation:** 22).

17. Tripathi VK, Kumar V, Pandey A, Vatsa P, Dhasmana A, **Singh RP**, Appikonda SHC, Hwang I, Lohani M (2017). Monocrotophos induces the expression of xenobiotic metabolizing cytochrome P450s (CYP2C8 and CYP3A4) and neurotoxicity in human brain cells. *Molecular Neurobiology*, 54(5): 3633-3651. (DOI: 10.1007/s12035-016-9938-7) [ISSN: 1559-1182 (Online), 0893-7648 (Print)] (**Impact Factor:** 4.8) (**Google Scholar Citation:** 33). (**SCOPUS Indexed**)
18. Singh RL, Singh PK, **Singh RP** (2015). Enzymatic Decolorization and Degradation of Azo Dyes – A Review. *International Biodeterioration & Biodegradation*, 104: 21-31. (DOI: 10.1016/j.ibiod.2015.04.027) [ISSN: 1879-0208 (Online), 0964-8305 (Print)] (**Impact Factor:** 4.1) (**Google Scholar Citation:** 710). (**SCOPUS Indexed**)
19. **Singh RP**, Singh PK, Singh RL (2014). Bacterial decolorization of textile azo dye Acid Orange by *Staphylococcus hominis* RMLRT03. *Toxicology International*, 21(2): 160-166. (DOI: 10.4103/0971-6580.139797) [ISSN: 0976-5131 (Online), 0971-6580 (Print)] (**Google Scholar Citation:** 202). (**SCOPUS Indexed**)
20. Jyotsana, Srivastava A, **Singh RP**, Srivastava AK, Saxena AK, Arora DK (2008). Growth Promotion and Charcoal Rot Management in Chickpea by *Trichoderma harzianum*. *Journal of Plant Protection Research*, 48(1): 557-568. (DOI: 10.2478/v10045-008-0009-6) [ISSN: 1899-007X (Online), 1427-4345 (Print)] (**Google Scholar Citation:** 34). (**SCOPUS Indexed**)

Books: 02

21. Singh RL, Singh PK, **Singh RP** (2019). Recent Advances in Decolorization and Degradation of Dyes in Textile Effluent by Biological Approaches, CRC Press (Taylor & Francis Group), Boca Raton, London, New York, p. 88. (DOI: <https://doi.org/10.1201/9780429244322>) [ISBN: 9780429244322 (ebk)] (**Google Scholar Citation:** 04).
22. Singh RL, **Singh RP** (eds.) (2019). Advances in Biological Treatment of Industrial Waste Water and their Recycling for a Sustainable Future, Springer Nature, Singapore, p. 361. (DOI: <https://doi.org/10.1007/978-981-13-1468-1>) [ISBN: 978-981-13-1467-4 (hbk), 978-981-13-1468-1 (ebk)] (**Google Scholar Citation:** 68).

Book Chapters: 21

23. Kusumlata, Singh RP* (2025). Electronic Wastes, Its Sources, Types, Composition, and Toxicity. In: Goswami S, Choudhury M, Agarwal S (eds). *Electronic Waste: Impact on Health, Animals, and the Environment*. CRC Press, Boca Raton. pp. 25 – 30. [ISBN: 978-1-032-94905-5 (hbk), 978-1-032-94906-2 (pbk), ISBN: 978-1-003-58231-1 (ebk)]
24. Tiwari A, Gayakwad K, Singh D, Vishvakarma NK, Shukla D, Jha H, **Singh RP*** (2025). Oleaginous Microbial Regimes Toward Utilization of Waste Biomass for Value-Added Products. In: Ghosh D, Bhatia L. (eds). *Oleaginous Microbes for Waste*

- Biomass Valorization, Apple Academic Press, Inc. Co-published with CRC Press (Taylor & Francis). pp. 1-30. [ISBN: 9781774918029 (hbk); 9781003538790 (ebk)]
25. Sarkar T, **Singh RP**, Jha H (2025). Oleaginous Microbes for Industrial Waste Degradation. In: Ghosh D, Bhatia L. (eds). Oleaginous Microbes for Waste Biomass Valorization, Apple Academic Press, Inc. Co-published with CRC Press (Taylor & Francis). pp. 61-86. [ISBN: 9781774918029 (hbk); 9781003538790 (ebk)]
26. Tiwari A, Singh D, Kumar D, Chandra V, Vishvakarma NK, Shukla D, Jha H, **Singh RP*** (2024). Outbreak of Deadly Coronavirus (COVID-19) Pandemic: Diagnosis and Management. In: Singh RL, Singh P, Pathak N. (eds). Clinical Applications of Biomolecules in Disease Diagnosis. Springer, Singapore. pp. 389-420. (DOI: https://doi.org/10.1007/978-981-97-4723-8_15) [ISBN: 978-981-97-4722-1 (hbk), 978-981-97-4723-8 (ebk)]
27. Singh PK, Singh P, **Singh RP**, Singh RL. (2022). Transgenesis in Plants: Principle and Methods. In: Singh RL, Mondal S, Parihar A, Singh PK. (eds). Plant Genomics for Sustainable Agriculture. Springer Nature, Singapore. pp. 41–70. (DOI: https://doi.org/10.1007/978-981-16-6974-3_3) [ISBN: 978-981-16-6973-6 (hbk), 978-981-16-6974-3 (ebk)] (**Google Scholar Citation:** 04).
28. Soni VK, Amit A, Chandra V, Singh P, Singh PK, Singh RP, Patel GK, **Singh RP*** (2022). Role of food additives and intestinal microflora in colorectal cancer. In: Shukla D., Vishvakarma NK., Nagaraju G.P. (eds) Colon Cancer Diagnosis and Therapy Vol. 3. Springer, Cham. pp. 307-324. (DOI: https://doi.org/10.1007/978-3-030-72702-4_14) [ISBN: 978-3-030-72701-7 (hbk), 978-3-030-72702-4 (ebk)]. (**Google Scholar Citation:** 04)
29. Chandra V, Tiwari A, **Singh RP**, Desai KV (2022) Therapeutic Intervention of Signaling Pathways in Colorectal Cancer. In: Shukla D., Vishvakarma NK., Nagaraju GP. (eds). Colon Cancer Diagnosis and Therapy Vol. 3. Springer, Cham. pp. 143-171. (DOI: https://doi.org/10.1007/978-3-030-72702-4_8) [ISBN: 978-3-030-72701-7 (hbk), 978-3-030-72702-4 (ebk)] (**Google Scholar Citation:** 01).
30. Amit A, Yadav S, **Singh RP**, Kumar C (2022) Development of RNA-Based Medicine for Colorectal Cancer: Current Scenario. In: Shukla D., Vishvakarma N.K., Nagaraju G.P. (eds). Colon Cancer Diagnosis and Therapy Vol. 3. Springer, Cham. pp 339-360. (DOI: https://doi.org/10.1007/978-3-030-72702-4_16) [ISBN: 978-3-030-72701-7 (hbk), 978-3-030-72702-4 (ebk)] (**Google Scholar Citation:** 01).
31. Soni VK, Mehta A, Ratre YK, Kumar C, **Singh RP**, Srivastava AK, Chaturvedi N, Shukla D, Pandey SK, Vishvakarma NK (2022) Antineoplastic Effects of Curcumin Against Colorectal Cancer: Application and Mechanisms. In: Shukla D., Vishvakarma N.K., Nagaraju G.P. (eds). Colon Cancer Diagnosis and Therapy Vol. 3. Springer, Cham. pp. 383-426. (DOI: https://doi.org/10.1007/978-3-030-72702-4_18) [ISBN: 978-3-030-72701-7 (hbk), 978-3-030-72702-4 (ebk)]. (**Google Scholar Citation:** 02).

32. Mehta A, Soni VK, Ratre YK, **Singh RP**, Shukla D, Vishvakarma NK, Rai RK, Chaturvedi N (2021). Short-Chain Fatty Acids as Therapeutic Agents in Colon Malignancies. In: Nagaraju, G.P., Shukla, D., Vishvakarma, N.K. (eds) Colon Cancer Diagnosis and Therapy Vol. 1. Springer, Cham, pp. 195-218. (DOI: https://doi.org/10.1007/978-3-030-63369-1_10) [ISBN: 978-3-030-63368-4 (hbk), 978-3-030-63369-1 (ebk)] (**Google Scholar Citation: 01**).
33. Kumar C, **Singh RP**, Dwiwedi MK, Amit A (2021). Immuno-modulating Mediators of Colon Cancer as Immuno-therapeutic: Mechanism and Potential In: Nagaraju GP, Shukla D, Vishvakarma NK. (eds) Colon Cancer Diagnosis and Therapy Vol. 1. Springer, Cham, pp. 271-308. (DOI: https://doi.org/10.1007/978-3-030-63369-1_14) [ISBN: 978-3-030-63368-4 (hbk), 978-3-030-63369-1 (ebk)].
34. Singh PK, Singh P, **Singh RP**, Singh RL (2021). From gene to genomics: tools for improvement of animals, In: Singh RL, Mondal S. (eds), Advances in Animal Genomics. Elsevier (Woodhead Publishing), USA, pp. 13-32. (DOI: <https://doi.org/10.1016/B978-0-12-820595-2.00002-3>) [ISBN: 9780128205952 (hbk), 9780128206126 (ebk)] (**Google Scholar Citation: 08**).
35. Singh PK, **Singh RP**, Singh P, Singh RL (2019). Food Hazards: Physical, Chemical and Biological, In: Singh RL, Mondal S. (eds), Food Safety and Human Health. Elsevier (Woodhead Publishing), USA, pp. 15-65. (DOI: <https://doi.org/10.1016/B978-0-12-816333-7.00002-3>) [ISBN: 9780128163337 (hbk), 9780128163344 (ebk)] (**Google Scholar Citation: 94**).
36. Gupta R, Gupta A, **Singh RP**, Singh PK, Singh RL (2019). Food Allergies, In: Singh RL, Mondal S. (eds), Food Safety and Human Health. Elsevier (Woodhead Publishing), USA, pp. 99-125. (DOI: <https://doi.org/10.1016/B978-0-12-816333-7.00004-7>) [ISBN: 9780128163337 (hbk), 9780128163344 (ebk)] (**Google Scholar Citation: 02**).
37. Singh RL, **Singh RP** (2019). Introduction, In: Singh RL, Singh RP. (eds), Advances in Biological Treatment of Industrial Waste Water and their Recycling for a Sustainable Future. Springer Nature, Singapore, pp. 1-11. (DOI: https://doi.org/10.1007/978-981-13-1468-1_1) [ISBN: 978-981-13-1467-4 (hbk), 978-981-13-1468-1 (ebk)] (**Google Scholar Citation: 06**).
38. **Singh RP**, Singh PK, Gupta R, Singh RL (2019). Treatment and recycling of wastewater from textile industry, In: Singh RL, Singh RP. (eds), Advances in Biological Treatment of Industrial Waste Water and their Recycling for a Sustainable Future. Springer Nature, Singapore, pp. 225-266. (DOI: https://doi.org/10.1007/978-981-13-1468-1_8) [ISBN: 978-981-13-1467-4 (hbk), 978-981-13-1468-1 (ebk)]. (**Google Scholar Citation: 96**).
39. Singh PK, Tripathi M, **Singh RP**, Singh P (2019). Treatment and recycling of wastewater from sugar mill, In: Singh RL, Singh RP. (eds), Advances in Biological Treatment of Industrial Waste Water and their Recycling for a Sustainable Future. Springer Nature, Singapore, pp. 199-224 (DOI: <https://doi.org/10.1007/978-981-13->

1468-1_7) [ISBN: 978-981-13-1467-4 (hbk), 978-981-13-1468-1 (ebk)] (**Google Scholar Citation: 15**).

40. Singh RP, Singh PK, Gupta R, Singh RL (2018). Biotechnological Tools to Enhance Sustainable Production, In: Singh RL, Mondal S. (eds), *Biotechnology for Sustainable Agriculture*. Elsevier (Woodhead Publishing), USA, pp. 19-66. (DOI: <http://dx.doi.org/10.1016/B978-0-12-812160-3.00002-7>) [ISBN: 9780128121603 (hbk), 9780128122389 (ebk)] (**Google Scholar Citation: 23**).
41. Umesha S, Singh PK, Singh RP (2018). Microbial biotechnology and sustainable agriculture, In: Singh RL, Mondal S. (eds), *Biotechnology for Sustainable Agriculture*. Elsevier (Woodhead Publishing), USA, pp. 185-205. (DOI: <http://dx.doi.org/10.1016/B978-0-12-812160-3.00006-4>) [ISBN: 9780128121603 (hbk), 9780128122389 (ebk)] (**Google Scholar Citation: 198**).
42. Sharma VP, Singh RL, Singh RP (2017). Degradable Polymers and Plastics of the Future: Steps Toward Environmental Sustainability, Regulations, and Safety Aspects, In: Singh RL. (ed), *Principles and Applications of Environmental Biotechnology for a Sustainable Future*. Springer, Singapore, pp. 267-287. (DOI: https://doi.org/10.1007/978-981-10-1866-4_15) [ISBN: 978-981-10-1865-7 (hbk), 978-981-10-1866-4 (ebk)] (**Google Scholar Citation: 09**).
43. Singh RL, Gupta R, Singh RP (2015). Microbial Degradation of Textile Dyes for Environmental Safety, In: Chandra R. (ed), *Advances in Biodegradation and Bioremediation of Industrial Waste*. CRC Press, Taylor & Francis Group, Boca Raton, pp. 249-285. (DOI: <https://doi.org/10.1201/b18218-14>) [ISBN: 978-1-4987-0054-2 (hbk), 978-1-4987-0055-9 (ebk)] (**Google Scholar Citation: 10**).

NCBI GenBank Accession numbers: 11

1. Tiwari A and Singh RP (2025). *Bacillus cereus* strain ASRI03B 16S ribosomal RNA gene, partial sequence (600 bp) [NCBI GenBank Accession Number: PV707048].
2. Tiwari A and Singh RP (2025). *Symbiopectobacterium purcellii* strain ASSI05B 16S ribosomal RNA gene, partial sequence (716 bp) [NCBI GenBank Accession Number: PV707049].
3. Tiwari A and Singh RP (2025). *Streptomyces albogriseolus* strain BALI02A 16S ribosomal RNA gene, partial sequence (708 bp) [NCBI GenBank Accession Number: PV707050].
4. Tiwari A and Singh RP (2025). *Streptomyces griseorubens* strain BALI04A 16S ribosomal RNA gene, partial sequence (703 bp) [NCBI GenBank Accession Number: PV707051].
5. Tiwari A and Singh RP (2025). *Bacillus licheniformis* strain PPLI02A 16S ribosomal RNA gene, partial sequence (698 bp) [NCBI GenBank Accession Number: PV707052].

6. Tiwari A and **Singh RP** (2025). *Streptomyces cellulosa* strain PPRD04A 16S ribosomal RNA gene, partial sequence (697 bp) [NCBI GenBank Accession Number: PV707053].
7. **Singh RP** and Singh RL (2013). *Bacillus amyloliquifaciens* strain RMLRK06 16S ribosomal RNA gene, partial sequence (1455 bp) [NCBI GenBank Accession Number: KF900121].
8. **Singh RP** and Singh RL (2013). *Staphylococcus haemolyticus* strain RMLRT05 16S ribosomal RNA gene, partial sequence (975 bp) [NCBI GenBank Accession Number: KF900122].
9. **Singh RP** and Singh RL (2013). *Staphylococcus hominis* strain RMLRT03 16S ribosomal RNA gene, partial sequence (966 bp) [NCBI GenBank Accession Number: KF900123].
10. **Singh RP** and Singh RL (2014). *Bacillus subtilis* strain RMLRT01 16S ribosomal RNA gene, partial sequence (819 bp) [NCBI GenBank Accession Number: KJ809112].
11. **Singh RP** and Singh RL (2014). *Sphingomonas* sp. RMLRK04 16S ribosomal RNA gene, partial sequence (1200 bp) [NCBI GenBank Accession Number: KJ809113].

Invited Lectures: 06

1. Resource person and deliver a talk on “Molecular Techniques for Qualitative and Quantitative Estimation of Nucleic Acid” in National Workshop on National Workshop on Molecular Diagnostics – Advances & Applications (MDAA 2022) organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, (03-09 November, 2022) Supported by: DST-SERB; DRDO & Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
2. Resource person and deliver a talk on “Bioinformatics tools for microbial diversity analysis” in the Five Days Online National Workshop on Practical Approaches of Bioinformatics: Basics to Advanced (PABA-2023) organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh from 16th to 20th March, 2023.
3. Resource person and deliver a talk on “Animal Cell Culture Media: Composition and Constitution” in the National Workshop on Animal Cell Culture: Techniques and Applications-2022 [ACCTA-2022] 16-22 Feb, 2022 organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Supported by: DST-SERB; & Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
4. Deliver a lecture on topic “Importance of microorganisms in biotechnology and their benefits in human life”. In: “Mohini Devi Memorial Science Seminar” (December 28, 2018) organized by Jhunjhunwala P. G. College, Dwarikapuri, Ayodhya (U. P.).
5. Deliver a lecture on topic “Applications of Biotechnology in Welfare of Society”. In: Dr. Lohiya Memorial Seminar on “Advance Trends in Sciences” (February 03, 2017) organized by Dr. Lohia Mahila P. G. College, Kuchera, Ayodhya (U. P.).

6. Deliver a lecture on topic “Global Environmental Problems”. In: Seminar on “Impact of Climate Change on Biodiversity & Ecosystem” (February 17, 2016) organized by Jhunjhunwala P. G. College, Dwarikapuri, Ayodhya (U. P.).
7. Deliver a lecture on topic “Emerging Trends in Life Sciences”. In: Mohini Devi Memorial Seminar on “Emerging Trends in Life Sciences” (January 31, 2014) organized by Jhunjhunwala P. G. College, Dwarikapuri, Ayodhya (U. P.).

Paper presented in conference/symposia (International/National): 14

1. **Singh RP**, Singh PK and Singh RL (2018). Bacterial decolorization of textile dye Acid Black by *Staphylococcus haemolyticus* RMLRT05. In: National Conference on “Roles of Modern Biological Sciences for Enhancing Farmers Economy” (November 12-13, 2018) organized by Ranveer Rananjay PG College, Amethi (UP), India.
2. Singh PK, **Singh RP** and Singh RL (2018). Isolation, Screening and Optimization of bacterial culture BT-8 for decolorization of Direct Blue 71 textile azo dye. In: National Conference on “Roles of Modern Biological Sciences for Enhancing Farmers Economy” (November 12-13, 2018) organized by Ranveer Rananjay PG College, Amethi (UP), India.
3. Singh PK, **Singh RP** and Singh RL (2018). Isolation, Screening and Optimization of bacterial culture T-2 for decolorization of Acid Blue 113 textile azo dye. In: 22nd International Conference of International Academy of Physical Sciences CONIAPS XXII on “Emerging Trends in Physical Sciences” (April 13-15, 2018) organized by Faculty of Science, Dr. Ram Manohar Lohia Avadh University, Ayodhya (UP), India.
4. **Singh RP** and Singh RL (2016). Decolorization of textile dye Acid Red GR by *Staphylococcus hominis* RMLRT03. In: National Conference on “Lifestyles and Chronic Diseases: A Threat to Sustainable Public Health” (March 09-10, 2016) organized by SKY Institute, Lucknow (UP), India.
5. Singh RL and **Singh RP** (2016). Biodecolorization of textile dye Orange II by *Bacillus subtilis* strain RMLRT01. In: National Conference on “Lifestyles and Chronic Diseases: A Threat to Sustainable Public Health” (March 09-10, 2016) organized by SKY Institute, Lucknow (UP), India.
6. **Singh RP**, Singh PK and Singh RL (2015). Optimization of process parameters for decolorization of textile dye Acid Orange by *Bacillus amyloliquifaciens* RMLRK06. In: National Conference on “Biotechnological Developments and Societal Benefits: Present Status and Future Prospects” (April 08-09, 2015) organized by SKY Institute, Lucknow (UP), India.
7. Singh PK, **Singh RP** and Singh RL (2015). Isolation, Screening and Optimization of bacterial culture T-4 for decolorization of Red GR textile dye. In: National Conference on “Biotechnological Developments and Societal Benefits: Present Status and Future Prospects” (April 08-09, 2015) organized by SKY Institute, Lucknow (UP), India.
8. Singh RL and **Singh RP** (2015). Microbial Decolorization of Textile Effluents. In: National Conference on “Biotechnological Developments and Societal Benefits:

Present Status and Future Prospects” (April 08-09, 2015) organized by SKY Institute, Lucknow (UP), India.

9. **Singh RP**, Singh PK and Singh RL (2014). Bacterial decolorization of textile azo dye acid orange by *Staphylococcus hominis* RMLRT03. In: International Conference on “Environmental Technology and Sustainable Development: Challenges and Remedies” (February 21-23, 2014) organized by Department of Environmental Science, BBAU, Lucknow (UP), India.
10. Singh PK, Singh A, **Singh RP** and Singh RL (2014). Biodecolorization of Blue GN textile dye by adapted bacterial isolate T-3. In: International Conference on “Environmental Technology and Sustainable Development: Challenges and Remedies” (February 21-23, 2014) organized by Department of Environmental Science, BBAU, Lucknow (UP), India.
11. **Singh RP**, Singh PK, Gupta R and Singh RL (2013). Biodecolorization of Blue GN textile dye by adapted bacterial isolate T-6. In: XXXIII Annual Conference of Society of Toxicology (STOX), India for Synergy of Toxicology Research in SAARC Countries & National Symposia on “Toxico-genomic technologies in predictive toxicology, Alternatives to use of animals for modern toxicity testing & Phyto-remedial approaches against environmental pollutants for human and animal health” (October 23-25, 2013) organized by Department of Pharmacology & Toxicology, College of Veterinary Sciences and Animal Husbandry, UP Pt. Deen Dayal Upadhyay Pashu Chikitsa Vigyan Vishwavidyalaya evam Go Anusandhan Sansthan, Mathura (UP), India.
12. **Singh RP** and Singh RL (2012). Decolorization of textile dye Red GR by bacterial culture K-2 isolated from contaminated soil. In: XXXII Annual Conference of Society of Toxicology (STOX), India & International Symposium on “New Frontiers in Toxicology” (December 05–07, 2012) organized by CSIR-Indian Institute of Toxicology Research, Lucknow, (UP), India.
13. **Singh RP** and Singh RL (2011). Effect of Various Parameters on Decolorization of Orange II textile dye using Mixed Culture. In: XXXI Annual Conference of Society of Toxicology (STOX), India & Symposium on “Current Trends in Environmental Toxicology” (December 22–24, 2011) organized by Department of Zoology, IIS University, Jaipur, (Rajasthan), India.
14. **Singh RP**, Patel GK, Srivastava AK and Arora DK (2005). Role of fungal metabolites in control of *Parthenium* weed. In: National Seminar on “Integrated Crop and Environment Management Trends and Prospective in Developing Areas” (October 15-17, 2005) jointly organized by FIST-DST sponsored Department of Botany and Department of Biotechnology, S.M.M. Town P.G. College, Ballia (U.P.).

Conferences/ Symposia/Webinars Attended: 33

1. Webinar on “Yeast Contributions to Alzheimer’s Disease” (September 05, 2021) organised by School of Biotechnology, IFTM University, Moradabad, Uttar Pradesh, India

2. Webinar on Academic and Scientific Writing Catapulting Institutional Visibility (August 03, 2020) organised by Central Library, Manipur University in collaboration with Springer Nature.
3. Webinar on “Research Competencies and Publications” (July 31, 2020) organized by Faculty of Education, Teerthanker Mahaveer University, Delhi Road, Moradabad, Uttar Pradesh.
4. International Webinar on “Management of Water Resources and Environment” (July 07, 2020) jointly organised by Dr. Rammanohar Lohia Avadh University, Ayodhya (UP) and Indira Gandhi National Open University, Regional Centre, Lucknow.
5. Webinar on “Publishing Ethics: The role of Publishers, Journals, Researchers and Institutions” (June 25, 2020) organised by Springer Nature in collaboration with INFLIBNET Centre.
6. International Webinar on “Emerging Trends in Biotechnology: Current and Future Challenges in Biotechnology Research” (June 24 – 26, 2020) organized by the Department of Biotechnology, Pachhunga University College (PUC), and Mizoram University (MZU).
7. National Webinar “Intellectual Property Rights and Patent Filing” (June 20, 2020) organized by Govt. Digvijay PG Autonomous College, Rajnandgaon, Chhattisgarh.
8. Webinar on “The People and the Principles behind Nature- The What, The Why and The How” (June 18, 2020) organised by Springer Nature in collaboration with INFLIBNET Centre.
9. Webinar on “Mending the Broken Heart: Evolution of Novel Therapeutic Approach” (June 18, 2020) organized by the School of Life Sciences, Mizoram University, Aizawl, India.
10. National Webinar on “COVID-19: Environment and Society” (June 15, 2020) organized by Ranveer Rananjay PG College, Amethi (UP), India.
11. Webinar on “Need and Challenges of Online teaching and learning in Indian context” (June 13-14, 2020) organized by Maharaja Surajmal Teachers Training College, Pakka Bagh, Bharatpur, Rajasthan.
12. Webinar on “Game Theory: Applications in Biology and in A Pandemic (Part-1)” (June 11, 2020) jointly organized by MANAV Human Atlas Initiative; National Centre for Cell Science (NCCS), Pune; Indian Institute of Science and Education Research (IISER), Pune and Persistent Labs, Pune.
13. Webinar on “Read Quality-Publish Quality-Write Effectively” (June 11, 2020) organized Mahatma Gandhi Central University, Motihari, Bihar.
14. International Webinar "Futuristic approach towards the mental and physical health of students during covid-19" (June 10, 2020) organised by Government Degree College, Kuchlai, Sitapur (UP).

15. International Webinar on “Pandemic Era of Covid-19: Where we stand? Where to go?” (June 09-10, 2020) organized by Department of Zoology, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur.
16. Webinar on “Effect of COVID-19 on Human Life & Environment” (June 08, 2020) organized by SR Institution of Management & Technology (SRIMT), Lucknow (UP).
17. National Webinar on “Impact of Covid-19 Pandemic on Health & Education” (June 08, 2020) jointly Organized by Department of Endocrine Surgery, KGMU, Lucknow; H. N. B. U. Medical Education University, Dehradun; Department of Public Administration, LU, Lucknow; Department of Hospital Administration, SGPGI, Lucknow; Kamla Nehru Institute of Physical & Social Sciences, Sultanpur; Association of Research Professional.
18. National Webinar on “Environmental Impacts of Corona Viruses: Crisis, Challenges ahead” (June 05, 2020) organized by Jhunjhunwala P. G. College, Dwarikapuri, Ayodhya (U. P.).
19. Webinar on “When and Where to Divide to Conquer: Personalised Medicine using Systems and Machine-based Biology Approaches” (June 04, 2020) jointly organized by MANAV Human Atlas Initiative; National Centre for Cell Science (NCCS), Pune; Indian Institute of Science and Education Research (IISER), Pune and Persistent Labs, Pune.
20. Webinar on Online Safety & Misinformation organized by WeThink Digital.
21. National Conference on “Roles of Modern Biological Sciences for Enhancing Farmers Economy” (November 12-13, 2018) organized by Ranveer Rananjay PG College, Amethi (UP), India.
22. “India International Science Festival (Health Conclave)” (October 05-20, 2018) organized by Ministry of Science & Technology, Ministry of Earth Science, Government of Uttar Pradesh and Vijnana Bharti.
23. National Seminar on “Recent Trends in Biotechnology: Technology to Skill Development” (March 23-24, 2018) organized by Shri Ramswaroop Memorial University Lucknow (UP).
24. National Seminar on “Role of CST, U.P. in promotion of Science & Technology & Facilitation of IPR Protection” (December 08-09, 2016) organized by Faculty of Science, V. B. S. Purvanchal University, Jaunpur (UP), India and Council of Science and Technology, Uttar Pradesh, India.
25. National Conference on “Lifestyles and Chronic Diseases: A Threat to Sustainable Public Health” (March 09-10, 2016) organized by SKY Institute, Lucknow (UP), India
26. National Conference on “Biotechnological Developments and Societal Benefits: Present Status and Future Prospects” (April 08-09, 2015) organized by SKY Institute, Lucknow (UP), India.

27. International Conference on “Environmental Technology and Sustainable Development: Challenges and Remedies” (February 21-23, 2014) organized by Department of Environmental Science, BBAU, Lucknow (UP), India.
28. National Seminar on “Intellectual Property Rights: Significance and Protection Process” (December 13, 2013) organized by Dr. RML Avadh University, Ayodhya (UP), India and Council of Science and Technology, Uttar Pradesh, India.
29. XXXIII Annual Conference of Society of Toxicology (STOX), India for Synergy of Toxicology Research in SAARC Countries & National Symposia on “Toxicogenomic technologies in predictive toxicology, Alternatives to use of animals for modern toxicity testing & Phyto-remedial approaches against environmental pollutants for human and animal health” (October 23-25, 2013) organized by Department of Pharmacology & Toxicology, College of Veterinary Sciences and Animal Husbandry, UP Pt. Deen Dayal Upadhyay Pashu Chikitsa Vigyan Vishwavidyalaya evam Go Anusandhan Sansthan, Mathura (UP), India.
30. Second Annual Conference of the Indian Academy of Biomedical Sciences (IABS) and International Symposium on “Animal Models of Human Diseases” (January 29, 2013) organized by Department of Biochemistry, King George’s Medical University, Lucknow (UP), India.
31. XXXII Annual Conference of Society of Toxicology (STOX), India & International Symposium on “New Frontiers in Toxicology” (December 05–07, 2012) organized by CSIR-Indian Institute of Toxicology Research, Lucknow, (UP), India.
32. XXXI Annual Conference of Society of Toxicology (STOX), India & Symposium on “Current Trends in Environmental Toxicology” (December 22–24, 2011) organized by Department of Zoology, IIS University, Jaipur, (Rajasthan), India.
33. National Seminar on “Integrated Crop and Environment Management Trends and Prospective in Developing Areas” (October 15-17, 2005) jointly organized by FIST-DST sponsored Department of Botany and Department of Biotechnology, S.M.M. Town P.G. College, Ballia (U.P.).

Orientation Courses/ Refresher Courses/ Faculty Development Programmes/ Workshops/Training Programmes: 10

1. Successfully completed the “Two Week Online Refresher Course on Interdisciplinary Life Sciences (ID)” (14-10-2024 to 26-10-2024) under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grant Commission (UGC) organized by UGC- MMTTC, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (CG).
2. Successfully completed a UGC sponsored “Two Week Online Refresher Course” on “Recent Advance in Life Science for Sustainable Development (Interdisciplinary)” (02/08/2021 to 14/08/2021) organized by UGC-HRDC, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
3. Successfully Completed a “Four Week Induction/Orientation Programme” for "Faculty in Universities/Colleges/Institutes of Higher Education" (June 04 - July 01,

2020) organized by Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi, sponsored by Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.

4. Successfully Completed “Two Weeks Faculty Development Programme” on "Managing Online Classes and Co-Creating Moocs: 2.0" (May 18 - June 03, 2020) organized by Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi, sponsored by Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
5. National Workshop on Artificial Intelligence in Education (July 15-19, 2019) organized by Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya.
6. One week Faculty Development Programme on Android Application for Internet of Things (May 28 – June 01, 2019) organized by Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya.
7. National Workshop on “5G & Industrial Internet of Things” (April 01-06, 2019) organized by Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya.
8. Workshop on AICTE Model Curriculum and CBCS (August 31-September 01, 2018) organized by Institute of Engineering and Technology, Dr. RML Avadh University, Ayodhya (UP), India.
9. Participate in National training program on “Microbial Diversity Analysis of Agriculturally Important Microorganisms” (3-25 Jan, 2006) at National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau (U.P.).
10. Participate in National Training Program on “Mushroom Cultivation” (22-26 July, 2006) at National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau (U.P.), jointly organized by National Research Center for Mushroom (NRCM), Solan and NBAIM, Mau.
11. Participate in National training program on “Microbial Identification Modules for Some Agriculturally Important Microorganisms” from 26 September to 16 October, 2007 at National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau (U.P.).

Member of Organizing Committee of Workshops/Seminars/Symposia: 07

1. Organizing Secretary - National Seminar on Innovations and Entrepreneurship in Biotechnology - 2023 (NSIEB-2023) from December 08 – 09, 2023 organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
2. Organizing Secretary – Two days Hands-on-Training cum workshop on “Molecular Biology: Techniques and applications” from August 22 -23, 2023 organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) in partnership with HiMedia Laboratories Pvt. Ltd, Mumbai, Maharashtra.
3. Joint Organizing Secretary – National Workshop on Five Days Online National Workshop on Practical Approaches of Bioinformatics: Basics to Advanced (PABA

2023) from March 16-20, 2023 organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).

4. Joint Organizing Secretary –National Workshop on Molecular Diagnostics – Advances & Applications (MDAA 2022) from November 03-09, 2022 organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Supported by: DST-SERB; DRDO & Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
5. Joint Organizing Secretary – National Workshop on Animal Cell Culture: Techniques and Applications-2022 [ACCTA-2022] from Feb 16-22, 2022 organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Supported by: DST-SERB; & Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.).
6. Organizing committee member in one week Faculty Development Programme on “Role of Matrix Laboratory (MATLAB) in Advance Communication” held during March 15-19, 2019 at Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya.
7. Organizing committee member in one week Faculty Development Programme on “Internet of Things” held during March 10-14, 2019 at Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya.
8. Organizing committee member in First IET Alumni meet held during Feb 14-15, 2019 at Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya.

Reviewer of various Journals: Molecular Biotechnology; Peer J; Energies; Sustainability; Microorganisms; Applied Sciences etc.

Research Guidance

Ph.D. Registered: 02

Supervised Dissertation Assignments (PG + UG): 40

Supervised Postgraduate students for their Dissertation/ Project work: 29

Supervised Undergraduate students for their Dissertation/ Project work: 11

Administrative responsibilities

- Coordinator, Exam Section
- Assistant Center Superintendent, University Exam
- Mentor, Implementation of MOOCs Regulations committee
- Nominated Faculty, Capacity Building for Design and Entrepreneurship (CBDE) Programme
- Member, Technical Committee for purchase of Chemicals, glasswares, plasticwares & labwares at University level
- Member, In-house Advisory Committee, DBT sponsored M.Sc. Biotechnology program
- Member, Board of Studies (BOS)
- Member, Departmental Research Committee (DRC)
- Member, Research Advisory Committee (RAC)

- Member, Departmental Purchase Committee (DPC)
- Member, Project Purchase Committee (PPC)
- Departmental Time Table Incharge 2019 till date
- Programme Officer (NSS), Biotechnology Unit (29.08.2022 to 21.08.2024)
- Member, AAA Committee (Store)
- Member of Proctorial Board (26.02.2020 to 03.08.2022)
- Member of Diary and Calendar Committee
- Counting Officer, Students' Council Election, 2019-2020
- Co-coordinator, Departmental work related to Student council 2019-20
- Departmental Representative, University Annual Report (2020, 2021, 2022)
- Departmental Criteria Coordinator, NAAC (2019 to 2023)
- Departmental Coordinator, IQAR
- Member, Departmental Write off Committee
- Organizing Committee member, GGV Convocation 2020, 2021
- Member, Verification Committee for Biotechnology Department PTB teaching posts

Declaration

I hereby declared that all the above information given by me is true at best of my knowledge. I shall send any details desired by you for the same. Given a chance I would endeavour my best in work and merit your confidence with trust and sincerity.

Date: 23/09/2025

Place: Bilaspur

Rajat Pratap Singh