

Dr. Rahul Kunwar Singh
Associate Professor

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Specialization : Cyanobacterial Biotechnology
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Affiliation : Department of Microbiology, HNB Garhwal University, Srinagar (Garhwal)- 246174, Uttarakhand, India
Date of Joining : June 11, 2025
Teaching Experience: 12 years; **Research Experience:** 15 years,

Academic highlights:

Exam	Year	University/Board
Ph.D. Microbiology	2012	Banaras Hindu University
M.Sc. Microbiology	2006	VBS Purvanchal University
B.Sc. (B. Z. C.)	2004	VBS Purvanchal University

Research highlights:

<i>Patent granted:</i>	01		
<i>Research/ Review articles:</i>	27	<i>Total Impact Factor:</i>	49
<i>Number of Book Chapters:</i>	15		
<i>Total Citations:</i>	1436	<i>h- index:</i>	13
		<i>i10- index:</i>	17
<i>Research Guidance:</i>		<i>Ph.D. Awarded-</i>	03
<i>M.Sc. dissertation awarded-</i>	24	<i>Ph.D. Registered-</i>	03
<i>Research Projects completed:</i>	03	<i>Invited Lectures -</i>	45

Administrative Experience:

- **Joint Director**, Malaviya Mission Teacher Training Centre, HNBGU (Nov 15, 2025 onwards)
- **Director (Officiating)**, Malaviya Mission Teacher Training Centre, HNBGU (Apr 2025 – Nov 14, 2025)
- **Member Secretary**, Institutional Ethical Committee, HNBGU (March 2023 onward)
- **Assistant Director**, Malaviya Mission Teacher Training Centre, HNBGU (Apr 2018- Mar 2025)
- **Member, Board of Studies**, Department of Microbiology, Sri Dev Suman University & HNB Garhwal University
- **Convener/Member**, UG and PG admission Committee, HNB Garhwal University

Awards, Recognition & Membership:

- **Life Member & Secretary**, Srinagar Garhwal Unit, Association of Microbiologists of India, New Delhi
- **Life Member**, Innovation Education and Scientific Research Foundation, New Delhi
- **Best Innovation Award 2020** by Institute Innovation Cell, HNBGU
- **Designed UG syllabus** of Medical Microbiology paper for Academy of Microbiological Science of India
- **Expert** for Indian adaptation of the Book, Microbiology, by Wessner et al.
- **Editor**, Indian Journal of Microbiology Research, Trends in Life Sciences,
- **Life Member**- Innovative Education and Scientific Research Foundation, New Delhi
- **Reviewer**: Frontiers in Microbiology, Journal of Applied Phycology, Biology, Environmental Monitoring and Assessment, National Academy Science Letters, Pharmaceutical Biology, Current World Environment, Evidence based Alternative and Complementary Medicine, Uttar Pradesh Council of Science and Technology Grant Awards
- **Associate Young Scientist Award** in NCEEBR 2013.
- **Best Oral Presentation Award**, International conference NHPBMS-2013 held at Dehradun.
- **ICMR-SRF** in 2011.
- **UGC-JRF** in 2009.
- **CSIR NET** in 2007.

Research Projects Completed:

Sr. No.	Title of the project	Sponsoring Agency	Amount (Rs.) Lakh	Duration
1	Identification and Characterization of antibacterial and/or antileishmania compounds from cyanobacteria.	ICMR	06.60	Jan 2011- June 2013
2	Screening of thermophilic cyanobacteria containing nonribosomal peptide synthetase gene clusters for their antimicrobial activity.	UGC	06	Jul 2014- Sep 2016
3	Cyanobacterial diversity of hot springs of Arunanchal Pradesh and their bioactivities	DBT	08	Mar 2018- Sep 2019

Total number of publications: 45

Publications during last five years (2020-2025):

1. Bhandari M, Sonam S, Negi R, Singh P, **Singh RK**, Dadheeck PK. (2025) Description of a novel cyanobacterial species *Elainella ringii* sp. nov. (Oculatellales) from Himalayan hot spring, Uttarakhand, India using polyphasic approach. **Phytotaxa** (1179-3155; IF= 1.7), 2025, 718: <https://doi.org/10.11646/PHYTOTAXA.718.3.1>
2. Negi R, Nigam M, Singh RK. (2024) Harnessing *Leptolyngbya* for antiproliferative and antimicrobial metabolites through lens of modern techniques: A review. **Algal Research** (2211-9264; IF= 4.5) 2024, 83, 103702. <https://doi.org/10.1016/j.algal.2024.103702>

3. Shashi Uniyal, Preeti Singh, **Singh RK**, Tiwari SP. (2024) Effects of *Nostoc* sp. inoculation on the yield and quality of a medicinal plant, *Allium sativum*. *J. Appl. Phycol.* (0921-8971; IF = 3.2). 2024. <https://doi.org/10.1007/s10811-024-03309-8>
4. Tyagi S, **Singh RK**, Kumar A. (2024) Lipophilic bioactive compounds from thermophilic cyanobacterium, *Leptolyngbya* sp. HNBGU 004; Implications for countering VRSA resistance. *Heliyon* (2405-8440; IF = 4.0) 10(8); E 29754. <https://doi.org/10.1016/j.heliyon.2024.e29754>
5. Bhandari M, **Singh RK**, Laishevcev A, Mohapatra TM, Nigam M, Mori E, Vasconcelos de Lacerda BCG, Coutinho HM, Mishra AP. (2022). Revisiting Scrub typhus: A neglected tropical disease. *Comparative Immunology, Microbiology and Infectious Diseases* (0147-9571) 90-91. doi: 10.1016/j.cimid.2022.101888
6. Nigam M, Panwar AS, **Singh RK**. (2022) Orchestrating the Fecal microbiota transplantation: Current technological advancements and potential biomedical application. *Frontiers in Medical Technology* (2673-3129) 4; 961569. doi: 10.3389/fmedt.2022.961569
7. Uniyal S, Bhandari M, Singh P, **Singh RK**, Tiwari SP. (2022) Cytokinin biosynthesis in cyanobacteria: Insights for crop improvement. *Frontiers in Genetics* (1664-8021; IF= 4.77). 13; doi.org/10.3389/fgene.2022.933226
8. Karthic A, Kesarwani V, **Singh RK**, Yadav PK, Chaturvedi N, Chauhan P, Yadav BS, Kushwaha SK. (2022) Computational Analysis Reveals Monomethylated Triazolopyrimidine as a Novel Inhibitor of SARS-CoV-2 RNA-Dependent RNA Polymerase (RdRp). *Molecules* (1420-3049; IF= 4.927) 27 (3): 801. <https://doi.org/10.3390/molecules27030801>
9. Tyagi S, **Singh RK**, Tiwari SP. (2021) Anti-enterococcal and anti-oxidative potential of *Leptolyngbya* sp. HNBGU 003. *Saudi Journal of Biological Sciences* (1319-562X; IF = 4.2). 28: 4022-4028. <https://doi.org/10.1016/j.sjbs.2021.04.003>
10. Olatunde A, Nigam M, **Singh RK**, Panwar AS, Lasisi A, Alhumaydhi FA, Kumar VJ, Mishra AP, Sharifi-Rad J. (2021) Cancer and diabetes: the interlinking metabolic pathways and repurposing actions of antidiabetic drugs. *Cancer Cell International* (1475-2867; IF = 5.72) 21 (1): 499.
11. Budakoti M, Panwar AS, Molpa D, **Singh RK**, Büsselberg D, Mishra AP, Coutinho HDM, Nigam M. (2021) Micro-RNA: The darkhorse of cancer *Cellular Signalling* (0898-6568; IF = 3.9) 83, 109995.
12. **Singh RK**, Yadav BS, Mohapatra TM. (2020) Molecular drug targets and system biology approaches for drug repurposing against SARS-CoV-2. *Bulletin of the National Research Center*. (2522-8307) 44:193. <https://doi.org/10.1186/s42269-020-00444-3>
13. Tyagi S, **Singh RK**. (2020) Chemical profile of the antibacterial component from *Leptolyngbya* sp. HNBGU 002 isolated from a hot spring of Garhwal Himalaya. *Int. J. Pharmaceut. Sci. Res.* (0975-8232) 11 (10): 5225-5238.

Conference Organized during last five years (2020-2025):

- National symposium on “Trends for Tuberculosis: Emerging pathogens and Environment Management: on March 24, 2025.
- National Conference on “*Ethical Perspectives of Biomedical & Health Research*” on March 11, 2025 as Convener.
- National Webinar on “Mass Spectrometry in Natural Products Research” on June 24, 2020.
- International Webinar on “Microbial Diversity: from Health to Environment” on June 27, 2020.
- Webinar on How to read the scientific literature and Introduction to Project MANAV as Convener on June 02, 2020.

Date: Feb 14, 2026

Place: Srinagar, Garhwal

(Rahul Kunwar Singh)