

Resume
Dr. SUDHIR SINGH

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Scholastics

- ❖ Post doc fellow at IISc, Bangalore, Aug, 2016- Nov 2023
- ❖ Research Associate at CIMAP, Lucknow, India 2015-2016
- ❖ Doctor of Philosophy (Biotechnology), 2016, SBT, Banaras Hindu University, Varanasi, India.
- ❖ Master of Science (Biotechnology), 2008 (74%), Utkal University, Bhubaneswar, Orissa India.
- ❖ Bachelor in Science (59%), S.G.R.P.G College, Purvanchal University, Jaunpur, Uttarpradesh, 2003.

Awards and scholarships

- ❖ Qualified as a DBT-JRF/SRF, 2008 (All India rank-36).
- ❖ Qualified GATE in 2008, 93.54 (Percentile score).
- ❖ Qualified CSIR-NET LS in 2019
- ❖ Research associate (ICAR-Project) at CSIR-CIMAP, Lucknow.(2015-2016)
- ❖ Awarded for National Post-doctoral Fellowship (N-PDF) by DST at IISc Bangalore.(2016-2018)
- ❖ Awarded for DBT-RA fellowship by Department of Biotechnology at IISc Bangalore (2018-2022).
- ❖ Awarded for Research Associateship by JNC SAR, Bangalore (1st July 2022- 31st Dec 2022)
- ❖ Research Associate at IISc Bangalore funded by DBT project (Jan-2023- Nov 2023)

Publications.

- Singh, Sudhir, Chhaya Singh, and Anil Kumar Tripathi. "A SAM-dependent methyltransferase cotranscribed with arsenate reductase alters resistance to peptidyl transferase center-binding antibiotics in *Azospirillum brasilense* Sp7." *Applied microbiology and biotechnology* 98, no. 10 (2014): 4625-4636.
- Singh, Sudhir, Susheel Kumar Dwivedi, Vijay Shankar Singh, and Anil Kumar Tripathi. "Expression of alkyl hydroperoxide reductase is regulated negatively by OxyR1 and positively by RpoE2 sigma factor in *Azospirillum brasilense* Sp7." *Microbiology* 162, no. 10 (2016): 1870-1883.
- Rai, Ashutosh Kumar, Sudhir Singh, Sushil Kumar Dwivedi, Amit Srivastava, Parul Pandey, Santosh Kumar, Bhupendra Narain Singh, and Anil Kumar Tripathi. "Catalase expression in *Azospirillum brasilense* Sp7 is regulated by a network consisting of OxyR and two RpoH paralogs and including an RpoE1→ RpoH5 regulatory cascade." *Applied and Environmental Microbiology* 84, no. 23 (2018): e01787-18. (Joint First Author)
- Singh, Vijay Shankar, Ashutosh Prakash Dubey, Ankush Gupta, Sudhir Singh, Bhupendra Narain Singh, and Anil Kumar Tripathi. "Regulation of a glycerol-induced quinoprotein alcohol dehydrogenase by σ_{54} and a LuxR-type regulator in *Azospirillum brasilense* Sp7." *Journal of Bacteriology* 199, no. 13 (2017): e00035-17.

- Dubey, Ashutosh Prakash, Parul Pandey, Vijay Shankar Singh, Mukti Nath Mishra, **Sudhir Singh**, Rajeev Mishra, and Anil Kumar Tripathi. "An ECF41 family σ factor controls motility and biogenesis of lateral flagella in *Azospirillum brasilense* sp245." **Journal of Bacteriology** 202, no. 16 (2020): e00231-20.
- Shah, Riyaz Ahmad, Rajagopal Varada, Shivjee Sah, Sunil Shetty, Kuldeep Lahry, **Sudhir Singh**, and Umesh Varshney. "Rapid formylation of the cellular initiator tRNA population makes a crucial contribution to its exclusive participation at the step of initiation." **Nucleic acids research** 47, no. 4 (2019): 1908-1919.
- Sah, Shivjee, Kuldeep Lahry, Chandana Talwar, **Sudhir Singh**, and Umesh Varshney. "Monomeric NADH-oxidizing methylenetetrahydrofolate reductases from *Mycobacterium smegmatis* lack flavin coenzyme." **Journal of bacteriology** 202, no. 12 (2020): e00709-19.
- **Singh, Sudhir**, Kuldeep Lahry, Chandra Sekhar Mandava, Jitendra Singh, Riyaz Ahmad Shah, Suparna Sanyal, and Umesh Varshney. "Lamotrigine compromises the fidelity of initiator tRNA recruitment to the ribosomal P-site by IF2 and the RbfA release from 30S ribosomes in *Escherichia coli*." **RNA biology** 20, no. 1 (2023): 681-692.
- Singh, Jitendra; **Singh, Sudhir**; Fathi, Emam Ali Elhassan and Umesh Varshney. "Role of Rmd9p in 3'-end processing of mitochondrial 15S rRNA in *Saccharomyces cerevisiae*" **Mitochondrion** (Under submission)

Invited lecture

Dr Sudhir Singh. (Invited Talk). "Understanding the role of drug lamotrigine in ribosome biogenesis defect in *Escherichia. coli*. International Conference on Exploring New Horizons in Biotechnology (ENB-2023) at Banaras Hindu University, Varanasi, India February, 10-12th, 2023.

Books Edited/Authorred

Bioremediation: Challenges and Advancements: ELECTRONIC WASTE MANAGEMENT: AN EMERGING CHALLENGE TO THE ENVIRONMENT" (Eds: Manikant Tripathi and Durgesh Narain Singh): Bentham Science Publishers Press, Singapore (ISBN Online -978-981-5036-03-9).

Sincerely

Sudhir Singh, PhD