

BIO-DATA



Name	Dr. Shree Prakash Tiwari
Designation	Reader
Address for Correspondence & Institution's Address	Department of Microbiology, V.B.S. Purvanchal Vishwavidyalaya, Jaunpur-222001 Mobile:09450776895 Email: sptiwarimicro@gmail.com
Date of Birth	01-04-1967
Academic highlights	B.Sc. University of Calcutta, 1986 M.Sc. (Botany), Purvanchal University, Jaunpur, 1989 Ph.D. (Botany), Banaras Hindu University, Varanasi, 1997
Research Topic	Regulation of Nitrate assimilation in the cyanobacterium <i>Anabaena</i> sp. PCC 7120
Specialization	Agricultural and Industrial Microbiology, Genetics and Physiology of Cyanobacteria.
Scholarship/award received	NET JRF Test Qualified in Examination held in 1990 Junior Research Fellowship (UGC), 1991- 1993 Senior Research Fellowship (UGC), 1993-1996 Provisional Research Associateship CSIR, New Delhi, India, 1997 Research Associateship, CSIR, New Delhi, India, 1998 Graduate Aptitude Test in Engineering (GATE-1991)
Research Experience	10 years
Ph.D. Program	6 years
Post doctoral Program	4 years
Teaching experience at University level (PG)	12 Years (Microbiology Deptt. VBS Purvanchal University, Jaunpur)
Teaching experience at College level	6 Years 2 Years in MMV, BHU (1997-1999) 1 Year 9 Months part time Lecturer in Biotechnology Department, Town PG College, Ballia 2 Yrs 3 Months Contractual Lecturer in Biotech Department, Town PG College, Ballia
Courses assigned in PG Classes	Molecular Biology, General Microbiology, Industrial Microbiology, Env. Microbiology & rDNA technology, Agricultural Microbiology
Dissertation Supervised	
M. Sc.	20
M Phil	01
Major Achievement	20, 16S rRNA sequences of bacterial strains from rhizospheric region of Radish have been submitted to NCBI, database.
Membership of Professional bodies	Life Member, Association of Microbiologists of India
Research work done during academic carrier	<ul style="list-style-type: none">Isolation of Transposon induced chlorate resistant mutants of Cyanobacterium <i>Anabaena</i> sp. PCC 7120 and their characterization in terms of Growth behaviour, measurement of cellular constituents, N₂-fixation, GS activity, Na⁺ transport, salinity tolerance, Nitrate, Nitrite and Ammonium transport and its kinetics, NO₃⁻ reducing activity &

its regulation in WT and mutant strains

- Evaluated the potentiality of *Azolla-Anabaena* as an N-biofertilizer in moderately saline environment
- Isolation & Characterization of Plant growth Promoting Rhizobacterial Strains from rhizospheric region of Radish. Genomic DNA extraction and amplified ribosomal DNA restriction analysis of isolates (ARDRA), 16s rRNA gene sequencing and phylogenetic analysis
- Screening of cyanobacterial extracts against bacteria causing nosocomial infection
- Isolation and characterization of Protease producing Bacterial strains from soil
- Worked as Head of Department, Department of Microbiology, VBS Purvanchal Univ. Jaunpur
- Member of IQAC
- Worked as member of Board of Studies
- Member of PU Combined Admission Test
- Worked as Assistant Proctor
- Member of Ant ragging Committee
- Worked as Centre Superintendent in Semester Examinations of Faculty Building, VBS Purvanchal Univ. Jaunpur (4 times)
- Worked as Assistant Centre Superintendent in B Ed Entrance Examination, Faculty Building, VBS PU, Jaunpur
- Worked as Assistant Coordinator at central evaluation centre

Administrative and University level Responsibilities

Seminar/Symposium/Conference/Training/Workshop attended

S. No	Title of paper presented	Subject of conference/seminar etc.	Organizing Institution	Date of Lecture/Presentation
Invited Lectures in International Conferences 02				
1	Plant probiotics for sustainable agriculture	1 st International Conference on NHPBMS-2013	Sheetal Life Sciences (P) Ltd and Society of Environment, Health and Biotechnology	2013
2	Plant Microbe interaction for ecofriendly agriculture	International symposium on innovations in educational environmental and health research.	Society for educational development and environmental research, Varanasi	2015
Papers presented in International Conferences 02				
1	Psychedelic Mushrooms	International meet on collaboration with American universities	Deptt. of Applied Psychology, VBS Purvanchal University, Jaunpur	2011
2	Microbial evaluationfrom Jaunpur, UP, India	International symposium on phycological research	CAS in Botany, BHU, Varanasi	2011
Invited Lectures in National Conferences 12				
1	National Training Programme on "Metagenomics : Methods and application in Microbiology (2+Practical)	National Training Programme on "Metagenomics: Methods and application in Microbiology,	National Bureau of Agriculturally Important Microorganism, Mau	2011.

2	Role of Bacterial Diversity in Growth Promotion of Plants	National Conference on Impact of Global Warming and Climatic Changes on Diversity : The Challenges of Conservation of Flora and Fauna	Department of Zoology, RHSPG College, SingraMau, Jaunpur, UP	2012
3	Agro chemicals: Their Impact & Search for Alternative	National Seminar on Monitoring of water quality contaminated by Pesticides and associated Health Impacts	Department of Chemistry, RSKDPG College, Jaunpur,	2012
4	Aim and scope of Microbiology	Science Inspire Camp (DST)	MDPG College Pratapgarh	2012
5	Transgenic plants: Strategies and Implications	National Seminar on Environmental Risk and Transgenic plants	Department of Botany, MGCGV, Chitrakoot, MP	2013
6	Role of bacterial diversity in growth promotion of plants	NCEEER-2013	Deptt. Of Biotech., MIM Ghaziabad	2013
7	Cyanobacteria: a neglected tool for biotechnological processes	SBSBAC-2014	Deptt. of Botany, BHU	2014
8	Plant Growth promoting Rhizobacteria: Probiotics for plant	National Seminar on Recent Trends in Microbiology	DDU Gorakhpur	2014
9	Exploitation of plant-microbe interaction for eco-friendly agriculture	NS on Climate change and Environmental threat to public health and sustainable agriculture	Sunbeam Varanasi	2014
10	Plant Growth promoting Rhizobacteria: Probiotics for plant	DBT Star College scheme	UP College, Varanasi	2015
11	Role of endophytes in growth promotion And metabolite production in plants	MEEDTA 2015	Deptt. of Botany and Microbiology, HNBGU, UK	2015
12	PGPR in Agriculture Improvement	BIOKUMBH 2016	Centre of Biotechnology, University of Allahabad	2016

Papers presented in National Conferences: 03

1	Magnetobiol effectsCyanobacterium	Indian Science Congress	Indian Science Congress Association	Jan 3-8, 1993, Goa
2	Toxicity and antimicrobial.... <i>M. aeruginosa</i>	Integrated crop and environmental management: trends and perspectives in developing areas	Deptt. of Botany & Biotech. SMM Town PG College, Ballia	Oct, 15-17, 2005
3	Antibiotic resistance.....Jaunpur district	Environmental problems in India and challenges to plant biologists	Deptt. of Botany, UP (Autonomous) College, Varanasi	Feb, 4-5, 2011

Training and Workshops attended: 08

S. No.	Programme	Sponsoring Institution	Duration
1	Hands on training in cell and	Deptt. Of Biotech. VBS Purvanchal	Dec. 21, 2009-Jan 2,

	molecular biology techniques for college teachers	University, Jaunpur	2010
2	NBAIM-CAB international, UK joint workshop	NBAIM, New Delhi	Mar 16-17, 2004
3	21 days Training on Microbial Identification Modules for some Agriculturally Important Microorganisms	National Bureau of Agriculturally Important Microorganism, Mau	26 Sep – 16 Oct, 2007
4	10 days Training on Microbial Chemical Taxonomy : A Poly phasic Approach	National Bureau of Agriculturally Important Microorganism, Mau	20 Sep – 29 Sep, 2008
5	Six months training on Water pollution and waste water management	Centre for Environmental Education	1993-1994
6	National Workshop on Methods of Assessment and Accreditation	IQAC, VBPU, Jaunpur	2013
7	International Workshop on Counselling skills in Health profession and Schools	Department of Applied Psychology, VBSPU, Jaunpur	2013
8	28 days Orientation Program	UGC-ASC, BHU	2015

Lecture/Special Lectured in National Institutions:

	Title/Subject of Lecture Delivered	Name and Place of Institutuin	Date of Lecture
1	BioProcess Engineering	School of Biotech. BHU	2011
2	rDNA Tech.	Deptt. Of Biotech., Town PG College Ballia	2010
3	Nitrogen fixation by algal system in different environmental conditions	Deptt. Of Microbiology, RMLAU, Faizabad	2011
4	Microbial associations in aquatic ecosystems	Deptt. Of Microbiology, RMLAU, Faizabad	2012
5	rDNA Tech.	Deptt. Of Biotech. Sanjay Memorial Girls College Varanasi	2011
6	Microbes and their role in agriculture	Deptt. Of Biotech. Town PG College Ballia	2013
7	Historical events of Microbiology	Deptt. Of Biotech. Town PG College Ballia	2013
8	Role of Growth promoting Rhizobacteria in Growth Promotion of Plants	RSKD College, Jaunpur	2015
9	DNA Sequencing	Deptt. Of Biotech. Town PG College Ballia	2015
10	From factors to cistrans	Department of Biotechnology, Md. Hasan PG College, Jaunpur	2016
11	Strain Improvement	Department of Microbiology, Md. Hasan PG College, Jaunpur	2016
11	Isolation of Genomic and Plasmid DNA from Bacteria	Kutir PG College, Chhakke, Jaunpur	2017
12	Microbes in the service of Mankind	OP Mishra Mahavidyalaya, Jaunpur	2018

Books Published:

1. **SP Tiwari, Rajesh Sharma & Rahul Kunwar Singh (2012).***Recent Advances in Microbiology*. Vol-1. **Nova Science Publishers, Inc.** New York, USA. **ISBN: 978-1-61470-632-8. (International).**

2. **SP Tiwari**, R Sharma & Rajeev Gaur. (2013). *Recent Advances in Microbiology*. Vol-2. **Nova Science Publishers, Inc.** New York, USA. **ISBN: 978-1-62808-633-1. (International)**
3. PL Kashyap, AK Srivastava, **SP Tiwari** & S Kumar (2018) Microbes for Climate Resilient Agriculture. **John Wiley Publishers, USA ISBN: 978-1-119-27592-3. (International)**
4. NC Gautam, **SP Tiwari** & Rajesh Sharma Singh (2018).*Recent Advances in Microbiology*. Vol-3. **Nova Science Publishers, Inc.** New York, USA. **ISBN: 978-1-53614-057-6. (In Press).**

List of Papers/Review article/Book chapters Published:

List of Publications

1. Singh SS, **Tiwari SP**, Abraham J, Rai S and Rai Ashwani K (1994) Magnetobiological effects on a cyanobacterium *Anabaena doliolum*. *Electro and Magnetobiology*, USA, 13: 227-235.
2. Singh SP, Rai S, Rai AK, **Tiwari SP**, Singh SS, Samarketu and Abraham J (1994) A thermal physiological effects of microwaves on a cyanobacterium *Nostoc muscorum*. *Med. & Biological Engg. & Comp.* 32: 175-180.
3. Rai AK and **Tiwari SP** (1999) NO₃⁻ nutrition and salt tolerance in the cyanobacterium *Anabaena* sp. PCC 7120 and mutant strains. *J. Appl. Microbiol.* UK, 86: 991-998.
4. Rai AK and **Tiwari SP** (1999) Mutants of the cyanobacterium *Anabaena* sp. PCC 7120 altered in nitrate transport and reduction. *Curr. Microbiol.* USA, 39: 227-243.
5. Rai AK and **Tiwari SP** (1999) Response to NaCl of nitrate assimilation and nitrogenase activity of the Cyanobacterium *Anabaena* sp. PCC 7120 and its mutants. *J. Appl. Microbiol.* UK 87: 877-883.
6. Rai S, Singh SP, Samarketu, **Tiwari SP**, Mishra AK, Pandey KD and Rai AK (1999) Effect of microwave modulation frequencies on the physiology of a cyanobacterium *Anabaena doliolum*. *Electro and Magnetobiol.* USA 18: 221-232.
7. Rai AK and **Tiwari SP** (2000) Isolation and characterization of transposon induced chlorate resistant mutants of *Anabaena* sp. PCC 7120. *Microbios.* UK 102: 103-112
8. Rai V, **Tiwari SP** and Rai Ashwani K (2001) Effect of NaCl on nitrogen fixation of unadapted and NaCl-adapted *Azollapinnata-Anabaena azollae*. *Aquatic Bot.* 71: 109-117.
9. RK Singh, S Upadhyay, **SP Tiwari**, AK Rai and TM Mohapatra (2010) Screening of cyanobacterial extracts against bacteria causing nosocomial infections. *Journal of Pharmacy Research.* 3(9): 2093-2096.

10. Singh RK, Pandey A, Pandey R and **Tiwari SP** (2010) Microbial Evaluation of local water bodies of District Jaunpur. *Pollution Research*. 29(2): 365-370.
11. Sharma NK, **Tiwari SP**, Tripathi KN & Rai AK (2010) Sustainability and cyanobacteria: facts and challenges. *Journal of Applied Phycology*. DOI:10.1007/s10811-010-9626-3
12. Singh RK, **Tiwari SP**, Rai AK & Mohapatra TM (2011) Cyanobacteria: an emerging for drug Discovery. *Journal of Antibiotics* **64**: 401-412.
13. Singh RK, Singh DP, **Tiwari SP** and Mohapatra TM (2011) Targeted therapies for Cancer treatment. *Journal of Pharmacy Research*, **4(2)**:312-316.
14. Singh CS, Singh VK, **Tiwari SP** and Sharma R (2011) Lignolytic activity and lignocellulosic degradation profile by natural isolates of *Pleurotus flavilatus* during mushroom cultivation on Rice straw. *Asian Journal of Experimental Biology* 2(1): 158-161.
15. Srivastava, R, Tripathi BN, Singh RK, Srivastava P, Kumari P, Srivastava M, Srivastava AK, Kumar S, Kashyap PL, Sharma R & **Tiwari SP** (2013) ,Profiling of plant growth promoting bacteria associated with Jaunpuri Giant Raddish rhizosphere. *Int. J. Agri. Env. Biotech.* 6(2): 187-193.
16. Singh R, Singh RK Rai RK , Sharma R & **Tiwari SP** (2013) Improvement of *Trichoderma* spp. strain for integrated control of soil borne plant pathogens. *Int. J. Agri. Env. Biotech.* 6(3): 487-496.
17. Sinha P, Singh RK, Srivastava R Sharma R & **Tiwari SP** (2013) Characterization of a soil borne protease producing bacterium. *Trends in Life Sciences* 1(4): 12-23.
18. **Tiwari SP**, Srivastava R, Singh CS, Shukla K, Singh RK, Singh P, Singh R, Singh NL & Sharma R (2015) Amylases: an overview with special reference to alpha Amylases. 4 (1): 1886-1901.
19. Singh RK, **Tiwari SP** & Mohapatra TM (2015) Characterization of cyanobacteria with non ribosomal synthetase gene clusture from tropical environment of Varanasi city, India. 8(8): 4841-4847
20. Srivastva R, Sonam S, Patel S, **Tiwari SP** (2012) Diversity of Azotobacter in raddish grown field of Jaunpur. In proceeding of National Conference on “Impact of global warming and climatic canges on diversity: the challenges of conservation of flora and fauna” held at department of Zoology, RHSPG College, SigramauJaunpur. Feb 20-21, 2012
21. Singh CS, **Tiwari SP**, Srivastva R, Singh VK, Sharma R (2012) Biodiversity of *Pleurotus* species in Uttar Pradesh. In proceeding of National Conference on “Impact of global warming and climatic changes on diversity: the challenges of conservation of flora

and fauna” held at department of Zoology, RHSPG College, Sigra mau Jaunpur. Feb 20-21, 2012.

22. Singh H, Jaiswal V, Singh S, **Tiwari SP**, Singh B & Katiyar D (2017) Antagonistic compounds producing Plant Growth promoting Rhizobacteria: A tool for management of plant diseases. J Adv. Microbiol. 3(4) 1-12.

Book Chapters

1. AK Rai, J Abraham & **SP Tiwari** (1996) Response of the Cyanobacterium *Anabaena doliolum* to NaCl stress, tolerance, recovery and sodium transport. In: Current Researches in Plant Sciences. Vol II PP. 1-10 (eds) Sarma TA, Saini SS, Trivedi ML and Sharma M, Bisen Singh Mahendra Pal Singh, Dehradun, India.

2. AK Rai & **SP Tiwari** (2000) Cyanobacterial nitrate assimilation: an overview. In: Changing Scinario in Plant Sciences : Prof HY Mohan Ram Commemoration Vol. pp 116-129. (eds) Jaiswal VS, Rai AK, Jaiswal U and Singh JS. Allied Publishers Ltd. N.Delhi

3. AK Dubey, V Rai, **SP Tiwari**, R Narayan & AK Rai (2007) Changes in growth behaviour, major metabolites and nitrogenase activity of the cyanobacterium *Aulosira fertilissima* under nitrogen shift. In Plant diversity and conservation. Pp 109-116. (eds) Singh JS, Bhatnagar AK, Singh VP and Rai BK. Satish serial publishing House, New Delhi

4. Rai Ashwani K, N Sharma, A Mishra, A Rai & **SP Tiwari** (2010) Cyanobacteria : a potential but neglected tool for biotechnological processes. In Recent Trends in Biotechnology. (Eds.) Singh MP, Sharma B and Gupta A. Nova Publishers USA.

5. Preeti Singh, RK Singh, RK Rai **SP Tiwari** & TM Mohapatra (2011) Diversity of Listeria. In: Biotic potential and abiotic stress (Eds) A K Diwedi. Lambert Academic Press, Germany. Pp 373-389

6. R Srivastava, A Mishra, R Sharma, P Srivastava & **SP Tiwari** (2011) Botulinum Toxin: Production and applications. In: Microbial Toxins and Toxigenic Microbes. pp. 25-40 (Eds.) Pandey VD and Singh. SK. Studium Press LLC, Texas, USA

7. S Upadhyay, RK Singh, **SP Tiwari**, MR Sen & TM Mohapatra (2011) Toxins produced by Members of Eneobacteriaceae. pp. 41-58. In: Microbial Toxins and Toxigenic Microbes. Eds. SK Singh, VD Pandey. Studium Press LLC, Texas, USA

8. R Sharma, BM Tripathi, R Pandey, RK Singh, A Mishra & **SP Tiwari** (2012). Microbial Detection in Drinking Water. In: Recent Advances in Microbiology Volume 1. Eds. SP Tiwari, R Sharma & RK Singh. Nova Science Publishers, Inc. New York, USA.

9. Asha Lata Singh, VK Singh, SK Singh and **SP Tiwari** (2012) Arsenic Contamination of ground water and its possible remedial measures. In: Recent Advances in Microbiology. Eds. RK Singh, R Sharma, SP Tiwari. Nova Sci. Inc. USA.
10. R Sharma, R Pandey & SP Tiwari (2013). Antimicrobial Activities of Plants. In: Recent Advances in Microbiology Volume 2. Eds. SP Tiwari, R Sharma & R Gaur. Nova Science Publishers, Inc. New York, USA.
11. R Srivastava, CS Singh, **SP Tiwari** & R Sharma (2013). RNA Silencing and Viral Counter Defence: A Host Parasite Interaction. In: Recent Advances in Microbiology Volume 2. Eds. SP Tiwari, R Sharma & R Gaur. Nova Science Publishers, Inc. New York, USA.
12. R Sharma, R Srivastava, K Shukla & **SP Tiwari** (2017). Environmental control of Biotechnology Industries. In: Principles and applications of Environmental Biotechnology for a sustainable future. Eds. RL Singh. Springer International Pub.
13. R. Sharma, Rishi Srivastava, RK Singh and **SP Tiwari** (2018). From Leeuwenhoek to Craig Venter. In: Recent Advances in Microbiology. Vol-3. Nova Science Publishers, Inc. New York, USA (In Press).