BIO-DATA

1. **Name** : **Dr. YADVINDER SINGH**
2. **Designation** : **ASSISTANT PROFESSOR**
3. **Department** : **BOTANY & ENVIRONMENTAL SCIENCE**
4. **Date of Birth** : **15.08.1982**
5. **Address for Correspondence** : **Dept. of Botany & Environmental Science, Sri Guru Granth Sahib World University, Fatehgarh Sahib-140406**

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6 **Areas of Specialisation** : **Classical and molecular taxonomy of cyanobacteria, Microbial ecology, Bioremediation of pesticides and heavy metals, Physiology and biochemistry of cyanobacteria**

7. Academic Qualifications:

S. No.	Degree Held	Year	Board/Univ./Inst.	Marks (%)	Div./Rank	Subjects Taken
1.	B. Sc. (Medical)	2003	Punjabi University, Patiala	56.04	II	Botany, Zoology, Chemistry, Punjabi, English
2.	M.Sc. (Botany)	2007	Punjabi University, Patiala	65.75	I	Botany
3.	Ph.D.	2014	Punjabi University, Patiala			Cyanobacterial Diversity of Cold Desert and Hot Water Springs of North-Western Himalayas

8. Membership of Professional Bodies/Organizations

i) Life Member of Biotech Research Society of India.

9. Medals/Awards/Honours/Received

i) Best paper presentation award during National conference on "Plant & Microbial Biodiversity, Present Scenario, Threats and Conservation Strategies" held at Department of Botany, Panjab University, Chandigarh, from March 1-2, 2012.

ii) Best paper presentation award during National Conference on "Frontiers in Algology and Algal Biotechnology" held at Centre for Biotechnology, Visva-Bharti, Santiniketan (WB), from November, 15-17, 2013.

10. Scholarships:

i) Awarded fellowship as Senior Research Fellow (direct) by CSIR, New Delhi in April, 2012.

11. Details of Experience:

S. No.	Name of the Inst./ Employer	Position Held	Duration	Major Job Responsibilities and Nature of Experience
1.	P.M.N. College, Rajpura	Assistant Professor	13.10.2014 to 20.07.2015	Teaching Botany to undergraduate classes
2..	Department of Botany & Environmental Science, SGGSW University	Assistant Professor	21.07.2015 till date	Post-graduate teaching and research

12. Published Work (Numbers only):

a. Research Papers i) National: 03

ii) International: 07

b. Conference/Seminar Presentation: 10

c. Gene sequences of cyanobacteria submitted to NCBI GenBank**:** 180

16S rRNA gene: 86
rbcL gene: 60
cpcGA-IGS region: 34

13. Technical Proficiency

- Isolation, Purification and Polyphasic characterization of microorganisms
- Sequence assembling, editing and alignment
- Phylogenetic analysis and evolutionary relationships
- Biochemical, molecular and microbiological techniques
- Handling of statistical software's like *Statistica*, *GraphPad* and *XLSTAT*

14. Research Interest

- Diversity of cyanobacteria from extreme habitats
- Bioprospecting of cyanobacteria for bioremediation of pesticides & heavy metals, bioenergy and biotechnological/Industrial important biomolecules
- Genomics of stress tolerant cyanobacteria

15. List of Papers Published

1. Singh, D.P., Khattar, J.I.S., Kaur, G., Gupta, M., **Singh, Y.** And Gulati, A. (2015) Interaction of pretilachlor with nitrogen assimilation of the cyanobacterium *Desmonostoc muscorum* PUPCCC 405.10. *Acta Physiol. Plant.* **37**: 177 DOI 10.1007/s11738-015-1923-7 I**F: 1.584**
2. Khattar, J.I.S., Shahnaz Parveen, **Singh, Y**., Singh, D. P. And Gulati, A. (2015) Intracellular uptake and reduction of hexavalent chromium by the cyanobacterium Synechocystis sp. PUPCCC 62. *J. Appl. Phycol*., **27**: 827-837. **IF: 2.559**

3. **Singh, Y**., Khattar, J.I.S, Singh, D. P., Rahi, P. And Gulati, A. (2014) Limnology and cyanobacterial diversity of high altitude lakes of Lahaul-Spiti in Himachal Pradesh, India. *J. Biosci*., **39(4)**: 643-657. **IF: 2.064**

4. Singh, D.P., Khattar, J.I.S., Kaur, M., Kaur, G., Gupta, M. and **Singh, Y.** (2013). Anilofos tolerance and mineralization by the cyanobacterium *Synechocystis* sp. Strain PUPCCC 64. *PloS One* 8(1):e53445. Doi:10.1371/journal.pone0053445**. IF: 3.53**

5. Singh, D.P., Khattar, J.I.S., Kaur, K., Sandhu, B.S. and **Singh, Y.** (2012). Toxicological impacts of anilofos on some physiological processes of a rice field cyanobacterium *Anabaena torulosa. Toxicol. Environ. Chem.* 94: 1304-1318. **IF: 0.825**

6. Singh, D.P., Khattar, J.I.S., Nadda, J., **Singh, Y**., Garg, A., Kaur, N. and Gulati, A. (2011). Chlorpyrifos degradation by the cyanobacterium *Synechocystis* sp. PUPCCC 64. *Environ. Sci. Pollut. Res*. 18(8): 1351-1359. **IF: 2.828**

7. Khattar, J.I.S., Singh, D.P., Jindal, N., Kaur, N., **Singh**, **Y.,** Rahi P. and Gulati A. (2010). Isolation and characterization of exopolysaccharides produced by the cyanobacterium *Limnothrix redekei* PUPCCC 116. *J. Applied Biochem. Biotechnol*. 162:1327-1338. **IF: 1.735**

8. Singh, D.P., Khattar, J.I.S. and **Singh Y.** (2009). Effect of pesticides on the distribution pattern of cyanobacteria in a rice field ecosystem. *J. Indian Bot. Soc.* 88 (1&2): 163-169.

9. Kaur, G., Khattar, J.I.S., Singh, D.P., **Singh Y.** and Nadda J. (2009). Microalgae: A source of natural colours. In: J.I.S. Khattar, D.P. Singh and G. Kaur (Eds). Algal Biology and Biotechnology. I. K. International Publishing House Pvt. Ltd. New Delhi. Pp 129-150.

10. Singh, D.P., Khattar, J.I.S., Kaur G. and **Singh Y.** (2007) Cyanobacterial diversity in rice fields of Malwa region of Punjab and their tolerance to chlorpyrifos. *J. Punjab Acd*. *Sci*. 4 (1&2): 106-113.

16. List of Paper Presented in Conferences/Symposia

1. **Singh, Y**., Khattar, J.I.S., Gulati, A., and Singh, D.P. 2014. Diversity of thermophilic cyanobacteria in the North-Western Himalayas, India. National Conference on "Current Trends in Plant Sciences with Special Reference to Phycology and Mycology" being held at Department of Botany, Panjab University, Chandigarh, from October 28-29, 2014 (Oral Presentation)

2. **Singh, Y**., Khattar, J.I.S., Singh, D.P., Gulati, A. 2014. Polyphasic characterization of thermophilic cyanobacterial diversity from three hot water springs of Uttarakhand, India. National conference on "Progress in Algology in the Indian Context" being held at Department of Microbiology, Bharathidasan University, Tiruchirappalli, Tamil Nadu, from September, 19-21, 2014. (Oral Presentation)

3. **Singh, Y**., Khattar, J.I.S., Gulati, A. And Singh, D.P. 2013. Cyanobacterial diversity of Manikaran hot water spring, Himachal Pardesh. National Conference on "Frontiers in

Algology and Algal Biotechnology" being held at Centre for Biotechnology, Visva-Bharti, Santiniketan (WB), from November, 15-17, 2013. (Poster Presentation)

4. **Singh, Y**., Rahi, P., Singh, D.P., Gulati A. And Khattar, J.I.S. 2013. Limnological and cyanobacterial diversity of four cold desert high altitudinal Lakes of Himachal Pradesh, North Western Himalayas. National Symposium on "Fundamental and applied Phycology", held at Department of Botany, Punjabi University, Patiala, India, from March 25-26, 2013. (Oral Presentation)
5. **Singh, Y**., Rahi, P., Singh, D.P., Gulati A. And Khattar, J.I.S. 2013. Cyanobacterial diversity of two high altitudinal Lakes of North-Western Himalayas, International conference on "Algal Biorefinery" (ICAB-2013), held at Department of Biotechnology, Indian Institute of Technology, Kharagpur, India, from January 10-12, 2013. (Oral Presentation)
6. **Singh, Y**., Rahi, P., Singh, D.P., Gulati A. And Khattar, J.I.S. 2012. Molecular diversity of thermophilic cyanobacteria from Kheer Ganga hot water spring of North-Western Himalayas, International Conference on Industrial Biotechnology (ICIB-2012), held at Department of Biotechnology, Punjabi University, Patiala, India, from November 21-23, 2012. (Poster Presentation)
7. **Singh, Y**., Rahi, P., Singh, D.P., Gulati A. And Khattar, J.I.S. 2012. Morphological and molecular diversity of cyanobacteria of Tattapani hot water spring, Himachal Pradesh. National conference on "Plant & Microbial Biodiversity, Present Scenario, Threats and Conservation Strategies" held at Department of Botany, Panjab University, Chandigarh, from March 1-2, 2012. (Poster Presentation)
8. **Singh, Y**., Khattar, J.I.S., Singh, H. 2010. Cyanobacterial diversity in Vashisht hot water spring of Manali, Himachal Pradesh. International Symposium on "Phycological Research" held at CAS in Botany, Banaras Hindu University, Varanasi, India, from February 25-27, 2010. (Poster Presentation)
9. Khattar, J.I.S., Singh, D.P., Ahuja, G., **Singh, Y**., Shailza and Kaur, K. 2009. Biodiversity of cyanobacteria from a hot water spring of Himachal Pradesh. National Symposium on " Phycology in India: Basic to applied" held at Department of Botany, Punjabi University, Patiala, India, from February 12-13, 2009. (Oral Presentation)
10. **Singh**, **Y.,** Khattar J.I.S. and Singh D.P. (2007). Effect of pesticides on cyanobacterial diversity of rice field of Patiala district, Punjab. National Symposium on "Recent Advances in Phycology: from Molecule to Ecosystem". Held at Department of Botany, Panjab University, Chandigarh. November 14-16. P. 40. (Poster Presentation)

I solemnly declare that above information is true and correct to the best of my knowledge

(YADVINDER SINGH)