


## Curriculum Vitae

<b>Full Name:</b>	Dr. Shivani Uniyal	
<b>Designation:</b>	Assistant Professor	
<b>Department:</b>	Botany	
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<b>Educational Qualification:</b>	<ul style="list-style-type: none"> <li>• B.Sc. H.N.B. Garhwal University, Srinagar, India. (2008)</li> <li>• M.Sc. G.B. Pant university of agriculture and technology, Pantnagar, India. (2010)</li> <li>• Ph.D. G.B. Pant university of agriculture and technology, Pantnagar, India. (2014)</li> </ul>	
<b>Research interest:</b>	<ul style="list-style-type: none"> <li>• Environmental Pollution</li> <li>• Plant-microbe interactions</li> <li>• Bioremediation</li> <li>• Waste Management</li> <li>• Sustainable Agriculture</li> </ul>	
<b>Honors &amp; Awards:</b>	<ul style="list-style-type: none"> <li>• Qualified CSIR-UGC-NET JRF (AIR-133).</li> <li>• Qualified UGC-NET.</li> <li>• Qualified ICAR-NET.</li> <li>• Qualified U-SET.</li> <li>• Awarded <b>National Post-Doctoral Fellowship</b> by Science and Engineering Research Board (SERB) under Ministry of Science and Technology in 2016.</li> <li>• Received <b>Merit award</b> for first rank holder in M.Sc. by Jawaharlal Nehru Memorial Fund, New Delhi in 2011</li> <li>• Awarded <b>INSPIRE Fellowship</b> by Department of science and technology under Ministry of Science and Technology in 2010.</li> </ul>	
<b>Professional affiliations:</b>	<p>Association of Microbiologist of India Crop and Weed Science Society (CWSS), Kolkata, India</p>	
<b>Conference/ seminar/workshop :</b>	<ul style="list-style-type: none"> <li>• Presented a paper entitled “<b>Environmental fate of Fipronil in Zea mays field Soil, under Sub-Tropical Climatic Conditions of India</b>” in international conference held from 11<sup>th</sup> February to 13<sup>th</sup> February 2016 at I.T.M. University, Gwalior.</li> <li>• Presented a poster entitled “<b>Remote sensing: A novel tool for water resource management and conservation</b>” in national workshop held from 21<sup>st</sup> May to 22<sup>nd</sup> May 2013 at G.B. Pant University of Agriculture &amp; Technology, Pantnagar.</li> <li>• Presented a paper entitled “<b>Biodiversity: Harnessing with sustainable development</b>” in International symposium held from 22-24 November 2012 at G.B. Pant University of Agriculture &amp; Technology, Pantnagar</li> <li>• Participated in the discussions during WCMANU-2011 held at Department of Zoology &amp; Environmental Science, Gurukul Kangri Vishwavidyalaya, Haridwar, Uttarakhand from 11-13 November 2011 and presented an oral presentation entitled “<b>Microorganisms mediated biosorption of heavy metals from synthetic solutions</b>”.</li> </ul>	

- Participated in the National Seminar on “**Pesticides, Food Safety and Environment**” organized by Departments of Chemistry & Microbiology, G. B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand on 8<sup>th</sup> November, 2011 with poster presentation of research paper entitled “**Heavy metal biosorption : Environmental significance and exploitation**”.
- Participated in International conference “**Cooling the earth: Tactics for restoring climate order and saving the living planet**” from 15-17 November 2010.

#### Research Publications:

- Sharma D, **Uniyal S**, Tewari L. Biocatalytic transesterification of algal oil employing a heterogenous methanol tolerant lipase enzyme aggregate from *Bacillus mycoides* strain CV18. Process Biochemistry, **2021**. 111(2),43-52. (I.F.-4.885)
- **Uniyal S**, Sharma RK, Kondakal Vishnu. New insights into the biodegradation of chlorpyrifos by a novel bacterial consortium: Process optimization using general factorial experimental design. Ecotoxicology and Environmental Safety, **2021**, 209, 111799. (I.F.-7.129)
- **Uniyal S**, Sharma RK, Technological advancement in electrochemical biosensor-based detection of Organophosphate pesticide chlorpyrifos in the environment: A review of status and prospects. Biosensors and Bioelectronics. **2018**, 116, 37-50 ( I.F.- 12.545)
- **Uniyal S**, Paliwal R, Verma M, Sharma RK, Rai JPN. Isolation and characterization of fipronil degrading *Acinetobacter calcoaceticus* and *Acinetobacter oleivorans* from rhizospheric zone of *Zea mays*. Bulletin of Environmental Contamination and Toxicology. 2016, 96, 833-838. (I.F.-2.807)
- **Uniyal S**, Paliwal R, Sharma RK, Rai JPN. Degradation of fipronil by *Stenotrophomonas acidaminiphila* isolated from rhizospheric soil of *Zea mays*. 3biotech. 2016. 6:48. (I.F.-2.893)
- Paliwal R, **Uniyal S**, Verma M, Kumar A, Rai JPN. Process optimization for biodegradation of black liquor by immobilized novel bacterial consortium. Desalination and Water treatment. 2016, 57, 18915-18926. (I.F.-1.273)
- Paliwal R, **Uniyal S**, Rai JPN. Evaluating the potential of immobilized bacterial consortium for black liquor decolorization and delignification. Environmental science and pollution research. 2015. 22(9): 6842-6853. (I.F.-5.190)
- **Uniyal S**, Rawat M, Rai JPN. Cadmium biosorption by *Stenotrophomonas humi* and *Micrococcus luteus*: kinetics, equilibrium and thermodynamic studies. Desalination and Water treatment. 2013; 51:1-13. (I.F.-1.273)
- **Uniyal S**, Rai J.P.N. Bioremediation: Molecular tools for microbial community analysis. Oaks. 2014; 9:68-70

#### Book Chapters:

- **Uniyal S**, Rai JPN. The Current Scenario in Chitosan Nanocomposite Application in Wastewater Treatment. In: Nano-biotechnology for wastewater treatment: Theory, Avenues and Practices. Rai and Saraswat (Eds). Pp. 315-330. 2022. Springer nature.
- Verma M, Sati M, **Uniyal S**. Impact of Renewable Energy in Reducing Greenhouse Gas Emissions. In: Renewable Energy and Green Technology. pp. 1-13. 2021, CRC Press. 10.1201/9781003175926-11.
- **Uniyal S**, Verma M, & Parmar S. Fungi mediated pollutant degradation and bioelectricity generation: An overview of current status. In book: Fungi Bio-Prospects in Sustainable Agriculture, Environment and Nano-technology. Editor(s): V.K. Sharma, M. P. Shah, S. Parmar, A. Kumar, 2021. Academic Press. (pp.101-119). ISBN 9780128219256
- **Uniyal S**, Kumar I, Singh P, Sharma R. Genetic engineering: an emerging approach for fostering bioremediation, current status, challenges and outlook. In: Innovations in Life Science Research. Nandita Ghoshal (Editor), Rajeshwar P. Sinha, PhD (Editor), Shashi Pandey-Rei (Editor). (2019). Nova science publisher. ISBN: 978-1-53615-868-7

- Sharma RK, Pandey B, **Uniyal S**. Phytotoxicity: An essential tool in Ecological risk assessment. In: Phytoremediation of Environmental Pollutants, 2016, (Chandra, R, Dubey, N. K., Kumar, V Eds.) CRC Press.
- **Uniyal S**, Paliwal R, Kaphaliya B, Sharma RK. Human Overpopulation: Impact on Environment. In: Environmental Issues Surrounding Human Overpopulation. 2016. (Singh et al. Eds.), Hershey, Pennsylvania, IGI Global.
- **Uniyal S**, Biodiversity harnessing with sustainable development. In: Environment, Agriculture and Sustainable Development. 2014. (Negi et al. Eds.), New Delhi. S.K. pp 116-121.
- **Uniyal S**, Pesticides: Environmental problems and degradation. In: Ecology, Environment and agriculture. 2015. (Negi et al. Eds.), pp. 3.3.1–3.3.11. Biotech Books. ISBN No. 978-81-7622-339-3
- Kaphaliya B, Paliwal R, Tariyal K, **Uniyal S**. Saline water problem in India: Its impact and management. In: Aquatic Science: The present Scenario. In; Water biology. 2018. (Khanna, D.R., Bhutiani R., Eds.) Discovery Publishing House Pvt. Ltd., New Delhi
- Paliwal R, Gusain P, Kaphaliya B, **Uniyal S**. Algal Potential for Inorganic and Organic Pollutants Decontamination. In: Aquatic Science: The present Scenario. In; Water biology. 2018. (Khanna, D.R., Bhutiani R., Eds.) Discovery Publishing House Pvt. Ltd., New Delhi.