

Curriculum Vitae

Name: Joginder Singh Panwar, PhD

Specialization: Plant Microbe Interaction; Environmental Microbiology; Bioremediation

Date of Birth: 02/01/1973

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Educational Qualification:

M.Sc. Botany (2000) – Specialization Plant-Microbe Interaction

Ph.D. Botany (2003) – “Studies on Arbuscular Mycorrhizal relationship of some Halophytes of Western Rajasthan”

Post Doc Fellowship (2003-2006): Research Associate CSIR, New Delhi

Post Doc Fellowship (2007-2010): DST Young Scientist, DST New Delhi

Total Grant Received 20.18 Millions

Research Experience: 20+ Years (Post Ph.D.)

Teaching Experience: 18+ Years (Post Ph.D.)

Research Output

Paper Published: 225 (Paper Accepted 02; Paper in Review: 05)				
Google Scholar	Citations: 7809	H-index: 44	i10-index: 127	Impact Factor: 610+
Scopus	Citations: 4808	H-index: 35	i10-index: 83	Impact Factor: 600+
Web of Science	Citations: 3203	H-index: 28	i10-index: 66	Impact Factor: 600+
Edited Book:	25	Authored Book:	01	Book Chapters: 85
NCBI Submission:	41	Patents Published: 08	Grant: 03	Research Grants: 2 + 2
Conference Presentation:	15	Invited Talks:	04	Scopus Indexed: 251
RG Score:	38.88	External Project Reviewer:	07	Professional Member: 08
Students Guidance	Ph.D.		M.Phil.	M.Tech. & M.Sc.
	Awarded – 07	Pursuing – 05	Awarded – 04	Awarded – 31

JOGINDER SINGH PANWAR

Ph.D

Career Highlights

Dr. Joginder Singh is a Professor at the Department of Botany, Nagaland University, Lumami, Nagaland India. Previously, he worked as a Professor in the school of Bioengineering and Biosciences, Lovely Professional University and also as a Young Scientist at Microbial Biotechnology and Biofertilizer Laboratory, Department of Botany, Jai Narain Vyas University in research project funded by the Department of Science and Technology, Govt. of India. He is an active member of various scientific societies and organizations including, Association of Microbiologists of India, Indian Society of Salinity Research Scientists, Indian Society for Radiation Biology, and European Federation of Biotechnology. He has more than 200 research and review articles in the peer-reviewed journals, edited 25 books published by Springer International Publishing, Elsevier Science Publishing and authored/co-authored 100 chapters in edited books. He serves as a reviewer for many prestigious journals, including Current Research in Engineering, Science and Technology, Journal of Cleaner Production, Science of the Total Environment, Environmental Monitoring and Assessment, Pedosphere, Soil and Sediment Contamination, Symbiosis, International Journal of Phytoremediation, Ecotoxicology and Environmental Safety, Annals of Agricultural Sciences, Annals of the Brazilian Academy of Sciences and many more. Dr Singh attended several International and National Seminars, Symposia, Conferences and chaired technical sessions and presented papers in them.

Web Profile

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<https://orcid.org/0000-0001-6968-4912>
<https://www.scopus.com/authid/detail.uri?authorId=56543826900>
<https://www.researchgate.net/profile/Joginder-Singh-8>
<https://scholar.google.com/citations?hl=en&user=0EeopQ8AAAAJ>
<https://www.webofscience.com/wos/author/record/D-5576-2014>
<https://vidwan.inflibnet.ac.in/myprofile>
<https://www.linkedin.com/in/joginder-singh-phd-287b5219/>

Work Experience

Teaching

- *Professor*
Department of Botany, Nagland University, Lumami – Nagaland, from September 25, 2023 onwards
- *Professor*
Department of Microbiology, Lovely Professional University, Phagwara – Punjab, from January, 01, 2019 to Sept. 15, 2023
- *Associate Professor*
Department of Microbiology, Lovely Professional University, Phagwara – Punjab, from August, 01, 2015 to Dec. 31, 2018
- *Assistant Professor*
Department of Microbiology, Lovely Professional University, Phagwara – Punjab, from August, 03, 2010 to July, 31, 2015
- *Honorary Faculty*

Department of Botany, Jai Narain Vyas University, Jodhpur from Dec. 26, 2003 to Dec. 31, 2006 and Dec. 13, 2007 to July, 01, 2010

- *Lecturer*
Department of Biotechnology, Mahila P. G. Mahavidyalaya, Jodhpur from July 7, 2007 to Dec. 12, 2007.
- *Guest Faculty*
Department of Botany, Jai Narain Vyas University, Jodhpur from Jan. 2006 to March 2007.
- *Guest Faculty*
Department of Botany, Jai Narain Vyas University, Jodhpur from Aug. 2003 to Dec. 25, 2003.

Research

- *Young Scientist*
Microbial Biotechnology and Biofertilizer Laboratory, Department of Botany, Jai Narain Vyas University in Department of Science and Technology, Govt. of India (DST SERC Fast Track Scheme) funded project entitled “Microbial Technology for Rhizoremediation of Pollutant Soil” from Dec. 13, 2007 to July 30, 2010.
- *Research Associate*
Microbial Biotechnology and Biofertilizer Laboratory, Department of Botany, Jai Narain Vyas University. Council for Scientific and Industrial Research (CSIR) funded project entitled “Mycorrhizal technology for increasing productivity of some medicinal plants of Indian Thar desert” from Dec. 26, 2003 to Dec. 31, 2006.
- *Senior Research Fellow*
Central Arid Zone Research Institute (CAZRI), Jodhpur
In Indian Council of Agriculture Research (ICAR) Cess funded project entitled “Integration of on-farm wastes and bio-control agents for managing *Fusarium* and *Macrophomina* to maximize cumin and clusterbean productivity” from Dec. 19, 2001 to Sept. 27, 2002.

Research Projects

IC-IMPACTS funded demonstration project entitled “Contaminated land reclamation using hybrid absorbable landscape and native plant species with real-time monitoring to improve public health in Punjab” from Feb 14, 2018 to Feb 13, 2020 – Canadian \$ 51500

Department of Biotechnology funded project entitled “An innovative green technology for treating municipal and industrial wastewater entering rivers and streams” from Dec 15, 2016 to June 15, 2019 – INR 1.7 Crore (**BT/IN/IC-IMPACTS/31/RK/2015-16 dated 17th Dec. 2015**)

Ministry of Environment and Forests funded project entitled “Biodiversity and conservation of medicinal plants of Punjab State” from March 26, 2013 to January 31, 2014 – INR 20 Thousand

Department of Science and Technology, Govt. of India (DST SERC Fast Track Scheme) funded project entitled “Microbial Technology for Rhizoremediation of Polluted Soil” from Dec. 13, 2007 to July 30, 2010 – INR 14.76 Lakh (**DST SERC Fast Track Project No. SR/LS-019/2007**)

Research Associate in Council for Scientific and Industrial Research, funded project entitled “Mycorrhizal technology for increasing productivity of some medicinal plants of Indian Thar Desert” from 26 Dec. 2003 to 31 Dec. 2006.

Patent Applications Granted

SHARMA, Raj Neeta, SINGH, Joginder, SINGH, BHATIA, Deepika, Simaranjeet and KANWAR, Ramesh, (2018). A Process to Remove Heavy Metals from Industrial Effluent using Biochar. Patent Number – 353669

SHARMA, Raj Neeta, SINGH, Joginder, SINGH, BHATIA, Deepika, Simaranjeet and KANWAR, Ramesh (2018). Filtration Assembly for Wastewater Treatment. Patent Number – 389028

Patent Applications Published

BHATIA, Deepika, SHARMA, Raj Neeta, SINGH, Joginder, SINGH, Simaranjeet and KANWAR, Ramesh (2018). A Process of Degradation of Textile Dyes. Patent application number – IN201811009348.

Research Activity Coordinated

Joint Organizing Secretary in International Conference entitled 'International Conference on Plant Physiology and Biotechnology (ICPPB) (ICPPB-2021) organized by Lovely Professional University, Phagwara, Punjab (India) 10-12th September 2021.

Joint Organizing Secretary in National Conference entitled 'Microbial Bioprospecting: Present & Future Scope organized by Association of Microbiologists of India-LPU Unit, Phagwara, Punjab (India) 6-7th March 2020.

Member of the Core Committee, International Conference on Recent Trends in Engineering, Management and Science ICRTEMS'19 on September 26 - 27th, 2019 at Delhi Institute of Technology and Research, Faridabad, Haryana,

Joint Organizing Secretary in International Conference entitled 'Innovative Strategies for Sustainable Water Management (ISSWM-2017) organized by Lovely Professional University, Phagwara, Punjab (India) 17-18th November 2017.

Coordinated Faculty Awareness programme on 'Intellectual Property Rights & Environment conservation' organized by Punjab State Council for Science & Technology, at Lovely Professional University, Phagwara, Punjab (India) 5th July 2012.

Book Published

1. Kumar, V., Bilal, M., Santayo, G., and **Singh, J.** (2023). Biocontrol Agents for Improved Agriculture. Academic Press, Elsevier, ISBN No. 978-044-31-5199-6 Print.
2. Gehlot, P. and **Singh, J.** (2023). Biomolecules of Fungi Nutraceutical, Pharmaceutical, Industrial and Environmental Protection. Agrobios (India): Jodhpur, ISBN No. 978-93-9438-014-1 Print.
3. **Singh, J.**, Pandey, A., Singh, S., Garg, V.K. and Ramamurthy, P. (2022). Current Developments in Biotechnology and Bioengineering: Pesticides: Human Health, Environmental Impacts and Management. Elsevier, ISBN No. 978-032-39-1900-5 Print.
4. Kumar, V., and **Singh, J.** (2022). Microbial Technologies for Wastewater Recycling and Management: Recent Trends, Challenges, and Perspectives. CRC Press (Taylor & Francis Group) USA, ISBN No. 978-103-21-3758-2 Print.

5. Samuel, J., Kumar, A., and **Singh, J.** (2022). Relationship Between Microbes and Environment for Sustainable Ecosystem Services, Volume 3 Microbial Tools for Sustainable Ecosystem Services. Woodhead Publishing, Elsevier, ISBN No. 978-032-38-9936-9 Print.
6. Samuel, J., Kumar, A., and **Singh, J.** (2022). Relationship Between Microbes and Environment for Sustainable Ecosystem Services, Volume 2 Microbial Mitigation of Waste for Sustainable Ecosystem Services. Woodhead Publishing, Elsevier, ISBN No. 978-032-38-9937-6 Print.
7. Samuel, J., Kumar, A., and **Singh, J.** (2022). Relationship Between Microbes and Environment for Sustainable Ecosystem Services, Volume 1 Microbial Products for Sustainable Ecosystem Services. Woodhead Publishing, Elsevier, ISBN No. 978-032-38-9938-3 Print.
8. **Singh, J.** and Sharma, D. (2022). Microbial Resource Technologies for Sustainable Development. Elsevier Science Publishing, ISBN No. 978-0-323-90590-9 Print.
9. **Singh, J.** and Vyas, A. (2022). Advances in Dairy Microbial Products. Woodhead Publishing, Elsevier, ISBN No. 978-032-38-5793-2 Print.
10. Kumar, A., **Singh, J.** and Ferreira, L. (2022). Microbiome Under Changing Climate: Implications and Solutions. Woodhead Publishing, Elsevier, ISBN No. 978-032-39-0571-8 Print.
11. Kumar, A., **Singh, J.** and Samuel, J. (2021). Volatiles and Metabolites of Microbes. Academic Press, ISBN No. 978-012-82-4523-1 Print. DOI: 10.1016/C2020-0-00302-6
12. **Singh, J.** and Gehlot, P. (2020). New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of Fungi and Fungal Metabolites: Current Aspects. Elsevier Science Publishing, ISBN No. 978-012-82-1005-5 Print. DOI: 10.1016/C2019-0-02158-9
13. **Singh, J.** and Gehlot, P. (2020). New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of fungi and fungal metabolites: Applications in Healthcare. Elsevier Science Publishing, ISBN No. 978-012-82-1006-2 Print. DOI: 10.1016/C2019-0-02159-0
14. **Singh, J.** and Gehlot, P. (2020). New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of fungi and fungal metabolites: Environmental and Industrial aspects. Elsevier Science Publishing, ISBN No. 978-012-82-1007-9 Print. DOI: 10.1016/C2019-0-02160-7
15. **Singh, J.** and Gehlot, P. (2020). New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of fungi and fungal metabolites: Biotechnological Interventions and Futuristic Approaches. Elsevier Science Publishing, ISBN No. 978-012-82-1008-6 Print. DOI: 10.1016/C2019-0-02161-9
16. Prasad, R., Kumar, V., **Singh, J.**, Upadhyaya, C.P. (2020). Recent Developments in Microbial Technologies. Springer Nature Singapore Pte Ltd. ISBN No. 978-981-15-4438-5 Print. DOI: 10.1007/978-981-15-4439-2
17. Yadav, A.N., **Singh, J.**, Singh, C., Yadav, N. (2020). Current Trends in Microbial Biotechnology for Sustainable Agriculture. Springer Nature Singapore Pte Ltd. ISBN No. 978-981-15-6948-7 Print. DOI: 10.1007/978-981-15-4439-2
18. **Singh, J.**, Vyas, A., Wang, S., Prasad, R (2020). Microbial Biotechnology: Basic Research and Applications. Springer Nature Singapore Pte Ltd. ISBN No. 978-981-15-2816-3 Print. DOI: 10.1007/978-981-15-2817-0
19. **Singh, J.** and Yadav, A.N. (2020). Natural Bioactive Products in Sustainable Agriculture, Springer Nature Singapore Pte Ltd. ISBN No. 978-981-15-3023-4 Print. DOI: 10.1007/978-981-15-2817-0
20. **Singh, J.**, Meshram, V., Gupta, M (2020). Bioactive Natural products in Drug Discovery, Springer Nature Singapore Pte Ltd. ISBN No. 978-981-15-1393-0 Print. DOI: 10.1007/978-981-15-1394-7

21. Yadav, A.N., **Singh, J.**, Rastegari, A.A., Yadav, N. (2020). *Plant Microbiomes for Sustainable Agriculture*, Springer Nature Switzerland AG. ISBN No. 978-3-030-38453-1 Print. DOI: 10.1007/978-3-030-38453-1
22. Gehlot, P. and **Singh, J.** (2018). *Fungi and their Role in Sustainable Development: Current Perspectives*. Springer International Publishing, Singapore, ISBN No. 978-981-13-0392-0 Print. DOI: 10.1007/978-981-13-0393-7
23. **Singh, J.**, Sharma, D., Kumar, G., and Sharma, N.R. (2018). *Microbial Bioprospecting for Sustainable Development*. Springer International Publishing, Singapore, ISBN No. 978-981-13-0052-3 Print. DOI: 10.1007/978-981-13-0053-0
24. **Singh, J.** and Gehlot, P. (2015). *Microbes in Action – Vol 1*. Agrobios (India): Jodhpur, 2015. ISBN No. 978-81-7754-537-1 Print.
25. Gehlot, P. and **Singh, J.** (2015). *Arbuscular Mycorrhizal Fungi*. Agrobios (India): Jodhpur, 2015. ISBN No. 978-81-7754-528-9 Print.

List of Publications

1. Singh, S., Pavithra, N., Khan, N.A., Chauhan, V., Shehata, N., Behera, S.K., Singh, J. and Ramamurthy, P.C. (2023). Effective voltammetric tool for Nano-detection of triazine herbicide (1-Chloro-3-ethylamino-5-isopropylamino-2, 4, 6-triazine) by naphthalene derivative. *Environmental Research*, 116808. (IF- 8.3)
2. Godbole, V., Singh, S., Ramamurthy, P.C., Khan, N.A., Bisht, M., Pal, M.K., Singh, J. Kumar, G., Esrafil, A., and Yousefi, M. (2023). Electroactive microbe communication: A crucial aspect for energy generation in bio-electrochemical systems. *Journal of Environmental Chemical Engineering*, 110646 (IF - 7.7)
3. Vishnu, G., Singh, S., Kaul, N., Ramamurthy, P.C., Naik, T., Viswanath, R., Kumar, V., Naik, H.B., Prathap, A., HA, A.K. and Singh, J. (2023). Green synthesis of nickel-doped magnesium ferrite nanoparticles via combustion for facile microwave-assisted optical and photocatalytic applications. *Environmental Research*, 116598. (IF- 8.3)
4. Thakur, B., Singh, J., Singh, J., Angmo, D., & Vig, A. P. (2023). Identification and characterization of extracted microplastics from agricultural soil near industrial area: FTIR and X-Ray diffraction method. *Environmental Quality Management*, 1–9.
5. Bera S, Chowdhury D, Han J and Singh J (2023) Editorial: Applied and sustainable methods to manage environmental contaminants with natural and fortified microbial biosorbents. *Frontiers in Microbiology* 14:1220337 (IF- 5.2)
6. Bera, S., Mitra, R., and Singh, J. (2023). Recent advancement in protected delivery methods for carotenoid: a smart choice in modern nutraceutical formulation concept, *Biotechnology and Genetic Engineering Reviews*, DOI: 10.1080/02648725.2023.2213988 (IF- 3.23)
7. Singh, S., Naik, T.S.S.K., Basavaraju, U., Pavithra, N., Varshney, R., Chauhan, V., Shehata, N., Thamaraiselvan, C., Subramanian, S., Singh, J. and Khan, N.A., 2023. Novel and sustainable green sulfur-doped carbon nanospheres via hydrothermal process for Cd (II) ion removal. *Chemosphere*, 328, 138533. (IF- 8.8)
8. Kumar, V., Ramamurthy, P. C., Singh, S., Dhanjal, D. S., Parihar, P., Bhatia, D., Prasad, R. and Singh, J. (2023). Phytochemistry and ethnomedicinal qualities of metabolites from *Phyllanthus emblica* L.: A review. *BIOCELL*, 47(5), 1159–1176. (IF- 1.2)
9. Vishnu, G., Singh, S., Naik, T.S.S.K., Viswanath, R., Ramamurthy, P.C., Bhadrecha, P., Naik, H.S., Singh, J., Khan, N.A. and Zahmatkesh, S. (2023). Photodegradation of methylene blue dye using light driven photocatalyst-green cobalt doped cadmium ferrite nanoparticles as antibacterial agents. *Journal of Cleaner Production*, 136977. 10.1016/j.jclepro.2023.136977 (IF- 11.1)

10. Thakur, B., Singh, J., Singh, J., Angmo, D., and Vig, A. P. (2023). Biodegradation of different types of microplastics: Molecular mechanism and degradation efficiency. *Science of The Total Environment*, 877: 162912. (IF- 9.8)
11. Dogra, S., Singh, J., Koul, B., and Yadav, D. (2023). *Artemisia vestita*: A Folk Medicine with Hidden Herbal Fortune. *Molecules*, 28(6), 2788. (IF- 4.6)
12. Singh, S., Pavithra, N., Naik, T.S.S.K., Basavaraju, U., Thamaraiselvan, C., Behra, S.K., Kour, R., Dwivedi, P., Subramanian, S., Khan, N.A., Singh, J. & Ramamurthy, P. C. (2023). Removal of Pb ions using green Co₃O₄ nanoparticles: Simulation, modeling, adsorption, and biological studies. *Environmental Research*, 222, 115335 (IF: 8.3)
13. Singh, S., Naik, T.S.S.K., Thamaraiselvan, C., Behera, S.K., Pavithra, N., Nath, B., Dwivedi, P., Singh, J. and Ramamurthy, P.C. (2023). Applicability of new sustainable and efficient green metal-based nanoparticles for removal of Cr (VI): Adsorption anti-microbial, and DFT studies. *Environmental Pollution*, 320, 121105 (IF- 8.9)
14. Kour, R., Singh, S., Sharma, H. B., Naik, T. S. S. K., Shehata, N., Pavithra, N., Ali, W., Kapoor, D., Dhanjal, D.S., Singh, J., Khan, A.H. and Ramamurthy, P. C. (2023). Persistence and remote sensing of agri-food wastes in the environment: Current state and perspectives. *Chemosphere*, 317, 137822 (IF- 8.8)
15. Singh, S., Naik, T., Shehata, N., Aguilar-Marcelino, L., Dhokne, K., Lonare, S., Chauhan, V., Kumar, A., Singh, J., Ramamurthy, P.C., Khan, A.H., Khan, N.A. and Dehghani, M.H. (2023). Novel insights into Graphene oxide-based adsorbents for remediation of hazardous pollutants from aqueous solutions: A comprehensive review. *Journal of Molecular Liquids*, 369, 120821 (IF: 6.0)
16. Singh, S., Basavaraju, U., Naik, T.S.K., Behera, S.K., Khan, N.A., Singh, J., Singh, L. and Ramamurthy, P.C. (2023). Graphene oxide-based novel porous MOF nanohybrid for synergic removal of Pb (II) ions from aqueous solutions: Simulation and adsorption studies. *Environmental Research*, 216(4), 114750. (IF: 8.3)
17. Naik, T.S.K., Singh, S., Pavithra, N., Varshney, R., Uppara, B., Singh, J., Khan, N.A., Singh, L., Arshad, M.Z. and Ramamurthy, P.C. (2023). Advanced experimental techniques for the sensitive detection of a toxic bisphenol A using UiO-66-NDC/GO-based electrochemical sensor. *Chemosphere*, 311, 137104. (IF- 8.8)
18. Singh, S., Naik, T.S., Khan, N.A., Wani, A.B., Behera, S.K., Nath, B., Bhati, S., Singh, J. and Ramamurthy, P.C (2022). A systematic study of arsenic adsorption and removal from aqueous environments using novel graphene oxide functionalized UiO-66-NDC nanocomposites. *Scientific Reports*, 12(1), 1-15. (IF: 4.6)
19. Mahajan, N., Koul, B., Kaur, J., Bishnoi, M., Gupta, P., Kumar, A., Shah, B.A., Mubeen, I., Rai, A.K., Prasad, R. and Singh, J. (2022). Antiobesity Potential of Bioactive Constituents from Dichloromethane Extract of *Psoralea corylifolia* L. Seeds, *BioMed Research International*, 2022:9504787
20. Cao, J., Yang, Q., Jiang, J., Dalu, T., Kadushkin, A., Singh, J., Fakhrullin, R., Wang, F., Cai, X. and Li, R., 2022. Coronas of micro/nano plastics: a key determinant in their risk assessments. *Particle and Fibre Toxicology*, 19(1), 55. (IF: 10.0)
21. Pawar, A., Singh, S., Ramamurthy, P.C., Anil, A.G., Shehata, N., Dhanjal, D.S., Naik, T.S.K., Parihar, P., Prasad, R. and Singh, J. (2022). Toxicity, Environmental Monitoring and Removal Strategies of Arsenic. *International Journal of Environmental Research*, 16: 66. (IF- 3.1).
22. Singh, S., Ramamurthy, P.C., Dhanjal, D.S., Rana, S., Bhatia, D., Kanwar, R., Sharma, N.R. and Singh, J. (2022). Design and development of onsite biofilter unit for effective remediation of contaminants from wastewater. *CLEAN–Soil, Air, Water*, 51(3): 2100396 (IF-1.7).

23. Singh, S., Naik, T.S.K., Anil, A.G., Khasnabis, S., Nath, B., Basavaraju, U., Kumar, V., Garg, V.K., Subramanian, S., Singh, J. and Ramamurthy, P.C. (2022). A novel CaO nanocomposite cross linked graphene oxide for Cr(VI) removal and sensing from wastewater. *Chemosphere*, 301, 134714. (IF-8.8).
24. Bhatia, D., Kanwar, R. S., Singh, J., Sharma, N. R., and Khandare, R. V. (2022). Degradation and decolorization of Disperse red 167 dye with an in-situ isolated azo-reductase enzyme producing bacterium *Paenochrobactrum glaciei*. *International Journal of Environmental Science and Technology*, 20: 2389–2404. (IF- 3.1).
25. Dhaka, V., Singh, S., Ramamurthy, P.C., Samuel, J., Swamy Sunil Kumar Naik, T., Khasnabis, S., Prasad, R. and Singh, J. (2022). Biological degradation of polyethylene terephthalate by rhizobacteria. *Environmental Science and Pollution Research*, 1-10. (IF- 5.8).
26. Bhardwaj, S., Sharma, D., Singh, S., Ramamurthy, P.C., Verma, T., Pujari, M., Singh, J., Kapoor, D. and Prasad, R. (2022). Physiological and molecular insights into the role of silicon in improving plant performance under abiotic stresses. *Plant and Soil*, DOI: 10.1007/s11104-022-05395-4 (IF-4.9)
27. Singh, S., Anil, A.G., Naik, T.S.K., Basavaraju, U., Khasnabis, S., Nath, B., Kumar, V., Subramanian, S., Singh, J. and Ramamurthy, P.C. (2022). Mechanism and kinetics of Cr (VI) adsorption on biochar derived from *Citrobacter freundii* under different pyrolysis temperatures. *Journal of Water Process Engineering*, 47, 102723. (IF-7.0)
28. Jha, P., Ghosh, S., Vidyarthi, A.S., Singh, J., Mukhopadhyay, K. and Prasad, R. (2022). Unravelling the microbial community structure and function of coal-bed methane producing formation water of Jharia coal mines using metagenomics approach. *Fuel*, DOI: 10.1016/j.fuel.2022.123459 (IF-7.4)
29. Mahajan, N., Koul, B., Gupta, P., Shah, B.A. and Singh, J. (2022). *Psoralea corylifolia* Linn: Panacea to several maladies. *South African Journal of Botany*, 149: 963-993. DOI: 10.1016/j.sajb.2022.01.024 (IF-3.1)
30. Dhaka, V., Singh, S., Anil, A.G., Kumar Naik, T.S., Garg, S., Samuel, J., Kumar, M., Ramamurthy, P.C. and Singh, J. (2022) Occurrence, toxicity and remediation of polyethylene terephthalate plastics. A review. *Environ Chem Lett* 20, 1777-1800 (IF-15.7).
31. Singh, S., Naik, T.S.K., Anil, A.G., Dhiman, J., Kumar, V., Dhanjal, D.S., Aguilar-Marcelino, L., Singh, J. and Ramamurthy, P.C. (2022). Micro (nano) plastics in wastewater: A critical review on toxicity risk assessment, behaviour, environmental impact and challenges. *Chemosphere*, 133169 (IF-8.8).
32. Joshi, A., Ray, N. M., Singh, J., Upadhyay, A. K., & Kaushik, V. (2022). T-cell epitope-based vaccine designing against Orthohantavirus: a causative agent of deadly cardio-pulmonary disease. *Network Modeling Analysis in Health Informatics and Bioinformatics*, 11(1), 1-10.
33. Joshi, A., Solanki, D.S., Gehlot, P., Singh, J. and Kaushik, V. (2022). In-Silico Validation of *Prosopis ciniraria* Therapeutic Peptides Against Fungal Cell Wall: Better Treatment Strategy for Fungal Diseases, *International Journal of Peptide Research and Therapeutics*, 28:15 (IF-2.1)
34. Singh, S., Kumar, V., Anil, A. G., Romero, R., Ramamurthy, P. C., & Singh, J. (2022). Biodegradation of phorate by bacterial strains in the presence of humic acid and metal ions. *Journal of Basic Microbiology*, 62(3-4): 498-507 (IF- 3.1)
35. Singh, S., Khasnabis, S., Anil, A. G., Kumar, V., Naik, TSSK., Nath, B., Garg, V.K., Singh, J., & Ramamurthy, P. C. (2021). Multifunctional nanohybrid for simultaneous detection and removal of Arsenic(III) from aqueous solutions. *Chemosphere*, 289, 133101. (IF-8.8).
36. Kumar, A., Singh, S.K., Singh, V.K., Kant, C., Singh, A.K., Tripathi, V., Singh, K., Sharma, V.K. and Singh, J. (2021). An insight into the molecular docking

- interactions of plant secondary metabolites with virulent factors causing common human diseases. *South African Journal of Botany*, 149: 1008-1016 DOI: 10.1016/j.sajb.2021.11.010 (IF-3.1).
37. Miao, X., Kumar, R.R., Shen, Q., Wang, Z., Qingzi Zhao, Singh, J., Paul, S., Wang, W. & Shang, X. (2021). Phytoremediation for Co-contaminated Soils of Cadmium and Polychlorinated Biphenyls Using the Ornamental Plant *Tagetes patula* L. *Bulletin of Environmental Contamination and Toxicology*, DOI: 10.1007/s00128-021-03392-4 (IF-2.7)
 38. Singh, S., Kumar, V., Anil, A. G., Kapoor, D., Khasnabis, S., Shekar, S., Pavithra, N., Samuel, J., Subramanian, S., **Singh, J.**, & Ramamurthy, P. C. (2021). Adsorption and detoxification of pharmaceutical compounds from wastewater using nanomaterials: A review on mechanism, kinetics, valorization and circular economy. *Journal of Environmental Management*, 300, 113569 (IF-8.7).
 39. Galadima, M., Singh, S., Pawar, A., Khasnabis, S., Dhanjal, D. S., Anil, A. G., Rai, P., Ramamurthy, P.C. and **Singh, J.** (2021). Toxicity, Microbial Degradation and Analytical Detection of Pyrethroids: A Review. *Environmental Advances*, 100105.
 40. Singh, S., Anil, A. G., Kumar, V., Kapoor, D., Subramanian, S., **Singh, J.**, & Ramamurthy, P. C. (2021). Nitrates in the environment: A critical review of their distribution, sensing techniques, ecological effects and remediation. *Chemosphere*, 287(1), 131996. (IF-8.8).
 41. Singh, S., Anil, A.G., Khasnabis, S., Kumar, V., Nath, B., Adiga, V., Naik, T.S.S.K., Subramanian, S., Kumar, V., **Singh, J.**, and Ramamurthy, P.C. (2021). Sustainable removal of Cr(VI) using graphene oxide-zinc oxide nanohybrid: Adsorption kinetics, isotherms and thermodynamics. *Environmental Research*, 203, 111891 (IF-8.3).
 42. Shivika Datta, S., Ramamurthy, P.C., Anand, U., Singh, S., Singh, A., Dhanjal, D.S., Dhaka, V., Kumar, S., Kapoor, D., Nandy, S., Kumar, M., Koshy, E.P., Dey, A., Proćków, J. and **Singh, J.** (2021). Wonder or evil?: Multifaceted health hazards and health benefits of *Cannabis sativa* and its phytochemicals. *Saudi Journal of Biological Sciences*, 28: 7290-7313 (IF: 4.4)
 43. Singh, S., **Singh, J.**, Ramamurthy, P. C., Kumar, V., Bhardwaj, S., and Garg, V. K. (2021). Biodegradation of monocrotophos by indigenous soil bacterial isolates in the presence of humic acid, Fe (III) and Cu (II) ions. *Bioresource Technology Reports*, 15: 100778.
 44. Bhardwaj, S., Kapoor, D., Singh, S., Gautam, V., Dhanjal, D. S., Jan, S., Ramamurthy, P. C., Prasad, R. and **Singh, J.** (2021). Nitric Oxide: A Ubiquitous Signal Molecule for Enhancing Plant Tolerance to Salinity Stress and Their Molecular Mechanisms. *Journal of Plant Growth Regulation*. <https://doi.org/10.1007/s00344-021-10394-3> (IF- 4.8).
 45. Singh, S., Kumar, V., Parihar, P., Dhanjal, D. S., Singh, R., Ramamurthy, P. C., Prasad, R. and **Singh, J.** (2021). Differential regulation of drought stress by biological membrane transporters and channels. *Plant Cell Reports*. 40, 1565–1583 (IF- 6.2).
 46. Akhtar, N., Joshi, A., **Singh, J.** and Kaushik, V. (2021). Design of a Novel and Potent Multivalent Epitope Based Human Cytomegalovirus Peptide Vaccine: An Immunoinformatics Approach. *Journal of Molecular Liquids*, 116586 <https://doi.org/10.1016/j.molliq.2021.116586> (IF-6.0)
 47. Tripathy, A., More, R. D., Gupta, S., Samuel, J., Singh, J. and Prasad, R. (2021). Present and Future Prospect of Algae: A Potential Candidate for Sustainable Pollution Mitigation. *The Open Biotechnology Journal*, 15: 1761-1767
 48. Gill, J.P., Singh, S., Sethi, N., Dhanjal, D.S., Mohan, A., Sarma, H., Prasad, R. and **Singh, J.** (2021). Efficient synthesis and characterization of non-toxic glyphosate

- derivatives as eco-friendly herbicides. *Current Research in Green and Sustainable Chemistry*, 4: 100100
49. Bhati, S., Kaushik, V. and **Singh, J.** (2021). Rational Design of Flavonoid based Potential inhibitors targeting SARS-CoV 3CL protease for the Treatment of COVID-19. *Journal of Molecular Structure*, 1237: 130380 (IF-3.8).
 50. Datta, S., Singh, J., **Singh, J.**, Singh, S. and Singh, S. (2021). Avoidance behavior of *Eisenia fetida* and *Metaphire posthuma* towards two different pesticides, Acephate and Atrazine. *Chemosphere*, 278, 130476 (IF-8.8).
 51. Singh, S., Kumar, V., Kanwar, R., Wani, A.B., Gill, J.P.K., Ramamurthy, P.C., **Singh, J.** and Garg, V.K. (2021). Toxicity and detoxification of monocrotophos from ecosystem using different approaches: A review. *Chemosphere*, 275, 130051 (IF-8.8).
 52. Kour, D., Kaur, T., Devi, R., Yadav, A., Singh, M., Joshi, D., Singh, J., Suyal, D.C., Kumar, A., Rajput, V.D., Yadav, A.N., Singh, K., **Singh, J.**, Sayyed, R.Z., Arora, N.K., and Saxena, A.K. (2021). Beneficial microbiomes for bioremediation of diverse contaminated environments for environmental sustainability: present status and future challenges. *Environmental Science and Pollution Research*, DOI: 10.1007/s11356-021-13252-7 (IF- 5.8)
 53. Singh, S., Kapoor, D., Khasnabis, S., **Singh, J.** and Ramamurthy, P.C. (2021). Mechanism and kinetics of adsorption and removal of heavy metals from wastewater using nanomaterials. *Environmental Chemistry Letters*, 19: 2351–2381 (IF-15.7).
 54. Singh, S., Kumar, V., Kapoor, D., Dhanjal, D.S., Bhatia, D., Jan, S., Singh, N., Romero, R., Ramamurthy, P.C. and **Singh, J.** (2021). Detection and disinfection of COVID-19 virus in wastewater. *Environmental Chemistry Letters*, 19:1917-1933 (IF-15.7).
 55. Ramamurthy, P.C., Singh, S., Kapoor, D., Parihar, P., Samuel, J., Prasad, R., Kumar, A. and **Singh, J.** (2021). Microbial biotechnological approaches: renewable bioprocessing for the future energy systems. *Microbial Cell Factories*, 20: 55 (IF-6.4).
 56. Kumar, V., Ferreira, L.F.R., Sonkar, M. and **Singh, J.** (2021). Phytoextraction of heavy metals and ultrastructural changes of *Ricinus communis* L. grown on complex organometallic sludge discharged from alcohol distillery. *Environmental Technology & Innovation*, 22, 101382 (IF-7.1)
 57. Dey, P., Rangarajan, V., **Singh, J.**, Nayak, J. and Dilip, K.J. (2021). Current perspective on improved fermentative production and purification of fungal cellulases for successful biorefinery applications: a brief review. *Biomass Conversion and Biorefinery*, DOI: 10.1007/s13399-020-01227-6 (IF-4.0)
 58. Bhadrecha, P., Bala, M., Kaushik, V., Gaur, N. A., Singh, S., Singh, J., & Kumar, M. (2021). Folate-producing rhizobacteria of *Hippophae rhamnoides* L. from Indian trans-Himalaya low atmospheric zone. *BIOCELL*, 45(2): 387-394 (IF-1.2)
 59. Singh, S., Kumar, V., Dhanjal, D.S., Datta, S., Kapoor, D., Singh, S., Kumar, S., Prasad, R. and **Singh, J.** (2020). Physiological Responses, Tolerance and Remediation Strategies in Plants exposed to Metalloids. *Environmental Science and Pollution Research*, DOI: 10.1007/s11356-020-10293-2 (IF- 5.8)
 60. Dey, P., **Singh, J.**, Suluvoy, J.K., Dilip, K.J., & Nayak, J. (2020). Utilization of *Swertia chirayita* Plant Extracts for Management of Diabetes and Associated Disorders: Present Status, Future Prospects and Limitations. *Natural Products and Bioprospecting*, 10: 431-443 (IF- 4.7)
 61. Kumar, P., Kumar, T., Singh, S., Tuteja, N., Prasad, R. and **Singh, J.** (2020). Potassium: A Key Modulator for Cell Homeostasis. *Journal of Biotechnology*. *Journal of Biotechnology* 324 (2020) 198-210 (IF-4.1)
 62. Singh, S.; Kumar, V.; Gill, J.P.K.; Datta, S.; Singh, S.; Dhaka, V.; Kapoor, D.; Wani, A.B.; Dhanjal, D.S.; Kumar, M.; Harikumar, S.L.; **Singh, J.** (2020). Herbicide

- Glyphosate: Toxicity and Microbial Degradation. *Int. J. Environ. Res. Public Health* 2020, 17, 7519
63. Shaikh, R., Rizvi, A., Quraishi, M., Pandit, S., Mathuriya, A.S., Gupta, P.K., **Singh, J.** and Prasad, R. (2020). Bioelectricity production using plant-microbial fuel cell: Present state of art. *South African Journal of Botany*, *South African Journal of Botany* 140 (2021) 393-408 (IF-3.1)
 64. Nandy, S., **Singh, J.**, Pandey, D.K. and Dey, A. (2020). *Hemidesmus indicus* L. Br.: Critical assessment of in-vitro biotechnological advancements and perspectives. *Applied Microbiology and Biotechnology*, 104(20): 8517-8548 (IF-5.0)
 65. Singh, S., Dhanjal, D.S., Sonali, Thotapalli, S., Kumar, V., Datta, S., Kumar, V., Kumar, M. and **Singh, J.** (2020). An insight in bacteriophage based biosensors with focus on their detection methods and recent advancements. *Environmental Technology & Innovation*, 20:101081 (IF-7.1)
 66. Jakeer, S., Varma, M., Sharma, J., Mattoo, F., Gupta, D., **Singh, J.**, Kumar, M. and Gaur, N.A. (2020). Metagenomic analysis of the fecal microbiome of an adult elephant reveals the diversity of CAZymes related to lignocellulosic biomass degradation. *Symbiosis* 81:209–222 (IF-2.5)
 67. Singh, S., Kumar, V., Dhanjal, D.S., Datta, S., Bhatia, D., Dhiman, J., Samuel, J., Prasad, R. and **Singh, J.** (2020). A sustainable paradigm of sewage sludge biochar: Valorization, opportunities, challenges and future prospects. *Journal of Cleaner Production*, 269:122259 (IF-11.1)
 68. Jha, P., **Singh, J.**, Vidyarthi, A.S. and Prasad, R. (2020). Unveiling the Biodiversity of Hyperthermophilic Archaea in Jharia Coal mines: Potential Threat to Methanogenesis?. *Current Genomics*, 21(5): 363-371(IF-2.6)
 69. Ghosh, M., Gera, M., **Singh, J.**, Prasad, R. and Pulicherla, K.K. (2020). Comprehensive Investigation of Potential Novel Marine Psychrotolerant *Actinomyces* sp. Isolated from the Bay-of-Bengal. *Current Genomics*, 21(4): 271-282 (IF-2.6)
 70. Singh, S., Kumar, V., Datta, S., Wani, A.B., Dhanjal, D.S., Romero, R. and **Singh, J.** (2020). Glyphosate uptake, translocation, resistance emergence in crops, analytical monitoring, toxicity and degradation: a review. *Environmental Chemistry Letters*, 18:663-702. (IF-15.7).
 71. Singh, S., Kumar, V., Singla, S., Sharma, M., Singh, D.P., Prasad, R., Thakur, V.K. and **Singh, J.** (2020). Kinetic Study of the Biodegradation of Acephate by Indigenous Soil Bacterial Isolates in the Presence of Humic Acid and Metal Ions. *Biomolecules*, 10, 433 (IF-5.5).
 72. Sood, M., Sharma S.S., **Singh, J.**, Prasad, R. and Kapoor, D. (2020). Stress Ameliorative Effects of Indole Acetic Acid on *Hordeum vulgare* L. Seedlings Subjected to Zinc Toxicity. *Phyton – International Journal of Experimental Botany*, 89(1), 71-86 (IF-1.7).
 73. Bhadrecha, P., Bala, M., Khasa, Y.P., Arshi, A., **Singh, J.** and Kumar, M. (2020). *Hippophae rhamnoides* L. rhizobacteria exhibit diversified cellulase and pectinase activities. *Physiology and Molecular Biology of Plants*, 26, 1075-1085 (IF-3.5)
 74. Singh, S., Kumar, V., Datta, S., Dhanjal, D.S., Sharma, K., Samuel, J. and **Singh, J.** (2020). Current advancement and future prospect of biosorbents for bioremediation. *Science of the Total Environment*, 709, 135895, (IF-9.8).
 75. Sharma, R., Jasrotia, K., Singh, N., Ghosh, P., Sharma, N.R., **Singh, J.**, Kanwar, R. and Kumar, A. (2020). A Comprehensive Review on Hydrothermal Carbonization of Biomass and its Applications. *Chemistry Africa*, 3(1):1-19 (IF-2.6).
 76. Singh, S., Kumar, V., Kapoor, D., Kumar, S., Singh, S., Dhanjal, D.S., Datta, S., Samuel, J., Dey, P., Wang, S., Prasad, R. and **Singh, J.** (2020). Revealing on hydrogen sulfide and nitric oxide signals co-ordination for plant growth under stress conditions. *Physiologia Plantarum*, 168(2): 301-317. (IF-6.4).

77. Bhati, S., Kumar, V., Singh, S. and **Singh, J.** (2020). Synthesis, Characterization, Antimicrobial, Anti-tubercular, Antioxidant Activities and Docking Simulations of Derivatives of 2-(pyridine-3-yl)-1H-benzo[d]imidazole and 1,3,4-Oxadiazole Analogy. *Letters in Drug Design & Discovery*, 17(8): 1047-1059 (IF-1.099).
78. Singh, S., Kumar, V. and **Singh, J.** (2020). The effects of Fe(II), Cu(II) and Humic Acid on biodegradation of atrazine. *Journal of Environmental Chemical Engineering*, 8(2): 103539. (IF-7.7).
79. Mahajan, G., **Singh, J.**, and Kumar, A. (2020). Microbial Degradation of Scarlet RR Collected from Textile Dye Effluent. *European Journal of Molecular & Clinical Medicine*, 7(7), 4103-4113.
80. Sharma, M., **Singh, J.**, Chinnappan, P., and Kumar, A. (2019). A comprehensive review of renewable energy production from biomass-derived bio-oil. *Biotechnologia* 100(2):179-194.
81. Singh, S., Kumar, V., Singh, S. and **Singh, J.** (2019). Influence of humic acid, iron and copper on microbial degradation of fungicide Carbendazim. *Biocatalysis and Agricultural Biotechnology*, 20: 101196. (IF-4.0)
82. Singh, S., Kumar, V. and **Singh, J.** (2019). Kinetic study of the biodegradation of glyphosate by indigenous soil bacterial isolates in presence of humic acid, Fe(III) and Cu(II) ions. *Journal of Environmental Chemical Engineering*, 7: 103098 (IF-7.7).
83. Bhati, S., Kumar, V., Singh, S. and **Singh, J.** (2019). Synthesis, biological activities and docking studies of piperazine incorporated 1, 3, 4-oxadiazole derivatives. *Journal of Molecular Structure*. 1191 (2019): 197-205 (IF-3.8).
84. Kapoor, D., Singh, S., Kumar, V., Romero, R., Prasad, R. and **Singh, J.** (2019). Antioxidant enzymes regulation in plants in reference to reactive oxygen species (ROS) and reactive nitrogen species (RNS). *Plant Gene* 18:100182.
85. Sidhu, G.K., Singh, S., Kumar, V., Djanjal, D.S., Datta, S. and **Singh, J.** (2019). Toxicity, monitoring and biodegradation of organophosphate pesticides: a review. *Critical Reviews in Environmental Science and Technology*, 49(13): 1135-1187 (IF-12.6).
86. Singh, D., Raina, T. K., Kumar, A., **Singh, J.** and Prasad, R. (2019). Plant microbiome: A reservoir of novel genes and metabolites. *Plant Gene* 18:100177
87. Singh, S., Kumar, V., Sidhu, G.K., Datta, S., Djanjal, D.S., Koul, B., Janeja, H.S. and **Singh, J.** (2019). Plant growth promoting rhizobacteria from heavy metal contaminated soil promote growth attributes of *Pisum sativum* L. *Biocatalysis and Agricultural Biotechnology*, 17: 665-671. (IF-4.0)
88. Bhati, S., **Singh, J.** and Kaushik, V. (2019). In Silico Identification of Piperazine Linked Thiohydantoin Derivatives as Novel Androgen Antagonist in Prostate Cancer Treatment. *International Journal of Peptide Research and Therapeutics*, 25(3), 845-860 (IF-2.191).
89. Dey, P., **Singh, J.**, Scaria, J. and Anand, A. P. (2018). Improved production of cellulase by *Trichoderma reesei* (MTCC 164) from coconut mesocarp-based lignocellulosic wastes under response surface-optimized condition (2018). *3 Biotech*, 8: 402. (IF – 2.8).
90. Singh, S., Kumar, V., Chauhan, A., Datta, S., Wani, A.B., Singh, N. and **Singh, J.** (2018). Toxicity, degradation and analytical techniques for analysis of herbicide atrazine. *Environmental Chemistry Letters*, 16(1): 211-237. (IF-15.7).
91. Bhatia D., Sharma, N.R., Kanwar, R.S. and **Singh, J.** (2018). Physico-Chemical Assessment of Industrial Textile Effluents of Punjab (India). *Applied Water Science*. 8(3): 83. (IF-5.5)
92. Sarma, C., Rasane, P., Kaur, S., Singh, J., Singh, J., Gat, Y., Garba, U., Kaur, D. and Dhawan, K. (2018). Antioxidant and antimicrobial potential of selected varieties of Piper betle L. (Betel leaf). *Anais da Academia Brasileira de Ciências*, 90(4): 3871-3878. (IF-1.3)

93. Kumar, V., Singh, S., Singh, A., Dixit, A.K., Shrivastava, B., Kondalkar, S.A., **Singh, J.**, Singh, R., Sidhu, G.K., Singh, R.P. and Subhose, V. (2018). Determination of phytochemical, antioxidant, antimicrobial, and protein binding qualities of hydroethanolic extract of *Celastrus paniculatus*. *Journal of Applied Biology & Biotechnology*, 6(06): 11-17.
94. Bhandari, V., **Singh, J.** and Singh, A. (2018). Application of smart polymer "hydrogel" to cope environmental and health care issues. *Pollution Research* 37 (May Suppl.), S171-S176.
95. Dhanjal, D.S., Singh, S., Bhatia, D., **Singh, J.**, Sharma, N.R. and Kanwar, R.S. (2018). Pre-treatment of the municipal wastewater with chemical coagulant, *Pollution Research* 37 (May Suppl.), S32-S38.
96. Sharma, M., **Singh, J.**, Baskar, C. and Kumar, A. (2018). A comprehensive review on biochar formation and its utilization for wastewater treatment. *Pollution Research* 37 (May Suppl.), S1-S18.
97. Dutta, J., Ahmad, A. and **Singh, J.** (2018). Study of industrial effluents induced genotoxicity on *Allium cepa* L., *Caryologia*, 71(2): 139-145 (IF-2.1).
98. Datta, S., Singh, J., **Singh J.**, Singh, S. and Singh, S. (2018). Assessment of genotoxic effects of pesticide and vermicompost treated soil with *Allium cepa* test. *Sustainable Environment Research*, 28(4): 171-178. (IF-4.9)
99. Kumar, V., Singh, S., Singh, R., Upadhyay, N., **Singh, J.**, Pant, P., Singh, R., Srivastava, B., Singh, A. & Subhose V. (2018). Spectral, structural and energetic study of acephate, glyphosate, monocrotophos and phorate: an experimental and computational approach, *Journal of Taibah University for Science*, 12(1): 69-78 (IF-3.3).
100. Kaur, P., Singh, S., Kumar, V., Singh, N. and **Singh, J.** (2018). Effect of rhizobacteria on arsenic uptake by macrophyte *Eichhornia crassipes* (Mart.) Solms. *International Journal of Phytoremediation*, 20(2):114-120 (IF-3.7).
101. Bhadrecha, P., Bala, M., **Singh, J.**, Sharma, N.R. and Kumar, M. (2018). Seabuckthorn rhizobacteria produce ACC Deaminase and exhibit PGPR traits, *Ecology, Environment and Conservation*, 24(1): 240-245.
102. Bhatia D., Sharma, N.R., **Singh, J.** and Kanwar, R.S. (2017). Biological methods for textile dye removal from wastewater: A Review, *Critical Reviews in Environmental Science and Technology*, 47(19): 1836-1876 (IF-12.6).
103. Gera, P., Gupta, A., Verma, P., **Singh, J.** and Gupta, J., 2017. Recent advances in vaccine development against Ebola threat as bioweapon. *VirusDisease*, 28(3), 242-246.
104. Kumar, V., Singh, S., Singh, R., Upadhyay, N. and **Singh, J.** (2017). Design, synthesis, and characterization of 2,2-bis(2,4-dinitrophenyl)-2-(phosphonomethylamino)acetate as a herbicidal and biological active agent. *Journal of Chemical Biology*, 10(4): 179-190.
105. Singh, S., Kumar, V., Upadhyay, N., **Singh, J.**, Singla, S., and Datta, S. (2017). Efficient biodegradation of acephate by *Pseudomonas pseudoalcaligenes* PS-5 in the presence and absence of heavy metal ions [Cu(II) and Fe(III)], and humic acid. *3 Biotech*, 7:262 (IF-2.8).
106. Kaushik, V., Sharma, N. and **Singh, J.** (2017). Insilico identification of vaccine candidate from various screening methods against hepatitis C Virus. *International Journal of Bioinformatics Research and Applications*, 13(3): 301-312.
107. Kaushik, V., Singh, B. and **Singh, J.** (2017). Bioinformatics Techniques used in Hepatitis C Virus Research. *Journal of Pure and Applied Microbiology*, 11(2): 921-932.
108. Singh, D., Raina, T.K. and Singh, J. (2017). Entomopathogenic Fungi: An Effective Biocontrol Agent for Management of Insect Populations Naturally. *Journal of Pharmaceutical Sciences and Research*, 9(6): 830-839.

109. Wani, A.B., Singh, J. and Upadhyay, N. (2017). Synthesis and Characterization of Transition Metal Complexes of Para-Aminosalicylic Acid with Evaluation of their Antioxidant Activities. *Oriental Journal of Chemistry*, 33(3): 1120-1126.
110. Singh, N., Mishra, T., Singh, K. and **Singh, J.** (2017). Microbial and Non-microbial Pyrogens in Healthcare Products: Risks, Quality Control and Regulatory Aspects. *Applied Clinical Research, Clinical Trials and Regulatory Affairs*. 4(1):4-15.
111. Kaushik, V. and **Singh, J.** (2017). Bioinformatics tools for conformational B-cell and T-cell epitope prediction, *International Journal of Pharma and Bio Sciences*, 8(2): 937-944.
112. Churasia, A., **Singh, J.** and Kumar, A. (2016). Production and characterization of biodiesel from soybean oil biomass as renewable energy source. *Journal of Environmental Biology*, 37(6): 1303–1307
113. Vyas, A.K., Putatunda, C., **Singh, J.** and Vyas, D., 2016. Cellulase production by *Bacillus subtilis* M1 using pretreated groundnut shell based liquid state fermentation. *Biotropia-The Southeast Asian Journal of Tropical Biology*, 23(1):28-34.
114. Singh, S., Singh, N., Kumar, V., Datta, S., Wani A. B., Singh, D., Singh, K. and **Singh, J.** (2016). Toxicity, monitoring and biodegradation of the fungicide carbendazim. *Environmental Chemistry Letters* 14(3): 317–329 (IF-15.7)
115. Kumar, M., Kumar, V., Varma, A., Prasad, R., Sharma, A., Pal, A., Arshi, A., and **Singh, J.** (2016). An efficient approach towards the bioremediation of Copper, Cobalt and Nickel contaminated field samples. *Journal of Soils and Sediments*. 16(8): 2118-2127. (IF-3.6)
116. Datta, S., **Singh, J.**, Singh, S. and Singh, J. (2016). Earthworms, Pesticides and Sustainable Agriculture: A Review. *Environmental Science and Pollution Research* 23(9): 8227-8243. (IF- 5.8)
117. Mishra, V., Gupta, A., Kaur, P., Singh, S., Singh, N., Gehlot, P. and **Singh, J.** (2016). Synergistic effects of arbuscular mycorrhizal fungi and plant growth promoting rhizobacteria in bioremediation of iron contaminated soils. *International Journal of Phytoremediation*, 18(7): 697-703. (IF-3.7)
118. Gehlot, P. and **Singh, J.** (2015). Arbuscular mycorrhizal fungi, *Glomus* spp. (Glomeromycetes), associated with drought tolerant plants of the Indian Thar desert. *Austrian Journal of Mycology*, 24(3): 15-22.
119. Kumar, M., Kaur, A., Pachouri, U.C. and **Singh, J.** (2015). Growth promoting characteristics of rhizobacteria and AM fungi for biomass amelioration of *Zea mays*. *Archives of Biological Sciences, Belgrade*, 67(3), 877-887. (IF-0.8)
120. Kumar, V., Singh, S., **Singh, J.** and Upadhyay, N. (2015). Potential of Plant Growth Promoting Traits by Bacteria Isolated from Heavy Metal Contaminated Soils. *Bulletin of Environmental Contamination and Toxicology*, 94:807–814, (IF-2.7)
121. Kaur, A., Kumar, V., Singh, S., **Singh, J.**, Upadhyay, N., Datta, S., Singla, S. and Kumar, V. (2015). Toll-like receptor-associated keratitis and strategies for its management. *3 Biotech*, 5(5), 611-619. (IF-2.8)
122. Dey, P., Wangyal, L. and **Singh, J.** (2015). Simultaneous Saccharification and Fermentation (SSF), An Efficient Process for Bio-Ethanol Production: An Overview. *Biosciences Biotechnology Research Asia*, 12(1): 87-100.
123. Mukherjee, D., **Panwar, J.S.**, Kumar, M., Thakur, Y., Kumari, K. and Singhania, S. (2015). Isolation and Characterization of Bioremediation Potent Microorganisms from Spectrophotometrically Analysed Heavy Metal (Cr and Cd) - Rich Tannery Effluent. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 6(3): 760-766.

124. Pramanik, T., Pathan, A.H., Gupta, R., **Singh, J.** and Singh, S. (2015). Dihydropyrimidinone Derivatives: Green Synthesis and Effect of Electronic Factor on Their Antimicrobial Properties. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 6(1): 1152-1157.
125. Verma, S., Kaur, S., **Singh, J.** and Garg, A. (2015). Anti-bacterial Effect of Garlic (*Allium sativum L*) Extract on Different Pathogenic and Non-pathogenic Bacteria. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 6(3): 1103-1107.
126. Singh, J., Singh, S., Kumar, V., Datta, S., Dutta, J., Saini, A., Singh, D., and **Singh, J.** (2015). Toxicological Effects of Lambda-cyhalothrin on Liver, Kidney and Testis of Indian Catfish *Clarias batrachus*. *Toxicology International*, 22(3):128-136.
127. Kumar, V., Singh, S., Bhadrecha, P., Kaur, P., Bhatia, D., Singla, S., Datta, S., Chandel, V., Bhat, M.A., Kashyap, N., Kalia, A. and **Singh, J.** (2015). Bioremediation of heavy metals by employing resistant microbial isolates from agricultural soil irrigated with Industrial Waste water. *Oriental Journal of Chemistry*, 31(1), 357-361.
128. **Singh, J.**, Kumar, M. and Vyas, A. (2014). Healthy Response from Chromium survived Pteridophytic Plant-*Ampelopteris prolifera* with interaction of Mycorrhizal fungus-*Glomus deserticola*. *International Journal of Phytoremediation*, 16(5): 524-535. (IF-3.7)
129. Pirzadah, T., Garg, S., **Singh, J.**, Vyas, A., Kumar, M., Gaur, N., Bala, M., Rehman, R., Varma, A., Kumar, V. and Kumar, M. (2014). Characterization of Actinomycetes and *Trichoderma* spp. for cellulase production utilizing crude substrates by response surface methodology. *SpringerPlus* 3: 622. (IF-0.982)
130. Kumar V, Singh S, Manhas A, **Singh J**, Singla S, Kaur P, Data S, Negi P, Kalia A. (2014). Bioremediation of Petroleum hydrocarbon by using *Pseudomonas* species isolated from Petroleum contaminated soil. *Oriental Journal of Chemistry* 30(4): 1771-1776.
131. Vyas, A., Bhardwaj, P., Kumar, M., Pachouri, U.C., Garg, S. and **Singh, J.** (2014). Biochemical Characterization of Plant Pathogenic Fungal Cultures and their Control through *Trichoderma harzianum*. *National Academy of Science Letters*, 37(5):435-439 (IF-1.1).
132. Pandey, D.K., Malik, T., Dey, A., **Singh, J.** and Banik, R.M. (2014). Improved growth and colchicine concentration in *Gloriosa superba* on mycorrhizal inoculation supplemented with phosphorus-fertilizer. *African Journal of Traditional, Complementary and Alternative Medicines* 11(2):439-446.
133. Gupta, K., Garg, S., **Singh, J.** and Kumar, M. (2014). Enhanced production of naphthoquinone metabolite (shikonin) from cell suspension culture of *Arnebia* sp. and its up-scaling through bioreactor. *3 Biotech* 4(3):263–273. (IF-2.8)
134. **Singh, J.** and Gehlot, P. (2014). Species Diversity of the Genus *Gigaspora* in Indian Thar Desert. *Biosciences Biotechnology Research Asia*, 11(3): 1611-1613.
135. Kaushik, V., Chauhan, G. and **Singh, J.** (2014). In silico peptide based vaccine design against non-structural Protein 5 of Hepatitis C Virus. *International Journal of Pharmacy and Pharmaceutical Sciences*, 6(9): 80-82.
136. **Singh, J.**, Singh, S., Kaur, P., Kapoor, P., Rasool, H.I., Sharma, J., Mir, S.S., Ibrahim, B., Vasist, D. and Bhatia D. (2014). Biochemical characterization of *Tylophora indica* and its immuno-modulatory effect. *South Asian Journal of Experimental Biology* 4(2): 61-67.
137. Bhatia, D., Singh, S., Vyas, A., Rasool, H.I., Kaur, P. and **Singh, J.** (2014). Studies on fungal strains of selected regions of Ludhiana and their biochemical characterization. *Current World Environment* 9(1):192-202.

138. Kumar, V., Upadhyay, N., Kumar, V., Kaur, S., **Singh, J.**, Singh, S., and Datta, S. (2014). Environmental exposure and health risks of the insecticide monocrotophos - a review. *Journal of Biodiversity and Environmental Sciences* 5(1):111-120.
139. Kumar, V., Upadhyay, N., Singh, S., **Singh, J.** and Kaur, P. (2013). Thin-Layer Chromatography: Comparative Estimation of Soil's Atrazine. *Current World Environment* 8(3): 469-472.
140. Kumar, M., Pal, A., **Singh J.**, Garg S., Bala M., Vyas A., Khasa, Y.P. and Pachouri, U.C. (2013). Removal of chromium from water effluent by adsorption onto *Vetiveria zizanioides* and *Anabaena* species. *Natural Science*, 5(3): 341-348.
141. Pathania N-Kaur G, **Singh, J.**, Vyas, A. and Kumar, M (2012). Response of hydrogenase enzymes (ALDH and ADH) in *Trapa natans* under physiological stress, *Advances in Bioscience and Biotechnology*, 3:304-307.
142. Kaur, G., **Singh, J.**, Arshi A., Bala, M. and Kumar, M (2012). *Trapa natans* as green drug to pathogenic *Escherichia coli*, *International Research Journal of Pharmacy*, 3(11): 209-212.
143. Mathur, N., Singh, J., Bohra, S., Bohra, A. and Vyas, A. (2010). Growth and productivity of Tomato (*Lycopersicon esculantum* Miller) grown in greenhouse as affected by organic, mineral and Bio-N-Fertilisers. ***Science and Culture*** 76(3-4): 128-131.
144. Mathur, N., Singh, J., Bohra, S., Bohra, A. and Vyas, A. (2010). Antibacterial activity of *Ephedra foliata* Boiss. Ex C. A. Mey, extracts against human pathogenic bacteria. ***Science and Culture*** 76(1-2): 62-66.
145. Mathur, N., **Singh, J.**, Bohra, S., Bohra, A., Mehboob, Vyas, M. and Vyas, A. (2010). Phytoremediation Potential of Some Multipurpose Tree Species of Indian Thar Desert in Oil Contaminated Soil, *Advances in Environmental Biology*, 4(2):131-137.
146. Mathur, N., **Singh, J.**, Bohra, S., Chauhan, M., Vyas, M. and Vyas, A. (2010). Phytoremediation of oil contaminated soil by some arid legume tree species. *Advances in Environmental Sciences - Bioflux* 2(1): 25-32.

Chapters in Book

1. Singh, S., Kumar, V., Dhanjal, D. S., Dhaka, V., & Singh, J. (2023). Atrazine Toxicity: Modification of Enzymatic Processes and Photosynthesis in Plants. In *Agricultural Biocatalysis* (pp. 295-312). Jenny Stanford Publishing. ISBN: 978-1-003-31307-6
2. Bala, M., Kumar, M., Bhadrecha, P., Gupta, M., Singh, J., Arshi, A. (2022). Knowing More About Seabuckthorn (*Hippophae rhamnoides*)—A Promising Source of Safe and Effective Medical Radiation Countermeasure. In: Sharma, P.C. (eds) *The Seabuckthorn Genome. Compendium of Plant Genomes*. (pp. 315-330). Springer, Cham. ISBN: 978-3-031-11275-1
3. Biswas, P., Nandy, S., Pandey, D. K., Singh, J., & Dey, A. (2022). Levulinic acid: a potent green chemical in sustainable agriculture. In: Singh, H.B. and Vaishnav, A. (Eds.), *New and Future Developments in Microbial Biotechnology and Bioengineering, Sustainable Agriculture: Revisiting Green Chemicals*, Elsevier, pp 179-218. ISBN: 978-0-323-85581-5
4. Dutta, T., Nandy, S., Singh, J., Pandey, D. K., & Dey, A. (2022). Chitin and chitosan as elicitors in sustainable production of medicinal crops. In: Singh, H.B. and Vaishnav, A. (Eds.), *New and Future Developments in Microbial Biotechnology and Bioengineering, Sustainable Agriculture: Revisiting Green Chemicals*, Elsevier, 413-426. ISBN: 978-0-323-85581-5
5. Singh, S., Kumar, V., Kapoor, D., Dhanjal, D. S., Wani, A. B., Bhardwaj, S., Ramamurthy, P.C., and Singh, J. (2022). Competence of nanoparticles for

- removal of pesticides from wastewater: an overview. In: Dehghani, M.H., Karri, R.R. and Anastopoulos, I. (Eds.) *Pesticides Remediation Technologies from Water and Wastewater*, Elsevier, pp. 253-266. ISBN: 978-0-323-90893-1
6. Wani, A. B., Singh, S., Dhanjal, D. S., Wani, A. H., Ramamurthy, P. C., and Singh, J. (2022). Recent aspects and modification in advanced oxidation processes for pesticide management in wastewater. In: Dehghani, M.H., Karri, R.R. and Anastopoulos, I. (Eds.) *Pesticides Remediation Technologies from Water and Wastewater*, Elsevier, pp. 127-140. ISBN: 978-0-323-90893-1
 7. Khan, M., Aymen, U., Mir, A.H., Tiwari, A., Prasad, S.M., Singh, J., Ramamurthy, P.C., Singh, R., Singh, S. and Parihar, P. (2022). Understanding Heavy Metal Stress in Plants Through Mineral Nutrients. In: Kumar, J., Gaur, S., Srivastava, P.K., Mishra, R.K., Prasad, S.M., Chauhan, D.K. (Eds.) *Heavy Metals in Plants Physiological to Molecular Approach*. CRC Press, pp. 281-309. ISBN: 978-1-003-11057-6
 8. Singh, S., Kapoor, D., Dhaka, V., Bhardwaj, S., Ramamurthy, P. C., and Singh, J. (2022). Integrated technologies for wastewater treatment. In: Kumar V. and Kumar, M. (Eds.) *Integrated Environmental Technologies for Wastewater Treatment and Sustainable Development*. Elsevier, pp. 433-457. ISBN: 978-0-323-91180-1
 9. Rahul, R., Sharma, P., Singh, A., Singh, J. and Kumar, M. (2022). Soil Enzymes and Their Role in Soil Health Improvement. In: Nayak, S.K., Baliyarsingh, B., Mannazzu, I., Singh, A., Mishra, B.B. (eds) *Advances in Agricultural and Industrial Microbiology*. Springer, Singapore. pp 39-61. ISBN: 978-981-16-8917-8
 10. Kaur, P., Singh, S., Ghoshal, G., Ramamurthy, P.C., Parihar, P., Singh, J. and Singh, A. (2022). Valorization of Agri-Food Industry Waste for the Production of Microbial Pigments: An Eco-Friendly Approach. In: Nayak, S.K., Baliyarsingh, B., Mannazzu, I., Singh, A., Mishra, B.B. (eds) *Advances in Agricultural and Industrial Microbiology*. Springer, Singapore. pp 137–167. ISBN: 978-981-16-8917-8
 11. Ramalingam, S., Singh, S., Ramamurthy, P.C., Dhanjal, D.S., Subramanian, J., Singh, J. and Singh, A. (2022). Plant Secondary Metabolites: A Biosensing Approach. In: Nayak, S.K., Baliyarsingh, B., Mannazzu, I., Singh, A., Mishra, B.B. (eds) *Advances in Agricultural and Industrial Microbiology*. Springer, Singapore. pp 249-268. ISBN: 978-981-16-8917-8
 12. Singh, S., Kumar, V., Kapoor, D., Bhardwaj, S., Dhanjal, D.S., Pawar, A., Ramamurthy, P. and Singh J. (2022). Fate and occurrence of micro- and nano-plastic pollution in industrial wastewater. In: *Biodegradation and Detoxification of Micropollutants in Industrial Wastewater*, Eds. Haq, I., Kalamdhad, A.S. and Shah, M.P. Elsevier, pp 27-38. ISBN: 978-0-323-88507-2
 13. Biswas, P., Ghorai, M., Pandey, D.K., Singh, J., Al-Tawaha, A.R., Bursal, E., Kumar, V., Nongdam, P., Shekhawat, M.S., Batiha, G.E.S., Ghosh, A., Dwivedi, P. and Dey, A. (2022). Regulation of Expression of Transcription Factors for Enhanced Secondary Metabolites Production Under Challenging Conditions. In: *Environmental Challenges and Medicinal Plants*, Eds. Aftab, T. Springer, Cham. pp. 249-280. ISBN: 978-3-030-92049-4
 14. Koul, B., Singh, S., Parray, S.Y., Dhanjal, D.S., Ramamurthy, P.C. and Singh J. (2022). Biochemical and molecular aspects of heavy metal stress tolerance in plants. In: *Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water*, Eds. Kumar, V., Shah, M.P. and Shahi, S.K., Elsevier Publishing, , pp 205-218. ISBN: 978-0-323-85763-5
 15. Singh, S., Kumar, V., Dhanjal, D.S., Parihar, R., Ramamurthy, P.C. and Singh J. (2022). Phytoremediation of heavy metals, metalloids, and radionuclides: Prospects and challenges. In: *Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water*, Eds. Kumar, V.,

- Shah, M.P. and Shahi, S.K., Elsevier Publishing, , pp 253-276. ISBN: 978-0-323-85763-5
16. Sharma, S., Singh, S., Dhanjal, D.S., Kumar, A., Jan, S., Ramamurthy, P.C. and Singh J. (2022). Role of rhizobacteria from plant growth promoter to bioremediator. In: *Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water*, Eds. Kumar, V., Shah, M.P. and Shahi, S.K., Elsevier Publishing, , pp 309-328. ISBN: 978-0-323-85763-5
 17. Singh, S., Dhanjal, D.S., Kapoor, D., Ramamurthy, P. and Singh J. (2022). Role of microbes in methane emission from constructed wetlands. In: *Microbiome Under Changing Climate: Implications and Solutions*, Eds. Kumar, A., Singh, J., and Ferreira, L.F.R., Woodhead Publishing, Elsevier, pp 241-256. ISBN: 978-0-323-90571-8
 18. Aley, P., Singh, J., and Kumar, P. (2022). Adapting the changing environment: microbial way of life.. In: *Microbiome Under Changing Climate: Implications and Solutions*, Eds. Kumar, A., Singh, J., and Ferreira, L.F.R., Woodhead Publishing, Elsevier, pp 507-525. ISBN: 978-0-323-90571-8
 19. Kumari, P., Singh, J., & Kumar, P. (2022). Impact of bioenergy for the diminution of an ascending global variability and change in the climate. In: *Microbiome Under Changing Climate: Implications and Solutions*, Eds. Kumar, A., Singh, J., and Ferreira, L.F.R., Woodhead Publishing, Elsevier, pp 507-525. ISBN: 978-0-323-90571-8
 20. Goud, E. L., Singh, J., & Kumar, P. (2022). Climate change and their impact on global food production. In: *Microbiome Under Changing Climate: Implications and Solutions*, Eds. Kumar, A., Singh, J., and Ferreira, L.F.R., Woodhead Publishing, Elsevier, pp 415-436. ISBN: 978-0-323-90571-8
 21. Singh, S., Kumar, V., Shekar, S., Kapoor, D., Bhatia, D., Dhanjal, D.S., Ramamurthy, P. And Singh J. (2022). Phycoremediation of Wastewater. In: *Ecophysiology and Biochemistry of Cyanobacteria*, Eds. Rastogi R.P., Springer, Singapore, pp 269-289. ISBN: 978-981-16-4873-1
 22. Das, T., Dey, A., Pandey, D. K., Panwar, J. S., & Nandy, S. (2022). Fungal endophytes as biostimulants of secondary metabolism in plants: a sustainable agricultural practice for medicinal crops. In: *New and Future Developments in Microbial Biotechnology and Bioengineering*, Eds. Singh, H. and Vaishnav, A., Elsevier Science Publishing, pp. 283-314. ISBN: 978-0-323-85163-3
 23. Singh, S., Ramamurthy, P. C., Kumar, V., Kapoor, D., Dhaka, V., & Singh, J. (2022). Microbes and Agri-Food Waste as Novel Sources of Biosorbents. *Biotechnology for Zero Waste: Emerging Waste Management Techniques*, Eds. Hussain, C.M. and Kadeppagari, R.K., Wiley-VCH GmbH, pp. 171-188. ISBN: 978-3-527-34898-5
 24. Poonia, A. K., Kajla, S., Koul, B., & Panwar, J. S. (2022). Algae: The high potential resource for biofuel production. In *An Integration of Phycoremediation Processes in Wastewater Treatment*. Eds. Shah, M., Rodriguez-Couto, S., De La Cruz, C.B.V. and Biswas, J.Elsevier Science Publishing, pp. 155-176. ISBN: 978-0-12-823499-0
 25. Singh, S., Kumar, V., Datta, S., Singh, S., Dhanjal, D.S., Dhaka, V., Sharma, K., and Singh, J. (2021). Commercial production and formulation of microbial biocontrol agents. In: *Food Security and Plant Disease Management*, Eds. Kumar, A., and Droby, S. Woodhead Publishing, Elsevier, pp 241-256. ISBN: 978-0-12-821843-3
 26. Singh, S., Kumar, V., Datta, S., Ramamurthy, P.C. and Singh, J. (2021). Molecular mechanism and signaling pathways interplay between plant hormones during plant-microbe crosstalk. In: *Microbial Management of Plant Stresses: Current Trends, Application and Challenges*, Eds. Kumar, A., and Droby, S. Woodhead Publishing, Elsevier, pp 93-105. ISBN: 978-0-323-85920-2

27. Singh, S., Kumar, V., Datta, S., Bhatia, D., Dhaka, V. and Singh, J. (2021). Novel Strategies for Environmental Remediation of Pesticides Using Nanocatalysts. In: Sarma, H., Joshi, S.J., Prasad, R. and Jampilek, J. (eds.) *Biobased Nanotechnology for Green Applications, Nanotechnology in the Life Sciences*, Springer Nature Switzerland AG, pp. 543-556. ISBN 978-3-030-61985-5.
28. Singh, S., Kumar, V., Dhanjal, D.S., Dhaka, V., Thotapalli, S., Singh, J., Al-Ani, L.K.T. and Aguilar-Marcelino, L. (2021). Rhizosphere Biology: A Key to Agricultural Sustainability. In: Yadav, A.N., Singh, J., Singh, C., and Yadav, N. (eds.) *Current Trends in Microbial Biotechnology for Sustainable Agriculture*, Springer, Singapore, pp. 161-182. ISBN 978-981-15-6948-7.
29. Sharma, V.P., Singh, S., Dhanjal, D.S., Singh, J. and Yadav, A.N. (2021). Potential Strategies for Control of Agricultural Occupational Health Hazards. In: Yadav, A.N., Singh, J., Singh, C., and Yadav, N. (eds.) *Current Trends in Microbial Biotechnology for Sustainable Agriculture*, Springer, Singapore, pp. 387-402. ISBN 978-981-15-6948-7.
30. Hesham, A.E.L., Kaur, T., Devi, R., Kour, D., Prasad, S., Yadav, N., Singh, C., Singh, J. and Yadav, A.N. (2021). Current Trends in Microbial Biotechnology for Agricultural Sustainability: Conclusion and Future Challenges. In: Yadav, A.N., Singh, J., Singh, C., and Yadav, N. (eds.) *Current Trends in Microbial Biotechnology for Sustainable Agriculture*, Springer, Singapore, pp. 555-572. ISBN 978-981-15-6948-7.
31. Singh, S., Kumar, V., Dhanjal, D.S., Datta, S., Singh, S., and Singh, J. (2020). Biosorbents for heavy metal removal from industrial effluents. In: Kumar, V., Saxena, G. and Shah. M. (eds.) *Bioremediation for Environmental Sustainability*, Elsevier Science Publishing, pp. 219-233. ISBN 978-0-12-820317-0.
32. Singh, S., Kumar, V., Dhanjal, D.S., Datta, S., Singh, S., and Singh, J. (2020). Rhizoremediation of organic and inorganic pollutants: advances and challenges. In: Kumar, V., Saxena, G. and Shah. M. (eds.) *Bioremediation for Environmental Sustainability*, Elsevier Science Publishing, pp. 397-420. ISBN 978-0-12-820317-0.
33. Singh, S., Dhanjal, D.S., Thotapalli, S., Sonali, Sharma, P. and Singh, J. (2020). Fungal enzyme inhibitors: Repository of novel cancer therapeutics In: Singh, J. and Gehlot, P. (eds.) *New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of fungi and fungal metabolites: Applications in Healthcare*. Elsevier Science Publishing, pp. 121-133. ISBN 978-012-82-1006-2.
34. Singh, S., Kumar, V., Datta, S., Dhanjal, D.S., Parihar, P. and Singh, J. (2020). Role of plant-microbe systems in remediation of petrochemical-contaminated water and soil environment. In: Kumar, A., Singh, V.K. and Mishra, V.K. (eds.) *Microbe Mediated Remediation of Environmental Contaminants*. Woodhead Publishing, pp. 79-88. ISBN 978-0-12-823207-1
35. Vyas, P., Singh, S., Dhaka, V., Dhanjal, D.S. and Singh, J. (2020). Rhizoremediation for efficient management of inorganic and organic contaminants in soil. In: Kumar, A., Singh, V.K. and Mishra, V.K. (eds.) *Microbe Mediated Remediation of Environmental Contaminants*. Woodhead Publishing, pp. 95-106. ISBN 978-0-12-823207-1
36. Koul, B., Ahmad, W. and Singh, J. (2020). Mycoremediation: A novel approach for sustainable development. In: Kumar, A., Singh, V.K. and Mishra, V.K. (eds.) *Microbe Mediated Remediation of Environmental Contaminants*. Woodhead Publishing, pp. 409-420. ISBN 978-0-12-823207-1
37. Singh, S., Kumar, V., Singh, S., Dhanjal, D.S., Thotapalli, S., Sonali, and Singh, J. (2020). Importance and recent aspects of fungal-based biosensors. In: Singh, J. and Gehlot, P. (eds.) *New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of fungi and fungal*

- metabolites: Biotechnological Interventions and Futuristic Approaches. Elsevier Science Publishing, pp. 301-309. ISBN 978-012-82-1008-6.
38. Singh, S., Kumar, V., Datta, S., Dhanjal, D.S., Prasad, R., and Singh, J. (2020). Biological Biosensors for Monitoring and Diagnosis. In: Singh, J., Vyas, A., Wang, S. and Prasad, R. (eds.) *Microbial Biotechnology: Basic Research and Applications, Environmental and Microbial Biotechnology*, Springer, Singapore, pp. 317-335. ISBN 978-981-15-2817-0
 39. Singh, A. and Singh, J. (2020). Recent Approaches Used in Environmental Monitoring Methods. In: Singh, J., Vyas, A., Wang, S. and Prasad, R. (eds.) *Microbial Biotechnology: Basic Research and Applications, Environmental and Microbial Biotechnology*, Springer, Singapore, pp. 355-368. ISBN 978-981-15-2817-0
 40. Singh, D., Kaur, G., Singh, J. and Satija, S. (2020). Microbial Strategies for Controlling Harmful Cyanobacterial Blooms. In: Singh, J., Vyas, A., Wang, S. and Prasad, R. (eds.) *Microbial Biotechnology: Basic Research and Applications, Environmental and Microbial Biotechnology*, Springer, Singapore, pp. 189-204. ISBN 978-981-15-2817-0
 41. Kumar, A. and Singh, J. (2020). Global scenario and future prospects of the potential microbiomes for sustainable agriculture. In: Maulin P. Shah (eds.) *Global scenario and future prospects of the potential microbiomes for sustainable agriculture*. Elsevier Science Publishing, pp. 311-330. ISBN 978-0-12-820526-6.
 42. Singh, S., Kumar, V., Dhanjal, D.S., Datta, S., Kaur, S., Romero, R., and Singh, J. (2020). Degradation of pesticides in wastewater using heterogeneous photocatalysis. In: Maulin P. Shah (eds.) *Advanced Oxidation Processes for Effluent Treatment Plants*. Elsevier Science Publishing, pp. 161-176. ISBN 978-0-12-821011-6.
 43. Singh, S., Dhanjal, D.S., Thotapalli, S., Sonali, Sharma, P., and Singh, J. (2020). Importance and recent aspects of fungi-based food ingredients. In: Singh, J. and Gehlot, P. (eds.) *New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of fungi and fungal metabolites: Environmental and Industrial aspects*. Elsevier Science Publishing, pp. 301-309. ISBN 978-012-82-1007-9.
 44. Singh, S., Kumar, V., Singh, S., Dhanjal, D.S., Datta, S., Sharma, D., Singh, N.K., and Singh, J. (2020). Biosurfactant-based bioremediation. In: Pandey, V.C. and Singh, V. (eds.) *Bioremediation of Pollutants*, Elsevier, pp. 333-358. ISBN 978-0-12-819025-8.
 45. Singh, S., Kumar, V., Datta, S., Dhanjal, D.S., and Singh, J. (2020). Plant Disease Management by Bioactive Natural Products. In: Singh, J., and Yadav, A.N. (eds.) *Natural Bioactive Products in Sustainable Agriculture*, Springer, Singapore, pp. 15-29. ISBN 978-981-15-3023-4
 46. Singh, S., Kumar, V., Dhanjal, D.S., and Singh, J. (2020). Biological Control Agents: Diversity, Ecological Significances, and Biotechnological Applications. In: Singh, J., and Yadav, A.N. (eds.) *Natural Bioactive Products in Sustainable Agriculture*, Springer, Singapore, pp. 31-44. ISBN 978-981-15-3023-4
 47. Singh, S., Kumar, V., Dhanjal, D.S., and Singh, J. (2020). Herbicides and Plant Growth Regulators: Current Developments and Future Challenges. In: Singh, J., and Yadav, A.N. (eds.) *Natural Bioactive Products in Sustainable Agriculture*, Springer, Singapore, pp. 67-81. ISBN 978-981-15-3023-4
 48. Singh, S., Kumar, V., Dhanjal, D.S., and Singh, J. (2020). Juvenoids and Its Application in Crop Management. In: Singh, J., and Yadav, A.N. (eds.) *Natural Bioactive Products in Sustainable Agriculture*, Springer, Singapore, pp. 101-112. ISBN 978-981-15-3023-4
 49. Kumar, A., Singh, S. and Baskar, C. (2020). Lactic Acid Production and Its Application in Pharmaceuticals. In: Singh, J., Meshram, V. and Gupta, M. (eds.)

- Bioactive Natural Products in Drug Discovery, Springer, Singapore, pp. 467-484. ISBN 978-981-15-1394-7
50. Singh, S., Kumar, V., Singh, S., Datta, S., Kumar, S., Bhadrecha, P., Dhanjal, D.S., and Singh, J. (2020). Biotechnological Aspects of Nanoparticles Driven from Natural Products for Drug Delivery System and Other Applications. In: Singh, J., Meshram, V. and Gupta, M. (eds.) Bioactive Natural Products in Drug Discovery, Springer, Singapore, pp. 549-584. ISBN 978-981-15-1394-7
 51. Kumar, V., Singh, S., Singh, S., Datta, S., Dhanjal, D.S., and Singh, J. (2020). Methods and Techniques for the Chemical Profiling and Quality Control of Natural Products and Natural Product-Derived Drugs. In: Singh, J., Meshram, V. and Gupta, M. (eds.) Bioactive Natural Products in Drug Discovery, Springer, Singapore, pp. 585-598. ISBN 978-981-15-1394-7
 52. Kumar, A., Devi, S., Agarwal, H., Singh, S. and Singh, J. (2020). Rhizoremediation: A Unique Plant Microbiome Association of Biodegradation. In: Varma, A., Tripathi, S. and Prasad, R. (eds.) Plant Microbe Symbiosis, Springer Nature Switzerland AG, pp. 203-220. ISBN 978-3-030-36248-5
 53. Sharma, K., Singh, S., Kumar, V., Singh, S., Datta, S., Dhanjal, D.S., Kaur, P. and Singh, J. (2020). *Saccharomyces cerevisiae* as Model Organism to Study Biological Activities of Nanoparticles. In: Siddhardha, B., Dyavaiah, M. and Kasinathan, K. (eds.) Model Organisms to Study Biological Activities and Toxicity of Nanoparticles, Springer, Singapore, pp. 101-116. ISBN 978-981-15-1702-0
 54. Singh, S., Kumar, V., Datta, S., Singh, S., Dhanjal, D.S., Garg, R., Kaur, P., Sharma, K. and Singh, J. (2020). *Challenges and Future Perspectives of Nanotoxicology*. In: Siddhardha, B., Dyavaiah, M. and Kasinathan, K. (eds.) Model Organisms to Study Biological Activities and Toxicity of Nanoparticles, Springer, Singapore, pp. 451-466. ISBN 978-981-15-1702-0
 55. Sisodia, B.S., Kumar, V., Singh, S., Singh, S., Datta, S., and Singh, J. (2020). Zebra Fish Infection Model: From Pathogenesis to Therapeutic. In: Siddhardha, B., Dyavaiah, M. and Syed, A. (eds.) Model Organisms for Microbial Pathogenesis, Biofilm Formation and Antimicrobial Drug Discovery, Springer, Singapore, pp. 429-440. ISBN 978-981-15-1695-5
 56. Kumar, S., Singh, S., Kumar, V., Datta, S., Dhanjal, D.S., Sharma, P. and Singh, J. (2020). Pathogenesis and Antibiotic Resistance of *Staphylococcus aureus*. In: Siddhardha, B., Dyavaiah, M. and Syed, A. (eds.) Model Organisms for Microbial Pathogenesis, Biofilm Formation and Antimicrobial Drug Discovery, Springer, Singapore, pp. 99-116. ISBN 978-981-15-1695-5
 57. Kumar, V., Singh, S., Dhanjal, D.S., Datta, S., Kumar, S., Singh, S.B. and Singh, J. (2020). Current Trends in *Mycobacterium tuberculosis* Pathogenesis and Drug Resistance. In: Siddhardha, B., Dyavaiah, M. and Syed, A. (eds.) Model Organisms for Microbial Pathogenesis, Biofilm Formation and Antimicrobial Drug Discovery, Springer, Singapore, pp. 301-322. ISBN 978-981-15-1695-5
 58. Singh, S., Singh, S., Kumar, V., Kumar, S., Dhanjal, D.S., Romero, R., Datta, S., Bhadrecha, P. and Singh, J. (2020). Microbial Remediation for Wastewater Treatment. In: Arora PK (ed) *Microbial Technology for Health and Environment*, Microorganisms for Sustainability, Volume 22, Springer, Singapore, pp. 57-71. ISBN 978-981-15-2679-4
 59. Kumar, A. and Singh, J. (2020) Biofilms Forming Microbes: Diversity and Potential Application in Plant–Microbe Interaction and Plant Growth In: Yadav A., Singh J., Rastegari A., Yadav N. (eds) *Plant Microbiomes for Sustainable Agriculture*, Sustainable Development and Biodiversity 25, Springer Nature Switzerland AG, pp 173-197. ISBN 978-3-030-38452-4
 60. Singh S., Kumar, V., Singh, S., Dhanjal D.S., Datta, S. and Singh J. (2020) Global Scenario of Plant–Microbiome for Sustainable Agriculture: Current Advancements and Future Challenges. In: Yadav A., Singh J., Rastegari A., Yadav N. (eds) *Plant*

- Microbiomes for Sustainable Agriculture*, Sustainable Development and Biodiversity 25, Springer Nature Switzerland AG, pp 425-443. ISBN 978-3-030-38452-4
61. Koul B., Singh S., Dhanjal D.S., Singh J. (2019) Plant Growth-Promoting Rhizobacteria (PGPRs): A Fruitful Resource. In: Singh D., Prabha R. (eds) *Microbial Interventions in Agriculture and Environment*. Springer, Singapore, pp 83-127. ISBN 978-981-32-9083-9
 62. Singh, S., Kumar, V., Dhanjal, D.S., Sidhu, G.K., Datta, S., Kumar, S. and Singh, J. (2019). Endophytic microbes in abiotic stress management. In *Microbial Endophytes: Prospects for Sustainable Agriculture* Woodhead Publishing Series in Food Science, Technology and Nutrition Ed. Kumar, A., Singh, V.K., Woodhead Publishing, Elsevier, United Kingdom, pp. 91-124. ISBN 978-0-12-818725-8
 63. Datta, S., Singh, S., Kumar, V., Dhanjal, D.S., Sidhu, G.K., Amin, D.S., Kumar, S., Singh, J. and Singh, J. (2019). Endophytic bacteria in xenobiotic degradation. In *Microbial Endophytes: Prospects for Sustainable Agriculture* Woodhead Publishing Series in Food Science, Technology and Nutrition Ed. Kumar, A., Singh, V.K., Woodhead Publishing, Elsevier, United Kingdom, pp. 125-154. ISBN 978-0-12-818725-8
 64. Singh, N. and Singh, J. (2019). Secretomics of Wood-Degrading Fungi and Anaerobic Rumen Fungi Associated with Biodegradation of Recalcitrant Plant Biomass. In *Recent Advancement in White Biotechnology Through Fungi*, Fungal Biology, Ed. Yadav, A.N., Singh, S., Mishra, S., Gupta, A. (eds). Springer Nature Switzerland AG, pp. 1-16. ISBN 978-3-030-25505-3
 65. Kumar, A., Kumar, V. and Singh, J. (2019). Role of Fungi in the Removal of Heavy Metals and Dyes from Wastewater by Biosorption Processes. In *Recent Advancement in White Biotechnology Through Fungi*, Fungal Biology, Ed. Yadav, A.N., Singh, S., Mishra, S., Gupta, A. (eds). Springer Nature Switzerland AG, pp. 397-418. ISBN 978-3-030-25505-3
 66. Kumar, S. and Singh, J. (2019). Impact of Arbuscular Mycorrhizal Fungi (AMF) in Global Sustainable Environments. In *Recent Advancement in White Biotechnology Through Fungi*, Fungal Biology, Ed. Yadav, A.N., Singh, S., Mishra, S., Gupta, A. (eds). Springer Nature Switzerland AG, pp. 419-436. ISBN 978-3-030-25505-3
 67. Singh, S., Kumar, V., Romero, R., Sharma, K. and Singh, J. (2019). Applications of Nanoparticles in Wastewater Treatment. In *Nanobiotechnology in Bioformulations*, Nanotechnology in the Life Sciences, R. Prasad, Kumar, V., Kumar, M., Choudhary, D (eds.) Springer International Publishing, Switzerland AG, pp. 395-418. ISBN 978-3-030-17061-5
 68. Kour, D., Rana, K.L., Yadav, N., Yadav, A.N., Singh, J., Rastegari, A.A. and Saxena, A.K. (2019). Agriculturally and Industrially Important Fungi: Current Developments and Potential Biotechnological Applications. In *Recent Advancement in White Biotechnology Through Fungi*, Fungal Biology Ed. Yadav, A.N., Mishra, S., Singh, S., Gupta, A. (eds). Springer Nature Switzerland, pp. 27-47. ISBN 978-3-030-04674-3
 69. Kumar, A., Singh, J. and Baskar, C. (2019). Lignocellulosic Biomass for Bioethanol Production Through Microbes: Strategies to Improve Process Efficiency. In *Prospects of Renewable Bioprocessing in Future Energy Systems*, Biofuel and Biorefinery Technologies 10, Ed. A.A. Rastegari, A.N. Yadav and A. Gupta (eds.), Springer International Publishing, Switzerland AG, pp. 257-386. ISBN 978-3-030-14462-3
 70. Singh, S., Sidhu, G.K., Kumar, V., Dhanjal, D.S., Datta, S. and Singh, J. (2019). Fungal Xylanases: Sources, Types, and Biotechnological Applications. In *Recent Advancement in White Biotechnology Through Fungi*, Fungal Biology Ed. Yadav, A.N., Mishra, S., Singh, S., Gupta, A. (eds). Springer Nature Switzerland, pp. 405-428. ISBN 978-3-030-10479-5

71. Karnwal, A., Singh, S., Kumar, V., Sidhu, G.K., Dhanjal, D.S., Datta, S., Amin, D.S., Saini, M. and Singh, J. (2019). Fungal Enzymes for the Textile Industry. In *Recent Advancement in White Biotechnology Through Fungi*, Fungal Biology Ed. Yadav, **A.N.**, Mishra, **S.**, Singh, **S.**, Gupta, **A.** (eds). Springer Nature Switzerland, pp. 459-482. ISBN 978-3-030-10479-5
72. Singh, N., Gautam, D.P., Chauhan, P.K., Kaur, T., Singh, K., Singh, J. and Dagar, S.S. (2019). Antiparasitics from Microorganisms. In *Pharmaceuticals from Microbes* Ed. Arora D., Sharma C., Jaglan S., Lichtfouse E. (eds). Environmental Chemistry for a Sustainable World, Vol 28. Springer Nature Switzerland, pp. 27-47. ISBN 978-3-030-04674-3
73. Kumar, A., Deb, R. and Singh, J. (2018). Bioethanol Production from Renewable Biomass by Yeast. In *Fungi and their Role in Sustainable Development: Current Perspectives*, Ed. P. Gehlot, J. Singh (eds.), Springer International Publishing, Singapore, pp. 427-448. ISBN 978-981-13-0392-0
74. Sharma, D., Gupta, E., Singh, J., Vyas, P. and Dhanjal, D.S. (2018). Microbial Biosurfactants in Food Sanitation. In *Sustainable Food Systems from Agriculture to Industry* Ed. Galanakis, C.M. Academic Press-Elsevier, United Kingdom, pp. 341-368. ISBN 978-0-12-811935-8
75. Kumar, A., Singh, J. and Baskar, C. (2018). Microbial Fuel Cell: Green Bioenergy Process Technology. In *Microbial Cell Factories* Ed. Sharma, D. and Saharan, B.S. CRC Press- Taylor & Francis, pp. 109-125. ISBN 978-1-138-06138-5
76. Singh, D., Singh, J. and Kumar. A. (2017). Microbial Options for Improved Crop Production. In *Probiotics and Plant Health* Ed. Kumar V., Kumar M., Sharma S., Prasad R. (eds). Springer International Publishing, Singapore, pp. 579-587. ISBN 978-981-10-3472-5
77. Kumar, V., Prasad, R., Goyal, P., Tuteja, N., Singh, J., Varma, A. and Kumar, M. (2017). Prominences on Xenobiotic Degradation Underneath of Ecological Sanitary. In *Xenobiotics in the Soil Environment* Eds. Zaffar, H.M., Kumar, V. and Varma, A, Springer International Publishing, Singapore, pp. 373-383. ISBN 978-3-319-47744-2
78. Kumar, V., Teotia, P., Tuteja, N., Prasad, R., Goyal, P., Varma, A., Bisht, S., Singh, J. and Kumar, M., 2017. Metabolomics-Mediated Characterization of Endophytic Species in Recalcitrant Tree Species. In *Modern Tools and Techniques to Understand Microbes* Varma, Ajit. and Sharma, A.K. Springer International Publishing, Singapore, pp. 251-257. ISBN 978-3-319-49197-4
79. Koul, B. and Singh, J. (2017). Lychee Biology and Biotechnology. In *The Lychee Biotechnology* Eds. Kumar, M., Kumar, V., Prasad, R., and Varma, A, Springer International Publishing, Singapore, pp. 137-192. ISBN 978-981-10-3644-6
80. Pandey, D.K., Dey, A. and Singh, J., 2017. Biotechnological Advances in Lychee (*Litchi chinensis*) and Their Future Implication in Improvement of Crop. In *The Lychee Biotechnology*. Eds. Kumar, M., Kumar, V., Prasad, R., and Varma, A, Springer International Publishing, Springer International Publishing, Singapore, pp. 59-99. ISBN 978-981-10-3644-6
81. Kumar, A., Singh, J., Baskar, C., and Ramakrishna, S. (2015). Bioenergy: Biofuels Process Technology. In: *Advances in Bioprocess Technology* Eds. P. Ravindra, Springer International Publishing, Singapore, pp. 165-207. ISBN 978-3-319-17915-5
82. Mathur, N., **Singh, J.**, Bohra, S., Bohra, A., and Vyas, A. (2009). Microbes as Biofertiliser. In: *Cellular and Biochemical Science*, Eds. G. Tripathi, I K International, New - Delhi, pp 1089-1113. ISBN: 978-8-188-23785-2
83. Mathur, N., **Singh, J.**, Bohra, S., Bohra, A., and Vyas, A. (2009). Arbuscular Mycorrhizae Associated with Medicinal Halophytes in Saline Areas of Indian Thar

- Desert. In: Indigenous Medicinal Plants Including Microbes and Fungi, Eds. Purshotam Kaushik, Today & Tomorrow's Printers & Publishers, New Delhi, pp 71-89. ISBN: 978-8-170-19452-1
84. Mathur, N., **Singh, J.**, Bohra, S., Bohra, A., and Vyas, A. (2007). Arbuscular Mycorrhiza on Root-Organ Cultures. In: *The Mycorrhizae: Diversity, Ecology and Applications*, Eds. M. Tiwari and S. C. Sati, Daya Publishing House, Delhi, pp 145-165. ISBN: 978-8-170-35516-8
 85. Mathur, N., **Singh, J.**, Bohra, S., Bohra, A., and Vyas, A. (2007). Mycorrhizal Technology in Revegetation Practices in Indian Thar Desert. In: *The Mycorrhizae: Diversity, Ecology and Applications*, Eds. M. Tiwari and S. C. Sati, Daya Publishing House, Delhi, pp 174-182. ISBN: 978-8-170-35516-8
 86. Mathur, N., **Singh, J.**, Bohra, S., Bohra, A., and Vyas, A. (2007). Arbuscular Mycorrhizal Fungi: A Potential Tool for Phytoremediation. In: *Plant Morphology and Biotechnology*, Eds. P. C. Trivedi, Pointer Publisher, Jaipur, pp 166-182. ISBN: 978-8-179-10203-9
 87. Mathur, N., Singh, J., Bohra, S., Bohra, A., and Vyas, A. (2007). Application of Microbial Biotechnology for Sustainable Legume Production in Desert Conditions. In: *Bioinoculants for Integrated Plant Growth*, Eds. H. C. Lakshman, MD Publications, New Delhi, pp 341-354. ISBN: 978-8-175-33253-9

Workshops and Conferences attended

1. Keynote Speaker at 5th International Conference on Advance in Agriculture Technology and Allied Sciences (ICAATAS), 2022, Jointly Organized by, Society of Agriculture Research and Social Development & MS Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Gajapati, Odisha - 761211, India, 04-05, June 2022.
2. Chaired Scientific Session at International Conference on International Conference on Sustainability: Life on Earth 2021 (ICS-LOE 2021), Organized by Department of Botany and Zoology, School of Bio-engineering and Biosciences, and Institute of Forest Productivity, Ranchi, Jharkhand, at Lovely Professional University, Punjab, India, 17-18, December 2021.
3. Chaired Scientific Session at National Conference on Recent Trends in Biomedical Sciences 2020 (RTBS-2020), Organized by Department of Medical Laboratory Sciences, Lovely Professional University Punjab, India, 02-03, July 2021.
4. Attended one-week Faculty Development Programme/Short Term Course on Advances in Enzyme and Bioprocess Engineering, Organized By Department of Biotechnology, National Institute of Technology, Jalandhar 144011, India, 07-11, February 2019.
5. Attended International Symposium on Fungal Biology: Advances, Applications and Conservation & 45th Annual Meeting of the Mycological Society of India, Organized by National Fungal Culture Collection of India (NFCCI) (DST - National Facility), MACS' Agharkar Research Institute, G.G. Agarkar Road, Pune 411004, India, 19-21, November 2018.
6. Attended Global Water Security Conference for Agriculture and Natural Resources, An ASABE Global Initiative Conference, Organized jointly with the Indian Society of Agricultural Engineers (ISAE), Taj Krishna, Hyderabad, India, 3-6 October 2018.
7. Conducted International conference entitled 'Innovative Strategies for Sustainable Water Management' (ISSWM-2017), Organized by Lovely Professional University, Phagwara (Punjab) in Collaboration with McGill University, Canada, 17-18 November 2017.
8. Presented paper entitled - Enhanced biodegradation of fungicide carbendazim by

indigenous soil bacterial isolates in presence of humic acid, iron and copper at Emerging Trends in Biotechnology for Agriculture, Medicine and Environment and 26th APSI Scientist Meet, Organized by Department of Biotechnology, Mahila P.G. Mahavidyalaya, Jodhpur, Rajasthan, 18-19, November 2016.

9. Presented paper entitled - Enhanced biodegradation of Glyphosate by Bacterial isolates in the presence of Humic acid, Iron, and Copper at National Conference on Basic and Applied Researches in Plants and Microbes, Organized by Department of Botany, Punjabi University, Patiala, Punjab, 03-05, November 2016.
10. Presented paper entitled - Arbuscular mycorrhizal fungus, *Glomus* spp. associated with drought tolerant plants of the Indian Thar desert at The National Academy of Sciences, India, 84th Annual session of the Academy, Organized by, Jai Narain Vyas University, Jodhpur, Rajasthan, 04-06, December 2014.
11. Presented paper entitled - Screening of rhizobacteria from Eichornia rhizosphere for removal of Arsenic at National Conference on Applications of Natural Products for Human Health & Bioremediation of pollutants, Organized by Centre for Advanced Studies, Department of Zoology, University of Zoology, Rajasthan University, Jaipur, 22-23 March 2013.
12. Presented paper entitled - In silico peptide based vaccine design against non-structural protein 3 of Hepatitis C at International Conference on Computing Sciences, Organised by Lovely Faculty of Technology and Sciences, Lovely Professional University, Phagwara, India, 15-16 November, 2013.
13. Presented paper entitled - Rhizoremediation of chromium by employing rhizobacteria collected from *Hibiscus rosa-sinensis* at UGC sponsored National Conference on Current Issues and Opportunities in Biotechnology, Organized by Department of Biotechnology, Mahila P.G. Mahavidyalaya, Jodhpur, 11-12 January 2013.
14. Attended Best Teaching Practices for Improved Learning, conducted by University of Illinois, Urbana Champaign, Illinois, USA, Organized by Lovely Professional University, Phagwara (Punjab), 20 July 2012.
15. Conducted Faculty Awareness Programme on Intellectual Property Rights and Environment Conservation, sponsored by Punjab State Council for Science and Technology, Organized by Lovely Professional University, Phagwara (Punjab), 5 July 2012.
16. Presented paper entitled - Protein and alkaloid profiling from seeds and root of Indian ginseng (*Withania somniferum* Dunal) at 3rd National Conference on Biotechnology for Environmental Management, Organized by Organized by Department of Biotechnology, Mahila P.G. Mahavidyalaya, Jodhpur, 4-5 December 2012.
17. National Conference, 3rd Bhartiya Vigyan Sammelan and Expo, Organized by Vijnana Bharti, Punjab Technical University and Lovely Professional University in collaboration with Punjab State Council for Science and Technology, Organized by Lovely Professional University, Phagwara (Punjab), 11-14 October 2012.
18. Presented paper entitled - Diversity of arbuscular mycorrhizal fungi associated with rhizosphere of *Cenchrus ciliaris* in Western Rajasthan at National Conference on Advancing Frontiers in Biotechnology, Organized by Mahila P.G. Mahavidyalaya, Jodhpur, 12-14 March 2012.
19. Presented paper entitled - Evaluation of in vitro responses from different explants of elite *Jatropha curcas* L. at University Grants Commission Sponsored Conference on Current Status and Opportunities in Medicinal Plants of Thar Desert, Organized by Mahila P.G. Mahavidyalaya, Jodhpur, 17-18 December 2011.
20. Presented paper entitled 'Mycorrhizal Technology for removal of heavy metal toxicity from soil' at XIVth Southern Regional Conference on Microbial Inoculants, Organized by Department of Botany, Government College of Arts, Science & Commerce, Quepem, Goa & National Institute of Oceanography (NIO) Dona

- Paula, Goa, India, 11-12 February 2010.
21. Training program on "Trends in instrumentation and Analytical Methods", Organised by University Science and Instrumentation Centre, Faculty of Science Jai Narain Vyas University, Jodhpur, India, 16 – 19 February 2009.
 22. Presented paper entitled 'Mycorrhizal technology for increasing productivity of some medicinal plants of Indian Thar Desert' at International Conference on Nurturing Arid Zones for People and the Environment: Issues and Agenda for the 21st Century, Organized by Central Arid Zone Research Institute, Jodhpur, India, 24-28 November 2009.
 23. NCPDPEP-2009 XVIII APSI Scientists Meet 2009 and National Conference on Plant Sciences: Diversity, Products and Environmental Planning, Organized by Department of Botany, Marwari College, Ranchi, Jharkhand and Academy of Plant Sciences India, Muzaffarnagar, U. P. India, 11-12 October 2009.
 24. Presented paper entitled 'Halophytes as a tool for removal of heavy metal toxicity' at International symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics, Organized by 49th Annual Conference of Association of Microbiologists of India, University of Delhi, India, 18-20 November, 2008.
 25. Presented paper entitled 'Arbuscular Mycorrhizal Fungi: A Potential Tool for Phytoremediation' at International Workshop on Development and Optimization of Combined Plant/Microbe Technologies for Bioremediation of soils contaminated with Hydrocarbons and Heavy metals, Organized by Institute of Advanced Study in Science and Technology, Paschim Boragaon, Guwahati, India, 29 September - 01 October, 2008.
 26. National Workshop on Techniques in Mycorrhizae, Organized by Government College of Arts, Science and Commerce, Quepem, Goa, India, 4-5 March, 2006.
 27. Presented paper entitled 'Physiological changes in root of *Chlorophytum borivillianum* by AM fungi' at Global Conference II, Organized by Indian Society of Mycology and Plant Pathology and Maharana Pratap University of Agriculture & Technology, Udaipur, India, 25-29 November 2005.
 28. Presented paper entitled 'Ecology of AM fungi in saline areas of Indian Thar desert' at International conference on Biosciences, Biotechnology and Biodiversity Analysis, Organised by Post Graduate Research Centre, Department of Botany, Modern College of Arts, Science and Commerce, Pune, Maharashtra, India, 15-17 October, 2005.
 29. Presented paper entitled 'Mycorrhizal relationship of *Convolvulus microphyllous* in Indian Thad desert' at National Seminar on Recent Advances in Medicinal and Aromatic Plants, Organized by Department of Horticulture and Directorate of Extension, Sardar Vallabh Bhai Patel University of Agriculture and Technology, Meerut, U. P., India, 15-17 February, 2005.
 30. National Symposium on Arid Legumes for Sustainable Agriculture and Trade, Organized by Central Arid Zone Research Institute, Jodhpur, India, 5-7 November, 2004.
 31. Presented paper entitled 'AM fungi associated with some halophytes of Indian Thar desert' at Asian Congress of Mycology and Plant Pathology, Organised by Department of studies in Applied Botany, Seed Pathology and Biotechnology, University of Mysore, Manasagangotri, Mysore, India, 1-4 October, 2002.
 32. Training-cum-Seminar on Neem and Holistic Sustainable Human Development, Organized by Central Arid Zone Research Institute, Jodhpur, India, 19-20 March, 2002.
 33. Campus training on Cultivation of Mushroom, Organized by National Research Centre for Mushroom, Solan in collaboration with Satat Krishi Samanvit Gramin Vikas Samiti, Jodhpur and Central Arid Zone Research Institute, Jodhpur, India, 4-5 January, 2000.

Achievements useful for Scientific Community

1. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from Heavy metal polluted areas. **JX157139** (*Enterobacter* sp. enrichment culture clone HMT): Isolation, Biochemical and Molecular Characterization of Heavy Metal Tolerant Bacteria. Pachouri, U.C., Sharma, S., Kumar, M., Vyas, A. and Panwar, J.S. (2012)
2. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas aeruginosa* strain jogii **JX276925.1**: Screening of rhizobacteria from Eichornia rhizosphere for removal of arsenic. Singh, J. and Kumar, V. (2012).
3. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from degraded insects. **KF010320.1** (*Bacillus megaterium* strain *chandellii*): Characterization of chitinase from degraded insects. Chandel, S., Singh, G. and Singh, J. (2013)
4. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas fluorescens* strain S2 **KF279042.1**: Bioremediation of petroleum hydrocarbon by using various species of *Pseudomonas* isolated from petroleum contaminated soil. Singh, J., Negi, P. and Kashyap, N. (2013).
5. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Azotobacter* strain jogii clone jogii **KF279043.1**: Rhizobacteria isolated from soil. Singh. J., Singh. S., Kaur. P., & Singh. H (2013).
6. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Azotobacter* strain jogii clone jogii **KF279044.1**: Rhizobacteria isolated from soil. Singh. J., Singh. S., Kaur. P., & Singh. H (2013).
7. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus subtilis* strain PSB **KF279045.1**. Isolation and identification of phosphate solubilizing bacteria. Pandey, D.K., Bhat, A.N. and Singh, J. (2013).
8. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus thuringiensis* strain Simi **KF916618.1**. Bioremediation of heavy metals by employing resistant microbial isolates from agricultural soil irrigated with industrial waste water. Singh, S., Singh, J., Kaur, S. and Kaur, P. (2013).
9. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus thuringiensis* strain PS1 **KJ511861.1**. Bioremediation of pollutants collected from polluted sites of Jalandhar district. Singh, S. and Singh, J. (2013).
10. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Paenibacillus ehimensis* strain PS4 **KJ511862.1**. Bioremediation of pollutants collected from polluted sites of Jalandhar district. Singh, S. and Singh, J. (2013).
11. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Azotobacter chroococcum* strain PS2 **KJ607246.1**. Bioremediation of pollutants collected from polluted sites of Jalandhar district. Singh, S. and Singh, J. (2013).
12. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas pseudoalcaligenes* strain PS5 **KJ588061.1**. Bioremediation of pollutants collected from polluted sites of Jalandhar district. Singh, S. and Singh, J. (2013).
13. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus subtilis* strain PS3 **KJ489411.1**. Bioremediation of pollutants coll from polluted sites of Jalandhar district. Singh, S. and Singh, J. (2013).
14. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from Streptomycetaceae bacterium RK1 **KJ206091**. Strains isolated from atrazine-contaminated fields. Singh, S. and Singh, J. (2013).
15. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas fluorescens* strain RK2 **KJ466148.1**. Strains isolated from atrazine-contaminated fields. Singh, S. and Singh, J. (2013).

16. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Azotobacter chroococcum* strain RK3 **KJ511860.1**. Strains isolated from atrazine-contaminated fields Singh, S. and Singh, J. (2013).
17. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Rhizobium leguminosarum* strain RK4 **KJ489410.1**. Strains isolated from atrazine-contaminated fields Singh, S. and Singh, J. (2013).
18. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Actinomyces* sp. GP1 **KJ854403.1**. Singh, S., Sharma, J. and Singh, J.(2013).
19. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus subtilis* strain GP2 **KJ854404.1**. Singh, S., Sharma, J. and Singh, J.(2013)
20. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Rhizobium leguminosarum* strain GP3 **KJ854405.1**. Singh, S., Sharma, J. and Singh, J. (2013).
21. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Actinomyces* sp. MC1 **KJ854396.1**. Singh, S., Ibrahim, B. and Singh, J.(2013).
22. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus subtilis* strain MC2 **KJ854397.1**. Singh, S., Ibrahim,B. and Singh, J.(2013).
23. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Rhizobium leguminosarum* strain MC3**KJ854398.1**. Singh, S., Ibrahim, B. and Singh, J. (2013).
24. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Actinomyces* sp. MC1 MC3 **KJ854399.1**. Singh, S., Mir S.S. and Singh, J. (2013).
25. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus subtilis* strain CB2 **KJ854400.1**. Singh, S., Mir S.S. and Singh, J. (2013).
26. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas aeruginosa* CB3 **KJ854401.1**. Singh, S., Mir S.S. and Singh, J. (2013).
27. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Rhizobium leguminosarum* strain CB4 **KJ854402.1**. Singh, S., Mir S.S. and Singh, J. (2013).
28. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas aeruginosa* ACP 2 KP268770.1. Singh, S., Singla S. and Singh, J. (2014).
29. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas putida* ACP 3 KP268771.1. Singh, S., Singla S. and Singh, J. (2014).
30. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas aeruginosa* PR1 KP268772.1. Singh, S., Singla S. and Singh, J. (2014).
31. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Pseudomonas oryzihabitans* PR2 KP268773.1. Singh, S., Singla S. and Singh, J. (2014).
32. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Paenibacillus pocheonensis* strain DP2 **KX034565.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)
33. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Lysinibacillus sphaericus* strain DP2 **KX034564.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)
34. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus cereus* strain DP2 **KX034563.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)
35. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus subtilis* strain DB1 **KX034562.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)

36. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Paenochrobactrum glaciei* strain DB1 **KX034561.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)
37. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Escherichia coli* strain DB1 **KX034560.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)
38. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Brevibacillus panacihumi* strain DB1 **KX034559.1** Bhatia, D., Kanwar, R., Das, A. and Singh, J. (2016)
39. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Priestia aryabhattai* strain VT 3.12 **OK135732** Singh, J., Dhaka, V., Singh, S., and Ramamurthy, P.C. (2021)
40. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus pseudomycoloides* strain VT 3.15 **OK135733** Singh, J., Dhaka, V., Singh, S., and Ramamurthy, P.C. (2021)
41. Gene Bank Accession Number of Isolated 16S ribosomal RNA gene, from *Bacillus pumilus* strain VT 3.16 **OK135734** Singh, J., Dhaka, V., Singh, S., and Ramamurthy, P.C. (2021)

Students guided

- **Ph.D** students - 11 (07 awarded; 00 Submitted; 05 pursuing); **M.Phil** students - (04 awarded); **M.Tech-M.Sc** students – 31 awarded.

Ph.D. (Awarded)

Simranjeet Singh (Reg. No. 11209166) – Comparative Study of Bio-degradation of Pesticides in the absence and presence of Humates and Metal ions, April 2018

Vikas Kaushik (Reg. No. 41300079) – *In silico* Design of Vaccine- A study based on use of peptides, May 2018

Abdul Basit Wani (Reg. No. 11209269) – Interaction of Salicylic Acid and its Derivatives with Essential Metal Ions of Soil in Presence/Absence of Soil Organic Matter, May 2018

Deepika Bhatia (Reg. No. 11211691) – Development of innovative clean-up technology (biofilters) for effective degradation of textile waste water effluents, Oct 2018

Shivika Dutta (Reg. No. 11313029) - Bioremediation of Pesticide Contaminated Agricultural soil by Vermitechnology and toxicity assessment by *Allium cepa*, Oct 2018

Parvinder Kaur (Reg. No. 11211429) – Development of microbe-assisted Phytoremediation of industrially polluted soils in Punjab, April 2019

Vaishali Dhaka (Reg. No. 11815986) – Biodegradation of Polyethylene terephthalate (PET) using rhizobacteria isolated from polluted sites of Jalandhar, Punjab (India), Jan 2023

M.Phil. (Awarded)

Damnita Singh (11512457) - Biodegradation of Triazophos by soil bacterium and its kinetics, August 2017

Simranjeet Singh (Reg. No. 11209166) – Bioremediation of Pollutants from various polluted sites of Jalandhar city, August 2013

Sweta Modgil (Reg. No. 11113909) – Synergistic efficacy of rhizobacteria and arbuscular mycorrhiza in bioremediation of heavy metals from Una district (H.P.), August 2012

Parvinder Kaur (Reg. No. 10803098) – Microbial technology for phytoremediation of industrially polluted soil of Hoshiarpur region (Punjab), June 2011

M.Tech./M.Sc. Dissertations

1. Nitish Pandit – Role of mycorrhiza for phytoremediation of pollutant soil of Hoshiarpur region, May 2011.
2. Antriksh Gupta (Reg. No. 3040060007) – Role of rhizo-microflora (rhizobacteria-mycorrhiza) for phytoremediation of pollutant soil of Hoshiarpur region, May 2011.
3. Vartika Sharma (Reg. No. 3040060116) – Role of rhizobacteria for phytoremediation of pollutant soil of Hoshiarpur region, May 2011.
4. Yashika Kakkar (Reg. No. 3040070048) - Molecular techniques for identification of mycorrhiza isolated from rhizosphere of *Saccharum bengalense*, May 2012.
5. Jyoti Jeswani (Reg. No. 3040070127) – Bioremediation of chromium by employing rhizobacteria collected from *Hibiscus rosa sinensis*, May 2012.
6. Vanita Pathak (Reg. No. 3040070051) – Molecular Biodiversity and Identification of *Rhizobium* isolated from native soil and fixed substrate, May 2012.
7. Amandeep Kaur (Reg. No. 3040070032) – Synergistic effect of Rhizobacteria and Mycorrhiza on growth and productivity of *Zea mays*, May 2012.
8. Vivek Kumar (Reg. No. 3040070044) – Screening of rhizobacteria from *Eichornia* rhizosphere for removal of Arsenic, May 2012.
9. Akashdeep (Reg. No. 3440070067) – Optimization of Cellulase production by White-Rot Fungi using Genetic Algorithm, May 2012.
10. Rupali Saini (Reg. No. 3440070113) – Optimization of Laccase Production from White-Rot Fungus using Genetic algorithm, May 2012.
11. Lalita (Reg. No. 11110069) - Isolation and Identification of Mycorrhiza associated with *Cannabis sativa*, 2013.
12. Nivedita Kashyap (Reg. No. 11112508) - Bioremediation of heavy metals by employing resistant microbial isolates from agricultural soil irrigated with industrial wastewater, 2013.
13. Pritika Negi (Reg. No. 11110456) - Bioremediation of Petroleum hydrocarbon by using various species of *Pseudomonas* isolated From Petroleum contaminated soil, 2013.
14. Vibhuti kachhawa (Reg. No. 11100068) - Isolation and identification of mycorrhiza associated with *Datura stramonium*, 2013
15. Sundeep Kaur (Reg. No. 11206597) - Enhancement of alkaloid production in *Catharanthus roseus* by root transformation, May 2014
16. Sadia Shabir (Reg. No. 11200551) - Isolation and characterization of microorganisms responsible for methomyl degradation, May 2014
17. Jitender Sharma (Reg. No. 11209770) - Isolation, Characterization and Biodegradation of Glyphosate Degrading Microorganism from soil sample, May 2014
18. Bilal Ibrahim (Reg. No. 11209262) - Isolation and characterization of microorganisms responsible for monocrotophos degradation, May 2014
19. Azad Ali (Reg. No. 11203600) - Enhancement of alkaloid production in *Gomphrena celosioides* by root transformation, May 2014
20. Anindita Choudhury (Reg. No. 11205216) - Enhancement of alkaloid production in *Murraya paniculata* by root transformation, May 2014
21. Shreyasi Chakraborty (Reg. No. 11000212) - Exploration and Exploitation of *Trichoderma* as antagonist against soil-borne pathogens, May 2014
22. Anchal Saini (Reg. No. 11308684) - Isolation and characterization of enzymes secreted from *Pseudomonas* sp. responsible for acephate degradation, May 2015
23. Anjali Kumari (Reg. No. 11306632) - Microbial decolorization and degradation of textile dyes, 2015

24. Krishan Kumar (Reg. No. 11305670) - Microbial analysis of Mustard plant growing at Chaheru village, May 2015
25. Sourav Singla (Reg. No. 11001485) - Isolation and characterization of rhizobacteria capable to degrade insecticide (Acephate), May 2015
26. Ayan Das (Reg. No. 11109375) - Toxicity assessment of Disperse Red 54 and Disperse Blue 60 dye: An approach towards it's bioremediation, May 2016
27. Pengani Kedharnath Reddy (Reg. No. 11400908) - Effect of alterations of growth factors on production and quality of xanthan gum produced by *Xanthomonas campestris* pv. *campestris*, May 2016
28. Harpreet Kaur (Reg. No. 11309262) – Mutagenicity assessment of disperse & vat dyes by using AMES test, May 2016
29. Premlata Rai (Reg.no.11511203) – To study the Effect of Organic Matter on Biodegradation of Thiophanate-Methyl, May 2017
30. Kankan Sharma (Reg. No. 11407280) – Microbial degradation of Lignocellulosic Agricultural Waste, July 2019
31. Noyonika Kaul (Reg.no.11506038) – Biodegradation of Cartap Insecticide by Naturally occurring Agricultural Microbial Community, July 2019
32. Lavneet Kaur (11909011) – Microbial degradation studies of Sunset Yellow Dye on bio-adsorbent, July 2020
33. Musa Galadima (11919348) – Biodegradation of Deltamethrin by rhizobacteria, July 2020
34. Ramandeep Kaur (11902854) – Biodegradation of Cypermethrin by rhizobacteria, July 2020
35. Akshay Pawar (11917577) – Removal of Arsenic by the use of Poplar leaves bio-adsorbent, July 2020

Education

- Ph.D. Doctorate in Botany, in 2003 from J. N. V. U. Jodhpur.
- PG Master of Science in Botany, in 2000 from J. N. V. U. Jodhpur
- UG Bachelor of Science, in 1998 from J. N. V. Univ., Jodhpur
- SSC Senior Secondary in Biology, in 1994 from Rajasthan Board of Secondary Edu. Ajmer.
- SC Secondary, in 1992 from Rajasthan Board of Secondary Edu. Ajmer.

Professional Qualifications

- Qualified National Eligibility Test (NET) of June 2002 organized by CSIR-UGC for Lectureship in University.

Professional Honors and Awards

- | | |
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| 2021 | Best Reviewer Award from the Editorial Board of Critical Reviews in Environmental Science and Technology (Impact factor 8.302), Taylor & Francis Group, United Kingdom |
| 2021 | Research Appreciation Award by Lovely Professional University, Punjab |
| 2019 | Research Appreciation Award by Lovely Professional University, Punjab |
| 2018 | Research Excellence Award by Lovely Professional University, Punjab |
| 2016 | Certificate of Excellence in the field of Microbial Technology by Academy of Plant Sciences India |
| 2016 | Research Excellence Award by Lovely Professional University, Punjab |
| 2007 | Young Scientist, DST, Govt. of India (DST SERC Fast Track Scheme) |
| 2003 | Research Associate, C.S.I.R. Project, Govt. of India |

Professional Memberships and Affiliations

- The Indian Botanical Society
- Mycological Society of India (LM-44-22)
- Association of Microbiologists of India (4680-2018)
- Indian Science Congress Association (L35696)
- The Microbiology Society, United Kingdom (C038693)
- Academy of Plant Sciences India
- K. K. Nanda Foundation for Advancement of Plant Sciences
- Asian Phytopathological Society
- Hong Kong Chemical, Biological & Environmental Engineering Society HKCBEEES (101346)
- Indian Society of Salinity Research Scientists
- Indian Society for Radiation Biology
- International Phytotechnology Society
- European Federation of Biotechnology

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