

Curriculum vitae

To work in an environment, which fosters performance based continuous growth and learning.

Personal Details

Position: Assistant Professor
Address: Department of Plant Sciences, School of Life Sciences,
Central University of Himachal Pradesh, Shahpur Parisar, Kangra-176206
Telephone (M): 06005209699, 09469219538
E-mail: munish.plant@hpcu.ac.in , munishptc@gmail.com
Citizenship Indian

Professional Qualifications

- ❖ Ph.D. (2014) from Shri Mata Vaishno Devi University, Kakryal, Katra (Union Territory of J&K)
- ❖ M.Sc. (2004) from Career College, Department of Life Sciences, BHEL, Govindpura, Bhopal [Barkatullah University, Bhopal (M.P)]
- ❖ B.Sc. (2001) from Govt. Gandhi Memorial Science College, University of Jammu, Jammu (Union Territory of J&K)
- ❖ Certificate Course in Computer Applications (CCCA) from Centre for Electronics Design & Technology of India (CEDTI, New Delhi) (An Autonomous Scientific Society under Ministry of Information Technology, Govt. of India) from Nov 2001-May 2002

Employment History

- ❖ Research Associate at School of Biotechnology, University of Jammu, Jammu (Union Territory of J&K) from July, 2014 to March, 2019
- ❖ Research Associate (T) at Plant Tissue Culture and Molecular Biology, The Energy and Resources Institute (TERI), Darbari Seth Block, IHC Complex, Lodhi Road, New Delhi from Sept. 2007 to Nov. 2007
- ❖ Junior Research Fellow (JRF) at Advanced Centre of Hill Bioresource and Biotechnology, CSK-HPKVV, Palampur from October, 2006 to Sept. 2007
- ❖ Project Assistant at Plant Tissue Culture Unit, Indian Institute of Integrative Medicine, (Formerly, Regional Research laboratory) (CSIR) Canal Road, Jammu (Union Territory of J&K) from May, 2005 to October, 2006

Personal Distinctions

- ❖ UGC BSR (Basic Scientific Research) Fellowship Awarded during Ph.D (2013)
- ❖ *Life Member*, The Indian Botanical Society (IBS), Department of Plant Science, Mahatma Jyotiba Phule Rohilkhand University, Bareilly, UP

- ❖ *Founding and Life Member*, Himalayan Life Science Society (HLSS), School of Life Sciences, Central University of Himachal Pradesh, Shahpur campus
- ❖ *Life Member*, Indian Science Congress Association (ISCA), Kolkata, India
- ❖ *Life Member*, The Orchid Society of India (TOSI), Botany Department, Panjab University, Chandigarh, India
- ❖ Paper Setter for various Universities i.e., Sardar Patel University, Mandi (HP), CSK-HPKV University Palampur (HP), Cluster University of Jammu.
- ❖ External Examiner for Practical Examination, Sardar Patel University, Mandi (HP)

Invited Seminars and Invited Conference Presentations (last 5 years)

- ❖ Delivered an invite talk on '*Green Technology - An Effective way for Healthy and Clean Environment*'organised byNSS Club of Government College of Engineering and Technology, Jammu (Union Territory of J&K); May, 2021.

Professional Contributions (last 5 years)

- ❖ Member, Board of Studies in Biotechnology, Govt. College for Women, Gandhi Nagar (A Constituted College of Cluster University of Jammu) [2021-2024]
- ❖ University Observer for University Level Entrance Examination at Jammu Centre for the session 2021-22, Sept. 2021
- ❖ Deputy Superintendent, Ph.D. Entrance Test-2021 at Shahpur Parisar, Nov 2021
- ❖ Deputy Superintendent for conduct of End Term Examination-2022, Feb 2022
- ❖ Faculty Incharge for IQAC and Alumni Cell, Department of Plant Sciences, CUHP (April, 2022)
- ❖ Organizing Committee (*Local*) Member for National Conference on Frontiers in Chemical Sciences (NCFCS) Jointly Organized by Indian Society of Analytical Scientists (ISAS)-Delhi Chapter and Central University of Himachal Pradesh at Shahpur Campus from 4-5 November, 2022
- ❖ Organizing Committee Member (*Session Coordinator*) for National Conference on Frontiers in Chemical and Biological sciences organized by Department of Chemistry and Chemical Sciences, CUHP in Collaboration with Himalayan Life Science Society (HLSS), School of Life Sciences, Central University of Himachal Pradesh on May29-30,2024
- ❖ Committee Member for Departmental Academic Integrity Panel (DAIP), Department of Plant Sciences, CUHP (June, 2024)
- ❖ Deputy Superintendent for Conduct of End Term Examination, December 2024 at Shahpur Campus, CUHP (05-20 Dec., 2024)
- ❖ Organizing Committee Member for one day *Jam-Session on Drug Abuse and Drug Demand Reduction* for UG, PG and PhD students of Central University of Himachal Pradesh in association with District Welfare Office Kangra at Central University of Himachal Pradesh, Shahpur Campus on 28-04-2025.
- ❖ Co-Organizing Secretary - National Conference on '*Nurturing Young Minds for Scientific Innovations (NYMSI-2025)*' organized by School of Life Sciences in collaboration with Himalayan Life Science Society (HLSS) and IQAC (CUHP) at Central University of Himachal Pradesh Shahpur Campus during May 15-16, 2025. [Funded by HLSS and CUHP]
- ❖ Rapporteur at National Conference on '*Environmental Sustainability, Climate Adaptability and Disaster Management-2025*', organized by Department of Environmental Sciences, Central University of Himachal Pradesh on 05-06-2025 at CUHP, Shahpur Campus, Kangra, Himachal Pradesh

- ❖ Committee Member for Departmental Standing Committee, Department of Plant Sciences, CUHP (Jan., 2025)
- ❖ Committee Member for Departmental Research Committee, Department of Plant Sciences, CUHP (Jan., 2025)
- ❖ Committee Member, Research Degree Committee, Department of Plant Sciences, CUHP
- ❖ Committee Member, Board of Studies, Department of Plant Sciences, CUHP
- ❖ Committee Member, School Board, School of Life Sciences, CUHP

Teaching

❖ **M.Sc Plant Science (Botany):**

Fundamentals of Plant Anatomy and Micro Techniques, Gardening and Landscaping, Plant Biotechnology and Genetic Engineering, Bio-analytical Techniques in Plant Science, *In Vitro* Plant Biology

❖ **Ph.D. Plant Science (Botany): Pre-Ph.D. Course work**

Advanced Plant Biotechnology

Doctoral Thesis Supervision

In Progress: (03students)

Thesis Submitted: (01 student)

University Administration

- ❖ Member, Emotional Well-Being Committee, Shahpur Campus, August 2021
- ❖ Member, Special Guidance Centre, CUHP, August 2021
- ❖ Internal Member, Institutional Biosafety Committee (IBSC), January 2022
- ❖ Member, Research and Development Cell, CUHP

Publications

Refereed Journal Articles

- (1) Deepika B. Prashar, Munish Sharma, Deepak Sharma, Zahoor Ahmad Mir, Hemant Sood, **Munish Sharma (2025)** Exploring the complexity of plant stress response: role of metabolomics and signalling pathways in metabolic diversification. *Journal of Plant Biochemistry and Biotechnology*. <https://doi.org/10.1007/s13562-025-00986-5>
- (2) Munish Sharma, Munit Sharma, **Munish Sharma (2025)**. Distribution Record and Occurrence of *Juglans regia* L. From Ramban and Chamba Districts of North Western Himalayas. *National Academy Science Letters*. 10.1007/s40009-025-01628-z.
- (3) Munish Sharma, **Munish Sharma**, Munit Sharma (2024) Assessment of Current Status and Conservation Strategies of Some High Valued Medicinal Plants From Himalayan Regions. *Ann. Bot. (Roma)*, 14: 3-20
- (4) Munish Sharma, Munit Sharma, Sudam Charan Sahu, Deepak Sharma, **Munish Sharma (2024)** Walnuts as functional food and nutraceutical: A bibliometric study of research trends on nutritional potential, phytochemistry and its health benefits. *Food and Humanity*, 3, 100387
- (5) Munish Sharma, Nikita Kashyap, Mukesh Verma, Bharti Devi, Anchal Prashar, Smita Sinha, **Munish Sharma (2024)** Role of natural products in cancer management: a comprehensive review. *Journal of Ethnopharmacology and Toxicology*, 2:1-18

- (6) Nikita, Munish Sharma and **Munish Sharma** (2024) Exploring the Wonders of Duckweed: Unveiling the Intriguing World of the Smallest Free-Floating Aquatic Plant. *International Journal of Plant and Environment*, 10(1), 1-11
- (7) Munish Sharma, Amit Kumar Sharma, Simran Sharma, Arvind Kumar Sharma, Munish **Sharma**, Kamal Kant Sharma, Munit Sharma (2024) Reviewing the insights of SARS-CoV-2: Its epidemiology, pathophysiology, and potential preventive measures in traditional medicinal system. *Clinical Traditional Medicine and Pharmacology*, 5(2) 200147
- (8) Arvind Kumar Sharma, Munish Sharma, Simran Sharma, Davendra Singh Malik, Munit Sharma, **Munish Sharma**, Amit Kumar Sharma (2024) A systematic review on assessment of heavy metals toxicity in freshwater fish species: Current scenario and remedial approaches. *Journal of Geochemical Exploration* 262: 107472
- (9) Vinay Kumar, Neha Sharma, Mridul Umesh, Roopali Sharma, **Munish Sharma**, Deepak Sharma, Munish Sharma, Sonica Sondhi, Jithin Thomas, Deepak Kumar, Lavish Kansal, Niraj Kumar Jha (2024) Commercialization potential of PET (polyethylene terephthalate) recycled nanomaterials: A review on validation parameters. *Chemosphere*. 352, 141453
- (10) Munish Sharma, Dixit Sharma, S.C Sahu, Ankita Sharma and **Munish Sharma** (2024) Mapping the Trends in Global Research Productivity and Conservation of Saffron (*Crocus Sativus* L.): Insight from Bibliometric Analysis during 1950-2022. *Biology Bulletin Reviews*, <https://doi.org/10.1134/S2079086424020117>
- (11) Munish Sharma, Munit Sharma and **Munish Sharma** (2024) Assessment of Variability and Genetic Factors Among High Heritable Traits of *Juglans regia* L. (Walnut) from North Western Himalayan Regions. *Agricultural Research*, <https://doi.org/10.1007/s40003-024-00697-8>
- (12) Munish Sharma, Sonam Yangzom, Munit Sharma & **Munish Sharma** (2024) Ethnobotanical Studies of high valued medicinal plants reported from Spiti Valley in Himachal Pradesh. *Biology Bulletin*, <https://doi.org/10.1134/S1062359023601568>
- (13) Gurpreet Kaur, Sahil Jain, Sakshi Bhushan, Niranjan Das, **Munish Sharma**, Deepak Sharma (2024) Role of microRNAs and their putative mechanism in regulating potato (*Solanum tuberosum* L.) life cycle and response to various environmental stresses. *Plant Physiology and Biochemistry*, 207, 108334
- (14) Manisha K, Geetika S, **Munish S**, Sunil K and Ranjit K (2023) Heavy Metal Induced Molecular Alteration Leads to Gallbladder Cancer. *Clinical Case Reports International* .7: 1539
- (15) Munish Sharma, Simran Sharma, Arvind Kumar Sharma, Munish Sharma, Munit Sharma, Amit Kumar Sharma (2023) Understanding the complex interplay: how social and economic development impact lake ecosystems. *Journal of Ethnopharmacology and Toxicology*. 1(1): 1-5
- (16) Vinay Kumar, **Munish Sharma**, Sonica Sondhi, Komalpreet Kaur, Deepak Sharma, Shivali Sharma, Divya Utreja (2023) Removal of Inorganic Pollutants from Wastewater: Innovative Technologies and Toxicity Assessment. *Sustainability*. 15,16376
- (17) Amit Kumar Sharma, Munish Sharma, Arvind Kumar Sharma, Munit Sharma, **Munish Sharma** (2023) Mapping the impact of environmental pollutants on human health and environment: A systematic review and meta-analysis. *Journal of Geochemical Exploration*, 255, 107325
- (18) Alisha Dhiman, Munish Sharma, **Munish Sharma** (2023) Ethnopharmacological Profile of *Curcuma aromatica* Salisb. *Journal of Mountain Research*, 18(1), 267-279
- (19) Ritika Dhiman, Munish Sharma, Munit Sharma, **Munish Sharma** (2023) Reviewing the medicinal potential of *Valeriana jatamansi* Jones: its traditional uses, phytochemistry, and pharmacological activities. *TMR Pharmacology Research*, 3(4), 1-8
- (20) Namrata Jaspal, Munish Sharma, Deepika B. Prashar, Rahul Sharma, **Munish Sharma** (2023) *Jatropha curcas* L.: A sustainable resource for biofuel feedstock with medicinal and commercial attributes. *Journal of Innovative Agriculture*, 10(3), 1-13
- (21) Sonia Yadav, Munish Sharma, Shilpa, **Munish Sharma** (2023) Exploring the Phytochemical composition and Pharmacological efficacies of *Viola odorata*: A Comprehensive Review. *Research & Reviews in Biotechnology & Biosciences*, 10(1), 35-51
- (22) Munish Sharma **Munish Sharma**, Navneet Bithal and Munit Sharma (2022) Ethnobotany, Phytochemistry, Pharmacology and Nutritional potential of medicinal plants from Asteraceae family. *Journal of Mountain Research*, 17(2), 67-83
- (23) Munish Sharma, Deepak Sharma and **Munish Sharma** (2022) A Case report on Walnut (*Juglans regia* L.) from Jammu & Kashmir. *Journal of Biotechnology and Bioresearch*, 4(3), 541-543

- (24) Munish Sharma, Munit Sharma and **Munish Sharma** (2022) A comprehensive review on ethnobotanical, medicinal and nutritional potential of walnut (*Juglans regia* L.). *Proc. Indian Natl. Sci. Acad.*, 88, 601–616
- (25) Ranjit Kumar, Disha Chauhan, Geetika Saini, Rakesh Kumar, Sunil Kumar, Dixit Sharma, **Munish Sharma**, Vijay Kumar Bharti, Arun Kumar, Ashok Ghosh (2022) Down-regulation of RdRp complex and activated immune response due to increased arsenic level leads to decreased corona virus replication. *Current Research in Microbial Sciences*. 3, 100162
- (26) Shilpa, **Munish Sharma** (2021) Hairy root culture: a promising alternative for enhancing the production of biologically active compounds. *Journal of Innovative Agriculture*, 8(1), 1-10
- (27) Anuja Koul, **Munish Sharma**, Shagun Sharma, Jyotsna Sharma, Vijeshwar Verma, Sharada Mallubhotla (2021) Exploration of Therapeutic Potential of *Bacopa monnieri* Using *in silico* Approach and Optimization of Culture Conditions for Bacoside Production. *Journal of Proteomics and Bioinformatics*, 14, 536.
- (28) Neha Thakur, **Munish Sharma**, Munish Sharma (2021) Phytoremediation-a green technology adapted to eradication of harmful heavy toxic metals from contaminated soil. *Journal of Innovative Agriculture*, 8(1), 26-31

Book Chapters

- (1) Munish Sharma, Munit Sharma, Sumant Kumar Pandey, Deepak Sharma and **Munish Sharma** (2025) Role of Biotechnology in the Production of Health Promising Bioactive Molecules. In: Devi, J (ed). *Biotechnological Intervention in Production of Bioactive Compounds. Sustainable Landscape Planning and Natural Resources Management*. Springer, Cham. <https://doi.org/10.1007/978-3-031-76859-0-8>
- (2) Munish Sharma, **Munish Sharma**, Navneet Bithel and Munit Sharma (2025) Nutraceutical Fruits as an alternative for the treatment of different types of diseases. In: Kerservani, RK (ed). *Nutraceutical Fruits: Overview and Diseases Prevention (AAP Advances in Nutraceuticals)*. Apple Academic Press Inc (1st Edition), E-Book ISBN: 9781003499503
- (3) Mokshi Pathania, Koshika Sharma, **Munish Sharma**, Gurpreet Kaur, Deepak Sharma, and Sakshi Bhushana (2024) Role of Spices in Bioprotection and Clinical Trials: A Review. In: Tuli, HS (ed). *Anticancer Spices: Dietary Input to Health* (1st Edition). Jenny Stanford Publishing, <https://doi.org/10.1201/9781003534662-10>
- (4) Ashok Ahuja, Munish Sharma, Sharada Mallubhotla, **Munish Sharma** (2024) Bacosides Neurotropic Molecules Production by Tissue Cultures of *Bacopa monnieri* (L.) Wettst.; In: KaviKishor PB, Pullaiah T, Suprasanna P, Ranga Rao A and Romano Anabela (eds.) *Biotechnological Production of Bioactive Phytochemicals of Medicinal Value: A Comprehensive Treatise*. Elsevier Inc., <https://doi.org/10.1016/B978-0-443-21818-7.00010-1>
- (5) Munish Sharma, **Munish Sharma**, Navneet Bithel and Munit Sharma (2023) Diversity and Use Pattern of Ethnomedicinal Plants in Shivalik Ranges of Uttarakhand. In: Tewari, G, Pant, D, Joshi, P, Tewari, LM and Upadhyay (eds.). *Sustainable Utilization and Conservation of Biological Wealth*. Indu Book Services Pvt. Ltd. ISBN: 978-93-91377-88-5
- (6) Sakshi Bhushan, Deepak Sharma, Rakshant, Sanjana Kaul, Manoj K Dhar and **Munish Sharma** (2023) Recent Strategies to Engineer Alkaloid Biosynthesis in Medicinal Plants. In: Husen, A and Iqbal, M. (eds). *Medicinal Plants*. Springer, Singapore. <https://doi.org/10.1007/978-981-19-5611-9-15>
- (7) **Sharma, Munish**, Bhushan, Sakshi, Sharma, Deepak, Kaul, Sanjana, Dhar, Manoj K, Sharma M, Bhushan S, Sharma D, Kaul S, Dhar MK (2023) A Brief Review of Plant Cell Transfection, Gene Transcript Expression, and Genotypic Integration for Enhancing Compound Production. In: Pereira GC (ed). *Gene, Drug, and Tissue Engineering (Methods in Molecular Biology)*. Springer US. <https://doi.org/10.1007/978-1-0716-2716-7-8>. PMID: 36301475.
- (8) Neha Thakur, Munish Sharma, **Munish Sharma** (2021) A Review on Phytoremediation - An Ecofriendly Technology. In: Sharma, AK, Thakur, R, Sharma, M and Sharma, M (eds). *Current Research and Innovations in Life Sciences*. JPS Scientific Publications. (1st Edition) ISBN: 978-81-950475-3-6