



G.B. PANT NATIONAL INSTITUTE OF HIMALAYAN ENVIRONMENT
AUTONOMOUS BODY OF MOEF&CC, GOVT. OF INDIA
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DR. VASUDHA AGNIHOTRI, Ph.D.

EDUCATIONAL QUALIFICATION

Ph.D.: CSIR- Indian Institute of Petroleum, Dehradun, India (degree from HNBGU, Srinagar, Uttarakhand)
Subject Area: Chemical Sciences
Thesis title: Studies on Adsorptive Desulphurization of Gasoline
M.Sc.: Indian Institute of Technology, Roorkee
Subject area: Chemical Sciences

AREAS OF INTEREST IN RESEARCH

Adsorption and desorption processes, adsorbent synthesis, environmental pollution monitoring and remediation, biochemistry, environment chemistry, natural product chemistry

EXPERIENCE

Worked as **SCIENTIST** in
G.B. PANT NATIONAL INSTITUTE OF HIMALAYAN ENVIRONMENT
AUTONOMOUS BODY OF MOEF&CC, GOVT. OF INDIA
KOSI-KATARMAL, ALMORA-263643
UTTARAKHAND
From 16 April 2008- till now

PUBLICATIONS

PAPERS

1. Soumen Das Gupta, Vasudha Agnihotri, Pushpa Gupta, Anshu Nanoti, M.O.Garg, A.N.Goswami, (2009). Simulation of a fixed bed adsorber for thiophene removal” Catalysis Today 141, 84–88
2. Anshu Nanoti, Soumen Dasgupta, Vasudha Agnihotri, Pushpa Gupta, Amar N. Goswami, Madhukar O. Garg, Elisabeth Tangstad, Michael Stöcker, Arne Karlsson, Ørnulv B. Vistad, (2011). Zeolite Based Vapour Phase Adsorptive Desulphurization Process for Naphtha. Microporous and Mesoporous materials, 146, 158-165
3. Priyanka Sati, Vasudha Agnihotri, Anita Pandey (2013). Optimization of Temperature and Time length during Post Chromatographic Derivatization of TLC Separation of Ginkgolides and Bilobalide Standards. Journal of Planar Chromatography- Modern TLC. Journal of planar chromatography, 26 (5), 452–454

4. Rajesh Joshi and Vasudha Agnihotri (2014). Artificial neural networks (ANNs): A new paradigm for the study of drying kinetics and sorption isotherm. *Mathematics in Engineering, Science and Aerospace*, 5 (3), 301-311.
5. Vasudha Agnihotri, Priyanka Sati, Arvind Jantwala & Anita Pandey (2015). Antimicrobial and antioxidant phytochemicals in leaf extracts of *Bergenia ligulata*: a Himalayan herb of medicinal value. *Natural Product Research*. 29(11): 1074-7. DOI: 10.1080/14786419.2014.980244.
6. Sati Priyanka, Agnihotri Vasudha, Pandey Anita, Rani Anju (2015). Proximate composition of *Ginkgo biloba* L. leaves, from Indian Himalayan Region, with reference to their importance in natural medicine. *Open access Journal of Medicinal and Aromatic Plants* 6 (2), 1-9.
7. Mithilesh Singh, Neha Pandey, Vasudha Agnihotri, Anita Pandey (2017). Antioxidant, antimicrobial activity and bioactive compounds of *Bergenia ciliata* Sternb.: A valuable medicinal herb of Sikkim Himalaya. *Journal of Traditional and Complementary Medicine*. 7 (2), 152-157
8. Vasudha Agnihotri, Arvind Janwal, Rajesh Joshi (2017). Determination of effective moisture diffusivity, energy consumption and active ingredient concentration variation in *Inula racemosa* rhizomes during drying. *Industrial Crops and Products*, 106, 40-47. DOI: 10.1016/j.indcrop.2016.09.068
9. Rajesh Joshi, Vasudha Agnihotri, Shyamal K. Nandi (2017). Modeling of thin layer drying kinetics of *Picrorhiza kurroa* under different drying conditions. *Nonlinear Studies* 24 (1), 79-88.
10. Adhikari Priyanka, Pandey Anita, Agnihotri Vasudha, Pande Veena. (2018). Selection of solvent and extraction method for determination of antimicrobial potential of *Taxus wallichiana* Zucc. *Research in Pharmacy* 2018, 8, 01-09. doi: 10.25081/rip.8.3487
11. Jyoti Bisht, N. S. K. Harsh, L. M. S. Palni, Vasudha Agnihotri & Anuj Kumar (2019) Bioaugmentation of endosulfan contaminated soil in artificial bed treatment using selected fungal species, *Bioremediation Journal*, 23:3, 196-214, DOI: 10.1080/10889868.2019.1640183
12. Jyoti Bisht, N. S. K. Harsh, L. M. S. Palni, Vasudha Agnihotri, Anuj Kumar (2019). Biodegradation of chlorinated organic pesticides endosulfan and chlorpyrifos in soil extract broth using fungi. *Remediation*, 29:63-77. <https://doi.org/10.1002/rem.21599>
13. Thathola Pooja, Chandola Dinesh, Agnihotri Vasudha, Rai Sumit (2019). Phytoremediation: A Potential tool for wastewater recycling. *Research Biotica* (Accepted)
14. Chauhan Devendra Kumar, Singh Shivendra Pratap, Agnihotri Vasudha and Kumar Kireet (2019). Water quality of springs in Deolikhnan recharge zone of Kosi watershed, Almora, Uttarakhand. *ENVIS Bulletin, Himalayan Ecology*. 27, 25-28.

15. Agnihotri Vasudha, Thathola Pooja (2019). Pharmaceutical and personal care products (PPCPs) in waste water and fresh water sources: distribution and related health concerns. ENVIS Bulletin, Himalayan Ecology. 27, 63-68.
16. Agnihotri, V., Anjum, S. & Rana, S. Nutraceutical potential of North-West Himalayan spices *Allium stracheyi* and *Angelica glauca* and their comparison with commonly used spices. Food Measure 14, 1708–1719 (2020). <https://doi.org/10.1007/s11694-020-00419-y>
17. Agnihotri Vasudha, Adhikari Priyanka, Pandey Neha, Sati Priyanka, Pandey Anita (2020). Thin layer drying behavior of *Ginkgo biloba* L. leaves with respect to Ginkgolide A and Bilobalide content and microbial load. Heliyon, 6, e03220. <https://doi.org/10.1016/j.heliyon.2020.e03220>.
18. Thathola, P., Agnihotri, V. & Pandey, A. (2021). Microbial Degradation of Caffeine Using Himalayan Psychrotolerant *Pseudomonas* sp. GBPI_Hb5 (MCC 3295). Curr Microbiol, 78(11):3924-3935. <https://doi.org/10.1007/s00284-021-02644-0>
19. Bisht, H., Kotlia, B.S., Kumar, K. et al. Hydrogeochemical analysis and identification of solute sources in the meltwater of Chaturangi glacier, Garhwal Himalaya, India. Appl Water Sci 12, 29 (2022). <https://doi.org/10.1007/s13201-021-01510-5>
20. Anjum, S., Rana, S., Dasila, K., Agnihotri, V., Pandey, A. and Pande, V. (2022), Comparative nutritional and antimicrobial analysis of Himalayan black and yellow soybean and their okara. J Sci Food Agric, 102: 5358-5367. <https://doi.org/10.1002/jsfa.11889>.
21. Thathola, P., Agnihotri, V. Pandey, A., Veena Pande (2022). Biodegradation of Bisphenol A using Psychrotolerant Bacterial Strain *Pseudomonas palleroniana* GBPI_ 508. Archives of Microbiology, 204(5):272. <https://doi.org/10.1007/s00203-022-02885-y>
22. Adhikari P, Agnihotri V, Suman SK, Pandey A. (2023). Deciphering the Antimicrobial Potential of *Taxus wallichiana* Zucc: Identification and Characterization Using Bioassay-Guided Fractionation. Chem Biodivers. 20(1): e202200572. doi: 10.1002/cbdv.202200572
23. Anjum Sofiya, Agnihotri Vasudha, Rana Smita, Pandey Anita, Pande Veena (2023). The Impact of Processing Methods and Conditions on Nutritional Properties of Soybean-Based Tofu: A Review. Journal of Food Engineering and Technology 2023;12(1):1-13.
24. Joshi, R., Khan, A.A., Pant, N.C., Agnihotri, V., Verma, K., Kumar, P. (2023). Geochemical characteristics and suspended sediments dynamics in the meltwater from the Gangotri Glacier, Garhwal Himalaya, India. Environ Earth Sci 82, 150. <https://doi.org/10.1007/s12665-023-10802-9>. 91F;3.1190
25. Rana, S, Agnihotri, V, Anjum, S, Bhandari, NS. (2023). Effect of dehulling, roasting, and cooking on the nutritional composition of Himalayan barnyard millet (*Echinochloa frumentacea*). JSFA Reports. 3 (5): 196– 206 <https://doi.org/10.1002/jsf2.111>
26. Agnihotri vasudha, Nautiyal Sunil (2023). Plastic degradation: Challenges and alternatives. International Journal of Ecology and Environmental Sciences, 49, 105-115.

PATENT

1. Garg Madhukar Onkarnath, Goswami Amar Nath, Nanoti Anshu, Gupta Pushpa, Dasgupta Soumen, Agnihotri Vasudha, Sharma Yogendra Kumar, Tumula Venkateshwar Rao, Dahl Ivar Martin, Karlsson Arne, Stocker Michael Wilhelm, Tangstad Elisabeth, Vistad Ornulv Bjornsson (2016). A vapor phase adsorption process for desulphurization of transportation fuel. Patent number: IN27423

BOOK CHAPTERS

1. Vasudha Agnihotri, Arvind Jantwal, Shyamal K. Nandi, Rajesh Joshi, and Kireet Kumar (2013). Studies on effect of Drying and extraction process on Picroside content of *Picrorrhiza kurroa*. Proceedings of International conference on Health, Environment and Industrial Biotechnology (BioSangam, 2013), McGraw Hill Education (India) Private Limited, pp: 51-55.
2. Vasudha Agnihotri, 2014. Drying: An important post-harvest processing step for medicinal plants. In *Agro-forestry and climate change*. © Discovery Publishing House Pvt. Ltd.
3. Pandey Anita and Agnihotri Vasudha, 2015. Antimicrobials from Medicinal Plants: Research initiatives, Challenges and the Future prospects. In *Biotechnology of Bioactive compounds: sources and Applications*. ©John Willey and Sons.
4. Joshi Rajesh, Agnihotri Vasudha, 2016. Multivariate techniques for analysis of water quality parameters: an overview. Narosa Publication. 164-180. ISBN: 9788184875201
5. Vasudha Agnihotri (2017). Advancement in bioremediation of Pharmaceutical and Personal Care Products. In: *Handbook of Research on inventive bioremediation techniques*.@ IGI Global, USA.
6. Agnihotri Vasudha, Rana Smita (2021). Horse Gram an Underutilized Legume: A Potential Source of Nutraceuticals. In P. Guleria et al., *Sustainable Agricultural reviews Volume 51, 29-51*. [10.1007/978-3-030-68828-8_2](https://doi.org/10.1007/978-3-030-68828-8_2)
7. Chandola Dinesh, & Agnihotri Vasudha. (2022). Recent perspectives of immobilized enzyme reactors used for wastewater treatment. In *Bioremediation of Environmental pollutants* (pp. 275–293). ISBN; 978-3-030-86168-1
8. Thathola Pooja, & Agnihotri Vasudha. (2022). Biochemical parameters and their optimization strategies for microbial bio remediation of wastewater. In *Bioremediation of Environmental Parameters* (pp. 369–386). ISBN; 978-3-030-86168-1
9. Agnihotri Vasudha (2023). *Taxus baccata* subsp. *wallichiana* (Zucc.) Pilg.. In. *Himalayan fruits and berries*. Elsevier. <https://doi.org/10.1016/B978-0-323-85591-4.00036-2>
10. Agnihotri Vasudha (2023). Water Management Practices and Greywater Treatment Technologies: The Source Towards Water Sustainability. In. *Water Management and Governance*. 36-58. ©USERC.

BOOKS2.

1. G.C.S.Negi, Vasudha Agnihotri, Subodh Airi, Anil Yadav, Mahesh Chandra Sati (Eds.). Him Prabha (Rajbhasha magazine) Published by GBPNIHESD
2. K. Kumar, A. Tiwari, S. Mukherjee, V. Agnihotri, RK Verma (2019). Technical report: water at a glance: Uttarakhand, GBPNIHESD, Almora, Uttarakhand, India. ISBN: 978-93-5382-956-8.
3. Vasudha Agnihotri, Sumit Rai, Ashutosh Tiwari, Sandipan Mukherjee, Kireet Kumar, Ranjan Joshi (2020). Monitoring and Assessment of Environmental Parameters. GBP-NIHE, 200.
4. Sharma, S., Gosavi, V.E., Kanwal, K.S., Agnihotri, V., Chandra Sekar, K. and Rawal, R.S. (2020). High Altitude Wetlands in the Indian Himalaya: Conservation and Management. G. B. Pant National Institute of Himalayan Environment. Kosi - Katarmal, Almora
5. Agnihotri Vasudha, Rana Smita, Anjum Sofiya, Bhatt I D, & Kumar Kireet. (2021). Nutritional Journey of traditional foods of Uttarakhand. GBPNIHE. www.gbpihed.gov.in. ISBN: 978-93-5593-754-4
6. Agnihotri Vasudha, Rana Smita, Sofiya Anjum, Bhatt I.D., Shailaja Punetha, Kumar Kireet (2021). Traditional crops and foods of Uttarakhand. GBPNIHE, Almora. ISBN: 978-93-5578-238-0
7. Agnihotri Vasudha, Rana Smita, Sofiya Anjum (2021). Food testing manual. GBPNIHE, Almora. ISBN: 978-93-5578-803-0
8. Suresh K. Rana, Sunil Nautiyal, Indra D. Bhatt, M.S. Lodhi, A.K. Sahni, K.S. Kanwal, Arun Jugran, **Vasudha Agnihotri**, Sarla Shashni, Sumit Rai, Shailaja Punetha, Kesar Chand, Mayank Joshi, Purushottam K. Garg, Lalit Giri, Mriganka S. Sarkar (2023). A Call to Action: The Role of Mann ki Baat for Mobilizing Communities to Address Plastic Waste in the Himalaya. © GBPNIHE.
9. Tripathi Manish, **Agnihotri Vasudha**, Shashni Sarla, Chand Kesar (2023). A handbook on parmelioid lichens of Kullu Valley. © GBPNIHE

PHD THESIS
SUPERVISION

1. Thesis entitled 'antimicrobial potential of Himalayan yea (*Taxus wallichiana* zucc.)', Was supervised in association with Dr. Anita Pandey and Dr. Veena Pande and Ph.D. Degree was awarded to dr. Priyanka Adhikari based on this work.
2. Thesis entitled 'Microbial degradation of bis-phenol A and estriol using psychrotrophic bacteria', was supervised in association with Dr. Anita Pandey and Dr. Santosh Kumar Upadhyay and Ph.D. Degree was awarded to Dr. Pooja Thathola based on this work.
3. Thesis entitled 'Tofu preparation using Himalayan black soybean: Nutritional, anti-nutritional and microbial assessment', was supervised in association with Dr. Anita Pandey and Dr. Veena Pande and Ph.D. Degree was awarded to Dr. Sofiya Anjum based on this work.

CONFERENCE

1. Vasudha Agnihotri, Anshu Nanoti, A.N.Goswami; "New Approaches for Desulfurisation of gasoline"; presented in National Workshop on Catalysis for Energy, BHU Varanasi, Feb 2006.
2. Elizabeth Tangstad, Ørnulv B. Vistad, Bente Vigerust, Arne Karlsson, Ivar M. Dahl and Michael Stöcker- SINTEF Materials and Chemistry, Oslo, Norway, Amar N.Goswami, Anshu Nanoti, Pushpa Gupta, Soumen Dasgupta, Vasudha Agnihotri, Y.K.Sharma, M.O.Garg, Indian Institute of Petroleum, Dehradun, India "Vapor phase adsorption process for removal of sulfur from naphtha stream: Combinatorial adsorbent screening and process development studies" Paper was presented in National Catalysis Symposium that was held on 16-18 April, 2007 at Indian Institute of Petroleum, Dehradun, India
3. Vasudha Agnihotri, Amar N. Goswami; "Adsorptive removal of thiophene in the liquid phase using rare earth exchanged zeolite" was presented in in 6th international ISFL Symposium on Fuels and Lubricants, New Delhi (10-12 March 2008)
4. Agnihotri Vasudha, "Studies on efficiency of pine needles for purification of potable water using adsorption process" was presented as poster in international seminar on Mountain Biodiversity & impacts of climate change with special reference to Himalayan biodiversity hotspot, organized by G.B.Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora, Uttarakhand India from 6-8 December, 2010.
5. Agnihotri Vasudha, "Drying of Medicinal Plants: A fundamental Post Harvest Preservation Step" poster presented in Mid-year meeting of Chemical Research Society of India organized by Central Drug Research Institute, Lucknow on dated 21-22 July, 2012.
6. Agnihotri Vasudha*, Jantwal Arvind, Nandi Shyamal K., Joshi Rajesh, and Kumar Kireet (2013). Studies on effect of Drying and extraction process on Picroside content of Picrorrhiza kurroa. Proceedings of International conference on Health, Environment and Industrial Biotechnology (BioSangam, 2013), McGraw Hill Education (India) Private Limited, pp: 51-55.
7. Vasudha Agnihotri, Arvind Jantwal, Shyamal K. Nandi, Rajesh Joshi (2014). Effect of Controlled drying conditions in Picroside content of Picrorrhiza kurroa. Presented in National Conference on Emerging areas in Chemical education & Research and National Convention of Chemistry Teachers organized by IIS inuversity, Jaipur (NCCT 2014) from October 16- 18, 2014.
8. Rajesh Joshi, Vasudha Agnihotri, Amir Khan, N.C.Pant, Kamlesh verma, Kireet Kumar (2014). Morphometric and Chemical Characteristics of Suspended Sediment from

- Gangotri Glacier, Garhwal Himalaya, India. Presented in ICCE 2014 Sediment Dynamics – From the Summit to the Sea Dec 11-14, 2014 New Orleans, USA.
- Agnihotri, Vasudha, Kumar, Kireet (2016). Adsorptive removal of methylene blue from aqueous solution using pine leaf litter based activated carbon. Presented in Sixth International conference on “Metals in Genetics, Chemical Biology and Therapeutics” February 17-20, 2016, IISc, Bangalore.
9. Agnihotri, Vasudha, Jantwal, Joshi Rajesh (2016). Determination of effective moisture diffusivity, energy consumption and active ingredient concentration variation in *Inula racemosa* rhizomes during drying. Presented in Eco-Bio 2016 Conference from 6-9 March 2016 in Postillion Convention Centre WTC Rotterdam, Netherlands.
 10. Pooja Thathola, Vasudha Agnihotri, Anita Pandey (2018), Bacterial degradation of caffeine using psychrotolerant bacteria, 59th Annual Conference of Association of Microbiologists of India (AMI- 2018) & International Symposium on Host Pathogen Interactions, 9-12 December 2018, Organized by School of life Science University of Hyderabad, 500046; page no. 91.
 11. Pooja Thathola, Vasudha Agnihotri, Anita Pandey, Santosh Kumar Upadhyay (2020), Bio-degradation of Bisphenol A by Bacterial Strain (GBPI_ 508) isolated from Indian Himalayan region, 2nd International conference on Bioprocess for Sustainable Environment and Energy (ICBSEE 2020), Organized by Department of Biotechnology and Medical Engineering NIT, Rourkela, 769008; 116.
 12. Thathola Pooja, Agnihotri Vasudha, Pandey Anita, Upadhyay S K (2021). Biodegradation of natural estrogen (Estriol) by psychrotolerant bacterium isolated from Indian Himalayan Region. Presented in BREEECH, 2021 during 1-4 December 2021.
 13. Tyagi Dolly, Agnihotri Vasudha, Rana Smita, Punetha Shailaja (2021). Presented in International conference on vegetable research and innovations for nutrition, entrepreneurship and environment organized during 14-16 December 2021 by Indian Society of Vegetable Science.
 14. Anjum Sofiya, Rana Smita, Agnihotri Vasudha (2021). Coagulating agent- induced changes in texture profile analysis of Himalayan black soybean-based tofu. Presented in e-National conference on texture & rheology of food materials during 20-21st January 2021.
 15. Anjum Sofiya, Agnihotri Vasudha, Rana Smita, Pandey Anita, Pande Veena (2022). Comparative nutritional profile of Himalayan black soybean (*Glycine max*) and its by-product okara. Presented in WCECFAJ 2022 during June 04-05, 2022.
 16. Smita Rana, Vasudha Agnihotri, Sofiya Anjum, Bhandari N.S. (2022). Horse gram (*Macrotyloma uniflorum*) based traditional cuisines of Uttarakhand: A nutritional evaluation. Presented in WCECFAJ 2022 during June 04-05, 2022.

17. राणा स्मिता, अग्निहोत्री वसुधा, अंजुम सोफिया, भंडारी एन.एस. (2022)। भारत के उत्तर-पश्चिम हिमालयी जिले अल्मोड़ा, उत्तराखंड में रहने वाले अप्राधिकृत समुदाय (अनुसूचित जाती) के बीच जनसांख्यिकी और पारम्परिक फसल, आधारित खाद्य आवृत्ति सर्वेक्षण। 28-29 जुलाई 2022 के दौरान भारतीय हिमालयी पर्यावरण को प्रभावित करने वाले कारक एवं प्रबंधन।
18. Thathola Pooja, Agnihotri Vasudha, Pandey Anita (2023). Degradation of Bisphenol A and Estriol using Bacterial Consortium isolated from the Indian Himalayan region. Presented in MBCC 2023, organized by Graphic Era Deemed to be University in association with ICIMOD, Nepal during 22-24, 2023.
19. Agnihotri Vasudha (2023). Emerging contaminants in water resources of India: distribution and remediation. Presented in fifth international conference on Water: From Pollution to Purification (ICW2023) during Feb.9-12, 2023, organized by School of Environmental Sciences, Mahatma Gandhi University, Kottayam, Kerala, India.
20. Agnihotri Vasudha (2023). Himalayan Springs: water quality and recharge. Presented in National workshop on "Impact of Climate Change on water resources of Upper Indus River Basin- An UIBN initiative" during 1st and 2nd May 2023, organized by Department of Earth Sciences, University of Kashmir.
21. Agnihotri Vasudha (2023). Himalayan Springs: water quality and recharge. Presented in National workshop on "Impact of Climate Change on water resources of Upper Indus River Basin- An UIBN initiative" during 1st and 2nd May 2023, organized by Department of Earth Sciences, University of Kashmir.
22. Agnihotri Vasudha (2024). Prospects and challenges of traditional farming systems with an emphasis on agro-ecosystem services and sustainable development. Presented in the national workshop on Ecosystem services in agricultural landscape of Himalayan region of India organized during 11-12 January, 2024 by ICAR-ATARI, Guwahati, Assam in collaboration with ICAR, NEH region, Meghalaya and Department of Horticulture, Arunachal Pradesh in St. claret Collaged, Ziro, Arunachal Pradesh.

M.SC.
DISSERTATION

1. **M.Sc. thesis** entitled '*Solvent system standardization in the separation of selected terpenes by thin layer chromatography*' was generated based on training work done by pharma student Mr.Rakesh pandey in 2009.
2. **M.Sc. dissertation report** (Summer training) was generated entitled *Ecological Studies on Wasteland Rehabilitation in Kumaun Himalayas* (Supervisor along with Dr.G.C.S.Negi) of Sandeep, M.Sc. Environmental Science, Kurukshetra University, Haryana. 2012
3. **M.Sc. Thesis** entitled "*Soil Physico- chemical, biological and phytochemical investigations in two forest types of Kumaun Himalayas*" (Supervisor along with Dr.G.C.S.Negi) of Ms. Radhika Bansal, M.Sc. Biotechnology, Mody Institute of Technology and Sciences, Lakshmangarh, Rajasthan in 2013.

4. **M.Sc. Thesis** entitled “*Microbial and Chemical analysis of Saussurea lappa during Drying Process*” (Supervisor along with Dr.Anita Pandey) of Ms. Priyanka Basera, M.Sc. Microbiology, Kumaun University, Nainital, Uttarakhand, 2014.
5. **M.Sc. Thesis** entitled “*Thin layer drying behavior of Ginkgo biloba leaves with respect to Ginkgolide A, bilobalide content and microbial load*” (Supervisor along with Dr.Anita Pandey) of Ms Priyanka Adhikari, M.Sc. Microbiology, Kumaun University, Nainital, Uttarakhand, 2015.
6. **M.Sc. thesis** entitled “Isolation of bergenin from *bergenia ligulata* and assessment of its antimicrobial activity” of Ms Jyoti Rani, M.Sc. Biotechnology, Department of Biotechnology and Microbiology, M.I.E.T, Meerut 250002, 2016
7. **M.Sc. thesis** entitled “Picroside I and II of Picrorrhiza kurrooa: isolation, separation, quantitative estimation and their antioxidant activity” of Ms Shilpi Vats, M.Sc. Biotechnology, Department of Biotechnology and Microbiology, M.I.E.T, Meerut 250002, 2016.
8. **M.Sc. thesis** entitled “Bacterial degradation of bis-Phenol A” of Ms Ayushi Sharma, M.Sc. Microbiology, Department of Microbiology, Kanya Gurukul Campus, Haridwar, Uttarakhand, 2017
9. **M.Sc. thesis** entitled “Bacterial degradation of ibuprofen drug” of Ms Rakhi Dhyani, M.Sc. Microbiology, Department of Microbiology, Kanya Gurukul Campus, Haridwar, Uttarakhand, 2017
10. **M.Sc. thesis** entitled “Bacterial degradation of Caffeine” of Ms Prachi Tyagi, M.Sc. Microbiology, Department of Microbiology, Kanya Gurukul Campus, Haridwar, Uttarakhand, 2017
11. **M.Sc. thesis** entitled “Study of bacterial degradation of Estriol” of Ms Anita Singh, M.Sc. Microbiology, Department of Microbiology, Alpine Institute of Management and Technology, Dehradun, Uttarakhand, 2017.
12. **M.Sc. thesis** entitled “Media Optimization for the growth of Psychotolerant Bacteria” of Ms Ramandeep Kaur, M.Sc. Microbiology, Department of Microbiology, Kunti Naman Institute of Pharma Technology Science, Haridwar, Uttarakhand, 2018.
13. **M.Sc. thesis** entitled “Impregnation of Himalayan bacteria (CBD – 02) on biomass based activated carbon” of Ms. Kanchan Shahi, M.Sc. Environment Science, Doon University, Dehradun (2019)
14. **M.Sc. thesis** entitled “Water quality assessment techniques” of Ms. Sakshee Verma, M.Sc. Microbiology, Shoolini University, Solan, HP (2019)
15. **M.Sc. thesis** entitled “Analytical methods and Instrumentations for the analysis of Food” of Mr. Akshit Tiwari, M.Sc. Microbiology, H.N.B. Garhwal University, Srinagar (Garhwal), Uttarakhand (2019).

16. Vritika internship dissertation entitled 'Monitoring of quality of natural water bodies and dominant geological features in Nana Kosi watershed' was supervised by Vasudha agnihotri and work carried out by Ms. Tsetan Dolker, M.Sc. Environmental Sciences from Indraprastha University, New Delhi during 16th March to 16 May 2022.
17. Vritika internship dissertation entitled 'Working with high-end instruments required for environmental studies' was supervised by Vasudha agnihotri and work carried out by Ms. Archana Kandpal, Ph.D. scholar from Botany department, SSJ University, Almora during 1 September- 31 Oct 2022.
18. Vritika internship dissertation entitled 'Working with high-end instruments required for environmental studies' was supervised by Vasudha agnihotri and work carried out by Ms. Mukta Martoliya, Ph.D. scholar from Botany department, SSJ University, Almora during 10 September- 31 Oct 2022.
19. Vritika internship dissertation entitled 'Assessment of hydro geochemistry of water bodies in upper Beas River basin in Kullu-Manali' was supervised by Vasudha agnihotri and work carried out by Ms. Dolly Kumari, student of M.Sc. Biotechnology from Parul University of applied science, Vadodara, during 11/09/2023 to10/11/2023
20. Vritika internship dissertation entitled 'Assessing the Influence of Ecological Restoration through Streamside Plantation on Soil Quality in Wasteland Ecosystems' was supervised by Vasudha agnihotri and work carried out by Mr. Hansveer, Ph.D. Scholar (MAPs) from College of Horticulture, VCSG, Uttarakhand University of Horticulture and Forestry, during 11/09/2023 to10/11/2023

EXTERNALLY
FUNDED
RESEARCH
PROJECTS
HANDLED

2. Development of Optimum Drying Conditions for Selected Medicinal Plants of Indian Himalayan Region (IHR) (**As Project Investigator**) funded by NMPB, Ministry of AYUSH
3. Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools" funded by (**as Co-PI**) funded by DBT
4. Geodynamic and hydro chemical studies of Gangotri glacier system of Garhwal Himalayas (**as Co-PI**) funded by DST
5. Removal of Pharmaceutical and personal care products (PPCPs) from contaminated water using pine needle based Activated Carbon/ Biological Activated Carbon (**As Project Investigator**) funded by DST-WTI
6. Nutritional status of traditional foods of Uttarakhand utilized by Schedule community (**As Project Investigator**) funded by DST-NRDMS
7. Pine Needle based wastewater treatment system for recycling of domestic wastewater effluents (**As Project Investigator**) funded by NMHS-SG

8. Rejuvenation of Kosi River of Kumaun Himalaya through field intervention and people's participation (**As Project Investigator from the institute**) funded by NMHS-SGP
9. Permafrost mapping and characterization of western Himalayan Region (**As Co-PI**) funded by NMHS-MG

ACADEMIC
FELLOWSHIP

CSIR- NET-JRF (DEC-2002)

GATE (2003)-99.11 percentile (24th rank in India)

MEMBERSHIP
SOCIETY

OF Life Member of Chemical Research Society of India

Life member of Indian Science Congress

AMERICAN CHEMICAL SOCIETY (2016)

National Association of Chemical Security

TOTAL CITATION: 388

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