

DR. PRIYANKA TIWARI

W/o Dr. Yogesh Chandra Bhatt
C – 10, Niliyam colony, Mukhani,
Manpur West, Haldwani, Uttarakhand, Pin - 263139
(near Mahrishi Vidya Mandir School)

Educational Qualification:

- Ph.D. (Chemistry), Kumaun University, 2017.
Title: *Adsorptive removal of Cu(II), Zn(II) and Pb(II) from synthetic waste water by using of leafs of Artemisia vulgaris, urtica dioica and dicleptra bupleorides as bioadsorbents.*
- M.Sc. (Chemistry), L.S.M. Govt. P. G. College, Pithoragarh, Nainital, Kumaun University, 2008, 65.2%.
- B.Sc. (Chemistry, Botany, Zoology), L.S.M. Govt. P. G. College, Pithoragarh, Nainital, Kumaun University, 2006, 61.4%.
- Intermediate (Science), G.G.I.C. Pithoragarh, (Uttarakhand Board), 2003, 54.2%.
- Matriculation from G.G.I.C. Pithoragarh, (Uttarakhand Board), 2001, 52.2%.

Fellowships:

CSIR-UGC NET exam (Chemistry) for Lectureship passed in December 2009, December 2012 **All India Rank -37.**

Work Experience:

- **Assistant Professor in Chemistry: 2017 onwards:** (2 January 2017 to till date) at Department of Chemistry, M. B. G. P. G. college (Kumaon University), Haldwani, Uttarakhand.
- **Contract lecturer in Chemistry: 2016-2017:** (29 December 2016 to 1st January 2017) at Department of Chemistry, M. B. G. P. G. college (Kumaon University), Haldwani, Uttarakhand.
- **Contract lecturer in Chemistry: 2010-2016:** (28th Sept 2010 to 28 December 2016) at Department of Chemistry, L.S.M. Govt. P. G. College (Kumaon University), Pithoragarh, Uttarakhand.

Projects / Research Studies – Proposed/Ongoing

1. Communicated a research project to **SERB – SURE as a Co-Principal investigator on a topic “Remediation of organic and inorganic contamination from industrial wastewater using magnetically activated Himalayan pine needle biochar and natural limestones: Isotherm and Kinetic Studies” Reference No.: 132023006339** [SERB Qualified Unique Identification Document: SQUID-1990-MV-1224]
2. Communicated a research project to **Chief Minister Higher Education Research Encouragement Scheme 2023-24, Department of Higher Education, Govt. of Uttarakhand) as a Co-Principal Investigator on a topic “Green Synthesis of Ag, TiO₂ and ZnO Nanoparticles and their Nanocomposite Using Sea Buckthorn and Hedychium spicatum Extracts: Assessing Antimicrobial and Photocatalytic Properties”**

Publications

Journal Articles

1. Yogesh Bhatt, Priyanka Tiwari, Nandi Negi, Jharna Banerjee, ***“Educational, Work and Agricultural Status of Women in Uttarakhand”***, *Bhartiya Siksha Sodh Patrika*, Vol 42, No.1(ii), pp. 24-29, 2023.
2. Priyanka Tiwari, Hemant Kumar Joshi, Harish Sharma and N. S. Bhandari ***“Adsorption of lead (II) ions on to Urtica dioica leaves (UDL) as a low-cost adsorbent: Equilibrium and Thermodynamic study “Proceeding of the 1st National Conference on Recent Advances in Sciences & Technology (NCRAS-2015), 1, 112-124, August 22-23, 2015.***
3. Priyanka Tiwari, Mahesh Chandra Vishwakarma, S. K. Joshi, Rajesh Kumar and N. S. Bhandari ***“Equilibrium and thermodynamic studies of Pb II, Cu II, and Zn II adsorption onto Artemisia Vulgaris (Paati) leaves J. Indian Chem. Soc., Vol 94, pp 59-66, 2017.***
4. Priyanka Tiwari, Mahesh C Vishwakarma, S K Joshi, Rajesh Kumar and N S Bhandari ***“Equilibrium and Thermodynamic Studies of Pb (II), Cu (II) and Zn (II) Adsorption onto Dicliptera bupleuroides Leaves”***, *Chemical Science Transactions*, Vol 6, pp 97-106, 2017.
5. Priyanka Tiwari, Mahesh Chandra Vishwakarma, Sushil Kumar Joshi, Harish Sharma, Narendra Singh Bhandari ***“Adsorption of Pb (II), Cu (II), and Zn (II) Ions onto Urtica dioica Leaves (UDL) as a Low-Cost Adsorbent: Equilibrium and Thermodynamic Studies”***, *Modern Chemistry*, Vol 5, pp 5-18, 2017.
6. M. C. Vishwakarma, Priyanka Tiwari, S. K. Joshi, Harish Sharma and N. S. Bhandari ***Adsorption of Cu (II) Ion onto Activated Eupatorium Adinoforum and Acer Oblongum: Thermodynamic, Kinetic and Equilibrium Studies, Chemical Science Transactions ISSN:2278-3458 2018, 7(2), 2018.***

Chapters in Edited Book

1. Yogesh Bhatt, Priyanka Tiwari, Ameeta Tiwari and Bhuwan Joshi (2023), ***“Land Use, Cropping Patterns and Crop Diversification in Hill and Plain Regions of Uttarakhand: Prospects and Implications”***, Book chapter in *Resource, environment and development perspectives on issues, impacts and strategies” H. S. R. A Publications*, pp. 62-74.
2. Himanshu Pandey, Sushma Kholia, R. C. Padalia, Priyanka Tiwari and Ameeta Tiwari ***“Essential oil screening and bioactive potential of some selected trees from temperate zone of kumaun Himalaya Uttarakhand”***. Book chapter in *Essential Oil: Sources, production and Applications” De Gruyter*, pp. 269-284.

Publications under progress

1. Thermodynamic, kinetic, and equilibrium studies of Cu(II), Cd(II), Ni(II), and Pb(II) ion biosorption onto treated Ageratum conyzoides biomass, *International Journal of Biological Macromolecules*, November 24, 2023

Presentations and participation

1. Presentation in international conference on ***“Gender Roles and Green Concepts: Pathways towards Environmental Sustainability” presented a paper entitled “importance of invasive species of plants in conservation of biodiversity”*** organized by department of English M.B.G.P.G.College Haldwani. On 8-9 January 2024.

2. Participation in international conference on “**MEDICINAL PLANTS, HEALTH AND QUALITY-LIFE**” organized by college of pharmacy, Graphic Era Hill University, Bhimtal Campus on 25-26 November 2022.
3. Presentation in National Conference on “**Leveraging New Technology for Reimaging Education**” presented a paper entitled “**Modern Technology in Higher Education**” organized by MIET Kumaon Haldwani Nainital in association with (U-SERC) on 22 November 2019.
4. Presentation in National Seminar on “**Progression and Innovation in Higher Education**” Presented a paper entitled “**Innovation In Higher Education: implication for the future**” organized by M.B.G.P.G.College Haldwani on 16 November 2019.
5. Participation in regional seminar on “**Introduction to intellectual property rights**” held at L.S.M. G.P.G. College Pithoragarh, 9 march 2016.
6. Presentation in National conference on “**innovation in Ethnopharmacology, recent developments in biological and chemical sciences for societal benefits**”, held at L. S.M. G. P. College Pithoragarh, March 1-3 2013.
7. Participation in the “**science education programme**” organised by L. S. M. G.P.G. College Pithoragarh and catalyzed by UCOST Dehradun and NASI on the occasion of national science day on 28 February 2011.
8. Participation in National seminar attended on “**Protection and enforcement of intellectual property rights (IPR) in a knowledge, economy: opportunities and challenges**” sponsored by University Grand commission New Delhi (U.G.C.) organised by department of commerce, L.S.M. G.P.G. college Pithoragarh, 6-7 March 2011.

Refresher and Orientation Courses

1. Participation in **orientation Programme by UGC-HRDC Kumaun university, Nainital from 1 March 2019 to 30 March 2019.**
2. Participation in **Refresher Course by UGC-HRDC Kumaun university, Nainital from 28 September 2020 to 12 October 2020.**
3. Participation in **Refresher Course by UGC-HRDC Aligarh Muslim University from 27 September 2022 to 11 October 2022.**

Workshops: Organized and participation

1. Regional one day workshop organized by Dr. Priyanka Tiwari on “**Digital Technologies In Chemistry Laboratories**” on **23 February 2019** with Dr. C. K. Seth and give the concept of **Eprayoglekha** for easy understand for practical digitally.
2. Participation in 7 days workshop on “**Developing Synergy Between Information Communications Technology and Academics**” organized by Department Of Higher Education on 25-31 MARCH 2017 at M.B.G.P.G.College Haldwani, Nainital.

Software awareness

Basic knowledge of **MS Office, E views, Mendeley** etc.

Academic Activities

- Appointed as *Institute Nodal coordinator (INC)* by principal of M.B.G.P.G. College, Haldwani for *virtual Leb project*.
- Participation for *career counselling cell* in M.B.G.P.G. College, Haldwani
- Supervised more than 10 Post graduate students for *dissertation work in M.Sc., Kumaon university and Uttarakhand Open University*.

Basic Information:

- Date of Birth: 12.07.1986
- Gender: Female
- Marital status: Married
- Nationality: Indian
- Religion: Hindu
- Languages known: Hindi, English

References:

Name	Designation and address	Mail id
Dr. Manish Joshi	Scientist, Bhabha Atomic Research Centre, Mumbai	manishjoshi284@gmail.com
Dr. Ameeta Tiwari	Assistant Prof. M.B.G.P.G.College Haldwani Nainital	tiwari.ameeta@gmail.com
Dr. Yogesh Bhatt	Assistant. Prof., AERC Delhi, Delhi University	ybhatt@aerc.du.ac.in

Date: 19/01/2024

Place: Haldwani

Priyanka Tiwari

Research work benefits to the society

The intended research findings will have wide-ranging benefits to the society since the research will demonstrate that locally grown various hill plants have the ability to function as an efficient, affordable biochar for the removal of heavy metal ions from industrial wastewater as we use such plants for making bioadsorbent and clean water through adsorption process. The completed, ongoing and suggested study findings point to the possibility of using these adsorbents to removal of various heavy metal ions such as Cu, Zn, Pb, Hg, Cd, Cr, Ni, and As from industrial wastewater. As part of their attempts to collect more plant debris from the Kumaun hills to evaluate as adsorbent for the removal of heavy metal ions in wastewater treatment facilities, scientist community will also benefit from this research.

We can gain a better understanding of the relevance and applications of these plants, as well as prospective areas for value addition and economic growth, by keeping track of the plant species, heavy metals, and the influence on heavy metal removal employed in the planned study effort. The positive results of the study can also provide a basis for long-term economic planning in areas that now cultivate or want to grow plants with industrial bioadsorbent potential. The recording of previous experiments in the form of technical reports, publications, methods used, a database of results, and test records will be useful to future researchers. Exploring such plants as bioadsorbent will also help to improve the productivity in pasture through the elimination of dense thickets which reduce growth of crops as well as make harvesting more difficult.

In specific, the ongoing and planned research work can benefit the society on following points:

- Treatment of the waste water to be reused
- Use of easily available wild and locally available plants in hill area for social benefits
- Securing farmers, locals and society from the adverse effects of the wild plants which are harmful to health, crop fields and of no use in general.
- Awareness among the people on the water contamination caused by heavy metals
- Potential use of bioadsorbent as an alternative source of water treatment processes at a low cost
- Saving the planet from the use of harmful chemicals used for water treatment
- Source of income for the local people from raw material preparation if encourage at economic level
- Can enrich the idea of use of bio-filters in future
