Curriculum Vitae

Full Name:	**Dr. SHIKHA DUBEY**
Designation:	Assistant Professor
Department:	Department of Chemistry
Campus:	Hemvati Nandan Bahuguna Garhwal University Srinagar (Garhwal), 246174, Uttarakhand, India
Mobile:	9450296019
Email	dubey.shikha.bhu@gmail.com dubeyshikha@hnbgu.ac.in
Web	*https://www.researchgate.net/profile/Shikha_Dubey6* https://scholar.google.co.in/citations?user=ysIlHEAAAAAJ&hl=en
ORCID iD	https://orcid.org/0000-0003-4442-1379

Educational Qualification:	❑ **B.Sc.(Chemistry)** Banaras Hindu University, Varanasi, India. (2007) ❑ **M.Sc.(Analytical Chemistry)** Banaras Hindu University, Varanasi, India. (2009) ❑ **Ph.D.(Chemistry)** Indian Institute of Technology(BHU) Varanasi, India. (2017)
Teaching Experience:	❑ Teaching assistant for undergraduate students. ❑ Teaching of technical aspects towards laboratory experimentation. ❑ Laboratory supervisor for undergraduate and graduate students.

Academic/Admimntsrative Responsibilities

- ❑ Assistant Proctor (University Proctorial Board)
- ❑ ARIIA Coordinator (Institutes' Innovation Cell)
- ❑ Member Departmental Purchase Committee

Research Interest and Fields of Specialization

- ❑ Functional Nanomaterials for Water Treatment and Corrosion Prevention
- ❑ Functional Biomass for Environmental Remediation and Separation
- ❑ Green Synthesis for Environmental Applications
- ❑ Material Synthesis and Characterization
- ❑ Analytical Chemistry and Statistical Analysis

Honours & Awards

1. Senior Research Fellowship (SRF) by Defence Research and Development Organization (DRDO), Ministry of Defence, Govt. of India, New Delhi, India (January, 2015-December, 2015).
2. Junior Research Fellowship by Defence Research and Development Organization (DRDO), Ministry of Defence, Govt. of India, New Delhi, India (January, 2013-December, 2014).
3. Qualified CSIR-NET Exam with 22nd Rank in December, 2011.

Membership of Scientific Organizations

1. Material Research Society of India (MRSI)
2. The Biotech Research Society of India (BRSI)

Reviewer

1. Journal of Molecular Liquids
2. Results in Physics
3. Chemistry Select
4. Biomass Conversion and Biorefinery
5. Springer Nature

Conference/Symposium/Workshop Organized

1. Hands-on Training Workshop on **"*Analytical Instrumentation Techniques for Applied Research*"** from May 17-23, 2024 **(Convenor)**
2. Hands-on Training Workshop on **"*Advanced Material Characterization by Sophisticated Research Instruments*, DST-STUTI"** from 12-18 May 2023 **(Co-convenor)**

Conference/Symposium/Courses Attended

International

1. International Conference on Recent Advances in Analytical Science (RAAS), March 27-29, 2014, Department of Chemistry, IIT (BHU), Varanasi, India, (Poster Presentation).

2. International Conference on Multifunctional Materials for Future Applications (ICMFA), 27-29 October 2015, Department of Chemistry, IIT (BHU), Varanasi, India, (Poster Presentation).

3. 4th International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2015), December 8-11, 2015, Department of Chemistry, IIT Guwahati, India, (Poster Presentation).

4. International Conference on Nanoscience and Technology (ICONSAT 2016), February 29-March 2, 2016, IISER Pune, India, (Poster Presentation).

5. International Conference on Recent Advances in Analytical Science (RAAS), April 7- 9, 2016, Department of Chemistry, IIT (BHU), Varanasi, India, (Poster Presentation).

6. International Conference on Advances in Biological System and Materials Science in NanoWorld (ABSMSNW), February, 19-23, 2017, Department of Physics, IIT (BHU), Varanasi, India, (Poster Presentation).

National

1. Nurturing Future Leadership Programme (NFLP) organized by IIT Roorkee from 22-26 March 2025.

2. Guru Dakshta (Faculty Induction) Program under MM-TTP of UGC organized by MMTC (HNBGU) from Aug 21- Sep.19 2024.

3. NEP 2020 Orientation & Sensitization Programme under MM-TTP of UGC organized by MMTC (HNBGU) from 01-15 December 2023.

4. Chaired the session at "5th- National Conference on Recent Advancement in Physical Sciences, NCRAPS-2023" organised by Department of Chemistry, Physics, Mathematics, NIT Uttarakhand, Srinagar (Garhwal). 19-20 December 2023.

5. National Symposium on Nanomaterials & Sustainable Synthetic Strategies, March 21-22, 2015, Department of Chemistry, BHU, Varanasi, India, (Poster Presentation)

6. 18th CRSI-RSC National Symposium in Chemistry, February 5-7, 2016, Punjab University, Chandigarh, India, (Poster Presentation).

7. 20th CRSI-RSC National Symposium in Chemistry, February 3-5, 2017, Guwahati University, Assam, India, (Poster Presentation).

Workshop Attended

1. Summer School on Development and Characterization of Advanced Materials -2013, Physics, Department, B.H.U., Varanasi.
2. Training Programme on 'Latex and other open source Software-2013, DST-Centre for Interdisciplinary Mathematical Sciences, B.H.U., Varanasi.
3. Hands on Training Program on MATLAB-2014, DST-Centre for Interdisciplinary Mathematical Sciences, B.H.U., Varanasi.
4. Workshop on Understanding Statistics by MS-Excel and SPSS-2015, DST-Centre for Interdisciplinary Mathematical Sciences, B.H.U., Varanasi.
5. Workshop on Challenges & Opportunities towards Sustainable Energy & Environmental Technology in India-2022, NIT Uttarakhand, Srinagar (Garhwal).
6. 3-Day Hands-on Training Program on Synthesis, Characterization, and Applications of Nanomaterials at SATHI-BHU, CDC Building, Banaras Hindu University, Varanasi from 15th- 17th June, 2023.

Total Research Publications: 19

Journals

[1] Heteroatomic multiple bonded corrosion inhibitors: Coordination chemistry, bonding and synergistic behavior of σ-donors and π-acceptors, Chandrabhan Verma, Promila, **Shikha Dubey**, Yujie Qiang, Bhaskaran, Eno E. Ebenso, Imad Barsoum, K.Y. Rhee, Akram Alfantazi, Coordination Chemistry Reviews, 2025 (**Impact Factor= 20.3).**

[2] Polypyridyl-based bridging corrosion inhibitors: A critical review on interface and ligands properties, Chandrabhan Verma, **Shikha Dubey**, Eno E. Ebenso, Kyong Yop Rhee, Akram Alfantazi, Advances in Colloid and Interface Science, 2025 **(Impact Factor= 16).**

[3] Microalgae derived honeycomb structured mesoporous diatom biosilica for adsorption of malachite green: Process optimization and modelling, **Shikha Dubey**, Rakesh K. Mishra, Savas Kaya, B.S. Giri, Y.C.Sharma, Chemosphere, 2024 **(Impact Factor= 8.1).**

[4] Principles and Theories of Green Chemistry in the Service of Corrosion Science and Engineering: Design and Application; Chandrabhan Verma, R. Aslam, P. Banerjee, D.S. Chauhan, J. Aslam, T.W. Quadri, S. Zehra, D.K. Verma, M.A. Quraishi, Shikha Dubey, Akram Alfantazi, T. Rasheed; Green Chem. 2024 **(Impact Factor= 9.3).**

[5] Zwitterions and Betaines as Highly Soluble Materials for Sustainable Corrosion Protection: Interfacial Chemistry and Bonding with Metal Surfaces; Chandrabhan Verma, Shikha Dubey, Ranjith Bose, Akram Alfantazi, Eno Ebenso, Kyong Yop Rhee; Advances in Colloidal and Interface Science, 324, 103091, 2024 **(Impact Factor= 16).**

[6] Heteroatoms-Doped Carbon Dots: Fundamental, Properties, Coordination Bonding and Corrosion Protection; Chandrabhan Verma, Shikha Dubey, Akram Alfantazi, Kyong Yop Rhee, Journal of Industrial and Engineering Chemistry, xx, 2023. **(Impact Factor= 5.9)**

[7] Mannich Bases: Chemical Structure, Chemistry, Coordination Bonding and Application in Aqueous Phase Corrosion Protection; Richika Ganjoo, Chandrabhan Verma, Abhinay Thakur, Alram Alfantazi, Humira Assad, Shveta Sharma, Shikha Dubey, Ashish Kumar; Journal of Industrial and Engineering Chemistry, xx, 2023 **(Impact Factor= 5.9).**

[8] Hexagonal Boron Nitride as a Cutting-Edge 2D Material for Additive Application in Anticorrosive Coatings: Recent Progress, Challenges and Opportunities; Chandrabhan Verma, Shikha Dubey, Imad Barsoum, Akram Alfantazi, Eno Ebenso, M.A. Quraishi; Materials Today Communications, 35:106367, 2023 **(Impact Factor= 3.7)**.

[9] Zingiber officinale powder as a biosorbent for adsorption of acid violet 90 from aqueous solutions; A. Hashem, Shikha Dubey, Yogesh C. Sharma, S.Farag, Amal Aly; Biomass Conversion and Biorefinery, xx, 2023 **(Impact Factor= 3.5).**

[10] Adsorption characteristics of alumina nanoparticles for the removal of hazardous dye, Orange G from aqueous solutions, Banerjee, Sushmita; **Shikha Dubey;** Gautam, R.K.; Chattopadhyay, M.C.; Sharma, Yogesh C., Arab. J. Chem., 12, 5339-5354, 2019. **(Impact Factor= 6.212).**

[11] Optimization of reclamation of Ni(II)- rich solutions by γ-alumina nanoparticles, **Shikha Dubey;** Sharma, Gopesh C.; Sharma Yogesh C., J. Hazard. Toxic Radioact. Waste, 23, xx, 2019. **(Impact Factor= 2.44).**

[12] Facile and green synthesis of highly dispersed cobalt oxide (Co3O4) nano powder: Characterization and screening of its eco-toxicity, **Shikha Dubey;** Kumar Jay; Kumar, A.; Sharma, Yogesh C., Adv. Powder Technology, 29(11), 2583-2590, 2018. **(Impact Factor= 4.2).**

[13] Application of common nanomaterials for removal of selected metallic species from water and wastewaters: A critical review **Shikha Dubey;** Banerjee, Sushmita; Upadhyay, S.N.; Sharma, Yogesh C., J. Mol. Liq., 240, 656-677, 2017. **(Impact Factor= 5.3).**

[14] Calotropis procera mediated one pot green synthesis of Cupric oxide nanoparticles (CuO-NPs) for adsorptive removal of Cr(VI) from aqueous solutions, **Shikha Dubey;** Sharma, Yogesh C., App. Organo. Chem*, 31, 3849-3863, 2017.* **(Impact Factor= 3.7).**

[15] Kinetic and isotherm parameter determination for the removal of chromium from aqueous solutions by nanoalumina, a nanoadsorbent, **Shikha Dubey;** Gusain, Deepak; Sharma, Yogesh C., J. Mol. Liq., 219, 1-8, 2016. **(Impact Factor= 5.3).**

[16] Optimization of removal of Cr by γ-alumina nano-adsorbent using response surface methodology **Shikha Dubey;** Upadhyay, S.N.; Sharma, Yogesh C., Ecol. Eng., 97, 272-283, 2016. **(Impact Factor= 3.9).**

[17] Studies on optimization of removal of orange G from aqueous solutions by a novel nano adsorbent, nano zirconia, Gusain, Deepak; **Shikha Dubey;** Upadhyay, S.N.; Weng, C.H.; Sharma, Yogesh C., J. Indus. Eng. Chem., 33, 42-50, 2015. **(Impact Factor= 5.9).**

[18] Adsorption *C*haracteristics of a Low Cost Activated Carbon for the Removal of Victoria Blue from Aqueous Solutions, Banerjee, Sushmita; Sharma, Gopesh C.; **Shikha Dubey;** Sharma, Yogesh C., J. Mater. Env. Sci., 6(8), 2045-2052, 2015. **(Impact Factor= 0.229).**

[19] Application of fly ash for adsorptive removal of malachite green from aqueous solutions, **Shikha Dubey;** Uma; Sujarittanonta, L.; Sharma, Yogesh C., Desalin. Water Treat., 53(1), 91-98, 2013. **(Impact Factor= 1.23).**

Book Chapters: 09

[1] The occurrence of various types of disinfectant by-products (trihalomethanes, haloacetic acids, haloacetonitrile) in drinking water, **Shikha Dubey**, Deepak Gusain, Yogesh Chandra Sharma, and Faizal Bux, Disinfection By-products in Drinking Water, Elsevier, 2020.

[2] Introduction, Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[3] Adsorbents: Classification, Characteristics, Chemical Nature, and Interaction with Contaminants, **Shikha Dubey**, Deepak Gusain, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[4] Impact of Factors on Remediation of Major Toxic Elements (Vanadium, Chromium, Nickel, Arsenic, Strontium, Cadmium, Mercury, Lead, Uranium)Via Batch Adsorption Process, , Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[5] Remediation of Essential Elements Exerting Toxicity on Excessive Exposure(Mn, Co, Cu, Zn, Se) Via Batch Adsorption in Response to Variable Factors and Elucidation of the Mechanism for the Batch Adsorption Process, Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[6] Impact of Factors on Remediation of Miscellaneous (Fe, Cs) and Nontoxic Elements (Sc, Ti,Ga, Ge) Via Batch Adsorption Process, Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[7] Impact of Factors on Remediation of Anions(Fluoride, Nitrate, Perchlorate, and Sulfate)Via Batch Adsorption Processes, Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[8] Impact of Initial Concentration, Adsorbent Dose, and Ionic Strength on Batch Adsorption of Metals and Anions and Elucidation of the Mechanism, Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

[9] Kinetic, Isotherm, and Thermodynamic Studies for Batch Adsorption of Metals and Anions, and Management of Adsorbents after the Adsorption Process, Deepak Gusain, **Shikha Dubey**, Faizal Bux, Yogesh Chandra Sharma, Batch Adsorption Process of Metals and Anions for Remediation of Contaminated water. CRC Press, Taylor & Francis, 2021.

Book:01

[1] Biomass Wastes for Sustainable Industrial Applications; Editors: Chandrabhan Verma & **Shikha Dubey**, CRC Press, Taylor & Francis, 2024. **ISBN:** 9781040149478, 1040149472