



Bio-data

Name	Dr Rachna Bhateria	
Date of Birth	04.09.1983	
Designation	Professor	
Nature of appointment	Regular	
Faculty	Life Sciences	
Department/Centre/Institute	Environmental Science	
Date of Joining in the University	07.07.2009	
Date of Retirement	30.09.2043	
Contact Details	Mobile No.	9254645473
	Email id	rachna.env@mdurohtak.ac.in

1. Educational Qualifications (10th and onwards)

S. No.	Degree/ Certificate	Board / University	Passing year
1	PGD in Environmental Law	National Law School of India University, Bangalore	2009
2	M.Tech	GJUS&T, Hisar	2008
3	M.Sc	GJUS&T, Hisar	2006
4	B.Sc	M.D.U., Rohtak	2004
5	12 th	CBSE	2001
6	10 th	CBSE	1999

2. Teaching/Research experience

S. No.	Post	Name of Institution	Period	
			From	To
1	Professor	M.D.U., Rohtak	2024 till now	
2	Associate Professor	M.D.U., Rohtak	2021-2024	
3	Assistant Professor	M.D.U., Rohtak	2009-2021	

3. Details of Research Achievements

h-index (Google/SCOPUS)	15
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Google Scholar link	https://scholar.google.com/citations?user=yfANHWgAAAAJ&hl=en
ORCID ID (if any)	0000-0001-5378-6172
LinkedIn ID (if any)	https://www.linkedin.com/in/rachna-bhateria-b9ab1079
Scopus ID	55948568400
Any other	-

S. No.	Year	Particulars / Details	Link to Article	Impact Factor (if any)
1	2026	Amita Khatri,M., Singh, Manju,M., Yadav, Meenu,R., Bhateria, Rachna (2026) An overview of the analysis, Distribution and treatment of Microplastics in industrial wastewater, Journal of water chemistry and technology, 48,259-270.	10.3103/S1063455X26030045	0.9
2	2026	A., Kumari, Anuradha,R., Mittal, Rishi,M., Yadav, Meenu,A., Khatri, Amita, R., Bhateria, Rachna (2026) Valorization of agriculture residues into novel mesoporous surface engineered (ZnO@RHBC) nanocomposites for sustainable sequestration of hexavalent chromium from electroplating wastewater, Nano Trends, 13:100181	10.1016/j.nwnano.2026.100181	6.135
3	2026	R., Mittal, Rishi,S., Patar, Shyamalee,Y., Singh, Yadvinder, Bhateria., Rachna, A.K., Bhardwaj, Abhishek Kumar,S., Bhukal, Santosh (2026) Novel synthesis of algae-derived mesoporous magnetic nanomaterial for sustainable removal of Pb and Cr(VI) from synthetic and industrial wastewater,10:101535.	10.1016/j.nxmte.2025.101535	4.7
4	2026	Khatri , A., Yadav, M., Kumari, A., Yadav, M., Bhateria R. (2026) Adsorptive Removal of Cd(II) Ions Using Zinc oxide and Iron doped zinc oxide nanoparticles, International Journal of Drug Delivery Technology, 16(56):703-708.	https://impactfactor.org/PDF/IJDDT/16/IJDDT,Vol16,Issue56s,Article74.pdf	-
5	2026	Yadav, M., Kumari, A., Mittal, R., Khatri, A., Bhateria R.(2026) Non-linear Dose-Response of Coconut Shell Biochar on Soil Quality and Plant Physiological Traits in <i>Capsicum annuum</i> L., International Journal of Drug Delivery Technology, 16(56):1127-1133	https://impactfactor.org/PDF/IJDDT/16/IJDDT,Vol16,Issue56s,Article122.pdf	-
6	2025	Yadav,M., Mittal,R., Kumari,A., Bhatia,A., Khatri,A., Bhateria,R. (2025) Soil carbon fractions and their role in climate-resilient agriculture: A review, Sustainable Chemistry for Climate Action,7,100127.	10.1016/j.scca.2025.100127	9.1

7	2025	Kumari, A., Yadav, M., Bhatia, A., Sharma, M., Bhateria , R. (2025) A review and bibliometric analysis on recent modification of biochar for effective and sustainable remediation of heavy metals in aqueous medium. <i>Discov Chem Eng</i> 5, 21	10.1007/s43938-025-00088-7	3.6
8	2025	Khatri A., Panghal V., Singh A., Sharma S., Bhateria R. , Kumar R., Arya S.S., Kumar S.(2025) Evaluating water quality of village ponds using water quality index and multivariate statistical techniques: A case study of Rohtak Block, Haryana, India, <i>Asian Journal of Chemistry</i> , 37(3): 653-660	https://asianpubs.org/index.php/ajchem/article/view/37_3_18	-
9	2025	Khatri A., Nisha, Pooja, Rani J., Bhateria R. Effect of Synthesized zinc oxide nanoparticles on the germination of Okra (<i>Abelmoschus esculentus</i>) and Mung Bean (<i>Vigna radiata</i>), <i>Rasayan Journal of Chemistry</i> , 18(1):479-484/ 2025	https://www.researchgate.net/publication/389346304_EFFECT_OF_SYNTHESIZED_ZINC_OXIDE_NANOPARTICLES_ON_THE_GERMINATION_OF_OKRA_Abelmoschus_esculentus_AND_MUNG_BEAN_Vigna_radiata	-
10	2025	Bhatia A., Khatri A., Yadav M., Kumari A., Mona S., Bhateria R. (2025) Potential of iron oxide nanoparticles in enhancing growth and development of plants: A review, <i>Physiological and Molecular Plant Pathology</i> , 139, 102746.	10.1016/j.pmpp.2025.102746	3.6
11	2025	Dhaka R., Kumar S., Kataria N., Kee P.E., Ayyamperumal R., Ethiraj B., Khoo K.S., Bhateria R. (2025) Biosorption of lead (II) ions by lead-tolerant fungal biomass isolated from electroplating industry effluent, <i>International Journal of Environmental Science and Technology</i> , 22 (5):2955 - 2966.	10.1007/s13762-024-05796-1	3.4
12	2025	Mittal R., Shyamalee P., Sharma, A., Bhateria, R. , Kumar, B.A., Kashyap, R., & Bhukal, S. (2025) Surface modified novel synthesis of <i>Spirulina</i> assisted mesoporous TiO ₂ @CTAB nanocomposite employed for efficient removal of chromium (VI) in wastewater, <i>Applied Surface Science</i> , 679, 161309	10.1016/j.apsusc.2024.161309	6.3
13	2025	Panghal, V., Singh, A., Hooda, V., Bhateria, R. & Kumar, S. (2025) Recent progress, challenges, and future prospects in constructed wetlands employing biochar as a substrate: A comprehensive review. <i>Environmental Science and Pollution Research</i> . 100472	10.1007/s11356-024-35846-7	-
14	2024	Singh R., Gupta, R., Bansal, D., Bhateria, R. , & Sharma, M. (2024) A Review on Recent Trends and Future Developments in Electrochemical Sensing, <i>ACS Omega</i> , 9, 7336-7356.	10.1021/acsomega.3c08060	5.1

15	2023	Bhatia, A., Sonika, Rajni and Bhateria, R. (2023) Effect of synthesized ironoxide nanoparticles on Mungbean and Okra seed germination, Annals of Agri-Bio Research, 28(2): 215-223. ISSN No. 0971- 9660	https://www.researchgate.net/publication/392135435_Effect_of_Synthesized_Iron_Oxide_Nanoparticles_on_Mungbean_and_Okra_Seed_Germination	0.33
16	2023	Kumar, S., Bhateria, R. & Sunder Arya (2023) Assessing the Environmental Impact of Heavy metal contamination in water, sediments and aquatic vegetation of River Yamuna in Delhi. Indian Journal of Science and Technology, 16(44): 4090-4097. Online ISSN: 0974-5645 Print ISSN: 0974-6846	10.17485/IJST/v16i44.2040	-
17	2023	Sharma, Y. & R. Bhateria (2023) Synthesis of <i>Datura Innoxia</i> -added iron nanoparticles adsorbent for malachite green dye removal, International Journal of Environmental Science and Technology (I.F. -3.1) ISSN (P) 1735-1472 ISSN (O) 1735-2630	https://doi.org/10.1007/s13762-023-05208-w	3.4
18	2023	Rao, A., Dhankhar, B., Deepika, Rinku, Gora, T. & Bhateria, R. (2023) Synthesis and Characterization of Zerovalent Iron Nanoparticles using different Routes, International Journal of Statistics and Reliability Engineering, 10(S-I): 288-293.	https://ijsreg.com/article/view/synthesis-and-characterization-of-zerovalent-iron-nanoparticles-using-different-routes	-
19	2023	Khatri, A. & Bhateria, R. (2023) Efficacy of Nanofertilizers over Chemical Fertilizers in Boosting Agronomic Production, Nature Environment and Pollution Technology, 22(2): 767-776.	https://neptjournal.com/upload-images/(19)B-3992.pdf	-
20	2023	Mittal, R., Sharma, A., Bhardwaj, A.K., Bhateria, R. , Bansal, S., Kashyap, R. & Bhukal, S. (2023) Removal of chromium (VI) using <i>Spirulina</i> assisted synthesized mesoporous iron oxide nanoparticles, Inorganic Chemistry Communications, 154: 110881.	10.1016/j.inoche.2023.110881	5.9
21	2023	Panghal, V., Bhateria, R. , Kumar, R., Arya, S.S. & Kumar, S.(2023) Assessment of Groundwater and Surface Soil using Multivariate Statistical Techniques and Contamination Indices: A Case Study of Gurugram Millennium City, Haryana, India, Journal of the Geological Society of India, 99(3): 430- 437.	10.1007/s12594-023-2327-8	1.5
22	2022	Sharma, Y., Kumar, S. & Bhateria, R. (2022) Analyzing the Efficiency of DI-FeNPs in Removal of Methyl Orange Dye using Statistical Approach, Indian Journal of Science and Technology, 15(21):1032-1040	10.17485/IJST/v15i21.468	-
23	2021	Sharma, Y. & Bhateria, R. (2021) Phytoremediation of Iron Nanoparticles for Methyl Orange removal and its optimization studies, Plant	https://drive.google.com/file/d/1b4Wl6hXLOIacP-LATwbMSpvFQI6ilX9k/view?	-

		Archives, 2021, 21(1),939-954 ISSN 0972-5210	usp=drive_link	
24	2021	Panghal, V., Sharma, P., Sharma, M. & Bhateria, R. (2021) Determining groundwater quality using indices and multivariate statistical techniques: a case study of Tosham block, Haryana, India. <i>Environmental Geochemistry and Health</i> , 44(10):5381-3595.	https://drive.google.com/file/d/1Iu-FDf6aAdFypRH5bqbfV3jO2wHqsuPO/view?usp=drive_link	4.3
25	2020	Singh , R. & Bhateria, R. (2020) Optimization and experimental design of the Pb ²⁺ adsorption process on a nano-Fe ₃ O ₄ -based adsorbent using the response surface methodology. <i>ACS Omega</i> . 5(43):28305-28318. ISSN(P) 2470-1343	https://drive.google.com/drive/u/0/folders/1QPskrbtZgmCYWqq8jm0DvChpSUjkqKy5	5.1
26	2020	Singh , R. & Bhateria, R. (2020) Experimental and Modeling Process Optimization of Lead Adsorption on Magnetite Nanoparticles via isothermal, kinetics and thermodynamics studies. <i>ACS Omega</i> . 5(19):10826-10837. ISSN(P) 2470-1343	https://drive.google.com/drive/u/0/folders/1QPskrbtZgmCYWqq8jm0DvChpSUjkqKy5	5.1
27	2020	Singh , R. & Bhateria, R. (2020) Core- shell nanostructures: a simplest two-component system with enhanced properties and multiple applications. <i>Environmental Geochemistry and Health</i> . 43(7): 2459- 2482	https://drive.google.com/file/d/1O8MG7jD7TPt6uttBfNX7eQu1JA6KjYr/view?usp=drive_link	4.3
28	2020	Panghal, V., & Bhateria, R. (2020) A multivariate statistical approach for monitoring of groundwater quality: a case study of Beri block, Haryana, India. <i>Environmental Geochemistry and Health</i> .43(7):2615-2629.	https://drive.google.com/file/d/1CCGQZWLAbf0_walEWrNi9KjBxjFo8nFf/view?usp=drive_link	4.3
29	2019	Bhateria, R. , Sharma, Y., Bhardwaj, A., Upadhyay, R., Malik, P., Verdodia, P., Saini, A. & Narwal, S. (2019). Synthesis of Silver Nanoparticles Biogenetically using easily accessible weeds. <i>Annals of Biology</i> . 35(2): 186-190	https://drive.google.com/drive/u/0/folders/1QPskrbtZgmCYWqq8jm0DvChpSUjkqKy5	-
30	2019	Bhateria, R. , & Dhaka, R. (2019) Optimization and Statistical Modelling of Cadmium biosorption Process in aqueous medium by <i>Aspergillus niger</i> using Response Surface Methodology and Principal Component Analysis. <i>Ecological Engineering</i> . 135:127-139.	https://drive.google.com/file/d/1Ewa7w-O3eeo0oH0RyJ4lhvjvAjiNEQHH/view?usp=drive_link	4.1
31	2019	Bhateria, R. , & Rimmi (2019) A review on Nanotechnological application of magnetic iron oxides for heavy metal removal. <i>Journal of Water Process Engineering</i> . 31: 100845 (I.F. – 3.173)	https://drive.google.com/file/d/1bwtwGte8XwDXWA9AwiSl9aOoAQu6s3EM/view?usp=drive_link	6.6
32	2018	Bhateria, R. , & Dhaka, R. (2018). Biosorption of Lead (Pb ²⁺) and Cadmium (Cd ²⁺) using <i>Aspergillus niger</i> : Isotherms, Kinetics and thermodynamics. <i>Annals of Biology</i> . 34(2): 260-265 (I.F. – 0.04)	https://drive.google.com/drive/u/0/folders/1QPskrbtZgmCYWqq8jm0DvChpSUjkqKy5	-
33	2017	Bhateria, R. , & Dhaka, R. (2017). Biological	https://drive.google.com/file/d/	-

		strategies for detoxification of Hexavalent Chromium. <i>International Journal of Pharma and Bio Sciences</i> . 8(1):35-48.	1F1qCopPxHQskskg6Zty4Vgd - arbdIuoP/view?usp=drive_link	
34	2017	Bhateria, R., & Dhaka, R. (2017). Impact of electroplating effluent on growth of <i>triticum aestivum</i> and <i>hordeum vulgare</i> . <i>Environmental technology & Innovation</i> . 8, 389-398.	https://drive.google.com/file/d/1_Klx73g-DLvaK9YQfUt_xuigA707wXG6/view?usp=drive_link	7.3
35	2016	Bhateria, R., & Snehlata. (2016). Effect of Chromium and Zinc Accumulation on Antioxidant enzymes during Phytoremediation in <i>Amaranthus viridis</i> and <i>Parthenium hysterophorus</i> . <i>Indian Journal of Science and Technology</i> . 9(S1):1-7.	10.17485/ijst/2016/v9iS1/99917	0.421
36	2016	Bhateria, R., & Snehlata (2016): <i>Phytoremediation of heavy metals- enhanced by EDTA: A Review. International Journal of Earth Sciences and Engineering</i> . 09(04):885-896. [ISSN: 0974-5904, SJR index-0.141, SNIP-0.197].	https://drive.google.com/file/d/1abdV2ZZPYw-cqAwN8W3PwupmUy_nHS_V/view?usp=drive_link	-
37	2015	Bhateria, R., & Jain, D. (2015): Water Quality Assessment of Lake Water: a Review. <i>Sustainable Water Resources Management</i> . 2(2):161-173 (Springer) [ISSN: 2363-5037 (print version) ISSN: 2363-5045 (electronic version)]	10.1007/s40899-015-0014-7	2.6
38	2015	Bhateria, R., & Snehlata (2015): <i>Parthenium hysterophorous</i> L : Harmful and Beneficial aspects – A Review. <i>Nature Environment and Pollution Technology</i> . 14(3):463-474. [ISSN: 0972-6268 (Print), ISSN:2395-3454 (online), SJR index-0.138, I.C. value- 5.96]. (NAAS Rating – 4.94)	https://www.researchgate.net/publication/310488949_Parthenium_hysterophorus_L_Harmful_and_Beneficial_Aspects_-_A_Review_Nature_Environment_and_Pollution_Technology_An_International_Quarterly_Scientific_Journal	-
39	2015	Bhateria, R., Snehlata and Renu (2015): Impact of Industrial Effluent on crops and soil properties: A Review. <i>Indian Journal of Environmental Protection</i> . 35(7):591-609.	https://www.researchgate.net/publication/298709433_Impact_of_industrial_effluent_on_crops_and_soil_properties_A_review	-
40	2015	Bhateria, R., & Amir Abdullah (2015): Analyzing uncertainties in lake water: A review. <i>International Journal of Environmental Sciences</i> . 5(6): 155-168. (ISSN No. 0976 – 4402).	https://www.semanticscholar.org/paper/Analyzing-uncertainties-in-lake-water%3A-A-review-Bhateria-Abdullah/15cba4274b0f2502df3c64538109f75cee40fd94	-
41	2015	Bhateria, R., & Renu Dhaka (2015): Algae as Biofuel. <i>Journal of Biofuel</i> . 5(6):607-631. Taylor and Francis ISSN:1759-7269E-ISSN:1759-7277	10.1080/17597269.2014.1003701	2.9
42	2014	Bhateria, R., & Rajesh Dhankhar (2014): Response surface methodology for biotransformation of Cr(VI) using <i>Salmonella sp.</i> S4. <i>International Journal of Pharma and Bio Sciences</i> . 5(4): (B) 307- 319.	https://ijpbs.net/index.php/journal/article/view/3751	-

43	2013	Bhateria, R., & Snehlata (2013): Role of Rhizospheric bacteria in phytoremediation of heavy metal contaminated soil. <i>International Journal of Current Research</i> . 5(12): 3897-3907.	https://journalcra.com/article/role-rhizospheric-bacteria-phytoremediation-heavy-metal-contaminated-soil	-
44	2013	Bhateria, R., & Rajesh Dhankhar (2013): Optimization of Cr(VI) biotransformation by response surface methodology using <i>Microbacterium maritypicum</i> . <i>International Journal of Pharma and Bio Sciences</i> . 4(4): (B) 834-844.	https://ijpbs.net/index.php/journal/article/view/2938	-
45	2013	Anju Hooda, Rajesh Dhankhar and Rachna Bhateria (2013): Sequestration of Uranium (VI) from aqueous solutions using Brewery yeast (<i>Saccharomyces cerevisiae</i>). <i>International Journal of Current Research</i> . 5(3): 704-710.	https://journalcra.com/article/sequestration-uranium-vi-aqueous-solutions-using-brewery-yeast-saccharomyces-cerevisiae	-
46	2013	Rachna Bhateria and Rajesh Dhankhar (2013): Statistical modelling and optimization of Cr(VI) Biotransformation by indigenous bacterial strains using response surface methodology. <i>International Journal of Current Research</i> . 5(2): 303-312.	https://journalcra.com/sites/default/files/issue-pdf/3019.pdf	-
47	2011	Rajesh Dhankhar and Rachna Bhateria Guriyan (2011): Bacterial Biosorbents for detoxification of heavy metals from aqueous solution. <i>International Journal of Advances in Science and Technology</i> . 2(6): 103-128. (ISSN No. 2229-5216)	https://drive.google.com/file/d/1oxPcwWHRBivnaWwEMd1y1lCODdXHn8az/view?usp=drive_link	-
48	2011	Rajesh Dhankhar and Rachna Bhateria Guriyan (2011): Bioremediation strategies for management of metal contaminated soil. <i>International Journal of Environmental Sciences</i> . 1(7): 1884-1898. (I.C. value- 6.29) (ISSN No. 0976 – 4402)	https://www.researchgate.net/publication/268429371_Strategies_for_Management_of_Metal_Contaminated_Soil	-

4. Research & consultancy Projects

S. No.	Year	Details	Status
-	-	-	-
-	-	-	-

5. Research Supervision Overview

S. No.	Level	Degree Awarded	Thesis Submitted
1	Ph.D.	4	-
2	P.G.	More than 80	-
3	U.G.	-	-

6. Patents/technology developed NIL

S. No.	Year	Particulars / Details	Published/Granted

7. Honors & Awards NIL

S. No.	Title of Award	Awarding Agency	Particulars / Details

8. Details as Resource person (Seminar / Conference / Lectures delivered etc.)

S. No.	Details	Number in total	
		National	International
a	Seminar	03	01
b	Conference	05	03
c	Workshops	06	-
d.	Any other	03	-

9. Membership details of Statutory Committees of this University

S. No.	Period	Particulars / Details
1	28 Nov 2023 - till date	Environmental Nodal Officer, M.D.U., Rohtak
2	11 Sept 2023 - till date	Deputy Coordinator, NAAC Criteria-7, M.D.U., Rohtak
3	3 Jan 2024 -till date	Member Outreach Programme Committee for formulation of Environmental Sustainable Goals and related areas
4	9 Sept, 2015 -July, 2018.	Counsellor of Youth Red Cross, Maharshi Dayanand University, Rohtak
5	5 Oct 2023 - 5 Oct 2024, 2024 till date	Member, PG Board of studies in Environmental Sciences, Maharshi Dayanand University, Rohtak
6	Feb 2025 - till date	Member, Academic Council, Maharshi Dayanand University, Rohtak
7	27 May 2024 - 27 May 2026	Member, Faculty of Life Sciences, Maharshi Dayanand University, Rohtak
8	9 Oct 2025 - till date	Advisor, Eco-tech Club, Maharshi Dayanand University, Rohtak
9	15 Nov 2023- till date	Member, Committee for proposal formulation for Environment & Sustainable Development Goals for CSR Funding
10	Session 2022-23 onwards	Deputy coordinator, Value added course in waste Management: Challenges and Opportunities offered by Deptt of Env Sc, MDU, Rohtak M.D.U., Rohtak
11	1 Jan 2024 onwards	Member, Sub-committees for implementation of NEP based curriculum for UG & PG Programmes, MDU., Rohtak

10. Any other Achievements:

S. No.	Period	Particulars / Details
1	2019	Development of e-content at e-PG Pathshala and SWAYAM portal
2	2019-22	Developed e-content for M.Sc Environmental Science Course for IGNOU on e-gyan kosh portal
3	2 Feb2026, 21 May 2026,	Radio talks on Prasar Bharti AIR