

Prof. Deepak Pathania

Education Qualification: D.Sc., Ph.D.

Research areas: Environmental Monitoring and Assessment, Removal of emerging contaminants from water/wastewater, Bioremediation, Green technologies for environmental restoratation, Ion-exchange and Adsorption systems.\

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Experiences:

Sr. No.	Post Held	Organization	Nature of Duties	Experience (In Years and Months)
1.	Professor/Head/Dean	Central University of Jammu	Teaching, Administration and Research	4.3 Years
2.	Professor/Head/Dean	Sardar Patel University, Mandi, Himachal Pradesh (on deputation)	Administration and Teaching	2.0 Years
3.	Professor/Head/Dean	Shoolini University, Solan, H.P	Teaching, Research and Administration	8.0 Years
4.	Head	Eternal University, Baru Sahib, Distt. Sirmour, H.P	Teaching, Research and Administration	2.0 Years
5.	Head	RIET, Phagwara, Punjab	Teaching, Research and Administration	3.0 Years
6.	Lecturer	NIT, Jalandhar, Punjab	Teaching, Research	1.0 Years

Academic Profile

1. Dean Research Studies, Central University of Jammu, Jammu and Kashmir from 20th January, 2023 to till date.
2. Dean Academic Affairs, Sardar Patel University, Mandi, Himachal Pradesh, India-175001 from Nov, 2021 to 30 September, 2022.
3. Dean of Planning and Development, Sardar Patel University, Mandi, Himachal Pradesh, India-175001 from 7th April, 2022 to 30 September, 2022.
4. Dean of Physical Sciences, Sardar Patel University, Mandi, Himachal Pradesh, India-175001 from Dec., 2020 to 30 September, 2022.
5. Head, Department of Chemistry, Sardar Patel University, Mandi, Himachal Pradesh, India-175001 from 11th Nov., 2020 to 30 September 2022.
6. Chairman, Policy and Programme, Sardar Patel University, Mandi, Himachal Pradesh, India-175001 from 1st March, 2021 to 30 September 2022.
7. Dean, School of Life Sciences, Central University of Jammu, Jammu and Kashmir from June 2019 to 30th Sept., 2020.
8. Dean Students' Welfare, Central University of Jammu, Jammu and Kashmir from Oct., 2017 to Feb., 2020.
9. Head, Department of Environmental Sciences, Central University of Jammu, Jammu and Kashmir since Oct., 2017.
10. Head, Department of Public Policy and Public Administration, Central University of Jammu, Jammu and Kashmir since Sept., 2018.
11. Dean, Faculty of Basic Sciences, Shoolini University, Solan, Himachal Pradesh from July, 2015 to 11 Sept., 2017.
12. Head, School of Chemistry, Shoolini University, Solan, Himachal Pradesh from March, 2014 to 11 Sept., 2017.
13. Head, Department of Sciences and Humanities in Eternal University, Baru Sahib, Simour (HP) from August 2008 to August 2010.
14. Head, Department of Applied Sciences, Ramgarhia Institute of Engineering and Technology, Phagwara Punjab from 2003 to 2004..

Publications

1. K. Sharma, P. Tewatia, M. Kaur, Deepak Pathania, G. Rattan, S. Singal, A. Kaushik, Bioremediation of multifarious pollutants using laccase immobilized on magnetized and carbonyldiimidazole-functionalized cellulose nanofibers, *Science of the Total Environment*, 864, 161137, 2023.
2. G. Rattan, P. Tewatia, M. Kaur, Deepak Pathania, S. Singal, A. Kaushik, Rice straw derived cellulose nanofibers modified with L-histidine for ultra-trace fluorometric assay of Cr(VI) and Hg(II) in aqueous medium, *Journal of Cleaner Production*, Published, 391, 136106, 2023.
3. Sachin Kumar, Dilbag Singh, Deepak Pathania, A. Awasthi and Kulvindhra Singh, Molybdenum disulphide-nitrogen doped reduced graphene oxide heterostructure based electrochemical sensing of epinephrine, *Materials Chemistry and Physics*, 297, 2023, 127446.
4. P. Tewatia, A. Kaushik, M.S. Jyoti, D. Pathania, S. Singhal, A. Kaushik, Highly fluorescent composite of boron nitride quantum dots decorated on cellulose nanofibers for detection and removal of Hg (II) ions from waste water, *International Journal of Biological Macromolecules*, 234, 123728, 2023.
5. A. Kumari, A. Kumar, M. Thakur, D. Pathania, A. Rani, A. Sharma, Murraya Koenigii Plant-Derived Biochar (BC) and Lanthanum Ferrite (BC/LaFeO₃) Nano-Hybrid Structure for Efficient Ciprofloxacin Adsorption from Waste Water, *Chemistry Africa*, Published, May 2023.
6. M. Kumari, A. Kumar, S. Kumari, P. Kumar, D. Pathania, The development of carbohydrate polymer- and protein-based biomaterials and their role in environmental health and hygiene, *International Journal of Biological Macromolecules*, Published, 242, 124875, 2023.
7. G. Kaur, I. Tyagi, S. Dhar, S. Kumar, R. Kothari, Deepak Pathania, Spatio-temporal evaluation of surface water quality of Tawi watershed in the Himalayan region of Jammu

(J&K, UT) using algal pollution indices: a geospatial approach, *Environmental Monitoring Assessments*, 195:1402, 2023.

8. S. Dhar, P. Mehta, D. Kumar, Deepak Pathania, Multi parametrical analysis of Haptal Glacier, Lower Chenab basin, Jammu and Kashmir, India; A remote sensing approach, accepted, *Journal of Earth System Science*, 2023.
9. Arush Sharma, Ajay Kumar; Manita Kumari, Kajal Sharma and Deepak Pathania, Fabrication of high visible light active LaFeO₃/Cl-g-C₃N₄/RGO heterojunction for solar assisted photo-degradation of Aceclofenac, *Journal of Environmental Management*, Communicated, 2022.
10. M Chandel, M Thakur, A Sharma, D Pathania, A Kumar, L Singh, Chlorophyll sensitized (BiO) 2CO₃/CdWO₄/rGO nano-hybrid assembly for solar assisted photo-degradation of chlorzoxazone, *Chemosphere*, 135472, 305, 2022.
11. Gagandeep Kour, Richa Kothari, Deepak Pathania, Sunil Dhar, V.V. Tyagi, Impact assessment on water quality in the polluted stretch using a cluster analysis during pre- and COVID-19 lockdown of Tawi river basin, Jammu, North India: an environment resiliency, *Energy, Ecology and Environment*, Springer, 7(5):461-472, 20223.
12. A Kumar, K Sharma, M Thakur, D Pathania, A Sharma, Fabrication of high visible light active LaFeO₃/Cl-g-C₃N₄/RGO heterojunction for solar assisted photo-degradation of aceclofenac, *Journal of Environmental Chemical Engineering*, 22133437, 10, 2022.
13. Chetna Verma, Deepak Pathania, Poonam Negi, Piyush Kumar Gupta, Rama Shanker Verma and Bhuvanesh Gupta, Designing of smart nanogels based on tragacanth gum for cisplatin delivery, *Polymer International*, Dec., 2022.
14. Gagandeep Kour, Rubia Kouser, Sunil Dhar, Deepak Pathania and Richa Kothari, Impact of Agricultural practices on riverine water quality of the Tawi River Basin, Western Himalayas, J&K, *ENVIS Centre on Himalayan Ecology*, Vol, 30, 145-151, 2022.
15. Deepak Pathania, Arush Sharma, Ajay Kumar, A.K. Srivastava, A.K. Saini, R. Saini, Divya Mittal, Sarita Kumari, Rishu Katwal, Lakhveer Singh, Green synthesis of biochar

encapsulated Ag/Cu-ZrO₂ nanostructure using *Melia azedarach* plant as capping agent: Sorption of heavy metals and microbial deactivation, *Journal of Environmental Technology, Communicated*, 2021.

16. P. Mishra, J. Lee, N. Costa, R.O. Lauro, Deepak Pathania, S. Kumar L. Singh, Engineered Nanoenzymes with Multifunctional Properties for Next-Generation Biological and Environmental Applications, *Advanced Functional Materials (IF 19)*, 2108650, 2021.
17. Deepak Pathania, Arush Sharma and A.K. Srivastava, Bio-inspired fabrication of Cu–ZrO₂ nanocomposites for the remediation of Cr(VI) from water system, *Current Research in Green and Sustainable Chemistry*, 4, 100073, 2021.
18. Deepak Pathania, Arush Sharma, Lakhwinder Singh and A.K. Srivastava, Bio-synthesized Cu-ZnO hetero-nanostructure for catalytic degradation of organophosphate chlorpyrifos under solar illumination, *Chemosphere*, 277, 130315, 2021.
19. Gagandeep Kour, Richa Kothari, Har Mohan Singh, Deepak Pathania, Sunil Dhar, Microbial leaching for valuable metals harvesting: Versatility for the bioeconomy, *Environmental Sustainability*, 2021, 2, 215-229.
20. S.S. Kumar, P. Ghosh, N. Kataria, D. Kumar, S Thakur, Deepak Pathania, V. Kumar, L. Singh, The role of conductive nanoparticles in anaerobic digestion: Mechanism, current status and future perspectives. *Chemosphere*, 220, 130601, 2021.
21. A. Sharma, M. Chandel, A. Sharma, M. Thakur, A. Kumar, Deepak Pathania, L. Thakur, Robust visible light active PANI/LaFeO₃/CoFe₂O₄ ternary heterojunction for the photo-degradation and mineralization of pharmaceutical effluent: Clozapine, *Journal of Environmental Chemical Engineering*, 9, 5, 106159, 2021.
22. Richa Kothari, Sinha Sahab, Har Mohan Singh, Rajeev Pratap Singh, Bhaskar Singh, Deepak Pathania, Anita Singh, Shweta Yadav, Tanu Allen, Sohini Singh, Vineet Veer Tyagi, COVID-19 and waste management in Indian scenario: challenges and possible solutions, *Environmental Science and Pollution Research*, 28(38): 52702–5272, 2021.
23. A. Sharma, A. Kumar, Deepak Pathania, Bio-Polymer Based Tragacanth Gum (TG) Loaded Fe₃O₄ Nanocomposite for the Sequestration of Tenacious Congo Red Dye from Waste Water, *Journal of Material Science and Technology Research*, 92-100, 2021.

24. Chetna Verma, Deepak Pathania, Sadiya Anjum, Bhuvanesh Gupta, Smart Designing of Tragacanth Gum by Graft Functionalization for Advanced Materials, *Macromolecular Materials and Engineering*, 305(4), 1900762, 2020.
25. Deepak Pathania, Swadeep Sood , Adesh K. Saini Sarita Kumari , Shilpi Agarwal, Vinod Kumar Gupta, Studies on anticancerous and photocatalytic activity of carboxymethyl cellulose-cl-poly(lactic acid-co-itaconic acid)/ZnO-Ag nanocomposite, *Arabian Journal of Chemistry*, 13, 6966–6976, 2020.
26. Chetna Verma, Poonam Negi, Deepak Pathania, Sadiya Anjum, and Bhuvanesh Gupta, Novel Tragacanth Gum-Entrapped lecithin nanogels for anticancer drug delivery, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 69, 604–609, 2020.
27. Deepak Pathania, Arush Sharma, A.K. Srivastava, Modelling studies for remediation of Cr (VI) from wastewater by activated *Mangifera indica* bark, *Current Research in Green and Sustainable Chemistry*, 3, 100034, 2020.
28. P. Negi, G. Sharma, C. Verma, P. Garg, C. Rathore, Deepak Pathania, Novel Thymoquinone loaded chitosan-lecithin micelles for effective wound healing: Development, characterization and preclinical evolution, *Carbohydrate Polymer*, [Volume 230](#), 115659, 2020.
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30. Deepak Pathania and A.K. Srivastava, Advances in nanoparticles tailored lignocellulosic biochars for the remediation of cadmium (II) and chromium (VI) from aqueous system, *Environmental Sustainability*, Nov, 2020.
31. Deepak Pathania, Arush Sharma, Sunil Dhar and A.K. Srivastava, Adsorption mechanism of hazardous Safranin-T dye from waste water using *Mangifera indica* as precursor material, *Environmental Sustainability*, October, 2020.
32. Deepak Pathania, Z.M. Siddiqi, P. Mehta and Arush Sharma, Adsorptive removal of congo red dye (CR) from aqueous solution by *Cornulaca monacantha* stem and biomass based activated carbon: Isotherm, Kinetics and Thermodynamics, *Separation science and technology*, *Volume 54*(6), 916-929, 2019.

33. Deepak Pathania, M. Thakur, Sol-gel synthesis of gelatin-zirconium(IV) tungstophosphate nanocomposite ion exchanger and application for the estimation of Cd(II) ions, Submitted after revision, Journal of Sol-Gel Science and Technology, 89(3), 700-712, 2019.
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35. C. Verma, P. Negi, S. Anjum, B. Gupta, Deepak Pathania, Preparation of novel tragacanth gum-entrapped lecithin nanogels, Advanced Materials Letters, 10(4), 267-269, 2019.
36. M. Giahi, Deepak Pathania, S. Agarwal, G.A.M. Ali and V.K. Gupta, Preparation of Mg doped TiO₂ nanoparticles for photocatalytic degradation of some of some organic pollutants, Studia UBB Chemia Journal, 1, 7-18, 2019.
37. C. Verma, P. Negi, S. Anjum, B. Gupta, Deepak Pathania, Novel Tragacanth Gum-Entrapped lecithin nanogels for anticancer drug delivery, International Journal of Polymeric Materials and Polymeric Biomaterials, 1-6, 2019.
38. C. Verma, P. Negi, B. Gupta, Deepak Pathania, Water Management within Tragacanth gum-g-polyitaconic acid Hydrogels, Accepted, Advanced Materials Letters, 10 (10), 711-714, 2019.
39. Deepak Pathania, Manita Thakur, Vanita Puri and Shefali Jasrotia, Fabrication of electrically conductive membrane electrode of gelatin-tin (IV) phosphate nanocomposite for the detection of cobalt (II) ions, Advanced Power Technology, 29, 915-924, 2018.
40. Deepak Pathania, S. Agarwal, V.K. Gupta, M. Thakur, N.S. Alharbi, Zirconium (IV) phosphate/poly(gelatin-cl-alginate) nanocomposite as ion exchanger and Al³⁺ potentiometric Sensor, Int. J. Electrochem. Sci., 13, 994 – 1012, 2018.
41. V.K. Gupta, S. Sood, S. Agarwal, A. Saini and Deepak Pathania, Antioxidant activity and controlled drug delivery potential of tragacanth gum-cl- poly (lactic acid-co-itaconic acid) hydrogel, International Journal of Biological Macromolecules, 107, 2534-2543, 2018.
42. Deepak Pathania, Manita Thakur, Gaurav Sharma, and A. K. Mishra "Tin (IV) phosphate/poly(gelatin-cl-alginate) nanocomposite: Photocatalysis and fabrication of potentiometric sensor for Pb (II), Materials Today Communications, 12, 282-293, 2018.

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44. C. Verma, P. Negi, B. Gupta, D. Pathania, Chemical vs Microwave initiated Tragacanth Gum graft copolymers: a Real Perception, *Annals of Materials Science & Engineering*, 3(2), 1034-1044, 2018.
45. C. Verma, P. Negi, B. Gupta, D. Pathania, Preparation of pH-sensitive hydrogels by graft polymerization of itaconic acid on Tragacanth gum, *Polymer International*, 68 (3), 344-350, 2018.
46. S. Sood, V.K. Gupta, S. Agarwal and Deepak Pathania, Controlled release of antibiotic amoxicillin drug using carboxymethyl cellulose-cl-poly(itaconic acid-co-lactic acid) hydrogel, *International Journal of Biological Macromolecules*, 101, 612-620, 2017.
47. Deepak Pathania, Manita Kumari and A.K. Mishra, Alginate-Zr (IV) phosphate nanocomposite ion exchanger: Binary separation of heavy metals, photocatalysis and antimicrobial activity, *Journal of Alloys and Compounds*, 701, 153-162, 2017.
48. Deepak Pathania, Shikha Sharma and Pardeep Singh, Removal of methylene blue by adsorption onto activated carbon developed from Ficus carica bast, *Arabian Journal of Chemistry*, 10, S1445–S1451, 2017.
49. Deepak Pathania, Manita Kumari, Anu Sharma, S. Agarwal and V.K. Gupta, Synthesis of lactic acid–Zr(IV) phosphate nanocomposite ion exchanger for green remediation, *Ionic*, 23, 699-706, 2017.
50. G. Sharma, Amit Kumar, Ala'a H. Al-Muhtase, Deepak Pathania, Mu. Naushad, Genene Tessema Mola, Revolution from monometallic to trimetallic nanoparticle composites, various synthesis methods and their applications: A review, *Materials Science and Engineering C*, 71, 1216–1230, 2017.
51. A. Sharma, Z.M. Siddiqi and Deepak Pathania, Adsorption of polyaromatic pollutants from water system using carbon/ZnFe₂O₄ nanocomposite: Equilibrium, kinetic and thermodynamic mechanism, *Journal of Molecular Liquid*, 240, 361-371, 2017.
52. Deepak Pathania, M. Thakur, S. Jasrotia, S. Agarwal and V.K. Gupta, Gelatin-zirconium dioxide nanocomposite as a Ni (II) selective potentiometric sensor: Heavy metal separation and photocatalysis, *International Journal of Electrochemical Sciences*, 12, 8477-8494, 2017.

53. Deepak Pathania, Shikha Sharma, Pardeep Singh, Removal of methylene blue by adsorption onto activated carbon developed from *Ficus carica* blast, *Arbian Journal of Chemistry*, 10, S1445-S1451, 2017.
54. V.K. Gupta, Deepak Pathania and Shikha Sharma, Adsorptive remediation of Cu(II) and Ni(II) by microwave assisted H_3PO_4 activated carbon, *Arbian Journal of Chemistry*, 10, S2836-S2844, 2017.
55. Deepak Pathania, Microwave induced graft copolymerization of binary monomers onto luffa cylindrica fiber: removal of congo red, *Procedica Engineering*, 200, 408-415, 2017.
56. M. Thakur, Deepak Pathania, G. Sharma, M. Naushad, M.R. Khan, Synthesis, characterization and environmental applications of new bio-composite gelatin-Zr(IV) phosphate, *Journal of polymer and Environment*, 1-10. 2017.
57. Deepak Pathania, Gaurav Sharma, Mu. Naushad and Divya gupta, Preparation of novel chitosan-g-poly(acrylamide)/Zn nanocomposite hydrogel and its application for controlled delivery of ofloxacin. *International Journal of Biological Macromolecules*, 84, 340–348, 2016.
58. Gaurav Sharma, Amit Kumar, M. Naushad and Deepak Pathania, M. Sillanpaa, Polyacrylamide@Zr(IV) vanadophosphate nanocomposite: Ion exchange properties, antibacterial activity, and photocatalytic behavior. *J. Ind. Eng. Chem.*, 33, 201–208, 2016.
59. Deepak Pathania, D. Gupta, A.H. Al-Mulitaseb, G. Sharma, A. Kumar and T. Ahamad, Photocatalytic degradation of highly toxic dyes using chitosan-g-poly(acrylamide)/ZnS in presence of solar irradiation, *Journal of Photochemistry and Photobiology*, 329, 61-68, 2016 (IF: 2.5)
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Polymerization for Environmental and Antibacterial Applications, Journal of Polymer and Environment, 24, 2016.

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67. Deepak Pathania, G. Sharma, M. Naushad and V. Priya, A biopolymer based hybrid cation exchanger pectin cerium (IV) iodate: Synthesis, characterization and analytical applications, Desalination and Water Treatment, 57, 468-475, 2016
68. Kamini Thakur, Susheel Kalia, B.S. Kaith, Deepak Pathania, Amit Kumar, Pankaj Thakur, Chelsea E. Knittel, Caroline L. Schauer, Grazia Totaro, The development of antibacterial and hydrophobic functionalities in natural fibers for fiber-reinforced composite materials, Journal of Environmental Chemical Engineering 4, 1743–1752, 2016.
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72. Deepak Pathania, Gaurav Sharma and Rinku Thakur, Pectin @ zirconium (IV) silicophosphate nanocomposite ion exchanger: Photo catalysis, heavy metal separation and antibacterial activity, *Chemical Engineering Journal*, 267, 235-244, 2015 (IF: 4.2).
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77. Amar Singh Singha, Bhanu Priya and Deepak Pathania, Corn starch/poly(vinyl alcohol) biocomposite blend films: mechanical properties, thermal behaviour, fire retardancy and antibacterial activity, *International Journal of Polymer Analysis and Characterization*, 20, 357-366, 2015 (IF: 1.2).
78. Reena Sharma, B.S. Kaith. S. Kalia, Deepak Pathania, Amit Dhiman, N. Sharma, C. Schauer, Biodegradable and conducting hydrogels based on guar gum polysaccharide for antibacterial and dye removal applications, *Journal of Environmental Management*, 162, 37-45, 2015 (IF: 3.2).
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Other information:

1. Court member (Nominated by President of India) of University of Hyderabad, Hyderabad from July 2018 to 2020.
2. Member, Technical Review Committee under the Hazardous and other Wastes (Management and Transboundary Movement), Ministry of Environment, Forest and Climate Change, Government of India from 18th April, 2022 to till date.
3. Figured among 2% Scientists of the world continuously for 4th years (2020, 2021, 2022 and 2023) as per survey Stanford University US.
4. Received distinguished alumni award from National Institute of Technology, Jalandhar, Punjab for dedications, contribution and achievements in the field of teaching, Innovations and Research on 4th October, 2021.
5. Awarded with Social award by Asian Polymer Association for the contribution on the uses of Science and Technology for society during its international conference on 24th Feb, 2023.