

Dr. Garima Pandey

Professor and Head Department of Chemistry

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**Education:**

Degree	Course	University	Year
PhD	Chemistry	CCS Univerity, 2008	2008
EPGDBM	Management	IIM Kashipur	2026-27
MBA	HR & IT	Maharaja Agrasen Himalayan Garhwal University, UK	2022
M. Sc.	Chemistry	Dr. RML Avadh University Faizabad, 2000	2000
B.Sc.	Zoology, Botany, Chemistry	Dr. RML Avadh University Faizabad, 1998	1998
B.Ed.	Science	Dr. RML Avadh University Faizabad, 2001	2002

ACADEMIC EXPERIENCE:

- Professor, SRM IST, DELHI-NCR Campus, April 2025
- Associate Professor, SRM IST, DELHI-NCR Campus, February 2022-March 2025
- Assistant Professor, SRM IST, DELHI-NCR Campus, August 2009-January 2022

ADMINISTRATIVE EXPERIENCE:

- Head Department of Chemistry, SRMIST Delhi NCR Campus
- Head Class Mentors, SRMIST Delhi NCR Campus, January-2020- Till date
- Event Management, SRMIST Delhi NCR Campus, July-2018- August 2025
- DRC-Chairperson of Chemistry
- Faculty In-charge of Hostel and Mess Committee –2020 Till Date
- Member of Women's Grievance cell, 2021-2025
- Core Member, Ant ragging SRMIST Delhi NCR Campus, 2010– Till date
- Member Proctorial Board, SRMIST Delhi NCR Campus July 2020-till Date
- SPOC and Institutional In charge of SRMLMS
- Lab In-Charge, Department of Chemistry, SRMIST Delhi NCR Campus August2014–July2023
- Faculty warden, Girls Hostel, July 2019 – June 2022.

Guest Editor/ Editor/ Editorial Board Member/Reviewer

- **Academic Editor**- *PLOS ONE*, Public Library of Science (PLOS)
- **Editorial Board Member**- *Scientific Reports*, Nature Portfolio
- **Guest Editor**- *ChemistrySelect*, Wiley-VCH
- **Guest Editor**- *Asian Journal of Organic Chemistry*, Wiley-VCH
- **Guest Editor**- *Chemistry & Biodiversity*, Wiley-VCH
- **Reviewer** - *Discover Sustainability*, Springer Nature
- **Reviewer** - *Environmental Monitoring and Assessment*, Springer Nature
- **Reviewer** - *Discover Materials*, Springer Nature
- **Reviewer** - *Journal of Nanotechnology*, Wiley

CONFERENCES/ WORKSHOPS/SYMPOSIUM /SEMINARS/ FDP ORGANIZED

- **Convener** –Three days International Conference VBCB 2025, funded by ANRF and CSIR 18th - 20th February 2025, at SRM Institute of Science and Technology, Delhi-NCR Campus
- **Convener** – Two days National Seminar, funded by CSTT 6th -7th March 2025, at SRM Institute of Science and Technology, Delhi-NCR Campus
- **Convener** –Two days Vigyan Sangam – A Science Colloquium, 15th -16th October 2024, at the Department of Chemistry, SRM Institute of Science and Technology, Delhi-NCR Campus
- **Convener** -One week FDP on Research & Innovation: Proposed Writing Tools, Techniques and Funding, in collaboration with Mahatma Hansraj Malviya Mission Teacher Training Centre, UGC, Ministry of Education, Govt. of India, 11th – 16th March 2024.
- **Convener** – International Conference on Chemical and Biological Sciences in collaboration with Atma Ram Sanatan Dharma College, University of Delhi, 27th – 29th January 2024.
- **Convener** – Three days workshop on Research and Funding: Proposal writing tools and techniques, FDP on Research & Innovation: Proposed Writing Tools, Techniques and Funding, 9th – 11th May 2023
- **Coordinator** - Workshop on counseling, motivation and effective communication, 7th February 2023.

- **Convener**- Two week “Induction Programme for newly recruited faculty members” from 3rd August to 13th August, 2022.
- **Member Organizing Committee** in “Neo Hindi Writers Workshop “organized by SRM Institute of Technology, Delhi NCR Campus in collaboration with at Central Hindi Directorate, Ministry of Education, Department of Higher Education, Govt. of India , 3-10th December 2021.
- **Coordinator** - National seminar on Astrology,SRM IST, Delhi NCR campus,22nd February 2020
- **Member Organizing Committee** 5-days workshop on Intellectual Property Rights (IPR) in collaboration of CIPAM, Department for promotion of industry & Internal Trade, Ministry of Commerce & Industry, Government of India, during 2-6th November 2020.
- **Member** - 3rd International Conference on Micro-Electronics and Telecommunication Engineering, at SRM-IST, Delhi-NCR Campus held on 28-29th September 2019.
- **Member** - 5th International Conference on Intelligent Computing and Applications, at SRM-IST, Delhi NCR, Campus held on 6-8th December 2019.
- **Member Organizing Committee** in Applications of Technical Terminology in Modeling, Optimization and Computing in Science and Technology in association of MHRD held at SRM- IST, Delhi-NCR Campus during 26-28th April 2019.
- **Member Organizing Committee** in IEEE Conference of ECE Dept held at SRM-IST, Delhi- NCR Campus during 28-29th September 2018.
- **Member Organizing Committee** in 5th International Conference on recent Trends in Computing (ICRTC-18) at SRM-IST, Delhi-NCR Campus held during 27-28th December 2018.
- **Member Organizing Committee** in DST-Inspire Internship Science Camp, sponsored by DST, Government of India and Organized by SRM University, Modinagar in 2017.
- **Faculty Coordinator** in 3rd International Conference on Global trends in pure and applied Chemical Sciences, Organized by SRM University, Modinagar in association with Asian Publication Corporation during 8-9th December, 2017.
- **Member Organizing Committee** - Global Initiatives in Applied Sciences and Green Technology, September 2016

CERTIFICATIONS and TRAININGS

- Certificate Course in Basic Programming using Python, conducted by E&ICT Academy, Indian Institute Of Technology, Kanpur, 2025
- The Science of Well-Being, an online course authorized by Yale University, offered through Coursera
- Capacity building program for Academic Leaders organized by All India Management association, on 7July 2025 at AIMA, New Delhi, 2025
- UGC-Approved 6-day Short-Term Programme on “Design & Development of e-Content for Online Learning and MOOCs” held from 29th January to 3rd February 2024, Grade ‘A’

AWARDS and ACHIEVEMENTS

- **Best Teacher Award**, AadGrow Foundation, 2025
- Among **Top 2% Most Cited** Scientist list by Elsevier BV, 2023
- Among **Top 2% Most Cited** Scientist list by Elsevier BV, 2024
- **Best Researcher Award** by SRM Institute of Science and Technology, March 2024
- **Best Teacher Award 2022** by SRM Institute of Science and Technology, Delhi NCR Campus
- **Session Chairperson** at the International Conference on Science for Society: Chemical & Biological Frontiers towards Viksit Bharat 2047 (ICSS-2025) , 27–28 December 2025
- **Session Chairperson** at International Conference on Chemical and Biological Sciences– 2024 organized by Atma Ram Santan Dharma College, University of Delhi on 27 th - 29 th January 2024.
- **Invited Talk** in International Conference on Nanostructured Materials and Nanocomposites, 10th -12th May 2024
- **Technical Session Chairperson** at “2 nd International Online Conference on Emerging Trends in Chemical Science (E.T.C.S.-23)” organized by H.V.M. (P.G.) College & U.S.E.R.C during 17th -18th March 2023.
- Delivered an **Invited Talk** in IIIC, Km Mayawati Girls PG College, GB Nagar, U.P. 24th February 2023 on the Topic "**Career opportunity in science and technology**".
- Delivered a **guest lecture** in Govt. PG College Kandhla, 29th January 2022on the topic –

The Rise of men is not about the fall of women

- Awarded with University Gold Medal in UG and PG, by Dr. RML Avadh University, Faizabad

Advisor/ Supervisor of The Ph.D./ M.Sc. Thesis:

Ph.D.: 5 (2 Awarded and 3 ongoing)

RESEARCH PROJECTS SANCTIONED/ UNDERTAKEN/SUBMITTED:

S.No	Title	Funding Agency	Amount	Role	Status
1.	Development of Ionic Liquid based electrochemical biosensor for breast cancer detection	Council of Science and Technology, U.P.	Rs. 15,36,000	PI	ongoing
2.	Design & Development of 3rd Generation Ionic Liquid for Treatment of Breast Cancer	Council of Science and Technology, U.P.	Rs. 13,86,000	Co-PI	ongoing
3	Design and development of intercalation of ionic liquids into LDH structures for carbon dioxide fixation of organic molecules	SRM Institute of Science and Technology , SERI Grant	Rs. 3,10,000	PI	ongoing
4	International Conference on Viksit Bharat 2047: Reaching the Unreached Through Chemical and Biological Sciences (VBCB-2025) 18th-20th February, 2025	ANRF, CSIR, ACS, RSC	Rs. 5,50,000	PI	completed

SELECTED PUBLICATIONS (Articles/Reviews)

- In Silico Exploration of Hydroxytetrahydroxanthes as Promising Antipsychotic Candidates: A Molecular Docking, Molecular Simulation, DFT, and ADMET Study, *ChemistrySelect*,10(38), 2025, <https://doi.org/10.1002/slct.202503516>
- In Silico Exploration of Xanthene Aminochloroquinoline Derivatives as Promising Dopamine D2 Receptor Antagonists: ADME, Molecular Docking, DFT Calculations, and MD Simulations, *ChemistrySelect*,10(40), 2025, <https://doi.org/10.1002/slct.202503297>

- Progress in the synthesis and applications of FDA-approved anticancer drugs: Current trends and future perspectives, Javed Khan, Anjali Rani, Sushant Sharma, Garima Pandey, Bhaskara Nand, *Tetrahedron*, Volume 185(15) 2025, 134833, <https://doi.org/10.1016/j.tet.2025.134833>
- Exploration of the Dual Action of Pyranopyrazoles as Anti-Alzheimer Agents and Dopamine D2 Receptor Antagonist Through Molecular Docking, ADMET, DFT Calculations, and MD Simulations, Anjali Rani, Mohd. Aslam, Javed Khan, Garima Pandey, Kamlesh Kumari, Bhaskara Nand, *ChemistrySelect*,10(22), 2025 <https://doi.org/10.1002/slct.202405917>
- Design, synthesis, and biological evaluation of Schiff-Base Isoxazole hybrids: Exploring novel antimicrobial agents, Anjali Rani , Ja
- A comprehensive overview of AI–nanotech convergence for a resilient future, *Next Research*,2(3), 2025, <https://doi.org/10.1016/j.nexres.2025.100639>
- A comparative in silico study of noscapine, bosutinib, and the co-crystal ligand (DHHE) of 3B99 to investigate their interaction with prostacyclin synthase, Mohd. Aslam, Vishnu Kumar Malakar, Bhaskara Nand, Snigdha Singh, Ramesh Chandra, Kamlesh Kumari, Garima Pandey, Prashant Singh, *Chemical Papers*, 79, 5301–5317 (2025), <https://doi.org/10.1007/s11696-025-04126-0>
- Graphene Oxide for Antimony Sensing: An Integrated Electrochemical, Spectroscopic, and Computational Study, Mohd. Aslam, Ayushi Prajapat, Bhaskara Nand, Snigdha Singh, Ramesh Chandra, Kamlesh Kumari, Garima Pandey & Prashant Singh, *Journal of Inorganic and Organometallic Polymers and Materials*, (2025). <https://doi.org/10.1007/s10904-025-03755-y>
- An insight for the sensing ability of Graphene Oxide for Pymetrozine through Electrochemical studies, In silico studies, and experimental approaches, Mohd Aslam, Sandeep Yadav, Madhur Babu Singh, Nobel Tomar, Bhaskara Nand, Kamlesh Kumari, Garima Pandey, Ramesh Chandra , Snigdha Singh , Prashant Singh, *Journal of the Indian Chemical Society*, 102, (7),2025, 101779, <https://doi.org/10.1016/j.jics.2025.101779>

- A comprehensive review on pyrazole derivatives as corrosion inhibitors: Ligand properties, coordination bonding, and interfacial adsorption, Mohd. Aslam, Anjali Rani, Ayushi Prajapat, Hitesh, Javed Khan, Bhaskara Nand, Garima Pandey, Chandrabhan Verma, Akram AlFantazi, Prashant Singh, *Coordination Chemistry Reviews*, 538, 2025, 216714, <https://doi.org/10.1016/j.ccr.2025.216714>
- Harnessing deep eutectic solvents for advanced corrosion protection: A review, Mohd. Aslam, Anjali Rani, Ravinder Singh, Bhaskara Nand, Chandrabhan Verma, Akram Al Fantazi, Garima Pandey, Prashant Singh, *Journal of Molecular Liquids*, Volume 422, 15 March 2025, 126919, <https://doi.org/10.1016/j.molliq.2025.126919>
- Unraveling the Therapeutic Potential of Alzheimer's Drugs: A Comprehensive Review, Anjali Rani, Javed Khan, Lakshika Choudhary, Manas Kumar, Ayushi Jha, Garima Pandey, Bhaskara Nand, *Tetrahedron*, 175, 2025, 134517, <https://doi.org/10.1016/j.tet.2025.134517>
- Investigate the binding of pesticides with the TLR4 receptor protein found in mammals and zebrafish using molecular docking and molecular dynamics simulations, Sandeep Yadav, Mohd. Aslam, Ayushi Prajapat, Iona Massey, Bhaskara Nand, Durgesh Kumar, Kamlesh Kumari, **Garima Pandey**, Chandrabhan Verma, Prashant Singh & Akram AlFantazi, *Scientific Reports*, 14, 24504 (2024). <https://doi.org/10.1038/s41598-024-75527-6> **IF: 3.8**
- Update on Pharmacological Drugs and Macrocyclic Compounds as Corrosion Inhibitors, Anjali Rani, Mohd. Aslam, Bhaskara Nand, **Garima Pandey**, Prashant Singh, *ChemistrySelect*, (2024), 9(43), <https://doi.org/10.1002/slct.202403762> **IF: 2.23**
- Computational Insights into Chromene/pyran Derivatives: Molecular Docking, ADMET Studies, DFT Calculations, and MD Simulations as Promising Candidates for Parkinson's Disease, Anjali Rani, Mohd. Aslam, Javed Khan, **Garima Pandey**, Prashant Singh, R. S. Maharia, Bhaskara Nand, *Chemistry and Biodiversity*, 21(8), (2024) <https://doi.org/10.1002/cbdv.202400920>
- A time and temperature dependent biosynthesis of silver nanoparticles using the extract of *Platycladus orientalis*' fruit, Deepa , Madhur Babu Singh , Gauri Thakur , Anirudh Pratap Singh Raman , Prashant Singh , Pradeep Kumar , Ravinder Singh ,

Garima Pandey , Kamlesh Kumari, **Next Research**, Volume 1, Issue 1, October 2024,
<https://doi.org/10.1016/j.nexres.2024.100005>

- Advances in metallopolymers: Synthesis strategies, catalytic insights, and environmental remediation applications, Mohd Aslam, Anjali Rani, Javed Khan, Ritika Sharma, Bhaskara Nand Pant, Prashant Singh, Vinod Kumar, **Garima Pandey**, Bhawna, *Sustainable Chemistry and Pharmacy*, 2024, 20, <https://doi.org/10.1016/j.scp.2024.101630> **IF : 5.5**
- Exploring triazole-based drugs: Synthesis, application, FDA approvals, and clinical trial updates—A comprehensive review, Javed Khan, Anjali Rani, Mohd Aslam, R.S. Maharia, **Garima Pandey**, Bhaskara Nand, *Tetrahedron*, 2024, 162, <https://doi.org/10.1016/j.tet.2024.134122> **IF : 2.1**
- An Updated Review on Functionalized Graphene as Sensitive Materials in Sensing of Pesticides., Pratap Singh Raman A, Thakur **G, Pandey G**, Kumari K, Singh P. *Chemistry and Biodiversity*. 2024 Apr 5:e202302080. <https://doi.org/10.1002/cbdv.202302080> **IF : 2.27**
- Applications of Biotechnology in Pharmaceutical Product Analysis, Aslam, M., Rani, A., Khan, J., Pant, B.N., **Pandey, G.** (2024). In: Bose, S., Shukla, A.C., Baig, M.R., Banerjee, S. (eds) Concepts in Pharmaceutical Biotechnology and Drug Development. Interdisciplinary Biotechnological Advances. Springer, Singapore. https://doi.org/10.1007/978-981-97-1148-2_4
- Study the solubility of pharmaceutical ingredients and their eutectic mixtures: An in depth Density Functional Theory and Molecular Dynamics Simulations approaches, Mohd. Aslam, **Garima Pandey**, Nidhi Deshwal, Ajay Kumar, Kamlesh Kumari, Indra Bahadur, Prashant Singh, Faruq Mohammad, Ahmed Abdullah Soleiman, , *Journal of Molecular Liquids*, 124070, (2024) <https://doi.org/10.1016/j.molliq.2024.124070> **6.165 IF : 6.165**
- Impact of functional group positioning in the anion of ionic liquids on aqueous solubility: a study through DFT calculations. Mohd. Aslam, Madhur Babu Singh, Prashant Singh, **Garima Pandey**, Ajay Kumar, Sangeeta Singh, Kaniki Tumba, Haritma Chopra, Durgesh Kumar & Kamlesh Kumari, *Ionics* (2023). <https://doi.org/10.1007/s11581-023-05305-3> **IF : 2.4**

- An Understanding for the Synthesis of Metal NPs to Photocatalysis to Toxicity. Mohd Aslam, Abhay Giri Goswami, Prashant Singh, Vinod Kumar, Bhaskara Nand Pant, **Garima Pandey**, Kamlesh Kumari, *Plasmonics* (2023). <https://doi.org/10.1007/s11468-023-02151-x> **IF : 3.3**
- A review on the synthesis and application of naphthoquinone-based drugs, Javed Khan, Anjali Rani, Mohd Aslam, **Garima Pandey**, Bhaskara Nand Pant, *Results in Chemistry*, 2023, 6, 101138 <https://doi.org/10.1016/j.rechem.2023.101138> **IF : 2.5**
- A review on synthesis of FDA-approved antipsychotic drugs, Anjali Rani, Mohd Aslam, **Garima Pandey**, Bhaskara Nand Pant, *Tetrahedron*, 2023, 138, 133430 <https://doi.org/10.1016/j.tet.2023.133430> **IF : 2.1**
- Indium Metal-Mediated Reactions in Water: Diverse Synthesis of Important Organic Compounds, **Garima Pandey**, Bimal Krishna Banik, Monika Kamboj, Sangeeta Bajpai, *Current Organocatalysis*, 2023, 10(2), pp. 80-80. <https://doi.org/10.2174/2213337210666230331115645> **IF : 0.9**
- Microwave-Assisted Synthesis of Biologically Relevant Six-Membered N-Heterocycles, Monika Kamboj, Sangeeta Bajpai, **Garima Pandey**, Monika Yadav and Bimal K. Banik, *Current Microwave Chemistry*, (2023). <https://doi.org/10.2174/0122133356268693231114052121> **IF : 0.9**
- Heterocyclic compounds containing thiazole ring as important material in medicinal chemistry, Vaishali Chugh, **Garima Pandey**, Reeta Rautela, Chandra Mohan, *Materials Today: Proceedings*, Volume 69, Part 2, 2022, pp. 478–481 <https://doi.org/10.1016/j.matpr.2022.09.150>
- Accessing the environmental impact of tellurium metal, **Garima Pandey** and Sangeeta Bajpai *Physical Sciences Reviews*, 8 (12), 2023, 4903-4913. 2022. <https://doi.org/10.1515/psr-2021-0113> **SNIP : 0.49**
- Approaches, challenges, and prospects of life cycle assessment applied in nano bioremediation of contaminated sites, *Rasayan Journal of Chemistry*, 2022, 15(2), pp. 1108– 1125 <https://doi.org/10.31788/rjc.2022.1526904> **SNIP : 0.413**
- Novel dithiocarbamate complexes of 2-Methyl-1, 1-Diiodo-1-Telluracyclopentane [C₄H₇(CH₃)TeI₂]: Synthesis, spectroscopic characterization, antibacterial assay and in silico molecular docking studies, *Research Journal of Chemistry and Environment*, 2021, 25(9), pp. 61–70 **SNIP : 0.216**

- Synthesis, Characterisation and In-silico Studies of Novel Heterocyclic Organotellurium Dithiocarbamates, *Research Journal of Chemistry and Environment*, 25(5), 170-177, 2021, **SNIP : 0.216**
- Prospects of nanotechnology as a tool to mitigate covid-19, **Garima Pandey**, S. Bajpai, S. Tripathi, *Rasayan Journal of Chemistry*, 14(2), 1297-1306, 2021. <http://dx.doi.org/10.31788/> **SNIP :0.413**
- Assessing the nanotechnology on the grounds of costs, benefits, and risks, **Garima Pandey**; Pallavi Jain, *Beni-Suef University Journal of Basic and Applied Sciences*, 2020 9(63)<https://doi.org/10.1186/s43088-020-00085-5> **IF : 2.5**
- Biomass based bio-electro fuel cells based on carbon electrodes: an alternative source of renewable energy, **Garima Pandey**, *SN Applied Sciences*, 1, 408, 2019<https://doi.org/10.1007/s42452-019-0409-4>
- Prospects of Biologically Active Schiff's Base Ligand and Metal Complexes in Drug Discovery **Garima Pandey**, Pallavi Jain, *Advanced Science, Engineering and Medicine*, 11,144-154, 2019. <https://doi.org/10.1166/ asem.2019.2302>
- Challenges and future prospects of agri-nanotechnology for sustainable agriculture in India, **Garima Pandey**, *Environmental Technology & Innovation*, 299-307,11,2018<https://doi.org/10.1016/j.eti.2018.06.012>
- Nanotechnology for achieving green- economy through sustainable energy, **Garima Pandey**, *Rasayan Journal of Chemistry*, June 2018.<https://doi.org/10.31788/rjc.2018.1133031>

BOOK CHAPTERS

- Application of Nanomaterials in Biofuel Production from Agricultural Residues, Anjali Rani, Mohd Aslam, Bhaskara Nand Pant, Prashant Singh, Garima Pandey, (2025), In Emerging Materials for Biofuel Developments, vol 2, CRC Press, <https://doi.org/10.1201/9781003668893-14>
- Prospects and Hurdles in Agricultural Nanotechnology, Rani, A., Aslam, M., Pandey, G. (2025), In: Al-Khayri, J.M., Anju, T., Jain, S.M. (eds) Nanomaterial Green Synthesis. Nanotechnology in Plant Sciences, vol 2. Springer, Cham. https://doi.org/10.1007/978-3-031-84643-4_2

- Challenges and Limitations of Graphene Oxide and Graphyne Biosensors for Cancer Detection, Naina, Kumar Rakesh Ranjan, **Garima Pandey**, Kamlesh Kumari, in Biosensors Based on Graphene, Graphene Oxide and Graphynes for Early Detection of Cancer, (2024) **CRC Press, Taylor and Francis**
- Cancer Detection Utilizing Graphene-Based Materials, Anjali Rani, Mohd Aslam, Javed Khan, **Garima Pandey**, Bhaskara Nand, in Biosensors Based on Graphene, Graphene Oxide and Graphynes for Early Detection of Cancer, (2024) **CRC Press, Taylor and Francis**
- Graphene Oxide and Graphyne Scalability and Manufacturing Challenges, Mohd Aslam, Javed Khan, Vaibhav Kumar Mishra, Ravinder Singh, **Garima Pandey**, Bhaskara Nand in Biosensors Based on Graphene, Graphene Oxide and Graphynes for Early Detection of Cancer, (2024) **CRC Press, Taylor and Francis**
- Ionic liquids in pharmaceuticals and bioanalytics, Chandra Mohan, Sarla Kumari, **Garima Pandey**, Jenifer Robinson, in Green Approaches in Medicinal Chemistry for Sustainable Drug Design Applications (Second Edition), Vol 1 in Advances in Green and Sustainable Chemistry, **Elsevier**, Pages 133-138, (2024) <https://doi.org/10.1016/B978-0-443-16166-7.00007-4>
- One-pot synthesis of biologically active oxazole, isoxazole, and pyranopyrazoles—an overview, Mohd. Aslam, **Garima Pandey**, Bhaskara Nand Pant, ,Editor(s): Bimal Krishna Banik, In Advances in Green and Sustainable Chemistry, Green Approaches in Medicinal Chemistry for Sustainable Drug Design (Second Edition), **Elsevier**, Volume 1, 2024, pp 411-431,
- Applications of Biotechnology in Pharmaceutical Product Analysis, Aslam, M., Rani, A., Khan, J., Pant, B.N., **Pandey, Garima**. (2024) In: Bose, S., Shukla, A.C., Baig, M.R., Banerjee, S. (eds) Concepts in Pharmaceutical Biotechnology and Drug Development . Interdisciplinary Biotechnological Advances. **Springer, Singapore**. https://doi.org/10.1007/978-981-97-1148-2_4
- Bismuth Oxyhalide Photocatalysts: Pioneering Efficiency in Hydrogen Generation, Bhawna, Ritika Sharma, Sanjeev Kumar, Vijay Kumar Vishvakarma, **Garima Pandey**, Vinod Kumar, *ACS Symposium Series*, 2024, 1468, pp. 241–254, <http://dx.doi.org/10.1021/bk-2024-1468.ch009>
- Polyphenols as Antimicrobial (Disinfectant and Pest control) Applications, Vrinda, Garima Narang, **Garima Pandey**, Prashant Singh, Kamlesh Kumari, In Science and

Engineering of Polyphenols, C. Verma (Ed.). **Springer, Singapore**. April 2024, pp 416-435, <https://doi.org/10.1002/9781394203932.ch16>

- Solid and Liquid Waste Management in Urban and Rural Areas: Current Practices and Future Perspectives, Raman, A.P.S., Aslam, M., Singh, P., **Pandey, Garima.**, Jain, P., Kumari, K. (2024), In: Gupta, A., Kumar, R., Kumar, V. (eds) Integrated Waste Management. **Springer, Singapore**. pp 141–157, April 2024, https://doi.org/10.1007/978-981-97-0823-9_7
- Green synthesis of silver nanoparticles for antibacterial properties, Reena, Chandra Mohan, **Garima Pandey**, Green Approaches in Medicinal Chemistry for Sustainable Drug Design (Second Edition) Methods, Volume 2 in Advances Green and Sustainable Chemistry, **Elsevier**, 2024, pp 61-69 <https://doi.org/10.1016/B978-0-443-16164-3.00003-0>
- Recent trends in synthesis and application of nanomaterials for agri-food industries, **Garima Pandey**, Navin Ahlawat, Sangeeta Bajpai, Monika Kamboj, ,Editor(s): Pardeep Singh, Puja Khare, Disha Mishra, Muhammad Bilal, Mika Sillanpää, In Micro and Nano Technologies, Nanotechnology and Nanomaterials in the Agri-Food Industries, **Elsevier**, 2024, pp 253-282, <http://dx.doi.org/10.1016/B978-0-323-99682-2.00005-0>
- Recent Development in the Production and Utilization of Plant Biomass-Based Nanomaterials, Aslam, M., Rani, A., Pant, B.N., Singh, P., **Pandey Garima**. In: Tiwari, S.K., Bystrzejewski, M., Kumar, V. (eds) Biomass-Based Functional Carbon Nanostructures for Supercapacitors. Green Energy and Technology. **Springer, Singapore.**, 2023, pp. 331–368 https://doi.org/10.1007/978-981-99-0996-4_12
- Potentials and frontiers of nanotechnology for phytoremediation, **Pandey Garima**, Singh, P., Pant, B.N., Bajpai, S. in Phytoremediation: Management of Environmental Contaminants, **Springer, Singapore.**, Volume 7, 2023, pp. 365–382 https://doi.org/10.1007/978-3-031-17988-4_17
 - Approaches, Challenges, and Prospects of Nanotechnology for Sustainable Agriculture, **Pandey Garima**, Tripathi, S., Bajpai, S., Kamboj, M. In: Fernandez-Luqueno, F., Patra, J.K. (eds) Agricultural and Environmental Nanotechnology. Interdisciplinary Biotechnological Advances, **Springer**, 2023, pp. 83–103 https://doi.org/10.1007/978-981-19-5454-2_3

- Accessing the environmental impact of tellurium metal, **Garima Pandey** and Sangeeta Bajpai, *ellurium Chemistry*, edited by Bimal Krishna Banik and Sangeeta Bajpai, Berlin, Boston: **De Gruyter**, 2022, pp. 151-162.
<https://doi.org/10.1515/9783110735840-007>
- LCA of Nanomaterials for Bioremediation, **Garima Pandey**, Reeta Chauhan, Ajay S. Yadav, Sangeeta Bajpai, in *In Nanotechnology for Environmental Remediation* (eds S. Thomas, M.S. Thomas and L.A. Pothen). **Wiley-VCH GmbH**, 2022, pp413-431 <https://doi.org/10.1002/9783527834143.ch22>
- Agri-Nanotechnology for Sustainable Agriculture, **Garima Pandey**, (2020) In: Bauddh, K., Kumar, S., Singh, R., Korstad, J. (eds) *Ecological and Practical Applications for Sustainable Agriculture*. **Springer, Singapore**.
https://doi.org/10.1007/978-981-15-3372-3_11

PATENTS

- A system for producing hydrogen by utilizing sunlight and method thereof (Application No. 202111043006) published on 22.09.2021
- Pyrolysis of Plastic Waste Into Fuels (Application No. 202011043038) published on 03.10.2020
- The effectiveness of internet advertising on consumer buying behavior towards mobile phones (Patent No. 2021102370) published on 05.05.2021 (**granted**)
- A METHOD FOR THE DETECTION OF CHROMIUM IONS, (Application No. 202411080393), 22.10.2024

ABSTRACTS IN CONFERENCES

- Investigate the Interaction of hormones with Mpro of CoV using DFT calculations and molecular dynamics simulations in *Recent Advances in Nano Medical Sciences*, (RANMS-2022)
- Prevention technique for automobile exhaust emission, in *5th International Conference on Recent Advances on Material Chemistry*, 2021
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Publisher: CRC Press
ISBN: 9781032613710

- **Title: Engineering Chemistry**

Authors: Dr. Garima Pandey, Dr. Reeta Chauhan, Dr. Niranjana Kumar Mandal, Mohd. Imran Anees

Publisher: Scientific Publishing House

ISBN: 978-93-94002-75-3

- **Title: Sustainable development and environmental issues**

Authors: Dr. Chandra Mohan, Dr. Dayawati, Dr. Prem Lata Meena, Dr. Garima Pandey

Publisher: Academic Guru Publishing House

ISBN: 978-81-19025-04-6

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Publisher: Taylor and Francis

ISBN: 9781041053736

- **Title: Solid Base Catalysis: A New Frontier in Industrial Sustainability**

Editors: Dr. Ravi Tomar, Dr. Vivek Mishra, Dr. Kapil Arya, Dr. Garima Pandey

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ISBN: 979-8898811495

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Editors: Dr. Garima Pandey, Dr. Alok Das

Publisher: Springer Nature

Status – Accepted

- **Title: Artificial Intelligence and In Silico Studies of Small Molecules: Drug Design to Toxicological Investigation**

Editors: Dr. Ravi Tomar, Dr. Garima Pandey, Dr. Sandeep Kumar Singh, Dr. Prashant Singh, Dr. Kamlesh Kumari

Publisher: Bentham Books Publisher

Status: Submitted

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- Administration with coordinated team work
- Effective verbal and written communication
- Target based approach in problem solving
- Leadership and Decision-making Qualities
- Student mentoring