


<b>NAME</b>	Dr Navaneet Chaturvedi		
<b>DESIGNATION</b>	Assistant Professor-II		
<b>EMAIL ID</b>	<a href="mailto:nchaturvedi@amity.edu">nchaturvedi@amity.edu</a>		
<b>CONTACT NUMBER</b>	9451067728		
<b>RESEARCH INTERESTS</b>	Structural Bioinformatics; Computational (Bio)chemistry; Protein Engineering; Molecular Modeling; Molecular Dynamics; Molecular Docking; AI/ML		
<b>EDUCATIONAL QUALIFICATIONS:</b>			
Name of College / University		Degree	Year
University of Allahabad, Prayagraj, India		DPhil (Bioinformatics)	2014
University of Allahabad, Prayagraj, India		MSc (Bioinformatics)	2008
<b>Title of Ph.D. thesis: “<i>In silico</i> Analysis and characterization of metal binding proteins of microbial system with references to heavy metal tolerance”</b>			
<b>EXPERIENCE (in chronological order): Total 08 Years Research &amp; Teaching</b>			
<b>Designation</b>	<b>Type of post held (teaching/ research)</b>	<b>Name of the Institute</b>	<b>Year (From – To)</b>
Assistant Professor	Teaching and Research	AIB, Amity University, Noida, UP, India	Sept-2023 to continue
Senior Scientist	Research	PharmCADD India Pvt Ltd, Hyderabad, India	June-2022 to June-2023
Research Associate	Research	University of Leicester, UK	March-2020 to Oct-2021
Assistant Professor	Teaching and Research	University of Information Science and technology, St Paul the Apostle, Ohrid, North Macedonia	Apr-2019 to Feb-2020
Research Associate	Research	School of Biochemical Engineering, IIT(BHU), Varanasi, India	Feb-2018 to Feb-2019
Postdoc	Research	Tel Aviv University, Israel	Dec-2013 to Oct-2017
<b>No. of Ph.D. students supervised</b>	nil		
<b>No. of Post-Doc</b>	nil		
<b>No. of M.Tech. Students supervised:</b>	03		
<b>No. of B.Tech. Students supervised:</b>	15		
<b>PUBLICATIONS (mention total no. 34)</b>	<p><i>Details: (Impact factor: 2023)</i></p> <ol style="list-style-type: none"> <li>Shahid, R., Shahid, S., Gund, J., &amp; <b>Chaturvedi, N.</b> (2024). AI-based advances in crop disease detection and health improvement. <i>Methods in Microbiology</i>. Academic Press (<b>Accepted</b>). (IF: 3.0)</li> <li>Dharmani, K., Sinha, A., &amp; <b>Chaturvedi, N.</b> (2024). AI-driven microbial medicine development. In A. Srivastava &amp; V. Mishra (Eds.), <i>Methods in Microbiology</i> (Vol. 55, pp. 101-124). Academic Press. <a href="https://doi.org/10.1016/bs.mim.2024.05.008">https://doi.org/10.1016/bs.mim.2024.05.008</a> (IF: 3.0)</li> </ol>		

3. Mishra, V., Mishra, S. K., Srivastava, A., Dubey, C. K., Dharmani, K., & **Chaturvedi, N.** (2024). Leveraging artificial intelligence (AI) and machine learning (ML) for enhanced drug discovery and development from microbes. In A. Srivastava & V. Mishra (Eds.), *Methods in Microbiology* (Vol. 55, pp. 125-140). Academic Press. <https://doi.org/10.1016/bs.mim.2024.05.005>. (IF: 3.0)
4. **Chaturvedi, N.**, Yadav, M. K., & Sharma, M. (2024). Applications of artificial intelligence and machine learning in microbial diagnostics and identification. In A. Srivastava & V. Mishra (Eds.), *Methods in Microbiology* (Vol. 55, pp. 213-230). Academic Press. <https://doi.org/10.1016/bs.mim.2024.05.013> (IF: 3.0)
5. Karthic, A.; Kesarwani, V.; Singh, R.K.; Yadav, P.K.; **Chaturvedi, N.**; Chauhan, P.; Yadav, B.S.; Kushwaha, S.K. (2022) Computational study reveals monomethylated triazolopyrimidine as a novel inhibitor of SARS-CoV-2 RNA-dependent RNA polymerase (RdRp), *Molecule*, 27, 801 <https://doi.org/10.3390/molecules27030801>. (IF: 4.2)
6. D K Chaodhary, **N Chaturvedi**, A Singh, A Mishra (2021) Catechin isolated from faba beans (*Vicia faba* L.): insights from oxidative stress and hypoglycemic effect in yeast cells through confocal microscopy, flow cytometry, and in silico strategy, *J. of Biomolecular Structure and Dynamics* <https://doi.org/10.1080/07391102.2021.1945953>. (IF: 2.7)
7. Mutaib MM, **Chaturvedi N.**, et al (2021) Biocomputational Prediction Approach Targeting FimH by Natural SGLT2 Inhibitors: A Possible Way to Overcome the Uropathogenic Effect of SGLT2 Inhibitor Drugs, *Molecules*, 26(3), 582, <https://doi.org/10.3390/molecules26030582> (Equally contributed with first author). (IF: 4.2)
8. V. K. Soni, A. Mehta, Y. K Ratre, A. K. Tiwari, A. Amit, R. P. Singh, S. C. Sonkar, **N. Chaturvedi**, D. Shukla, N. K. Viswakarma (2020) Curcumin, a traditional spice component, can hold the promise against COVID-19?, *European Journal of Pharmacology*, 886, 173551 <https://doi.org/10.1016/j.ejphar.2020.173551>. (IF: 4.2)
9. S Singh, **N Chaturvedi**, G Rai (2020) De novo modeling and structural characterization of IL9-IL9 receptor complex: A potential drug target for hematopoietic stem cell therapy, *Network Modeling Analysis in Health Informatics and Bioinformatics*. doi.org/10.1007/s13721-020-00236-9. (IF: 2.0)
10. **N Chaturvedi**, E Nachliel, M. Gutman (2020) Characterization of Pre-Dissociative Structures of the E6AP Trimer by All-atom Unbiased Molecular Dynamics, *Israel Journal of Chemistry*, doi.org/10.1002/ijch.202000016. (IF: 2.3)
11. D K Chaodhary, **N Chaturvedi**, A Singh, A Mishra (2020) Investigation of hypoglycaemic effects, oxidative stress potential and xanthine-oxidase activity of polyphenols (gallic-acid, catechin) derived from faba bean on 3 T3-L1 Cell line: insights through molecular docking and simulation study, *Toxicology Research*,doi.org/10.1093/toxres/tfaa025. (IF: 2.2)
12. **N Chaturvedi\***, K Ahmad, BS Yadav, EJ Lee, SC Sonkar, N Marina, I Choi (2020), Understanding Calcium-Dependent Conformational Changes in S100A1 Protein: A Combination of Molecular Dynamics and Gene Expression Study in Skeletal Muscle, *Cells* 9 (1), 181. (IF: 5.1)
13. BS Yadav, **N Chaturvedi**, N Marina (2019) Recent Advances in System Based Study for Anti-Malarial Drug Development Process, *Current pharmaceutical design* 25 (31), 3367-3377. (IF: 2.6)
14. D K Choudhary, **N Chaturvedi**, A Singh, A Mishra (2019), Characterization, inhibitory activity and mechanism of polyphenols from faba bean (gallic-acid and catechin) on  $\alpha$ -glucosidase: insights from molecular docking and simulation study, *Preparative Biochemistry & Biotechnology* 50 (2), 123-132. (IF: 2.0)
15. Khurshid Ahmad, Vishal M. Balaramnavar, **Chaturvedi N.**, Saif Khan, Shafiul Haque, Yong-Ho Lee, Inho Choi (2019), Targeting Caspase 8: Using structural and ligand-based approaches to identify potential leads

for the treatment of multi-neurodegenerative diseases, *Molecules* 24 (9), 1827. (IF: 4.2)

16. **Chaturvedi N\***, Mishra Abha, Rawat Varun (2019), Synthesis and Characterization of Oxygen Depleted Tert-Amine Calix[4]Arene Ligands and Study the Effect on Sigma Non-Opioid Intracellular Protein Receptor, *Struct Chem* 30, 1899–1910 DOI: 10.1007/s11224-019-01324-x. (IF: 2.1)
17. Yadav BS, **Chaturvedi N**, Yadav P, Marina N, Ganash M, Barreto GE, Ashraf GM, Baig MH(2019) Protein modelling, molecular network and molecular dynamics study of newly sequenced interleukin-18 (IL-18) gene in *Mus musculus*, *Journal of cellular physiology* 234 (8), 14285-14295 (Equally contributed with first author). (IF: 4.5)
18. **Chaturvedi N\***, Brijesh Singh Yadav , Paras Nath Pandey, Vijay Tripathi (2017) The effect of the  $\beta$ -glucan and its Potential Analog on the Structure of Dectin-1 Receptor, *Journal of Molecular Graphics and Modelling*, Vol74 315–325. (IF: 2.7)
19. Yadav PK, Yadav BS, Panigrahi PN, Tripathi V, **Chaturvedi N**, Kataria M., (2017) Molecular characterization and insilico analysis of the tissue inhibitor of metalloproteinases-3 (TIMP-3) gene of canine mammary tumor, *Comb Chem High*, Vol-20 1-12. (IF: 1.6)
20. Harikrishna Pillai, Yadav BS, **Chaturvedi N** et al. (2017), Protein modelling and molecular dynamics simulation of cloned Regucalcin (RGN) gene from *Bubalus bubalis*, *Comb Chem High*. Vol- 20, 186-192. (IF: 1.6)
21. Amber-Vitos O, **Chaturvedi N**, Nachliel E, Gutman M, Tsfadia Y. (2016), The effect of regulating molecules on the structure of the PPAR-RXR complex, *Biochim Biophys Acta*. 2016 Nov; 1861(11):1852-1863. (IF: 3.9)
22. **Chaturvedi N\***, Micheal Kaszik, Stephen Forsythe, Paras Nath Pandey (2015), Protein Sequences Insight into Heavy Metal Tolerance in *Cronobacter sakazakii* BAA-894 encoded by Plasmid pESA3, *Archives of Microbiology*, 197, 11411149. (IF: 2.3)
23. **Chaturvedi N\*** Paras Nath Pandey (2014), Phylogenetic analysis of Gammaproteobacterial arsenate reductase proteins specific to Enterobacteriaceae family, signifying arsenic toxicity suggests importance of Enterobacter species in arsenic toxicity, *Interdiscip Sci.*, 6(1): 57-62. (IF: 3.9)
24. **Chaturvedi N\***, Vinay Kumar Singh, Paras Nath Pandey (2013), Computational identification and analysis of arsenate reductase protein in *Cronobacter sakazakii* ATCC BAA-894 suggests potential microorganism for reducing arsenate, *J Struct Funct Genomics.*, 14(2):37-45.
25. **Chaturvedi N\*** et al. (2011) Hidden Markov Model for the Prediction of Transmembrane proteins using MATLAB, *Bioinformation* 7(8): 418-421.
26. Raksha Singh, **Chaturvedi N** and Vinay Kumar Singh (2012), *In-silico* study of novel herbal compounds (Baicalin, Curcumin and Dronabinol) as MAO inhibitors for Parkinson's disease treatment, *International journal of Life science & Pharma Research*, 2(3) 81-98.
27. A. Rahman, **Chaturvedi N** et al (2013), Computational protein modeling and Analysis of UV-stress protein in *Synechocystis sp.* PCC 6803, *Bioinformation*, 9(12): 639-644.
28. **Chaturvedi N\*** and Pandey PN (2011) *In Silico* Genome Analysis of Gammaproteobacteria with Reference to Metal Binding Sites, *Proceedings of International Acad. of Physical Sciences*, vol. 15, (special issue) pp. 501-50
29. S C Sonkar, A Mishra, **N Chaturvedi\*** (2019), A Road-map to Tackle the Challenges of Antimicrobial Resistance: Act Today for Better Tomorrow, *EC Microbiology* 15 (10), 1154-1156.
30. **Chaturvedi N\*** and Pandey PN (2020) Molecular Dynamical Investigation of a YodA Protein Signifies Zinc IonResidues Interactions, *International Acad. of Physical Sciences* 24(1) 105-114.
31. Soni VK, Mehta A, Sharma K, Ratre YK, Dwivedi M, **Chaturvedi N**, et

	<p>al. (2022) Immunity boosters in COVID-19: Reality or myth? <i>Med India</i>, 1:3. doi:10.25259/MEDINDIA_1_2021. (Chapter)</p> <p>32. Mehta A.....<b>Chaturvedi N.</b> (2021) Short-Chain Fatty Acids as Therapeutic Agents in Colon Malignancies. In: Nagaraju G.P., Shukla D., Vishvakarma N.K. (eds) <i>Colon Cancer Diagnosis and Therapy</i>. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-63369-1_10">https://doi.org/10.1007/978-3-030-63369-1_10</a>. (Chapter).</p> <p>33. Soni V.K. ....<b>Navaneet Chaturvedi</b> (2022) Antineoplastic Effects of Curcumin Against Colorectal Cancer: Application and Mechanisms. In: Shukla D., Vishvakarma N.K., Nagaraju G.P. (eds) <i>Colon Cancer Diagnosis and Therapy Vol. 3</i>. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-72702-4_18">https://doi.org/10.1007/978-3-030-72702-4_18</a>. (Chapter).</p> <p>34. Vivek Kumar Soni, ....., <b>Navaneet Chaturvedi</b>, Dhananjay Shukla and Naveen Kumar Vishvakarma (2023) Mushrooms Against Malignancies: from Chemosensitization to Immunopotentialiation, Mushrooms: A Wealth of Nutraceuticals and An Agent of Bioremediation, 9-34 (26). Springer, DOI: 10.2174/9789815080568123010005 (Chapter).</p>
<p><b>PATENTS</b> (total no. 01)</p>	<p>TEMP/E-1/76630/2024-DEL <b>Title:</b> ‘A Bioreactor Provided with a Method for Bioremediation of Lead (Pb) Contamination in Water Using <i>Escherichia Fergusonii</i> Strain U1’</p>
<p><b>RESEARCH PROJECTS</b> Completed: (total no.) Ongoing: (total no.)</p>	<p><b>Details:</b></p>
<p><b>AWARDS &amp; HONOURS/ DISTINCTIONS</b></p>	<p><b>Details:</b></p> <ol style="list-style-type: none"> <li>1) <b>Project JRF:</b> Department of Biotechnology (DBT), New Delhi, India (2009)</li> <li>2) <b>Young Scientist Award:</b> International Academy of Physical Sciences at SVNIT, Surat, <b>India</b> (2011)</li> <li>3) <b>3<sup>rd</sup> Best Poster Presentation:</b> Tel Aviv University, Israel (2016)</li> <li>4) <b>PBC fellowship:</b> Planning and budgeting committee, Israel (2014)</li> <li>5) <b>MFA Fellowship:</b> Ministry of Foreign Affairs, Israel (2013)</li> <li>6) <b>Award of Appreciation for Online Training on Advanced Bioinformatics:</b> Bansal Institute of Engineering and Technology, Lucknow, India (2020)</li> </ol>
<p><b>MEMBERSHIP</b> with Professional/ Academic bodies</p>	<p><b>Details:</b></p> <ol style="list-style-type: none"> <li>1) Life Member: BioClues organization, India (Bio-LM-2020-061)</li> <li>2) Life Member: Indian Biophysical Society (1278)</li> <li>3) Life Member: International Academy of Physical Sciences (N10109)</li> </ol>