

# Curriculum Vitae

## Shivam Mishra


Address: 01/4957

Gangotri Nagar

Mahewa, Prayagraj

U.P. India, 211008

DOB: 01.11.1993

Mobile: +91- 9125913300 , +91-9450055542

E-Mail: [symbioinfo@gmail.com](mailto:symbioinfo@gmail.com) 

---

### PROFESSIONAL SUMMARY

- Assistant Professor (contract basis), Department of Zoology [Bioinformatics & Zoology (UG & PG)], S. S. Khanna Girls' Degree College, University of Allahabad, Allahabad (July 2021 – Continue).
  - Project (PI) on In-silico Investigation of phytochemicals from Indian Medicinal Plant against Breast Cancer”, funded by IQAC, S. S. Khanna Girls' Degree College, amount; 65000 inr, for 2 years from 2023 to 2025.
  - Ability to conduct research independently and collaboratively within a team.
  - Proficient in organizing seminars, workshops, and other scientific events
  - Ability to quickly learn and adapt to critical concepts and tools.
  - Excellent communication and presentation skills
- 

### EDUCATION

**Ph.D. in Bioinformatics,** (Jan 2022-Oct 2025)

[Singhania University, Jhunjhunu Rajasthan, India & Indian Institute of Information](#)

[Technology Allahabad, Allahabad, India](#)

**Thesis Title:** In silico screening of phytochemicals from Indian medicinal plant (*Punica granatum* & *Saraca asoca*) for potential pharmacological activities and their experimental validation

**M.Sc. Zoology** 2019-2021

**B.Ed. Biological Sciences** 2017-2019

**M.Sc. Bioinformatics** 2014-2016

**B.Sc. Biology** 2011-2014

---

## SKILLS

- Animal handling (Albino Mice)
  - Antibacterial Assay
  - Nanoparticle synthesis
  - Antioxidant assay
  - Skilled in utilizing bioinformatics and drug discovery servers
  - DFT
  - Computer-Aided Drug Design
  - Structure & Ligand-based drug design
  - QSAR
  - Pharmacophore modelling
  - ADME/Toxicity & PK data analysis
  - Molecular Docking
  - Python (Beginner)
  - Molecular Dynamics Simulations
  - Virtual screening of compounds
  - Protein sequence analysis
  - Homology modelling
  - Windows & Linux
- 

## SOFTWARES

- Schrodinger suite, Autodock, VINA, Avogadro, ACD labs, Chems sketch, MOPAC, ORCA, GROMACS, Discovery Studio, UCSF CHIMERA, PyMol, AlphaFold 2 and many more.
- 

## PUBLICATIONS

### Articles

- **Mishra Shivam\***, Kumar Prabhat, Mishra Nidhi. (2025, June). Computational screening of *Saraca asoca* phytochemicals against thymidine kinase and type II protease of herpes virus. International Journal of Emerging Technologies and Innovative Research, 12(6), i798–i807. <https://www.jetir.org>, (Peer Reviewed)
- **Mishra S\***, Modanwal S, Kumar P, Mishra A, Mishra N. (2025, January) “Computational Evaluation of *Punica granatum* Leaf Phytochemicals against Multi-

Drug-Resistant E. coli: Molecular Docking, ADMET, MD Simulation, and DFT Studies”. Current Computer Aided Drug Design. (CCADD) Published online January 9, 2025. doi:10.2174/0115734099343126241105102839 (**SCI, SCOPUS, IF 1.6**)

- **Shivam Mishra\*** (2024), “Exploring the Efficacy of Probiotics: A Comprehensive Review of Current Evidence and Future Directions”, Eurasian Journal of Medical Advances, DOI: 10.14744/ejma.2023.06078., (**Peer Reviewed**).
- **Mishra, S\***, Malviya S., (2023) “In Silico Investigation of Phytochemicals Against Typhoid: A Review”. Indian Journal of Pharmaceutical and Biological Research, Vol. 11, no. 01, Apr. 2023, doi:10.30750/ijpbr.11.1.04. (**Peer Reviewed**).
- Shruti Mishra, Prashant Ankur Jain, Shamoon Ahmad, **Shivam Mishra**. (2020), Bioinformatics approach for COVID 19 (Corona virus) disease prevention treatment and drug validation, Eurasian Journal of Medicine and Oncology, Pages: 234-238, 2020. DOI: 10.14744/ejmo.2020.97358 (**ESCI, SCOPUS, IF:0.8**)

#### **Book Chapter**

- Shivam Mishra\*, Chapter 19- Profiling Natural Compounds Through Omics Technologies, Book: ADVANCING SCIENCES AND INNOVATION IN HEALTHCARE RESEARCH: HEALTH HORIZON, Elsevier (August 2025) ISBN: 978-0-443-33351-4.
  - Shivam Mishra, Electromagnetic Radiation: The Powerful Tool in Medical Diagnosis and Treatment, Electromagnetic Radiation: Importance and Application, LAMBERT Academic Publishing, ISBN: 978-620-7-45539-3, 2023.
- 

## **COMMUNICATED**

### **Articles**

- Pratibha Mishra, **Shivam Mishra**, Saurabh Shrivastav, Saima Sohrab, Sanjay Kumar Mishra\*, Unveiling the CDK4 inhibitory potential of *Hyptis suaveolens* and *Hyptis capitata*: A combined HR LC-MS/MS, Cytotoxicity and In-Silico approach, Journal of Applied Research on Medicinal and Aromatic Plants; (Peer Reviewed).
- Pratibha Mishra, Marium, **Shivam Mishra**, Sanjay Kumar Mishra\*, In-vitro antidermatophytes activity and molecular docking analysis of *Hyptis capitata* against lanosterol 14a-demethylase (5TZ1), Phytomedicine, (Peer Reviewed).
- **Shivam Mishra**, Shristi Modanwal, Prabhat Kumar, Shraddha Singh, Rubina Lawrence, Nidhi Mishra, In Vitro and Computational Insights into the Antibacterial

Properties of *Punica granatum* Leaf Extract Against *Clostridium perfringens*, 3Biotech, July/2025, (Peer Reviewed).

- Ekhlakh Veg; Azam Raza; Smita Rai; Pratibha Bansal; Swati Sharma; Nidhi Mishra; Riya Gupta; **Shivam Mishra**; Seema Joshi; Abdul Rahman Khan; Tahmeena Khan, "*Facile synthesis of ZnO and  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles mediated by Livistona chinensis leaf extract and their comparative evaluation of Biological, Environmental and Computational Studies*", Environmental Sustainability (Springer), May 2025 (Peer Reviewed). (Under review)
- Nand Lal Verma, Mohit Kumar, Shilendra Kumar, **Shivam Mishra**, Ram Sunil Kumar Lalji; Hari kant, Gautam Jaiswar, Nisha Rathor\*, *Synthesis, spectroscopic investigation, Density functional theory, electronic state, docking and simulation studies of novel ethyl 1-((2-chlorothiazol-5-yl)methyl)-1H-1,2,3-triazole-4-carboxylate: An antibacterial agent*, Journal of Molecular Structure (Peer Reviewed) (Under review)
- Ranjana, **Shivam Mishra**, Rahul Kanaoujiya\*, "*In silico molecular modeling and molecular docking study of N, N- Bis(glycyl) amines as anticancer drugs*", Discovery Molecules (Peer Reviewed) (Accepted)
- Ranjana, Shivam Mishra, "*Computational Insights into Pyridinone Derivatives as HIV-1 NNRT Inhibitors: A QSAR, DFT, Molecular Docking, ADMET, and MD Simulation Studies*" Doklady Biological Sciences (Peer Reviewed) (Under review)

#### **Book Chapter**

- **Shivam Mishra\***, Prabhat Kumar, Chapter 9- Drugs Toxicity using Computational Tools, Book: ARTIFICIAL INTELLIGENCE AND IN SILICO STUDIES OF SMALL MOLECULES: DRUG DESIGN TO TOXICOLOGICAL INVESTIGATION, Bentham Sciences.
  - Shailendra Kumar Singh, Krishnan Sriram, Ankit Dwivedi, Md. Akhlaqur Rahman, **Shivam Mishra**, Rudra Prakash Ojha\*, ADVANCES IN ALGAL BIOTHERAPEUTICS THROUGH PROTEIN ENGINEERING: INNOVATION, APPLICATION, AND FUTURE DIRECTION, CRC Press, Taylor & Fransis.
  - Shagun Varshney, Shristi Modanwal, **Shivam Mishra**, Hitesh Yadav\*, AI in Healthcare Transformations: Mathematical Foundations, Real-World Applications, and Emerging Challenges; Bentham Sciences,
-

## PRESENTATION IN NATIONAL AND INTERNATIONAL SEMINAR/ CONFERENCES

### *Poster Presented*

- **Shivam Mishra**, Prabhat Kumar, Nidhi Mishra, “*Comprehensive Analysis of Punica granatum Leaf Extracts: Phytochemical Profiling and Computational Assessment Against Clostridium perfringens*” Advancements in Diagnostics Technologies: Global Healthcare Monitoring Organized by Department of Biotechnology, MNNIT Allahabad. 15<sup>th</sup> – 17<sup>th</sup> Nov 2024, ISBN:978-93-89947-40-3.
- **Shivam Mishra**, Prabhat Kumar, Nidhi Mishra, “*A Computational Studies of Phytochemicals from Punica granatum leaves against E. coli*” 2<sup>nd</sup> National Conference on Natural Product/AYUSH System of Medicine, Organized by EPL, Department of Pharmacology, PGIMER Chandigarh, RCFC (NR-1) of National Medicinal Plant Board Ministry of AYUSH, GoI. On 19<sup>th</sup> -21<sup>st</sup> April, 2024.

### *Oral presented*

- **Shivam Mishra**, Prabhat Kumar, “*In silico evaluation of phytochemicals from Sarasa asoka against Herpes Virus*”.in international conference on “Indiscriminate Anthropogenic Impact: A trans-Disciplinary Approach to Environmental and Social Sustainability” Organized by Environment and Society (6<sup>th</sup> ICES),.
  - **Shivam Mishra**, Mubusira Fatima, Shaima Afaf, “*Exploring the Antiviral Potential of Calotropis gigantea against Monkeypox: An Insilco approach rooted in traditional Medicine*”, ICSSR Sponsored, International Seminar on IKS & Global Education organized by S. S. Khanna Girls’ Degree College, Prayagraj on 23<sup>rd</sup> and 24<sup>th</sup> Nov/2024.
  - **Shivam Mishra**, “*Kumbh Mela: Tradition and the rise of spiritual tourism*” in Two days National seminar on Kumbh Parv Parampara: Teerthraj Prayag ki Amulya Virasat under the ICSSR Sanctioned Research Program 12-13, December, 2024
  - **Shivam Mishra**, “*In Silico Investigation of Phytochemicals from Indian Medicinal Plant Against Typhoid*”.in national seminar on “Science in Times to Come” Organized by S.S. Khanna Girls’ Degree College, Prayagraj, under, SCS, DBT, Govt. of India.
- 

## WORKSHOPS & FDP

- **Workshop** on From Ideas to Assets: IPR Strategies for Success” held at IIIT Allahabad on 24<sup>th</sup> February 2024.

- **FDP** Organized by AICTE Training and Learning (ATAL) Academy, from 2022-10-10 to 2022-10-21 at Indian Institute of Information Technology, Allahabad.
  - **FDP** on “Evolution from Offline to Online Teaching” (Duration of 5 days Organized by Satish Pradhan Dnyanasadhana College, Thane, Maharashtra.
  - **Workshop** on “Beyond the classroom: Cultivating Health and Mental Wellness for all” organized by Non-Communicable Diseases (NCD) cell, CMO Office, Prayagraj, in Association with S. S. Khanna Girls’ Degree College, Prayagraj on 17 Sept/2024.
  - **Workshops on** “Genomics for Crop Improvement” (Duration of 7 days at MNNIT Allahabad).
  - **Online workshop on** “Next Generation Sequencing Certification” conducted by Biotechnika (Duration of 14 days).
  - **Online Workshop on** “Molecular Biology Techniques” conducted by Biotechnika (Duration of 20 days).
- 

#### **PATENT PUBLISHED IN IP INDIA IPR**

- A patent on “MACHINE LEARNING-BASED ADVANCED IMAGE PROCESSING SYSTEM FOR EARLY DETECTION AND CLASSIFICATION OF BREAST CANCER” published in the Indian Patent office under IPR Act with reference number “202541036338”.
  - A patent on “DEVELOPMENT OF AN AI-BASED CLINICAL DECISION SUPPORT SYSTEM FOR AYURVEDIC DRUG DOSAGE RECOMMENDATIONS” published in the Indian Patent office under IPR Act with reference number “202521018486A”.
- 

#### **PROFESSIONAL MEMBERSHIP**

- Indian Science Congress Association (**ISCA**) (ID: L37799).
  - American Society for Microbiology (**ASM**) (ID: 200332654I)
-

## References

**Dr. Nidhi Mishra**

Associate Professor  
Department of Applied Sciences  
**IIIT-Allahabad**  
E-Mail: [nidhimishra@iiita.ac.in](mailto:nidhimishra@iiita.ac.in)  
Mob: +919450900033

**Dr. Pramod Katara**

Associate Professor  
Centre of Bioinformatics,  
**University of Allahabad**  
E-Mail: [pmkatara@gmail.com](mailto:pmkatara@gmail.com)  
Mob: +919413094705

**Dr. Anup Som**

Associate Professor  
Centre of Bioinformatics,  
**University of Allahabad**  
E-Mail: [som.anup@gmail.com](mailto:som.anup@gmail.com)  
Mob: +919838115336