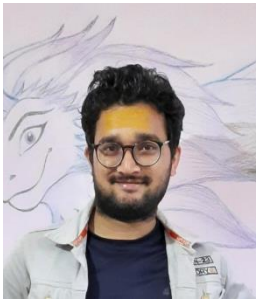
Curriculum Vitae



Patil Shivprasad Suresh

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Researchgate: https://www.researchgate.net/profile/Shivprasad-Patil-5
LinkedIn: https://www.linkedin.com/in/shivprasad-patil-944452166/

Publications: (Citations as on 19-04-2022: **52;** *h*-index**: 4;** *i*10-index**: 2;** Total Impact: **38.531)**

Research Articles: **8 (**6 in first authorship**)**; Book Chapter: **05**

Educational Qualifications

Doctor of Philosophy in *Biological Science* **(2018-2022)**
CSIR-*Institute of Himalayan Bioresource Technology*, Palampur
Topic: **"**Phytochemical and Pharmacological Investigation of *Trillium govanianum* Wall. ex D.Don for Steroidal Saponins"
Supervisor: Dr. Upendra Sharma

M.Sc. (*Biochemistry*) Institute of Science**,** *Banaras Hindu University* (2016)
CSIR-NET- December 2015; CSIR-NET-JRF- June 2016

B.Sc. (*Biochemistry*) at Dr P.R Ghoghre Science College, Dhule, *North Maharashtra University*, Jalgaon (2014)

Area of Interest/Expertise

- The extraction and isolation of natural products from biomass using organic and deep eutectic solvents.
- Chemical characterization and structure elucidation of natural products.
- Bioassay-guided fractionation and isolation of biomolecules.
- Investigation of therapeutical possibilities of biomolecules using *in silico, in vitro,* and *in vivo,* methodologies.

Work Experience

● **Researcher at IIT-Indore** (2017-2018)
Topic: Protein-RNA interaction for target identification
Work: Microbial expression and isolation of hnRNPH1 by FPLC (AKTA) for crystallography; gel electrophoresis, *in vitro* RNA synthesis, Western blotting, PCR, and ELISA.

● **Assistance Professor (**2016-2017), at Dr P.R Ghoghre Science College, Dhule.
Teaching: Biochemistry, Cell Biology, Molecular Biology, Plant Biochemistry Immunology, and Metabolism.
Practical: Clinical Biochemistry, Enzymology, and Analytical Biochemistry

Skills

- Isolation and purifications of natural products.
- NMR and LC-MS/MS based-structure elucidation of small molecules.
- Natural Deep Eutectic Solvents-based extraction and protocol optimization for natural products from biomass.
- Recombinant expression, isolation and purification of proteins.
- Microbiology and molecular biology techniques.
- Enzymology
- Animal cell culture and animals handling.
- Schrodinger based molecular docking and molecular dynamic simulation.

Conferences and Workshops

- New Insights of Microbial Biotechnology, NIMB 2013. *SSVPS College Dhule*.
- 26th National Congress of Parasitology 2016, *BHU* Varanasi.
- Syllabus Restructuring Workshop of T.Y.B.Sc, 2017. *R.C.Patel College*, Shirpur.
- 6th biennial international conference on DDNPTM-2018, *NIPER*-Mohali. (*Oral presentation*)
- AcSIR Gyantarang, 2020 *CSIR-NEIST*, Jorhat, Assam. (*Poster presentation*)
- CARBOXXXV, *Forest Research Institute*, Dehradun, 2021 (*Oral presentation*)

Scientific Publications

Research articles

1. Prithvi Pal Singh, **Patil Shivprasad Suresh**, Prateek Singh Bora, Vinod Bhatt, and Upendra Sharma. Govanoside B, a new steroidal saponin from rhizomes of *Trillium govanianum*. *Natural Product Research* (2020) 1-9 *(equal contribution)* (**IF: 2.862**)
2. Prithvi Pal Singh, Prateek Singh Bora, **Patil Shivprasad Suresh,** Vinod Bhatt, and Upendra Sharma. Qualitative and quantitative determination of steroidal saponins in *Trillium govanianum* by UHPLC-QTOF-MS/MS and UHPLC-ELSD. *Phytochemical Analysis* (2020) **31**(6):861-873 *(equal contribution)* (**IF: 3.373**)
3. Shudh Kirti Dolma¸ **Patil Shivprasad Suresh**¸ Prithvi Pal Singh¸ Upendra Sharma¸ and S.G. Eswara Reddy. Insecticidal activity of extract, fractions and pure steroidal saponins of *Trillium govanianum* Wall. ex D. Don for the control of diamondback moth (*Plutella xylostella* L.) and aphid (*Aphis craccivora* Koch). *Pest Management Science* (2020) **77**(2):956-962. (**IF: 4.845**)
4. **Patil Shivprasad Suresh,** Prithvi Pal Singh, Yogendra Padwad, and Upendra Sharma. Steroidal saponins from *Trillium govanianum* as *α*-amylase, *α*-glucosidase, and dipeptidyl peptidase IV inhibitory agents. *Journal of Pharmacy and Pharmacology* (2021) **73**(4):487-495. (**IF: 3.765**)
5. **Patil Shivprasad Suresh**, Prithvi Pal Singh, Anamika Sharma, Yogendra Padwad, and Upendra Sharma. Steroidal saponins of *Trillium govanianum*: Quality control, pharmacokinetic analysis, and anti-inflammatory activity. *Biocatalysis and Agricultural Biotechnology* (2021) **35**:102071. (**IF: 3.218**)
6. Vikram Patial, Swati Katoch¸ Jyoti Chhimwal¸ Prithvi Pal Singh¸ **Patil Shivprasad Suresh**¸ and Yogendra Padwad. *Tinospora cordifolia* activates PPARγ pathway and mitigates glomerular and tubular cell injury in diabetic kidney disease. *Phytomedicine* (2021) 153663. (**IF: 5.340**)
7. **Patil Shivprasad Suresh,** Gopal Krishnan, and Upendra Sharma. Molecular docking and dynamic simulation approach to decipher steroidal sapogenins from genus *Trillium* derived agonists for glucocorticoid receptor**.** *Journal of Biomolecular Structure and Dynamics* (2021). (**IF: 3.392**)
8. **Patil Shivprasad Suresh**, Prithvi Pal Singh, Anmol, Smita Kapoor, Yogendra Padwad, and Upendra Sharma. Lactic acid-based deep eutectic solvents: An efficient green media for the selective extraction of steroidal saponins from *Trillium govanianum*. *Separation and Purification Technology* (2022) 121105. (**IF: 7.312**)

9. Prithvi Pal Singh, **Patil Shivprasad Suresh**, Anmol, and Upendra Sharma. New steroidal saponins from *Trillium govanianum*: Gram scale isolation and acetylcholinesterase inhibitory activity evaluation. *ChemRxiv*, (2022). Submitted to *Phytochemistry*.
10. **Patil Shivprasad Suresh,** Surekha Kumari, and Upendra Sharma. *In silico* validation of the ethnopharmacological relevance of phytomolecules from *Cissampelos pareira* L. as anti-malarial agents *Natural Products and Bioprospecting* (2022) (*Under publication processing committee-IHBT*).

Reviews

11. Surekha Kumari, Anmol, Vinod Bhatt, **Patil Shivprasad Suresh,** and Upendra Sharma *Cissampelos pareira* Linn: A review of its traditional uses, phytochemistry, and pharmacology *Journal of Ethnopharmacology* (2021) **274**:113850. (**IF: 4.360**)
12. **Patil Shivprasad Suresh**, Rohit Sharma, Upendra Sharma, and Yogendra Padwad. AMPK-TET2 signaling pathway and their natural activators. *Preprint* (2022). Submitted to Trends In Cancer.
13. **Patil Shivprasad Suresh**, Surekha Kumari, Dinkar Sahal, and Upendra Sharma. Innate functions of natural products as a promising path for identification of novel therapeutics. *Drug Discovery Today* (2022). (*Communicated*).

Book Chapters

14. **Patil Shivprasad Suresh,** Vinod Bhatt, Singh, Prithvi Pal, and Upendra Sharma. Steroidal Sapogenins from Genus *Trillium*: Chemistry, Synthesis, and Opportunities in Neuro-active Steroids Designing. *Studies in Natural Product Chemistry* (Elsevier), (2021) **68**:67-95.
15. Prateek Singh Bora, **Patil Shivprasad Suresh**, Surekha Kumari, Anmol, Shivani Puri¸ and Upendra Sharma. Integrated Approach for the Quality Assurance of Commercially Important Himalayan Medicinal Plants. *Medicinal Plants: Sustainable Development and Biodiversity* (Springer, Switzerland) (2021) **28**: 721-768.
16. **Patil Shivprasad Suresh,** Shiv Shankar Gupta, Anmol, and Upendra Sharma. Insight of Coronaviruses and Natural Products-based Approach for COVID-19 Treatment. *Studies in Natural Product Chemistry* (Elsevier), (2022)
17. **Patil Shivprasad Suresh,** Anmol, and Upendra Sharma. Role of supermolecules in anti-inflammatory and analgesic drugs. *Pharmaceutical Applications of Supramolecule* (Springer, Nature). (2022) (*Accepted*).
18. Anamika Sharma, **Patil Shivprasad Suresh**, and Yogendra Padwad. Natural molecules as new paradigm for infectious diseases. *Frontiers in Clinical Drug Research-Anti Infectives* (2022) (*Accepted*).