# **CURRICULUM VITAE**

### Dr. Saurabh K. Sinha

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Department of pharmaceutical Sciences
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## **ACADEMIC QUALIFICATIONS**

Degree	Year	Institute	University/Board	% Marks
Ph.D. (Pharmaceutical Chemistry)	2014	Department of pharmaceutics, IIT (BHU)	Banaras Hindu University	85
M.Pharm. (Pharmaceutical Chemistry)	2009	Department of pharmaceutics, IIT (BHU)	Banaras Hindu University	85.2
B.Pharm.	2007	Dr. K. N. M. I. P. E.R Ghaziabad	U.P.T.U.	69.3

**Title of the Ph.D. Thesis:** Synthesis, Evaluation and Molecular Modeling of Some New Cholinesterase Inhibitors as Antiamnesic and Cognition Enhancing Agents.

h-index: 17 i10-index: 24 Citations: 1054

Patent: 02

https://scholar.google.com/citations?user=buyLfMkAAAAJ&hl=en

**Experience:** Assistant Professor (Since 09 Oct 2014)

### **Project:**

S. No	Title of the Project	Duration	Funding agency	Amount sanctioned	Present position
1.	Design, synthesis and evaluation of some dual β-secretase/cholinesterase inhibitors for management of Alzheimer's diseases.	2016-2018	UGC	6,00,000	Completed
2.	Design, synthesis, evaluation and kinetic studies of derivatives of xxxxxxxx as potential antiamnesic and cognition enhancing agents	2020-2024	RUSA 2.0	50,00000	Ongoing

### **HONORS & AWARDS**

- ➤ GATE qualified with **99.4 percentile** in 2007 conducted by I.I.T. Khadagpur.
- ➤ GATE qualified with **98.2 percentile** in 2009 conducted by I.I.T. Roorkee.
- Award of **Senior Research Fellowship** from UGC New Delhi for Doctorate of Philosophy.
- Award of **Teaching Assistantship** from I.I.T (BHU) for Doctorate of Philosophy.

#### RESEARCH INTEREST

Rational Drug Design and Molecular Modeling, Pharmaceutical Chemistry.

### **COMPUTER SKILL**

Schrodinger Molecular Modelling Software, Graph pad prism, Chem office.

### **INSTRUMENTAL SKILL**

- High Performance Liquid Chromatography
- Ultraviolet-Visible Spectrophotometer
- FT- IR Spectrophotometer
- Rota Evaporator

### **PUBLICATIONS**

#### International (33)

- 1. Jain V, **Sinha SK**, Rustage K, Pareek A, Srivastava M, Meena MK, Shakya A, Gupta MM, Rai N, Pareek A, Ratan Y, Chen MH, Prasad SK, Ashraf GM. Solasodine Containing Solanum torvum L. Fruit Extract Prevents Chronic Constriction Injury-Induced Neuropathic Pain in Rats: In Silico and In Vivo Evidence of TRPV1 Receptor and Cytokine Inhibition. **Mol Neurobiol**. 2023 Sep;60(9):5378-5394. doi: 10.1007/s12035-023-03412-w. Epub 2023 Jun 14. PMID: 37314657. (**Impact factor: 5.6**)
- Rupali S. Prasad, Nikhil Y. Yenorkar, Suhas R. Dhaswadikar, Saurabh K. Sinha, Nitish Rai, Pravesh Sharma, Onkar Kulkarni, Neeraj Kumar, Mahaveer Dhobi, Damiki Laloo, Shailendra S. Gurav, Prakash R. Itankar, Satyendra K. Prasad, A systematic antidiarrhoeal evaluation of a vegetable root Begonia roxburghii and its marker flavonoids against nonpathogenic and pathogenic diarrhoea, Food Bioscience, Volume 53, 2023, 102672, ISSN 2212-4292, <a href="https://doi.org/10.1016/j.fbio.2023.102672">https://doi.org/10.1016/j.fbio.2023.102672</a>. (Impact factor: 5.3)
- 3. Vinayak P. Nakhate, Natasha S. Akojwar, **Saurabh K. Sinha**, Amarsinh D. Lomte, Mahaveer Dhobi, Prakash R. Itankar, Satyendra K. Prasad, Wound healing potential of Acacia catechu in streptozotocin-induced diabetic mice using in vivo and in silico approach, **Journal of Traditional and Complementary Medicine**, 2023, ISSN 2225-4110, https://doi.org/10.1016/j.jtcme.2023.05.001. (**Impact factor: 4.2**)
- 4. Rupesh V. Chikhale, Rupali S. Prasad, Pedro Ernesto de Resende, Natasha S. Akojwar, Raksha A. Purohit, Shailendra S. Gurav, **Saurabh K. Sinha** and Satyendra K. Prasad, Analysing the impact of eriosematin E from Eriosema chinense Vogel. against different diarrhoeagenic pathovars of Escherichia coli using in silico and in vitro approach. **Journal of biomolecular structure and dynamics**, 2023, 20:1-12. doi: 10.1080/07391102.2023.2246570 (**Impact factor: 5.2**)

- 5. Jain V, Pareek A, Bhardwaj YR, **Sinha SK**, Gupta MM, Singh N. Punicalagin and ellagic acid containing Punica granatum L. fruit rind extract prevents vincristine-induced neuropathic pain in rats: an in silico and in vivo evidence of GABAergic action and cytokine inhibition. **Nutr Neurosci**. 2021 Aug 9:1-18. doi: 10.1080/1028415X.2021.1954293. Epub ahead of print. PMID: 34369317. (**Impact factor: 4.6**)
- 6. Damiki Laloo, **Saurabh K. Sinha**, Satyendra K. Prasad, Siva Hemalatha, Gastric H+, K+-ATPase inhibitory effects of the active constituent isolated from Potentilla fulgens roots: An in vivo and in silico molecular docking studies, Phytomedicine Plus, 1(3) (2021), 100037. doi: <a href="https://doi.org/10.1016/j.phyplu.2021.100037">https://doi.org/10.1016/j.phyplu.2021.100037</a> (**Impact factor: 1**)
- 7. Rupesh Chikhale, **Saurabh K. Sinha**, Manish Wanjari, Nilambari S. Gurav, Muniappan Ayyanar, Satyendra Prasad, Pukar Khanal, Yadu Nandan Dey, Rajesh B. Patil, Shailendra S. Gurav, Computational assessment of saikosaponins as adjuvant treatment for COVID-19: molecular docking, dynamics, and network pharmacology analysis. **Molecular Diversity** <a href="https://doi.org/10.1007/s11030-021-10183-w">https://doi.org/10.1007/s11030-021-10183-w</a> (**Impact factor: 3.36**)
- 8. Patil R, Chikhale R, Khanal P, Gurav N, Ayyanar M, **Sinha S**, Prasad S, Dey YN, Wanjari M, Gurav SS. Computational and network pharmacology analysis of bioflavonoids as possible natural antiviral compounds in COVID-19. **Inform Med Unlocked**. 2021;22:100504. doi: 10.1016/j.imu.2020.100504. (**Impact factor: 1**)
- 9. Komal M. Parmar, **Saurabh K. Sinha**, Rupali S. Prasad, Mohit S. Jogi, Damiki Laloo, Mahaveer Dhobi, Shailendra S. Gurav, Satyendra K. Prasad. Identifying the mechanism of eriosematin E from Eriosema chinense Vogel. for its antidiarrhoeal potential against Shigella flexneri-induced diarrhea using in vitro, in vivo and in silico models. **Microbial Pathogenesis** 149 (2020) 104582. (**Impact factor: 3.84**)
- 10. Rupesh V. Chikhale, **Saurabh K. Sinha**, Rajesh B. Patil, Satyendra K. Prasad, Anshul Shakya, Nilambari Gurav, Rupali Prasad, Suhas R. Dhaswadikar, Manish Wanjari & Shailendra S. Gurav (2020) *In-silico* investigation of phytochemicals from *Asparagus racemosus* as plausible antiviral agent in COVID-19, **Journal of Biomolecular Structure and Dynamics**, DOI: 10.1080/07391102.2020.1784289 (**Impact factor: 5.23**)
- 11. SK Sinha, SK Prasad, MA Islam, SK Chaudhary, S Singh, A Shakya, Potential Leads from Liquorice against SARS-CoV-2 Main Protease using Molecular Docking Simulation Studies. Combinatorial Chemistry & High Throughput Screening 23, 0-0 DOI: 10.2174/1386207323999200817103148 (Impact factor: 1.71)
- 12. Rupesh V Chikhale, Shailendra S Gurav, Rajesh B Patil, **Saurabh K Sinha**, Satyendra K Prasad, Anshul Shakya, Sushant K Shrivastava, Nilambari S Gurav. Sars-cov-2 host entry and replication inhibitors from Indian ginseng: an in-silico approach. **Journal of Biomolecular Structure and Dynamics.** 2020; 1-12. doi:10.1080/07391102.2020.1778539 (**Impact factor: 5.23**)
- 13. **Saurabh K. Sinha**, Satyendra K. Prasad, Md Ataul Islam, Shailendra S. Gurav, Rajesh B. Patil, Nora Abdullah AlFaris, Tahany Saleh Aldayel, Nora M. AlKehayez, Saikh Mohammad Wabaidur & Anshul Shakya. Identification of bioactive compounds from Glycyrrhiza glabra as possible inhibitor of SARS-CoV-2 spike glycoprotein and non-structural protein-15: a pharmacoinformatics study, **Journal of Biomolecular Structure and Dynamics**, 2020. (In Press) DOI: 10.1080/07391102.2020.1779132 (**Impact factor: 5.23**)
- 14. Verma S, Kuhad A, Bhandari R, Prasad SK, Shakya A, Prasad RS, **Sinha SK**. Effect of ethanolic extract of Solanum virginianum Linn. on neuropathic pain using chronic constriction injury rat

- model and molecular docking studies. **Naunyn-Schmiedeberg's Archives Pharmacology**, 393, 2020, 1715–1728. doi:10.1007/s00210-020-01872-8 (**Impact factor: 3.19**)
- 15. Saurabh K. Sinha, Anshul Shakya, Satyendra K. Prasad, Shashikant Singh, Nilambari S. Gurav, Rupali S. Prasad & Shailendra S. Gurav. An in-silico evaluation of different Saikosaponins for their potency against SARS-CoV-2 using NSP15 and fusion spike glycoprotein as targets, Journal of Biomolecular Structure and Dynamics, 2020. (In Press) DOI: 10.1080/07391102.2020.1762741 (Impact factor: 5.23)
- 16. Hirudkar JR, Parmar KM, Prasad RS, **Sinha SK**, Lomte AD, Itankar PR, Prasad SK. The antidiarrhoeal evaluation of Psidium guajava L. against enteropathogenic Escherichia coli induced infectious diarrhoea. **Journal of Ethnopharmacology**, 251 (2020) 112561. DOI: 10.1016/j.jep.2020.112561 (**Impact factor: 5.19**)
- 17. Hirudkar JR, Parmar KM, Prasad RS, **Sinha SK**, Jogi MS, Itankar PR, Prasad SK. Quercetin a major biomarker of Psidium guajava L. inhibits SepA protease activity of Shigella flexneri in treatment of infectious diarrhoea. **Microbial Pathogenesis**. 2020, 138, 103807. DOI: 10.1016/j.micpath.2019.103807 (**Impact factor: 3.84**)
- 18. Parmar KM, Bhagwat DS, **Sinha SK**, Katare NT, Prasad SK, The Potency of Eriosematin E from Eriosema chinense Vogel. Against Enteropathogenic Escherichia coli Induced Diarrhoea Using Preclinical and Molecular Docking Studies, **Acta Tropica**, 2019, 193, 84-91. (**Impact factor: 3.22**)
- 19. Sushant K. Shrivastava, **Saurabh K. Sinha**, Pavan Srivastava, Prabhash N. Tripathi, Piyoosh Sharma, Manish K.Tripathi, AvanishTripathi, Priyanka K.Choubeya, Digambar K. Waikera Lalit M. Aggarwal, Manish Dixit, Subhash C. Kheruka Sanjay Gambhir Sharmila Shankar Rakesh K.Srivastava, Design and development of novel p-aminobenzoic acid derivatives as potential cholinesterase inhibitors for the treatment of Alzheimer's disease. **Bioorganic Chemistry**. 2019, 82, 211-223. (**Impact factor: 5.3**)
- Sushant K. Shrivastava, Pavan Srivastava, T.V.R. Upendra, Prabhash Nath Tripathi, Saurabh K. Sinha, Design, synthesis and evaluation of some N-methylenebenzenamine derivatives as selective acetylcholinesterase (AChE) inhibitor and antioxidant to enhance learning and memory. Bioorganic & Medicinal Chemistry. 25, 2017, 1471–1480. (Impact factor: 3.46)
- 21. Shashi Kant Singh, **Saurabh K. Sinha** and Mrunal K. Shirsat, Design, synthesis and evaluation of p-aminobenzoic acid and 4-aminopyridine analogues as cholinesterase inhibitors for management of alzheimer's diseases. World Journal of Pharmaceutical Research, 2017, 6, 14, 977-995.
- 22. Sushant K. Shrivastava, Ankit Batham, **Saurabh K Sinha**, Tanmaya K. Parida Debapriya Garabadu, Priyanka K. Choubey, Design, synthesis and evaluation of novel thiazolidinedione derivatives as anti-hyperglycemic and anti-hyperlipidemic agents. **Medicinal Chemistry Research** 25, 2016, 2258–2266. (*Impact factor: 2.35*)
- 23. **Saurabh Kumar Sinha**, In-vitro Evaluation and Molecular Docking Studies of Some Schiff Bases as Cholinesterase Inhibitor. International Journal of Pharmaceutical Sciences and Drug Research, 2015; 7(5): 421-424.
- 24. **Sinha, S. K** and Shrivastava, S. K., Synthesis, evaluation and molecular dynamics study of some new 4-aminopyridine semicarbazones as an antiamnesic and cognition enhancing agents. **Bioorganic & Medicinal Chemistry 2013**, 21, 5451-5460. (*Impact factor: 3.46*)

- 25. **Sinha, S. K** and Shrivastava, S. K., Design, synthesis and evaluation of some new 4-amino pyridine derivatives in learning and memory *Bioorg. Med. Chem. Lett.* **2013**, 23(10) 2984-2989 (*Impact factor: 2.94*)
- 26. **Saurabh K. Sinha** and Sushant K Shrivastava, Synthesis and Evaluation of Some New 4-Aminopyridine Derivatives as a Potent Antiamensic and Cognition Enhancing Drug, **Medicinal Chemistry Research 2012**, 21, 4395–4402. (*Impact factor: 2.35*)
- 27. **Saurabh K. Sinha,** Prabhat K. Shrivastava and Sushant K. Shrivastava, Development and Validatin of HPLC method for simultaneous estimation of Amlodipine And Talmisartan in Pharmaceutical Dosage Form, Asian Pacific J. Trop. Biomedicine, **2012**, S312-S315. (*Impact factor: 1.54*)
- 28. **Saurabh K. Sinha,** B Praveen, Prabhat K. Shrivastava, Sushant K. Shrivastava. Synthesis, characterization and biological evaluation of some glutathione inducing amino acid conjugates of Valproic Acid with reduced hepatotoxicity. *Asian Pacific Journal of Tropical Disease*. 2012, 2, S218-S222. (Science Direct) (ISSN: 2222-1808)
- 29. Shashi Kant Singh, Rupali M. Tiwari, **Saurabh K. Sinha\***, Chhanda C. Danta, Satyendra K. Prasad. Antimicrobial evaluation of mangiferin and its synthesized analogues. *Asian pacific Journal of Tropical Biomedicine*. (2012) S884-S887 (Science Direct) (ISSN 1995-7645) (*Impact factor: 1.54*)
- 30. **Saurabh K. Sinha**, Prabhat K. Shrivastava, Sushant K. Shrivastava. Synthesis, characterisation and biological activity of three new amide prodrugs of lamotrigine with reduced hepatotoxicity. *Chemical Papers* 2011, 65, 70-76. (*Impact factor: 2.14*)
- 31. Pugazhendhy S. Prabhat K. Shrivastava, **Saurabh K. Sinha**, Sushant K. Shrivastava. Lamaotrigine-dextran conjugates: Synthesis, characterization and biological evaluation. **Medicinal Chemistry Research** 2011, 20, 595–600. (*Impact factor: 2.35*)
- 32. Shashi Kant Singh, **Saurabh K Sinha**, S. K. Prasad, R. Kumar, Bhawani S Bithu, S. Sadish Kumar, P. Singh. Synthesis and Evaluation of Novel Analogues of Mangiferin as Potent Antipyretic. *Asian pacific Journal of Tropical Medicine* 2011, 4, 866-9. (*Impact factor: 3.04*)
- 33. Shashikant Singh, Vijay Kumar Sharma, Yatendra Kumar, Shanmaugam Sadish Kumar, **Saurabh Kumar Sinha**. Phytochemical and Pharmacological investigations on Mangiferine. *Herba Polonica* 2009, 55, 126-138. (ISSN: 0018-0599).

#### National (04)

- 1. Shashi Kant Singh, **Saurabh Kumar Sinha**, Mrunal Krishnarao Shirsat, Design, Synthesis and Evaluation of 4-Aminopyridine Analogues as Cholinesterase Inhibitors for Management of Alzheimer's Diseases. Indian Journal of Pharmaceutical Education and Research 52: 4, 2018, 644-654. (*Impact factor: 0.35*)
- 2. Saurabh K. Sinha, In-vitro evaluation of some 4-aminopyridine Schiff bases as dual acetyl/butyryl cholinesterase inhibitor, Journal of Chemical and Pharmaceutical Research, 2015, 7(8):1069-1072.
- 3. P. K. Shrivastava, A. Shrivastava, S. K. Sinha, Sushant. K. Shrivastava "Polyamidoamine Dextran carrier macromolecules for colon specific delivery of 5-ASA" Indian Journal of Pharmaceutical Sciences, 2013, 75: 3, 277-283. (Impact factor: 0.73)
- 4. Ankit Seth, Paramdeep Bagga, **Saurabh Sinha**, Sushant K Shrivastava. Development and validation of a simple U.V. spectrophotometric method for the determination of sertaconazole nitrate in bulk and pharmaceutical formulation. International Conference on Global Scenario of

Traditional System of Medicine. Ayurveda, Agriculture and Education, 21-22 January, 2013, 41-46.

### **Conferences/Seminar:**

#### International (04)

- 1. Poster presentation at **IBRO-APRC Associate School of Neuroscience**, 05 Aug to 11 Aug, 2019 at Department of Pharmaceutical Sciences, MLSU, Udaipur "Evaluation of 5-Aminoindole derivatives as cholinesterase inhibitor" **Saurabh K Sinha**.
- 2. Poster presentation at **APP 4<sup>th</sup> Indo Malaysian Conference**, 26 Feb, 2019 at Bhupal Nobles Institute of Pharmaceutical Sciences, Udaipur "*In-Silico* study of 5-aminoindole as cholinesterase inhibitor" **Saurabh K Sinha**.
- 3. Oral presentation at **10**<sup>th</sup> **DGSI International Geography Conference** 17-19 Oct, 2015 at MLSU, Udaipur "Environment Protection by Minimizing Excretion of Active Pharmaceutical Ingredients." **Saurabh K Sinha**,
- 4. Poster presentation at **International Conference on Recent Advances in Pharmaceutical Sciences**, 22-23 Dec, 2010 at Department of Pharmaceutics, IT-BHU, Varanasai "Development and Validation of a HPLC Method for the Simultaneous Estimation of Amlodipin and Telmisartan in Pharmaceutical Dosage Form." **Saurabh K Sinha**, Prabhat K Shrivastava, Sushant K Shrivastava.

#### National (08)

- 1. Modern Trends in Chemical Sciences, **30-31 January 2016**, Sponsored by UGC, Department of Chemistry, Faculty of Sciences, M. L. Sukhadia University, Udaipur, Nanocatalysis: A Greener Synthetic Approach.
- 2. Contemporary technologies in Drug delivery and Envisaged future trends, **12-13 august 2016**, Sponsored by DBT, ICMR and APTI, Getanjali institute of Pharmacy, Getanjali University, Udaipur, Rjasthan, β-Secretase/Cholinesterase inhibitors for management of Alzheimer's Diseases.
- 3. Current status of Regulatory Affairs for Pharmaceuticals, **24-25 September 2016**, Indian Pharmacy Graduates Association Sponsored, Bhupal Nobles College of Pharmacy, Trends in Regulatory affair in clinical trials Professional.
- 4. Recent Advancement in Drug Discovery and Development, **04-05 February 2017**, Sponsored by DST, Design, Synthesis and Evaluation of Some Dual β-Secretase/Cholinesterase inhibitors as Antiamnesic and Cognition enhancing Agents.
- 5. Impact of Pharmaceutical Biotechnology on the Future of medicine, **24-25 March 2017**, Sponsored by DBT and ICMR, Getanjali institute of Pharmacy, Getanjali University, Udaipur, Rjasthan, Novel cholinesterase inhibitors as Antiamnesic and Cognition enhancing Agents.
- 6. Industrial Advancement and Academic Research: A Correlation, **20 March 2018**, Sponsored by APTI, Department of Pharm. Sciences, M. L. Sukhadia University, Udaipur, Rajasthan, Design, Synthesis and evaluation of 5-aminoindole derivatives as Antiamnesic and Cognition enhancing Agents.
- 7. Intellectual Property Right: A Formula To Success (IPR-2018), DST, Bhupal Nobles' College of Pharmacy, Intellectual Property Rights: Industrial Prospective.
- 8. Poster presentation at **61st Indian Pharmaceutical Congress**, **2009** at Ahmedabad "Synthesis and Evaluation of Lamotrigine-Glutathione inducing amino acid conjugate to Minimize Hepatotoxicity: A Prodrug Approach." **Snha S. K.**, Das B., Shrivastava P.K., Shrivastava S. K.

Workshop attended (02)

> 1. Seminar cum Workshop on "Emerging Trends in Drugs Design and Molecular Modeling". April 1-3, 2009. Department of Pharmaceutics, IT-BHU, Varanasi.

> 2. DST Sponsored National Workshop on "Application of Chromatography and Mass

Spectrometry In Clinical Research". Sept 20-24, 2010. Jadavpur University, Kolkata.

**DECLARATION** 

I hereby declare that the information furnished above is true to the best of my knowledge and can produce

testimonials whenever asked for.

Place: Udaipur

(Dr. Saurabh K. Sinha)