

## VIRENDRA NATH

Present Address	Contact Details	
C/O, Prof. Vipin Kumar Department of Pharmacy, Central University Rajasthan, Kishangarh, Rajasthan.	<b>Email id.</b> <a href="mailto:virendrapharmchem@gmail.com">virendrapharmchem@gmail.com</a> <a href="mailto:vnsrivastav3@gmail.com">vnsrivastav3@gmail.com</a> <u>+91-9452990321</u> <u>+91-9549908846</u>	

### Career Objective:

To become a part of reputed organization that can provide opportunities to learn and thus improve my research skills in application of drug design, synthesis of medicinally active small heterocyclic compounds and isolation of natural compounds from plants towards the achievement of the organization and personal goals.

### Educational Qualifications:

Examinations	Year	College/Board/University	Subjects	Remarks
Ph.D	2015	Department of Pharmacy, School of Chemical Science & Pharmacy, Central University of Rajasthan (Ajmer)	Pharmacy  "In silico Studies and Synthesis of Novel Heterocyclic Compounds as Agonist/Antagonist for Targets Involved in Type 2 Diabetes Mellitus"	Thesis Submitted
M.Pharmacy	2011-2014	B.N College of Pharmacy Udaipur. (RUHS)	Pharmaceutical Chemistry	Passed
B.Pharmacy	2007-2011	College of Pharmacy-IILM-AHL Gr.NOIDA. (GBTU)	Pharmaceutical Sciences	Passed

### Professional Skills:

- Operating Systems: Windows XP/Vista/98/Windows 7 & Proficient in text formatting and Office Computing, Microsoft Word, PowerPoint, Internet Surfing.
- Application of Chem Draw, Marvin Sketch, Chem Sketch, Sound knowledge on Computer Assisted Drug Design- Schrodinger (Docking, Molecular dynamics & 2D/3D-QSAR & Pharmacophore generation, PHASE), Accelrys Inc.-Discovery Studio (Library Design, 2D-QSAR:PLS, MLR, GFA).
- Synthesis of heterocyclic compounds and their characterization using 1H-NMR/13C-NMR
- e-sources- Scifinder,NCBI-PubMed, Sciencedirect, Thomson Integrity etc..

### Projects:

- M.Pharmacy final year dissertation (1year) on "**Development of QSPR models on different physicochemical properties**" under the supervision of **Dr. C. S Sharma**, Reader, Bhupal Nobles' College of Pharmacy, Udaipur, Rajasthan and **Dr. Amit Nargotra**, Scientist,CSIR-Indian Institute of Integrative Medicine (IIIM)Jammu (2013-2014).
- Project Fellow from February 2016 to December 2016 in SERB-DST, Govt of India "**Rationally Designed Indolizine Derivative(s) as multitarget anticancer agents for Inhibition of cancer cell growth and metastasis**" at Department of Pharmacy, Central University of Rajasthan, Ajmer under Dr. Vipin Kumar (Professor)
- CSIR-Senior Research Fellow from **April 2019 to April 2022** at Department of Pharmacy, Central University of Rajasthan, Ajmer on "**Computational studies, synthesis, and biological evaluation of novel heterocyclic compounds as antidiabetic agents**" at Department of

Pharmacy, Central University of Rajasthan, Ajmer under Prof. Vipin Kumar.

**Publications:**

- Identification of Behenic Acid as Medicinal Food for the Diabetes Mellitus: Structure Based Computational Approach and Molecular Dynamics Simulation Studies **Virendra Nath**, Rakesh Kumar Paul, Neeraj Kumar, & Vipin Kumar, **2022. Journal of Molecular Modeling**, 28, 73. doi: [10.1007/s00894-022-05060-8](https://doi.org/10.1007/s00894-022-05060-8).
- Identification of M<sup>PTO</sup> Inhibitors of SARS-CoV-2 Using Structure Based Computational Drug Repurposing. **Virendra Nath**, R Ahuja, V Kumar. **Biocatalysis and Agricultural Biotechnology**, **2021**. <https://doi.org/10.1016/j.bcab.2021.102178>.
- In Silico Identification of Antifungal Compounds as Mutant DHFRase Inhibitors: Structure-based Approach, Molecular Dynamics Simulation and Structural Integrity Analysis. **Virendra Nath**, Trambak Bask, Vipi Kumar, Amit Kumar Goyal. **Journal of Computational Biophysics and Chemistry**, **2021**. [10.1142/S2737416521500344](https://doi.org/10.1142/S2737416521500344)
- Editorial: India's COVID-19: Diverse Population Demands Diverse Requisites. Pritt Verma, **Virendra Nath**, Akanksha and Shravan Kumar Paswan **EC Pulmonology and Respiratory Medicine**, 10.6 (2021): 11-12
- Hydroxychloroquine: Similarity Search and Structure-Based Virtual Screening for Identification of Potential Hits against SARS-CoV-2. **Virendra Nath**, Shravan Kumar Paswan, Pritt Verma, Arun Pratap Sikarwar, Sudhir K. Verma accepted in **FABAD Journal of Pharmaceutical Sciences**. **2020**
- Computational Identification of Potential Dipeptidyl Peptidase (DPP)-IV Inhibitors: Structure Based Virtual Screening, Molecular Dynamics Simulation and Knowledge based SAR Studies. **Virendra Nath**, Manish Ramchandani, Neeraj Kumar, Rohini Agrawal, Vipin Kumar. **Journal of Molecular Structure**. **2020**, <https://doi.org/10.1016/j.molstruc.2020.129006>.
- Structure based docking and molecular dynamics studies: Peroxisome proliferator-activated receptors  $\alpha/\gamma$  dual agonists for treatment of metabolic disorders. **Virendra Nath**, Rohini Ahuja, Vipin Kumar. **Journal of biomolecular structure & dynamics**. **2019**, <https://doi.org/10.1080/07391102.2019.1581089>.
- Identification of novel G-protein coupled receptor 40 (GPR40) agonists by hybrid in silico screening techniques and molecular dynamics simulations thereof. **Virendra Nath**, R Ahuja, V Kumar. **Journal of biomolecular structure & dynamics**. **2018**.
- Virtual screening and *In Silico* simulation analysis for rapid and efficient identification of novel natural GPR40 agonist. **Virendra Nath**, Rohini Ahuja, Vipin Kumar. **Letters in Drug Design & Discovery**. **2019**, 16, 000-000. <https://doi.org/10.2174/1570180815666180914162935>.
- Deciphering PPAR $\gamma$  activation in series etabolic syndrome: studies by in silico and in vivo experimental assessment. R Agrawal, **V Nath**, H Kumar, V Kumar. **Journal of Receptors and Signal Transduction**. **2018**, 38 (2), 122-132. <https://doi.org/10.1080/10799893.2018.1436560>.
- Structure based virtual screening of natural compounds and molecular dynamics simulation: Butirosin as Dipeptidyl peptidase (DPP-IV) inhibitor. Rakesh Kumar Paul, **Virendra Nath**, Vipin Kumar. **Biocatalysis and Agricultural Biotechnology**, 35, 102042, **2021**. <https://doi.org/10.1016/j.bcab.2021.102042>.
- Norbixin, an apocarotenoid derivative activates PPAR $\gamma$  in series etabolic syndrome: Validation by in silico and in vivo experimental assessment. Rohini A., Neeraj Agrawal, Harish Kumar, **Virendra Nath**, Vipin Kumar. **Life Sciences**. **2018**, 209 (15), 69–77. <https://doi.org/10.1016/j.lfs.2018.08.001>.
- Hematological, antioxidant and protective performance of Usnea longissima on chemical induced hepatotoxicity in experimental animals. Pritt Verma, Shravan Kumar Paswan, Abhisek Raj, **Virendra Nath**, Ramesh Kumar Gupta, Shikhar Verma, Sajal Srivastava, Chandana Venketshwara Rao. **Journal of Coastal Life Medicine** **2017**, 5(5), 224-232. <https://doi.org/10.12980/jclm.5.2017J6-250>.

**Additional Information/Awards:**

- **APP-Unique Student Award-2021** in research scholar category for the **Outstanding Academic Achievements** by Association of Pharmacy Professionals (APP) 10<sup>th</sup> Annual International Virtual Convention on 10<sup>th</sup>-11<sup>th</sup> day of December,2021.
- **InSc Research Excellence Award** for publication titled “**Computational Identification of Potential Dipeptidyl Peptidase (DPP)-IV Inhibitors: Structure Based Virtual Screening, Molecular Dynamics Simulation and Knowledge based SAR Studies**” in *Journal of Molecular Structure* by Institute of Scholars, Karnataka in October,2020.
- **Award of Foreign travel grant** for Symposium in South Korea by Council of Scientific and Industrial Research, New Delhi in November, 2019
- **Award of Foreign travel grant** for Symposium in South Korea by Science & Engineering Research Board, New Delhi in October, 2019.
- **Award of Foreign travel grant** for Symposium in Greece by Science & Engineering Research Board, New Delhi in July, 2019.
- **Award of Foreign travel grant** for Symposium in France by Indian Council of Medical Research, New Delhi in April, 2019.
- **Award of Foreign travel grant** for Symposium in USA by Council of Scientific and Industrial Research, New Delhi in March, 2019.
- **Award of National Fellowship for Person with Disability (NFPwD)** by Department of Empowerment of person with disability, Ministry of Socila Justice a Empowerment, New Delhi in October, 2019.
- **Senior Research Fellow-CSIR** Government of India, from **5<sup>th</sup> April, 2019** to **30<sup>th</sup> April, 2022**.
- Listed reviewer in **Medicinal Chemistry Research (Springer), Coronaviruses (Bentham Science Publication), International Journal of Pharma and Bio Sciences** and **Current Reasearch in Bioinformatics (Science Publications)**.
- **National Level Fellowship Examination Qualified: GPAT-2011** conducted by M.S.University of Baroda & AICTE-Govt of India and **GPAT-2019** conducted by **National Testing Agency (NTA)**, Government of India.
- Registered Pharmacist in Uttar Pradesh Pharmacy Council (UP-PCI), Government of Uttar Pradesh.
- One month training in different segments of Indian Drugs and Pharamceuticals Limited, Gurgaon, Haryana
- Life Member of IPGA (Indian Pharmacy Graduates’ Association) , Regd. No – LM-3835.
- Life time professional member of Institute of Scholars (InSc2020E84E)
- Life member of Society of Pharmaceutial Education and Research, Madhya Pradesh (SPER/LM/RJ/049)
- Member of European Federation of Medicinal Chemist-Young Scientist Network (EFMC-YSN), Belgium.
- Third rank in 4<sup>th</sup> academic semester of M.Pharmacy in Bhupal Nobles’ College of Pharmacy, Udaipur.

#### Conference & Workshop:

- Won **2<sup>nd</sup> Prize** in **Poster Presentation** on “**Life cycle of Malaria and recent advances in its therapy**” in National Pharmacy Week-2010, College of Pharmacy-IILM-AHL, Greater Noida.
- National Seminar Cum Workshop on Emerging Trends in **Computer Aided Drug Design (CADD)**, NSWCADD-2012 organized by GIPER, Kashipur, U. S. Nagar, Uttarakhand.
- “**Bioinformatics Workshop on Drug Design**” held under the aegis of the Foundation for Innovation & Technology from **13<sup>th</sup> Sept., 2012** to **15<sup>th</sup> Sept., 2012** at the SCFbio, IIT-Delhi.
- “**Workshop on Chemoinformatics**” Sponsored by Department of Biotechnology, Govt. of India held at Biotech Park, Lucknow on **27<sup>th</sup> – 28<sup>th</sup> Dec. 2012**.
- “**Workshop-cum-Conference on Chemoinformatics**” Sponsored by Department of Biotechnology, Govt. of India held at Faculty of Science, Jamia Hamdard, NewDelhi on **8<sup>th</sup> – 9<sup>th</sup> Dec. 2015**
- **Presented poster** on “**Development of QSPR models on different physicochemical properties**” in “National conference on Impact of molecular Biology on drug discovery and Development: Promises and challenges (IMB-2015)” in Department of Pharmacy, Central University of Rajasthan, Ajmer on **17-18 Feb.2015**.
- **Presented Poster** on “**Pharmacophore mapping of eries of propanoic acid derivatives to combat T2DM**” in **Workshop-cum-Conference on Chemoinformatics**” Sponsored by Department of Biotechnology, Govt. of India held at Faculty of Science, Jamia Hamdard, NewDelhi on **8<sup>th</sup> – 9<sup>th</sup> Dec. 2015**.

- Presented poster on “*In Silico* Evaluation of Fatty Acids for Searching Potential Gpr40 Agonist using Molecular Docking Simulations for The Treatment Of Type 2 Diabetes “ in ICMR and SERB sponsored National Conference on Recent trends on Nanotechnology in Biomedical Drug Research held at Himanchal institute of pharmaceutical education and research on 25<sup>th</sup> – 26<sup>th</sup> February 2017 .
- Presented poster on “Virtual Screening and *In Silico* Simulation analysis for rapid and efficient identification of novel natural GPR40 agonist” at 9<sup>th</sup> international conference on Computational Methods in Toxicology and Pharmacology Integrating Internet Resources on 27-30 Oct. 2017 (CMTPI-2017).
- Oral presentation on “Computational study of searching potential inhibitor for DPP-IV using Target based approach and Molecular dynamics Simulation for the medication of Type2 DM” at A National Seminar Sponsored by Indian Council of Medical Research (ICMR) & Himachal Pradesh Technical University (HPTU) current status and future scope for nanomaterials and nanotechnology in drug discovery and development on 23 – 24 Feb. 2018 .
- Presented e-poster on “Searching hidden inhibitors of  $\alpha$ -glucosidase using direct drug design for the treatment of Type2 Diabetes mellitus” in National seminar on emerging trends in drug discovery, pharmaceutical science and biomedical research (17 – 18 March 2018) at Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak.
- Presented Poster on “Identification of PPAR $\gamma$  Agonist(s) using structure based virtual screening for treatment of Type2 Diabetes mellitus” in VI Rajasthan Science Congress, Organized by Central University of Rajasthan, Rajasthan, India on Innovation in Science and Technology for Sustainable Development on 13-15, Oct. 2018 (RSC2018).
- Presented poster on “Recognition of DPP-IV Inhibitors using *In silico* approach for treatment of Type2 Diabetes mellitus” 3<sup>rd</sup> International Conference on Academic and Industrial Innovations: Transitions in Pharmaceutical, Medical and Biosciences on 22-23 Oct. 2018 (INNOPHARM3).

Personal Details		Permanent Address
Father's Name:	Mr. Udai Shanker Srivastav	“ASHIRWAD”
D.O.B:	27/07/1988	11/285, Sector-11, Block-F, Raja Jee Puram
Language Proficiency:	Hindi & English	Near: CMS,
Marital Status:	Unmarried	Lucknow – 226017 Uttar Pradesh.
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LiveDNA ID: <a href="https://livedna.net/?dna=91.33715">https://livedna.net/?dna=91.33715</a>		
LinkedIN ID: <a href="https://linkedin.com/in/virendra-nath-srivastav8846-2707">https://linkedin.com/in/virendra-nath-srivastav8846-2707</a>		
Reference		
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Dr. Chandra Shekhar Sharma (Masters' Supervisor)	Associate Professor, Department of Pharmaceutical Chemistry, Bhupal Nobles' University. Email id. <a href="mailto:cssharma_medicinalchemistry@yahoo.com">cssharma_medicinalchemistry@yahoo.com</a> +91-9828173650	