

Mr. KIRAN BHARAT LOKHANDE

Designation : Junior Research Fellow

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Phone Number : 020-67919444 Extn. -9449

Qualification : M.S. Pharm. (Pharmacoinformatics)

Area of interest : Bioinformatics, Drug design, Molecular modeling, docking, dynamics, QSAR studies of Cancer Proteins



Academic Qualifications:

M.S. Pharmacy (2014-2016) - National Institute of Pharmaceutical Education and Research (NIPER), Hajipur, Bihar, India.

B. Pharmacy (2010-2014) – University of Solapur, Solapur, India.

Professional Experience:

Junior Research Fellow (JRF) | Bioinformatics Research Laboratory
Dr. D.Y. Patil Biotechnology and Bioinformatics Institute (Oct. 2016 – Present).

Project: “*Molecular modeling and docking studies on Deguelin and its derivatives with cell cycle arrest, apoptosis and anti-angiogenesis pathway proteins in cancer cell signaling pathway*”, funded by DST-SERB, New Delhi

Principal Investigator: Dr. K. V. Swamy, Associate Professor, Bioinformatics Research Laboratory

Projects Undertaken:

- 1) Worked and submitted an academic project on, “**Discovery of novel GPR3 inhibitors using structure based and ligand based approaches**”. During the course of M.S. Pharmacy (2014-2016), NIPER, Hajipur, India.
- 2) Worked and submitted an academic project on, “**Biodegradable Polymer as Drug Delivery System**”, during the course of T.Y. B. Pharmacy (2012-2013), College of Pharmacy Akluj, university of Solapur, Solapur, India.

Computer Skills:

- 1) **Operating System:** Window, Ubuntu, Linux
- 2) **Languages:** JAVA, C++, Python, R, Perl
- 3) **Database:** Oracle, SQL query

Bioinformatics Tools and Software:

- 1) **Schrödinger:**
Maestro, Canvas, Confgen, Desmond, e-Pharmacophore, Glide, Induced Fit, Jaguar, LigPrep, Maestro, Phase, Prime, Protein Preparation Wizard, QikProp, SiteMap, Shape Screening, Water Map, Epik, Bioluminate.
- 2) **Gromacs, AutoDock, AutoDockVina, FlexX, Pymol, SPDBV, Molinspiration, Marvin, VMD, COOT, Avogadro.**
- 3) **Protein Modelling:**
I-Tasser, SwissModel, Modeller.

Awards and Fellowship:

- 1) Qualified **GPAT** 2014
- 2) Qualified **NIPER-JEE** 2014
- 3) Fellowship of **NIPER** funded by Ministry of Chemicals and Fertilizers, Govt. of India, during the course of M.S. Pharm, (2014-2016).

International Publications:

- 1) Gadamsetty Saayi Krushna, Vutharadhi Leela Shivaranjani, Jolapuram Umamaheswari, Cheemanapalli Srinivasulu, Shaik Althaf Hussain, Mohammed Abdul Kareem, Vaddi Damodara Reddy, Daoud Ali, **Kiran Bharat Lokhande**, K. Venkateswara Swamy, Lakshmi Devi Kodihela (2017). In vivo and molecular docking studies using whole extract and phytochemicals of Aegle marmelos fruit protective effects against Isoproterenol-induced Myocardial infarction in rats. *Biomedicine & Pharmacotherapy*, 91:880–889. PMID: 28511341, DOI: 10.1016/j.biopha.2017.04.115. (Impact factor: 2.326).

Abstracts in Conference Proceedings:

- 1) *K Venkateswara Swamy and Kiran Bharat Lokhande*, Molecular modeling, docking, dynamics and simulation of deguelin and its derivatives with cyclin D1 and cyclin E in cancer cell signaling pathway. *J Proteomics Bioinform*, 10:11(Suppl.), (2017). DOI: 10.4172/0974-276X-C1-106.
- 2) *Prachi Bhole, Kiran Bharat Lokhande, Shuchi Nagar, K. Venkateswara Swamy*. Molecular Docking and Molecular Dynamics Simulation studies of DHFR inhibitors in Plasmodium falciparum. *Can J Biotech* (2017), Volume 1, Special Issue, Page 23, DOI: <https://doi.org/10.24870/cjb.2017-a11>.

- 3) Rohit Singh Yadav, **Kiran Bharat Lokhande**, Vaddi Damodara Reddy, K. Venkateswara Swamy. Molecular Docking and Molecular Dynamic studies of Phytocompounds with HIF-1 α , HIF-2 α , and SREBP1c to explore its Inhibitory Effect on Metabolic disorders and in Cancer. *Can J Biotech* (2017), Volume 1, Special Issue, Page 25, DOI: <https://doi.org/10.24870/cjb.2017-a13>.

Seminars/Webinars/Symposium/Conferences/ Workshops:

- 1) International webinar on “**An Introduction to Schrödinger's Python API**”, organized by Schrödinger on 11th January, 2018.
- 2) **International symposium** on “**Novel Targets for Cancer Therapy**”, organized by Interdisciplinary science and technology Research Academy (ISTRA), Azam Campus, Pune, held o 5th January 2018.
- 3) “**International Conference on Drug Design**” organized by Schrödinger at Convention Centre, Jawaharlal Nehru University, New Delhi, during 8th to 9th April, 2017.
- 4) Workshop on “**Free Energy Perturbations (FEP) for prediction of accurate binding affinity-FEP+, Automated application to build, validate and deploy predictive QSAR models-AutoQSAR, Hydration Thermodynamics-WaterMap, and Efficient mining of protein-ligand complexes based on geometry from biological database-PLDB**” organized by Schrödinger at Convention Centre, Jawaharlal Nehru University, New Delhi, on 7th April, 2017.
- 5) “**Schrödinger's 5th European Life Science Boot camp - a series of interactive webinars**” These workshops included training on the following tools: Small-Molecule Drug Discovery Suite, Maestro 11, Pharmacophore Modeling with Phase, Polypeptide docking with Glide, and Lead Optimization with WaterMap and FEP+, during 20th March to 24th March, 2017.
- 6) Webinar on “**Introduction to Cresset science and software foe academics_2017**” organized by Cresset on 21st March, 2017.
- 7) National Symposium on “**Recent Advances in Modern Biology and Biotechnology 2017**”, organized by Dr. D.Y. Patil Biotechnology and Bioinformatics Institute, Pune, during 16th to 17th March, 2017.
- 8) International webinar on “**Lead Optimization with FEP+: Innovation in 2017 and Sneak Peek at 2017**”, Schrödinger's 2017 Spring Seminar Series, Organized by Schrödinger on 7th March, 2017.
- 9) International webinar on “**Maestro 11: What's New in 2017**”, Schrödinger's 2017 Spring Seminar Series, organized by Schrödinger on 2nd March, 2017.
- 10) International webinar on “**Lead Optimization with FEP+: Innovation in 2017 and Sneak Peek at 2017**”, Schrödinger's 2017 Spring Seminar Series, organized by Schrödinger on 28th February, 2017.

Technical Abstracts/Oral/Poster presentations:

- 1) Ajinkya Sunil Mehere*, Amresh Kumar Yadav, **Kiran Bharat Lokhande** and K. Venkateswara Swamy. “**Molecular Modeling and Docking Studies of Aromatase Inhibitors with Aromatase for ERP Breast Cancer**” in 86th Conference of Society of Biological Chemists (SBC) - Emerging Discoveries in Health and Agricultural Sciences organized by School of Life Sciences, Jawaharlal Nehru University, New Delhi, during 16th – 19th Nov., 2017.

- 2) *K. Venkateswara Swamy** and *Kiran Bharat Lokhande*. **“Molecular modeling, docking, dynamics and simulation of Deguelin and its derivatives with cyclin D1 and cyclin E in cancer cell signaling pathway”**, in 9th International Conference and Expo on Proteomics and Molecular Medicine & 9th International Conference on Bioinformatics, at France, Paris. 13th – 15th Nov., 2017.
- 3) *Rohit Singh Yadav**, *Kiran Bharat Lokhande*, *Vaddi Damodara Reddy*, *K. Venkateswara Swamy*. **“Molecular docking and Molecular Dynamics studies of phytocompounds with HIF-1 α , HIF-2 α and Srebp1c to explore its inhibitory effect on metabolic disorder and in cancer”**, in 2017 NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT) organized by SGRF, at Bhubaneswar, Odisha, India. 1st - 4th Oct, 2017.
- 4) *Prachi Bhole**, *Kiran Bharat Lokhande*, *Shuchi Nagar* and *K. Venkateswara Swamy*. **“Molecular Docking and Molecular Dynamics Simulation studies of DHFR inhibitors in Plasmodium falciparum”**, in 2017 NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT) organized by SGRF, at Bhubaneswar, Odisha, India. 1st - 4th Oct, 2017.
- 5) *Kiran Bharat Lokhande** and *K. Venkateswara Swamy* **“Molecular Modeling, Docking, Dynamics and Simulation of Deguelin and Its Derivatives with Cyclin D1 and Cyclin E In Cancer Cell Signaling Pathway”** in International Conference on Drug Design, at Convention Centre, Jawaharlal Nehru University, New Delhi, on 8th April, 2017.