



**Dr. D.Y. Patil Vidyapeeth's**  
Dr. D. Y. Patil Biotechnology And  
Bioinformatics Institute, Pune.

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**Dr. K.V Swamy**

**Designation:** Associate Professor

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**Phone:** 020-65101870/71

**Qualification:** M.Sc., Ph.D.

**Area of Specialization:** Structural Bioinformatics, Protein - Drug interaction, drug design, Protein modeling, Molecular modeling, Molecular dynamics and simulations

**Academic Qualification**

**Ph.D. (Biochemistry) (2010) Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India** Thesis Title: *“Computer aided Drug (CADD) design studies on Human histamine H2 Receptor “*

**M.Sc. (Biochemistry.) (2003) Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India**

**B.Sc. (Biochemistry.) (2000) Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India**

**Professional Experience:**

**Associate Professor** (15<sup>th</sup> July 2016 to Present) Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Dr. D. Y. Patil Vidyapeeth, Pune

**Asst. Professor** (Jan 2015 to 14<sup>th</sup> July, 2016): Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Dr. D. Y. Patil Vidyapeeth, Pune.

**Officer, Lab Administration** (Nov, 2013 Aug 2014) Thyrocare Technologies Limited, Navi Mumbai, India

**Head and Asst. Professor (June, 2007 to October, 2013).**Department of Biotechnology and Bioinformatics, Dr.D.Y.Patil Biotechnology and Bioinformatics Institute, Dr. D. Y. Patil Vidyapeeth, Pune

**Visiting faculty:** Jaffna University, Sri Lanka

**Awards:** Young Scientist Award, by ICMPHP, George Washington, USA on September 8, 2012



## Academic Memberships at Dr.D.Y.PatilVidayapeeth, Pune

1. Curriculum committee member for Bioinformatics
2. Board of studies (BOS) Member for Bioinformatics
3. Board of Faculty (BOF) Member for Biotechnology and Bioinformatics

## Reviewer for International Journals

1. Journal of Molecular modeling.
2. Interdisciplinary Sciences: Computational Life Sciences
3. Journal of Molecular modeling and Graphics

**Research projects guided to students: 45**

**Protein structures deposited to Protein Model Data Base: 32**

## Joint Research collaborations for publications and Research projects

- 1) Department of Pathology, Barbara Ann Karmanos Cancer Institute, Wayne State University School of Medicine, 740Hudson Webber Cancer Research Center, USA
- 2) Department of Pharmacology, Pharmacology Core Services at Karmanos Cancer Center, Wayne State University, USA
- 3) D. Y. Patil Institute of Pharmaceutical Sciences, Pune, 411018, India.
- 4) Department of Bioinformatics, Pad. Dr.D.Y.PatilVidyapeeth, Mumbai. India
- 5) Department of Biochemistry, Sri Krishnadevaraya University, India
- 6) Department of Biotechnology, Sri VenkateswaraUniversity, India

**Publications: 23**

**International: 20**

**National:03**

**International Publications: 20**

- 1) DhafirLatiefFayadh, **K Venkateswara Swamy** (2016) Molecular Docking Studies of Human Ubiquitin Conjugating Enzyme Rad6: A Systematic in Silico Approach. International journal of science and research vol5:3, 636-641(**ISSN (Online): 2319-7064**)
- 2) Prasad Dandawate, KiranmayiVemuri, **K. Venkateswara Swamy**, Ejazuddin M. Khan, ManjulaSritharan, SubhashPadhye (2014) Synthesis, characterization, molecular docking and anti-tubercular activity of Plumbagin-Isoniazid Analog and its  $\beta$ -cyclodextrin conjugate.*Bioorganic & Medicinal Chemistry Letters*, 24(21):5070-5075 (**Impact factor 2.65**)
- 3) Prasad Dandawate, Aamir Ahmad, Jyoti Deshpande, **K Venkateswara Swamy**,Ejazuddin M Khan, MadhukarKhetmalas, SubhashPadhye, Fazlul Sarkar (2014).Anticancer phytochemical analogs 37: Synthesis, characterization, molecular docking and cytotoxicity of novel plumbaginhydrazones against breast cancer cells.*Bioorganic & Medicinal Chemistry Letters*, 24:2900-2904 (**Impact factor 2.65**)
- 4) P Sharma. P Patil, N Rao, **K V Swamy**, M.B khetmalas, G D Tandon (2014). Mapping Biodiversity of Indigenous Freshwater Chlorophytes. *Research Journal of Pharmaceutical, Biological and Chemical Sciences* 5(3): 1632-1639(**Impact factor 0.35**)

- 5) Shibnath Ghataka, Alok Vyas, Suniti Misra, Paul O'Brien, Ajit Zambre, Victor M. Fresco, Roger R. Markwald, **K. Venkateswara Swamy**, Zahra Afrasiabi, Amitava Choudhury, Madhukar Khetmalas, Subhash Padhye. (2013) Novel di-tertiary-butyl phenylhydrazones as dual cyclooxygenase-2/5-lipoxygenase inhibitors: synthesis, COX/LOX inhibition, molecular modeling, and insights into their cytotoxicities. *Bioorganic & Medicinal Chemistry Letters*, 24:317-324 (**Impact factor 2.65**)
- 6) Siddiqui A, Dandawate P, Rub R, Padhye S, Aphale S, Moghe A, Jagyasi A, **Venkateswara Swamy K**, Singh B, Chatterjee A, Ronghe A, Bhat HK. (2013) Novel Aza-resveratrol analogs: Synthesis, characterization and anticancer activity against breast cancer cell lines. *Bioorganic & Medicinal Chemistry Letters*, 23: 635–640 (**Impact factor 2.978**)
- 7) Yusufi M, Banerjee S, Mohammad M, Khatal S, **Venkateswara Swamy K**, Khan EM, Aboukameel A, Sarkar FH, Padhye S. (2013) Synthesis, characterization and anti-tumor activity of novel thymoquinone analogs against pancreatic cancer. *Bioorg Med Chem Lett*. 15;23(10):3101-3104. (**Impact factor 2.978**)
- 8) Misra S, Ghatak S, Patil N, Dandawate P, Ambike V, Adsule S, Unni D, Venkateswara Swamy K, Padhye S. (2013) Novel dual cyclooxygenase and lipoxygenase inhibitors targeting hyaluronan-CD44v6 pathway and inducing cytotoxicity in colon cancer cells. *Bioorg Med Chem*. 1;21(9):2551-2559 (**Impact factor 2.978**)
- 9) Y. Nanda Kumar, K. Kalpana, **K. Venkateswara Swamy**, P.V.G.K.Sarma, M. Bhaskar (2012) Molecular dynamics simulations of mody2 mutated glucokinase structures revealed significant conformational variations explaining reasons for hyperglycemic condition, *International Journal of Pharma and Bio Sciences*, 493 - 499.
- 10) Dipti Shingnapurkar, Prasad Dandawate, Christopher E. Anson, Annie K. Powell, Zahra Afrasiabi, Ekkehard Sinn, Sheetal Pandit, **K. Venkateswara Swamy**, Scott Franzblau, Subhash Padhye (2012) Synthesis and Characterization of Pyruvate-Isoniazid Analogs and their Copper Complexes as Potential ICL Inhibitors. *Bioorganic & Medicinal Chemistry Letters*, 22: 3172–3176 (**Impact factor 2.978**)
- 11) Prasad Dandawate, Ejazuddin Khan, Subhash Padhye, Himanshi Gaba, Swati Sinha, Jyoti Deshpande, **K. Venkateswara Swamy**, Madhukar Khetmalas, Aamir Ahmad, Fazlul Sarkar (2012) Synthesis, Characterization, Molecular Docking and Cytotoxic Activity of Novel Plumbagin Hydrazones against Breast Cancer Cells. *Bioorganic & Medicinal Chemistry Letters*, 22: 3104–3108 (**Impact factor 2.978**)
- 12) Dandawate PR, Vyas A, Ahmad A, Banerjee S, Deshpande J, **Swamy KV**, Jamadar A, Dumhe-Klaire AC, Padhye S, Sarkar FH. (2012) Inclusion Complex of Novel Curcumin Analogue CDF and  $\beta$ -Cyclodextrin (1:2) and Its Enhanced *In Vivo* Anticancer Activity Against Pancreatic Cancer *Pharm Res*, 29:1775-1786 (**Impact factor 4.456**)
- 13) **K. Venkateswara swamy**, Jyothi Deshpande, Jasmine Soumya Pathageri, Vidya Kothekar, Subhash Padhye (2011) Molecular Docking Studies On Estrogen Receptor -  $\alpha$  And Chalcone Derivatives. *International Journal of Advances in Pharmacy and Biological Sciences (IJAPBS)* 1(3): 87– 93.

- 14) Parul J, Sagar N, **Swamy K V** and Suresh Kumar C (2011) An insight into blood clotting disorders in humans. *Journal of Computational Biology and Bioinformatics Research*. 3(1): 8-14.
- 15) Padhye S, Ahmad A, Oswal N, Dandawate P, Deshpandye J, **Swamy K.V**, Farkar F.H (2010). Fluorinated 2' –Hydroxychalcones as Garcinol analogs with enhanced antioxidant and anticancer activities. *Bioorganic & Medicinal Chemistry Letters*1; 20(19):5818-21. (PMID: 20729081 ) (**Impact factor 2.65**)
- 16) Padhye S, chavan D, Pandey S, Deshpande J, **Swamy KV**, Sarkar (2010). Perspectives on chemopreventive and therapeutic potential of curcumin analogs in medicinal chemistry. *Medicinal chemistry*, 10, 1-16 (PMID:20370702) (**Impact factor.3.12**)
- 17) Subhash P, Sanjeev B, Deepak C, Shubhangini P, **Swamy K V**, Shadan A, Jing Li, Q. Fazlul H. Sarkar (2009) Fluorocurcumins as Cyclooxygenase-2 Inhibitor: Molecular Docking, Pharmacokinetics and Tissue Distribution in Mice. *Pharmaceutical Research*, 26(11):2438-2448(**Impact factor 4.5**) (PMID:19714451)
- 18) Chitta Suresh Kumar, C.M. Anuradha, **K. Venkateswara Swamy**, Niamat Ali Khan. (2006) Structural and Functional Characterization of Cation-Transporting Atpase of *Mycobacterium tuberculosis* CDC 1551 By in Silico Methods Int. J. Genomics and Proteomics, Volume 2, Number 1 **ISSN:1540-260**
- 19) Chittasuresh Kumar, C.M. Anuradha, K. Venkata Rao, **K. Venkateswara Swamy** (2006) In silico Characterization of Fatty acid synthase of *Mycobacterium tuberculosis* H37Rv. Int. J. Genomics and Proteomics, volume 2, Number 1 **ISSN:1540-260**
- 20) Chitta Suresh Kumar, C. M. Anuradha, **K. Venkateswara Swamy** (2005), Genomic characterization of Chromosome 1 *Plasmodium falciparum* by computational Method. Int .J. Microbiology Volume 1 Number **ISSN:1937-8289**

### **National: 03**

- 1) Rachna Pandey, **K V Swamy**, Madhukar B Khetmalas (2013) Indole: A novel signaling molecule and its applications. *Indian journal of Biotechnology* vol 12, 297-310(**Impact factor 0.36**)
- 2) P Sharma, P Patil, N Rao, **KV Swamy**, MB Khetmalas, GD Tandon (2013) Algal Database—Bioprospecting indigenous algae for industrial application. *Indian journal of Biotechnology* vol12, 548-549(**Impact factor 0.36**)
- 3) **Swamy KV**, SupriyaKore, Rachna Pandey, Madhukar Khetmalas (2011) Extraction, isolation, molecular modeling and optimization of antimicrobial agents from *Coriandrum sativum*. *Current Trends in Biotechnology and Pharmacy*. 4 (5):1033-1038.

### **Trainings**

1. Workshop on “**Development of signaling pathways network**” at Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram, Kerala during January, 11-13,2016.
2. SLI- International webcasting on **Basic aspects in Bioinformatics** organized by Department of Biochemistry, Sri Krishnadevaraya University Department of

Biochemistry, Sri Krishnadevaraya University, Anantapur, Andhra Pradesh during 19-20 March, 2011.

3. Two day National workshop on “**Python programming and Data visualization**” organized by Department of Bioinformatics, Dr.G.R. Damodaran College of Science, and Coimbatore during 17-18 March, 2007.
4. **Advanced Immunology** course organized by 8<sup>th</sup> FIMSA/IIS, New Delhi during 1-5 March,2006.
5. National workshop on **molecular modeling and drug designing using tripos (sibyl software)** conducted by department of genetics, Osmania university, Hyderabad on 9 – 02-2005.
6. Second National workshop on **Genome and Proteome analysis** conducted by Dept. of biochemistry, Sri Krishnadevaraya university, Anantapur, Andhra Pradesh on 21 -03-2005.
7. National workshop on **Bio-computing tools** (Bioinformatics) conducted by Kuvempu university, shimoga, Karnataka on 25th Oct, 2004

### **Invited Speaker**

1. National workshop on “**Molecular modeling and Drug designing**” organized by Department of Chemistry, Savitribai Phule Pune University during 25-30 March 2015.
2. Two day National Level seminar on “**Advanced Drug Design and Development: A Medicinal Chemistry Approach**” organized by PadmashreeDr .D.Y.Patil Institute of Pharmaceutical Sciences and Research, Pune on 27-09-2013
3. State level seminar on “**Drug Discovery, Development and Delivery**” organized by Pad.Dr.D.Y.Patil institute of Pharmaceutical Science and Research, Pimpri, Pune during 15-16 February 2008.
4. Second National Workshop on “**Genome and proteome Analysis**” organized by Department of Biochemistry, Sri Krishnadevaraya University, Anantapur, Andhra Pradesh during 21-23 March,2005.
5. Key note speaker at National workshop on “**Sequence annotations and Molecular modeling of Cancer targeted Proteins** “ organized by Dept of Biochemistry & Biotechnology, S. K. Univeristy, Anantapur, Andhra Pradesh, India on 27-03-2015
6. Invited speaker at 7th National workshop on “**Application of Structural Bioinformatics to Drug design and Discovery**” conducted by Department of Biochemistry, Sri Krishnadevaraya University, Anantapur, Andhara Pradesh, India on March 19-20th, 2011.
7. Invited speaker at National Seminar on “**Structural Bioinformatics**” conducted by Arts and Science College, Dandeli, Karnataka, India on Feb 12th, 2010.

### **Paper presentation**

1. Oral presentation on “*Molecular modeling and docking studies on curcumin and curcumin analogs with cyclooxygenase-2*” at 4<sup>th</sup> International conference on Medicinal

plants and Medicinal herbs, Johns Hopkins University, Washington, USA, 6-8<sup>th</sup> September, 2012

2. Oral presentation on “ ***Structural and functional characterization of Fatty acid synthase Mycobacterium tuberculosis- insilico methods***” at three day National level seminar on “ Structural Bioinformatics” organized by Department of Bioinformatics, Dr. G.R. Damodaran College of Science, Coimbatore during 18-20 August, 2005
3. Oral presentation on “ ***Molecular modeling and docking studies on curcumin and curcumin analogs with cyclooxygenase-2***” at National conference on Recent trends in Biotechnology and Bioinformatics organized by Department of Biotechnology and Bioinformatics, Yogi Vemana University, Kadapa, Andhra Pradesh during 12-13 February, 2014.

#### **Poster presentations at international level seminars**

1. Poster presentation at National Symposium on “**Molecular modeling and docking studies of deguelin with cyclin D, Cyclin E and PI3 $\gamma$  proteins**” organized by CDAC, Pune during 19-21 January, 2016
2. Poster presented on “**Homology modeling of Plasmodium Vivax protein phosphatase V and validation of the structure**” at S.V. University, Tirupathi, Andhra Pradesh on 25<sup>th</sup> November, 2007.
3. Poster presented on “**Homology modeling of D-alanine D-alanine ligase of M. tuberculosis CDC 1551**” at Osmania university, Hyderabad, Andhra Pradesh on 9<sup>th</sup> January, 2006
4. Poster presented on “**Homology modeling of Human histamine H2 receptor and Docking studies**” at AIIMS, New Delhi on 1<sup>st</sup> March, 2006