


<b>Faculty Name</b>	<b>Dr. K.M. Kumar</b>	
<b>Designation</b>	<b>Assistant Professor</b>	
<b>Educational Qualifications</b>	M.Sc., M.Phil., Ph.D	
<b>Experience in Years</b>	9 years	
<b>Area of Interest</b>	Bioinformatics / Biotechnology / Omics Sciences / Computational and Medicinal Chemistry / Structural and systems biology	
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### International Journal Publications:

1. **K. M. Kumar**, P. Lavanya, A. Anand and R. Sudha, "Molecular dynamics and molecular docking studies on E166A point mutant, R274N/R276N double mutant, and E166A/R274N/R276N triple mutant forms of class A  $\beta$ -lactamases," J Biomol Struct Dyn., vol.32, no.12, pp.1953-68, Dec. 2014. **Impact factor: 4.983**
2. **K. M. Kumar**, A. Anand and R. Sudha, "Molecular docking and molecular dynamics studies on  $\beta$ -lactamases and penicillin binding proteins," Mol Biosyst, vol.10, no.4, pp.891-900, Apr. 2014, **Impact factor: 3.183**
3. **K. M. Kumar**, P.Anitha, V.Sivasakthi, Susmita Bag, P.Lavanya, A. Anand and R. Sudha, "Insilico study on Penicillin derivatives and Cephalosporins for upper respiratory tract bacterial pathogens," 3 Biotech, vol. 4, no.3, pp.241–251, Jun. 2014. **Impact factor: 0.992**
4. **K. M. Kumar** and R. Sudha, "Pharmacological importance of *Echinacea purpurea*, Int. journal of pharma and biosciences,"vol.2, no.4, pp. 304-314, Dec. 2011, **Impact factor: 2.958**
5. S. Madhan, **K. M. Kumar**, M. Anand, A. Anand, R. Sudha, "Detection of OXA-1  $\beta$ -Lactamase Gene of *Klebsiella pneumoniae* from Blood Stream Infections (BSI) by Conventional PCR and In-Silico Analysis to Understand the Mechanism of OXA Mediated Resistance," PLoS One, vol. 19, no.9-3, pp. e91800, Mar. 2014, **impact factor: 3.534**
6. C.H. Vinay Kumar, **K.M. Kumar**, R. Swetha, R. Ramaiah, A. Anand, "Protein aggregation due to nsSNP resulting in P56S VABP protein is associated with amyotrophic lateral sclerosis," J Theor Biol. vol.7, no.354, pp.72–80, Aug. 2014, **Impact Factor: 2.394**
7. T. Mahalakshmi , Lavanya P, **K.M. Kumar**, V. Vijayakumar , S. Sarveswari, A. Anand, R. Sudha, "In silico analysis reveals the anti-malarial potential of quinolinyl chalcone derivatives,"J Biomol Struct Dyn., vol.33, no.5, pp.961-77, May. 2015, **Impact factor: 2.983**
8. R.Venkat, **K.M. Kumar**,V.Vijayakumar, S.Sarveswari, R. Sudha, A. Anand, S. Karthikeyan, P. Giridharan and N. Suchetha Kumar, " $\beta$ -Keto esters from ketones and ethyl chloroformate: a rapid, general, efficient synthesis of pyrazolones and their antimicrobial, in silico and in vitro cytotoxicity studies," Org Med Chem Lett., vol.3, no.3, pp.6, Jul. 2013.
9. V. Sivasakthi, P. Anitha, **K.M. Kumar**, S. Bag, P. Senthilvel, P. Lavanya, R.Swetha, A. Anbarasu, S. Ramaiah, "Aromatic-aromatic interactions: analysis of  $\pi$ - $\pi$  interactions in interleukins and TNF proteins." Bioinformation, vol.30, no.9, pp.432-439, Apr.2013, **Impact factor: 0.62**

10. P. Senthilvel, P. Lavanya, **K.M. Kumar**, R. Swetha, P. Anitha, S. Bag, S. Sarveswari, V. Vijayakumar, S. Ramaiah, A. Anbarasu, "Flavonoid from *Carica papaya* inhibits NS2B-NS3 protease and prevents Dengue 2 viral assembly," *Bioinformation*, vol. 11, no. 9, pp. 889-895, Nov. 2013, **Impact factor: 0.62**
11. P. Anitha, V. Sivasakthi, P. Lavanya, S. Bag, **K.M. Kumar**, A. Anbarasu, S. Ramaiah. "Arginine and Lysine interaction with  $\pi$  residues in metalloproteins," *Bioinformation*, vol.8, no.17, pp.820-826. **Impact factor: 0.62**
12. Samer Adnan Hani Al – Khaboori, S. Balasubramanian, **K. M. Kumar**, "In Silico drug designing studies on Human Protein Kinases inhibitors," *Int. J. Rec. Biotech.* vol.3, no.4, pp.10-17, Dec.2015.
13. T. Shivani, G. Jyotsna, C. Anjali, J. Aruna, G.R. Geetha, **K.M. Kumar**, Biosynthesis of silver nanoparticles using *Bacillus* sp. for Microbial Disease, Control: An in-vitro and in-silico approach, *Sch. Acad. J. Pharm.*, vol4, no.9, pp. 389-397 Jan.2016.

#### PAPERS PUBLISHED IN CONFERENCES:

1. **K.M. Kumar**, P. Senthil, R.Sudha, & A. Anand, "Biological interaction of beta lactam antibiotics with penicillin binding proteins & beta-lactamases: A molecular docking & molecular simulation approach," 5<sup>th</sup> national symposium cum workshop on recent trends in Structural bioinformatics and computer aided drug design (SBCADD' 2013), PP-40, 2013.
2. R. Saranya, T. Ramanathan, **K.M. Kumar**, K.S. Kesavaraya, & A. Anand, "Interaction of 2-benzoazoline and its analogs with the Human serotonin (hSERT) AND Norepinphrine transporter (hNET) proteins: Insilico approach for potential target identification in depression and pain related disease," 4th science biospectrum-2013- international symposium on computational biology and drug design, sponsored by Kerla State Council Science, Technology and environment and Indian Council of Medical Reseach (ICMR). Pp. 44, 2013
3. **K.M. Kumar**, R. Sudha., "Pharmacological studies on *Echinacea Purpurea*," 3<sup>rd</sup> International conference on Science, Engineering and Technology (SET), Organized by School of Mechanical and Building Science (SMBS), VIT University, pp. 124, Mar.2011.
4. **K.M.Kumar**, R.Sudha, & A. Anand, "Molecular docking study on Ceftobiprole and its derivatives with penicillin bindings," 6<sup>th</sup> national symposium cum workshop on recent trends in Structural bioinformatics and computer aided drug design (SBCADD), pp.40. 2013.
5. T. Krishna, **K.M. Kumar**, "Piperine production by endophytic fungus *Colletotrichum Gloesporioides* isolated from *Piper Nigrum* L., fungal nutritional and Piperine antimicrobial studies, National conference on enzyme research in agriculture, food and Industrial Biotechnology," organized by Karnataka Science and Technology Academy, Department of Science and technology, Mharani Lakshmi Ammani College for women. 2015,
6. U. Magesh, G. Mangesh, **K.M. Kumar**, "Computational and structural investigation on endopolygalacturonase and polygalacturanase inhibiting proteins (PGIPs)," National conference on CONFLUENCE 2015, A system biology approach. Sponsored by Department of Biotechnology (DBT), Govt of India, Organized by Indian Academy Degree college, Pp-13. Apr. 2015.

7. G. Laxmikant, Gadhe, A.S. Shraddha, J. Vaishali, D. Sairama, **K.M. Kumar**, "Molecular dynamics and Molecular docking studies on anticancer molecules inhibiting different type of cancer targets, National conference on CONFLUENCE 2015, A system biology approach," Sponsored by Department of Biotechnology (DBT), Govt of India, Organized by Indian Academy Degree college, pp-12, Apr.2015.