



Name: Venkata Rao Kaki
Designation: Assistant Professor
Centre/School: Pharmaceutical Sciences and Natural Products, School of Basic and Applied Sciences, Central University of Punjab
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Education

Ph.D. - Panjab University – India, 2012

M.S. - National Institute of Pharmaceutical Education and Research (NIPER), India, 2005

B. Pharmacy - Kakatiya University, India, 2002

Research interests

- Design and synthesis New Chemical Entities (NCEs) for drug discovery research
- Natural Products Chemistry

Academic/Teaching experience

- Assistant Professor 18th Nov 2016 – to date
Central University of Punjab,
Bathinda, Punjab, India – 151001
- Lecturer Jan-2014 – Nov-2016
International Medical University,
Bukit Jalil, Kuala Lumpur, Malaysia-57000
- Senior Lecturer July-2013 - Dec-2013
Asia Metropolitan University,
Cheras, Selangor DE, Malaysia-43200

Industrial Research experience

- Sr. Research Associate May 2008- Sept 2008
Medicinal chemistry Department
Suven Life sciences Ltd, India
- Research Associate Aug 2007- April 2008
Medicinal chemistry Department
Jubilant Chemsys Ltd, India
- Research Associate Jun-2005 to Aug 2007

Medicinal chemistry Department
Nicholas Piramal Research Centre, India

Research projects/grants

1. Identification of chemical probes with pancreatic β -cell selective replication promoting activity: The new paradigm in anti-diabetic drug discovery. FRGS/1/2014/SG01/IMU/03/1; RM 154,000 (INR 29, 00,000); 2014-2016 - Principal Investigator.
2. Synthesis and evaluation of new thieno[2,3-*d*]pyrimidine derivatives as possible inhibitors of Cyclooxygenase isoenzyme-2 (COX-2); IMU/BP-I-01/12(14)2015; RM 9,000 (INR 1,60,000); 2014-2016 - Principal Investigator.
3. Design and synthesis of New Adenosine Kinase Inhibitors. CSIR/09/135/(0628)/2010/EMR-I; INR 750,000; 2010-2012.
4. Synthesis and biological evaluation of new 2,4-aryl/alkyl-5,6-dimethylthieno[2,3-*d*]pyrimidine derivatives as possible inhibitors of Cyclooxygenase isoenzyme-2 (COX-2); IMU/BP-I-01/12(15)2015; RM 12,000 (INR 2,20,000); 2014-2016 – Co-Investigator.
5. Hit to Lead Optimisation: Synthesis and Biological Evaluation of New Thienopyrimidine Derivatives as Potential Antagonists of Adenosine A₃ Receptor, A Promising Target for The Treatment of Asthma. *e-science*; RM 80,000; 2014-2016 – Co-Investigator.

Academic Awards

- Senior Research Fellowship, CSIR, India, 2008-2012.
- NIPER fellowship, India, 2003-2005.
- GATE-2003, 99.01 Percentile (All India Rank-61).
- CSIR-NET Lectureship, India, 2006.

Patents

1. Sarala Balachandran, Ram Vishwakarma, **Venkata rao Kaki**, Vithal Yadav, Siddheshwar Chauthi, Somesh Sharma, Sapna Parikh, Firuza Kharas. *Tumor necrosis factor- α inhibitors. WO 2008142623A2.*

Publications

2015 - 2016

1. **K. Venkata Rao**, A. Raghuram Rao, D. Pran Kishore, P. Mallikarjuna Rao. Basic Ionic Liquid [bmIm]OH Mediated Gewald Reaction As A Green Protocol For The Synthesis of 2-Aminothiophenes. *Synth. Commun.* 2015, 45(1), 119-126. (Impact

factor: 1.0, Tier level-Q2).

2. Narender Malothu, Jaswanth S. Bhandaru, Umasankar Kulandaivelu, Malathi Jojula, Raghuram Reddy Adidala, Umadevi K. R., Dusthacker A. V. N., **Venkat Rao Kaki**, Raghuram Rao Akkinapalli. Synthesis, in vitro antimycobacterial evaluation and docking studies of some new 5,6,7,8-tetrahydropyrido[4,3:4,5]thieno[2,3-d]pyrimidin-4(3H)-one schiff bases. *Bioorg. Med. Chem. Lett.* 2016, 26, 836 – 840.

2014

3. **K. Venkata Rao**, M. Raghu Prasad, A. Raghuram Rao. Facile Methods for the Synthesis of 5-Aryl And 5-Iodo Pyrrolo[2,3-D]Pyrimidines. *J. Heterocyclic Chem.* 2014, 51, E380-383. (Impact factor: 1.2, Tier level-Q3)
4. Pran Kishore Deb, Rajwinder Kaur, Balakumar Chandrasekaran, Madhu Bala, Dilshad Gill, **Venkat Rao Kaki**, Raghuram Rao Akkinapalli, Raghuprasad Mailavaram. Synthesis, anti-inflammatory evaluation, and docking studies of some new thiazole derivatives. *Med. Chem. Res.* 2014, 23, 2780-2792 (Impact factor: 1.1)

2013

5. **K. Venkata Rao**, C. Balakumar, B. Lakshmi Narayana, D. Pran Kishore, Rajwinder Kaur, A. Raghuram Rao. Transesterification of trimethylorthoacetate: an efficient protocol for the synthesis of 4-alkoxy-2-aminothiophene-3-carbonitrile. *Tetrahedron Lett.* 2013, 54, 1274-1278. (Impact factor: 2.683, Tier level-Q2)
6. B. Lakshmi Narayana, D. Pran Kishore, C. Balakumar, **K. Venkat Rao**, Rajwinder Kaur, A. Raghuram Rao. Pharmacophore based 3D-QSAR study of biphenyl derivatives as nonsteroidal aromatase inhibitors in JEG-3 cell lines. *Med. Chem.* 2013, 9(7), 974-984. (Impact factor: 1.642, Tier level-Q3)

2012

7. B. Lakshmi Narayana, D. Pran Kishore, C. Balakumar, **K. Venkata Rao**, Rajwinder Kaur, A. Raghuram Rao, J. Narashima Murthy, M. Ravikumar. Molecular modelling evaluation of non-steroidal aromatase inhibitors. *Chem. Biol. Drug. Des.* 2012, 79, 674–682. (Impact factor: 2.527, Tier level-Q2)
8. C Balakumar, D Pran Kishore, **K Venkat Rao**, B Lakshmi Narayana, K Rajwinder, V Rajkumar, A Raghuram Rao. Design, microwave-assisted synthesis and *in silico* docking studies of new 4H-pyrimido[2,1-b]benzothiazole-2-arylamino-3-cyano-4-ones as possible adenosine A2B receptor antagonists. *Indian .J. Chem.* 2012, 51B, 1105-1113. (Impact factor: 0.5, Tier level-Q3)

9. Upendra K. Jain, Richa K. Bhatia, Raghuram Rao Akkinapally, Ranjit Singh, Pran Kishore Deb, **Venkat Rao Kaki**. Design and synthesis of triphenyl-1H-pyrazole derivatives as anticancer agents. *Int. J. Pharm. Pharm. Sci.* 2012, 4, 600-604.

2011

10. Rajwinder Kaur, Pran Kishore, Lakshmi Narayana, **K Venkat Rao**, Balakumar, Rajkumar, Raghuram Rao. A facile microwave-assisted synthesis of 8,9-cycloalkathieno[3,2-e] [1,2,4]triazolo[1,5-c]pyrimidin-5(6H)-ones. *J. Chem. Sci.*, 2011, 123(1), 69–73. (Impact factor: 1.075, Tier level- Q2)
11. B. Lakshmi Narayana, D. Pran Kishore, C. Balakumar, **K. Venkata Rao**, Rajwinder Kaur, A. Raghuram Rao. Current strategies in breast cancer therapy. *Spanacea*, 2011, 1-6.

2010

12. **K Venkata Rao**, Premanand R. Patil, Sridhar Atmakuri, K. P. Ravindranathan Kartha. Iodine–sodium cyanoborohydride-mediated reductive ring opening of 4,6-O-benzylidene acetals of hexopyranosides. *Carbohydrate Res.* 2010, 345, 2709–2713. (Impact factor: 2.32, Tier level-Q2)
13. C. Balakumar, P. Lamba, D. Pran Kishore, B. Lakshmi Narayana, **K. Venkat Rao**, K. Rajwinder, A. Raghuram Rao, B. Shireesha, B. Narsaiah. Synthesis, anti-inflammatory evaluation and docking studies of some new fluorinated fused quinazolines. *Eur. J. Med. Chem.* 2010, 45, 4904-4913. (Impact factor: 3.193, Tier level-Q1).