

Curriculum Vitae



Dr. Putta Venkat Reddy

MSc, PhD

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Objective:

To seek a responsible and challenging position and to dedicate my service to a reputed organization to expose my talents and skills

Academic Profile:

- **Ph.D : Chemistry**, Osmania University, Hyderabad, India. “*Design, Structural elucidation, In vitro DNA-Binding, Photocleavage and Anticancer activity investigations of Ru(II) complexes containing polypyridyl ligands*” (**August-2018**)
- **M.Sc : Inorganic Chemistry**, Osmania University (**2007**) **63.9%**
- **B.Sc : Maths, Physics, Chemistry**, Osmania University (**2003**) **71%**

Other qualifications:

- **AP-SET-2012:** Qualified
AP-State Eligibility Test for Assistant Professor/Lectureship. Conducted by Osmania University, Hyderabad, India-2012
- **UGC-BSR (RFSMS) Fellowship** -2012

Professional experience:

- Worked as a Research Scientist in Solid Phase Peptide Synthesis and Purification at Issar Pharmaceuticals Ltd, MN Park, Turkapally – 500078, June-2019 to Oct-2020
- I have 4 Years of teaching experience as lecturer for Under Graduate and Post Graduate (**2007 to 2011**).

Research experience and skills:

- I have research experience in the field of Synthesis and Purification of organic/peptide molecules.
- Synthesis of novel peptide molecules by solid phase peptide synthesis grams to kilo grams scales.

- Purification of peptides on Prep- HPLC (50mm, 150mm and 200mm columns) –API
- Design and Synthesis of novel imidazole polypyridyl derivatives and their metal compounds,
- Characterization of synthesized compounds by UV-Vis Spectrophotometer, FTIR, Mass and ^1H & ^{13}C -NMR, spectral methods.
- Experienced in DNA- binding studies using UV-Vis, Fluorescence, CD-spectroscopy. Viscosity measurements and Gel electrophoresis.
- Laminar air flow, Autoclave, Incubator & hot air oven, Electrophoresis.
- Antibacterial activity and Cytotoxicity studies.
- Molecular modeling and docking studies.
- Operating Systems: Windows, MS-Office, Chem-draw and Internet Applications.
- Good knowledge on using search engines like science direct and Sci-Finder etc.

Achievements:

- Improved the yield and quality of peptides by developing methods of synthesis and Purification.

Instruments handling:

- Solid phase peptide synthesizer
- Prep- HPLC (50mm, 150mm & 200mm columns)
- Analytical HPLC
- Rota evaporator
- Lyophilizer
- Centrifuge
- UV-Visible Spectrometer
- Fluorescence Spectrophotometer
- FT-IR
- Circular Dichroism Spectrophotometer
- Agarose gel electrophoresis
- Laminar air flow

Publications:

1. **Putta Venkat Reddy**, M Rajender Reddy, Srishailam A, Y Praveen Kumar, Ch Nagamani, N Deepika, K. Nagasuryaprasad, S S Satyanarayana, S Satyanarayana. *Design, Synthesis, DNA binding affinity, cytotoxicity, apoptosis and cell cycle arrest of Ru(II) polypyridyl complexes. Analytical Biochemistry*, 485 (2015) 49–58.
2. **Putta Venkat Reddy**, Nagamani Ch, Rajender Reddy M, Srishailam A, K Nagasuryaprasad, Deepika Nancherla, VV Yaswanth, RS Prakasham, Satyanarayana Singh Surya, Satyanarayana Sirasani. *Synthesis and evaluation of in vitro DNA/protein binding affinity, antimicrobial, antioxidant and antitumor activity of mononuclear Ru(II) mixed polypyridyl complexes. Journal of fluorescence*, 26 (2016) 225-240.

3. Nagamani Chintakuntla, **Venkat Reddy Putta**, Rajender Reddy Mallepally, Ravi Kumar Vuradi, Laxma Reddy Kotha, Satyanarayana Surya Singh, Satyanarayana Sirasani. *Synthesis, structural characterization, in vitro DNA binding, and antitumor activity properties of Ru (II) compounds containing 2 (2, 6-dimethoxypyridine-3-yl)-1H-imidazo (4, 5-f)[1, 10] phenanthroline*. *Nucleosides, Nucleotides & Nucleic Acids*, 2020, 1-32. doi:10.1080/15257770.2019.1694685.
4. Srinivas Gopu, Vuradi Ravi kumar, Kotha Laxma Reddy, **Putta Venkat Reddy**, Satyanarayana Sirasani. *DNA binding, photocleavage, antimicrobial and cytotoxic properties of Ru(II) polypyridyl complexes containing BOPIP ligand, (BOPIP = {2-(4-(benzyloxy) phenyl)-1H-imidazo [4,5-f] [1,2]phenanthroline})*. *Nucleosides, Nucleotides & Nucleic Acids*, **38** (2019) 349-373.
5. Ch Ravi, Ravi Kumar Vuradi, Srishailam Avudoddi, Praveen Kumar Yata, **Venkat Reddy Putta**, G Srinivas, Ramchander Merugu, S Satyanarayana. *Synthesis, spectral studies, DNA binding, photocleavage, antimicrobial and anticancer activities of isoindol Ru(II) polypyridyl complexes*. *Nucleosides, Nucleotides & Nucleic Acids*, **38** (2019) 788-806.
6. Rajender Reddy Mallepally, Nagamani Chintakuntla, **Venkat Reddy Putta**, Nagasuryaprasad K, Ravi Kumar Vuradi, Madhuri P, Satyanarayana Singh S, Ramesh Kumar Chitumalla, Joonkyung Jang, Nagababu Penumaka, Satyanarayana Sirasani. *Synthesis, Spectral Properties and DFT Calculations of new Ruthenium (II) Polypyridyl Complexes; DNA Binding Affinity and in Vitro Cytotoxicity Activity*. *J of Fluorescence*, 27 (2017) 1513–1530.
7. RK Vuradi, S Avudoddi, **Venkat Reddy Putta**, LR Kotha, PK Yata, S Sirasani. *Synthesis, Characterization and Luminescence Sensitivity with Variance in pH, DNA and BSA Binding Studies of Ru (II) Polypyridyl Complexes*. *J of fluorescence*, 27 (2017), 939-952.
8. N Deepika, CS Devi, YP Kumar, KL Reddy, **Putta Venkat Reddy**, DA Kumar, Satyanarayana Singh Surya, Satyanarayana Sirasani. *DNA-binding, cytotoxicity, cellular uptake, apoptosis and photocleavage studies of Ru (II) complexes*. *Journal of Photochemistry and Photobiology B: Biology* 160, (2016) 142-153.
9. Rajender Reddy Mallepally, **Venkat Reddy Putta**, Nagamani Chintakuntla, Ravi Kumar Vuradi, Laxma Reddy Kotha, Satyanarayana Sirasani. *DNA Binding Behavior, Sensor Studies, Antimicrobial, Photocleavage and In vitro Cytotoxicity of Synthesized Ru(II) Complexes with Assorted Intercalating Polypyridyl Ligands*. *Journal of fluorescence*, 2016.
10. RK Vuradi, **Venkat Reddy Putta**, D Nancherla, Satyanarayana Sirasani. *Luminescent behavior of Ru (II) polypyridyl morpholine complexes, synthesis, characterization, DNA,*

protein binding, sensor effect of ions/solvents and docking studies. *J of fluorescence* 26 (2016), 689-701.

11. Y Praveen Kumar, C Shobha Devi, A Srishailam, N Deepika, V Ravi Kumar, **Putta Venkat Reddy**, K Nagasuryaprasad, Surya S. Singh, Penumaka Nagababu, S. Satyanarayana. *Studies on Photocleavage, DNA Binding, Cytotoxicity, and Docking Studies of Ruthenium(II) Mixed Ligand Complexes. J of Fluorescence*, 26 (2016) 2119–2132.
12. C. Shobha Devi, P Nagababu, Sumathi Natarajan, N. Deepika, **P. Venkat Reddy**, N. Veerababu, Surya S. Singh, S. Satyanarayana, *Cellular uptake, cytotoxicity, apoptosis and DNA-binding investigations of Ru(II) complexes. European Journal of Medicinal Chemistry* (2013) DOI: 10.1016/j.ejmech.2013.11.005.
13. A Srishailam, YP Kumar, **Putta Venkat Reddy**, N Nambigari, U Vuruputuri, SS Singh, *Cellular uptake, cytotoxicity, apoptosis, DNA-binding, photocleavage and molecular docking studies of ruthenium (II) polypyridyl complexes. Journal of Photochemistry and Photobiology B: Biology* 132, (2014) 111-123.
14. A. Srishailam, Yata Praveen Kumar, Nazar M. D. Gabra, **Putta Venkat Reddy**, N. Deepika, Nagesetti Veerababu and S. Satyanarayana, “Synthesis, DNA-binding, Cytotoxicity, Photo Cleavage, Antimicrobial and Docking Studies of Ru(II) Polypyridyl Complexes”. *J of Fluoresc.* 23 (2013), 897-908.
15. N Deepika, YP Kumar, CS Devi, **Putta Venkat Reddy**, A Srishailam, *Synthesis, characterization, and DNA binding, photocleavage, cytotoxicity, cellular uptake, apoptosis, and on–off light switching studies of Ru (II) mixed-ligand complexes containing 7- fluorodipyrido [3,2-a: 2', 3'- c]phenazine. Journal of Biological Inorganic Chemistry* 18 (2013), 751-766.
16. MR Reddy, **Putta Venkat Reddy**, YP Kumar, A Srishailam, N Nambigari, *Synthesis, characterization, DNA binding, light switch “on and off”, docking studies and cytotoxicity, of ruthenium(II) and cobalt(III) polypyridyl complexes. J of fluorescence* 24 (2014), 803-817.
17. NM Gabra, B Mustafa, YP Kumar, CS Devi, A Srishailam, **Putta Venkat Reddy**, *Synthesis, characterization, DNA binding studies, photocleavage, cytotoxicity and docking studies of ruthenium(II) light switch complexes. J of fluorescence* 24 (2014), 169-181.
18. A Dayanand, **Putta Venkat Reddy**, Ch Nagamani, Y Praveen Kumar, M Rajender Reddy, V. Ravi Kumar, K Laxma Reddy, and S Satyanarayana. *Synthesis of Ru(ii) thiophene-imidazo-phenanthroline polypyridyl complexes and their dna binding, photocleavage, antimicrobial and cytotoxicity activity properties. European Journal of Biomedical and Pharmaceutical sciences* 4 (2017), 245-253.

Conferences, symposiums, poster and oral presentations of national and international:

1. International Conference on Innovations in Commerce and Science (ICICS-2017), 29th & 30th November, 2017. Organized by Nizam College, Hyderabad-500001, Telangana State, India. *The design, Synthesis, Mechanism of DNA-binding, Photocleavage and Cytotoxicity of Ru(II) complexes.* **Putta Venkat Reddy**, Chintakuntla Nagamani, Rajender Reddy M, K Laxma Reddy, S Satyanarayana. (**Oral Presentation**).
2. 20th International Conference of International Academy of Physical Sciences (**CONIAPS XX**) on Recent Advances In Physical Sciences and Future Challenges **July 14-16, 2017** Organized by Faculty of Science (Departments of Mathematics, Physics & Chemistry), University College of Science Osmania University, Hyderabad-500 007, Telangana State, India. *In vitro antitumour activity, DNA-binding ability and DNA-cleavage studies of Ru(II) polypyridyl complexes.* **Putta Venkat Reddy**, Chintakuntla Nagamani, Rajender Reddy Mallepally, K Nagasuryaprasad, Kotha Laxma Reddy, S Satyanarayana Singh, Sirasani Satyanarayana. (**Oral Presentation**).
3. National Symposium on Recent Advances in Chemical & Material Sciences (**RACMS 2016**), Organized by Department of chemistry, **RGUKT-BASAR**, 20-21st August, 2016. *Exploring the DNA binding mode and anticancer activity of Ru(II) polypyridyl complexes containing CTFIP ligand.* **Putta Venkat Reddy** and Sirasani Satyanarayana. (**Best Oral Presentation award**).
4. International Congress on Recent Advances in Chemistry And Chemical Engineering (**ICRACACE -2016**), Organized by Department of Chemistry, JNTUH College of Engineering, Kukatpally, Hyderabad - 500085. Telangana, India. 11-13th July 2016. *Design, Synthesis, DNA binding studies and anticancer activity of Ru(II) polypyridyl complexes containing CTPFIP ligand.* **Putta Venkat Reddy** and Sirasani Satyanarayana. (**Oral Presentation**)
5. Participated in the International Conference on Biological Inorganic Chemistry (ICBIC-2013) organized by the Department of Chemistry, Periyar University, Salem, Tamil Nadu, India on February 20th – 22nd, 2013.
6. 4th International Conference on Luminescence and its Applications (ICLA-2012) organized by RGUKT Hyderabad, ICT Hyderabad, Society for Information Display(India Chapter) and Luminescence Society of India on February 7 – 10th, 2012. *“Synthesis, Characterization, DNA Binding , Photocleavage and Antimicrobial activity of Ru(II) metal complexes”* Yata Praveen Kumar, M Rajender Reddy, **Putta Venkat Reddy** and S Satyanarayana* (Poster Presentation).
7. Participated in 30th Annual Conference of Indian Council of Chemists held at Department of Chemistry, Osmania University, Hyderabad on 28th – 30th December, 2011.

8. DST sponsored National Seminar on Emerging Concepts and Trends in Bio-Inorganic Chemistry (ECTBC-2011) *Synthesis, DNA, Binding and photocleavage of light switch complexes* $[Ru(phen)_2 dppca]^{2+}$ $[Ru(bpy)_2 dppca]^{2+}$ and $[Ru(dmb)_2 dppca]^{2+}$, Yata Praveen Kumar, M Rajender Reddy, **Putta Venkat Reddy** and S Satyanarayana (*Best poster award*).
9. Participated in the two day State Level Seminar on “Principles and Applications of NMR, IR&MASS Spectroscopy” held on 16th & 17th September 2008, at *Govt. College for Women Begumpet, Hyderabad*.
10. Participated in the one day seminar on “Futuristic Chemistry” held on 8th march 2007, at *Nizam College (autonomous), Osmania University, Hyderabad*.

Strengths:

- Dedication, Responsible, Enthusiasm, Leadership, Confident, Hard-working, Positive Attitude, Creativity and Ability to resolve challenging technical issues.

Present address :

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References:

1. **Prof. S. Satyanarayana:** Former Vice-Chancellor Osmania University; Dept. of chemistry, Osmania University; Hyderabad-07; Telangana State, INDIA; Email: snsirasani@gmail.com; Ph: 9490156670.
2. **Prof. Ch. Srala Devi:** Dept. of chemistry, Osmania University, Hyderabad-07, Telangana State, INDIA; Email: saraladevich1@gmail.com Ph: +91 9391390114.
3. **Dr. K Laxma Reddy:** Dept. of chemistry, Osmania University, Hyderabad-07, Telangana State, INDIA.

Declaration: I hereby declare that all the above information is correct and accurate.

Dr. Putta Venkat Reddy