

## Current CV



**Name & Designation** : Prof. BYRU VENKATRAM REDDY  
Professor & Head  
Department of Physics,  
Kakatiya University, Warangal - 506 009, Telangana, India  
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*E-mail: bvreddy67@yahoo.com*

**Father's and Mother's Name** : Late Sri Raghava Reddy & Late Smt. Laxmi Devi

**Date of Birth** : 20/10/1966

**Educational Qualifications** :

|            |      |                         |        |
|------------|------|-------------------------|--------|
| B.Sc (MPE) | 1986 | Osmania University      | I Div  |
| M. Sc:     | 1989 | Kakatiya University     | I Div  |
| B. Ed:     | 1990 | Kakatiya University     | II Div |
| Ph. D:     | 1992 | Kakatiya University     | -      |
| PGDCS:     | 2000 | University of Hyderabad | I Div  |

### Employment Details:

| <i>Designation</i>                              | <i>Place of work</i>   | <i>From</i> | <i>To</i>  |
|---|--|-------------|------------|
| <b>Professor</b>                                | Dept. of Physics, KU, Warangal   | 11/02/2018  | Till date  |
| <b>Associate Professor</b>                      | Dept. of Physics, KU, Warangal   | 11/02/2015  | 10/02/2018 |
| <b>Assistant Professor</b><br>(AGP: Rs. 8000/-) | Dept. of Physics, KU, Warangal   | 11-02-2012  | 10/02/2015 |
| <b>Assistant Professor</b><br>(AGP: Rs. 7000/-) | University P.G. College (KU), Godavarikhani, KU<br>College of Engg., KU Campus;<br>University Arts & Science College, Subedari<br>& Dept. of Physics, UC, KU | 11/02/2007  | 10-02-2012 |
| <b>Assistant Professor</b><br>(AGP: Rs. 6000/-) | University P.G. College (KU),<br>Godavarikhani, Karimnagar   | 11-02-2003  | 10-02-2007 |
| <b>Lecturer</b> (Ad-hoc)                        | University P.G. College (KU),<br>Godavarikhani, Karimnagar   | 05-09-1994  | 10-02-2003 |
| <b>Lecturer</b> (Part-time)                     | C.K.M Arts & Science College, Warangal   | 28-08-1989  | 04-09-1994 |

### Teaching:

**Experience** : 31 years (PG: 24 years; UG: 7 years)  
**Papers taught** : Electronics, Molecular Spectroscopy and  
Quantum Mechanics

### Research:

**Experience** : 31 years  
**Specialization** : Molecular Spectroscopy, DFT computations & Material Science  
**Publications** : 42 (International Journals: 37; National Journals: 05);  
**WoS Publications** : 29  
**Citations** : 345  
<https://scholar.google.co.in/citations?user=Rkt0IRgAAAAJ&hl=en>  
**h-index** : 11  
**i10-index** : 12  
**No. of Ph.Ds awarded** : 03  
**No. of candidates registered for Ph.D** : 03

**Books authored/edited** : 1. Basic Electronics (Telugu Akademi, Hyderabad)  
2. Physics of Semiconductor Devices (Telugu Akademi, Hyderabad)  
3. Basic Instrumentation (Telugu Akademi, Hyderabad) (In Press)

**Reviewer for Reputed International Journals** : ACS Omega (ACS publishers)  
Spectrochimica Acta A (Elsevier Publishers),  
Physical Chemistry Chemical Physics (RSC publishers)  
Molecular Physics (Taylor & Francis)  
Springer Nature Applied Sciences (Springer)  
J. Molecular Structure (Elsevier Publishers)  
J. Non-crystalline Solids (Elsevier Publishers),  
Canadian J. Chemistry (Canadian Science Publishing)  
Analytical Chemistry Letters (Taylor & Francis)  
Computational Biology and Chemistry (Elsevier Publishers)  
RSC Advances (RSC publishers)  
Journal of Biomolecular Structure & Dynamics (Taylor & Francis)  
Heliyon (Elsevier Publishers)  
Results in Chemistry (Elsevier)  
Scientific Reports (Springer)  
Food Chemistry (Elsevier)  
Indian J. Pure & Applied physics (CSIR, NISCAIR)  
DAE Solid State Physics Symposium Proceedings

**Work-shops, Conferences, Seminars, etc attended** : 47; International (Abroad): 02; International (India) : 10  
National: 35 (Annexure II – IV)

**Research Projects completed** : 01 (Vibrational spectroscopic investigations and Density Functional Theory (DFT) calculations of some Biomolecules, funded by UGC of Rs. 11.45 lakh)

**Foreign visits** : 1) USA (Ohio State University, Columbus, Ohio) in 2011;  
Funded by UGC, New Delhi  
2) USA (Southern Methodist University, Dallas, Texas) in 2018;  
Funded by ITS-SERB, DST, New Delhi

**Achievements/Awards** : 1) Recipient of “ISPA Dr. Gunasekaran Award - 2020” from Indian Spectro Physicists Association, Chennai, India  
2) Recognized as Outstanding Reviewer by Elsevier Publishers for J. Molecular Structure  
3) Complementary Membership in ACS publishers  
4) Identified Mentor of NITTTR, UGC, Govt. of India.

### **Academic Positions:**

- (i) **Member, BoS in Physics** : Design of Curriculum  
University of Madras, Chennai  
(01/9/2020) onwards
- (ii) **Member, BoS in Electronics (UG)** : Involving in curriculum design  
SR&BGNR Govt. Degree & PG College  
Khammam (Dec 2019 onwards)
- (iii) **Member, BoS in Physics** : Involving in curriculum design  
Mahathma Gandhi Univ, Nalgonda  
(September 2019 onwards)
- (iv) **Member, BoS in Physics (PG)** : Involving in curriculum design  
Satavahana University, Karimanagar  
(July 2019 onwards)
- (v) **Member, BoS in Environmental Science** : Involving in curriculum design  
KU, Warangal (06/10/2016 – 05/10/2018)
- (vi) **Chairman, BoS in Physics and Electronics** : Introduced CBCS system, syllabi was revised &  
KU, Warangal (30/5/2015 – 07/6/2017) New papers were introduced

- (vii) **Member**, Syllabus Revision Committee for Applied Physics (UG Engineering Courses) KU, Warangal (2010-2018) : Syllabus of Applied Physics for B.Tech was revised
- (viii) **Coordinator**, UGC SAP-DRS-II, Physics Dept, KU (09/2/2017 onwards) : Coordinating with UGC cell, KU & UGC for utilization of grant for research and academics
- (ix) **Member**, BoS in Physics (PG) KU, Warangal (2013-15) : Involving in curriculum design
- (x) **Member**, BoS in Physics & Electronics Chaitanya Degree College (Autonomous), Hanamkonda, Warangal (2007 - 2011) : Curriculum and syllabi of Physics & Electronics were revised
- (xi) **Member** : American Chemical Society (ACS)
- (xii) **Life Member** : Indian Spectro Physics Association (ISPA)
- (xiii) **Life Member** : Laser & Spectroscopy Society of India (LASSI)
- (xiv) **Life Member** : Indian Society of Atomic and Molecular Physics (ISAMP)
- (xv) **Member** : Governing Body, Kendriya Vidyalaya, NTPC, Jyothinagar, Karimnagar Dist. (During 2008-2009)
- (xvi) **Member** : College Planning and Development Council, Govt. Degree College, Godavarikhani, Karimnagar Dist. (During 2008-2009)
- (xvii) **Resource Person**, State level Pedagogical : Lectures were given to JLs in Refresher Course Training Program, APIE (2007 -2008)
- (xix) **Executive Member & Seminar Secretary** GPPPPG, Godavarikhani; an NGO for Pollution Control & Environmental Protection (During 2000-2009) : Organized number of workshops & Awareness programs in schools and colleges

### **Administrative Positions in Kakatiya University:**

- (i) **Registrar (FAC)** : Kakatiya University (01/6/2026 – 17/6/2021)
- (ii) **Controller of Examinations (FAC)** : Kakatiya University (01/6/2026 – 24/6/2021)
- (iii) **Additional Controller of Exams** : Confidential Section, KU (18/9/2017 - 24/6/2021)
- (iv) **Director (I/c)** : Central Instrumentation Centre, KU (30/4/2020 onwards)
- (v) **Head of the Department** : Department of Physics, KU (22/05/2019 to 21/5/2021)
- (vi) **Additional Controller of Exams** : UG Section, KU (03/9/2012 – 31/8/2015)
- (vii) **Director** : University Hostels, KU (07/7/2011 – 12/9/2012)
- (viii) **Officer-Incharge of Exams** : KU College of Engg, Wgl (2009-2010)
- (ix) **Principal** : Univ P.G. College (KU), Godavarikhani (08/8/2008-18/8/2009)
- (x) **Joint Director** : UPGC Hostels (1998-2001 & 2007-08)
- (xi) **Coordinator** : Student Welfare and Placement Cell University P.G. College, Godavarikhani (KU), (2004-2005)
- (xii) **Program Officer** : NSS, Univ. P.G College, GDK (KU)

## ANNEXURE – I (Research Publications) No. of Citations : 351

| Year | S.No. | Title & Authors   | Journal details  | Impact Factor  |
|------|-------|---|--|----------------|
| 2021 | 43    | Theoretical (DFT) and experimental (FT-IR & FT Raman) approach to investigate the molecular geometry and vibrational properties of 2,5- and 2,6-dihydroxytoluenes<br><i>P. Venkata Ramana Rao, K. Srishailam<sup>b</sup>, B. Venkatram Reddy, G. Ramana Rao<sup>b</sup></i>   | J. of Molecular Structure<br>1240 (2021) 130617<br><b>(Elsevier Publishers)</b>  | 2.46           |
| 2021 | 42    | Synthesis, evaluation of molecular structure from torsional scans, study of vibrational and molecular characteristics using spectroscopic and DFT methods of some thiosemicarbazones and investigation of their anticancer activity<br><i>K. Srishailam, K. Ramaiah, K. Laxma Reddy, B. Venkatram Reddy, G. Ramana Rao</i>                            | Chemical Papers (Springer)<br>doi.org/10.1007/s11696-021-01595-x   | 1.68           |
| 2020 | 41    | NMR & Electronic Spectra, NLO, FMO, NBO and Thermodynamic Properties of Pentachlorophenol: An Experimental and Theoretical Investigation<br><i>P. V. Ramana Rao, K. Srishailam, G. Ramesh, B. Venkatram Reddy*, G. Ramana Rao</i>   | Asian J. of Chemistry<br>32(12) (2020) 3057-3062<br><b>(Asian Publication Corp.)</b>   | Scopus indexed |
| 2020 | 40    | Synthesis of Sr1-xBaxBi2B2O7 glass ceramics: A study for structure and characterization using experimental techniques and DFT method<br><i>G. Padmaja, G. Devarajulu, B. Deva Prasad Raju, G.R. Turpu, K. Srishailam, B. Venkatram Reddy*, G. Pavan Kumar</i>   | J. of Molecular Structure<br>1220 (2020) 128660<br><a href="https://doi.org/10.1016/j.molstruc.2020.128660">https://doi.org/10.1016/j.molstruc.2020.128660</a><br><b>(Elsevier Publishers)</b> | 2.46           |
| 2020 | 39    | Theoretical and experimental study of torsional potentials, molecular structure (monomer and dimer), vibrational analysis and molecular characteristics of some dimethyl bipyridines<br><i>L. Ravindranath, B. Venkatram Reddy*</i>   | J. of Molecular Structure<br><a href="https://doi.org/10.1016/j.molstruc.2019.127089">https://doi.org/10.1016/j.molstruc.2019.127089</a><br>1200 (2020) 127089<br><b>(Elsevier Publishers)</b> | 2.46           |
| 2019 | 38    | Investigation of torsional potentials, hindered rotation, molecular structure and vibrational properties of some biphenyl-carboxaldehydes using spectroscopic techniques and density functional formalism<br><i>K. Srishailam, B. Venkatram Reddy*, G. Ramana Rao</i>   | J. of Molecular Structure<br>1196 (2019) 139-161<br><b>(Elsevier Publishers)</b>   | 2.46           |
| 2019 | 37    | Barrier potentials, molecular structure, force field calculations and quantum chemical studies of some bipyridine di-carboxylic acids using the experimental and theoretical using (DFT, IVP) approach<br><i>Jyothi Prashanth, Ramaiah Konakanchi and Byru Venkatram Reddy*</i>   | Molecular Simulation<br>doi.org/10.1080/08927022.2019.1634807<br><b>(Taylor &amp; Francis)</b>   | 1.45           |
| 2019 | 36    | Synthesis, crystal and molecular structure, and characterization of 2-((2-aminopyridin-3-yl)methylene)-N-ethylhydrazinecarbothioamide using spectroscopic (1H and 13C NMR, FT-IR, FT-Raman, UV-Vis) and DFT methods and evaluation of its anticancer activity<br><i>K. Ramaiah, K. Srishailam, K. Laxma Reddy, B. Venkatram Reddy*, G. Ramana Rao</i> | J. of Molecular Structure<br>1184 (2019) 405-417<br><b>(Elsevier Publishers)</b>   | 2.46           |
| 2019 | 35    | Structural and vibrational properties of pentabromophenol and pentafluorophenol: A spectroscopic investigation using density functional theory<br><i>P. Venkata Ramana Rao, K. Srishailam, L. Ravindranath, B. Venkatram Reddy*, G. Ramana Rao</i>  | J. of Molecular Structure<br>1180 (2019) 665-675<br><b>(Elsevier Publishers)</b>   | 2.46           |
| 2019 | 34    | Experimental and theoretical determination of structural and vibrational properties of pentachlorophenol and pentachlorothiophenol<br><i>K. Srishailam, P. Venkata Ramana Rao, L. Ravindranath, B. Venkatram Reddy*, G. Ramana Rao</i>  | J. of Molecular Structure<br>1178 (2019) 142-154<br><b>(Elsevier Publishers)</b>   | 2.46           |
| 2019 | 33    | Synthesis, spectroscopic, and DFT quantum chemical studies of 3- and 4-pyridyl-acetonitriles<br><i>P. Rajender Reddy, J. Prashanth, B. Prasanna, B. Venkatram Reddy*</i>  | J. of Molecular Structure<br>1176 (2019) 447-460<br><b>(Elsevier Publishers)</b>   | 2.46           |

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|------|----|--|---|------|
| 2019 | 32 | Vibrational spectroscopic (FT-IR, FT-Raman), anti-inflammatory, docking and molecular characteristic studies of Ni(II) complex of 2-aminonicotinaldehyde using theoretical and experimental methods<br><i>K. Ramaiah, J. Prashanth, J. Haribabu, E. Srikanth, B. Venkatram Reddy*, R. Karvembu, K. Laxma Reddy</i>   | J. of Molecular Structure<br>1175 (2019) 769-781<br><b>(Elsevier Publishers)</b>  | 2.46 |
| 2018 | 31 | Molecular structure and vibrational analysis of 2,5-pyridinedicarboxylic acid using experimental and theoretical methods<br><i>J. Laxman Naik and B. Venkatram Reddy*</i>  | Materials Science and Engineering <b>360</b> (2018) 012028 ( <b>IOP Conf. Series</b> )  | --   |
| 2018 | 30 | Molecular structure, vibrational analysis, hyperpolarizability and NBO analysis of 3-methyl-picolinic acid using SQM calculations<br><i>G. Ramesh, J. Prashanth, J. Laxman Naik, B. Venkatram Reddy*</i>   | J. of Structural Chemistry<br>Vol. 59, No.5 (2018) 1022-1031<br><b>(Springer Publishers)</b>  | 0.52 |
| 2018 | 29 | Synthesis, Structural, Biological Evaluation, Molecular Docking and DFT Studies of Co(II), Ni(II), Cu(II), Zn(II), Cd(II) and Hg(II) Complexes bearing Heterocyclic Thiosemicarbazone ligand<br><i>Ramaiah K, J. Haribabu, J. Prashanth, V. B. Nishtala, Ramachary M, Saikumar M, Durgaiah G, Ramasamy K, B. Venkatram Reddy, Narsimha Reddy Y, Laxma Reddy K*</i> | Appl Organometal Chem.<br>2018; e4415 ( <b>Wiley</b> )<br><a href="https://doi.org/10.1002/aoc.4415">https://doi.org/10.1002/aoc.4415</a> | 3.58 |
| 2018 | 28 | Spectroscopic investigation on structure (monomer and dimer), molecular characteristics and comparative study on vibrational analysis of picolinic and isonicotinic acids using experimental and theoretical (DFT & IVP) methods<br><i>G. Ramesh, B. Venkatram Reddy*</i>  | J. of Molecular Structure<br>1160 (2018) 271-292<br><b>(Elsevier Publishers)</b>  | 2.46 |
| 2018 | 27 | Study on structure, vibrational analysis and molecular characteristics of some halogen substituted azido-phenylethanones using FTIR spectra and DFT<br><i>J. Prashanth, B. Venkatram Reddy*</i>  | J. of Molecular Structure<br>1155 (2018) 582-597<br><b>(Elsevier Publishers)</b>  | 2.46 |
| 2017 | 26 | Synthesis, structural, spectroscopic, anti-cancer and molecular docking studies on novel 2-[(Anthracene-9-ylmethylene)amino]-2-methylpropane-1,3-diol using XRD, FTIR, NMR, UV-Vis spectra and DFT<br><i>P. Pavitha, J. Prashanth, G. Ramu, G. Ramesh, K.Mamatha, B. Venkatram Reddy *</i>   | J. of Molecular Structure<br>1147 (2017) 406-426<br><b>(Elsevier Publishers)</b>  | 2.46 |
| 2016 | 25 | Investigation of torsional potentials, molecular structure, vibrational properties, molecular characteristics and NBO analysis of some bipyridines using experimental and theoretical tools<br><i>J. Prashanth, B. Venkatram Reddy*, G. Ramana Rao</i>   | J. of Molecular Structure<br>1117 (2016) 79-104<br><b>(Elsevier Publishers)</b>   | 2.46 |
| 2016 | 24 | Molecular geometry, NBO analysis, Hyperpolarizability and HOMO-LUMO energies of 2-azido-1-phenylethanone using Quantum chemical calculations<br><i>J. Prashanth, G. Ramesh, J. Laxman Naik, Jai Kishan Ojha, B. Venkatram Reddy*</i>   | Materials Today: Proceedings<br>3 (2016) 3761–3769<br><b>(Elsevier Publishers)</b>  | 0.84 |
| 2016 | 23 | Experimental and theoretical study of 3-methyl-4-nitrobenzoic acid using DFT and IVP methods<br><i>J. Prashanth, Jai Kishan Ojha, B. Venkatram Reddy*, G. Ramana Rao.</i>  | Journal of Physics: Conference Series<br>759 (2016) 012057, pp 1-8.<br><b>IOP Science Publishers</b>                                      | 0.45 |
| 2015 | 22 | Experimental (FTIR and FT-Raman) and theoretical investigation of some pyridine-dicarboxylic acids<br><i>J. Laxman Naik, B. Venkatram Reddy*, N. Prabavathi.</i>   | J. of Molecular Structure<br>1100 (2015) 43-58<br><b>(Elsevier Publishers)</b>  | 2.46 |
| 2015 | 21 | Molecular Structure, vibrational spectra, natural bond orbital and thermodynamic analysis of 3,6-dichloro-4-methylpyridazine and 3,6-dichloropyridazine-4-carboxylic acid by dft approach.<br><i>N. Prabavathi*, N. Senthil Nayaki, B. Venkatram Reddy</i>   | <i>Spectrochim. Acta A</i> ,<br>136 (2015) 1134-1148<br><b>(Elsevier Publishers)</b>  | 3.23 |

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|------|----|--|--|------|
| 2015 | 20 | Molecular structure, vibrational analysis and first order hyperpolarizability of 4-methyl-3-nitrobenzoic acid using density functional theory<br><i>J. Prashanth, G. Ramesh, J. Laxman Naik, Jai Kishan Ojha, B. Venkatram Reddy*, G. Ramana Rao</i>   | Optics and Photonics Journal 5 (2015) 91-107<br><b>(Scientific Research Publishers, USA)</b>                         | 1.01 |
| 2015 | 19 | Molecular structure and vibrational analysis of 2,6-pyridine-dicarboxylic acid using experimental and theoretical methods<br><i>J. Laxman Naik, G. Ramesh and B. Venkatram Reddy*</i>  | <b>ICSEMF-2015 (e-book) 331-335</b>  | --   |
| 2015 | 18 | Vibrational analysis and Transferability of Force constants of 3-methyl pyridine-2-carboxylic acid using DFT and IVP methods<br><i>J. Laxman Naik, J. Prashanth and B. Venkatram Reddy*</i>  | <b>ICSEMF-2015 (e-book) 336-339</b>  | --   |
| 2015 | 17 | Spectroscopic study of 2-azido-1-phenylethanone using density functional theory (DFT)<br><i>J. Prashanth, B. Venkatram Reddy*, G. Ramana Rao</i>   | <b>ICSEMF-2015 (e-book) 340-343</b>  | --   |
| 2013 | 16 | Transferable valence force fields: the case of out-of-plane vibrations of some trimethoxybenzenes.<br><i>J. Laxman Naik, B. Venkatram Reddy*, G. Ramana Rao</i>  | Conference Proceedings of AMST-2012, 416-422 (2013),<br><b>Lap LAMBERT Academic Publishers</b>                       | --   |
| 2012 | 15 | Vibrational analysis and Valence force field for nitrotoluenes, dimethylanilines and some substituted methylbenzenes.<br><i>Jai Kishan Ojha, B. Venkatram Reddy, G. Ramana Rao*</i>  | Spectrochim. Acta A, 96 (2012) 632-643,<br><b>(Elsevier Publishers).</b>   | 3.23 |
| 2011 | 14 | Vibrational analysis of some substituted methylbenzenes. Part II: Transferability of force constants - the case of tetra-, trimethylbenzenes and nitroparatoluidine<br><i>Jai Kishan Ojha, B. Venkatram Reddy, G. Ramana Rao*</i>  | AIP Conference Proceedings of International Conference: Optics-2011; 1391 (2011) 472<br><b>(AIP Publishers, USA)</b> | --   |
| 2008 | 13 | Vibrational spectra and modified valence force field of N,N'-methylene-bisacrylamide.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>   | Ind. J. of Pure & App. Phys. 46 (2008) 611<br><b>(NISCAIR, CSIR, New Delhi)</b>                                      | 0.58 |
| 2007 | 12 | Normal coordinate analysis of some di- and trimethoxy nitrobenzenes.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>  | Acta Ciencia Indica, Vol.33, No.1 (2007) 27<br><b>(Pragathi Prakashan, Meerut)</b>                                   | --   |
| 2007 | 11 | Transferable valence force fields: the case of out-of-plane vibrations of dimethoxybenzenes.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>  | Asian J. of Physics Vol.16, No.1 (2007) 29<br><b>(Anitha Publications, Ghaziabad).</b>                               | --   |
| 2006 | 10 | Normal coordinate analysis of some fluorotoluenes.<br><i>Jai Kishan Ojha, B. Venkatram Reddy, G. Ramana Rao*</i>   | Acta Ciencia Indica, Vol.32, No.4 (2006) 509<br><b>(Pragathi Prakashan, Meerut)</b>                                  | --   |
| 2004 | 9  | Vibrational analysis of mononitro substituted benzamides, benzaldehydes and toluenes: Part I – Vibrational spectra, normal coordinate analysis and transferability of force constants of nitrobenzamides, nitrobenzaldehydes and nitrotoluenes.<br><i>Md. Qayyum, B. Venkatram Reddy, G. Ramana Rao*</i> | Spectrochim. Acta A, 60 (2004) 279<br><b>(Elsevier Publishers)</b>   | 3.23 |
| 2004 | 8  | Vibrational analysis of mononitro substituted benzamides, benzaldehydes and toluenes: Part II – Transferability of valence force constants.<br><i>Md. Qayyum, B. Venkatram Reddy, G. Ramana Rao*</i>   | Spectrochim. Acta A, 60 (2004) 291<br><b>(Elsevier Publishers).</b>  | 3.23 |
| 2002 | 7  | Normal coordinate treatment of some pyridines.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>  | Indian J. of Physics 76B (4) (2002) 473<br><b>(Springer Publishers)</b>  | 1.24 |
| 1996 | 6  | Vibrational analysis of substituted anisoles: Part III – Normal coordinate analysis of 2,6-di- and penta-chloro anisoles.<br><i>B. Venkatram Reddy, A. Pavan Kumar, G. Ramana Rao*</i>   | Asian J. of Physics 5 (1996) 193<br><b>(Anitha Publications, Ghaziabad).</b>   | --   |

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| 1994 | 5 | Transferable valence force fields for substituted benzenes:<br>Part I – Monohalogenated anisoles.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>   | Vibrational Spectroscopy<br>6 (1994) 231<br><b>(Elsevier Publishers)</b>           | 1.92 |
| 1994 | 4 | Transferable valence force fields for substituted benzenes:<br>Part II – Di- and Tri-methoxy benzenes.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>  | Vibrational Spectroscopy<br>6 (1994) 251<br><b>(Elsevier Publishers)</b>           | 1.92 |
| 1994 | 3 | Transferable valence force fields for substituted benzenes<br>Part III – Tri-substituted benzenes.<br><i>B. Venkatram Reddy, G. Ramana Rao*</i>  | Vibrational Spectroscopy<br>6 (1994) 259<br><b>(Elsevier Publishers).</b>          | 1.92 |
| 1992 | 2 | Vibrational analysis of substituted anilines, anisoles and anisidines: Part<br>– Further evidence for the transferability<br>of valence force constants.<br><i>B. Venkatram Reddy, D. Vijaya Kumar, G. Ramana Rao*</i> | Vibrational Spectroscopy<br>4 (1992) 67<br><b>(Elsevier Publishers).</b>           | 1.92 |
| 1992 | 1 | Normal Coordinate Analysis of out-of-plane vibrations of some fluoro- a<br>chloro substituted anisoles.<br><i>B. Venkatram Reddy, B. Laxmaiah, G. Ramana Rao*</i>  | Indian J. Pure & App. Phys.<br>30 (1992) 351<br><b>(NISCAIR, CSIR, New Delhi).</b> | 0.58 |

## ANNEXURE – II

### Work-shops, Conferences, etc organized

1. Coordinator, “**Two-day National Workshop on Physics of Materials and Molecules**” during 15-16 March, 2019 at Department of Physics, Kakatiya University, Warangal.
2. Coordinator, UGC-DAE CSR Two-day ‘**Awareness Workshop on Diffraction and other Characterization Techniques in Material Science**’ during 12-13 April, 2017 at Department of Physics, KU, Warangal.
3. Convener, **MIST-2009**, a 3 day Workshop on Management, Informatics, Science and Technology at Univ. P. G. College, Godavarikhani held during March 4 – 6, 2009.
4. Convener, **Commerce Meet-2008** held on 15<sup>th</sup> Nov., 2008 at Univ. P. G. College, Godavarikhani.

## ANNEXURE - III

### List of Work-shops / Recharge / Training Programmes, etc attended

1. Mentors Orientation Training Programme (Mentoring of Faculty of UGC)  
**1-10 Feb., 2021 organized by National Institute of Technical Teachers Training and Research, UGC, Govt. of India, Chennai**
2. One Day State level Workshop on Redesigning UG Physics Syllabus under Revised CBCS Curriculum  
**8<sup>th</sup> Feb., 2020 at Department of Physics, Govt. Degree College, Kamareddy, TS**
3. UGC-DAE CSR Two-day Awareness Workshop on Diffraction and other Characterization Techniques in Material Science  
**12-13 April, 2017 at Department of Physics, Kakatiya University, Warangal.**
4. Faculty Development Program (FDP) on “Signals, Systems and Transform techniques theory with MATLAB  
**26-31 Dec., 2016 at E&ICT Academy, NIT, Warangal**
5. Sceice Academie’s 82<sup>nd</sup> Refresher Course on Experimental Physics  
**6-21 Dec., 2016 at Department of Physics, Kakatiya University, Warangal.**
6. State level One-day Orientation Programme on CBCS – Quality Enhancement and Sustenance  
**28<sup>th</sup> Sept., 2016, Pingle Govt. College for Women, Warangal**
7. National Workshop on Advanced Analytical and Molecular Techniques  
**30<sup>th</sup> Nov - 1<sup>st</sup> Dec. 2015, Advanced Analytical Lab, Andhra University, Vishakhapatnam**
8. One-day Workshop on SPSS 22 Application  
**5<sup>th</sup> July, 2014, Dept. of Computer Science, Kakatiya University, Waranal**
9. Two week ISTE Work-shop on Signals and Systems, organized by IIT, Kharagpur through NMECIT, MHRD, New Delhi.  
**02-12 Jan., 2014, SVS Group of Institutions, Hanamkonda, Warangal**
10. Winter School on Recent Trends in Physics of Atoms, Molecules and Lasers - 2011,  
Sponsored by UGC under Networking Program.  
**9-31 Jan., 2011, Dept. of Physics, Banaras Hindu University, Varanasi.**

11. One-week Workshop on Physics Practicals for Under Graduate Teachers  
*23-29 Dec., 2010, Dept. of Physics, Univ. Arts & Science College (KU), Warangal*
12. Two-day Work-shop on Nanoscience & Nanotechnology  
*3<sup>rd</sup> & 4<sup>th</sup> Nov., 2010 at Dept. of Physics, Kakatiya University, Warangal.*
13. 67<sup>th</sup> Orientation Programme sponsored by UGC Academic Staff College  
*4-30 Oct, 2010, Academic Staff College, Osmania University, Hyderabad*
14. Training program on Microprocessors, Microcontrollers and Digital Communications  
*13-17 July, 2010, Dept. of Physics, Kakatiya University, Warangal.*
15. Training program on Microprocessors, Microcontrollers and Digital Communications  
*22-26 Feb., 2010, Dept. of Physics, Kakatiya University, Warangal.*
16. Workshop on Nuclear energy & Applications  
*21<sup>st</sup> & 22<sup>nd</sup> March, 2009 at National Institute of Technology, Warangal.*
17. National Work-shop on Recent Advances Trends in Physics  
*3-4 March, 2008 at Dept. of Physics, Kakatiya University, Warangal.*
18. National Workshop on Recent Advances in Physics  
*3<sup>rd</sup> & 4<sup>th</sup> Feb., 2006 at Dept. of Physics, Kakatiya University, Warangal.*
19. Workshop on Physics Practicals  
*3 Sept., 2005, Dept. of Physics, KU & Chaitanya Degree College, Hanamkonda*
20. Two-day seminar on Revised Common core Syllabus for UG Courses  
*5-6 August, 2005, Dept. of Physics, CKM Arts & Science College, Warangal*
21. Workshop on Microprocessors and Applications  
*18-23 Jan., 1999 at Dept. of Physics, Kakatiya University., Warangal*
22. III SERC School in Atomic and Molecular Physics sponsored by DST, Govt. of India.  
*11-30 Dec., 1995 at CAT, Indore.*

#### **A N E X U R E – I V**

##### **List of International Conferences/Seminars, etc attended**

1. International Conference on Physics of Advanced Materials and Molecules (ICPAMM)  
*30-31 Jan., 2020, Dr. Ambedkar Govt. College, Chennai, India*
2. 27<sup>th</sup> Austin Symposium on Molecular structure and Dynamics @ Dallas (ASMD@D)  
*3-5 March, 2018, Southern Methodist University, Dallas, Texas, USA*
3. International Conference on Materials Research and Applications (ICMRA)  
*11-13 March, 2016, CMR Technical Campus, Hyderabad.*
4. International Conference on Science and Engineering of Materials for Future Needs  
*21-22 Dec., 2015, S.R & B.G.N.R Arts & Science College, Khammam, TS, India*
5. XXVII IUPAP International Conference on Computational Physics (CCP- 2015)  
*2-5 Dec., 2015, Indian Institute of Technology (IIT), Guwahati*
6. 5<sup>th</sup> International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS-2014)  
*8-12 July, 2014, Dept. of Physics, Mar Ivanios College, Thrivandrum, Kerala*
7. 66<sup>th</sup> OSU International Symposium on Molecular Spectroscopy  
*20-24 June, 2011, Ohio State University, Columbus, Ohio, USA.*
8. Optics'11, an International Conference on light  
*23-25 May, 2011, National Institute of Technology, Calicut, Kerala, India.*
9. International Symposium on Advances in Physics  
*25 Feb., 2006, Dept. of Physics, N A S College ( C C S Univ), Meerut, UP, India*
10. International Conference on Perspectives in Vibrational Spectroscopy.  
*26-28 Feb., 2006 at Meerut University, Meerut.*
11. International Conference on Spectroscopy: Perspectives & Frontiers  
*3-5 Jan., 1996 at BARC, Bombay*

#### **A N E X U R E – V**

##### **List of National Conferences/Seminars, etc attended**

1. National Conference on Recent Advances in Applied Nano Materials (RAANM – 2018)  
*16-17 Feb., 2018, Dept. of Physics, University Science College (OU), Saifabad, Hyderabad.*
2. Two Day National Seminar on Issues and Challenges of Higher Education in Newly Formed States  
*26 - 27 Feb., 2015, Dept. of Economics, Mahatma Gandhi University, Nalgonda*



3. A One Day National Conference on Emerging Areas of Research in Renewable Energy Resources and Electronics India  
*21<sup>st</sup> Feb., 2015, Dept. of Physics, Mahathma Gandhi University, Nalgonda*
4. Two-day National seminar on Recent Advances in Physics,  
*6-7, Nov., 2014, Dept. of Physics, Kakatiya University, Warangal*
5. National Conference on Advanced Materials & Technologies  
*19-21 Nov., 2012, Kakatiya University, Warangal.*
6. Two Day National Seminar on Recent Trends in Solid State Physics  
*13-14 Feb., 2012, Kakatiya University, Warangal.*
7. National Conference on Current Trends in Condensed Matter Research  
*20-22 Sept., 2004 at Univ. Arts & Science College, Warangal.*
8. National Seminar on Current Trends in Physics  
*12-13 Feb., 2004 at Dept. of Physics, Kakatiya University., Warangal.*
9. XIII National Conference on Atomic and Molecular Physics  
*16-20 Jan., 2001 at IACS, Kolkata.*
10. National Conference on Recent Trends in Vibrational Spectroscopy  
*26-28 Feb., 1996 at Meerut College (Meerut Univ.), Meerut*
11. National Conference on Current Trends in Atomic and Molecular Physics  
*21-23 Dec., 1993 at BARC, Bombay.*
12. IX National Conference on Atomic and Molecular Physics  
*14-18 Dec., 1992 at BARC, Bombay.*
13. Symposium on Molecular Spectroscopy  
*9<sup>th</sup> & 10<sup>th</sup> May., 1992 at M.M. College (Meerut Univ.) Modinagar.*
14. National Seminar on Molecular Spectroscopy  
*15-17 March., 1991 at Banaras Hindu University, Varanasi.*

#### ANNEXURE – VI

##### List of Invited Talks / Popular Lectures/ Chaired Sessions , etc given:

23. Invited Talk on “*Synthesis, molecular structure from torsional scans, study of vibrational and molecular characteristics using spectroscopic and DFT methods of some thiosemicarbazones and investigation of their anticancer activity*” at **International Conference on Physics of Emerging Materials and Molecules (ICPEMM-2021)** during 4-5 March 2021 organized by Sri Vidya Mandir Arts & Science College (Autonomous), Uthangarai, TN.
22. Key note address on “*Importance of Physics & Success stories of Great Physicists*” at **Three day Webinar on Knowledge Prism during 29<sup>th</sup> – 31 Dec., 2020** organized by TTWRCCDC, Jangaon.
21. Invited Talk on “*Importance of Physics in Engineering Physics*” at **Induction Program for Engineering Students on 16<sup>th</sup> & 17<sup>th</sup> Dec., 2020** organized by KU College for Engineering & Technology for Women, KU Campus, Warangal – 506009.
20. Keynote address on “*Nano Science and Photonics*” at **Webinar on Fundamentals of Photonics and Nano Science for UG students on 23<sup>rd</sup> July, 2020** organized by Govt. degree College, Luxettipet, Mancherial Dist, TS.
19. Invited Talk on ‘*Semiconductor Devices and Logic Circuits*’ at **One Day State level Workshop on Low Cost Models with Simulations in Undergraduate Physics Practicals** 7<sup>th</sup> Mar., 2020 at Department of Physics, Govt. Degree College (Autonomous), Siddipet, TS
18. Invited Talk on ‘*National Education Policy: Design of Physics component by UGC and TSCHE – A review*’ at **One Day State level Workshop on Redesigning UG Physics Syllabus under Revised CBCS Curriculum** 8<sup>th</sup> Feb., 2020 at Department of Physics, Govt. Degree College, Kamareddy, TS
17. Invited Talk on ‘*Spectroscopic study for structure, vibrational analysis and characteristics of some dimethyl-bipyridines and biphenyl-carboxaldehydes using experimental and theoretical methods*’ at **International Conference on Physics of Advanced Materials and Molecules (ICPAMM)** 30-31 an., 2020 at Dr. Ambedkar Govt. College, Chennai, India
16. Invited Talk on ‘*Spectroscopic study for structure, vibrational analysis and characteristics of some biomolecules using experimental and theoretical methods*’ at **Two-day National Workshop on Physics of Materials and Molecules** 15-16 March, 2019, Department of Physics, Kakatiya University, Warangal

15. Invited talk on '*Raman Scattering and Applications*' at **IAPT sponsored One-day workshop on Physics for Creativity and Innovation - 2019 (PCI-19)**  
2<sup>nd</sup> March 2019, Dept. of Physics, SRR Govt. Arts & Science College, Karimnagar
14. Invited Talk on '*Characteristics and Applications of Operational amplifiers*' at **One-day workshop on Emerging Trends in Electronics and Instrumentation**  
22<sup>nd</sup> Feb., 2019, Dept. of Electronics, Acharya Nagarjuna University, Guntur
13. Invited Talk on '*Cathode Ray Oscilloscope and Applications*' at **IAPT One-day Workshop on Physics Practicals**  
9<sup>th</sup> April, 2018, Kakatiya Government Degree College, Hanamkonda, Warangal.
12. Invited talk on '*Operational Amplifiers, Characteristics and Applications*'  
27<sup>th</sup> March, 2018 at Department of Physics, South Campus, Telangana University, Nizamabad
11. Chaired the Lecture Sessions at **"Science Academies' Two-week Refresher Course in Experimental Physics"**  
6-21ec., 2016 at Dept. of Physics, KU, Wgl.
10. Invited Talk on '*CBCS - Quality Enhancement and Sustenance*' at **"State level One day Orientation Programme on CBCS"** on 21<sup>st</sup> Sept., 2016, at Govt. Pingle College for Women, Waddepalli, Warangal.
9. Invited Talk on '*Success Stories of Great Scientists*' at **"INSPIRE 2015"**  
24<sup>th</sup> Jan., 2016, Kakatiya Government Degree College, Hanamkonda.
8. Invited Talk on '*Semiconductor Devices & Logic Circuits*' at **"Refresher Course in Physics for Junior Lecturers"** on 9<sup>th</sup> Dec., 2015, Govt. Junior College, Hanamkonda.
7. Invited Talk on '*Reforms in Examination System for Transparency, Accountability and Accuracy*' at **"Two Day National Seminar on Issues and Challenges of Higher Education in Newly Formed States"** on 27<sup>th</sup> Feb., 2015 at Dept. of Economics, Mahathma Gandhi University, Nalgonda.
6. Chaired the Session at **"Two Day National Seminar on Issues and Challenges of Higher Education in Newly Formed States"** on 27<sup>th</sup> Feb., 2015 at Dept. of Economics, Mahathma Gandhi University, Nalgonda.
5. Invited Talk on '*Renewable Energy Resources*' at **"One day National Conference on Emerging Areas of Research in Renewable Energy Resources and Electronics in India"**  
21<sup>st</sup> Feb., 2015, Dept. of Physics, Mahathma Gandhi University, Nalgonda.
4. Invited Talk on '*Alternate Energy Resources*' at **"INSPIRE 2014"**  
4<sup>th</sup> Nov., 2014, Kakatiya Government Degree College, Hanamkonda.
3. Invited Talk on '**Physics Practicals for UG Teachers**'  
**23-29** Dec., 2010, Dept. of Physics, Univ. Arts & Science College, Warangal.
2. Invited Talk on '*Mechanics of rigid bodies*' at **"Refresher course for UG Physics Teachers"**  
22<sup>nd</sup> Oct., 2010, Dept. of Physics, Kakatiya University, Warangal.
1. Invited Talk on '*Communication Systems*' at **"Refresher course for Junior Lecturers"**  
16<sup>th</sup> Oct, 2010, Bala Vikasa, Fathima Nagar, Kazipet, Warangal.