Dr. Adavala Venkatesulu, M.Sc, Ph.D

Assistant Professor and Coordinator for PG Post Graduate Department of Physics Government First Grade College Hoskote, Bengaluru, India PIN-562114

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Scholar IDs

Scopus Author ID: 15137185000 orcid.org/0000-0003-4953-0494 https://scholar.google.co.in/citations?user=Oa62KnkAAAAJ&hl=en&authuser=2 https://www.researchgate.net/profile/A_Venkatesulu

EDUCATIONAL QUALIFICATIONS

COURSE	DETAILS	PERCENTAGE
Ph.D	 In Physics (Soft Condensed Matter Physics) Thesis: Quantum Chemical, Physical & Thermo Acoustic studies in Some polar liquid crystals. Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India / Nov 2001 – Jun 2007 	NA
M.Sc.	 In Physics with specialization in Electronics Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India / July 1998 – June 2000 	First Class 73.14%
B.Sc.	 with Mathematics, Physics and Statistics. Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India / July 1995 – June 1998 	Distinction with 75.5%

TEACHING EXPERIENCE

July 2017 to till date	Assistant Professor and Coordinator for PG	
	Post Graduate Department of Physics	
	GFG College, Hosakote-562114, Bengaluru, India	
Sept 2009 – Jun 2017	Assistant Professor& Head	
	Dept. of Physics, GFG College, Hosakote-562114, Bengaluru, India	
July 2007 – Aug 2009	Lecturer & HOD of Physics for B.Tech., Graduate courses	
	Sri Krishnadevaraya University College of Engineering and Technology	
	(SKUCET), Sri Krishnadevaraya University, Anantapur, Andhra Pradesh,	
	India	
June 2003 – June 2007	Lecturer, Dept. of Physics, CVLNR Degree and PG College, Anantapur,	
	Andhra Pradesh, India	
June 2000 – Dec 2001	Lecturer, Dept. of Physics, CVLNR DEGREE COLLEGE, Anantapur,	
	Andhra Pradesh, India	

RESEARCH GUIDENCE for Ph.D Scholars as Main Research Supervisor

SI. No.	Name of the Research Student	University	Year of Admission	Year of Award
1	M. Chandrasekhar	JNT University, Hyderabad	2009	2016
2	M. Raghavendra	Rayalaseema University -	2010	2017
		Kurnool		
3	Srinivasa	Rayalaseema University -	2010	Pursuing
		Kurnool		

RESEARCH GUIDENCE for M.Phil Scholars as Main Research Supervisor

SI. No.	Name of the Research Student	University	Year of Admission	Year of Award
1	Y Chandrasekhar	Sri Vinayaka Mission University -Selam	2006	2008

RESEARCH PROJECTS COMPLETED As a Principal Investigator (worth of Rs. 21,20 000)

SI. No.	Project Details
1	Title: "Structure – Property Investigations in some polar Liquid crystals using
	Computer aided Quantum Chemical Studies"
	Funding agency: University Grants Commission-South Western Regional Office
	(UGC-SWRO).
	Duration: October2013 to September 2015, (Amount: Rs.1 20 000)
2	VGST-SDP project for "Establishment of center for Excellence in Physics" Funding
	agency: VGST, GOK, Dept. of IT,BT& S&T (Amount: Rs.20 00 000)

UGC SPONSORED REFRESHER AND ORIENTATION COURSES ATTENDED

SI. No.	Refresher / Orientation	Sponsors	Year	Theme of the Course	
1	Refresher in Physics @	UGC	18-06-2017	University and PG College	
	Indian Institute of Science-		to	teachers training	
	TDC IISC		10-07-2017	programmer in Physics	
2	Refresher in Physics @	UGC	28-09-2007	Advances in polymoris	
	Dept. of Polymer Science,		То		
	SK University, Anantapur,		18-10-2017	materials	
3	Orientation Course @	UGC	23-08-2010		
	Academic Staff College, Sri		to	NA	
	Venkateswara University,		18-09-2010	NA	
	Tirupathi.				
4	Refresher in Physics @ JNT	UGC	12-08-2013	"Physics of Bulk, Thin and	
	University, Hyderabad		То	Nano Size Materials"	
			03-09-2013		
5	Refresher Course by Dept.	GOK	01-04-2012	Teacher Empowerment	
	of Collegiate Edn. &		to	Training for Assistant	
	Karnataka Jnana Ayog		07-04-2012	Professors"	

ATTENDED AS A VISITING SCIENTIST

SI. No.	Year	Details of the Course and Venue
1	June 2000	Summer Research Programme in INSTITUTE OF PHYSICS (DAE Unit),
		Bhubaneswar, Orissa, India
2	Feb 2002	SERC School on the Development of Plasma based Particle Accelerators at SAHA Institute of Nuclear Physics (DAF Unit), Kolkata, West Bengal
		India

MERITS / AWARDS

SI. No.	Details
1	Awarded merit certificate in National Standard Examination in Physics in 1998.
	(Graduate level).Conducted by Indian Association of Physics Teachers.
2	Awarded merit certificate in National Standard Examination in Physics in 1995. (At Class XII level).Conducted by Indian Association of Physics Teachers.

PUBLICATION IN PEER-REVIEWED JOURNALS (Total Publications – 22)

- R.R Reddy, <u>A.Venkatesulu</u>, K.Neelakanteswara Reddy, K. Rama Gopal, On the behavior of thermo-acoustic properties of liquids. Journal of Molecular Liquids (Elsevier), Vol. 126, PP: 9-13, 2006. [Impact Factor:3.648 and Citation Index:13] <u>doi:10.1016/j.mollig.2004.08.032.</u>
- R.R Reddy, A.Venkatesulu, K.Neelakanteswara Reddy, K. Rama Gopal, *Thermo acoustic Parameters in the Nematic and Isotropic phases of 5CB and Tetraethyl methane in 5CBJournal of Molecular Liquids*(Elsevier), Vol. 130, PP: 112-118, 2007. [Impact Factor: 3.648 and Citation Index:20], doi:10.1016/j.molliq.2006.05.014.
- R.R Reddy, <u>A.Venkatesulu</u>, K. Narasimhulu, L. Siva Sankar Reddy, K. Ragavendra Kumar, K. Rama Gopal₂Correlation between available volume and Inter Molecular free length from different Thermo-acoustic Parameters.*Journal of Molecular Liquids*(Elsevier), Vol. 140, PP: 48-53, 2008. [Impact Factor: 3.648 and Citation Index:27] <u>doi:10.1016/j.mollig.2008.01.003</u>.
- 4. M.Parinitha, A.Venkatesulu, Dielectric and AC Conductivity studies of Vanadium Pentaxide doped polyaniline Composites, *Research Inventy: International Journal of Engineering and Science (IJES),2013, E –ISSN-2319-1813.*
- M.Parinitha, A.Venkatesulu, Synthesis, characterization and transport property of PANI– calcium titanate composites, *International Journal of Latest Research in Science and Technology* ISSN (Online):2278-5299 Volume 2,Issue 1 :Page No.495-498 , January-February (2013) http://www.mnkjournals.com/ijIrst.htm - IJLRST, 2013
- M. Chandra Sekhar, T.Madhu Mohan, T.Vijaya Krishna and <u>A.Venkatesulu</u>. Density, Refractive Index, Speed of Sound and Computational Studies of Intermolecular Interactions in Binary Mixtures of 2-Chloroaniline with Butanols (1-Butanol, 2- Butanol) at T(303.15– 318.15)K, Journal of Solution Chemistry (Springer)2015, Volume 44, <u>Issue 2</u>, pp 237-263, <u>DOI</u> <u>10.1007/s10953-015-0306-4</u>, ISSN 0095-9782. [Impact Factor:1.342 and Citation Index:5]
- M.Chandrasekhar, <u>A.Venkatesulu</u>, T.Madhu Mohan and M.Gowrisankar Density Functional Theory, Natural Bond Orbital and Atoms in Molecule Analyses on the Hydrogen Bonding Interactions in 2-chloroaniline-Carboxylic Acids" *Oriental journal of chemistry-OJCHEG 2015*, Vol. 31, No. (2),

http://dx.doi.org/10.13005/ojc/310233, ISSN : 0970 - 020X, ONLINE ISSN : 2231-5039, [IPP:0.478(2014) and SNIP:0.578(2014)]. [Impact Factor:0.58 and Citation Index:13]

- M.Chandrasekhar, A.Venkatesulu and M.Gowrisankar "Thermodynamic and theoretical study on hydrogen bonded binary mixtures of isomeric butanols with o-toluidine at T = (303.15 to 318.15) K" *Journal of Molecular Liquids(Elsevier)*209 (2015) 428–439. [Impact Factor: 3.648 and Citation Index:10]<u>http://dx.doi.org/10.1016/j.molliq.2015.04.034.</u>
- A.Venkatesulu, M.Gowrisankar, T. Srinivasa Krishna and K.Ravindhranath "Studies on the importance of chain length of alkanols on the thermodynamic and transport properties of liquid mixtures at various temperatures" *The Journal of Chemical Thermodynamics*, Volume 107, April 2017, Pages 104–113, http://dx.doi.org/10.1016/j.jct.2016.12.019[Impact Factor:2.784 and Citation Index:1]
- R. Balaji, M. Gowri Sankar, A. Venkatesulu, M. Chandra Shekar "Mesomeric effect on thermodynamic parameters of binary liquid mixtures of *N*-methyl formamide and osubstituted anilines" *Journal of Molecular Liquids(Elsevier)*Volume:230,March-2017,Pages:36–43, http://dx.doi.org/10.1016/j.molliq.2016.12.109. [Impact Factor: 3.648 and Citation Index: 0]
- M.Chandrasekhar, <u>A.Venkatesulu</u> and M.Gowrisankar, Densities, Speed of sound and dynamic viscosities properties of binary liquid mixture 2-Chloroaniline + carboxylic acids. Physics and Chemistry of Liquids, (Taylor & Francis) Volume 55, 2017 - <u>Issue 2</u>, Pages 196-217 <u>http://dx.doi.org/10.1080/00319104.2016.1183201</u>[Impact Factor:1.145 and Citation Index:1]
- 12. P. Venkateswarao MuvvaRaghavendra , A. Venkatesulu , K . Sambasiva Rao, "Electron Releasing Effect on the Thermodynamic and Transport Properties of Liquid Mixtures at Various Temperatures" *IOSR Journal of Applied Chemistry* 10(07):12-27, July 2017, DOI: 10.9790/5736-1007021227
- MC Sekhar, M Gowrisankar, A Venkatesulu, KC Reddy, "Experimental and computational study of the molecular interactions between 2-chloroaniline and substituted ethanol's" 221, 1,867-877 - *Journal of Molecular Liquids*, 2016 <u>https://doi.org/10.1016/j.molliq.2016.06.014</u> [Impact Factor: 3.648 and Citation Index:0]
- A.Venkatesulu, N.Srinivasa Rao & P Ravindranath,"Heat Transfer Characteristics of Nanofluids in fully developed channels And flat walls" *Open Journal of Applied & Theoretical Mathematics (OJATM)* Vol. 2, No. 4, December 2016, pp. 753~763 ISSN: 2455-7102
- 15. Muvva Raghavendra, A.Venkatesulu&M.Gowrisankar "Excess molar volumes, speeds of sound and viscosities for binary mixtures of 2-methylaniline with selected di- and tri – chloro substituted benzene at various temperatures - comparison with prigogine-flory-patterson theory"*ARPN Journal of Engineering and Applied Sciences (ISSN 1819-6608)* Vol. 12, No. 22, November 2017, pp. 5966~5982 ISSN: 1819-6608
- 16. Muvva Raghavendra, A. Venkatesulu, M. Gowrisankar and E. Kalavathi "Study of Intermolecular Interactions in Binary Mixtures of 2-Methylaniline with Isomeric Chlorotoluenes at Various Temperatures" Asian J. Chem. /2017 / 29(12)/ pp 2597-2604 <u>https://doi.org/10.14233/ajchem.2017.20703</u>
- 17. Muvva Raghavendra, E.Kalavathi, A. Venkatesulu K. Chandra Sekhara Reddy,"Inductive / Mesomeric effect on molecular interactions in binary mixtures of the 2 -methoxyanilineand

mono substituted benzene derivatives at various temperatures" **Research Journal of Chemistry and Environment,** Vol. 21 (12) December (2017)

- 18. K Sivakumar, M Raveendra, M Chandrasekhar, K Chandrasekhar Reddy, A Venkatesulu, K Dayananda Reddy," Study on Thermo physical properties of binary mixture containing aromatic alcohol with aromatic, substituted aromatic amines at different temperatures in terms of FT-IR, 1H NMR spectroscopic and DFT method" Journal of Fluid Phase Equilibria (Elsevier)-Vol 462,85-99(2018)
- Raghavendra Muvva, Venkatesulu Adavala ,Srinivasa Krishna Tadikonda, M.Gowrisankar "Studies on associated solutions: Evaluation of thermodynamic parameters of blends of 2methylaniline and substituted ethanol at various temperatures" Journal of Solution Chemistry.2018 (JOSL-D-17-00134R2 Accepted for publication on 16th January 2018)
- 20. Muvva Raghavendra, A. Venkatesulu, M. Gowrisankar & M Chandrasekhar "Excess thermodynamic properties in binary mixtures of 2-methoxy aniline with acetophenone and cyclic ketones at various temperatures" *Indian Journal of Advances in Chemical Science (IJACS)*. Manuscript Number: IJACS-386. (2017) (Accepted for Publication)
- 21. M.Chandrasekhar, <u>A.Venkatesulu</u> and M.Gowrisankar "Effect of placement of hydroxyl group in isomeric butanediols in intermolecular interactions with 2-chloroaniline: A computational and Experimental approach", *Journal of Solution Chemistry*.2017 (Accepted for publication)
- 22. Muvva Raghavendra, A. **Venkatesulu**, M. Gowrisankar "Investigations of molecular interactions in binary mixtures of the 2-methylaniline and mono substituted benzene derivatives at various temperatures, *Oriental journal of chemistry-OJCHEG 2017* (Under Review)

PAPER PRESENTATIONS

- 1. **"Abinitio and DFT investigations on some organic acids relevant to tropospheric aerosols"** AdavalaVenkatesulu and K Chandrasekhar Reddy in National Conference on Environment and Climate Change: Issues and Challeges (ECCIC-2017) during 10th-11th March,2017 at Department of Physics, Sri Krishnadevaraya University,Ananthapur,Andhrapradesh,India
- "Molecular Modelling and simulation Techniques to address Global Warming" A.Venkatesulu,M Chandrasekhar and K Chandrasekhar Reddy in National Conference on Environmental Pollution and its impact on regional climate change(EPRCC-2016) during 11th-12th March,2016 at Department of Physics, Sri Krishnadevaraya University,Ananthapur,Andhrapradesh,India.
- "Thermodynamic and theoretical study on hydrogen bonded binary mixtures of isomeric butanols with O-toulidine at T=(303.15 to 313.15)", M Chandrasekhar, A.Venkatesulu and M.Gowrisankar, UGC & SAP Sponsored Two Day National Level Conference On "Advances and Innovations in Chemical Sciences"(NCAICS-2015) during February 12-13,2015 at Department of Chemistry, University of Mumbai.
- "Experimental and Computational approach to the study of Intermolecular Interactions in the Binary mixtures of 2-Cloroaniline with 2-Methyl-1-Propanol/2-Methyl-2-Propanol at T=(303.15 to 318015)K under atmospheric pressure", M Chandrasekhar,T.Madhumohan,T.VijayaKrishna,V.SrinivasaRao,K.Sivakumar and A.Venkatesulu ,The National Conference on Thermodynamics of Chemical, Biological,

Environmental and Non-Conventional energy Systems-(TCBNES-2014), during 17-18 October, 2014 at Department of Chemistry, Sardar Patel University, Gujarat.

- 5. "Food Security Through Biodiversity Conservation" K.Harish Kumar and A.Venkatesulu, Two Day National Workshop on Environmental Pollution and Impacts on Public Health and Agriculture(EPPA-2012), during 21-22 February, 2012 at Department of Physics, SriKrishnadevaraya University, Anantapur, AndhraPradesh.
- "Physico-Chemical Parameters and Zoo Plankton communities in K.R.PuramLake,Bangalore,Karnataka" A.Venkatesulu and K.Harish Kumar, Two Day National Workshop on Environmental Pollution and Impacts on Public Health and Agriculture(EPPA-2012),during 21-22 February,2012 at Department of Physics, Sri Krishnadevaraya University,Anantapur,AndhraPradesh.
- 7. "Dielectric Investigations on Hydrogen Bonded Polar Binary Mixture of Propanol-2-ol And Ethyl Benzoate" T.MadhuMohan, T.Vijay Krishna, A.Venkatesulu, S.Sreehari Sastry and V.R.K.Murthy. UGC National Seminar on "Emerging Materials and technologies (EMT-2010) during 9-10 October, 2010, Dept. of Physics, SSBN Degree and PG college, Anantapur, India.
- 8. **"On The Behaviour of Induced Smectic-G Phase in Hydrogen Bonded Liquid Crystal"** A.Venkatesulu, T.Madhumohan, T.Vijaya Krishna, K.Chandrasekar Reddy. UGC National Seminar on "Emerging Materials and technologies (EMT-2010) during 9-10 October, 2010,Dept.of Physics, SSBN Degree and PG college, Anantapur, India.
- "Synthesis,Spectroscopic Characterization and DFT Caluculations On Chlorophenyl Substituted PyrazolesDerivativatives" G.Sivareddy, A.Venkatesulu, K.Chandrasekhar Reddy and M.S.Surendrababu. UGC National Seminar on "Emerging Materials and technologies (EMT-2010) during 9-10 October, 2010,Dept.ofPhysics,SSBN Degree and PG college, Anantapur, India.
- 10. **"ThemoAucostic Parameters of NematogenicDiflurobengene Derivatives"** K.Chandrasekarareddy, D.Sailaja and A.Venkatesulu. UGC National Seminar on "Emerging Materials and technologies (EMT-2010) during 9-10 October 2010,Dept.of Physics, SSBN Degree and PG college, Anantapur, India.
- 11. "Low Power Consumption LCD technology that meets our needs" R.N.V.Ranga Reddy, A. Venkatesulu, K. Fakruddin and K. Neelakanteswar Reddy, presented in National Seminar on RENEWABLE ENERGY SOURSES AND OTHER RELATED TECHNOLOGIES, Organised at Sri Sant Gahanna Maharaja College of Engineering, Maharastra, INDIA.
- 12. **"Optical studies of homologous series of Liquid Crystals"** R.N.V.Ranga Reddy, **A. Venkatesulu**, K. Fakruddin and K. Neelakanteswar Reddy, Presented in national seminar on Recent Trends in Optoelectronic Materials And Devices, 21-22 November, 2002, at Dept. of Physics, Sri Venkateswara University, Tirupathi, India