Curriculum Vitae

Dr. NARENDRA KOLLA
Assistant Professor
Department of Physics
NSS Program Officer
V.R. Siddhartha Engineering College
Kanuru, Vijayawada - 07.

E-mail : drkollanarendra@gmail.com
Mobile : 98850 38074

Academics :

Ph.D : Obtained from Acharya Nagarjuna University, Guntur in 2012.

M.Phil : Obtained **A Grade** from Nagarjuna University, Guntur in 2008.

PGDCA : Obtained from **University of Hyderabad** in 1999.

M.Sc. : Obtained **First** Class with **67 %** in 1997 from **S.S.L.Jain College, Vidisha**. Affiliated to Barkatulla Vishwavidyalaya, Bhopal.

B.Sc. : Obtained **First** Class with **distinction** with **75 %** in 1995 from **P.B.Siddhartha College of Arts & Science, Vijayawada**. Affiliated to Nagarjuna University, Guntur.

Intermediate : Obtained **First** Class with **60 %** in 1992 from **The Co-Operative Junior College, Tenali.**

S.S.C. : Obtained **First** Class with **61 %** in 1990 from **Y.R.High School, Parchoor**.

Experience : **20 Years**

01. Working as an **Assistant Professor** in **V. R. Siddhartha Engineering College, Vijayawada** since Sep'2004.
02. Worked as a **Lecturer** in **Vijetha Junior & Degree College, Hyderabad** during 7th December 1999-24th September 2004.
03. Worked as a **Lecturer** in **G.V.R & S College, Guntur** during 4th July 1998 to 6th December 1999.

Membership in Professional Society:

Life Member of 'The Indian Thermodynamic Society' (LM-265) Since 2013.
Life Member of 'Ultrasonic Society of India' (LM-307) Since 2015.
Life Member of 'Indian Aerosol Science and Technology Association' (IASTA-LM-623) Since Jan 2017

Courses Taught :

01. Engineering Physics for I / IV B.Tech Students
02. Material Science for II / IV B.Tech Students
03. Intermediate Physics for both First and Second Years
04. Physics for B.Sc Students (1^{st}, 2^{nd} and 3^{rd} year)

Publications in International Journals:	**82**	**(Annexure – IA)**
Publications in National Journals:	**15**	**(Annexure – IB)**
Papers presented in Seminars/ Conferences:	**19**	**(Annexure – II)**
Seminars / Workshops Attended:	**20**	**(Annexure – III)**
Books Published:	**03**	**(Annexure – IV)**

Additional Information : Participating in Many activities in the College.

1. Acting as a member for Anti Ragging Committee.
2. Acting as a student counselor.
3. Acting as a member for ISO 9000-2008.
4. Acting as a Co-ordinator for NBA work.

Personal Information:

Date of Birth	: 15 - 08 – 1975
Father's Name	: Mastan Rao
Sex	: Male
Permanent Address	: # F-20, Yamuna – B Block Mega Estates, Damera Nagar Pappula mill road Vijayawada -07
Languages Known	: Telugu, English & Hindi

Place:

Date : (Dr. Narendra K.)

Publications in International Journals (Annexure – IA)

orcid.org/0000-0002-0347-3845

1. J.V. Srinivasu, **K. Narendra**, Ch. Kavitha, T. Srinivasa Krishna, B. Subba Rao. *Journal of Pure and Applied Ultrasonics*. Molecular interactions in binary liquid mixtures- An ultrasonic study. 39 (2017) 35-39.
2. J.V. Srinivasu, T.S. Krishna, **K. Narendra**, G. Srinivasa Rao, B. Subba Rao. *Journal of Molecular Liquids*. Elucidation of H-bond and molecular interactions of 1,4-butanediol with cresols: Acoustic and volumetric data. **236** (2017) 27-37.
3. T. Srinivasa Krishna, Anil K. Nain, **K. Narendra**, S. Chenthilnath, D. Punyaseshudu. *The Journal of Chemical Thermodynamics*. Densities, ultrasonic speeds, excess and partial molar properties of binary mixtures of 2-pyrrolidone with isomeric propanediols at temperatures from 303.15 K to 323.15 K. **111** (2017) 129-141.
4. T. Srinivasa Krishna, **K. Narendra**, M. Gowrisankar, Anil K. Nain, B. Munibhadrayya. *Journal of Molecular Liquids*. Physicochemical and spectroscopic studies of molecular interactions of 1-butyl-3-methylimidazolium hexafluorophosphate + 2-methoxyethanol or 2-ethoxyethanol binary mixtures at temperatures from 298.15 to 323.15 K. **227** (2017) 333-350.
5. M. Srilakshmi, T. Srinivasa Krishna, **K. Narendra**, Ch. Kavitha, A. Ratnakar. *The Journal of Chemical Thermodynamics*. Study of molecular interactions of binary mixtures DEC with alkoxyalkanols at various temperatures. **105** (2017) 452-468.
6. Sk. Fakruddin Babavali, Ch. Srinivasu, K. Narendra, Ch. Sridhar Yesaswi. *International Journal of Physics and Mathematical Sciences*. Comparative study of viscosities in binary liquid mixtures containing hetero cyclic compound quinolone with alkanols at temperature T = 303.15K. **6(S1)** (2016) 24-28.
7. M. Srilakshmi, Ch. Kavitha, K. Narendra, A. Ratnakar. *Journal of Chemical and Pharmaceutical Research*. Thermo-physical properties of binary mixtures of DEC + Xylenes at different temperatures. **8 (11)** (2016) 180-186.
8. M. Srilakshmi, **K. Narendra**, A. Ratnakar, Ch. Kavitha, M. Durga Bhavani. *Journal of Pure and Applied Ultrasonics*. Ultrasonic speed measurements in binary mixtures containing esters at temperatures from 303.15 to 318.15 K. **38 (2)** (2016) 31-34.
9. Sk. Fakrddin Babavali, Ch. Srinivasu, **K. Narendra**, Ch. Sridhar Yesaswi. *Rasayan J. Chem*. Experimental and theoretical predictions of viscosity in binary liquid mixtures

containing quinolone with arenes (Benzene, toluene and mesitylene) at temperature T = 303.15 K: A comparative study. **9 (3)** (2016) 544-549.

10. Sk. Fakruddin Babavali, D. Punyaseshudu, **K. Narendra**, Ch. Sridhar Yesaswi, Ch. Srinivasu. *Journal of Molecular Liquids*. Study of molecular interactions using excess thermo-acoustical parameters at different temperatures. **224** (2016) 47-52.
11. Sk. Fakruddin Babavali, **K. Narendra**, P. Shakira, Ch. Srinivasu. *International Journal of Physics and Mathematical Sciences*. Thermo-acoustical parameters in binary liquid mixture containing quinolone and toluene at temperatures T= (303.15, 308.15, 313.15 and 318.15)K. **6(3)** (2016) 34-38.
12. J.V. Srinivasu, **K. Narendra**, RanjanDey, B. Subba Rao. *International Journal of Advanced Research in Physical Science (IJARPS)*. Theoretical evaluation of speed of sound in binary liquid mixtures. **3(6)** (2016) 7-14.
13. M. Srilakshmi, Ch. Kavitha, **K. Narendra**, A. Ratnakar. *International Journal of Science Technology and Management*. Speed of sound investigation of binary liquid mixtures: comparative evaluation of correlative models. **5(8)** (2016) 169-178.
14. **K. Narendra**, T. Srinivasa Krishna, B. Sudhamsa, Ranjan Dey, M. Sarathbabu. *The Journal of Chemical Thermodynamics*. Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K. **103** (2016) 17-29.
15. Sk. Fakruddin Babavali, P. Shakira, K. Rambabu, **K. Narendra**, Ch. Srinivasu. *Journal of Molecular Liquids*. Excess thermo-acoustical parameters in the study of molecular interactions in binary liquid mixtures containing quinolone with arenes (benzene and toluene) at temperatures T = (303.15, 308.15, 313.15 and 318.15) K. **220** (2016) 113-119.
16. T.S.Krishna, **K. Narendra**, M.G. Sankar, A.K. Nain, B. Munibhadrayya. *The Journal of Chemical Thermodynamics*. Thermodynamic, excess and optical studies on the intermolecular interactions of binary liquid mixtures of imidazolium based ILs. **98** July (2016) 262-271. doi:10.1016/j.jct.2016.03.029
17. Sk. Fakruddin Babavali, P. Shakira, K. Rambabu, **K. Narendra**, B. Vijay Kumar, Ch. Srinivasu. *Rasayan Journal of Chemistry*. Study of excess thermoacoustical parameters in binary liquid mixtures of quinolone with mesitylene at temperatures T = (303.15, 308.15, 313.15 and 318.15) K. **9(1)** (2016) 89-94.
18. Sk. Fakruddin Babavali, P. Shakira, K. Rambabu, **K. Narendra**, Ch. Srinivasu. *Ponte International Scientific Journal*. Thermo-acoustical parameters study in 3 binary liquid

mixtures of quinolone with methanol, ethanol and 1-propanol at temperatures T = (303.15, 308.15,313.15 and 318.15)K. **72 (3)** (2016) 83-94.

19. J.V. Srinivasu, **K. Narendra**, B. Subba Rao. *International Journal of Scientific Research in Chemical Sciences*. Refractive Properties of Binary Mixtures of 1,4-Butanediol with Methylpyridine Isomers. **3(1)** (2016) 1-12.
20. Sk. Fakruddin Babavali, P. Shakira, K. Rambabu, **K. Narendra** and Ch. Srinivasu. *Research journal of pharmaceutical, biological and chemical sciences*. Study of thermo-acoustical parameters in binary liquid mixture containing quinolone and benzene at temperatures T = (303.15, 308.15, 313.15 and 318.15) K. **7(2)** (2016) 1344-1350.
21. M. Srilakshmi, **K. Narendra**, A. Ratnakar. *International Journal of Science Technology and Management*. Theoretical evaluation of speeds of sound of binary liquid mixtures containing diethyl carbonate and xylenes at temperatures T = 298.15 K – 323.15 K. 5 **S(1)** (2016) 300-308.
22. J.V. Srinivasu, **K. Narendra**, T.Srinivasa Krishna, B. Subba Rao. *Journal of Molecular Liquids*. Study of volumetric and thermodynamic properties of binary mixtures 1,4-butanediol with methylpyridine isomers at different temperatures. **216** (2016) 455-465.
23. C. Kavitha, A. Ratnakar, **K. Narendra**. *International letters of Chemistry, physics and Astronomy*. Study of molecular interactions in ternary liquid mixtures. **33** (2016) 77-82. DOI: 10.18052/www.scipress.com/ILCPA.63.77
24. M. Srilakshmi, **K. Narendra**, Ch, Kavitha, A. Sarath Babu, A. Ratnakar. *International Journal of Innovative Research in Science, Engineering and Technology*. Refractive Properties for Binary Mixtures Containing DEC+o-xylene or m-xylene or p-xylene. **4(12)** (2015) 12598 – 12612. DOI:10.15680/IJIRSET.2015.0412175
25. Sk. Fakruddin, P. Shakira, Ch. Srinivasu, **K. Narendra**. *Karbala International Journal of Modern Science*. Comparative study of theoretical ultrasonic velocities of binary liquid mixtures containing quinolone and mesitylene at temperatures T = (303.15, 308.15, 313.15 and 318.15) K. **1** (2015) 172-177.
26. Sk. Fakruddin, M. Puspalatha, Ch. Srinivasu, **K. Narendra**. *Karbala International Journal of Modern Science*. Excess thermo-acoustical parameters in binary liquid mixture containing n-butanol at different temperatures. **1** (2015) 97-100.
27. S. Govardhan Rao, T. Madhu Mohan, T. Vijaya Krishna, **K. Narendra** and B. Subba Rao. *Journal of Molecular Liquids*. Thermophysical properties of 1-butyl-3-methylimidazolium tetrafluoroborate and N-methyl-2-pyrrolidinone as a function of temperature. **211** (2015) 1009-1017. **(Impact factor: 2.52)**

28. M. Srilakshmi, T. Srinivasa Krishna, **K. Narendra**, Ranjan Dey and A. Ratnakar. *Journal of Molecular Liquids*. Influence of alkyl group and temperature on excess thermodynamic properties of diethyl carbonate and their binary mixtures at 0.1 MPa. **211** (2015) 854-867. **(Impact factor: 2.52)**
29. Sk.Fakruddin, Ch. Srinivasu and **K. Narendra**. *Journal of Chemical and Pharmaceutical Research*. Excess Gibb's free energy function values at different temperatures in binary liquid mixture for the study of molecular interactions. **7(6)** (2015) 488-490.
30. **K. Narendra**, B. Sudhamsa, M. Sarath Babu and T.S. Krishna. *Journal of Applied Solution Chemistry and Modeling*. Study of Molecular Interactions in Binary Mixtures of Diethyl Carbonate + Benzene Derivatives at Different Temperatures. **4(2)** (2015) 119-127.
31. M. Srilakshmi, Ch. Kavitha, A. Ratnakar, **K. Narendra**. *International Journal of engineering research*. Study of molecular interactions in binary mixtures containing o-anisidine. **3s1** (2015) 183-187.
32. Ch. Srinivasu, Sk. Fakruddin, M. Pushpalatha, **K. Narendra**. *International Journal of engineering research*. Study of Excess adiabatic compressibility, excess molar volume and excess acoustic impedance in binary liquid mixture containing acetophenone and n-butanol at temperatures T = (303.15, 308.15, 313.15, 318.15 and 323.15)K. **3s1** (2015) 80-88.
33. Ch. Kavitha, A. Ratnakar, M. Srilakshmi, M. Durga Bhavani, **K. Narendra**. *International Journal of engineering research*. Molecular interactions in ternary liquid mixtures at different temperatures. **3s1** (2015) 92-97.
34. Anjaneyulu T, Raghavender A.T, Vijaya Kumar K, Narayana Murthy P and **Narendra K**. *Science, Technology and Arts Research Journal*. Effect of Particle Size on the Structural and Magnetic Properties of Nanocrystaline Zinc Ferrite. **3(3)** (2014) 48-51.
35. B. Sudhamsa, M. Sarath Babu, **K. Narendra.** *International Letters of Chemistry, Physics and Astronomy*. Study on thermodynamic properties of binary mixtures of diethyl carbonate with benzonitrile, benzaldehyde at different temperatures. **19(1)** (2014) 1-7.
36. **Narendra K**, Sudhamsa B, Sarath Babu M. *Research Journal of Chemical Sciences*. Theoretical Evaluation of Speeds of Sound in Liquid Mixtures Containing Diethyl carbonate and Aniline at Various Temperatures. **4(8)** (2014) 42-45.
37. Ch. Srinivasu, M. Yedukondalu, **K. Narendra** and Sk. Fakruddin. *J. Applicable Chemistry*. Excess molar volume and viscosity studies of binary mixtures of MTBE with

anisole, cyanobenzene, nitrobenzene and toluene at different temperatures**. 3(4)** (2014) 1756-1763.

38. M. Durga bhavani, S. Satyaveni, A. Ratnakar, Ch. Kavitha, **K. Narendra**. *International Journal of Chemical and Physical Sciences*. Study of molecular interactions in binary liquid mixtures at temperatures 303.15K, 308.15K, 313.15K and 318.15K. **3(4)** (2014) 49-53.
39. Sk. Fakruddin, N.T. Sharma, Ch. Srinvasu, **K. Narendra**. *International Journal of Scientific & Engineering Research*. Study of molecular interactions in binary liquid mixture containing quinolone and cresol by using excess thermodynamic parameters at different temperatures. **5(3)** (2014) 54-59.
40. B. Sudhamsa, M. Sarath Babu and **K. Narendra**. *Journal of applicable Chemistry*. Application of refractive index mixing rules to binary system. **3(3)** (2014) 1272-1276.
41. M. Sri lakshmi, A. Ratnakar, Ch. Kavitha, **K. Narendra**. *International Journal of Chemical and Physical Sciences*. Study of molecular interactions in binary liquid mixtures containing esters. **3(2)** (2014) 35-40. (**Impact factor: 1.0289**)
42. **Narendra Kolla**. *Journal of Applicable Chemistry*. Application of speed of sound relations to binary system at different temperatures. **3(2)** (2014) 759-763.
43. Fakruddin Sk, Srinivasu Ch, **Narendra K**. *International Jouranl of Innovative Research in Science, Engineering and Technology*. Excess Thermodynamic parameters of binary mixture at different temperatures. **3(2)** (2014) 89-92. (**Impact factor: 1.672**)
44. **Narendra K**, Fakruddin Sk, Srinivasu Ch, Sudhamsa B, Sarath Babu M. *International Jouranl of Innovative Research in Science, Engineering and Technology*. Ultrasonic study of molecular interactions in binary mixtures at 308.15 and 318.15 K. **3(2)** (2014) 59-62. (**Impact factor: 1.672**)
45. Chagarlamudi Kavitha, Abbineni Ratnakar, M. Sri Lakshmi and **Kolla Narendra**. *Journal of Applicable Chemistry*. Molecular Interactions in ternary liquid mixtures at different temperatures-an ultrasonic study. **3(1)** (2014) 360-365. (**Impact factor: 1.21**)
46. **Narendra Kolla**. *Journal of Applicable Chemistry*. Study of Molecular Interactions in Binary Mixtures Containing Nonanol at 303.15 and 313.15. K. **3(1)** (2014) 379-384.
47. K. Anil Kumar, Ch. Srinivasu, Sk. Fakruddin and **K. Narendra**. *International Journal of Pharmaceutical and Chemical Sciences*. Acoustic behaviour of molecular interactions in binary liquid mixture containing 1-butanol and hexane at temperatures 298.15K, 303.15K and 308.15K. **3(1)** (2014) 10-13.

48. Ch. Kavitha, A. Ratnakar, M. Durga Bhavani, **K. Narendra**. *International Research Journal of Pure and Applied Chemistry*. Study of molecular interactions in ternary liquid mixtures of quinoline with o-cresol, m-cresol and p-cresol in methanol at 303.15, 308.15, 313.15 and 318.15 K. **4(2)** (2014) 213-226.
49. Ch. Kavitha, A. Ratnakar and **K. Narendra**. *Journal of Advances in Chemistry*. Molecular interaction studies in ternary liquid mixtures of quinoline at varying temperatures. **4(2)** (2013) 412-419.
50. Fakruddin Sk, Srinivasu Ch, **Narendra K**. *Research Journal of Physical Sciences*. Characterization of useful functionality by the study of excess thermo acoustical parameters in binary mixture of multi useful heterocyclic aromatic compound with 2-methylphenol at different temperatures T(=303.15, 308.15,313.15 K and 318.15K.). **1(8)** (2013) 10-13.
51. Ch. Srinivasu, K. Anil Kumar, Sk. Fakruddin, **K. Narendra**, T. Anjaneyulu. *International letters of chemistry, physics and astronomy*. Study of acoustical parameters in binary liquid mixture containing 1-butanol and hexane at temperatures 313.15 K, 318.15 K and 323.15 K. **13** (2013) 1-7.
52. T.Anjaneyulu, A.T. Raghavender, K. Vijaya Kumar, P. Naraya Murthy, **K. Narendra**. *Journal of the Korean Physical Society*. Influence of zinc doping in nickel ferrite nanoparticles synthesized by using an oxalic-acid-based precursor method. **62(8)** (2013) 1114-1118.
53. Ch. Srinivasu, Sk. Fakruddin, **K. Narendra**. *International Journal of Luminescence and Applications*. Excess thermo acoustical parameters studies on binary mixtures of multi useful quinoline with xylenes and cresols at different temperatures. **32(III)** (2013) 11-14.
54. S.S.J. Srinivas, B. Tulasi Koteswaro Bai, K. Babu Rao, **K. Narendra**, M.Sarath Babu. *International Letters of Chemistry, Physics and Astronomy*. Studies of densities, viscosities and ultrasonic speeds of binary mixtures containing isopropyl alcohol and ketones at different temperatures. **10(2)** (2013) 33-40.
55. Y.Sreedevi, Ch.Srinivasu, Sk. Fakruddin, **K. Narendra**, B.R. Venkateswara Rao, Y. Nirmal Rajeev. *International Letters of Chemistry, Physics and Astronomy*. Theoretical ultrasonic velocities in binary liquid mixture containing aniline and anisole at different temperatures- a comparative study. **7(2)** (2013) 120-124.
56. Sk. Fakruddin, **K. Narendra**, N.T. Sarma, Ch.Srinivasu. *Journal of Applicable Chemistry*. Acoustical study of molecular interactions in binary liquid mixture at different temperatures. **2(2)** (2013) 257-263. (**Impact factor: 1.0714**)

57. T.Anjaneyulu, P. Narayanamurthy, **K. Narendra**, K. Vijaya Kumar. *International Journal of Basic and Applied Chemical Sciences*. Structural and magnetic properties of $Cu_{1-x}Zn_xFe_2O_4$ Nano-powders synthesized by oxalate based precursor method. **3(1)** (2013) 50-59.
58. Y. Sreedevi, Ch. Srinivasu, Sk. Fakruddin, **K. Narendra**. *Journal of Chemical, Biological and Physical Sciences*. Study on Acoustical Parameters In Binary Liquid Mixture Containing Aniline and Anisole at Different Temperatures. **3(1)** (2013) 1849-1861.
59. T. Karunakar, Ch. Srinivasu, **K. Narendra**. *Research and Reviews: Journal of pure and applied Physics*. Thermoacoustic and infrared study of molecular interactions in binary mixture aniline + 1-butanol. **1(1)** (2013) 5-10.
60. M. Puspalatha, Ch. Srinivasu, **K.Narendra**. *International Journal of Research in Pharmacy and Chemistry*. Ultrasonic investigations on binary mixture of acetophenone with n-butanol at temperatures. 303.15 K – 323.15 K. **3(1)** (2013) 129-133.
61. M.Sri Lakshmi, R.Ramesh Raju, C. Rambabu, G.V. Rama Rao and **K. Narendra**. *Research&Reviews: Journal of Chemistry*. Study of molecular interactions in binary liquid mixtures containing higher alcohols at different temperatures. **2(1)** (2013) 12-24.
62. Sk. Fakruddin, CH.Srinivasu, B.R. Venkateswara Rao, **K. Narendra**. *Advances in Physical Chemistry* Excess transport properties of binary mixtures of Quinoline with Xylenes at Different Temperatures. (2012). **DOI: 10.1155/2012/324098**.
63. **K. Narendra**, Ch. Srinivasu, Ch. Kalpana and P. Narayanamurthy. *Journal of Thermal Analysis and Calorimetry*. Excess Thermo dynamical parameters of Binary Mixtures of Toluene and Mesitylene with Anisaldehyde using Ultrasonic Technique at Different Temperatures. **107** (2012) 25-30.
64. **K. Narendra**, B.Tulasi Koteswari Bai, K. Babu Rao, S.S.J. Srinivas and M. Sarath Babu. *Asian Journal of Chemistry*. Excess molar volumes and viscosity studies of binary mixtures of o-cresol and nonanol at different temperatures. **24(8)** (2012) 3645-3648.
65. Sk. Fakruddin, **K. Narendra** and Ch. Srinivasu. *Journal of Chemical and Pharmaceutical Research*. Study of ultrasonic parameters in binary liquid mixture containing quinoline and o-xylene at different temperatures. **4(7)** (2012) 3606-3609.
66. **K. Narendra**, T.S.Krishna, B. Munibhadrayya. *Instasci journal of physics*. Thermodynamic properties of binary mixtures of pyrrolidinone with propane-1,3-diol at different temperatures. **2(5)** (2012) 110-117.

67. Sk. Fakruddin, Ch. Srinivasu and **K. Narendra**. *Journal of Chemical, Biological and Physical Sciences*. Ultrasonic Study in binary liquid mixture containing quinoline and 1,4-Dimethylbenzene at 303.15 K, 308.15K, 313.15K & 318.15K. **2(4)** (2012) 2004-2008.
68. M. Sri Lakshmi, R. Ramesh Raju, C. Rambabu, G.V. Rama Rao and **K. Narendra**. *International journal of pharmaceutical and chemical sciences*. Theoretical evaluation of ultrasonic velocities in binary liquid mixtures containing cyclohexanone. **1(4)** (2012) 1512-1518.
69. Sk. Fakruddin, **K. Narendra** and Ch. Srinivasu. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. Excess parameters of binary mixtures of quinoline with o-cresol, m-cresol and p-cresol at T = (303.15, 308.15, 313.15, and 318.15) K. **3(4)** (2012) 578-588.
70. Sk. Fakruddin, Ch. Srinivasu and **K. Narendra**. *J. Chem. Pharm. Res*., Theoretical Studies of Ultrasonic Velocities in Binary Liquid Mixtures of Quinoline at Different Temperatures. **4(3)** (2012) 1799-1806.
71. Sk. Fakruddin, Ch. Srinivasu and **K. Narendra**. *IJRCE*. Acoustical Parameters of Some Binary Liquid Mixtures Containing Heterocyclic Aromatic Compound with Methylphenols at Different Temperatures. **2(3)** (2012) 164-167.
72. Sk. Fakruddin, Ch. Srinivasu, **K. Narendra,** N.T. Sarma. *Journal of Environmental science, computer science and Engineering & Technology*. Theoretical study of ultrasonic velocities in binary liquid mixture containing o-xylene at different temperatures. **1(3)** (2012) 295-300.
73. **K. Narendra**, Ch. Srinivasu and P. Narayanamurthy. *Pakistan Journal of Industrial and Research*. Experimental and Theoretical Ultrasonic Velocities of Binary Liquid Mixtures at Temperatures (303.15, 308.15, 313.15 and 318.15) K - Comparative Study. **55(2)** (2012) 59-67.
74. **K. Narendra**, Ch. Srinivasu, Sk. Fakruddin and P. Narayanamurthy. *J. Chem. Pharm. Res.*, Molecular interaction study of binary mixtures at different temperatures by ultrasonic method. **4(1)** (2012) 686-692.
75. Sk. Fakruddin, Ch. Srinivasu, **K. Narendra**. *International Journal of Applied Sciences, Engineering and Technology*. Study of Thermo Acoustical Parameters in Binary Liquid System at Different Temperatures. **1** (2012) 6-8.

76. Ch. Srinivasu, **K. Narendra** and Ch Kalpana. *Asian journal of Chemistry*. Thermo acoustical excess parameters of Anisaldehyde – Toluene mixture at 303.15K, 308.15K, 313.15K and 318.15K. **23(6)** (2011) 2681.
77. **K. Narendra**, Tulasi K.B.B, Babu Rao K, Srinivas S.S.J. and Sarath Babu M. *Research Journal of Pharmaceutical Biological and Chemical Sciences*. Studies of molecular interaction in binary liquid mixtures of o-cresol and nonanol at different temperatures. **2(4)** (2011) 916.
78. Ch. Srinivasu, **K. Narendra** and Ch. Kalpana. *E- Journal of Chemistry*. Experimental and Theoretical Evaluation of Ultrasonic Velocities of Binary Liquid Mixtures of Anisaldehyde and Toluene at Different Temperatures. **8(3)** (2011) 977.
79. **K. Narendra**, P. Narayanamurthy and Ch. Srinivasu. *Asian Journal of Chemistry*. Ultrasonic Study of Cyclohexane with *o*-Xylene at Different Temperatures. **23(2)** (2011) 752.
80. **K. Narendra**, Ch. Srinivas, Sk. Fakruddin and P. Narayanamurthy. *The Journal of Chemical Thermodynamics*. Excess parameters of binary mixtures of anisaldehyde with o-cresol, m-cresol and p-cresol at T= (303.15, 308.15, 313.15 and 318.15) K. **43** (2011) 1604-1611. (**Impact factor: 2.422**)
81. **K. Narendra**, P. Narayanamurthy and Ch. Srinivasu. *E-Journal of Chemistry*. Evaluation of Excess Thermodynamic Parameters in a Binary Liquid Mixture (Cyclohexane + o-Xylene) at Different Temperatures. **7(3)** (2010) 927.
82. **K. Narendra**, P. Narayanamurthy and Ch. Srinivasu. *International Journal of Computational Mathematical Ideas*. Experimental and theoretical evaluation of ultrasonic velocities in binary liquid mixture cyclohexane + o-xylene at 303.15, 308.15, 313.15 and 318.15K. **2(1)** (2010) 55.

Publications in National Journals (Annexure – IB)

1. Sk. Fakruddin, Ch. Srinivasu**, K. Narendra**. *Indian Streams Research Journal*. Study of adiabatic compressibility in a binary liquid mixture containing quinolone and mesitylene at different temperatures. **5(5)** (2015) 1-5.
2. Ch. Kavitha, A. Ratnakar and **K. Narendra**. *Indian Streams Research Journal*. Ultrasonic study of ternary solutions containing quinolone. **5(3)** (2015) 1-8.
3. K.Anil Kumar, Srinivasu Ch, Sk. Fakruddin and **K.Narendra.** *Golden Research Thoughts***.** Experimental and theoretical evaluation of refractive indices in binary liquid

mixture containing 1,4-dioxane and pentanol at different temperatures-a comparative study. **3(8)** (2014) 1-6.

4. K.Anil Kumar, Srinivasu Ch, T.S.Krishna and **K.Narendra**. *Journal of Chemical and Pharmaceutical Sciences*. Excess Thermo Acoustic Parameters on Binary Mixture of Tetrahydropyran with 1-Pentanol. Special issue (2014) 21-24.
5. T. Srinivasa Krishna, B. Munibhadrayya, **K. Narendra**, K. Anil Kumar, K.Thomas SS Raju. *Journal of Chemical and Pharmaceutical Sciences*. Theoretical Evaluation of Ultrasonic Velocities In Binary Liquid Mixtures of Pyrrolidinone with Propane-1, 2-Diol at Different Temperatures. Special issue (2014) 34-36.
6. **Narendra Kolla**. *Indian Streams Research Journal*. Study of Molecular Interactions in Binary Mixtures Using Excess Parameters. **4 (7)** (2014) 1-5.
7. B. Sudhamsa, M. Sarath Babu, **K. Narendra**. *Indian Journal of Applied Research*. Excess isentropic compressibilities, excess molar volumes, refractive index deviations of Diethyl Carbonate +, Nitrobenzene, + Chlorobenzene, and + Ethylbenzene at T = (293.15, 303.15, 313.15 and 323.15) K. **4(8)** (2014) 45-54.
8. Sk. Fakruddin, Ch. Srinivasu and **K. Narendra**. *Indian Streams Research Journal*. Study of molecular interaction in binary liquid mixture at different temperatures T (=303.15,308.15,313.15 and 318.15)K by using excess Gibb's free energy function. **4(3)** (2014) 1-7.
9. T. Srinivasa Krishna, B. Munibhadrayya, S. Govardhana Rao, Sk. Fakruddin, **K. Narendra**. *Golden Research Thoughts*. Theoretical evaluation of refractive index in binary liquid mixtures at different temperatures. **3(10)** (2014) 1-7.
10. Sk. Fakruddin, Ch. Srinivasu, **K. Narendra**, T.S.Krishna and N.T. Sarma. *Golden Research Thoughts*. Study of excess thermodynamic parameters in binary liquid mixtures of quinoline with m-cresol at T= 303.15, 308.15, 313.15 and 318.15K. **3(6)** (2013) 75-80.
11. K. Anil Kumar, Ch. Srinivasu, Sk. Fakruddin, **K. Narendra**. *Indian Streams research Journal*. Comparative study of theoretical ultrasonic velocities in binary liquid mixture containing 1-butanol and hexane at temperatures (=303.15, 308.15, 313.15, 318.15 & 323.15) K. **3(7)** (2013) 1-2.
12. Sk. Fakruddin, Ch.Srinivasu and **K. Narendra**. *Indian Streams research Journal*. Study of theoretical ultrasonic velocities in binary liquid mixture containing quinoline and p-xylene at different temperatures. **2(12)** (2013) 1-5.

13. T.Anjaneyulu, A.T.Raghavender, K. Vijaya Kumar, P. Narayana Murthy, **K. Narendra**. *Paripex - Indian Journal of Research*. IR Analysis of Zinc Doped Nickel and Copper Ferrite Nanoparticles. **2(3)** (2013) 310-312.
14. **K. Narendra**, Ch. Srinivasu and P. Narayanamurthy. *Journal of Applied Sciences*. Excess Properties of Binary Mixtures of o-xylene, m-xylene and p-xylene with Anisaldehyde at Different Temperatures. ***12(2)*** *(2012) 136-144*.
15. **K. Narendra**, P. Narayana Murthy and Ch. Srinivasu. *Asian Journal of Applied Sciences*. Refractive indices of binary liquid mixtures at different temperatures. **4(5)** (2011) 535.

Papers presented in Seminars/ Conferences (Annexure –II)

International

01. *"Speed of sound investigation of binary liquid mixtures: comparative evaluation of correlative models"* in **Two day International Conference on Recent Innovations in Engineering, Science, Humanities and Management** at Gayatri Vidya Parishad College for Degree & P.G. Courses, Visakhapatnam held on 11th and 12th August 2016.
02. *"Ultrasonic speed measurements in binary mixtures containing esters at temperatures from 303.15 to 318.15 K and its implications on thermodynamic data processing"* in **International Conference on Engineering Physics Materials and Ultrasonics (ICEPMU-2016)** at NorthCap University, Gurgaon held on 3rd and 4th June 2016.
03. *"Theoretical Evaluation of Speeds of Sound of Binary Liquid Mixtures Containing Diethyl Carbonate and Xylenes at Temperatures T = 298.15K – 323.15 K"* in '**3rd International Conference on Recent Innovations in Science, Engineering and Management (ICRISEM-16)**' at Sri Venkateswara College of Engineering and Technology, Etcherla, Srikakulam held on 27th February 2016.
04. *"Molecular Interactions of binary mixtures of BMIM Imide with cyclic amides at temperature 293.15 to 323.15 K at ambient pressure"* in '**International Symposium on Ultrasonics [ISU-2015]**' at Department of Physics, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur held on 22nd, 23rd and 24th January 2015 in association with **Ultrasonic Society of India**.
05. *"Study of molecular interactions in binary liquid mixture by using excess thermodynamic parameters at different temperatures"* at International Conference on '**Research and**

Development in Engineering and Technology (ICRDET)' held at Institute of Research and Journals, Chennai on 9th February 2014.

National

1. "Structural and Magnetic Properties of Mn, Co and Ni Doped ZnO nanoparticles Obtained by Oxalic-acid-based Precursor Method Technique" in UGC Sponsored two day national seminar on '**Need and role of nano science in present era**' (NRNSPE-2015) held at Department of Physics, P.B. Siddhartha College of Arts and Science, Vijayawada on 7th and 8th October 2015.
2. "*Excess thermodynamic parameters of binary mixture at different temperatures*" in UGC Sponsored two day national seminar on '**Advances in Chemical Science**' (NSACS-2015) held at Department of Chemistry, K.B.N. College, Vijayawada on 18th and 19th September 2015.
3. **"***Thermodynamic properties study for heterocyclic aromatic compound at different temperatures***"** in UGC Sponsored Two day national Conference on **'Emerging Frontiers of Materials Science'** held at Department of Physics, Maris Stella College, Vijayawada on 12th and 13th February 2015.
4. "*Molecular Interactions in Ternary Liquid Mixtures at different Temperatures – an Ultrasonic Study***"** in 9th National Conference on '**Thermodynamics of Chemical, Biological, Environmental and Non- Conventional Energy Systems-2014 [TCBNES-14]'** at Department of Chemistry, Sardhar Patel University, Vallabh Vidyanagar, Gujarat held on 17th & 18th October 2014.
5. *"Studies on Thermodynamic properties of Binary Mixtures of o-anisidine + butyl acetate at T = 303.15, 308.15, 313.15 and 318.15 K"* In a National Conference on '**Recent Challenges in Chemical & Biological Sciences**' at Department of Sciences & Humanities, Vignan's University, Vadlamudi held on 28th and 29th July 2014.
6. *"Ultrasonic study of molecular interactions in binary mixtures at 308.15 and 318.15 K"* in a National Seminar on '**Physics & Quality of Life (NSPQL 2014)**' at Department of Physics and Electronics, Osmania University College for Women, Hyderabad held on 24th & 25th February 2014
7. *"Application of refractive index mixing rules to binary systems at different temperatures"* in a National Conference '**Raman Memorial Conference 2014 [RMC-2014]**' at Department of Physics, University of Pune, Pune held on 7th & 8th February 2014.

8. "*Molecular Interactions in Ternary Liquid Mixtures at different Temperatures – an Ultrasonic Study*" in a National Conference on '**Thermodynamics of Chemical, Biological and Environmental Systems-2013 [TCBES-13]'** at Department of Applied Chemistry, BB Ambedkar University, Lucknow held on 25th & 26th November 2013.
9. "*Efficient solar cells in absorbing lower and higher wavelength solar rays with nanotechnology*" in a UGC sponsored National Seminar on '**Solar energy harvesting through photovoltaic cells and storage**' at RVR & JC College of Engineering, Chowdavaram, Guntur held on 21st & 22nd June 2013.
10. "*Excess thermo acoustical parameters studies on binary mixtures of multi useful quinoline with xylenes and cresols at different temperatures*" in a National Seminar on '**Multifunctional Materials**' at Andhra Loyola College, Vijayawada held on 6th & 7th March 2013.
11. "*Experimental and Theoretical evaluation of ultrasonic velocities of binary liquid mixtures of Aniline + Anisole at different temperatures*" in a National Seminar on '**New Frontiers in Scientific Research**' at **Andhra Loyola College, Vijayawada** held on 27th Feb' 2012.
12. "*Molecular interactions of quinoline with xylenes*" in two-day National Seminar on "**Recent Trends in Advanced Materials**" at **Sir C.R. Reddy Autonomous College, Eluru** held on 27th & 28th Jan' 2012.
13. "*Thermo dynamical investigation of binary mixtures of anisaldehyde with aliphatic alcohols at 303.15K*" in a National Seminar on '**Emerging trends in material science-An application to Amorphous, Nano and Liquid crystals**' on 30th Oct'2010, conducted by department of Physics, **Sir CR Reddy autonomous college, Eluru**.
14. "*Technology that works at atomic and molecular level- Nanotechnology*" in a national seminar on '**Nano materials in engineering chemistry**' on 13th Sept' 2010, Conducted by department of Chemistry, **VRSEC, Vijayawada**.

Seminars / Workshops Attended (Annexure –III)

01. Attended a National workshop on **'Innovative Teaching Strategies in Engineering Education**' held on March 24, 2017, Organized by Department of Mathematics, VRSEC, Vijayawada.

02. Attended a one day International Seminar on '**Contemporary Development in Organizational Behavior**' held on 30-12-2016, Organized by department of Business Management, VRSEC, Vijayawada.
03. Attended a three day Faculty Development Program on '**Renewable Energies and Grid Integration Systems**' held during 7th – 9th October, 2016 under TEQIP-II S.C.1.2, Organized by the Department of Electrical & Electronics Engineering, VRSEC, Vijayawada.
04. Attended a '**National workshop on Material Characterization Techniques (NWMCT-2016)**' held during September 28th and 29th 2016, Organised by Department of Physics, Osmania University, Hyderabad.
05. Attended a two-day workshop on '**Research Methodologies & Guidelines to paper publication**' Under TEQIP – II S.C. 1.2. held during 23rd & 24th September 2016, Organized by Department of Electrical and Electronics Engineering, VRSEC, Vijayawada.
06. Attended an '**International conference on Smart Sustainable Cities**' held during 26th and 27th February 2016, Organised by the department of Civil Engineering, V.R. Siddhartha Engineering College, Vijayawada-07.
07. Attended a Two Day National Workshop on '**Computational fluid dynamics and applications**' held during 21st -22nd December 2015, Organized by the department of Mechanical Engineering, V.R. Siddhartha Engineering College, Vijayawada.
08. Attended a National Workshop on '**Recent trends in urban solid waste management**' held on 4th November 2015, Organized by the department of Civil Engineering, V.R. Siddhartha Engineering College, Vijayawada.
09. Attended a two day National Seminar on '**Smart Materials and Structures**' held on 28th – 29th August 2015 sponsored by DST, Organised by department of Mechanical Engineering, VRSEC, Vijayawada.
10. Attended a Seminar on '**Good Governance practices for academic institutions**' held on 26th August 2015, Organised by Department of Business Management, VRSEC.
11. Attended a two day National Seminar on '**Recent Advances in Mathematics and Computer Science – Applications in Technology, Cryptology, Quality and Business (RAM-2014)**' held on 25th & 26th April 2014 organised by department of Mathematics, **VRSEC, Vijayawada** under TEQUIP-II SC 1.2.

12. Attended a two day National Conference on '**Nanotechnology in Chemical and Allied Industries**' held on 7th – 8th March 2014 Sponsored by 'AICTE', Organised by Department of Chemical Engineering, **Bapatla Engineering College**, **Bapatla**.
13. Attended 4 days **IEEE EPICS** Workshop held during 2nd Dec 2012 to 5th Dec 2012 in Hyderabad.
14. Attended a one day faculty development program on '**Characterization of Nano Materials**' held on 27th April, 2012 organised by department of Mechanical Engineering & Chemistry, **VRSEC, Vijayawada** under TEQUIP-II SC 1.2.
15. Attended a one day national workshop on '**Wavelets and its applications**' on 9th August 2009, conducted by Dept. of Electronics and Communications, **VRSEC, Vijayawada**.
16. Attended a one day national workshop on '**Nano science and the smart technology**' on 8th April 2009, conducted by SOSAR, **VRSEC, Vijayawada.**
17. Attended an internal seminar on **'Science and technology of Glass materials**' during 16-19th March 2009, Sponsored by UGC, DAE-BRNS, DST, CSIR, APCOST, Organized by Dept. of Physics held at **ANU, Guntur**.
18. Attended a '**School on Radar and Lidar Remote Sensing of the Atmosphere**' during 7-11, March 2007, Sponsored by **S.V.University, Tirupathi & NARL, Gadanki** held at **S.V.University, Tirupathi**.
19. Attended the **One** Day Faculty Development Programme on '**Brain Train for Effective Teaching**' on 7th January 2007, Sponsored by Siddhartha Academy of General & Technical Education, held at **P.V.P.Siddhartha Institute of Technology, Vijayawada**.
20. Attended the **Two** Day Refresher Course on "**Effective Teaching Methodology**" on 8th - 9th December 2006, Sponsored by **Indian Society for Technical Education, A.P.Section**, **Hyderabad** in association with **V.R.Siddhartha Engg.College, Vijayawada**, held at **V.R.Siddhartha Engg.College, Vijayawada**.

Books Published (Annexure –IV)

1. Practical physics for engineers, Duvvuri Publications (ISBN 978-81-908892-4-7), Machilipatnam.
2. Engineering physics lab manual for JNTU, Ananthapur. Duvvuri publications.
3. Engineering practical physics for JNTU, Hyderabad. Duvvuri publications (ISBN 978-81-908892-5-4), Machilipatnam.