Head, Department of Chemistry

Dr. V. K. Sharma

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A) Educational Profile

Degree	Year of Passing	University / Institute
Ph. D.	1983	M.D.University, Rohtak
PG (M.Sc. Chemistry)	1979	M.D.University, Rohtak
UG (B.Sc. Non-Medical)	1977	G.N.D. Univ., Amritsar

B) Career Profile

Designation	Institution Served	Duration	
		From	То
Lecturer	Hindu College, Sonepat	Oct. 1984	Oct. 1984
Senior Lecturer	M.D.University, Rohtak	Nov. 1989	Nov. 1997
Reader	M.D.University, Rohtak	Nov. 1997	Nov. 2005
Professor	M.D.University, Rohtak	Nov. 2005	Till Date

C) Research Advisory

No. of Students supervised	Ph. D.	M. Phil
	10	01

D) Projects Undertaken

Title of the Project	Duration	Funding Agency	Status
Topological and	Three Yrs	UGC, DELHI	Completed
thermodynamic			
studies of multi			
component Liquid			
mixtures containing			
Ionic Liquids			

E) Publications

Research Papers

Participation in Conferences / Seminars/ Workshops 2	1
b. Published in conferences / Seminar Proceedings 4	8
a. Published in refereed /Peer Reviewed Journals 1	10

Assignments outside M.D. University, Rohtak

INDIA

- a. Outside Experts in various Academic Bodies of Universities
- b. Member, selection committees
- c. Delivered plenary Lectures in Conferences

List of Publications

- Topological aspects of thermodynamics of binary mixtures of non-electrolytes, P. P. Singh, R. K. Nigam, K. C. Singh and V. K. Sharma, *Themochim. Acta* 46, 175-190, 1981. *Impact Factor* 1.989
- Topological aspects of excess enthalpies of binary mixtures of non-electrolytes, P. P. Singh, R. K. Nigam, V. K. Sharma, S. P. Sharma and K. C. Singh, *Thermochim. Acta*, 52, 87-102, 1982. *Impact Factor 1.989*
- 3. Thermodynamics of ternary mixtures of non-electrolytes: Excess volumes, P. P. Singh and V. K. Sharma, *Canad. J. Chem.* 61, 2321-2328, 1983. *Impact Factor 1.242*
- 4. Thermodynamics of ternary mixtures of non-electrolytes: Excess Enthalpies, P. P. Singh and V. K. Sharma, Z. Phys. Chemie. 265, 915-928, 1984. *Impact Factor 1.57*
- Molar excess volumes and molar excess enthalpies of binary mixtures of methylenebromide + aromatic hydrocarbon mixtures, P. P. Singh, R. K. Nigam and V. K. Sharma, *Fluid Phase Equilibria* 81, 313-331, 1984. *Impact Factor 2.379*
- NMR studies of molecular interactions between benzene + methylene bromide + pxylene mixtures, P. P. Singh, R. K. Nigam and V. K. Sharma, Z. Phys. Chemie. 265, 359-364, 1984. Impact Factor 1.57
- Ion-pairs in aqueous solutions and the transition model of electrolytic behavior, P. P. Singh, H. P. Dahiya and V. K. Sharma, *Indian .J. Chem.* 25A, 116-122, 1986. *Impact Factor 0.891*
- Liquid Vapour equilibria in some binary liquid mixtures of non-electrolytes, V. K.
 Sharma and P. P. Singh, Z. Phys. Chemie. 207, 805-810, 1986. Impact Factor 1.57
- 9. Topological studies of the molecular species that characterize lower alkanol + methylene bromide mixtures: Molar excess volumes and molar excess enthalpies, P. P. Singh, V. K. Sharma and S. P. Sharma, *Thermochim. Acta* 106, 293-307, 1986. *Impact Factor 1.989*
- Thermodynamics of methylene bromide + aromatic hydrocarbon mixtures Molar excess Gibbs free energy of mixing, P. P Singh and V. K. Sharma, *Fluid Phase Equilibria 44*, 347-355, 1989. *Impact Factor 2.379*

- Thermodynamics of binary mixtures of non-electrolytes: Molar excess Gibbs free energy of mixing, V. K. Sharma, S.P. Sharma and Sadhna Aggarwal, *Indian .J. Chem.* 31A, 398-402, 1992. *Impact Factor 0.891*
- 12. Excess molar volumes of binary mixtures containing nitrotoluene at 308.15K, V. K. Sharma and S. Maken, *Indian J. Chem.* 31A, 721-722, 1992. *Impact Factor 0.891*
- Topological investigations of aniline and substituted anilines in binary solutions containing methylene bromide, V. K. Sharma, P. P. Singh, S. Maken and Bhup Singh, *Canad. J.Chem.* 71, 2183-2188, 1993. *Impact Factor 1.242*
- Solute solute interaction enthalpies in solution of copper (II) chloride in organic solvents having nitrogen donor atoms, P. P. Singh, S. Maken and V. K. Sharma, *Fluid Phase Equilibria* 93, 277-283, 1994. *Impact Factor 2.379*
- 15. Adsorption from some binary solutions on silica gel, S. K. Shanna , V. K. Sharma and Bharat Singh, *Indian J. Chem.* 33A, 259 -262, 1994. *Impact Factor 0.891*
- Molecular interactions in binary mixtures of non-electrolytes: Molar excess volumes and molar excess enthalpies, V.K. Sharma, P. P. Singh, S. Maken and Jaibir singh, *Indian J. Chem.* 33A, 727-731,1994. *Impact Factor 0.891*
- 17. Thermodynamics and topological investigations of molecular interactions in methylene bromide + nitrobenzene mixtures, V. K. Sharma, P. P. Singh and Bhup Singh, *Indian J. Chem.* 33A, 287-290,1994. *Impact Factor 0.891*
- Molar excess volumes of binary and ternary mixtures containing chloroaniline, V. K. Sharma, P. P. Singh and S. Maken, *J. Chem. Eng. Data* 39, 238-240, 1994. *Impact Factor* 2.004
- Thermodynamics of molecular interactions in water some + non-electrolyte mixtures,
 V.K. Sharma, O. P. Yadav & Jaibir Singh, *Indian. J. Chem.* 34A, 594-601, 1995.
 Impact Factor 0.891
- Physico-chemical studies of aqeous sodium dodecyl sulphate solutions in pyridine and isomeric picolines, V. K. Sharma, O. P. Yadav and Jaibir Singh, J. Colloids & Surfaces 110, 23-35, 1996. Impact Factor 2.236
- Conductometeric, surface tension and thermodynamic studies of aqueous sodium dodecyl benzene sulphonate in pyridine and isomeric picolines, V. K. Sharma, O. P. Yadav and Jaibir Singh, *Indian J. Chem.*, 35A, 1056-1061, 1996. *Impact Factor* 0.891
- 22. Physico-chemical studies of some surfactants solutions in water and in water + pyridine mixtures, **V. K. Sharma**, O. P. Yadav and Jaibir Singh, *Indian J. Chem.*, 35A, 337-341, 1996. *Impact Factor 0.891*

- Thermodynamics and topological investigations in binary mixtures containing nitrobenzene, K. C. Kalra, V. K. Sharma and A. Katoch, *Indian J. Chem.*, 35A, 390-394, 1996. *Impact Factor 0.891*
- 24. Molar excess volumes and Molar excess enthalpies of binary mixtures containing nitrobenzene, K. C. Kalra, V. K. Sharma and A. Katoch, *Indian J. Chem.*, 36A, 46 52, 1997. *Impact Factor 0.891*
- 25. Physico-chemical studies of some aqueous surfactants in alcohol, V. K. Sharma and Jaibir Singh, J. Surf. Sci. & Technol., 13 (2-4), 166 -178, 1997. Impact Factor 1.994
- Thermodynamic properties of ternary mixtures containing nitrobenzene, V. K. Sharma, K. C. Kalra and A. Katoch, *Canad. J. Chem.*, 75, 1896-1904, 1997. *Impact Factor 1.242*
- Ultrasonic speeds and isentropic compressibilities of some water + non-electrolyte mixtures, V. K. Sharma and & A. Katoch, *Indian J. Chem.*, 37A, 59-62, 1998. *Impact Factor 0.891*
- Thermodynamical investigations of some non-electrolytic ternary mixtures, K.C. Kalra, V.K. Sharma and A. Katoch, *Indian J. Chem.*, 37A, 308-315, 1998. *Impact Factor 0.891*
- 29. Thermodynamics of solutions containing surfactant in mixed solvent, V. K. Sharma, O. P. Yadav and Jaibir Singh. *Indian J. Chem.*, 37A, 498-506, 1998. *Impact Factor* 0.891
- Molar excess enthalpies of ternary mixtures containing nitrobenzene, K. C. Kalra, V. K. Sharma and A. Katoch, *Indian J. Chem.*, 37A, 393-398, 1998. *Impact Factor* 0.891
- 31. Topological investigations of molecular interactions in binary mixtures containing

methylene bromide, V. K. Sharma, Jaibir Singh and Bhup Singh, *Indian J. Chem.*, 37A, 586-591, 1998. *Impact Factor 0.891*

- 32. Thermodynamic studies of solution containing surfactants in mixed solvent, V. K. Sharma, Jaibir Singh and D. Soni, *J. Surf Sci. & Technol.*, 14 No(1-4) 141-149, 1998.
- Molar excess volumes and molar excess enthalpies of ternary mixtures containing nitrobenzene at 308.15 K, K. C. Kaira, V. K. Sharma and A. Katoch, J. Chem. Thermodyn., 30, 449 -458, 1998. Impact Factor 2.297
- 34. Thermodynamics of molecular interaction in binary mixtures containing nitromethane: Molar excess volumes and molar excess enthalpies, **V. K. Sharma** and Jaibir Singh, *Indian. J. Chem.*, 38A, 65-69, 1999. *Impact Factor 0.891*

- 35. Topological investigations of molecular interactions in water + 1,4-dioxane mixture,
 V. K. Sharma and Jaibir Singh, *Indian J. Chem.*, 38A, 271-274, 1999. *Impact Factor* 0.891
- 36. Thermodynamics of ternary mixtures: Molar excess volumes, V. K. Sharma, K. C. Kaira and A. Katoch, *Indian J. Chem.*, 38A, 230-236, 1999. *Impact Factor 0.891*
- Ultrasonic speeds and isentropic compressibilities of mixtures containing nitrobenzene, K. C. Kaira, V. K. Sharma and A. Katoch, *Indian J. Chem.*, 38A, 482 -485, 1999. *Impact Factor 0.891*
- Thermochemical and topological investigations of ternary mixtures containing ether,
 V. K. Sharma and Romi, *Indian J. Chem.*, 40A, 1156-1160, 2001. *Impact Factor* 0.891
- Topological investigations in binary mixtures containing ether: Molar excess volumes and molar excess enthalpies, V. K. Sharma, Rajni and Romi, *Indian J. Chem.*, 40A, 1277-1281, 2001. *Impact Factor 0.891*
- 40. Molar excess volumes of ternary mixtures containing ether, V. K. Sharma and Romi, *Canad .J. Chem.*, 79, 1910-1914, 2001. *Impact Factor 1.242*
- 41. Thermodynamics of molecular interactions in miceller solutions, **V. K. Sharma**, O. P. Yadav, M. Singh and Jaibir Singh. *J. Surf Sci. & Technol.*, 17 No 1-2, 1-8, 2001.
- 42. Thermodynamics of molecular interactions in mixtures containing ether, V. K. Sharma and Romi, *Indian J. Chem.*, 41A, 1, 2002. *Impact Factor 0.891*
- Thermodynamics of ternary mixtures: Excess isentropic compressibilities, V. K. Sharma, K. C. Kalra, Romi and A. Katoch, *Indian J. Chem.*, 42A, 292-294 (2003). *Impact Factor 0.891*
- 44. Topological investigations of binary and ternary mixtures containing cyclic ether: Excess isentropic compressibilities, **V. K. Sharma**, Romi and Satish Kumar, *Indian J. Chem.*, 42A, 1379-1384, 2003. *Impact Factor 0.891*
- 45. Topological investigations of molecular interactions of containing alkanols: Molar excess volume and molar excess enthalpies, V. K. Sharma and Satish Kumar, *Thermochim. Acta*, 413, 255-259, 2004. *Impact Factor 1.989*
- Topological investigations of binary and ternary mixtures: Excess isentropic compressibilities, V. K. Sharma, Romi and Satish Kumar, *Thermochim. Acta*, 417, 91-97, 2004. *Impact Factor 1.989*
- 47. Molar excess volumes of ternary mixtures containing cyclic ether, **V. K. Sharma** and Satish Kumar, *J. Soln. Chem.*, Vol. 34 (2)205-2 18, 2005. *Impact Factor 1.128*

- 48. Topological investigations of molecular interactions in mixtures containing 1,4dioxane and alkanols, V. K. Sharma and Satish Kumar, *Thermochim. Acta*, 428, 83-90, 2005. *Impact Factor 1.989*
- 49. Isentropic compressibility changes of mixing for 1,3-dioxolane or 1,4-dioxane + water + propanol ternary mixtures, V. K. Sharma and Satish Kumar, J. Solution Chem. 34, 387-405, 2005. Impact Factor 1.128
- 50. Excess isentropic compressibilities for 1,3-dioxolane or 1,4-dioxane + water + formamide or N, N-dimethylformamide ternary mixtures at 308.15K, V. K. Sharma and Satish Kumar, *J. Solution Chem.* 34(6), 713-731, 2005. *Impact Factor 1.128*
- Topological investigations of some cyclic ether-water-alkanol ternary mixtures: Molar excess volumes, V. K. Sharma and Satish Kumar, J. Solution Chem. 34 (7), 839-852, 2005. Impact Factor 1.128
- Molecular interactions in binary mixtures containing o-toluidine: Dimple, J. S. Yadav, K.C. Singh and V.K. Sharma, *Thermochim. Acta* 468, 108-115, 2008. *Impact Factor* 1.989
- 53 Topological and thermodynamical investigations of molecular interactions of aniline and o-toluidine with chloroform: Dimple, Jaibir S. Yadav, Satish Kumar, K.C. Singh and **V.K. Sharma**, *Thermochim. Acta* 471, 74-79, 2008. *Impact Factor* 1.989
- 54. Molar excess volumes and excess isentropic compressibilities of ternary mixtures: Dimple, Jaibir S. Yadav, K.C. Singh and V.K. Sharma, J. Chem. Eng. Data, 53, 1935-1939, 2008. Impact Factor 2.004
- 55. Molar excess volumes and excess isentropic compressibilities of ternary mixtures containing o-toluidine: Dimple, Jaibir S. Yadav, K.C. Singh and V.K. Sharma, J. *Solution Chem.* 37, 1099-1112, 2008. *Impact Factor 1.128*
- 56. Topological and Thermodynamic investigations of binary mixtures: Molar excess volumes, Molar excess enthalpies and Isentropic compressibility changes of mixing: Dimple, Jaibir S. Yadav, Satish Kumar, K.C. Singh and V.K. Sharma, *Thermochim. Acta* 475, 8-14, 2008. *Impact Factor* 1.989
- 57. Molar Excess Volumes and Excess Isentropic Compressibilities of {2-Methylaniline (i) + Benzene (j) + Methylbenzene}, {2-Methylaniline (i) + Benzene (j) + 1,2-Dimethylbenzene (k)}, and{2-Methylaniline (i) + Benzene (j) + 1,4-Dimethylbenzene (k)} at T = 308.15 K: Dimple, Jaibir S. Yadav, K. C. Singh and V. K. Sharma J. *Chem. Eng. Data* 54, 2109-2112, 2009. *Impact Factor 2.004*
- Topological investigations of thermodynamic properties of binary mixtures containing
 2-pyrrolidinone: Jaibir S. Yadav, Dimple and V.K. Sharma, *Thermochim. Acta* 489,
 45-52, 2009. *Impact Factor 1.989*

- 59. Topological investigations of the molecular species and molecular interactions that characterize pyrrolidin-2-one + lower alkanols mixtures: J. S. Yadav, Dimple and **V.K. Sharma**, *Thermochim. Acta* 493, 19-24, 2009. *Impact Factor 1.989*
- 60. Thermodynamical investigations of molecular interactions in ternary mixtures containing 2-pyrrolidinone at 308.15K. Molar excess volumes and Excess isentropic compressibilities: Jaibir S. Yadav, Dimple and V.K. Sharma *Thermochim. Acta* 496, 166-172, 2009. *Impact Factor* 1.989
- 61. Molar excess volumes and excess isentropic compressibilities of ternary mixtures containing 2-pyrrolidinone: Jaibir S. Yadav, Dimple and V.K. Sharma. *WASET* 29, 29-35, 2009.
- 62. Thermodynamic and Acoustic Properties for Binary and Ternary mixtures of Cyclic Ethers with Industrially Important Solvents at 308.15K: Satish Kumar, Wonsub Lee, Younghee Lee, Jaibir S. Yadav, Dimple Sharma, V.K. Sharma, IL Moon J. Mol. Liquids 155, 8-15, 2010. Impact Factor 1.684
- 63. Thermodynamic properties of ternary liquid mixtures of 2-pyrrolidinone with aromatic hydrocarbons: Jaibir S. Yadav, Dimple and V.K. Sharma, *Int. J. Thermophys.* 31, 327-337, 2010. *Impact Factor 0.568*
- Excess molar volumes and isentropic compressibilities changes of mixing of tetrahydropyran + benzene + cyclo or n-alkanes ternary mixtures at 308.15K. Rajesh K. Siwach, Dimple, and V. K. Sharma *Thermochim. Acta* 503, 85-89, 2010. *Impact Factor 1.989*
- 65. Thermodynamic properties of binary mixtures containing tetrahydropyran: excess molar volumes, excess molar enthalpies and isentropic compressibilities changes of mixing. Rajesh K. Siwach, Dimple, and V. K. Sharma *Thermochim. Acta* 506, 1-7, 2010. *Impact Factor 1.989*
- 66. Thermodynamic Investigation of Molecular Interactions in 1,3-dioxolane or 1,4-dioxane + benzene or toluene + formamide or + di-methylformamide Ternary Mixtures at 308.15 K and Atmospheric Pressure: Satish Kumar, Jaibir S. Yadav, V.K. Sharma and IL. Moon J. Solution Chem. 39, 680-691, 2010. Impact Factor 1.128
- 67. Excess molar volumes of ternary mixtures of cyclic ether with aromatic hydrocarbons at 308.15 K: Rajesh K. Siwach, Dimple Sharma, Sunil K Jangra and V. K. Sharma J. *Solution Chem.* 39, 1492-1500, 2010. *Impact Factor 1.128*
- 68. Thermodynamic properties of binary mixtures of Tetrahydropyran with anilines at 308.15K, Sunil K. Jangra, Jaibir S. Yadav, Neeti, Dimple, and V. K. Sharma J. *Chem. Eng. Data* 55, 4525-4531, 2010. *Impact Factor 2.004*

- Topological investigations of molar excess volumes and excess isentropic compressibilities of ternary mixtures containing 2-pyrrolidinone at 308.15K: Jaibir S. Yadav, Satish Kumar, Dimple and V.K. Sharma, Int. J. Thermophys 31, 2201-2215, 2010 Impact Factor 0.568
- 70. Thermodynamic properties of liquid mixtures containing 1,3-dioxolane and anilines: Excess molar volumes, excess molar enthalpies, excess Gibb's free energy and isentropic compressibilities changes of mixing: Sunil Kumar, Jaibir S Yadav, Neeti, Dimple, V. K. Sharma *Thermochim. Acta* 511, 74-81, 2010. *Impact Factor 1.989*
- Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities of tetrahydropyran with aromatic hydrocarbons: V. K. Sharma, Rajesh K. Siwach, and Dimple J. Chem Thermodyn. 43, 39-46, 2011. Impact Factor 2.297
- 72. Excess molar volumes of ternary liquid mixtures composed of 1, 4-Dioxane, otoluidine, and aromatic hydrocarbons at temperature of 308.15K. Sunil K. Jangra, Neeti Saini, J. S. Yadav, R. K. Siwach, V. K. Sharma, J. Mol. liquids, 158, 192-196, 2011. Impact Factor 1.684
- 73. Thermodynamic and topological investigations of molecular interactions in binary and ternary mixtures containing 1-methyl pyrrolidin-2-one at 308.15 K: Yameeka, J.S. Yadav, Dimple and V.K. Sharma, J. Chem. Thermodyn. 43, 737-749, 2011. Impact Factor 2.297
- 74. Thermodynamic properties of binary mixtures of tetrahydropyran with pyridine and isomeric picolines: Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities: Neeti, Sunil K. Jangra, J. S. Yadav, Dimple and V. K. Sharma. *Thermochim. Acta* 518, 13-26, 2011. *Impact Factor 1.989*
- 75. Thermodynamic studies of molecular interactions in mixtures of o-toulidine with pyridine and picolines: Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities: Neeti, Jaibir S. Yadav, Sunil K. Jangra, Dimple and V. K. Sharma, J. Chem. Thermodyn., 43, 782-795, 2011. Impact Factor 2.297
- Physicochemical Properties of Jatropha Curcas Biodiesel + Diesel Fuel No.2 Binary Mixture at T= (288.15 to 308.15K) and Atmospheric Pressure: Satish Kumar, J. S.Yadav, V. K. Sharma, Wonsub Lim, Jae Hyun Cho, Junghwan Kim and Il Moon, J. Chem. Eng. Data, 56(3), 497-501, 2011. Impact Factor 2.004
- 77. Topological investigations of excess molar volumes and excess isentropic compressibilities of ternary mixtures containing 1-methyl pyrrolidin-2-one at 308.15 K: Yameeka, J. S. Yadav, Dimple, and V. K. Sharma. J. Mol. Liquids 159, 230–235, 2011. Impact Factor 1.684

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- 79. Sound speeds and excess isentropic compressibilities of ternary mixtures of tetrahydropyran and aromatic hydrocarbons at 308.15K. Rajesh K. Siwach, Dimple and V. K. Sharma Int. J. Thermophys., 32, 1188-1201, 2011. Impact Factor 0.568
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- 81. Thermodynamic investigations of ternary *o*-toluidine + tetrahydropyran+ N,N-dimethylformamide mixture and its binaries at 298.15,303.15 and 308.15K Neeti, S. K. Jangra, J. S. Yadav, Dimple and V. K. Sharma, J. Mol. Liquids 163, 36-45, 2011. *Impact Factor 1.684*
- Topological investigations of molecular interactions of binary and ternary mixtures containing tetrahydropyran, o-toluidine and N-methylformamide Neeti, Sunil K. Jangra, J.S. Yadav, Dimple, V. K. Sharma, *Thermochim. Acta* 524, 92–103, 2011. *Impact Factor 1.989*
- 83. Topological and thermodynamic investigations of ternary mixtures containing cyclic ether: Excess molar enthalpies Sunil K. Jangra, Neeti, Jaibir S. Yadav, Dimple and V. K. Sharma. J. Mol. Liquids, 162, 122-128, 2011. Impact Factor 1.684
- 84. Thermodynamic and topological investigations of ternary mixtures with o-toluidine, tetrahydropyran, and picolines: Excess molar volume and excess isentropic compressibility Neeti Hooda, S. K. Jangra, Dimple Sharma, V.K. Sharma, J. Chem. *Thermodyn.*, 47, 109–119, 2012. *Impact Factor 2.297*
- Excess molar enthalpies for binary and ternary mixtures containing cyclic ether, 2methylaniline and aromatic hydrocarbons, Sunil K. Jangra, Neeti, J. S. Yadav, Dimple, V. K. Sharma, *Thermochim. Acta*, 530, 25–31, 2012. *Impact Factor* 1.989
- 86. Excess molar enthalpies of ternary mixtures containing *o*-toluidine + tetrahydropyran with pyridine or isomeric picolines or benzene or toluene at 308.15 K, Neeti, S.K. Jangra, D. Sharma, V.K. Sharma, *Thermochim. Acta*, 531, 28-34, 2012. *Impact Factor 1.989*
- 87. Thermodynamic study of molecular ternary mixtures containing 1-methyl pyrrolidin-2-one, propan-2-ol and benzene or methyl benzene or cyclohexane: Yameeka, Jaibir S. Yadav, Dimple and V. K. Sharma, J. Solution Chem. 40, 1769-1783, 2012. Impact Factor 1.128

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- Topological investigations of binary mixtures containing Ionic liquid 1-ethyl-3methylimidazolium tetrafluoroborate and pyridine or isomeric picolines: Subhash, Neeti and V.K. Sharma, J. Chem. Thermodyn. 56, 123-135, 2013. Impact factor 2.297
- 90. Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities of binary mixtures containing N-methyl-2-pyrrolidone and isomeric xylenes at 308.15K: Y. Chhikara, J. S. Yadav, D. Sharma and V. K. Sharma, J. Solution. Chem. 41, 1696-1712, 2012 Impact factor 1.128
- 91. Topological investigations of binary mixtures containing 1-ethyl-3-methyl imidazolium tetrafluoroborate and anilines: V.K. Sharma and Subhash, J. Mol. Liquids 177, 133-144, 2013. Impact factor 1.684
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- 93. Thermodynamic properties of binary mixtures of the ionic liquid [emim][BF₄] with acetone and dimethylsulphoxide: S. Bhagour, S. Solanki, N. Hooda, D. Sharma and V. K. Sharma, *J. Chem. Thermodyn.* 60, 76-86, 2013. *Impact factor 2.297*
- 94. Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities of 1-methylpyrrolidi-2-one with water and propanols: Yameeka, Dimple, J. S. Yadav and V. K. Sharma, J. Solution. Chem. 42, 372-389, 2013. Impact factor 1.128
- 95. Excess molar volumes and excess isentropic compressibilities of o-toluidine + tetrahydropyran with pyridine or benzene or toluene ternary mixtures at 298.15, 303.15 and 308.15K, N. Hooda, S. K. Jangra, D. Sharma, V.K. Sharma, J. Solution. Chem. 42, 282-308, 2013. Impact factor 1.128
- 96. Molecular interactions in 1-ethyl-3-methylimidazolim tetrafluoroborate + amide mixtures: Excess molar volumes, excess isentropic compressililities and excess molar enthalpies: V.K. Sharma and S. Bhagour, J. Solution. Chem. 42, 800-822, 2013. Impact factor 1.128
- 97. Volumetric Properties of 1, 3-Dioxolane + Toluene + o- or p-Xylene ternary mixtures at 25.00 °C and atmospheric pressure: S. Kumar, V. K. Sharma, Il Moon, *J. Solution. Chem.*, 42, 1936-1944, 2013. *Impact factor 1.128*

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- 99. Thermodynamic properties of ternary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate with 1-methyl pyrrolidin-2-one or Pyrrolidin-2-one + Water: V. K. Sharma, S. Bhagour, D. Sharma and S. Solanki, *Thermochim. Acta*, 563, 72-81, 2013. *Impact Factor 1.989*
- Excess molar enthalpies of ternary mixtures containing 1-ethyl-3-methylimidazolium tetrafluoroborate and organic solvents: V. K. Sharma, S. Solanki, S. Bhagour, D. Sharma, *Thermochim. Acta*, 569, 36-41, 2013. *Impact factor 1.989*
- Excess heat capacities of 1-methyl pyrrolidin-2-one and pyridine or picolines mixtures: V. K. Sharma, A. Rohilla. *Thermochim. Acta*, 568, 140-147, 2013. *Impact factor 1.989*
- Topological investigations of thermodynamic properties of ionic liquid mixtures: excess molar volumes and excess isentropic compressibilities: V. K. Sharma, S. Solanki, S. Bhagour and D. Sharma, J. Mol. Liquids, 188, 258-271, 2013. Impact factor 1.684
- 103. Excess molar enthalpies for [emim][BF₄] + pyrrolidin-2-one or 1-methyl pyrrolidin-2-one + pyridine or water mixtures: V. K. Sharma, S. Bhagour, S. Solanki, Sheetal, S. K. Jangra, *J. Chem. Thermodyn.*, 68, 235-243, 2014. *Impact factor 2.297*
- 104. Excess heat capacities for lactam + chlorotoluene binary mixtures: V. K. Sharma, A. Rohilla, J. S. Yadav, S. Solanki, D. Sharma, J. Chem. Eng. Data, 58, 2979-2990, 2013. Impact factor 2.004
- 105. Topological investigations of excess heat capacities of binary liquid mixtures containing lactams and cycloalkanol: V. K. Sharma, J. Kataria, J. Mol. Liquids, 188, 210-221, 2013. Impact factor 1.684
- 106. Topological studies of molecular interactions in binary and ternary liquid mixtures containing lactams and isomeric chlorotoluenes, V. K. Sharma, A. Rohilla, S. Bhagour, J. Mol. Liquid, 193, 94-115, 2014. Impact factor 1.684
- Topological and thermodynamic investigations of mixtures containing ochlorotoluene and lower amides, V. K. Sharma, R. Dua, J. Chem. Thermodyn., 71, 182-195, 2014. Impact factor 2.297
- Themodynamic properties of mixtures containing linear and cyclic ketones: V. K. Sharma, J. Kataria, S. Bhagour, J. Mol. Liquids, 195, 132-138, 2014. Impact factor 1.648

- Molecular interactions in binary mixtures of lactams with cyclic alkonones, V. K. Sharma, J. Kataria, S. Solanki, J. Solution. Chem. 43, 486-524, 2014. Impact factor 1.128
- 110. Molecular interaction in mixtures containing *o*-chlorotoluene and cyclic ethers, V. K. Sharma, R. Dua, *J. Chem. Eng. Data* 59, 684-695, 2014. *Impact factor* 2.004

List of Papers Presented at Conferences/Symposia (Abstract Published)

- 1. "Thermodynamics of ternary mixtures: Molar excess volumes and molar excess enthalpies", IUPAC International conferences on Chemical and Biological Thermodynamics, p.41, G.N.D. University Amritsar, Jan 5- Jan 8, 1997.
- "Physico-chemical studies of some aqueous surfactants in alcohols", IUPAC International Conference on Chemical & Biological Thermodynamics, p. 140, G. N. D. University, Amritsar, Jan 5- Jan 8, 1997.
- 3. "Topological investigations of molecular interactions in water + 1 ,4-dioxane", Proceedings of the 85th session of the Indian Science Congress, Hyderabad, p.86, 1998.
- 4. "Thermodynamics of molecular interactions in binary mixtures containing nitromethane: Molar excess volumes & molar excess enthalpies", Proceedings of the 86th session of the Indian Science Congress, Chennai, p.70, 1999.
- 5. "Thermodynamics of molecular interactions in micellar solutions", Proceedings of the 88th session of the Indian Science Congress, New Delhi, p.110, 2001.
- 6. "Topological investigations in binary mixtures containing ether: Molar excess volumes and molar excess enthalpies", National conference on recent advances in thermodynamics of chemical and biological systems, OP- 3, G.N.D.University, Amritsar, May 7- May 9, 2001.
- "Thermodynamics of molecular interactions in mixtures containing cyclic ether", Indian Council of chemists, 20th conference, paper no. OP- 21, p. 181, University of Mysore, Mysore, Dec 22- Dec 24, 2001.
- 8. "Thermodynamical and topological investigations of ternary mixtures containing ethers", Indian Council of chemists, 20th conference, paper no. OP- 05, p. 186, University of Mysore, Mysore, Dec 22- Dec 24, 2001.
- 9. "Excess isentropic compressibilities of binary and ternary mixtures containing cyclic ether", 21st conference of Indian Council of Chemists, R. D. University, Jabalpur, paper no. OP- 1, p. 146, Oct 24- Oct 26, 2002.

- "Topological investigations of molecular interactions in mixtures containing cyclic ether and alkanols", 22nd Conference of Indian Council of Chemists, paper no. OP-39, p. 185, IIT, Roorke, Oct 17- Oct 19, 2003.
- "Thermodynamics of ternary mixtures: Molar excess volumes", Proceedings of 91st
 I.S.C., Section 4, p. 111-112, Punjab University, Chandigarh, Jan 3- Jan 7, 2004.
- 12. "Topological investigations of molecular interactions in mixtures containing alkanols: Molar excess volumes and molar excess enthalpies", Proceedings 92nd I.S.C., Section 4, p. 111, Punjab university, Chandigarh, Jan 3- Jan 7, 2004.
- 13. "Topological investigations of some ternary cyclic ether-water-alkanol mixtures: Excess isentropic compressibilities", 23rd conference of Indian Council of Chemists, paper no. PO- 02, p.172, Christ College, Bombay, Oct 29- Oct 31, 2004.
- "Topological studies of ternary mixtures of non-electrolytes: Molar excess volumes", 23rd conference of Indian Council of Chemists, paper no., OP- 04, p. 189, Christ College, Bombay, Oct 29- Oct 31, 2004.
- 15. "Topological investigations of excess isentropic compressibilities of ternary mixtures", 41st Annual convention of Chemists 2004, Dec 23- Dec 27, 2004.
- "Molecular interactions in binary mixtures containing water and glycols", National Conference on Thermodynamics of Chemical & Biological Systems, paper no. OP-28, G. N. D. University, Amritsar, Dec 28- Dec 30, 2005.
- 17. "Topological investigations of binary and ternary mixtures containing cyclic ether: speed of sound and excess isentropic compressibilities", 24th conference of Indian Council of Chemists, Birla Institute Mesra, Ranchi, Dec 16- Dec18, 2005.
- "Conductornetric Studies on the intermolecular interactions of some alkane-polyols in aqueous AOT and CTAB Solutions", 24th conference of Indian Council of Chemists, Birla Institute Mesra, Ranchi, Dec 16- Dec 18, 2005.
- 19. "Physico-Chemical studies of Non-Ionic Surfactant in mixed solvents" presented in International symposium on Recent trends on surface and colloidal sciences held at Indian Statistical Institute, Kolkata on 15th-16th Nov. 2007.
- 20. Paper entitled "Speeds of sound and excess isentropic compressibilities for ternary mixtures containing cyclic ether " presented in 95th Indian Science Congress Conference held at Vishakhapatnam from 3rd-7th January 2008.
- 21. Paper entitled "Speeds of sound and excess isentropic compressibilities for 1, 3dioxolane or 1,4-dioxane + toluene + formamide or N, N-dimethylformamide ternary mixtures at 308.15 K" presented in 95th Indian Science Congress Conference held at Vishakhapatnam from 3rd-7th January 2008.

- 22. Paper entitled "Topological and Thermodynamical studies of ternary mixtures: Molar excess volumes and Excess isentropic compressibilities" presented in 10th CRSI National Symposium in Chemistry held at Indian Institute of Science, Bangalore in 1st 3rd Feb, 2008.
- 23. Paper entitled "Topological investigations of the molecular species and molecular interactions that characterize 2-pyrrolidinone + lower alkanols mixtures: Molar excess volumes, Molar excess enthalpies and Excess isentropic compressibilities" accepted for Oral presentation in 27th Annual Conference of Indian Council of Chemists held at Gurukul Kangri Vishwavidyalaya, Haridwar from 26 th. 28 th. December, 2008.
- 24. Paper entitled "Topological investigations in ternary mixtures containing ether: Molar excess volumes and excess isentropic compressibilities" accepted for poster presentation in 27th Annual Conference of Indian Council of Chemists held at Gurukul Kangri Vishwavidyalaya, Haridwar from 26 th. 28 th. December, 2008.
- 25. Paper entitled "Topological investigations of binary mixtures containing cyclic ether: Molar excess volumes and molar excess enthalpies" accepted for oral presentation in 27th Annual Conference of Indian Council of Chemists held at Gurukul Kangri Vishwavidyalaya, Haridwar from 26 th. - 28 th. December, 2008.
- 26. "Molar excess volumes and excess isentropic compressibilities of ternary mixtures containing 2-pyrrolidinone" accepted in International Conference on Applied Chemistry (World Academy of Science, Engineering and Technology) at Oslo, Norway from 29th 31st July, 2009
- 27. "Topological investigations of molar excess volumes and Excess isentropic compressibilities of ternary mixtures containing 2-pyrrolidinone at 308.15 K" presented in 97th Indian Science congress held at Tiruvananthapuram, Kerla on 03-07 Jan, 2010.
- 28. "Thermodynamic properties of ternary liquid mixtures of 2-Pyrrolidinone with aromatic hydrocarbons" presented in 97th Indian Science congress held at Tiruvananthapuram, Kerla on 03-07 Jan, 2010
- 29. "Excess molar volumes, Excess molar enthalpies and isentropic compressibilities changes of mixing of tetrahydropyran with aromatic hydrocarbons" presented in 97th Indian Science congress held at Tiruvananthapuram, Kerla on 03-07 Jan, 2010.
- "Graph Theory" presented in H.E.C. & C.S.I.R. Sponsored National Conference on Environmental and Health Issues: In a Changing Climatic Scenario held at M.D. University, Rohtak on 14-15 Oct. 2010.
- 31. "Topological and Thermodynamic studies...... Anilines at 308.15 K" presented in 98th Indian Science congress held at SRM University, Chennai on 03-07 Jan, 2011.

- 32. "Topological investigations of molecular.....excess molar enthalpies" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 33. "Excess molar enthalpies......toulene at 308.15 K" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 34. "Excess molr volumes......xylenes at 308.15" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 35. "Excess molar volumes......mixtures at 298.15 K" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 36. "Topological investigations......with pyridine" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 37. "Excess molar enthalpies.....aromatic hydrocarbons" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- "Excess molar enthalpies of ternary ionic liquid mixture" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 39. "Physicochemical studies.....1,4-dioxane" presented in 6th National Conference of Thermodynamics of Chemical and Biological Systems (NCTCBS-2011) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 02-04 Nov, 2011.
- 40. "Thermodynamics of molecular interactions in ternary: Excess molar enthalpies" presented in 99th Indian Science congress held at KIIT, Bhubaneswar on 03-07 Jan, 2012.
- 41. "Excess molar volumes and excess isentropic compressibilities of ternary mixtures at 298.15 K" presented in 99th Indian Science congress held at KIIT, Bhubaneswar on 03-07 Jan, 2012.

- 42. "Thermodynamics of molecular interactions in ternary: Excess molar enthalpies" presented in 99th Indian Science congress held at KIIT, Bhubaneswar on 03-07 Jan, 2012.
- 43. "Topological Investigations of Ionic Liquid Mixtures" presented in International Conferences on "Molten Salts and Ionic Liquids" XXIV (EUCHEM 2012) held at New Port, South Wales, UK on 05-10 August.
- 44. "Thermodynamic properties of binary mixtures of the ionic liquid [emim][BF₄] with Acetone and Dimethylsulphoxide" presented in 100th Indian Science congress held at Calcutta University, Kolkata on 03-07 Jan, 2013.
- 45. "Thermodynamic and Topological Studies of 1-ethyl-3-methylimidazolium tetrafluoroborate + Pyrrolidin-2-one and 1-methyl pyrrolidin-2-one Mixtures" presented in 100th Indian Science congress held at Calcutta University, Kolkata on 03-07 Jan, 2013.
- 46. "Topological investigations of binary mixtures containing 1-ethyl-3-methyl imidazolium tetrafluoroborate and anilines" presented in 100th Indian Science congress held at Calcutta University, Kolkata on 03-07 Jan, 2013.
- 47. "Topological investigations of thermodynamic properties of ionic liquid mixtures: excess molar volumes and excess isentropic compressibilities" presented in National Conference on Advances in Chemical Sciences (ACS-2013) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 01-02 March, 2013.
- 48. "Thermodynamic properties of ternary mixtures containing ionic liquid and organic solvents" presented in National Conference on Advances in Chemical Sciences (ACS-2013) held at Department of Chemistry, M. D. University, Rohtak, Haryana on 01-02 March, 2013.

List of Conferences/Symposia/ Refresher Course Attended

Sr. No.	Conferences/Symposia Institution	Duration
1.	National Symposium on Radiochemistry	Sept 26- Oct 15
	(3 week CPDHE, Delhi University Refresher	1994
	course) Delhi.	
2.	U. G. C. Sponsored Refresher Course	Dec 9- Dec 29
	M. D. University, Rohtak	1995
3.	National workshop on Solid State Nuclear Track	Oct 8- Oct10
	Detectors(NTSI) Chem. Deptt. M. D. University, Rohtak	1996
4.	IUPAC International Conference on Chemical &	Jan 5- Jan 8

	Biological Thermodynamics G. N. D. University, Amritsar	1997
5.	86th Session of Indian Science Congress,	Jan 3- Jan 7
	Anna. University, Chennai	1999
6.	U. G. C. Sponsored Refresher Course,	Oct 14- Nov3
	G. N. D. University, Amritsar	1999
7.	U. G. C. Sponsored Refresher Course,	Aug7-Aug 31
	Allahabad University, Allahabad	2000
8.	88th Session of Indian Science Congress,	Jan 3- Jan 7
	IARI, New Delhi	2001
9.	National Conference on Recent Advances in	May 7- May 9
	Thermodynamics of Chemical & Biological,	2001
	G. N. D. University, Amritsar	
10.	20th Annual Conference of Indian Council of	Dec 22- Dec 24
	Chemists University, Mysore	2001
11.	21st Annual Conference of Indian Council of	Oct 24- Oct26
	Chemists, R. D. University, Jabalpur	2002
12.	Patent Awareness Workshop, M.D. University,	Dec 21
	Rohtak	2002
13.	22nd Annual Conference of Indian Council	Oct 17- Oct 19
	of Chemist, I.I.T., Roorkee	2003
14.	91st Session of Indian Science Congress, Punjab	Jan 3- Jan 7
	University, Chandigarh	2004
15.	21st Annual Conference of Indian Council of	Oct 28- Oct 31
	Chemists, K.C. College, Bombay	2004
16.	National Conference on Thermodynamics of Chemical	Dec 28- Dec 30
	And Biological Systems, G.N.D. University, Amritsar	2005
17.	National conference on Recent Advancement	Jan 7- Jan 8

	Development in Chemical Sciences, D.A.V. College,	2008
	Abhor, PUNJAB	
18.	International Conference on Applied Chemistry,	July29- July31,
	World Academy of Sciences, Engineering and	2009
	Technology Oslo Norway	
19.	The Indian Science Congress Association, University	Jan3- Jan7
	of Kerala, Thriuvananthapuram	2010
20.	National Symposia on Emerging Trends in Chemistry,	Feb15- Feb16
	Punjab University, Patiala	2010
21.	National Workshop on Environmental Problems &	March 26,
	its mitigation, M.D. University, Rohtak, Haryana	2010
22	98th Indian Science congress held at SRM University,	03-07 Jan
	Chennai	2011