

Dr. Jaibir S. Yadav
Mail id : jaichem01@gmail.com
Mobile No. +91 9034090960



A) Educational Qualifications

Degree	Year of Passing	University/Institute
Phd	2009	MDU Rohtak
Post Graduation	2005	MDU Rohtak
Graduation	2003	MDU Rohtak

B) Career Profile

Designation	Institution Served	Duration		Experience
Assistant Professor	A.I. Jat H.M. College	August 2009	Till date	10 years 1 months

C) Research Advisory

No. of Students supervised	Phd	M.Phil.
	-	

D) Projects Undertaken

Title of the Project	Duration	Funding Agency	Status
- DEVELOPMENT OF A NEW GENERATION OF CIGS-BASED SOLAR CELLS (Nano CIS)	-	FPT/IRSES Marie Curie International Research Staff Exchange Scheme	Completed

E) Publications

RESEARCH PAPERS :

- i) Published in Referred/Peer viewed Journals and edited books : 34

S. No.	Description of Manuscript
1	Excess heat capacities of mixtures containing 1-methylpyrrolidin-2-one, chlorotoluenes and benzene <i>J. Chem. Thermodyn.</i> 85(2015)1-12
2	Excess heat capacities of lactams + chlorotoluenes binary mixtures <i>J. Chem. Eng. Data</i> 58 (11), 2979–2990, 2013
3	Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities of 1-methyl pyrrolidin-2-one with water and propanols <i>J. Solution Chem.</i> 42, 372-389, 2013
4	Excess Molar Enthalpies for Binary and Ternary Mixtures containing Cyclic Ether, 2-methylaniline and Aromatic Hydrocarbons <i>Thermochim. Acta</i> 530, 25-31, 2012.
5	Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities of binary mixtures containing N-methyl-2-pyrrolidone and isomeric xylenes at 308.15 K <i>J. Solution Chem.</i> 41, 1696–1712, 2012
6	Topological and Thermodynamic studies for binary mixtures of 1,4-Dioxane with anilines at 308.15 K <i>J. Solution Chem.</i> 41 (2012) 1563-1581.
7	Thermodynamic study of molecular ternary mixtures containing 1-methyl pyrrolidin-2-one, propan-2-ol and benzene or methyl benzene or cyclohexane: <i>J. Solution Chem.</i> 41 (2012) 1769-1783.
8	Topological investigations of molecular interactions of binary and ternary mixtures containing tetrahydropyran, <i>o</i> -toluidine and N-methyl formamide <i>Thermochim. Acta</i> 524 (2011) 92-103.
9	Topological and thermodynamical investigations of ternary mixtures containing cyclic ether: Excess molar volumes <i>J. Solution Chem.</i> 40 (2011) 1055-1066
10	Thermodynamic investigations of ternary <i>o</i> -toluidine + tetrahydropyran + N,N-dimethyl formamide mixture and its binaries at 298.15, 303.15 and 308.15 K <i>J. Mol. Liquids</i> 163 (2011) 36-45
11	Thermodynamic properties of binary mixtures of tetrahydropyran with pyridine and isomeric picolines: Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities <i>Thermochim. Acta</i> 518 (2011) 13-26
12	Topological and thermodynamic investigations of ternary mixtures containing cyclic ether: Excess molar enthalpies <i>J. Mol. Liquids</i> 162 (2011) 122-128
13	Topological investigations of excess molar volumes and excess isentropic compressibilities of ternary mixtures containing 1-methyl pyrrolidin-2-one at 308.15 K <i>J. Mol. Liquids</i> 159 (2011) 230–235
14	Thermodynamic studies of molecular interactions in mixtures of <i>o</i> -toluidine with pyridine and picolines: Excess molar volumes, excess molar enthalpies and excess isentropic compressibilities <i>J. Chem. Thermodyn.</i> 43 (2011) 782-795
15	Excess molar volumes of ternary liquid mixtures composed of 1, 4-dioxane, <i>o</i> -toluidine, and aromatic hydrocarbon at temperature of 308.15 K <i>J. Mol. Liquids</i> 158 (2011) 192-196
16	Thermodynamic and topological investigations of molecular interactions in binary and ternary mixtures containing 1-methyl pyrrolidin-2-one at 308.15 K <i>J. Chem. Thermodyn.</i> 43 (2011) 737-749
17	Physicochemical Properties of Jatropha Curcas Biodiesel + Diesel Fuel No.2 Binary Mixture at $T=$ (288.15 to 308.15 K) and Atmospheric Pressure <i>J. Chem. Eng. Data</i> 56 (3) (2011) 497-501

18	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 <i>Thermochim. Acta</i> 511 (2010) 74-81.
19	Thermodynamic properties of binary mixtures of Tetrahydropyran with anilines at 308.15 K. <i>J. Chem. Eng. Data</i> 55 (2010) 4525-4531.
20	Thermodynamic and Acoustic Properties for Binary and Ternary mixtures of Cyclic Ethers with Industrially Important Solvents at 308.15K. <i>J. Mol. Liquids</i> 155 (2010) 8-15.
21	Topological investigations of molar excess volumes and excess isentropic compressibilities of ternary mixtures containing 2-pyrrolidinone at 308.15K <i>Int. J. Thermophys.</i> 31 (2010) 2201-2215
22	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 <i>J. Solution Chem.</i> 39 (2010) 680-691
23	Thermodynamic properties of ternary liquid mixtures of 2-pyrrolidinone with aromatic hydrocarbons <i>Int. J. Thermophys.</i> 31 (2010) 327-337
24	Topological investigations of thermodynamic properties of binary mixtures containing 2-pyrrolidinone <i>Thermochim. Acta</i> 489 (2009) 45-52
25	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. <i>J. Chem. Eng. Data</i> 54 (2009) 2109-12
26	Topological investigations of the molecular species and molecular interactions that characterize pyrrolidin-2-one + lower alkanol mixtures <i>Thermochim. Acta</i> 493 (2009) 19-24
27	Molar excess volumes and excess isentropic compressibilities of ternary mixtures containing 2-pyrrolidinone <i>WASET</i> 29 (2009) 29-35
28	Excess molar volumes and excess isentropic compressibilities of 2-pyrrolidinone at 308.15K <i>Thermochim. Acta</i> 496 (2009) 166-172
29	Molar excess volumes and excess isentropic compressibilities of ternary mixtures containing o-toluidine <i>J. Solution Chem.</i> 37 (2008) 1099-1112
30	Topological and Thermodynamic investigations of binary mixtures: Molar excess volumes, Molar excess enthalpies and Isentropic compressibility changes of mixing <i>Thermochim. Acta</i> 475(2008) 8-14
31	Molar excess volumes and excess isentropic compressibilities of ternary mixtures <i>J. Chem. Eng. Data</i> 53 (2008) 1935-1939
32	Topological and thermodynamical investigations of molecular interactions of aniline and o-toluidine with chloroform <i>Thermochim. Acta</i> 471(2008) 74-79
33	Molecular interactions in binary mixtures containing o-toluidine <i>Thermochim. Acta</i> 468 (1-2) (2008) 108-115
34	Enhanced orange-red emission from alkaline earth metal oxide doped with Sm ³⁺ and codoped with some alkali metal ions <i>INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN SCIENCE AND TECHNOLOGY</i> 6, 2017, 599-606

ii) Participation in Conferences/Seminars/Workshops : 17 + 10

INTERNATIONAL CONFERENCES

- Paper entitled “**Thermodynamic properties of ternary liquid mixtures of an amide with aromatic hydrocarbons**” accepted for poster presentation in *International Conference On Recent Advances In Chemical Sciences* held at Department of Chemistry, Arya P.G. College, Panipat, Haryana, INDIA from February 24-26, 2013.
- Paper entitled “**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
- Paper entitled “**Thermodynamic 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.

NATIONAL CONFERENCES

- Paper entitled “**Physico-Chemical Studies Of Non-Ionic Surfactant In Mixed Solvents**” presented at *National Seminar on Emerging Trends in Chemistry " (NSETC-2014)* held at Department of Chemistry, A.I. Jat H.M. College, Rohtak on 12th and 13th March, 2014.
- Paper entitled “**Topological investigations of molar excess volumes and Excess isentropic compressibilities of ternary mixtures containing an amide at 308.15 K**” presented at *National Conference on "Advances in Chemical Sciences" (ACS-2013)* held at Department of Chemistry, M.D. University, Rohtak on 1st and 2nd March, 2013.
- Paper entitled “**Topological studies and Thermodynamic properties of ternary liquid mixtures of an amide with aromatic hydrocarbons**” presented at *National Conference on Global Challenges: New Frontiers in Chemical Sciences (GC: NFCS-2012)* held at Kurukshetra University, Kurukshetra during September 22 & 23, 2012.
- Paper entitled “**Excess molar volumeshydrocarbon**” presented in 6th National conference on thermodynamics of chemical and biological systems (NCTCBS-2011) held at Department of Chemistry, M.D. University, Rohtak on 02-04 Nov., 2011.
- Paper entitled “**Topological investigations 2-pyrrolidinone**” presented in H.E.C. & C.S.I.R. sponsored National conference on Environmental and Health Issues: In a changing climate scenario) held at Department of Environment Sciences, M.D. University, Rohtak on 14-15 Oct., 2010.
- Paper entitled “**Thermodynamic properties of liquid Excess molar volumes**” presented National seminar on Environmental Challenges: Sustainable Development held at Department of Environment Sciences, M.D. University, Rohtak on 29-30 March, 2010.
- Paper entitled “**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.
- Paper entitled “**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.
- 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 26th- 28th Dec, 2008.
- 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 26th- 28th December, 2008.
- 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 26th- 28th December, 2008.
- Paper entitled “**Topological and Thermodynamical studies of ternary mixtures: Molar excess volumes and Excess isentropic compressibilities**” accepted in 10th CRSI National Symposium in Chemistry held at Indian Institute of Science, Bangalore from 1st -3rd Feb, 2008.

- 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.
- Paper entitled “*Speeds of sound and excess isentropic compressibilities for 1,3-dioxolane 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

Sr. No.	Title of the paper presented	Presented by	Title of the Conference/ Seminar etc& Organizer	Date (s) of the event	Whether International/ National/
1	<i>Thermophysical Properties of Biodiesel + Diesel Fuel No.2 Binary Mixture at T= (288.15 to 308.15K) and Atmospheric Pressure</i>	Jaibir S Yadav	2nd International Conference on Innovations in Chemical, Biological & environmental Sciences (ICICBES 2019)	27 th March 2019	International
2	<i>Physico-Chemical propertties of ternary mixtures containing 2- pyrrolidinone at 298.15 K</i>	Jaibir S Yadav	National seminar on Recent Trends in Science & Technology: A computational Approach (RTSTCA 2018) Faculty of Physical Sciences, Ch. Bansi Lal university, Bhiwani	27 th March 2018	National
3	<i>Molar excess volumes and Excess isentropic compressibilities of ternary mixtures containing an amide with alkanols at 308.15 K</i>	Jaibir S Yadav	National Conference on Recent Advances in Chemical Sciences" (NCRACS-2018) DEPARTMENT OF CHEMISTRY, M.D. UNIVERSITY, ROHTAK	07 th March 2018	National
4	<i>Thermodynamic studies of Lactum containing binary Mixtures used in Food industries</i>	Jaibir S Yadav	National conference on "food processing For value addition Trends and Innovations DEPTt. T OF FOOD TECHNOLOGY, MDU ROHTAK	27 th Nov 2017	National
5	<i>Physico-Chemical Studies Of Non-Ionic Surfactant In Mixed Solvents</i>	Jaibir S Yadav	National Seminar on Emerging Trends in Chemistry " (NSETC-2014) held at Department of Chemistry, A.I. Jat H.M. College, Rohtak	12 th and 13 th March, 2014	National
6	<i>Topological investigations in ternary mixtures containing ether: Molar excess volumes and excess isentropic compressibilities</i>	Jaibir S Yadav	Topological investigations in ternary mixtures containing ether: Molar excess volumes and excess isentropic compressibilities	16 th March, 2013	National
6	<i>Topological investigations of molar excess volumes and Excess isentropic compressibilities of ternary mixtures containing an amide at 308.15 K</i>	Jaibir S Yadav	National Conference on "Advances in Chemical Sciences" held at Department of Chemistry, M.D. University, Rohtak	1 st and 2 nd March, 2013	National
7	<i>Topological studies and Thermodynamic properties of ternary liquid mixtures of an amide with aromatic hydrocarbons</i>	Jaibir S Yadav	National Conference on Global Challenges: New Frontiers in Chemical Sciences (GC: held at Kurukshetra University, Kurukshetra	September 22 & 23, 2012	National
8	<i>Excess molar volumeshydrocarbon</i>	Jaibir S Yadav	6th National conference on thermodynamics of chemical and biological systems held at Department of Chemistry, M.D. University, Rohtak	02-04 Nov., 2011.	National
9	<i>Topological investigations of molar excess volumes and Excess isentropic compressibilities of ternary mixtures containing 2- pyrrolidinone at 308.15 K</i>	Jaibir S Yadav	H.E.C. & C.S.I.R. sponsored National conference on Environmental and Health Issues: In a changing climate scenario) held at Department of Environment Sciences, M.D. University, Rohtak	14-15 Oct., 2010.	National
10	<i>Thermodynamic properties of liquid mixtures containing 1,3-dioxalanes and anilines Excess molar volumes</i>	Jaibir S Yadav	National seminar on Environmental Challenges: Sustainable Development held at Department of Environment Sciences, M.D. University, Rohtak	29-30 March, 2010	National