

BIO-DATA



1. **Name and full correspondence address:** Dr. Poonam Patyar, Assistant Prof. (Stage II)

Department of Chemistry, Punjabi University Patiala, Patiala-147 002, Punjab

Research Interests:

Physical Chemistry, Ionic Liquids, Solution Thermodynamics of binary mixtures
Physicochemical Studies on Biopolymer model compounds and proteins, Thermodynamic
Investigations of Pure compounds and mixtures.

2. Email(s) and contact number(s): poonam_chem@yahoo.co.in,

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3. Institution: Punjabi University Patiala, Patiala-147 002

4. <https://orcid.org/0000-0002-5911-7591>; h-index= 10, Citation= 269

5. Gender :F

6. Academic Qualification (Undergraduate Onwards)

S. No.	Degree	Year	Subject	University/Institution	% of marks
1.	B.Sc.	1997	Physics, Chemistry, Biology	Punjab University Chandigarh	60.90%

2.	M.Sc.	2000	Chemistry	Punjab Agricultural University, Ludhiana	71.8%
3.	Ph.D.	2007	Chemistry	Guru Nanak Dev University, Amritsar	Degree was Awarded

7. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Ph.D thesis title: Study on Interactions of Some Protein Model Compounds and Lysozyme with Metal Ions in Aqueous Solutions.

Guides' Name: Prof. Bhajan Singh Lark (Retired)

Institute Name: Guru Nanak Dev University, Amritsar 143 005

Year of Award: 2007

8. Work experience (in chronological order).

S.No.	Positions held	Name of the Institute	From	To	Pay Scale
1.	Lecturer	Dept. of Chemistry, NIT Jalandhar	31.07.2007	24.12.2007	12000 (Consolidated)
2.	Lecturer	Dept. of Chemistry, LPU Jalandhar	28.01.2008	31.07.2008	22000 (Consolidated)
3.	Sr. Lecturer	Dept. of Chemistry, LPU Jalandhar	01.08.2008	31.01.2011	10,000-325-15200
4	Sr. Lecturer	Dept. of Chemistry, LPU Jalandhar	01.02.2011	03.08.2011	38000 (Consolidated)
5.	Assistant Prof.	Dept. of Chemistry, Punjabi University Patiala	4 th Aug. 2011	till date	21990-7000

9. Professional Recognition/Award/Prize/Certificate, Fellowship received by the applicant.

S.No.	Name of Award	Awarding Agency	Year
1.	State Merit Scholarship holder	B.Sc.	1997
2.	Winner of William F. GIAUQUE Travel Award	60 th Calorimetry Conference being hosted by National Institute of Standards and Technology, U.S. Department of Commerce Gaithersburg, MD, USA, June 26- July 1, 2005.	2005

3.	Best Poster Presentation Award	National Symposium on New Challenges in Chemistry being sponsored by CSIR, UGC and DST in the Department of Chemistry, Guru Nanak Dev University Amritsar held from March 20-21, 2006.	2006
4.	Research Fellow in the Department of Chemistry, Guru Nanak Dev University, Amritsar, Punjab, India 143 005.	Guru Nanak Dev University, Amritsar, Punjab, India 143 005.	July 2000 to July 2004
5.	Senior Research Fellow Department Chemistry, Guru Nanak Dev University, Amritsar, Punjab, India 143 005.	Council of Scientific and Industrial Research, New Delhi/ India	July 2004 to June 2007

10. Journal Publications (*List of papers published in SCI Journals, in year wise descending order*).

S.No	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	Tarnveer Kaur and Poonam Patyar	Transport behaviour and FT-IR study of some protein model compounds + 1-butyl-3-methylimidazolium bromide mixtures at different temperatures.	Journal of Molecular Liquids Impact Factor: 6.633	365	120113	2022
2.	Poonam Patyar, Gurpreet	Volumetric, viscometric and spectroscopic properties of glycylglycine	Journal of Solution Chemistry	51(1)	58-83	2022

	Kaur	in citrate and acetate buffer solutions at different temperatures	(Impact Factor: 1.677)			
3.	Poonam Patyar, Gurpreet Kaur	Thermophysical studies of protonated and deprotonated glycine in aqueous sodium acetate buffer solutions at different temperatures	Indian Journal of Chemistry Section A (Impact factor: 0491)	60A	1317-1328	2021
4.	Poonam Patyar, Akhtar Ali, Naved I. Malek	Experimental and theoretical excess molar properties of aqueous choline chloride based deep eutectic solvents.	Journal of Molecular Liquids (Impact Factor: 6.165).	324	114340-114350	2020
5.	Poonam Patyar, Kuldeep Kaur, Gagandeep Singh	Viscometric and spectroscopic studies on interactions of glycine with aqueous buffer solutions.	Journal of Molecular Liquids (Impact Factor: 6.165).	307	112921-112933	2020
6.	Poonam Patyar, Gurpreet Kaur, Tarnveer Kaur	Volumetric investigations on molecular interactions of glycine/ <u>L</u> -alanine in aqueous citric acid solutions at different temperatures.	Journal of Solution Chemistry (Impact Factor: 1.677)	47	2039-2067	2018
7.	Poonam Patyar, Tarnveer Kaur and	Molecular interactions of some amino acids in aqueous 1butyl-3methylimidazolium	J. of Chemical Thermodynamics (Impact factor:	125	278-295	2018

	Omish Sethi	bromide solutions at different temperatures: A volumetric approach	3.03)			
8.	Poonam Patyar, Gagandeep Singh and Kuldeep Kaur	Interactions of glycine with aqueous solutions of sodium phosphate buffer at T= (288.15, 293.15,298.15 ,303.15, 310.15,313.15 ,318.15,323.1 5 and 328.15)K: Volumetric and UV absorption studies.	J. Molecular Liquids (Impact Factor: 6.165).	251	70-76	2018
9.	Gagandeep Singh, Poonam Patyar, Tarnveer Kaur, Gurpreet Kaur	Volumetric behavior of glycine in aqueous succinic acid and sodium succinate buffer at different temperatures	J. Molecular Liquids (Impact Factor: 6.165).	222	804-817	2016
10.	Poonam Patyar, Gagandeep Singh and Kuldeep Kaur	Effect of potassium phosphate buffer on volumetric behavior of glycine in aqueous solutions at different temperatures	J. Molecular Liquids (Impact Factor: 6.165).	213	191-200	2016

11.	T.S. Banipal, K. Singh, P.K. Banipal, A.K. Sood, P. Singh, G. Singh and Poonam Patyar	Volumetric and Viscometric Studies of Some Metal Acetates in Aqueous Solutions at T = (288.15 to 318.15) K	J. Chem. Eng. Data	53(12)	2758-2765	2008
12.	Bhajan S. Lark, Poonam Patyar, and Tarlok S. Banipal	Temperature Effect on the Viscosity Behaviour of Some Amino Acids in Water and Aqueous Magnesium Chloride Solutions	J. Chemical Thermodynamics (Impact factor: 3.03)	39	344-360	2007

12	Bhajan S. Lark, Poonam Patyar, and Tarlok S. Banipal	Thermodyna mic Studies on the Interactions of Diglycine with Magnesium Chloride in Aqueous Medium at Different Temperatures	J. Chemical Thermodynamics	38	1592-1605	2006
14.	P. Patyar, H.S. Randhawa and B.S. Sekhon	Molecular Interactions of Picric Acid with L-Amino Acids	J. Indian Council of Chemists	21 (2)	86-91	2004
15.	Bhajan S. Lark, Poonam Patyar, T.S. Banipal, and Nand Kishore,	Densities, Partial Volumes, and Heat Capacities of Glycine, LAlanine, and L-Leucine in Aqueous Magnesium Chloride	J. Chem. Eng. Data	49	553	2004

		Solutions at Different Temperatures				
16.	H.S.Randhawa ,Poonam Patyar and B.S. Sekhon	Charge Transfer Interactions of L-Amino Acids With Chloranil: Conductometric Studies	Proc. Natl. Acad. Sci. India	74 A, (III)	253-259	2004
17.	H.S. Randhawa, Poonam Patyar and B.S. Sekhon	On The Molecular Interactions of L-Amino Acids And Iodine in 50% Aqueous Ethanol Solvent: Conductometric and Electronic Absorption Spectroscopic Studies	Proc. Natl. Acad. Sci. India	74 A, (II)	99-105	2004

Membership of the Academic bodies: Life member of 1. The Indian Thermodynamic Society, Amritsar.

2. The Indian Council of Chemists.

3. Punjab Academy of Sciences, Patiala

Invitations:

Resource Person for Poster, Quiz and Project Competition during INSPIRE internship camp organized by DST-New Delhi from 20th - 24 March 2012 at ACPTE Mastuana Sahib.

Ph.D. Supervised/Ongoing:

S. No.	Name of the Student	Date of Registration/Status:		Title of Thesis
1.	Dr. Kuldeep Kaur	23-01-2014 (completed)	UGC-BSR Fellow	Hydration and Protonation behaviour of amino acids in mixed aqueous solutions.
2.	Dr. Gurpreet Kaur	17-04-2015 (completed)	UGC-BSR Fellow	Effect of pH and Temperature on amino acids and peptides in different Buffer solutions
3.	Dr. Tarnveer Kaur	16-12-2016 (completed)	NILL	Thermodynamic investigations of some Protein Model Compounds in aqueous ionic liquid solutions
4.	Mr. Akhtar Ali	October 2020 (Ongoing)	UGC-SRF	Water-and Alcohol-mediated Tailoring of physicochemical properties of the natural deep Eutectic solvents
5.	Ms. Urvashi	2023 (Ongoing)		

M.Sc(Hons.)/M.Phil Dissertation Guided:

S. No.	Name of the Student	Status	Year
1.	Ms. Monika Arora	Completed	2011
2.	Ms. Jasmeet Kaur	Completed	2013
3.	Ms. Gurpreet Kaur	Completed	2013
4.	Mr. Parmijit Singh	Completed	2014
5.	Ms. Tarnveer Kaur	Completed	2015

6.	Mr. Omish Sethi	Completed	2016
7.	Ms. Harpreet Kaur	Completed	2017

- Peer Reviewed:**
1. Journal of the Brazilian Society of Mechanical Sciences and Engineering.
 2. Journal of Chemical Thermodynamics
 4. Journal of Molecular Liquids
 5. Indian Journal of Chemistry Section A
 6. Food Chemistry