

BIO-DATA



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A. Academic Qualifications

Exam Passed	Board/University	Subjects	Year	Percentage	Division/Position
Ph.D.	Himachal Pradesh University	Chemistry	2021		
M.Phil	Himachal Pradesh University	Chemistry	2014	75.67	I (Gold medal)
Master's Degree	Himachal Pradesh University	Chemistry	2013	74.4	I
Bachelor's Degree	Himachal Pradesh University	Mathematics, Physics, Chemistry	2011	73.8	I
12 th	Central Board of Secondary Education	Mathematics, Physics, Chemistry, English, Hindi	2008	82.4	I
Matric	Central Board of Secondary Education	Hindi, English, Mathematics, Science, Social Science	2006	79.6	I
Other diploma/certificates					
JRF(NET)	Chemistry		2015		61/631
SET	Chemistry		2015		
DOEACC "O" level			2014		II

B. Achievements: (Awards/ Prize)

Scholarship/Fellowship	Time Period	Awarding Institution / Agency
Junior Research Fellowship	28/07/2015-30/06/2016	Himachal Pradesh University, Shimla
Junior Research Fellowship	1/7/2016 - 30/6/2018	U.G.C. New Delhi
Senior Research Fellowship	1/7/2018 - 23/4/2021	U.G.C. New Delhi

Award: Gold Medal in Master of Philosophy in chemistry 2014 (Himachal Pradesh University)

C. Research Experience & Training

Research Stage	Title of work	University
M. Phil	Physico-Chemical Studies of Glycine and Alanine in Aqueous Solutions of Furosemide (A Cardiovascular Drug) at Different	H. P. University, Shimla

	Temperature	
Ph.D.	A Physicochemical Approach To Study Micellar And Intermolecular Interactions of Cationic Surfactants In Aqueous Solutions of Antibiotic Drugs: Cefepime And Levofloxacin At Different Temperatures	H. P. University, Shimla

D. Teaching Experience

Courses Taught	Name of the University/ College / Institution	Duration
M.Sc. Chemistry	Himachal Pradesh University, Shimla-05	2017-2019

E. Membership of Professional Bodies, Societies, etc.

- Life membership of "Indian Science congress association (ISCA)"

F. List of Publications

- "Volumetric, acoustical and viscometric behavior of glycine and DL-alanine in aqueous furosemide solutions at different temperatures" Suvarcha Chauhan, **Lalita Pathania**, Kundan Sharma, G. Kumar *Journal of Molecular Liquids* 212 (2015) 656–664. (Impact Factor-6.165)
- "Carbohydrate-surfactant interactions in aqueous and mixed organic solvents at various temperatures: Volumetric, compressibility and acoustical studies" S. Chauhan, J. Jyoti, **Lalita Pathania**, Ahmad Umar, M.S. Chauhan *Journal of Molecular Liquids* 218 (2016) 637–648. (Impact Factor-6.165)
- "Thermo-acoustical and optical studies of glycine and DL-alanine in aqueous furosemide solutions at different temperatures" Suvarcha Chauhan, **Lalita Pathania**, M.S. Chauhan *Journal of Molecular Liquids* 221 (2016) 755–762. (Impact Factor-6.165)
- "Probing effect of maltodextrin on micellar properties of bile salts at varying temperatures: A physico-chemical approach" Suvarcha Chauhan, Vivek Sharma, **Lalita Pathania** *Journal of Molecular Liquids* 269 (2018) 304–314. (Impact Factor-6.165)
- "Impact of cationic surfactants on cefepime properties in aqueous medium: Micellization and characterization of microenvironment" S. Chauhan, **Lalita Pathania** *Journal of Molecular Liquids* 272 (2018) 953–962. (Impact Factor-6.165)
- Effect of Levofloxacin on the Colloidal Behavior of Dodecyltrimethylammonium Bromide: A Physicochemical Approach **Lalita Pathania**, Mohinder Singh Chauhan and Suvarcha Chauhan *Journal of Chemical & Engineering Data* 64, 10 (2019) 4337-4348. (Impact Factor-2.694)
- Aggregation and interactional behavior of cationic surfactants in the presence of cephalosporin drug: A thermo-acoustic and spectroscopic approach **Lalita Pathania**, S. Chauhan *Journal of Molecular Liquids* 99 (2020) 112210. (Impact Factor-6.165)
- Modulation in Aggregation Behavior of Cationic Surfactant in Presence of Fluoroquinolone Drug: A Physicochemical Approach **Lalita Pathania**, Suvarcha Chauhan *Journal of Surfactants and Detergents* 23 (3) (2020) 661-673. (Impact Factor-1.9)

9. Insight into intermolecular interactions and hydration properties of biologically active amino acids in aqueous solutions of cefepime: volumetric, compressibility and viscometric studies. Suvarcha Chauhan, Neetika Kumari and **Lalita Pathania** *Journal of Dispersion Science and Technology* 42(12) (2021) 1853-1866. (Impact Factor-2.262)

G. Conferences/Seminars attended

1. International Conference on Emerging Trends in Basic and Applied Sciences, held at Agarsen University, Baddi (Himachal Pradesh) on May 1-2, 2015. "Investigation on interactions of Amino acids in Furosemide (A Cardiovascular drug) aqueous solutions at different Temperatures: Volumetric and Compressibility studies" Suvarcha Chauhan* and **Lalita Pathania**
2. National Conference on Recent Innovations in Science & Engineering, held at Career Point University, Hamirpur (Himachal Pradesh) on March 4-5, 2016. "Thermo-Acoustical analysis of Glycine and DL-Alanine in Furosemide solutions" Suvarcha Chauhan* and **Lalita Pathania**.
3. International Conference on Recent Trends in Basic and Applied Sciences, held at Agarsen University, Baddi (Himachal Pradesh) on May 12, 2016. "Intermolecular Interactions of Biologically active compounds in aqueous solutions of Cardiovascular drug Furosemide at different temperatures : Viscometric studies" **Lalita Pathania** and S. Chauhan.
4. National Conference on innovation & challenges in basic and Applied Sciences, held at Agarsen University, Baddi (Himachal Pradesh) on March 4, 2017. "Intermolecular Interactions of Cardiovascular drug Furosemide with Glycine and DL-Alanine analyzed by Viscometric and Optical method" **Lalita Pathania** and S. Chauhan.
5. National Conference on Advances in science and technology: A step towards 'make in india' in defence sector, held at Indian military academy, Dehradun on 24-25 march 2017 "Conductometric Approach to Analyse the Micellar Behaviour of Cationic Surfactant in hydro-ethanolic Solutions of Terbinafine hydrochloride", **Lalita Pathania** and S. Chauhan.
6. National Conference on advances in Basic and applied Sciences, held at Career Point University, Hamirpur (Himachal Pradesh) on april 7-8, 2017. "Intermolecular interactions of Antimicrobial drug (Terbinafine hydrochloride) and CTAB in Hydro-ethanolic Solutions: Transport properties examination " Suvarcha Chauhan and **Lalita Pathania**.
7. National Conference on Reaching the Unreached through Science and Technology, Himachal Pradesh University, shimla on 30th and 31st march, 2018, "Probing effect of Cefepime on Micellar Property of DTAB at Varying Temperatures: A Physico-Chemical Approach", **Lalita Pathania** and S. Chauhan*.
8. TEQIP-III Sponsored 2nd National Conference on Advances in Chemical And Environmental Engineering (ACEE-2019) March 23-24, 2019 "Aggregation Behavior Modulation of Cationic Surfactants by Fluoroquinolone Drug at Varying Temperatures: A Physicochemical Approach" **Lalita Pathania** and S. Chauhan*



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