Curiculum Vitae

Title	**Dr.**	First Name	**Lata**	Last Name	**Vodwal**	Photograph
Designation		Assistant Professor				
Address		Department of Chemistry, Maitreyi College, University of Delhi, Chanakyapuri New Delhi. Residence: H-33/48, Sector-3, Rohini, New Delhi-110085				
Email		latavodwal@gmail.com				
		lvodwal@maitreyi.du.ac.in				

Educational Qualifications		
Degree	Institution	Year
PhD	University of Delhi	2011
MSc	University of Delhi	2006
BSc	University of Delhi	2004

Additional Qualification		
MBA (HR)	Sikkim Manipal University	2012

Areas of Interest / Specialization

- Synthetic Organic Chemistry, Green Chemistry and Phytochemical Investigation of Medicinal Important Plants. Efficient problem solving capabilities in synthetic process and ability to handle milligram to multi-gram scale reactions. Isolation and purification of new natural products from different medicinal plants in small amounts. Familiar with all chromatographic and crystallization techniques. Total synthesis of natural products. Knowledge of spectral data interpretation.

Publications Profile

1. A Green Approach for the Synthesis of Thiazolyl Hydrazones**, Lata Vodwal**, Pinkey Bajaj Gandhi and Archana Gupta. Accepted. Issue no.2 of vol.13, 2023.
2. *"Zn-Cr-LDH"-based Nano-Hybrids assembling at the presence of anions to Sense gas,* Anil Kumar, Amit Kumar Rawat, **Lata Vodwal**, Kamal Kant Tiwari, Chandra Mohan. Eur. Chem. Bull. 2023, 12(Special Issue 4), 233-243.
3. *In Silico Identifcation of Potential Inhibitors of the SARS-CoV-2 Nucleocapsid Through Molecular Docking-Based Drug Repurposing*, Rukhsar Afreen, Saleem Iqbal, Ab Rauf Shah, Heena Afreen, **Lata Vodwal**, Mohd. Shkir. Dr. Sulaiman Al Habib Medical Journal (2022) 4:64–76.
4. *A Review Targeting the Infection By CHIKV Using Computational and Experimental Approaches,* Durgesh Kumar, Kamlesh Kumari, Ramesh Chandra, Pallavi Jain, **Lata Vodwal**, Geetu Gambhir & Prashant Singh. Journal of Biomolecular Structure and Dynamics, Volume 40, 2022 - Issue 17, 8127-814.
5. *Promising inhibitors of nsp2 of CHIKV using molecular docking and temperature-dependent molecular dynamics simulations.* Mahendera Kumar Meena, Durgesh Kumar, Kamlesh Kumari, Nagendra Kumar Kaushik, Rammapa Venkatesh Kumar, Indra Bahadur, **Lata Vodwal** & Prashant Singh. Journal of Biomolecular Structure and Dynamics, Volume 30, 2022 - Issue 13, Pages 5827-5835.
6. One Pot Synthesis of Green Detergents from Biowastes, Khetrapal, Mudgal P, **Lata**, Sagarika, Ayushi, Vishu , Vaishali , Ushma , Deepika and Charu. Volume 2, Issue 1 pp 92-98, 2016.
7. *Botanical Pesticides: An Upcoming Tool for Plant Protection*. Meena Khetrapal and **Lata Vodwal.** Int. J. Adv. Res. 4(10), 1778-1784.
8. *Biological Activities of Imidazo[2,1-b][1,3,4]thiadiazole Derivatives: A Review,* **Lata**, Khushbu Kushwaha, Archana Gupta, Dhanraj Meena and Anjali Verma. Heteroletters, issue no.3 of vol.5, 489-509, 2015. ISSN: 2231 – 3087(print) / 2230 -9632. (Impact factor: 3.833)
9. *Synthesis, characterization and pharmacological evaluation of 2-acetamido-4-(5- substituted-phenyl-4H-[1,2,4]triazol-3-yl)methylthiazoles*, **Lata**, Bharti Bhardwaj, Khushbu Kushwaha and Subhash C. Jain. Accepted in Heteroletters, Vol. 5: (2), 2015, 195-203. ISSN: 2231 – 3087(print) / 2230 -9632. (Impact factor: 3.833)
10. *Comparative study of detergents in India- A step towards more sustainable laundry*, Meena Khetrapal, Padmshree Mudgal, **Lata**, Sagarika, Ayushi, Vishu, Vaishali, Ushma, Deepika & Charu. Journal of Undergraduate Research and Innovation, volume 1, Feb 2015, 1-10. (Not Available)
11. *Synthesis of detergent from rice bran oil and study of its quality parameters including cytotoxic activity*, Meena Khetrapal, Padmshree Mudgal, **Lata**, Ayushi, Deepika & Charu. International Journal of General Engineering and Technology, Vol. 3: Issue 6, Nov 2014, 1-6. ISSN(P): 2278-9928; ISSN(E): 2278-9936. (Impact factor: 2. 4579)

12. *Aqua mediated novel, one-pot, catalyst-free and economically efficient synthesis of functionalized 2-aminothiazoles*, **Lata**, Khushbu Kushwaha, Bharti Bhardwaj, Nusrat Jehan and Subhash C Jain. International Journal of Applied and Natural Sciences, Vol. 3, Issue 3, May 2014, 87-94. ISSN: 2319-4014; ISSN: 2319-4022. (Impact factor: 2.9459)
13. *An efficient synthesis and antimicrobial evaluation of N-methyl-5-substituted-1H-indole-2-oxo-3-(2'-acetamidothiazol-4'-yl)-carbonylmethyl hydrazones*, **Lata**, Khushbu Kushwaha and Subhash. C. Jain. Der Pharma Chemica, 2014, 6(2):149-15. ISSN: ISSN 0975-413X, CODEN (USA): PCHHAX. (Impact factor: 0.73)
14. *Design and synthesis of novel 2H-chromen-2-one derivatives bearing 1,2,3-triazole moiety as lead antimicrobials*, Khushbu Kushwaha, Nagendra Kaushik, **Lata**, Subhash. C. Jain. Bioorganic & Medicinal Chemistry Letters 24 (2014) 1795–1801, ISSN: 0960-894X. (Impact factor: 2.447)
15. *Benzotriazole: A medicinally important heterocyclic moiety*, Bharti Bhardwaj, **Lata** and Khushbu Kushwaha, Asian Journal of Biochemical and Pharmaceutical Research, Issue 1 (Vol. 4) 2013: 164-174. ISSN: 2231-2560. (Impact factor: 3.833)
16. *An economical and ecofriendly regioselective bromination of acetanilides using potassium bromide and ceric ammonium nitrate in polyethylene glycol*, Ritu Gupta and **Lata**. Heteroletters, Vol. 2: (3), 2012, 297-300. ISSN: 2231 – 3087(print) / 2230 -9632.
(Impact factor: 3.833)

BOOK PUBLISHED

- *Experiments in Organic Chemistry for Undergraduates* (First edition in year 2012; Publisher: Ane Books Pvt. Ltd.) ISBN: 978-93-8212-723-9.

BOOK CHAPTERS

- *Introduction of botanical pesticides in integrated pest management Environment and Chemistry*, **Lata** and Anjali Verma. Chapter 9, pp.95-100. Campus Books International, 2015.

PATENT GRANTED

- German Patent Grant: 'Implementing a modified CFD Model for Micro-Scale Air Pollutant Spreading in a Coastal Urban Environment' (G. No. 202022105965; 15.11.2022)
- Indian Patent Grant: 'A Process for Selective C-3 Thiazolylation of Indoles' (Application No. 202311003523; 17.01.2023 (G. No. 516103)

Research Guidance

- Supervising 10 students of Maitreyi College under Innovation Project 2015-2016 Granted by University of Delhi.
- Supervised 10 students of Daulat Ram College under Innovation Project 2013-2014 Granted by University of Delhi.
- Supervised 3 students of M.Sc. (Applied Science), Amity University, Sector-12, Noida, UP under Internship Project from 26.05.2016 to 08.07.2016.

Research Projects (Major Grants/Research Collaboration)

- NNOVATION PROJECT, "*How Safe are Our Detergents: A Comparative Study and Development of Bio-detergents*", DR-204, 2013-2014, Daulat Ram College, University of Delhi, Delhi.
- INNOVATION PROJECT, "*Development of Slow Releasing Fertilizers from Bio-waste using the Techniques of Nanotechnology*", MTC-301, 2015-2016, Maitreyi College, University of Delhi, Delhi.
- STAR COLLEGE PROJECT, "*A Comprehensive Study of Chemical Reactions and Bio-molecules using the Techniques of Chromatography*" Granted by Department of Biotechnology, Working place: Maitreyi College.
- UGC START UP PROJECT, "*Design and Synthesis of potential imidazo[2,1-b][1,3,4]- thiadiazole derivatives as anticancer agent*" (Project Recommended by University Grant Commission,2017).

Awards and Distinctions

- Lectureship certificate (NET) in Chemical Science, Dec 2007 from CSIR.
- Merit certificates in each year of B.Sc.
- Merit certificates in M.Sc.
- Certificate of merit as organizer in Annual talent promotion contest.
- Certificate of oral presentation in work on environment and sustainable development.
- Certificate in "*Intellectual Property Right and Information Technology in the Internet Age*", conducted by the Indian Law Institute, Deemed University.
- Awarded first prize with Best Innovative Idea under Industry University Interface, Innovation Project 2013-2014, University of Delhi, Delhi.
- Awarded Teaching Excellence Award (for developing of green detergents from biowastes) by the Vice Chancellor, Delhi University in the year 2015.