

CURRICULUM VITAE

Dr. Trupti Tawde

Designation: Assistant Professor

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I am Dr. Trupti Tawde, Assistant Professor, Department of Chemistry, K. J. Somaiya College of Science and Commerce. I, have completed my Doctoral degree [Ph.D.] in Chemistry with specialization in "Application of azole in stereodiscrimination Processes" at Department of Chemistry, University of Mumbai, Mumbai, India.

Teaching is my passion and student centric education is my preference. I have been teaching B.Sc./M.Sc. students since the academic year 2015 in my special interest topics like stereochemistry. I believe in continuous improvement; one must not stop learning after achieving the academic goals and credentials. This attitude always inspires me to learn something new and get acquainted with latest techniques such as RBPT, Flipclass learning which are being introduced in the field of education.

Faculty Profile:

- M.Sc. Organic Chemistry [2007] from Institute of Science, Mumbai. 1st rank holder from Institute of Science, Fort.
- Ph.D. in Chemistry [2015], from Department of Chemistry, University of Mumbai.
- Seven years of teaching experience in Organic and Inorganic chemistry for M.Sc. and B.Sc. classes at various institutes.
- About 5 years of research experience with Synthesis of heterocyclic compounds and their applications in stereodiscrimination processes.
- Four published papers in reputed journals
- Three years administrative experience as IQAC member of K J Somaiya College of Science and Commerce.

Academic Qualifications (Metric till Post Graduation):

Examinations	Name of the Board/University	Year of Passing	Percentage of marks obtained	Division/ Class/ Grade	Subject
High School/Metric/ S.S.C.	Maharashtra state board	2000	84.80%	1 st class with distinction	Marathi, Hindi, English, Maths, Science, Soc sci.

Intermediate / (10+2)	Maharashtra state board	2002	81.50%	1 st class with distinction	Physics, chemistry, Maths, Biology, English, Marathi
B.A./B.Sc./ B.Com/B.Music	Mumbai university	2005	68.44%	1 st class	Chemistry, Industrial chemistry
M.A./M.Sc./ M.Com/M.Music	Mumbai university	2007	71.30%	1 st class with distinction	Organic Chemistry

Research Degree(s):

Degrees	Title	Date of award	University
Ph.D.	APPLICATION OF CHIRAL AZOLES IN STEREODISCRIMINATION PROCESS	30 TH JUNE 2015	MUMBAI UNIVERSITY

Synthetic and Chiral chemistry experience in Ph.D.

- Successfully synthesized Heterocycle based chiral tweezers and explored them as organocatalyst for asymmetric Diels-Alder reaction of Anthrone and N-substituted Maleimides.
- Successfully developed chiral heterocycle based azolide as enantioselective acylating agent for kinetic resolution of racemic amines and amino esters.
- Developed chiral heterocycle based Phosphoric acid for asymmetric synthesis.
- Used UV-vis, Fluorescence, Circular Dichroism (CD) and NMR spectroscopy for chiral recognition studies.
- Used chiral HPLC for analysis of the chiral and racemic compounds.
- Handled polarimeter to measure optical rotation of the enantiopure compounds.
- Well versed with advance NMR technique for complete characterization on compounds. ¹H, ¹³C, DEPT, HETCOR, COSY, HETCOR, NOESY, ³¹P NMR.

Instruments Handled

- UV-visible spectrophotometer, Fluorescence Spectrometer, Circular Dichroism Spectrometer, Polarimeter, HPLC

Conference Presented

- Presented on entitled “Enantioselective Diels-Alder reactions using chiral heterocycle based chiral tweezers” at National Conference on chirality (NCC2013) at M.S. University, Baroda, Gujarat from 7-8 December 2013.
- Presented on entitled “Development of New Bis-benzimidazole derived chiral phosphoric acid application in enantioselective synthesis of Dihydroquinazolinones” at National Conference on New horizon in synthetic and material chemistry at Department of Chemistry, University of Mumbai from 26th to 28th November 2015.

Research Publications:

- “Chiral Base-catalyzed Asymmetric Diels-Alder Reaction: Achiral Flexible Heterocyclic Arm Induced Unusual Reversal of Enantioselectivity”. Trupti S. Tawde, Swapnil J. Wagh, Jai V. Sapre, Vaibhav N. Khose and Anil V. Karnik* Tetrahedron Asymmetry, Vol.27, Issue 2-3, 2016, 130-135.
- “A Convenient route to Benzimidazole Fused Chiral Heterocyclic Bases”. Swapnil J. Wagh, Trupti S. Tawde, Jai V. Sapre, Vaibhav N. Khose, Anil V. Karnik*, Indian Journal of Chemistry Vol. 55B, June 2016, pp. 707-712.
- “Synthesis of enantiomerically enriched benzimidazole-triazole: Application as organocatalyst for asymmetric Diels-Alder reaction” Jai V Sapre, Vaibhav N Khose, Trupti S Tawde, Swapnil J Wagh & Anil V Karnik* Indian Journal of Chemistry, 59B, January 2020, pp 93-101.
- “Synthesis of Palladium complexes derived from Amido linked N-Heterocyclic Carbenes and their use in Suzuki cross coupling reactions” Rohit Singh Chauhan, * Suryakant Nagar, Sucheta Chatterjee, Dibakar Goswami, * David B. Cordes, Alexandra M. Z. Slawin, and Trupti Tawde, Journal of Inorganic and general chemistry (ZAAC), Volume 647, Issue13, July 2021, Pages 1334-1341

Faculty Development program completed:

Name of the Course/ Summer Course	Place	Duration	Sponsoring Agency
Orientation course	Kumaun university, Nainital	18 th June 2018-14 th July 2018	UGC-HRDC
FDP on Pharmaceutical marketing	Institute of chemical technology	6 th January to 15 th January 2019	MHRD under PMMMNMNTT
Refresher course in chemical, Physical, and material sciences	Pondicherry University, Pondicherry	14 th June 2019 to 27 th june 2019	UGC-HRDC
FDP on Managing online Classes and Co- creating MOOCs	TLC-Ramanujan College, University of Delhi	20 th April to 6 th May 2020	MHRD under PMMMNMNTT
FDP on Advanced concepts for Developing MOOCs	TLC-Ramanujan College, University of Delhi	2 nd July to 17 th July 2020	MHRD under PMMMNMNTT
Refresher course on “Chemistry-The catalyst for Change”	TLC-Ramanujan College, University of Delhi	14 th July to 28 th July 2021	MHRD under PMMMNMNTT