Name of the faculty: Dr. Vishnu A. Adole

Designation	Assistant Professor
Name of the department	Chemistry
E-mail	vishnuadole86@gmail.com vishnuadole87@gmail.com vishnuadole27@gmail.com
Qualification	M.Sc. Organic Chemistry (Ph.D., NET, SET, GATE)

Teaching Experience: 12 Years

Awards / Recognitions

1. **Recognized as a Brand Ambassador of Bentham Science**

Research Guidance for M.Phil./Ph.D./Project

1. Guiding 06 students for the Ph.D. degree as a co-guide
1. Guided many students for M.Sc. Project work

Reviewer of Journals

1. Nature Catalysis
2. Journal of Molecular Liquids
3. Chemistryselect
4. Asian Journal of Organic Chemistry
5. Green chemistry letters reviews
6. Journal of Advanced Pharmaceutical Science
7. Material Science Research India
8. International journal of chemical and physical sciences

Patent / Copyright

1. One Indian patent entitled SYNTHESIS OF NOVEL COMPOUND (E)-4-(2-(2-(1,2,6,7-TETRAHYDRO-8H-INDENO[5,4-b]FURAN-8-YLIDENE)HYDRAZINEYL)THIAZOL-4-YL)BENZONITRILE

Research paper published/presented

1. Nano 5% Fe–ZnO: A highly efficient and recyclable heterogeneous solid nano catalyst for the Biginelli reaction.
2. Fe3+ modified zinc oxide nanomaterial as an efficient, multifaceted material for photocatalytic degradation of MB dye and ethanol gas sensor as part of environmental rectification.
3. Synthesis, molecular structure, electronic, spectroscopic, NLO and antimicrobial study of N-benzyl-2-(5-aryl-1,3,4-oxadiazol-2-yl)aniline derivatives.
4. Synthesis Techniques and Applications of Rare Earth Metal Oxides Semiconductors: A Review

5. Computational Chemistry: Sulfamic Acid Catalyzed PEG400 Mediated Synthesis, Molecular Structure, HOMO–LUMO, UV-visible, Vibrational, and Reactivity Descriptors Analysis of 2-(Furan-2-yl)-1Hbenzo[d]imidazole
6. Computational Study on Molecular Structure, UV-Visible and Vibrational Spectra and Frontier Molecular Orbital Analysis of (E)-7-((2-Chloroquinolin-3-yl) methylene)-1, 2, 6, 7-tetrahydro-8H-indeno [5, 4-b] furan-8-one
7. Synthesis, spectral analysis, antibacterial, antifungal, antioxidant and hemolytic activity studies of some new 2, 5-disubstituted-1, 3, 4-oxadiazoles
8. Exploration of catalytic performance of nano-La2O3 as an efficient catalyst for dihydropyrimidinone/thione
9. Microwave prompted solvent-free synthesis of new series of heterocyclic tagged 7-arylidene indanone hybrids and their computational, antifungal, antioxidant, and cytotoxicity study (2021)
10. Synthesis, Computational, Antibacterial and Antifungal Investigation of Two Tri-Fluorinated Chalcones of 1-(2,3- Dihydrobenzo[b][1,4]dioxin-6- yl)ethan-1-one (2021)
11. Design, fabrication, antitubercular, antibacterial, antifungal and antioxidant study of silver doped ZnO and CuO nano candidates: A comparative pharmacological study
12. PEG-400 mediated synthesis, computational, antibacterial and antifungal studies of fluorinated pyrazolines
13. DFT computational insights into structural, electronic and spectroscopic parameters of 2-(2- Hydrazineyl)thiazole derivatives: a concise theoretical and experimental approach
14. Efficient Synthesis, Antibacterial, Antifungal, Antioxidant and Cytotoxicity Study of 2-(2-Hydrazineyl)thiazole Derivatives
15. DFT computational insights into structural, electronic and spectroscopic parameters of 2-(2- Hydrazineyl)thiazole derivatives: a concise theoretical and experimental approach
16. Solvent-free grindstone synthesis of four new (E)-7-(arylidene)-indanones and their structural, spectroscopic and quantum chemical study: a comprehensive theoretical and experimental exploration
17. Experimental and theoretical exploration on single crystal, structural, and quantum chemical parameters: A comparative study
18. Aqua-mediated rapid and benign synthesis of 1,2,6,7-tetrahydro-8H- indeno[5,4-b]furan-8-one-appended novel 2-arylidene indanones of pharmacological interest at ambient temperature
19. Superfast synthesis, antibacterial and antifungal studies of halo-aryl and heterocyclic tagged 2, 3-dihydro-1 H- inden-1-one candidates
20. Structural, Spectroscopic (UV-Vis and IR), Electronic and Chemical Reactivity Studies of (3, 5-Diphenyl-4, 5-dihydro-1H-pyrazol-1-yl)(phenyl) methanone
21. Ultrasound Promoted Stereoselective Synthesis of 2,3-Dihydrobenzofuran Appended Chalcones at Ambient Temperature
22. Synthesis, antibacterial and computational studies of Halo Chalcone hybrids from 1-(2,3-Dihydrobenzo[b][1,4]dioxin-6- yl)ethan-1-one
23. Transition metals Fe3+, Ni2+ modified titanium dioxide (TiO2) film sensors fabricated by CPT method to sense some toxic environmental pollutant gases
24. Fabrication, Characterization and Exploration of Cobalt (II) ion doped, modified zinc oxide thick film sensor for gas sensing characteristics of some pernicious gases
25. Study on Molecular Structure, UV- Visible and Vibrational Spectra and Frontier Molecular Orbital Analysis of (E)-7-((2-Chloroquinolin-3- yl)methylene)-1,2,6,7-tetrahydro-8H-indeno[5,4-b]furan-8-one

26. Antimicrobial and Computational Investigation of Two 2,3-Dihydro-1H- inden-1-one Derived Fluorinated Chalcone Motifs" in its current form for publication in Vietnam Journal of Chemistry
27. Spectroscopic (FTIR and UV), quantum Chemical, antifungal and antioxidant investigations of (E)-7-(4- (trifluoromethyl)benzylidene)- 1,2,6,7-tetrahydro-8H-indeno[5,4- b]furan-8-one: A combined experimental and theoretical study
28. Molecular structure, frontier molecular orbital and spectroscopic examination on dihydropyrimidinones: a comparative computational approach
29. Computational Chemistry: Molecular Structure, Spectroscopic (Uv-Visible And Ir), Electronic, Chemical And Thermochemical Analysis Of 3'- Phenyl-1, 2-Dihydrospiro [Indeno [5, 4-B] Furan-7, 2'-Oxiran]-8 (6h)- One
30. Investigation of Structural and Spectroscopic Parameters of Ethyl 4- (4-isopropylphenyl)-6-methyl-2-oxo- 1,2,3,4-tetrahydropyrimidine-5- carboxylate: a DFT Study
31. Synthesis, Molecular Structure, HOMOLUMO and Spectroscopic Investigation of (E)-1-(2,4-Dichloro-5-fluorophenyl)-3- (2,6-dichlorophenyl)prop-2-en-1-one: A DFT Based Computational Exploration
32. Synthesis, Molecular Structure, HOMO-LUMO, Chemical, Spectroscopic (UV-Vis and IR), Thermochemical Study of Ethyl 6- amino-5-cyano-2-methyl-4-(4- nitrophenyl)-4H-pyran
33. Transition Metals Ni2+, Fe3+ Incorporated Modified ZnO Thick Film Sensors to Monitor the Environmental and Industrial Pollutant Gases
34. Computational insights on molecular structure, electronic properties, and chemical reactivity of (E)-3-(4- chlorophenyl)-1-(2-hydroxyphenyl) prop-2-en-1-one
35. Poly (ethylene glycol)(PEG-400): A green approach towards synthesis of novel pyrazolo [3, 4-d] pyrimidin-6- amines derivatives and their antimicrobial screening
36. Efficient Synthesis, spectroscopic and quantum chemical study of 2, 3- dihydrobenzofuran labelled two novel arylidene indanones: A comparative theoretical exploration
37. Synthetic approaches for the synthesis of dihydropyrimidinones/thiones (biginelli adducts): a concise review
38. Molecular structure, electronic, chemical and spectroscopic (UV- visible and IR) studies of 5-(4- chlorophenyl)-3-(3,4-dimethoxyphenyl)-1-phenyl-4, 5- dihydro-1H-pyrazole: combined DFT and experimental exploration
39. Anti-microbial evaluation, Experimental and Theoretical Insights into Molecular Structure, Electronic Properties, and Chemical Reactivity of (E)-2-((1H-indol-3-yl) methylene)- 2, 3-dihydro-1H-inden-1-one
40. Structural, Vibrational and Chemical Reactivity Studies Of (2-(4-Chlorophenyl)-5-(4-Methylphenyl)-1,3,4-Oxadiazole
41. Synthetic approaches for the synthesis of dihydropyrimidinones/thiones (biginelli adducts): a concise review
42. Molecular structure, frontier molecular orbitals, MESP and UV– visible spectroscopy studies of Ethyl 4-(3, 4-dimethoxyphenyl)-6-methyl-2-oxo-1, 2, 3, 4-tetrahydropyrimidine- 5-carboxylate: A theoretical and experimental appraisal
43. Experimental and Theoretical Studies on the Molecular Structure, FT-IR, NMR, HOMO, LUMO, MESP, and Reactivity Descriptors of (E)-1-(2, 3- Dihydrobenzo [b][1, 4] dioxin-6-yl)-3- (3, 4, 5-trimethoxyphenyl) prop-2-en- 1-one
44. Computational Chemistry Approach for the Investigation of Structural, Electronic, Chemical and Quantum Chemical Facets of Twelve Biginelli Adducts
45. Synthesis, Antibacterial, Antifungal and DFT Studies on Structural, Electronic and Chemical Reactivity of (E)-7-((1H-Indol-3-yl)methylene)- 1,2,6,7-tetrahydro-8H-indeno[5,4- b]furan-8-one

46. Molecular Structure, FT-IR Spectra, MEP and HOMO-LUMO Investigation of 2-(4-Fluorophenyl)-5-phenyl-1, 3, 4-oxadiazole Using DFT Theory Calculations
47. Synthesis, Characterization and DFT Studies of 2-[(2-substitutedphenyl) carbamoyl] benzoic acids
48. Density and Viscosity of LiCl, LiBr, LiI and KCL in Aqueous Methanol at 313.15K
49. Photocatalytic Applications of Doped Fe_3O_4 Nanoparticles for Degradation of Methyl Orange and Methylene Blue Dyes: A Review
50. 17. Synthesis, Molecular Structure, HOMO-LUMO, Spectroscopic (UV-Vis and IR), Thermochemical Study of 5-Acetyl-4-(4-chlorophenyl)-6-methyl- 3,4-dihydropyrimidin-2(1H)-one: A DFT Study, Asian Journal of Organic and Medicinal Chemistry,
51. Interpretation of Viscometric, Thermodynamic and Acoustic Properties of Maltose in Aqueous Sodium Fluoride, Asian Journal of Organic and Medicinal Chemistry,

Books published / chapters in a book

1. Intermediates and Rearrangements in Organic Synthesis, Himalaya Publishing House, ISBN- 978-93-5262-001-2

Conferences/Seminars/ Workshop organized / attended

1. Zinc Oxide Nanoparticle Catalyzed Biginelli Reaction under Microwave Irradiation: An Expeditious and Green Synthesis of Dihydropyrimidinones.
2. Researchers World: Journal. International Refereed Research Journal Vol.–IX, Special Issue, January 2018, ISSN: 2231-4172, (Presented & Published).
3. Synthesis, Characterization and Biological Screening of some Biologically potent Chalcones and their Heterocyclic Analogues. Researchers World: Journal. e. International Refereed Research Journal. Vol- VII- Special Issue 4(4)-Dec-2016, ISSN: 2231-4172, (Presented & Published).
4. Zinc oxide nanoparticle catalyzed Biginelli reaction under microwave irradiation: An expeditious and green synthesis of dihydropyrimidinones, Emerging Trends in Chemistry and Nanosciences (ETCN-2017), (Presented).
5. An expeditious and environmentally benign synthesis of substituted 1,3-diphenyl prop-2-en-1-one, International Conference on Functional Materials (ICAFM-2018), (Presented)
6. International e-conference on Current research in green chemistry and Nanosciences organized by LVH College
7. Online National Webinar on Intellectual Property Rights (IPR) entitled “R & D and Patenting: Synergistic Approach” organised by Department of Chemistry in collaboration with IQAC (Internal Quality Assurance Cell), Wilson College, Mumbai held on 29th January 2022.
8. IPR webinar organized by LVH College
9. Online webinar on Unwrapping Brighter Future Opportunities in Chemical Science Background organized by MSG College
10. Online National Webinar Research methodology organized by BOS in Chemistry, MGV.
11. International e-conference on “Merging continuous flow chemistry and supported catalysis for the synthesis of bioactive molecules” Organized by IQAC & Chemistry Department, ASC College, Manmad
12. Oral presentation titled Synthesis and Computational Insights on Molecular Structure, Frontier Molecular Orbital, Molecular electrostatic surface potential of (E)-3-(2,3-dihydrobenzofuran-5-yl)-1-(2- hydroxyphenyl)prop-2-en-1-one in ‘VIRTUAL INTERNATIONAL CONFERENCE ON MULTIFUNCTIONAL ADVANCED MATERIALS (VICMAM-2021)’ organized by Department of Chemistry, JVM’s Degree College in collaboration with Association of Chemistry Teachers

13. 'VIRTUAL INTERNATIONAL CONFERENCE ON MUTLIFUNCTIONAL ADVANCED MATERIALS (VICMAM-2021)' organized by Department of Chemistry, JVM's Degree College in collaboration with Association of Chemistry Teachers (ACT)
14. Participated in the Two Weeks Virtual National Faculty Development Programme
15. Revised NAAC Assessment and Accreditation: Challenges and Path to Move Ahead
16. Revised Accreditation Framework: Issues and Perspectives
17. Best Practices in Higher Education
18. Filling Up Online AQAR as Per RAF:
19. Development and Application of Quality Benchmarks
20. Material Science
21. Recent Advances in Chemical Sciences"
22. Online teaching and learning tools
23. Programme and Course Outcomes (POs & COs) for Quality in HEI
24. Feedback on Revised Syllabus of F.Y.B.Sc. Chemistry (CBCS) from the Academic year 2019-20
25. Mental Health & Physical Fitness During & After Covid-19 Pandemic"
26. Importance and Methods of Energy Conservation and Selection of Energy Efficient Appliances
27. Intellectual Property Right
28. Introduction to nanoscience and nanotechnology
29. Nanotechnology in Daily Life
30. Post Covid Environmental issues and Sustainability
31. Prospects and Potential of Deep-Sea Mineral Mining- Where Does India Stand?
32. Revised Accreditation Framework and Preparation of NAAC
33. Role of Teachers In Quality Enhancement and Accreditation
34. Social Entrepreneurship, Swachhta & Rural Engagement
35. Fitness and wellness for all during pandemic
36. LANGUAGE MEET
37. Changing Facet of Laws Relating to Gender Justice and Role of Judiciary
38. Women's Grievance Redressal Committee on Protection from Sexual at
39. Harassment at Work Place - Structure and Functioning
40. Workshop on S.Y.B.Sc. Chemistry Revised Syllabus(CBCS-2020)
41. World Mental Health Day
42. Participated and Attended many International, National, State and Regional Level conferences, seminars and workshops.

Experience as Resource Person

1. Delivered lecture as a resource person in the SET/NET WORKSHOP conducted by Arts, Science and Commerce College, Nandurbar
2. Delivered lecture as a resource person in the SET/NET WORKSHOP conducted by Arts, Science and Commerce College, Nashik
3. Delivered lecture on "Symmetry elements and points groups" in
4. KVNN shikshan prasarak santhan's Arts, Commerce and Science College, Nashik
5. Delivered lecture on "Photochemstry" in KVNN Shikshan Prasarak Santha's Arts, Commerce and Science College, Nashik
6. Delivered lecture on "GROUP THEORY" in Arts, Commerce and Science College, Akola.
7. Delivered lecture on "SPECTROSCOPY" in Rayat Shiksahan Santha's R.B.NArayanrao Borawake Arts, Commerce and Science College, Nashik
8. Delivered lecture on 'Symmetry elements and points groups" in KVNN shikshan prasarak santhan's Arts, Commerce and Science College, Nashik

9. Delivered lecture on ‘STRUCTURE ILLUCIDATION BY SPECTROSCOPIC METHODS” in Mahatma Gandhi Vidyamandir’s Samajshri Prashantdada Hiray College of Pharmacy, Malegaon
10. Delivered lecture many lectures as a resource person in the SET/NET WORKSHOPS which are conducted every year by Loknete Vyankatrao Hiray College
11. Delivered lecture on “PHOTOCHEMISTRY” in Arts, Commerce and Science College, Cidco, Nashik
12. Delivered lectures for JEE exam
13. Resource Person’ for delivering Lecture in the seven days Online National Workshop on “Practicing NET/SET Examination in Chemical Science organized by NMU, Jalgaon.
14. 2Resource Person for ONE WEEK STATE LEVEL ONLINE WORKSHOP ON "NET-SET GUIDANCE FOR CHEMICAL SCIENCES"
15. Resource Person at ACS College Peth
16. Resource Person at ACS College, Sinnar
17. Resource person at KLE of Commerce and Science, Mumbai
18. Resource person at K J Somaiya College of Science & Commerce
19. Resource person at MSG College Malegaon
20. Resource person at LVH College
21. Many other lectures as resource person

E-content developed

1. **Youtube channel: Chemistry simplified/Vishnu Adole**

   https://www.youtube.com/channel/UC2D-udRNL2VwL6EdtTYlbKw

Social Media links

Research gate	**https://www.researchgate.net/profile/Vishnu-Adole**
Google Scholar	**https://scholar.google.com/citations?user=gNocKL8AAAAJ&hl=en**
Orcid Id	**https://orcid.org/0000-0001-7691-7884**