

Teacher Profile



Name Dr. Rayate Ankita Mukund.

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Personal Information

- Name : Dr. Rayate Ankita Mukund.
- Date of Birth : 29th March 1996
- Nationality : India
- Present Position : Assistant Professor
- Experience : 7 years
- Areas of Research : Synthetic Chemistry, Computational Chemistry, Bioinformatics
- Orchid ID : 0009-0005-5978-270X

Educational Details

Degree	University / Institution	Grade / %	Year of Passing	Specialization
B.Sc.	University of Pune	74.91%	2016	Che + Math + Phy
M.Sc.	University of Pune	71.73%	2018	Organic Chemistry
B.Ed.	University of Pune	77.05%	2021	Sciences
PET.	Savitribai Phule Pune University, Pune	-----	2021	-----
Ph.D.	Savitribai Phule Pune University, Pune	-----	2025	Synthetic Chemistry, Computational Chemistry, Bioinformatics

Thesis/dissertation/Project

Degree	Name of the Guide	Title
Ph.D.	Dr. Gaware Manoj Ramesh	"Theoretical Interpretations and New Strategies Towards Synthesis of Various Imidazole and Pyrazolone Scaffolds Using Multicomponent Reactions."

Teaching Experience (07 Years)

Name & Address of Employer	Post Held	Period of service
G.M.D Arts B.W Commerce & Science College, Sinnar	Assistant Professor in Chemistry	Dec 2018 -Nov 2025

Research**Research Paper Publications (1)****1. PUBLICATIONS IN JOURNALS:**

No.	Title of the paper / Authors	Journal
2023		
1	The Significance of Heterogeneous Catalysis to the Field of Chemical Kinetics Ankita M. Rayate , Dr. Anju, Vanita Kumari Sapra, K. Raj Tilak, Amareswara Prasad Chundru	<i>European Chemical Bulletin</i> , 2023, 28-C, (37-41). Indexed in Web of Science and Scopus
2	Temperature Dependence and Molecular Interactions Studies from Refractive Indices of 6-(4-Chlorophenyl)-1, 2, 3, 4-Tetrahydro-4-Oxo-2-Thioxopyrimidine-5-Carbonitrile in 60% Aqueous Dimethyl Sulphoxide Ankita M. Rayate and Manoj R. Gaware	<i>Indian Journal of Science and Technology</i> , 2023, 16(36), 2907-2911 Indexed in Web of Science
2024		

3	Thiourea-Ammonium Chloride mediated Knoevenagel Condensation as an intermediate in synthesis of Pyrimidine scaffolds under solvent free condition Ankita M. Rayate and Manoj R. Gaware	<i>Letters in Organic Chemistry</i>, 2024, 21(9), 749-755 DOI: 10.2174/0115701786286587240130114029 Indexed in Web of Science and Scopus with Impact Factor 1.00 and Cite Score 1.5
2025		
4	A colorimetric Detection Probe for Iron (III) by Naphthalene-Based Schiff Base Mayuri S. Kulkarni, Ashok V. Borhade, Prajakta Y. Pachorkar, Ankita M. Rayate	<i>Journal Of Analytical Chemistry</i>. 2025, Vol. 80, 50-60
5	Design, Synthesis of Imidazole Scaffolds as an Effective Larvicidal Agent against <i>Etiella zinkenella</i> and In Vitro Antibacterial and Antifungal Evaluation against <i>Candida albicans</i> with DFT Calculations, Molecular Docking Technique and Theoretical Biological Potential A M. Rayate, M. R. Gaware, D. D. Lokhande, A. H. Kategaonkar, A. M. Bhagare B. N. Shelke, A. S. Kale, S. S. Bhamare	<i>Results in Chemistry</i>, 2025, 15, 102259-13 DOI https://doi.org/10.1016/j.rechem.2025.102259

6	Antibody-Antigen interactions with antibody loops, rainbow's spectrum of various Imidazole scaffolds against various microbes using molecular docking A M. Rayate , M. R. Gaware, A. S. Kale	International Journal of Scientific Research in Science and Technology , 2025, 12(11), 8-15 DOI : h t t p s://doi.org/10.32628/IJSRST
7	Synthesis, Characterization of C-N functionalized pyrazolone scaffolds as potent antimicrobial, larvicidal agent with DFT calculations, molecular docking, molecular dynamic stimulation studies and PASS analysis A M. Rayate , M R. Gaware, A S. Kale, P N. Jadhav	Proceeding of the Indian National Science Academy (online) https://doi.org/10.1007/s43538-025-00624-7
8	Ligplot+ and DIMPLOT diagrams as effective computational tool of molecular docking for in silico approach in determination of protein-ligand and protein-protein interaction studies of imidazole scaffolds A M. Rayate , M R. Gaware, A S. Kale, A P. Bhagat	Indian Journal Of Pharmaceutical Education And Research(In Review)

REFRESHER/ORIENTATION COURSES COMPLETED: -

Details of Course	Duration
Faculty Development Programme “Research Methodology” organised by Kamala Nehru Mahavidyalaya, Nagpur	One Week 02-05-2022 to 07-05-2022
Faculty Development Programme Emotional Intelligence For Teacher In Higher Education organized by Sant Gadge Baba Amravati University, Amravati	One Week 16-11-2023 to 25-11-2023
Faculty Development Programme Exploring Multidisciplinarity: What, Why and How organised by S. V. K. T. Arts, Commerce and Science College, Deolali Camp	One Week 27-01-2025 to 31-01-2025
Faculty Development Programme Accelerating Drug Discovery through AI: Machine Learning Applications in Chemistry organised by Guru Nanak Institute of Technical Campus, New Delhi	One Week 09/12/2024 to 14/12/2024.
Faculty Development Programme NEP- 2020 Orientation & Sensitization Programme Organised By UGC-Malaviya Mission Teacher Training Centre And Shri Hari Prasad Gour Vishwavidyalaya, Madhya Pradesh	Two Week 02/04/2025 to 14-04/2025

Research Paper Papers presented in International /National Conferences

PAPER PRESENTATION

- Paper presentation on “Role and Importance of Research in National Education Policy-2020” at National Level Workshop on National Education Policy-Accreditation 2020 organized by
G. M. D. Arts, B. W. Commerce and Science College, Sinnar on 06/02/2023 to 07/02/2023.
- Paper presentation on “Recent Advances in Knoevenagel condensation reaction” at International Conference on Recent Advances in Multidisciplinary Research (ICRAMR-2024) organised by Bapumiya Sirajoddin Patel Arts, Commerce and Science College, Pimpalgaon Kale Jalgaon Jamod, Buldhana on 13/04/2024
- Paper presentation on “Thiourea-Ammonium Chloride mediated Knoevenagel Condensation by NEAT reaction” in Souvenir Cum Proceedings in National Symposium on Next-Generation Drug Delivery system organized by Sharda University, Noida, Uttar Pradesh on 22/12/2024 to 23/12/2024
- Paper presentation on “Study of some basic principle, types , models and application of Molecular Docking in “International Conference on Recent Innovations in Chemical and Material Sciences organised by L.V.H. Arts, Science and Commerce College, Panchavati, Nashik on 21/02/2025 to 22/02/2025
- Paper presentation on “Molecular Docking Technique for structural, interactions in chemical molecule” in International Conference on Innovations in Science for Sustainable Development organised by Smt. Narsamma Arts, Commerce and Science College, Amravati on 19/03/2025 to 20/03/2025

DETAILS OF SEMINAR/CONFERENCE/WORKSHOPS PARTICIPATED

Title of Seminar	Venue and other details	Mode of participation
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International Level Faculty Development Programme on “GATEWAY TO INNOVATION”	Shrimati Indira Mahadev Beharay College of Arts Shriman Chandulal Sheth College of Commerce & Shrimati Shobhanatai Chandulal Sheth College of Science, Khed, Ratnagiri Maharashtra University of Mumbai, On 22/06/2020 to 26/03/2020.	Participation
Webinar Serendipity An Unplanned Discoveries In Science	Bhavan’s College Andheri West A Mumbai, On 16/08/2021.	Participation
International Virtual Conference on Career And Research Opportunities In Chemistry	Arts, Science And Commerce College Ozar (MIG) ,Nashik, on 1/10/2021	Participation
International Level Conference on “Advances in Functional Materials” (ICAFM-2018)	K.T.H.M College Nashik on 12/01/2018 to 13/01/2018	Participation
National Level Webinar on “Nanoscience For 21 st Century”	Shri Anand College,Patharidi Ahmednagar, on 13/09/2021	Participation
National Level Webinar on “Green Chemistry And Catalysis”	Dada Patil Mahavidyalaya, Karjat, Dist:Ahmednagar, on 13/09/2021	Participation
Teacher workshop on “New Revised Syllabus of T.Y.B.Sc.Chemistry S.P.P.U Pune”	Department of Chemistry, Prof. Ramkrishna More Arts, Commerce and Science College, Akurdi, Pune On 30/08/2021	Participation
Zonal Laval Research Competition At “Avishkar-2017”	K.S.K.W. Arts, Commerce& Science College Cidco.	Participation
National Consumer Awareness Quiz	Arts, Science And Commerce College Ozar (MIG) ,Nashik, on 24/12/2021	Participation
International conference on “Recent Trend In Green And Sustainable Development In Chemical Science”	K.T.H.M College Nashik on 25/10/2021 to 27/10/2021	Participation
National Seminar “Research Methodology”	Dada Patil Mahavidyalaya, Karjat, Dist: Ahmednagar, on 1/10/2021	Participation
International Level Programme “Advance Horizons In Chemical Sciences -2021”	Arts, Science And Commerce College , Satral, Tal-Rahuri, Dist: Ahmednagar, on 26/10/2021 to 27/10/2021	Participation

“State Level Quiz 2022” State level Online World Cancer Day Quiz 2022	K. K. Wagh Arts ,Commerce, Science And Computer Science College Saraswati Nager, Nashik. 4/02/2022	Participation
National Webinar on National Educational Policy 2020	Matoshri College Of Education Nashik 16/02/2022	Participation
Webinar on IP awareness/ Training program under National Intellectual Property Awareness Mission	Intellectual Property Office , India. On 18/5/2022	Participation
One Day International Multidiciplinary E-Seminar on „Trends In Research“	Rajarshi Shahu Arts And Commerce College, Rukadi 30 th June 2022	Participation
National Level Workshop on National Education Policy-Accreditation 2020	G. M. D. Arts, B. W. Commerce and Science College, Sinnar on 06/02/2023 to 07/02/2023	Paper Presentation and Participation
One Day Workshop on “ Work Skills and Prosocial Behavioral Development for Senior and Professional College Teachers”	Maratha Vidya Pasarak Samaj’s HumanResource Development Center (HRDC) Nashik on 21/04/2023	Participation
One Day Workshop on Voice Care	M.V.P. Samaj’s G. M. D. Arts, B. W. Commerce and Science College Sinnar and Maharashtra State Department of Higher and Technical Education Maharashtra Information Technology Support Center on 05/01/2024	Participation
International Conference on Recent Advances in Multidisciplinary Research (ICRAMR-2024)	Bapumiya Sirajoddin Patel Arts, Commerce and Science College, Pimpalgaon Kale Jalgaon Jamod, Buldhana on 13/04/2024	Participation
One Day Workshop on “Implementation of National Education Policy (NEP 2020)	M. V. P. Samaj’s Shrimati Vimlaben Khimji Tejookaya Arts, Science and Commerce College, Deolali Camp	Participation
International Conference on Recent Advances In Multidisciplinary Research (ICRAMR-2024)	Bapumiya Sirajoddin Patel Arts, Commerce And Science College, Pimpalgaon Kalle on 13/04/2024	Paper Presentation and Participation

National Level Research Workshop on “Geogebra Math Tool for 3 D Visualization	A. C. T. academy, Kerela on 10/12/2024	Participation
Faculty Development Programme on “Accelerating Drug Discovery through AI: Machine Learning Applications in Chemistry”	Guru Nanak Institute of Technical Campus from 09/12/2024 to 14/12/2024	Participation
Faculty Development Programme on “NEP 2020 Orientation and Sensitization Programme”	UGC-Malaviya Mission Teacher Training Centre, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur from 1/12/2024 to 15/12/2024	Participation
State Level Conference On “Education, Awareness and Detection of Thalassemia to Make Thalassemia Free Maharashtra 2025”	G. M. D. Arts, B. W. Commerce and Science College, Sinnar and Aashray Samajik, Sanskrutik and Shaikshanik Trust, Thane on 19/12/2024.	Participation
Faculty Development Programme on “Exploring Multidisciplinary :What, Why and How” organized	M. V. P. Samaj’s Shrimati Vimlaben Khimji Tejookaya Arts, Science and Commerce College, Deolali Camp in collaboration with MSFDA In house Programme from 27/01/2025 to 31/01/2025	Participation
National Symposium on Next-Generation Drug Delivery system	Sharda University, Noida, Uttar Pradesh on 23/12/2024	Paper Presentation and Participation
International Conference on Recent Innovations in Chemical and Material Sciences	L.V.H. Arts, Science and Commerce College, Panchavati on 21/02/2025 to 22/02/2025	Paper Presentation and Participation
International Conference on Innovations in Science for Sustainable Development	Smt. Narsamma Arts, Commerce and Science College, Amravati on 19/3/2025 to 20/3/2025	Paper Presentation and Participation

BOOK PUBLISHED

Sr. No	Title of Book	Publisher	ISBN No	Place of Publishing	Year

1.	Molar Volumes and Jones Dole Coefficients of Dihydropyrimidines and its Derivatives	Astral International Private Limited	978-93- 5461668-6	National	2022
2	Organic Chemistry	Good Writers Publication	978-93-5756- 028-3	National	2023
3	Recent advances in Knoevenagel Condensation reaction using solvent free condition	Lambert Academic Publishing, Germany	978-620-0- 47435-3	International	2024
4	Book chapter on “Thalassemia’s: An Overview” in Souvenir Cum Proceedings on Education, Awareness and Detection of Thalassemia to Make Thalassemia Free Maharashtra 2025 .	G. M. D. Arts, B. W. Commerce and Science College, Sinnar and Aashray Samajik, Sanskritik and Shaikshanik Trust, Thane	78-93-341- 9277-3	National	2025
5	Thiourea-Ammonium Chloride mediated Knoevenagel Condensation by NEAT reaction” in Souvenir Cum Proceedings in National Symposium on Next-Generation Drug Delivery System	Sharda University,	978-819-8322- 401	National	2025
6	Molecular Docking Technique for structural, interactions in chemical molecule in “International Conference on Innovations in Science for Sustainable Development	Smt. Narsamma Arts, Commerce and Science College, Amravati	978-81- 955425-9-8	National	2025

7	Studies Of Some Basics Principle, Types, Models & Applications of Molecular Docking in “Recent Innovations in Chemical and Material Sciences	Walnut Publication	978-93-6926-691-3	International	2025
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PATENTS

S. No	Title of the Patent	National/ International	Patent No.	Funding Agency	Details of Patent
1	Medicinal plant leaf extracts that are used to treat plant diseases were put up against each other in Aphysicochemical test	National	202221039793	-	Published
2	The effect of population explosion on Reservation system	National	202321003518	-	Published
3	Motorcycle Ignition Biosensor Helmet	National	409222-001	-	Design Patent Granted
4	Equipment for microwave assisted synthesis of chemical compound	National	416517-001	-	Design Patent Granted
5	Micro reactor for Nanoparticles Synthesis	National	383106-001	-	Design Patent Granted
6	Reactor for Production and Utilization of Diazomethane	National	404834-001	-	Design Patent Registered
7	Hand Operated Fruit Cutting Machine	National	411037-001	-	Design Patent Granted
8	Effective Hand Operated Wheat Flour Vermicelli (Kurdai) Preparation Machine	National	412037-001	-	Design Patent Registered

9	Container to check water holding capacity of soil	National	412186-001	-	Design Patent Granted
10	Portable Spectrophotometer for Real-Time Chemical Analysis.	International	6380678	-	Design Patent Granted
11	Portable Three Way Led Torch	National	433581-001	-	Design Patent Granted
12	PVC Pipe Borrer Machine	National	432998-001	-	Design Patent Granted
13	Wound healing property of powder extracted from flowers of Typha augustifolia L.	National	202421093113	-	Published
14	Macro Fungi Collection Trunk	National	448580-001	-	Design Patent Registration
15	Macro Fungi Preservation Bag	National	448581-001	-	Design Patent Registration

AWARD

S. N	Title of the Award	National/ International	Organizing Agency
1	Award for Excellence in Research (Young Scientist Award)	National	International Business and Education, New Delhi
2	Young Scientist Award	International	Shinawatra University, Thailand and ESN Publication

3	Award for Excellence in Research	National	EXPO-Science and Technology, New Delhi
4	Shiv Chatrapati Maharashtra Gaurav Award	State	Sanjivani Foundation Maharashtra
5	Certificate of World Record	International	Greenfield of London Book of World Record, U.K.
6	American Merit Council Certificate	International	American Merit Council, USA

Research Guide (Ph.D/M.PHIL/PG) in descending order

Sr. No.	Title of Project/Dissertation Thesis	Name of student	University	Ph.D/ M.Phil/PG	Month/Year of award
-	-	-	-	-	-

Role in Curriculum/Administrative Activity (College level committee)

- Online teaching by using ZOOM app, Google meet
- Online test by Google forms
- Participation in online webinars
- Use of teaching material for students using Google Classroom

COLLEGE COMMITTEES

- Member of IQAC committee
- Member of admission committee
- Worked as member for science Poster Competition
- Worked as member for Annual Gathering
- Worked as coordinator of “soil and water testing ” course

COMMUNITY SERVICES

- Participates Soft Skill Development programme
- Zonal Level Research Competition Participated at “Avishkar-2017” and “Avishkar 2023”
- Tree Plantation
- Blood Donation Camp
- Tree Plantation Programme
- Road Safety Rallies

RESOURCE PERSON/INVITED SPEAKER:

- Delivered Expert lecture talk on “Some Important Chemical Compounds” for Combined Defence Services Examination Preparation organized by N.C.C and Department of Geography at G. M. D. Arts, B. W. Commerce and Science College, Sinnar.
- Delivered Expert lecture talk on “Spectroscopy” organized by Department of Chemistry at C.M.C.S. College, Nashik.
- Delivered Expert lecture talk on “Intellectual Property Rights” organized by Department of IQAC at Arts and Commerce College, Makhmaladad, Nashik
- Delivered Guest Lecture on “Intellectual Property Rights at Shri Eknath Sahadu Shete Society’s Arts, Commerce and Science College, Deolali Camp
- Delivered Guest Lecture on “Intellectual Property Rights at K. K. Wagh Arts, Commerce Science and Computer Science College, Nashik

REVIEWER AND EDITORIAL

- Potential Reviewer for Uttar Pradesh Journal of Zoology
- Potential Reviewer for International Research Journal of Pure and Applied Chemistry
- Certificate of Excellence in Peer Reviewing for B. P. International for outstanding contribution to the quality of book

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Ankita

Dr. Rayate Ankita Mukund.