

## Dr. RAJASHREE AJAY MARKANDEWAR

Rashtrapita Mahatma Gandhi Arts Commerce and Science  
College

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### EDUCATIONAL QUALIFICATIONS :

Sr. No.	Qualification	Name of Board / University	Month and Year of Passing	Grade / Marks / Division
1	M.Sc [Organic Chemistry]	RTMNU, Nagpur MS	June - 2006	FIRST
2	B.Ed [Science - Maths]	SRTMNU, Nanded MS	June - 2005	SECOND
3	M.Phill [Synthesis and Anti Microbial Activity of Novel Flavonoids Derivatives]	ALAGAPPA University, Karaikudi. TN	June - 2010	FIRST
4	Ph.D [Synthesis And Pharmacological Evaluation of Novel Flavonoid Derivatives]	SRTMNU, Nanded MS	January - 2014	AWARDED

### WORK EXPERIENCE DETAILS :

Sr no	Name of the Institution	Period	Post	Nature of appointment
1	Rashtrapita Mahatma Gandhi Mahavidyalaya, Saoli	August 2014 till date	Assistant Professor	APPROVED
2	Ballarpur Institute of Technology, Ballarpur	June 2009 to May 2014	HOD, BE I yr	REGULAR

3	Mahila Junior College, Chandrapur	Dec 2006 to May 2009	Lecturer	REGULAR
4	Janta Mahavidyalaya, Chandrapur	August 2006- April 2007	Lecturer	CHB

### LIST OF PUBLICATIONS:

Sr no	Title	Journal	Issue/ vol.	Impact factor
1	Addition of some novel flavonols to the class of anti oxidants,	Indo American Journal of Pharmaceutical Research.	Vol.3, Issue 5, 3174, (2013).	1.25
2	Green Chemistry Approach to Novel Chalcones and their anti oxidant properties.	Journal of Atoms and Molecules	Vol 3, Issue 1 , 468, (2013).	0.347
3	Reaction Dynamics and Chemical Reactivity of Nitrogen containing Aldehydes.	Oriental Journal of Chemistry	Vol 29, Issue 4, 1126, (2013).	0.508
4	Investigation of flavones as an efficient anti oxidant and anti inflammatory agents.	American Journal of Pharm Tech Research	Vol 4, Issue 1, 759, (2014).	0.983
5	Exploring Pharmacological Significance of Pyrrolidine Scaffold-A Review	Sunrise Multidisciplinary Research journal,	Special Issue(4) Feb2015,76-80 )	
6	Synthesis of 4-(4-(4-Ethyl piperazine 1yl) Phenyl)-6 phenyl-3 hydro-1H-pyrimidine-2-thione(thiopyrimidine) derivatives and their antimicrobial activites	Journal of Medicinal Chemistry and Drug Discovery	Jan 2015 special issue 209-217)	
7	Exploring Pharmacological significance of Piperazine Scaffold	World Journal of Pharmaceutical Research		
8	Novel Heterocyclic Schiff base synthesis and Antimicrobial studies	World Journal of Pharmaceutical Research	(Vol 6(2), Nov 2016, 778-783)	
9	Novel Heterocyclic Aryl Schiff base synthesis and Antimicrobial studies	Journal of Chemistry and Chemical Sciences	.(Vol 6(10), Oct 2016, 919-925)	

10	Novel Pyrazolines derived from piperazine chalcones synthesis antimicrobial studies.	International Journal of Innovative Research in Science, Engineering and Technology.	Vol5(12), Dec 2016 21383-387)	
11	Novel Pyrazolines derived from piperidine Chalcones synthesis antimicrobial studies	Indo American Journal of Phramaceutical Research	. Vol7(1), Jan 2017 7348-7352)	
12	Synthesis, Characterization of 2-Substituted Benzamidazoles via Green Catalyst	International Journal of Advance and Applied Research	Vol.4 Issue 44 (pp115-119)	
13	A Comprehensive Review of Hydrogel Materials for Heavy Metal ion Adsorption from Waste water: Synthesis, Characterization and Applications	International Journal of Science, Technology and Management	Vol-12 Issue-10 (pp 1-15)	
14	Microstructural evolution in DTAB/ KBr Micellar systems induced by nonanol : A rheological perspective.	Journal of Molecular Liquids [Elsevier]	427(2025)127438 March 2025	5.2
15	Optimizing Rheology in Nano Chitin PVA PEG Hydrogels for biomedical applications	Taylor and Francis Polymer Technology and Materials	1080/25740881 Vol 64 Issues 7 Dec 2024	3.0
16	Therapeutic Potential of Imidazothiadiazole derivatives.	African Journal of Biological Sciences	2663-2187	0.9
17	Synthesis and antimicrobial evaluation of fluoro calcone based 1 5 benzodiazepines: a green chemistry approach using microwave tehniques.	Results in Chemistry [Elsevier]	16(2025) 102516 July 2025	4.2

#### LIST OF PATENTS :

Sr. No.	Title	National / International	Patent No.
1	Auf Tamsulosin basierende Derivat formu lierung	International (German)	Patent No-IPC A6IK 31/18

2	Device for Synthesis of Chiral Pharmaceutical Intermediates	Indian	Design Patent No 393870-001
3	Apparatus for Extraction of Phytochemicals	Indian Design Patent	43289-001 dated 14 October 2024
4	Laboratory equipment for sensor based chemical reaction monitoring device	UK Design Patent	6418876 dated 22 January 2025.
5	Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> PMA- Cu Nanoparticles A Green Catalyst for Triazole Synthesis	Indian Patent	20244101514 57 dated 12 July 2024
6	Assessing the Efficacy of TiO <sub>2</sub> Nanoparticles against Bacterial Strains.	Indian Patent	20254107366 0 dated 22/08/2025.

#### LIST OF BOOKS PUBLISHED :

Sr No	Title of Book	Level of Publisher	ISBN No.	Name of Publisher
1	An introduction to Crystal Chemistry	National	978-93-94570-46-7	Krupa Drishti Publications
2	Fundamentals of Organic Chemistry	National	973-93-90734-40-5	World Lab Publications
3	Chemical Lab Safety Handbook November 2024	Online	ISBN 979-8346404040	Blacktether Publishers

#### LIST OF STUDENTS PURSUING PHD:

Sr No	Name of Student	Topic	Date of Registration
1	Mr Bhujangrao Abhare	Synthesis and Microstructural Studies of Conductive Hydrogels for Bioelectric Applications.	04/ 05/ 2022

2	Mr Prafful Ramteke	Synthesis and Microstructural Studies of Stimuli Responsive Hydrogels for Biomedical Applications	07/08/2023
3	Mr Mayur Ramteke	Synthesis and Designing of Adsorbing Hydrogels for Heavy Metal Ion Adsorption.	07/08/2023
4	Miss Harsha Kharase	Investigating Biomedical Applications through Synthesis and Characterization of Stimuli-Responsive Hydrogels	07/08/2025

**LIST OF PAPERS PRESENTED IN PROCEEDINGS :**

Sr. No	Name of the Conference/Seminar/ Workshop etc	Place and Name of the sponsoring Agency	Date	Paper Presented
1	ICCM-2011 Chemistry For Mankind: Innovative Ideas In Life Sciences	INTERNATIONAL RTMNU , Nagpur	09 /02/2011 TO 11/02/2011	ZOC-Catalyzed efficient synthesis of 1-5-benzodiazepines under mild conditions.
2	National Conference On Advanced Tools In Chemical Analysis	NATIONAL Deogiri College, Aurangabad	26/08/2012 TO 28/08/2012	Synthetic aspects for some novel pyrazolines and their evaluation as antimicrobial agent
3	Iccb-2014 International Conference On Chemical Biology.	INTERNATIONAL CSIR-IICT , Hyderabad	6/02/2013 TO 8/02/2013	Synthesis and anti oxidant potential of novel 2,3-dihydro-2-phenyl-4H-1-benzopyran-4-ones
4	International Conference On Chemical Biology, Disease Mechanism And Therapeutics (ICCB)	INTERNATIONAL CSIR-Indian Institute Of Chemical Technology, Hyderabad	6to-8 Feb2014	Exploring Pharmacokinetics of Pipazine, Piperidine moiety.

5	Modern Approaches Of Spectroscopic Techniques In Chemical, Pharmaceutical And Life Sciences (Mastcpl-14)	NATIONAL Yeshwant Mahavidyalaya, Nanded	16and 17 Jan 2015	Addition of some Novel 3 hydroxy 2 phenyl chromen-4ones(3 Hydroxy-flavones) to the class of Anti-oxidants.
6	Recent Advances In Chemical Sciences. (NSRACS-2015)	NATIONAL Janta Mahavidyalaya, Chandrapur	16 feb 2015	Exploring pharmacological significance of Piperazine scaffold
7	National Conference On Newest Developments In Chemical Sciences For Civilized Society	NATIONAL Dyanopasak College Of Arts Comm,And Science, Parbhani	December 09 to10, 2016	Synthesis of some Novel Flavones and their antimicrobial activity.
8	International Conference On Innovations In Science Technology For Sustainable Development	INTERNATIONAL Anand Niketan College Of Science Arts And Commerce, Warora	March 14 and 15 2022	Hydrogels, promising adsorbent for heavy metal ions for waste water treatment.
9	International Conference On Basic Sciences: Global Challenges And Solutions For Sustainable Development	INTERNATIONAL Chintamani College Of Science Pombhurna	13- 14 October 2023	Advances and Progress in heavy metal ion absorbing hydrogels and its applications : A review.
10	International Conference On Innovations In Science For Sustainable Development (Hybrid Mode)	INTERNATIONAL	19-20 March 2024	Recent advances of Stimuli Responsive Hydrogels in Drug Delivery system.
11	National Conference On Converging Perspectives : Science, Humanities And Sustainability.	NATIONAL	21-22 February 2024	Stimuli Responsive Polysaccharide based Smart Hydrogel and their emerging Applications

12	National Conference On Frontiers In Science And Technology.	NATIONAL Mahatma Gandhi College of Science, Gadchandur, DistChandrapur	5October 2024	Advances and Progress in self healing hydrogels and its application in Regenerative Medicines.
13	National Conference on “Empowering the Future Through Chemistry”	NATIONAL Yeshwant Mahavidyalaya Nanded MS	04th October, 2025	“Hydrogels as Drug Delivery Systems: A review of current characterization and evaluation techniques”
14	International Conference on "Innovations in Physical, Chemical and Biological Sciences for Sustainable Development	INTERNATIONAL Guru Nanak College, Ballarpur, Dist: Chandrapur (MH)	2 <sup>nd</sup> Feb to 3 <sup>rd</sup> February, 2026	Emerging Design Strategies of Conducting Polymers: A Review.

**WORKSHOPS, SYMPOSIUM, STP & FDP :**

Sr. No	Name	Level	Place	Period
1	Workshop-Science and Tech. Teaching in 21 <sup>st</sup> Century	State	Government B Ed College , Aurangabad	20/03/2007 to 24/03/2007
2	Workshop-Engineering Chemistry Syallabus	Univeristy	RCERT ,Chandrapur	16/12/2011
3	Syallabus- Chemistry BSc 5 sem	University	Janta college chandrapur	16/08/2014
4	CBCS syllabus in all Subjects of Science Faculty	University	Shri Dnyanesh Mahavidyalaya, Nawargaon Dist Chandrapur.	16 April 2017
5	Recent Trends in Chemistry	National	Yeshwant Chavhan College of Arts, Comm and Sci, Sillod Dist, Aurangabad.	6 February 2017

6	Scope and Relevance of CBCS for UG and PG in Chemistry	University	Janata Mahavidyalaya Chandrapur	11 March 2017
7	SUMMER SCHOOL	National	UGC HRDC Maulana Azad National Urdu University, Hyderabad, Telangana State.	24 <sup>th</sup> MAY 2017 to 13 <sup>th</sup> JUNE 2017
8	Refresher Course in Chemistry	National	UGC HRDC, University of Mumbai, Maharashtra.	12 Dec to 24 Dec 2022
91	Refresher Course in Chemistry	National	UGC HRDC, DAVV INDORE	11 Jan 2023 to 24 Jan 2023
10	FDP on Nurturing Future Leadership Program	National	MMTTP , IIM Nagpur, Maharashtra	15 <sup>th</sup> July to 19 <sup>th</sup> July 2024
11	Capacity Building Program on Cybersecurity	National	Teaching Learning Center, IIT Madras Pravartak	5 <sup>th</sup> May to 9 <sup>th</sup> May 2025
12	STP on Indian Knowledge System	National	UGC-MMTTC, Central University Kerala.	18 <sup>th</sup> June 2025 to 24 <sup>th</sup> June 2025

### INVITED GUEST LECTURES AT NATIONAL/ STATE LEVEL CONFERENCES

Sr No	Topic	Seminar / Conference	Level	Year
1	Environmental Awareness Program	Seminar by TIPSOH ,Hosur Tamil Nadu.	State level	2018
2	Gender Sensitization "GARIMA" Workshop	Swastika National School, Mangalore Karnataka	State Level	2019
3	Future Training for Youth Empowerment by JCI PUTTUR for College	Seminar by JCI PUTTUR Mangalore Karnataka	State Level	2020

4	Chairman for Jasmine Jaycees Academy for Smart Initiative for Empowerment	02 days Webinar by JCI India	North Region	2020
5	Skill Development Training Program on Networking	Swastika National School Mangalore Karnataka.	State Level	2020
6	Bridge the Gap (Theory and Real Life Chemistry )	National Level Induction Program for Undergraduate students By The Zamorins' Guruvayurappan College, Kozhikode (Kerala)	National level	2020
7	"Focus on Future" Pursuit and Parishkriti 2021	National Level Technical and Management Event Shri Sant Gajanan Maharaj College of Engineering ,Shegaon Maharashtra	National Level	2021
8	Time and Priority Management	NCC Students Orientation Program Sardar Vallabhbhai Arts College Ahmedabad Gujarat	State Level	2021
9	Rise and Shine ( Chemistry for Better Future)	One day National E webinar on Advances in Chemical Sciences for better Future	National Level	2022
10	Training Program on Soft SKILLS- Topic Problem Solving Attitude	Training and Placement Cell Gondwana University, Gadchiroli.	University Level	2022
11	Inclusive Leadership : Thriving in a diverse new world	Webinar by NGO JCI Dhaka East and JCI Dhaka South Bangladesh	International Level	2022

12	Chemistry for Well Being	Seminar Organized by Horizon School of Physiotherapy, Nanded	University Level	2023
13	Its Me : Soft Skills and Organizational Work Culture	Teachers Training Workshop organized at Jind Haryana	State Level	2023
14	Youth Empowerment Training ,	National Conference for Class 9 <sup>th</sup> to 12 <sup>th</sup> Students Kochi Kerala.	National Level	2024
15	Career Guidance @ Dyanganga	District Interact Conference by Rotary.	District Level	2025
16	Youth Empowerment Training ,	National Conference for Class 9 <sup>th</sup> to 12 <sup>th</sup> Students Yelagiri Tamil Nadu.	National Level	2025

#### **AWARDS AND RECOGNITIONS :**

- Adarsha Shikshika Puraskar by Maharastra Rajya Savitribai Phule Samiti.
- Nation Builder Teachers Award by Rotary Club of Chandrapur.
- Samaj Ratna Puraskar from Maharashtra Rajya Kumbhar MahaSangh
- Recognition by SP and Collector for Organizing Road Safety Week.
- Felicitation by Hon'ble Minister Mr Sunil Tatkare for Best Employee at BIT.

#### **MEMBERSHIP :**

- Life Member ACTRA, India.[Fellowship No.LM/34/2013]
- Member Alumni Association, SRTMU, Nanded.
- Member JCI India NGO ( Id 1257910)
- Member Rotary

#### **ENRICHMENT OF CAMPUS LIFE :**

- Coordinator IHLR & SS (2024 onwards)
- Program Officer NSS (2024 onwards)
- Head Women Education Cell (2015-2023)
- Administrative Responsibilities' Accomplished: 2F and 12 B UGC Recognition and Permanent Affiliation, Gondwana University as Committee head.
- Member, College NAAC Committee, Magazine Committee, Agro Forum and Student Grievance Cell, Women Grievance Cell.
- Coordinator. Indradhanushya-University Level Cultural Screening Event. [13-17 Oct-2014]
- Coordinator State Level Youth Fest, AURA 2013,
- Coordinator Vidarbha Level Youth Fest, AURA 2012, 2011.
- Coordinator Inter Collegiate Level Youth Fest, AURA 2010.
- Coordinator ARC, Committee, June 2012

Dr. Rajashree A. Markandewar  
Assistant Professor  
Department of Chemistry