

Rayat Shikshan Sanstha's

Radhabai Kale Mahila Mahavidyalaya, Ahmednagar

Affiliated to Savitribai Phule Pune University, Pune (PU/AN/ASC/034)

7.3.1. Institutional Distinctiveness

Developing Scientific Temperament among Students

The 20th century has witnessed an explosion of scientific knowledge. This knowledge has significantly contributed to the advancement of mankind, while also posing significant challenges. Our society is currently grappling with implementing and embracing the changes brought about by scientific knowledge. We find that there is an urgent need to transform our dogmatic and traditional society into a scientific one that respects our proud, rich, and varied heritage. The institute has gained momentum in the last 7 years, achieving both horizontal and vertical growth in the faculty of science in the following domains, with the aim of strengthening the scientific culture.

Sr. No.	Initiative/ Activity
1.	List of Patents granted/ published by the faculties
2.	Research Publications
3.	Major and Minor Research Projects
4.	List of Ph. D. Students of Research Centre
5.	Avishkar Competition
6.	Rayat Inspire Competition
7.	Chem Fest
8.	CHEMIADS Exam
9.	Project Based Learning
10.	Madhava Mathematics Competition Examination
11.	Rankers of Madhava Mathematics Competition
12.	Number of students contributed in college Magzine 'Mai'



1. List of Patents granted/ published by the faculties

The Department of Chemistry of our institute has made major contributions to the world of chemistry and established itself as a centre for creative research. Numerous publications published in prestigious journals have earned our faculty members international recognition and citations. We have research experience in many different fields, such as organic synthesis, materials science, computational chemistry, green chemistry

Patents Published: 12 (Indian Patent Office, New Delhi)
Patents Granted: 06 (Indian Patent Office, New Delhi)

Sr. No.	Inventor/ Applicant Name	Title of the Patent	Patent Application No.	Date of Filing Patent	Patent Published Date	Date of Patent Granted	Granted Patent Number
1	Rayat Shikshan Sanstha's Radhabai Kale Mahila Mahavidyalaya (Dr. B. K. Karale, Dr. H. N. Akolkar, Ms. N. R. Darekar)	Pyrazolyl compounds as Anti- malarial Agents	2020210197 16	09-05- 2020	12-11- 2021	06-11- 2023	466308
2	Dr. M. H. Shaikh	1,2,3- Triazolyl Thiazolidine dione Derivatives As Therapeutic Agents	2021210519 12	12-11- 2021	03-06- 2022	29-09- 2023	455735
3	Rayat Shikshan Sanstha's Radhabai Kale Mahila Mahavidyalaya (Dr. S. R. Thopate)	Process for synthesis of 6-substituted-α, β-unsaturated δ-Lactone	2022210463 47	15-08- 2022	09-09- 2022	02-11- 2023	465402
4	Dr. Ms. R. S. Endait	Green nanotechnol ogy-driven drug delivery assemblies	2022110486 57	26-08- 2022	02-09- 2022	-	-



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5	Rayat Shikshan Sanstha's Radhabai Kale Mahila Mahavidyalaya (Dr. S. R. Thopat, Dr. Ms. R. S. Endait)	Substituted Imidazole compounds as anti- bacterial agent	2022210498 74	01-09- 2022	16-09- 2022	28-07- 2023	441202
6	Dr. Laxmi Ganesh Kathawate	Rare-Earth Doped Material Platforms for Quantum Nanophoton ics Process	2022210565	01-10- 2022	14-10- 2022	-	-
7	Dr. M. H. Shaikh, Ms. N. R. Darekar	Substituted 1,2,3 Triazole Compounds As Antioxidant Agent	2022210617 19	29-10- 2022	11-11- 2022	09-10- 2023	457709
8	Dr. M. H. Shaikh, Ms. N. R. Darekar	Substituted Benzofuran Compounds As Antibacteria l Agent	2023210280 67	17-04- 2023	02-06- 2023	24-01- 2024	503070
9	Dr. M. H. Shaikh	Substituted 1, 2, 3 Triazole Compounds As Antitubercul ar Agent	2023210215 91	24-03- 2023	12-05- 2023	-	-
10	Dr. Ms. R. N. Shelke	Substituted Oxazino- Quionoline compounds as anti- cancer agents	2023210217 80	26-03- 2023	27-09- 2024	-	-
11	Dr. Ms. R. N. Shelke	Substituted pyrrolidine compounds as anti- cancer agent	2023210292 21	21-04- 2023	25/10/202 4	-	-
12	Dr. S. R. Thopate	Substituted Quinoline Compounds as Anticancer Agents	2023210329 04	08-05- 2023	-	-	-





2. Research Publications

Research Paper: 89

Sr. No.	Name of Author	Title of Research Paper	Name of the Journal	Year of Publication	ISSN No.
1.	Dr. S. R. Thopate	Design, synthesis, and biological evaluation of novel quinoline derivatives as small molecule mutant EGFR inhibitors targeting resistance in NSCLC: In vitro screening and ADME predictions	European Journal of Medicinal Chemistry	2023	0223-5234.
2.	Dr. S. R. Thopate	Molecular Docking Studies and Application of 6-(1- Arylmethanamino)-2-Phenyl-4H- Chromen-4-Ones as Potent Antibacterial Agents	Polycyclic Aromatic Compounds	2023	1563-5333
3.	Dr. M. H. Shaikh	Click chemistry inspired syntheses of new amide linked 1,2,3-triazoles from naphthols: biological evaluation and in silico computational study	Research on Chemical Intermediates	2023	1568-5675
4.	Dr. M. H. Shaikh	Curcumin-based bioactive heterocycles derived via multicomponent reactions	Archiv der Pharmazie	2023	0365-6233 (print); 1521-4184 (web)
5.	Dr. M. H. Shaikh	New 1,2,3-Triazole Tethered Chalcone Derivatives: Synthesis, Bioevaluation and Computational Study	Polycyclic Aromatic Compounds	2023	1040-6638 (Print); 1563-5333 (Web)
6.	Dr. M. H. Shaikh	Antibacterial Activity of Novel 1- Cyclopropyl-6,7- Difluoro-8-Methoxy-4-Oxo-1,4- Dihydroquinoline-3- Carbohydrazide Derivatives	Polycyclic Aromatic Compounds	2023	1040-6638 (Print); 1563-5333 (Web)
7.	Dr. Ms. R. S. Endait	Synthesis And Antibacterial Screening Of Imidazole Containing Substituted Flavones	Journal of the Maharaja Sayajirao University of Baroda	2023	0025-0422
8.	Ms. N. R. Darekar	New 1,2,3-Triazole Tethered Chalcone Derivatives: Synthesis, Bioevaluation and Computational Study	Polycyclic Aromatic Compounds	2023	1040-6638 (Print); 1563-5333 (Online)

9.	Dr. Ms. R. N. Shelke	Exploration of 2-(Substituted Phenyl)-thiazolidin-4-one as Anticancer Agents	Russian Journal of Bioorganic Chemistry	2023	1608-330X
10.	Dr. Ms. R. N. Shelke	Synthesis of (Z)-5-((Substituted-2- (substituted phenyl)-quinoline-3- yl)methylene) Thiazolidinone as Antimicrobial and Anticancer Agent	Russian Journal of Bioorganic Chemistry	2023	1608-330X
11.	Dr. Ms. R. N. Shelke	A facile Synthesis and characterization of some novel benzimidazole derivatives	Results in Chemistry	2023	2211-7156
12.	Dr. S. R. Thopate	Pyruvic acid-catalyzed one-pot three- component green synthesis of isoxazoles in aqueous medium: a comparable study of conventional heating versus ultra-sonication	Journal of Chemical Sciences	2022	0973-7103
13.	Dr. S. R. Thopate	Biosynthesis of Palladium Nanoparticles from Moringa oleifera Leaf Extract Supported on Activated Bentonite Clay and Its Efficacy Towards Suzuki–Miyaura Coupling and Oxidation Reaction	BioNanoScience	2022	2191-1649
14.	Dr. S. R. Thopate	Ultrasound-Promoted Pyruvic Acid Catalyzed Green Synthesis of Biologically Relevant Bis(Indolyl)Methanes Scaffold under Aqueous Condition	Polycyclic Aromatic Compounds	2022	1563-5333
15.	Dr. S. R. Thopate	Water-Mediated Green Synthesis of Benzimidazoles Using Pyruvic Acid: A Comparable Study of Ultra- sonication versus Conventional Heating	Letters in Organic Chemistry	2022	1570-1786
16.	Dr. M. H. Shaikh	[DBU][OAc]-mediated synthesis and anthelmintic activity of triazole- tetrazole conjugates	Research on Chemical Intermediates	2022	1568-5675
17.	Dr. M. H. Shaikh	Investigation of the Anti- inflammatory potential of Mono- carbonyl Analogues of Curcumin	Analytical Chemistry Letters	2022	2229-7928
18.	Dr. M. H. Shaikh	Design, Synthesis and Bioevaluation of Highly Functionalized 1, 2, 3- Triazole-Guanidine Conjugates as Anti-Inflammatory and Antioxidant Agents	Polycyclic Aromatic Compounds	2022	1563-5333
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Synthesis And Antibacterial Screening of Imidazole Anchored Heterocyclic	19.	Dr. M. H. Shaikh	Synthesis, Biological Activity, and Computational Study of 1-[5-(4- Methylthiazol-5-yl)-2-phenyl-1,3,4- oxadiazol-3(2H)-yl]ethanone Derivatives	Russian Journal of General Chemistry	2022	1608-3350
21. Dr. M. H. Shaikh Base Derivatives, as Antioxidant and Antimitotic Agent: Synthesis and in Silico ADME Studies 2022 1563-5333	20.	Dr. M. H. Shaikh	benzimidazole derivatives under ultrasonic irradiation using ZnFe2O4	Journal of Moldova General, Industrial and Ecological	2022	(PRINT) / 2345-1688
22. Dr. Ms. R. S. Endait Triazole Derivatives And Their Biological Potential: A Review Advance and Applied Research 2022 2347 -7075	21.	Dr. M. H. Shaikh	Base Derivatives, as Antioxidant and Antimitotic Agent: Synthesis and in	Aromatic	2022	1563-5333
23. Dr. Ms. R. S. Endait A Green Synthesis of Schiff's Bases With Multifluorinated Core And Their Antifungal Study Sciences, Engineering and Technology 2022 2229-7111 (P), 2454-5767 (E)	22.	Dr. Ms. R. S. Endait		Journal of Advance and Applied	2022	2347 -7075
24. Ms. N. R. Darekar Biological Evaluation of Thiazole Containing Chromones and Pyrazole Derivatives Synthesis, Biological Activity, and Computational Study of 1-[5-(4-Methylthiazol-5-yl)-2-phenyl-1,3,4-oxadiazol-3(2H)-yl]ethanone Derivatives 26. Ms. N. R. Darekar Synthesis and antibacterial screening of thiazolyl pyrazole containing chromones and aurones Synthesis And Antibacterial Screening of Imidazole Anchored Pyrazolines, Benzodiazepines And Biological Evaluation of Thiazole Heterocyclic Chemistry 2022 2456-4311 Russian Journal of Heterocyclic Chemistry 1070-3632 Heterocyclic Chemistry 2022 2230-9632	23.	Dr. Ms. R. S. Endait	With Multifluorinated Core And	Journal of Physical Sciences, Engineering and	2022	(P), 2454-
25. Ms. N. R. Darekar Computational Study of 1-[5-(4-Methylthiazol-5-yl)-2-phenyl-1,3,4-oxadiazol-3(2H)-yl]ethanone Derivatives Synthesis and antibacterial screening of thiazolyl pyrazole containing chromones and aurones Synthesis And Antibacterial Screening of Imidazole Anchored Pyrazolines, Benzodiazepines And Russian Journal of General Chemistry 2022 1070-3632 Heterocyclic letters 2022 2230-9632	24.	Ms. N. R. Darekar	Biological Evaluation of Thiazole Containing Chromones and Pyrazole	Heterocyclic	2022	2456-4311
26. Ms. N. R. Darekar of thiazolyl pyrazole containing chromones and aurones letters 2022 2230-9632 Synthesis And Antibacterial Screening of Imidazole Anchored Pyrazolines, Benzodiazepines And letters 2022 2230-9632	25.	Ms. N. R. Darekar	Computational Study of 1-[5-(4-Methylthiazol-5-yl)-2-phenyl-1,3,4-oxadiazol-3(2H)-yl]ethanone	of General	2022	1070-3632
27. Ms. N. R. Darekar Screening of Imidazole Anchored Pyrazolines, Benzodiazepines And letters 2022 2230-9632	26.	Ms. N. R. Darekar	of thiazolyl pyrazole containing		2022	2230-9632
	27.	Ms. N. R. Darekar	Screening of Imidazole Anchored Pyrazolines, Benzodiazepines And	1.5	2022	2230-9632

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28.	Dr. Ms. R. N. Shelke	Development of a new chromogenic spray reagent for the detection and identification of synthetic pesticide carbaryl in biological material by high-performance thin-layer chromatography	JPC - Journal of Planar Chromatography - Modern TLC	2022	0933-4173
29.	Dr. H. N. Akolkar	Design, synthesis and characterization of novel fluorinated styryl chromones	Indian Journal of Chemistry	2022	2583-1321
30.	Dr. B. K. Karale	Design, synthesis and characterization of novel fluorinated styryl chromones	Indian Journal of Chemistry	2022	2583-1321
31.	Dr. B. K. Karale	Synthesis, Characterization and Biological Evaluation of Thiazole Containing Chromones and Pyrazole Derivatives	Indian Journal of Heterocyclic Chemistry	2022	2456-4311
32.	Dr. M. H. Shaikh	Synthesis of 3-(trifluoromethyl)-1- (perfluorophenyl) -1H-pyrazol-5(4H)- one derivatives via Knoevenagel condensation and their biological evaluation	Journal of the Chinese Chemical Society	2021	2192-6549
33.	Dr. M. H. Shaikh	[DBUH][OAc]-Catalyzed Domino Synthesis of Novel Benzimidazole Incorporated 3,5-Bis (Arylidene)-4- Piperidones as Potential Antitubercular Agents	Polycyclic Aromatic Compounds	2021	1563-5333
34.	Dr. M. H. Shaikh	Synthesis and Biological Evaluation of 2-(4,5,6,7- Tetrahydrobenzo[c]Isoxazol-3-yl)- 4H-Chromen-4-Ones	Polycyclic Aromatic Compounds	2021	1563-5333
35.	Dr. M. H. Shaikh	[Et3NH][HSO4]-Catalyzed One-Pot Solvent Free Syntheses of Functionalized [1,6]-Naphthyridines and Biological Evaluation	Polycyclic Aromatic Compounds	2021	1563-5333
36.	Dr. M. H. Shaikh	Synthesis, Characterization and antimicrobial evaluation of substituted N2-((1R,4R)-4-aminocyclohexyl)-N6-(Phenyl)-9-cyclopentyl-9H-purin-2,6-diamine derivatives	Journal of Advanced Scientific Research	2021	0976-9595
37.	Dr. Ms. R. S. Endait	Synthesis and Biological Evaluation of Indolyl Bis-chalcones as Anti-Breast Cancer and Antioxidant Agents	Croatica Chemica Acta	2021	1334-417X

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38.	Ms. N. R. Darekar	Synthesis of 3-(trifluoromethyl)-1- (perfluorophenyl) -1H-pyrazol-5(4H)- one derivatives via Knoevenagel condensation and their biological evaluation	Journal of the Chinese Chemical Society	2021	2192-6549
39.	Ms. N. R. Darekar	Synthesis and Biological Evaluation of 2-(4,5,6,7- Tetrahydrobenzo[c]Isoxazol-3-yl)- 4H-Chromen-4-Ones	Polycyclic Aromatic Compounds	2021	1563-5333
40.	Dr. H. N. Akolkar	Synthesis of 3-(trifluoromethyl)-1- (perfluorophenyl) -1H-pyrazol-5(4H)- one derivatives via Knoevenagel condensation and their biological evaluation	Journal of the Chinese Chemical Society	2021	2192-6549
41.	Dr. H. N. Akolkar	Synthesis and Biological Screening of Some New 5, 7-dihydro-4H-thieno [2, 3-c] pyran-3-yl containing 1, 2, 4-Triazoles, 1, 3, 4-Oxadiazoles, and 1, 3-Thiazoles	Indian Journal of Heterocyclic Chemistry	2021	2456-4311
42.	Dr. B. K. Karale	Biogenic synthesis of ZnO nanoparticles from Parthenium histerophorus extract and its catalytic activity for building bioactive polyhydroquinolines	Research on Chemical Intermediates	2021	1568-5675
43.	Dr. B. K. Karale	'In water' exploration of Alpinia zerumbet-fabricated CuO NPs in the presence of NaPTS at room temperature: green synthesis of 1,8- dioxooctahydroxanthene derivatives	Research on Chemical Intermediates	2021	1568-5675
44.	Dr. B. K. Karale	Synthesis and Biological Screening of Some New 5, 7-dihydro-4H-thieno [2, 3-c] pyran-3-yl containing 1, 2, 4- Triazoles, 1, 3, 4-Oxadiazoles, and 1, 3-Thiazoles	Indian Journal of Heterocyclic Chemistry	2021	2456-4311
45.	Dr. B. K. Karale	Synthesis of 3-(trifluoromethyl)-1- (perfluorophenyl) -1H-pyrazol-5(4H)- one derivatives via Knoevenagel condensation and their biological evaluation	Journal of the Chinese Chemical Society	2021	2192-6549
46.	Dr. M. H. Shaikh	Nanostructured N doped TiO ₂ efficient stable catalyst for Kabachnik-Fields reaction under microwave irradiation	RSC Advances	2020	2046-2069
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47.	Dr. M. H. Shaikh	Design, Synthesis and Biological Evaluation of Novel Furan & Thiophene Containing Pyrazolyl Pyrazolines as Antimalarial Agents	Polycyclic Aromatic Compounds	2020	1563-5333
48.	Dr. M. H. Shaikh	Propargylated monocarbonyl curcumin analogues: synthesis, bioevaluation and molecular docking study	Medicinal Chemistry Research	2020	1054-2523
49.	Dr. M. H. Shaikh	New N-phenylacetamide-linked 1,2,3- triazole-tethered coumarin conjugates: Synthesis, bioevaluation, and molecular docking study	Archiv der Pharmazie	2020	1521-4184
50.	Dr. M. H. Shaikh	Synthesis, evaluation and molecular docking of 1, 2, 3-triazolyl chalcones as potential antifungal and antioxidant agents	Chemistry & Biology Interface	2020	2249-4820
51.	Dr. M. H. Shaikh	Tetrazoloquinoline-1,2,3-Triazole Derivatives as Antimicrobial Agents: Synthesis, Biological Evaluation and Molecular Docking Study	Polycyclic Aromatic Compounds	2020	1563-5333
52.	Dr. M. H. Shaikh	Amide-Linked Monocarbonyl Curcumin Analogues: Efficient Synthesis, Antitubercular Activity and Molecular Docking Study	Polycyclic Aromatic Compounds	2020	1563-5333
53.	Ms. N. R. Darekar	Design, Synthesis and Biological Evaluation of Novel Furan & Thiophene Containing Pyrazolyl Pyrazolines as Antimalarial Agents	Polycyclic Aromatic Compounds	2020	1563-5333
54.	Ms. N. R. Darekar	Microwave Assisted Synthesis and Antibacterial Activity of New 1,3,4- Thiadiazoles and 1,2,4-Triazoles Derived from 2-{2-[2-(4- Fluorophenyl)-4-methylthiazol-5-yl]- 1H-benzo[d]imidazol-1- yl}acetohydrazide	Russian Journal of General Chemistry	2020	1608-3350
55.	Dr. H. N. Akolkar	Nanostructured N doped TiO ₂ efficient stable catalyst for Kabachnik-Fields reaction under microwave irradiation	RSC Advances	2020	2046-2069



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56.	Dr. H. N. Akolkar	Synthesis and characterization of novel 2-(1-benzyl-3-[4-fluorophenyl]-1H-pyrazol-4-yl)-7-fluoro-4H-chromen-4-one derivatives	Journal of Heterocyclic Chemistry	2020	0022-152X
57.	Dr. H. N. Akolkar	Design, Synthesis and Biological Evaluation of Novel Furan & Thiophene Containing Pyrazolyl Pyrazolines as Antimalarial Agents	Polycyclic Aromatic Compounds	2020	1563-5333
58.	Dr. H. N. Akolkar	Microwave Assisted Synthesis and Antibacterial Activity of New 1,3,4-Thiadiazoles and 1,2,4-Triazoles Derived from 2-{2-[2-(4-Fluorophenyl)-4-methylthiazol-5-yl]-1H-benzo[d]imidazol-1-yl}acetohydrazide	Russian Journal of General Chemistry	2020	1608-3350
59.	Dr. H. N. Akolkar	Synthesis of New Thiazole Anchored N'-Benzylidene Carbohydrazide and 1,3,4-Oxadiazole Derivatives by Conventional and Microwave Irradiation Methods	Indian journal of Heterocyclic chemistry	2020	2456-4311
60.	Dr. H. N. Akolkar	Microwave-assisted Synthesis, Characterization, and Antibacterial Screening of Some Pyrazolone Derivatives	Indian journal of Heterocyclic chemistry	2020	2456-4311
61.	Dr. H. N. Akolkar	Synthesis and Antibacterial Screening of Some New Pyrazolylchromones and Pyrazolylcoumaran-3-ones	Indian Journal of Heterocyclic chemistry	2020	2456-4311
62.	Dr. B. K. Karale	Synthesis and Antibacterial Screening of Some New Pyrazolylchromones and Pyrazolylcoumaran-3-ones	Indian Journal of Heterocyclic Chemistry	2020	2456-4311
63.	Dr. B. K. Karale	Microwave-assisted Synthesis, Characterization, and Antibacterial Screening of Some Pyrazolone Derivatives	Indian journal of Heterocyclic chemistry	2020	2456-4311
64.	Dr. B. K. Karale	Synthesis of New Thiazole Anchored N'-Benzylidene Carbohydrazide and 1,3,4-Oxadiazole Derivatives by Conventional and Microwave Irradiation Methods	Indian journal of Heterocyclic chemistry	2020	2456-4311
65.	Dr. B. K. Karale	Microwave Assisted Synthesis and Antibacterial Activity of New 1,3,4- Thiadiazoles and 1,2,4-Triazoles Derived from 2-{2-[2-(4- Fluorophenyl)-4-methylthiazol-5-yl]-	Russian Journal of General Chemistry	2020	1608-3350

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		1H-benzo[d]imidazol-1-			
		yl}acetohydrazide			
66.	Dr. B. K. Karale	Design, Synthesis and Biological Evaluation of Novel Furan & Thiophene Containing Pyrazolyl Pyrazolines as Antimalarial Agents	Polycyclic Aromatic Compounds	2020	1563-5333
67.	Dr. B. K. Karale	Synthesis and characterization of novel 2-(1-benzyl-3-[4-fluorophenyl]-1H-pyrazol-4-yl)-7-fluoro-4H-chromen-4-one derivatives	Journal of Heterocyclic Chemistry	2020	0022-152X
68.	Dr. B. K. Karale	Nano structured N doped TiO ₂ efficient stable catalyst for Kabachnik-Fields reaction under microwave irradiation	RSC Advances	2020	2046-2069
69.	Dr. B. K. Karale	Synthesis, Characterization and antibacterial screening of fluorinated benzofuran containing heterocycles	Indian Journal of Chemistry	2019	0975-0983
70.	Dr. B. K. Karale	Synthesis, characterisation and antimicrobial screening of some new thiazolyl chromones and pyrazoles	Indian Journal of Chemistry	2019	0975-0983
71.	Dr. B. K. Karale	Synthesis and Antibacterial Screening of Novel Thiazolyl Pyrazole and Benzoxazole	Oriental Journal Of Chemistry	2019	0970-020 X
72.	Dr. B. K. Karale	Thiazoly-pyrazole derivatives as potential antimycobaterial agents	Bioorganic and Medicinal Chemistry Letters	2019	0960-894X
73.	Dr. B. K. Karale	Synthesis and Characterization of Novel 1-Methyl-3-(4-phenyl-4H- 1,2,4-triazol-3-yl)-1H-indazole Derivatives	Journal of Heterocyclic Chemistry	2019	2583-1321
74.	Dr. B. K. Karale	Microwave Assisted Synthesis and Antimicrobial Activity of Novel 1, 3, 4-Thiadiazoles and 1, 2, 4-Triazoles Derived from 2-(3-Fluorophenyl)-4- methylthiazole-5-carbohydrazide	Russian Journal of General Chemistry	2019	1608-3350
75.	Dr. B. K. Karale	Nanocrystalline Cu–ZnO as an Green Catalyst for One Pot Synthesis of 4,4'-((phenyl)methylene)bis(3- methyl-1-phenyl-1H-pyrazol-5-ol) Derivatives	Journal of Nanoscience and Nanotechnology	2019	1533-4899
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76.	Dr. B. K. Karale	Synthesis and characterization of nanostructured Cu-ZnO: An efficient catalyst for the preparation of(E)-3-styrylchromones	Arabian Journal of chemistry	2019	1878-5379
77.	Dr. H. N. Akolkar	Synthesis and characterization of nanostructured Cu-ZnO: An efficient catalyst for the preparation of(E)-3-styrylchromones	Arabian Journal of chemistry	2019	1878-5379
78.	Dr. H. N. Akolkar	Microwave Assisted Synthesis and Antimicrobial Activity of Novel 1, 3, 4-Thiadiazoles and 1, 2, 4-Triazoles Derived from 2-(3-Fluorophenyl)-4- methylthiazole-5-carbohydrazide	Russian Journal of General Chemistry	2019	1608-3350
79.	Dr. H. N. Akolkar	Conventional and Non-Conventional Synthesis of Novel (4E)-4-((3-(2-(4-fluorophenyl)- 4- methylthiazol-5-yl)-1-aryl-1H- pyrazol-4-yl) methy lene)-3-alkyl-1-aryl-1H- pyrazol-5(4H)-ones	Journal of Emerging Technologies and Innovative Research	2019	2349-5162
80.	Dr. H. N. Akolkar	Synthesis and characterization of some benzofuran anchored heterocycles	International Journal of Research and Analytical Reviews	2019	2348 –1269
81.	Dr. H. N. Akolkar	Synthesis and antibacterial screening of 1-(2-(2-chlorophenyl)-2-(4-(6-fluorobenzo[d]isoxazol-3-yl)piperidin-1-yl) containing 1,3,4-thiadiazole, 1,2,4-triazole and 1,3,4-oxadiazole derivatives	International research journal of pharmacy	2019	2230-8407
82.	Dr. H. N. Akolkar	Synthesis and Characterization of Novel 1-Methyl-3-(4-phenyl-4H- 1,2,4-triazol-3-yl)-1H-indazole Derivatives	Journal of Heterocyclic Chemistry	2019	2583-1321
83.	Dr. H. N. Akolkar	Thiazoly-pyrazole derivatives as potential antimycobaterial agents	Bioorganic and Medicinal Chemistry Letters	2019	0960-894X
84.	Dr. H. N. Akolkar	Synthesis ,Characterization and antibacterial screening of fluorinated benzofuran containing heterocycles	Indian Journal of Chemistry	2019	0975-0983
85.	Ms. N. R. Darekar	Microwave Assisted Synthesis and Antimicrobial Activity of Novel 1, 3, 4-Thiadiazoles and 1, 2, 4-Triazoles Derived from 2-(3-Fluorophenyl)-4-methylthiazole-5-carbohydrazide	Russian Journal of General Chemistry	2019	1608-3350

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86.	Dr. S. P. Kunde	Synthesis and characterization of nanostructured Cu-ZnO: An efficient catalyst for the preparation of(E)-3-styrylchromones	Arabian Journal of chemistry	2019	1878-5379
87.	Dr. B. K. Karale	Novel catalytic application of Ni@ZnO nanoparticles and ZnO nanoflakes in aqueous solution of NaPTS hydrotrope at room temperature via a green synthesis of 3,4-dihydropyrimidin-2(1H)-ones	Research on Chemical Intermediates	2018	1568-5675
88.	Dr. B. K. Karale	Synthesis and Characterization of Chlorinated Thiophene Based Flavones	International Journal of Chemical and Physical Sciences	2018	2319-6602
89.	Dr. Ms. R. S. Endait	Synthesis and Characterization of Chlorinated Thiophene Based Flavones	International Journal of Chemical and Physical Sciences	2018	2319-6602



3. Major and Minor Research Projects

Research Project: 02

Sr.	Name of the Principal Investigator	Title of Project	Funding Agency	Amount	Status
1	Dr. Ms. R. S. Endait	Synthesis, Characterization and Antimicrobial Evaluation of Substituted Pyrazole Derivatives	Seed Money By Institute (AY 21-22)	20,000/-	Complete
2	Dr. M. H. Shaikh	Synthesis, Molecular Docking Study of Novel Thiazolidinedione Derivatives Featuring 1,2,3-Triazole Ring: As Antifungal Agents Targeting Lanosterol-14α- Demethylase	Seed Money By Institute (AY 21-22)	20,000/-	Complete



4. List of Ph. D. Students of Research Centre

Sr. No	Academic Year	No. of Students	Name of Student
1			Sachin Prakash Kune
2			Santosh Tukaram Shinde
3		2	Hon Kiran Shridhar
4			Ramesh Ashok Kawale
5	2018-2023	9	Prashant Bhaskarrao Sutar
6			Ramakant Asaram Kardile
7			Kiran Dilip Badave
8			Sandip Bhanudas Kasar
9			Nalkar Archana Subhash

List of Ph. D. Awarded Students

Sr. No.	Name of the Student	Ph. D. Award
1	Sachin Prakash Kunde	28/09/2019
2	Santosh Tukaram Shinde	03/10/2019
3	Sandip Bhanudas Kasar	11/01/2023
4	Ramakant Asaram Kardile	11/01/2023



5. Avishkar Competition

Shri S.M. Krishna, the Governor of Maharashtra, has launched a novel inter-university research project competition called "AVISHKAR." This competition distinctive in its nature. Savitribai Phule Pune University has made a concerted effort to increase the participation of students from rural and urban areas who are interested in research.

Every year, the students of Rayat Shikshan Sanstha's various colleges participate in the "Rayat Avishkar" program, which is also conducted by our primary institution, Rayat Shikshan Sanstha, Satara. The activity is beneficial for the development of research skills, the exploration of new dimensions, and the examination of various areas of knowledge and unexplored areas of inquiry.

Sr. No	Academic Year	Date	No of
			beneficiaries
1	Avishkar Competition 2018-19	01/02/2019	12
2	Avishkar Competition 2019-20	08/02/2020	29
3	Avishkar Competition 2022-23	15/09/2022	69



6. Rayat Inspire Competition

The parent institute, Rayat Shikshan Sanstha, Satara, organizes the innovative Rayat Inspire program to motivate students. From 2015 to 2016, the campus organizes the Rayat Inspire program. High school and undergraduate students participate in this activity for 5-6 days.

Sr	Academic Year	Date	No of
No		,	beneficiaries
1	Rayat Inspire Competition 2018-19 (High School)	26 th to 30 th November 2018	30
2	Rayat Inspire Competition 2018-19 (Senior College)	26 th to 30 th November 2018	20
3	Rayat Vidnyan Parishad	29,30,31 Dec 2018	Students 14 Teacher 02
4	Rayat Inspire Competition 2019-20 (High School)	8 th to 23 December 2019	30
5	Rayat Inspire Competition 2019-20 (Senior College)SGM college Karad	18/12/2019	10
6	Rayat Inspire Competition 2019-20 (Senior College) YCM Satara	10/01/2020	08



7. Chem Fest

Chem Fest is a Chemistry festival at colleges which includes competitions like poster presentation, quiz, seminar competition etc. Students can engage with participate in hands on activities.

Sr No	Academic Year	Date	No of beneficiaries
1.	2018-19	04/02/2019	44
2.	2019-20	27/02/2020	63
3.	2020-21	26/02/2021	80
4.	2021-22	26/02/2022	50
5.	2022-23	28/02/2023	105



8. CHEMIADS Exam

The Chemistry Department of Savitribai Phule Pune University conducted the CHEMIAD examination. First-year B.Sc. Chemistry students registered in colleges affiliated with Savitribai Phule Pune University undertake the examination.

Academic Year	Date	No of
		beneficiaries
CHEMIDS Exam 2018-19	17/02/2019	58
CHEMIDS Exam 2019-20	23/02/2020	93
	CHEMIDS Exam 2018-19	CHEMIDS Exam 2018-19 17/02/2019



9. Project Based Learning

Project based learning helps student in understanding the fundamentals of science while also developing transferable skills such as problem solving and science communication.

A specific type of Project based learning is an investigative research project which is a student – led, open ended research investigation frequently supported by teachers and university and it promotes active learning to the application of knowledge in a relatable topic. Students learn to analyzed, evaluate and synthesized information.

Sr No	Academic Year	No of beneficiaries	
1	2018-19	08	
2	2019-20	05	
3	2021-22	09	



10. Madhava Mathematics Competition Examination

Madhava Mathematics Competition is a mathematics competition for undergraduate students. Madhava, an Indian mathematician from the 14th century, introduced mathematical concepts that are now a part of calculus, hence the competition's name.

Sr	Academic Year	Date	No of
No			beneficiaries
1	Madhava Mathematics Competition Examination 2018-19	06/01/2019	76
2	Madhava Mathematics Competition Examination 2019-20	12/01/2020	64
3	Madhava Mathematics Competition Examination 2022-23	29/01/2023	30

Rankers of Madhava Mathematics Competition

Sr	Academic Year	Name of Student	Rank	
No	· ·			
1	Madhava Mathematics Competition Examination 2018-19	Jadhav Swati Balasaheb	3 rd	
2	Madhava Mathematics Competition	Sase Shivani Vijay	1 st	
	Examination 2019-20	Bhosale Rutuja Suresh	2 nd	
		Padar Vaishnavi Vjaykumar	3 rd	



PRINCIPALI Kadhabai Kale ividinia Mahavidyalaya Ahmednagar

11. Number of students contributed in college Magzine 'Mai'

The college 'MAI' magazine article writing program encourages students to express their thoughts, ideas, and creativity while developing their writing, research, and critical thinking abilities. The main goals are to foster creativity and originality, improve critical thinking and analytical abilities, foster effective communication and writing skills, and provide students the chance to highlight their accomplishments and capabilities.

Through this program, students will expand their research and information literacy skills, as well as their writing, editing, and publishing talents. They will also improve their creativity, critical thinking, and problem-solving capabilities. The college aims to boost students' self-esteem in voicing their thoughts and opinions, cultivate a feeling of belonging and college identity, and encourage student involvement, engagement, and leadership.

Sr. No.	Department	2018-2019	2019-2020	2020-2021	2022-2023
1.	Marathi	44	35	45	16
2.	Hindi	25	21	11	17
3.	English	17	18	13	11
4.	Science	10	-	-	07
5.	Commerce	-	-	29	10
	Total	96	74	98	61



12. Gandhi Vichar Examination

The Gandhi Vichar Sanskar examination aims to instill in the young generation the foundational values of our human heritage, promoting harmony in the body, mind, and soul, as well as with all living beings. The objectives of the exam are to nurture the students with principles of non-violence and peace. The exam aims to foster the truth-based philosophy of Gandhiji's life and instill Gandhian ideas in the students. The idea behind the exam is to encourage the students to reflect on their understanding of Gandhi's ideals. The exam focuses on Gandhiji's life, work, values, and thoughts, and it is based on value-rich reading material that includes moral stories and historical anecdotes from his life and work.

Sr.no.	Academic year	Name of the activity	Date	Beneficiaries	Award/Rankers
1.	2022- 2023	Gandhi Vichar Sanskar Pariksha.2022	14/12/2022	66	Miss Jawale Gayatri Bhausaheb. (B.Com. III) Gold Medal with certificate stood first in Ahmednagar Dist.And Trophy was awarded to the college.
2.	2022- 2023	Online Examination on Gandhi Jivan Parichaya For Staff And Students	20/04/2023	145	-
3.	2022- 2023	Film on Gandhi	15/05/2023	31	-
4.	2022- 2023	Debate Competition - 'Gandhi Vicharanchi Ajachi Prasangikata'	19/05/2023	34	-

