



Pravara Rural Education Society's
Arts, Commerce and Science College, Satral
Tal. Rahuri, Dist. Ahmednagar- 413711
Affiliated to Savitribai Phule Pune University, Pune.

Self-Study Report: 2024 (3rd Cycle)



Criterion- 3
Research, Innovations and
Extension

Key Indicator: 3.2 - Innovation Ecosystem

Metric: 3.2.2 (QnM)

Number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years.

3.2.2: The Documentation asked in DVV for the following Workshops/Seminars/Conferences on RM and IPR are provided



Submitted to
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BENGALURU

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J. M. J. J.
I/C/O PRINCIPAL
Art, Commerce & Science College
Satral, Tal. Rahuri, Dist. Ahmednagar.



Submitted to
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BENGALURU

**An Expert Lecture on Intellectual
Property Rights (2022-23)**


Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's
ARTS, COMMERCE & SCIENCE COLLEGE, SATRAL
Department of Commerce

Date:- 08/12/2022

Student Notice

All the students of Commerce are hereby informed that the Department of Commerce organize an expert lecture on “**Intellectual Property Rights**” on 10th December, 2022 in Commerce Laboratory at 10.00 a. m. Attendance will be marked in the program.


HOD
H.O.D.
Department of Commerce
Arts, Commerce & Science College, Satral.


Principal
Arts, Commerce and Science College
At/Po. Satral, Tal. Rahuri,
Dist. Ahmednagar. 413711

ABOUT THE INSTITUTION

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society was founded by Late Padmashri Dr. Vitthalrao Vikhe Patil in 1964. The Education Society since its establishment has expanded its avenues to reach out to the students from the remote areas under the dynamic leadership of late Padma Bhushan Dr. Balasaheb Vikhe Patil. Presently, Hon'ble Shri. Radhakrishna Vikhe Patil, Chairman, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society, Pravaranagar has shouldered the responsibility of providing the best facilities for the all-round development of students from rural background. The college was established in 1998 and re-accredited with "B++" grade by NAAC in 2018. It has grown since its inception in the field of Higher Education. The college offers courses like B.A., B. Com., B.Sc., M.Sc.(Analytical Chemistry) and M. Com (Business Administration and Advance Marketing). The college maintains a perfect blend of quality education and excellence in sports and extra-curricular activities.

Resource Person

ADV. Shri Anil Gagare
Office Superintendent,
College of Home Science and BCS, Loni



Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society`s

ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL

Tal- Rahuri, Dist- Ahmednagar-413 711 Maharashtra.
NAAC Re-accredited B++ Grade

DEPARTMENT OF Commerce

ORGANIZES

An Expert Lecture on Intellectual Property
Rights

10 th December , 2022 . Time 10.00 am

ORGANIZING COMMITTEE

Prof. (Dr.) P. M. Dongre
Principal

Dr. D. N. Gholap
(Vice- Principal)

Dr. J. R. Singar
(Vice- Principal)

Dr. V. G. shinde
Convener

Mr. D.N. Ghane
Coordinator

ABOUT THE WORKSHOP

- ❑ An Expert Lecture aims to introduce students to the important aspects of Intellectual Property Rights
- ❑ The aims of an Expert Lecture are to motivate and guide the Students and faculty.
- ❑ the lecture will bring a positive transformation in the faculty member's attitude in their UG/PG Projects and research works and get them more focused as well as result oriented

DISCUSSION THEMES

The proposed themes that will be covered during an expert lecture are as follows:

- Various issue related to patent
- The lecture focus on different aspects of Intellectual Property rights(IPRS),Conversion of the research/Project works into patent and Hands on -Training on patent searchers for Innovations.

OBJECTIVES OF AN EXPERT LECTURE

- ❑ To stimulate the creation and growth of intellectual property by undertaking relevant measures.
- ❑ To catalyze commercialization of IP rights.
- ❑ Promote development of infrastructural facilities for registration of intellectual property by facelifting the improvement of legal ,institutional and administrative framework.

EXPECTED OUTCOME

The lecture on Intellectual Property Rights and Innovations covers various aspects of Intellectual Property Rights like Patents, Copyrights, Designs, Trademarks and Geographical Indications

Intellectual Property became the strong pillar of the modern society, which engulfs in its ambit the research and development of large multinational companies, budding entrepreneurs, literary and artistic works, designs, marks, images, names etc., emitting from human intelligence.

The lecture will be beneficial for the students, young researches and teachers to broaden the perspective towards the research. The lectures in the workshop will inculcate the importance of different research tools.

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)

Pravara Rural Education Society's

Arts, Commerce and Science College, Satral

Department of Commerce

A Report of An Expert Lecture on 'Intellectual Property Rights'

Date:- 10/12/2022

The Department of Commerce organized an expert lecture on 'Intellectual Property Rights' on 10th December, 2022 in Commerce Laboratory. For this program, Adv. Anil Gagare, Office Superintendent, Home Science, Loni, was the chief Guest. Mr. D. N Ghane, Vice-Principal and Head, Department of Commerce, introduced and welcomed the guest. He added that patent registration is very important when you find any innovation. The chief guest Adv. Shri Anil Gagare expressed his views on registration of Patents. He explained the process of patent registration, drafting of patent application in form No.1 and form No.2, Application for grant of Patent, complete specification, undertaking, declaration as to inventorship publication of patent application, examining of patent application, grant of application process, rules of application and fee of application. He practically presented the various forms and how they should be filled. Finally he cleared all the doubts and queries of staff and students. Vice-Principal of college, presided over the function. He expressed his views that student can apply for patent registration for their innovations. Dr. V.G. Shinde Asst. Prof. Dept. of Commerce expressed the vote of thanks. For this program 65 students and staff members were present.



A handwritten signature in blue ink, appearing to read "Shinde".

Mr. V. G. Shinde
(Coordinator)

A handwritten signature in blue ink, appearing to read "Dongre".

Principal
Arts, Commerce and Science College
AVPo. Satral, Tal. Rahuri,
Dist. Ahmednagar. 413711

Arts, Commerce and Science College Satral

Department of Commerce

Special Lecture on "Intellectual Property Rights"

Date-10/12/2022

Time- 10.00 am

Venue- Commerce Lab

Sr. No	Name of Student	Class	Sign
1)	Gokul Dattatray Jorvekar	F.Y B.COM	<u>Gorvekar</u>
2)	Wani Vaibhav Vikas	F.Y. B.COM	<u>Wani</u>
3)	Dhobe Ganesh Bhagwat	F.Y. B.COM	<u>Ganesh</u>
4)	sheikh mohinuddin Ansar	F.Y. B.COM	<u>Ansar</u>
5)	Ghuge Pratik Khandu	F.Y. B.COM	<u>Ghuge Prk</u>
6)	Londhe Vaibhav Dilip	S.Y. B.COM	<u>Londhe</u>
7)	Gogre Ashish Jalindar	S.Y. B.COM.	<u>Ashish</u>
8)	Shinde Bhushan Sanjay	S.Y B.COM	<u>Shinde B.S</u>
9)	shinde Akash Rajendra	M.COM. I.	<u>Akash</u>
10)	Jorvekar Gokul Dattatray	M.COM. I	<u>Gokul</u>
11)	Musmade Bhanu Sanjay	T.Y. B.COM	<u>Bhanu</u>
12)	Musmade Vaibhav Sambhoji	T.Y. B.COM	<u>V. S. Musmade</u>
13)	Uetthe Shivam Ganesh	F.Y B.COM	<u>Uetthe</u>
14)	Khemnar Akshay Bhaskar	m.com I	<u>Akshay</u>
15)	Antrre Pranav Raosaheb	S.T.B.COM	<u>Antrre P</u>
16)	Gogane Vaibhav Bhauasaheb	S.Y. B.COM	<u>Vaibhav</u>
17)	Bramhane Gaurav Ganesh	S.Y B.COM	<u>Gaurav</u>



[Signature]

H.O.D.
Department of Commerce
Arts, Commerce & Science College, Satral.

Arts, Commerce and Science College Satral

Department of Commerce

Special Lecture on "Intellectual Property Rights"

Date-10/12/2022

Time- 10.00 am

Venue- Commerce Lab

18	Anap Nilesh Balasaheb	M. Com - I	<u>Nilesh</u>
19	Gholap Rushikesh Rajendra	m. com - I	<u>Rushikesh</u>
20	Mohan Sanket Sarangdhar	M. Com - I	<u>Sanket</u>
21	Pable Dipak Shivaji	M. Com - I	<u>Dipak</u>
22	mohan Sanket Sarangdhar	m. com II	<u>Sanket</u>
23	patilghalmeedabhai sanjay	m. Com II	<u>Abhay</u>
24.	Harde mahesh Tabaji	M. Com II	<u>Harde</u>
25.	Wani Rushikesh Anil	M. Com - I	<u>Ruf</u>
26.	Pathan Human Jamil	S. Y. B. Com	<u>Pathan</u>
27.	Kate Tejas Mohiniraj	S. Y. B. Com	<u>Tejas</u>
28.	Tumbare Mayur Pandurang	S. Y. B. Com	<u>Mayur</u>
29.	Shaikh Ishaq Ibrahim	S. Y. B. Com	<u>Ishaq S</u>
30.	Tumbare Karun Suresh	S. Y. B. Com	<u>Karun</u>
31.	Dukre Shubham Vikas	T. Y. B. Com	<u>Shubham U.D</u>
32.	Londhe Dnyaneshwar G	T. Y. B. Com	<u>Dnyaneshwar</u>
33.	Harde Sujit Shantaram	T. Y. B. Com	<u>Sujit</u>
34.	Bhramne Darshan Sandip	T. Y. B. Com	<u>Darshan (B)</u>
35.	Kaotik Anap	F. Y. B. Com	<u>Kaotik</u>
36.	Pathan Sajid Rahimtullah	F. Y. B. Com	<u>Sajid</u>



H.O.D.

Department of Commerce
Arts, Commerce & Science College, Satral.

Arts, Commerce and Science College Satral

Department of Commerce

Special Lecture on "Intellectual Property Rights"

Date-10/12/2022

Time- 10.00 am

Venue- Commerce Lab

37	Patole Pratik Omkar	S.Y.B.com	<u>Patole P.</u>
38	Tatore Ashwin Satish	S.Y.B.com	<u>ASL</u>
39	Londhe Tejus Rajendra	S.Y.B.com	<u>Londhe</u>
40	Tumbare Karon Suresh	S.Y.B.com	<u>Blue</u>
41	Patil Numan Jamil	S.Y.B.com	<u>Patil</u>
42	Shaikh Ishaq Mehumud	S.Y.B.com	<u>Ishaq</u>
43	Antrac Pranav Raosahab	S.Y.B.com	<u>Antrac</u>
44	Gagare Vaibhav Bhawan	S.Y.B.com	<u>Vaibhav</u>
45	Parode Bhushan Karles	S.Y.B.com	<u>Parode</u>
46	Boothape Gaurav Ganesh	S.Y.B.com	<u>G</u>
47	Dighe Vaibhav Machhindra	T.Y.B.com	<u>Dighe</u>
48	Musmade Bharat Sanjay	T.Y.B.com	B.S Musmade
49	Musmade Vaibhav Sambhaji	T.Y.B.com	<u>Vaibhav</u>
50	Shinde Bhushan Sanjay	S.Y.B.com	<u>Shinde</u>
51	Gagare Ashish Jalinda	S.Y.B.com	<u>Ashif</u>
52	Wahi Rushikesh Dhil	M. Com I	<u>Wahi</u>
53	Gagare Ajinkya Jalinda	F.Y.B.com	<u>Ajinkya</u>
54	Gagare Kunal Kisan	F.Y.B.com	<u>Kunal</u>
55	Jadhav Jaydeep Shrawan	F.Y.B.com	<u>Jadhav</u>



[Signature]
H.O.D.

Department of Commerce
Arts, Commerce & Science College, Satral.

Arts, Commerce and Science College Satral

Department of Commerce

Special Lecture on "Intellectual Property Rights"

Date-10/12/2022

Time- 10.00 am

Venue- Commerce Lab

56	Shinde Poonam Sandip	S.Y.B.Com	Poonam.s.s
57	Pradhan Gauri Vijay	S.Y.B.Com	Pradhan
58	Antae Komal Shastri	S.Y.B.Com	K.S.A
59	More Priya Sandip	S.Y.B.Com	Priyam
60	Dighe Sakshi Appasaheb	S.Y.B.Com	Sakshi
61	Dakore Shubham Nikas	T.Y.B.Com	Shiy
62	Mohan Sanket S	B.Com I	Seid
63	Dighe Vaibhav M	M.Com I	Vaibhav
64	Ladhe Dineshwar Grahesh	T.Y.B.Com	Leidhy
65	Musmade Vaibhav Sambhaji	T.Y.B.Com	Musmade



H.O.D.

Department of Commerce
Arts, Commerce & Science College, Satral.

Anil Shahaji Gagare Date of Birth-15th December 1970.



anilgagare@gmail.com -9860188410

UID-546916168860 EID-LBH1655554

PAN-ALNPG9593N DL.No-MH17.2008009708

At/Pt-Loni Bk Tal-Rahata,Dist-Ahmednagar,(M.S.)

(Balasaheb Vikhe Patil Nagar) Pin-413736.

Degree/Exam	Board/University	Year of Passing	% Percentage
Secondary School Certificate	Pune Board	March -1986	59.28%
Higher Secondary Certificate	Pune Board	March -1989	57.83%
Bachelor of Science (Chemistry)	Pune University	April-1992	55.00%
Master of Science (Environmental Science)	Pune University	May-1995	58.15%Highlnd
Diploma in Lab our Law & Labour Welfare	Pune University	October-1998	56.00%High lnd
Bachlore of Law	Pune University	October-2004	50.00% lnd
Master of Business Admisnistration (HR)	Y.C.M.O.University, Nashik	Februvary-2011	56.91%
Master of Philoshy (Env.Sci)	Y.C.M.O.University, Nashik	May-2012	59.43%
MS-CIT	MSBTE-MKCL	December-2004	77%

Experience-

Worked as Chemist in Padmashri Dr.Vitthalrao Vikhe Patil S.S.K.Ltd,Pravaranagar

15/07/1992 to 30/09/1993.

Worked as Technical cum Markrtng Officer in Mahabal Enviro Engg,Thane at Pune branch

01/09/1996 to 30/04/1996.

Worked as Visiting Lecturer in P.V.P.College,Pravaranagar.(Dept of Env Science)

25/07/1996 to 30/04/1997.

Since 01/06/1997 working as Administrative Post in Women's College of Home Science, Loni

Geo tagged photos Workshop on "Intellectual Property Rights" [10thDec. 2022]



Adv. Anil Gagare guiding the students about IPR. Date. 10/12/2022



Adv. Anil Gagare guiding the students about IPR. Date. 10/12/2022



**An Expert Lecture on “Roadmap of
Research Activities” (2022-23)**

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's
Arts, Commerce and Science College, Satral
A/P Satral, Tal. Rahuri, Dist. Ahmednagar

Post Graduate Department of Chemistry

Date: 26th November- 2022

Notice

All the faculty members and students are informed that, the Department of Chemistry in collaboration with Research Committee, have organize a guest lecture on “**Roadmap of Research Activities**” on **28th November-2022** at 2.00pm in the seminar hall. Faculty members and students are requested to attend the lecture and take part in the discussion.


Head
Dept of Chemistry
Arts, Commerce & Science College
Department of Chemistry
Satral

ABOUT THE INSTITUTION

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society was founded by Late Padmashri Dr. Vitthalrao Vikhe Patil in 1964. The Education Society since its establishment has expanded its avenues to reach out to the students from the remote areas under the dynamic leadership of late Padma Bhushan Dr. Balasaheb Vikhe Patil. Presently, Hon'ble Shri. Radhakrishna Vikhe Patil, Chairman, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society, Pravaranagar has shouldered the responsibility of providing the best facilities for the all-round development of students from rural background. The college was established in 1998 and re-accredited with "B++" grade by NAAC in 2018. It has grown since its inception in the field of Higher Education. The college offers courses like B.A., B. Com., B.Sc., M.Sc.(Analytical Chemistry) and M. Com (Business Administration and Advance Marketing). The college maintains a perfect blend of quality education and excellence in sports and extra-curricular activities.

RESOURCE PERSON



Prof. (Dr.) P. M. Dongre

Prof & Head, Department of Biophysics, University of Mumbai.
Principal & I/c, Director Research, Loknete Dr. Balasaheb Vikhe Patil
(Padma Bhushan Awardee) Pravara Rural Education Society's
Pravaranagar Dist. Ahmednagar



**Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society`s**

ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL

Tal- Rahuri, Dist.- Ahmednagar-413 711 Maharashtra.
NAAC Re-accredited B++ Grade

DEPARTMENT OF CHEMISTRY AND RESEARCH COMMITTEE ORGANIZES

An Expert Lecture on

“Roadmap of Research Activities”

28th November, 2022 . Time-2.00pm to 4.30pm

ORGANIZING COMMITTEE

Dr. D. N. Gholap
(Vice- Principal)

Dr. J. R. Singar
(Vice- Principal)

Dr. V. A. Kadnor
Convener

Dr. A. S. Waghmare
Coordinator

ABOUT AN EXPERT LECTURE

- An Expert Lecture aims to introduce students to the important steps of research activities.
- The aims of an Expert Lecture are to motivate and guide the young researchers.
- It gives opportunity to young researchers to make familiar with respect to the research roadmap for continued exploration.

DISCUSSION THEMES

- Define Research Objectives
- Design Research Framework
- Data Collection and Data Analysis
- Research Paper writing
- Submission of manuscript to the Journal



OBJECTIVES OF AN EXPERT LECTURE

- Identify Research Topic
- Conduct Literature Review
- Define Research Objectives
- Select Research Methodology
- Design Research Framework
- Develop Research Proposal
- Data Collection and Data Analysis
- Interpretation of Findings
- Write and Publish Research Paper Presentation and Dissemination

EXPECTED OUTCOME

Roadmap of Research activities is a careful and detailed study of a various steps involved in research work. An in-depth analysis of information creates space for generating new questions, concepts and understandings. An Expert lecture will be beneficial for the students, young researches and teachers to broaden the perspective towards the research. The effective use of research tools boost the research. The lectures will inculcate the importance of various steps in research.

**LOKNETE DR. BALASAHEB VIKHE PATIL (PADMA BHUSHAN AWARDEE)
PRAVARA RURAL EDUCATION SOCIETY'S
ARTS, COMMERCE & SCIENCE COLLEGE, SATRAL**

A Report on “Roadmap of Research Activities”

Name and Type of Event	Expert Lectutre on “ Roadmap of Research Activities ”
Date of Event	28 th November-2022
Conducted by	Department of Chemistry and Research Committee
No. Of Participant	51

Department of Chemistry and Research Committee had organized an Expert Lectutre on “**Roadmap of Research Activities**” for PG students and research scholars on 28th November-2022. For this lectutre we have invited resource persons Prof. (Dr) P. M. Dongre (Research Coordinator, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society Pravaranagar).

The inauguration of the workshop was done by the auspicious hands of Prof. (Dr) P. M. Dongre, vice Principal Dr. D. N. Gholap, Dr. J. R. Singar, Dr. S. S. Pandit , Dr A. S. Waghamre (HOD Chemistry) and Dr. V. A. Kadnor (Research Committee Coordinator). The program started at 02:15 pm with the Welcoming of Guests and participants with vandana of Padmashri Dr. Vitthalrao Vikhe Patil and Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) and Lamp Lightning. The Chief Guest Prof. (Dr) P. M. Dongre, was welcomed by vice principal Dr. D. N. Gholap. The welcome address was given by the Dr. V. A. Kadnor.

The chief guest, Prof. (Dr.) P. M. Dongre (Research Coordinator, PRES) enumerated and briefly discussed the steps to develop a good research and the related key components. Sir also listed good books, journals and stressed on the importance of carrying out an Ethical research. He emphasized the importance of good writing and commitment. Another very important topic he touched was Research ethics, fraud and Plagiarism, and the need for honesty as the age old value. It was an enriching experience for all. enlightened the participants and emphasized on the importance of contribution of research in the larger domain and benefaction to the society at large also introduced the participants to Notable features of the Mendeley Desktop which is very practical and helpful.

At the end of programme Dr. Vijay Kadnor ARC proposed vote of thanks towards resource persons, Mr. Akash Puri, Rahim Shaikh, Rutik Londhe Miss. Nikita Kothule, Renuka and More from the department of chemistry worked as volunteers in conducting this lectutre. There were fifty one teachers and students participated in workshop programme. The Research Scholars and all the other participants were benefitted immensely from this workshop. The expert lectutre motivated the aspiring researchers and also helped the PhD holders update themselves.




The chief guest, Prof. (Dr.) P. M. Dongre (Research Coordinator, PRES) enumerated and briefly discussed the steps to develop a good research and the related key components.



The chief guest, Prof. (Dr.) P. M. Dongre (Research Coordinator, PRES) enumerated and briefly discussed the steps to develop a good research and the related key components.




Principal
Arts, Commerce and Science College, Satral
Tal- Rahuri, Dist- Ahmednagar- 413711

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's
Arts, Commerce and Science College, Satral,
Research Committee and Department of Chemistry Organize
Special Lecture on "Roadmap of Research Activities",
Monday, 28-Nov-2022

Attendance Report

Sr. No.	Name of the Participant	Sign
1.	Dr. Singar Jayashree Ramrao	
2.	M. A. Bhandari	
3.	Dr. N. A. Shinde	
4.	Dr. Kambe Nilesh S.	
5.	Mr. R. S. Bhadarkwad	
6.	Mr. E. S. Nimmal	
7.	Mr. G. K. Wadgaonkar	
8.	Mr. Ahane D. W.	
9.	Dr. R. S. Tambe	
10.	Dr. A. S. Waghmare	
11.	Dr. A. V. Kedare	
12.	Mr. H. Z. Divakaran	
13.	Mr. T. D. Kadaskar	
14.	Sau. C. S. Kalle	
15.	P. A. Tambe	
16.	L. H. Pandure	
17.	P. A. Galande	
18.	Dr. Borde A. B.	
19.	Mr. S. N. Borde	
20.	Mr. B. V. Rajdeo	
21.	Mr. D. D. Harade	
22.	Mr. Wani. N. E.	
23.	Mr. Kaldar B.	

24.	Sinare pooja Gopinath	Bsinare
25.	Sinare kajal Bapusaheb	kajal
26.	Shinde Nilesh Sanjay	Nilesh Shinde.
27.	Pawar Ajit Kumbhari	Ajit
28.	Sangale Gaurav Bhausahab	G.B.S.
29.	Belkar Shweta Sanjay	shweta
30.	Wani Sangita Suresh	Sangita.
31.	Wani Parvati Sanjay	Parvati
32.	Gogare Dipak Sundarapur	Dipak.
33.	Wani Prayakta Gorakh	Prayakta
34.	Shraddha Haushiram Dhamak	Dhamak.
35.	Korade Nikita Ravindra	Nikita
36.	Sarede Yogesh Sanjay	Sarede
37.	Shinde Mayuri Sanjay	Mayuri
38.	Harde Rushikesh Subhash	Rushikesh
39.	Tambe Priyanka Ananta	Priyanka
40.	Pandhe Sonali Shivaji	Sonali
41.	Kadaskar Tushar Dadasahab	Tushar
42.	Lkshinagar Gauri Sanjay	Gauri.
43.	Dighe Pratik Sanjay	Pratik
44.	Chavan Karan Janku	Karan
45.	Dhobe Vishal Dilip	Vishal
46.	Anap Sunil machidra	Sunil
47.	Sable Yash B.	Yash
48.	Musmade Rohit Kachru	Rohit
49.	Dere Jitendra Shivaji	Jitendra
50.	Harde Akshay Satakshay	Akshay
51.	R.D. Boase	R.D.



Principal
Arts, Commerce and Science College, Satral
Tal- Rahuri, Dist- Ahmednagar- 413711

CURRICULUM VITAE

Prof (Dr) Prabhakar Manikrao Dongre



1. General information :

Name in full	PRABHAKAR MANIKARAO DONGRE
Fathers Name	Manikarao Dongre
Sex	Male
Position held	Prof & Head, Department of Biophysics, University of Mumbai Principal & I/c Director Research Pravara Rural Education Society, Dist. Ahmadnagar
Address for communication	A1302 Saffron Residency, SG Barve Marg, Kurla East, Mumbai 400024
E-mail ID	drpmdongre@yahoo.co.in
Telephone numbers for contact including STD Code	8369831994
Indian languages (Read, Speak & Write)	Marathi, Hindi, English
Date of Birth	Sixth June nineteen sixty-two

2. Education qualifications

Examination / Degree	Board / University/ Institute	Subjects / Specialization	Month & Year of Passing	Division / CGPA
Graduation	Marathwada University, Aurangabad	Physics, Chemistry, Electronics	1987	Second
Post Graduation	Dr Babasaheb Ambedkar Marathwada University, Aurangabad	Biophysics	1995	First
Ph.D.	-----do-----	Biophysics	1996	-

3. Experience in the field of Higher Education:

University / Institution	Post held	From	To	Total (in years and months)
Govt Institute of Science	Lecturer	08/08/1995 06/08/1996	30/03/1996 21/01/1997	14 months
MIMSR Medical College, Latur	Lecture (Asst. Prof)	22/01/1997	28/02/2001	4 year 01 month
MIMSR Medical College, Latur	Sr Lecturer	01/03/2001	28/02/2002	1 year
MIMSR Medical College,	Associate Professor	01/03/2002	01/05/2006	4 year 2 month
University of Mumbai, Mumbai	Reader/ Associate Professor	02/05/2006	02/05/2009	3 years
University of Mumbai, Mumbai	Professor	03/05/2009	24/06/2022	12 years 1 month
Arts Commerce & Science Grant-in-aid Satral Dist Ahmednagar	Principal	25/06/2022	30/06/2024	02 years
	Total experience			28 years

4. Professional training:

- Auditing of Quality Management systems as per ISO 9001-2001 (2003)
- Radiological Safety Aspects in the Research Applications of Ionizing Radiation (2009)
- Radiation Safety Officer, approved by Atomic Energy Regulation Board, Govt of India

5. Experience with various academic and professional statutory bodies:

Sr.No.	Institution*	Statutory forum/authority and position	From	To	Total (in years and months)
1	University of Mumbai, Mumbai	Member of Academic council	2008 2014	2011 2017	06 years
2	University of Mumbai, Mumbai	Senate member	2015	2017	02 years
3	University of Mumbai, Mumbai	Chairperson, Board of Studies (Biophysics)	2008 2014 May 2019	2011 2017 Till date	07 years
4	University of Mumbai, Mumbai	Research Recognition committee in Biophysics	2008	Till date	12 years
5	Garware Institute of Career Development & Education (Autonomous center of University of Mumbai, Mumbai)	Member of Advisory committee	Sept 2010	Aug 2015	05 years
6	University of Mumbai, Mumbai	Member, Board of Studies in Nanoscience & Nanotechnology	1 st April 2017	5 th May 2019	02 years
7	UM DAE Centre for Excellence in Basic Sciences, Mumbai	Academic Board Member	May 2016 2018	2018 Till date	04 years
8	University of Mumbai, Mumbai	Member, Faculty of Science	2008 2014	2011 2017	06 years

9	University of Mumbai, Mumbai	Member, Board of University Teaching & Research	2008 2014	2011 2017	06 years
10	University of Mumbai, Mumbai	Member, Purchase committee	2012	2014	02 years
11	University of Mumbai, Mumbai	Member, Campus Development Committee	2015	2017	02 years
12	SRT Marathwada University, Nanded	Member, Board of studies in Medical Physics	June 2018	Aug 2020	02 year
13	Mithibai College (Autonomous), Mumbai	Member, Academic council (VC nominee)	April 2018	Till date	03 years
14	Kelkar Vaze College, Mumbai	Member, Academic council (VC nominee)	26 th Feb 2020	Till date	1 year 04 month
15	Sophiya Women's College (Autonomous), Mumbai	Member of Board of Studies in Physics	Aug 2019	Till date	2 years
16	Mahatma Gandhi Central University, Motihari, Bihar	Member of Board of studies in Physics	July 2020	Till date	01 year
17	University of Mumbai	Member of Standing committee	Nov 2020	Till date	01 year
18	KV Pendharkar College (Autonomous) Dombivali, Mumbai	Member of Academic council (VC nominee)	May 2021	Till date	06 months
19	University of Mumbai	Member of Board of Innovation, Incubation and linkages	March 2021	Till date	08 month
20	NMIMS Deemed University, Mumbai	Member of Board of Studies in Biological sciences	Aug 2021	Till date	

6. Experience of various international bodies:

Member of the International Union of Pure and Applied Biophysics (2012-2016)

Vice President, Indian Biophysical Society (2013-2018)

President, International Society of Science and Technology, Mumbai

7. Honors & awards:

- ✓ Best research award by Mauritius Marathi Mandali, Mauritius (2017)
- ✓ Best Teacher award by the University of Mumbai (2019)
- ✓ Best Researcher award by computer society of India, Mumbai chapter (2019)
- ✓ Best Research Publication Award by Biophysical Society of Japan (2019)
- ✓ Best Research & Academician award by *Bharatmata Bahu-uddeshiya Sanstha, Naldurg (2011)*
- ✓ Elected fellow Global Society for Basic and Applied Sciences (GSBAS) Mumbai, India
- ✓ Elected fellow *International Society for Science and Technology, Mumbai (2010)*

8. Research project executed: Total value: 124.647 lakh

- ✓ Studies on oxidative stress of various cancer patients undergo Chemotherapy and Radiotherapy and to evaluate those as surrogate markers for immediate clinical response, DAE BRNS Govt of India (March 2010-2013), **Project value 12.47 lakh**
- ✓ Development of bioinformatics database resource for radio modifiers and make it available on internet to user community, DAE BRNS Govt of India (March 2010-2014), **Project value 7.96 lakh**
- ✓ Design and Development of packaging for Dry Electrodes for Bio-potential measurement and their (Co-Investigator), DRDO, Govt of India (July 2015 to June 2016) **Project value 9.70 lakhs**
- ✓ A biophysical study of homeopathy formulation, Life Force Trust (NGO) (2010-2013) **Project value 1.54 lakhs**
- ✓ Common Research scheme of Mumbai University under DST PURSE scheme (1st Phase) Amount was received under my supervision, DST PURSE scheme (2010-2013) **Project value 18.00 lakh**
- ✓ Mumbai University under DST PURSE Scheme (2nd Phase) Govt of India (2016-2019) **Project value 75.00 lakh**

9. Research work (Summary)

Targeted drug delivery- an advanced and precision therapeutic approach

Targeted drug delivery (TDD) represents an innovative approach in administering medications to patients with precision, concentrating the therapeutic agent solely on the intended body part, such as organs, tissues, or cells. This method enhances treatment efficacy by minimizing side effects and reducing the necessary dosage. By maintaining a consistent therapeutic level over an extended period, TDD ensures optimal drug concentration at the diseased site while safeguarding healthy tissues.

In recent years, nanomaterials have emerged as pivotal components in TDD systems, owing to their unique physical and chemical properties. These materials serve as efficient carriers, encapsulating or attaching therapeutic drugs and delivering them precisely to target tissues, thereby facilitating controlled release.

Our research group has pioneered the development of a distinctive nano-bio carrier for precise drug delivery, focusing on metallic silver, gold, and zinc nanomaterials. Employing our proprietary synthesis method, we have systematically characterized these nanostructures using various physical techniques, including XRD, SEM, TEM, Dynamic Light Scattering, Raman Spectroscopy, SPR, FTIR, and UV-visible spectroscopy.

Furthermore, we have selected specific proteins, such as Bovine Serum Albumin, Human Serum Albumin, alpha and beta lactoglobulins, for conjugation with these nanomaterials. Through rigorous structural and functional characterization using biophysical approaches like fluorescence

spectroscopy, DLS, FTIR, UV- visible spectroscopy, ITC, Circular Dichroism, Raman Spectroscopy, Fluorescence Microscopy, and AFM, we have quantitatively assessed the interaction between these proteins and various nanoparticles.

We have explored the distribution of particles in various organs using animal models by binding isotopes to protein-nanoparticle conjugates. Subsequently, we successfully loaded clinically relevant anticancer drugs such as Paclitaxel, cisplatin, and curcumin onto protein-nanoparticle conjugates, addressing various pharmacological parameters in our investigation

Our approach integrates drug delivery strategies into the drug development process, promising improved therapies with enhanced efficacy and reduced side effects. Notably, our nanoparticle-based snake venom inhibitor/nanoparticles – anti-snake venom (Nano-ASV) exhibits biocompatibility, low dosage requirements, simple storage, easy production, and cost-effectiveness. Animal testing of Nano-ASV is currently underway, marking a pioneering innovation in nanomedicine.

Our research contributions have been recognized globally through publications in esteemed journals such as Drug Delivery, International Journal of Biological Macromolecules, Journal of Fluorescence, Colloids and Surfaces B: Biointerfaces, among others. With over 60 research papers published and numerous citations, our work has garnered significant acclaim, including gold and silver medals at national and international conferences.

A key outcome of our research is the development of kit for preparing silver and gold nanoparticles, facilitating training and education for undergraduate and postgraduate students. This kit represents a tangible contribution toward advancing nanotechnology education and research.

10. a) Successfully guided PhD students: 12 number

b) Successfully guided MSc Project students: > 100

11. Research Publications/ National / International / Patents filled/ Proceeding publications:

a) Publications (International Journals)

1. M Kumar, VD Jaiswal, DS Pangam, P Bhatia, A Kulkarni, **PM Dongre** (2024) Biophysical study of DC electric field induced stable formation of albumin-gold nanoparticles corona and curcumin binding. **Spectro Chimica Acta Part A: Molecular and Biomolecular Spectroscopy** 305, 123469
2. BS Khade, P Gawali, M Ali, MN Waghmare, **PM Dongre** (2023) Influence of Photon and Electrical Energy in the Nucleation of Silver Nanoparticles Synthesis. **Journal of Cluster Science** 34 (1), 189-197
3. VD Jaiswal, DS Pangam, **PM Dongre** (2023) Biophysical study of cisplatin loaded albumin-gold nanoparticle and its interaction with glycans of gp60 receptor, **International Journal of Biological Macromolecules** 231, 123368

4. D Shaha, Jaiswal, **Dongre**, Kulkarni (2023) Simple and cost-effective eggshell membrane model for diffusion characteristics of biochemical materials, **International Journal of Biochemistry, Biophysics and Molecular Biology 8 (1)**
5. D Pangam, V Jaiswal, **P Dongre** (2022) Inhibition of Russell's Viper Venom using Silver Nanoparticle-Bovine Serum Albumin-Curcumin Conjugates. Indian Journal of Pharmaceutical Sciences 84 (4)
6. Neha Kumari, V L Mathe, **P M Dongre** et al. (2021) BSA-drug-ZnO-PEI conjugates interaction with glycans of gp60 endothelial cell receptor protein for targeted drug delivery: a comprehensive spectroscopic study, *Journal of Biomolecular Structure and Dynamics*, 1-17
7. Priyanka Pal, **P M Dongre**, R Shaha et al. (2021) Biophysical techniques revealed insight of potentized solvent of ethanol-water interface, Romanian J Biophysics.
8. J Pendharkar, Manik Waghmare, **P M Dongre** et al. (2021) Photo-excitation nature of aromatic amino acids under electric field: a fluorescence spectroscopy study, Romanian J Biophysics
9. Waghmare Manik, **P M Dongre** et al (2021) β -Lactoglobulin-gold nanoparticles interface and its interaction with some anticancer drugs—an approach for targeted drug delivery, Journal of Biomolecular Structure and Dynamics,
10. Bipin Khade, **P M Dongre**, (2021), Adsorption of α -amylase and Starch on Porous Zinc Oxide Nanosheet: Biophysical Study, Food Biophysics
11. NH Mudliar, AM Pettiwala, **PM Dongre**, PK Singh (2021), A Heparin based dual ratiometric sensor for Thrombin, International Journal of Biological Macromolecules
12. NH Mudliar, AM Pettiwala, **PM Dongre**, PK Singh (2020) An anionic polyelectrolyte induced aggregate assembly of Thioflavin-T: A prospective platform for Protamine Sensing, International Journal of Biological Macromolecules
13. NH Mudliar, **PM Dongre**, PK Singh (2020) A molecular rotor based dual ratiometric sensor for heparinase , Dyes and Pigments, 108528
14. BS Khade, MN Waghmare, N Bhatawale, PG Gawali, CN Khobragade, **PM Dongre (2020)** A Quantitative Fluorescence Study of α -Amylase with Different Sizes of Colloidal Silver Nanoparticles and Its Effect on Human Lung Carcinoma A549 Cells, Advanced Science, Engineering and Medicine 12 (5), 662-671
15. VD Jaiswal, **PM Dongre (2020)**, Biophysical interactions between silver nanoparticle-

albumininterface and curcumin, Journal of Pharmaceutical Analysis.

16. **PM Dongre**, Vinod Jaiswam and Suraj Singh (2020) Effect of smart flux light on cornea- Abiophysical study, Journal of Medical Physics
17. M N Waghmare, TS Qureshi, AN Shaikh, BS Khade, C Murali Krishna, **PM Dongre (2020)** Functionalized Alpha-lactalbumin Conjugated with Gold Nanoparticle for Targeted Drug Delivery, ChemistrySelect 5 (6), 2035-2049
18. N Kumari, VL Mathe, **PM Dongre (2019)** Albumin nanoparticles conjugates binding withglycan- a strategic approach for targeted drug delivery, International Journal of Biological Macromolecules,
19. M Waghmare, B Khade, P Chaudhari, **P Dongre (2018)**,Multiple layer formation of bovine serum albumin on silver nanoparticles revealed by dynamic light scattering and spectroscopic technique, *Journal of Nanoparticle Research* 20 (7), 185
20. **P M Dongre** and Amruta Joshi (2018)A systematic organization of bioinformatics database of radiosensitizers and radioprotectors , Journal of Radiation and cancer research.
21. Hingane Vrushali, Dhanshri Pamgam and **Prabhakar Dongre (2018)** Inhibition of crude vipervenom action by silver nanoaprticles-A biophysical and Biochemical study. Biophysics and Physicobiology, doi 10.2142/biophysico.15.0_00
22. S Sawant, H Dongre, C Ahire, S Sharma, S Jamghare, Y Kansara, P Rane, **PM Dongre (2018)**,Alteration in desmosomal adhesion at protein and ultrastructure levels during the sequential progressive of human oral tumorogenesis , *European J Oral Sciences*.
23. BS Khade, VL Mathe, **PM Dongre (2018)** Alpha amylase binding to thermal plasma synthesizedzinc oxide nanosheets: A fluorescence study , *Journal of Luminescence* .187, 449-456
24. P M Dongre & Amruta Joshi (2018) A systematic organization of bioinformatics database of radiosensitizers and radioprotectors, Journal of Radiation and Cancer Research 9 (2), 102
25. M Yogesha, VG Rao, EAF Martis, EC Coutinho, H Gohlke, S Chidangil, **PM Dongre (2017)** Structural features of FAP174,a MYCBP-1 orthologue from Chlamydomonas reinhardtii reveledby computational and experimental analysis , *RSC Advance* , 7,5139.
26. SS Sawant, H Dongre, C Ahire, S Sharma, S Kannan, S Mahadik, **P M Dongre (2017)** A nomogram predicting the risk of neck node metastasis in Pathologically node-negative oral cavitycarcinoma, *Oral Disease*
27. A Lohot, S Gite, G Kelkar, **PM Dongre (2017)** Influence of meditation on visual and

auditory reaction time in young healthy volunteers, *Indian J Pharmacol*, 61(2): 100-106

28. D Tari, S Haryan, K Patankar, V Jaiswal, M Samant, S Sivakami, P M Dongre (2017) A simple egg membrane model for understanding diffusion characteristics of nanoparticles and amino acids, *Current Science*, Vol 112, No 7,
29. VG Rao, RB Sarafdar, TS Chowdhury, P Sivadas, P Yang, **PM Dongre (2016)** Myc-binding protein orthologue interact with AKAP240 in the central pair apparatus of the *Chlamydomonas flagella*, *BMC Cell Biology* , 17:24
30. YK LAHIR, **P M DONGRE** et al.(2016) Role of nanomaterials in the development of biosensors, *Global Journal of Biosciences and Biotechnology*, Vol 5 (2), 146-163
31. D Gurve, H Muthurajan, P Karnik, A Deshpande, AK Srivastava, **PM Dongre** et al (2016) Novel Algorithm for coherence level measurement using R-R interval of ECG signal, *IEE WISPNET*, 2242-2246.
32. Jessy Mariam, S Sivakami, **Prabhakar M Dongre (2016)** Elucidation of structural and functional properties of albumin bound to gold nanoparticles, *Journal of Biomolecular structure & Dynamics*
33. PD Pal, **PM Dongre**, AV Chitre (2015) Implication of volume exclusion: A look at thermodynamics perspective of DNA- Hemoglobin complexes and their reconstitution under macromolecular crowding , *Journal of Fluorescence*, DOI 10.1007/s10895-015-1721-2
34. J Mariam, S Sivakami, **PM Dongre (2015)** Albumin corona on nanoparticles- a strategic approach in drug delivery, *Drug Delivery*, Informa healthcare DOI: 10.3109/10717544.2015.1048488
35. MP Pant, J Mariam, A Joshi, **PM Dongre (2014)** UV radiation sensitivity of Bovine Albumin Bound to Silver Nanoparticles, *Journal of Radiation Research and Applied Sciences*, vol7, Issue 4, 399-95
36. J Mariam, S Sivakami, DC Kothari, **PM Dongre (2014)** Bioactivity of Albumins Bound to Silver Nanoparticles, *Protein J* .DOI10.1007/s10930-014-9553-2
37. PD Pal, **PM Dongre**, AV Chitre (2014) Is Macromolecular Crowding Overlooked? Effect of volume Exclusion on DNA – Amino Acids Complexes and Their Reconstitutes, *J Fluoresc*, DOI10.1007/s10895-014-1412-1
38. A Bhogale, N Patel, J Mariam, **PM Dongre**, A Miotello, DC Kothari (2014)

Comprehensive studies on interaction of copper nanoparticles with bovine serum albumin using various spectroscopies, *Colloids and Surfaces B: Biointerfaces*, **113**, 276-284

39. A Bhogale, N Patel, P Sarpotdar, J Mariam, **PM Dongre**, A Miotello (2013) Systematic investigation on the interaction of bovine serum albumin with ZnO nanoparticles using fluorescence spectroscopy, *Colloids and Surfaces B: Biointerfaces* 102 (2013) 257–264.
40. A Bhogale, N Patel, J Mariam, **PM Dongre**, A Miotello, DC Kothari (2013) Study of interaction of ZnO nanoparticles with human serum albumin using fluorescence spectroscopy, *AIP Conf. Proc.* 1512, pp. 130-131
41. SD Sharma, **P Dongre**, V Mhatre, M Heigrujam (2010) Evaluation of automated registration algorithm for Image Guided Radiotherapy, Australian Physical & Engineering Science in Medicine.
42. Jayant Shelake, Gangadhar Meshrea, **Prabhakar Dongre (2011)** Synthesis of 2-oxoquinoline -3-carboxamide of ampicillin and amoxicillin as inhibitors of penicillin binding protein 1A of *Pseudomonas aeruginosa*, *Acta Poloniae Pharmaceutica –Drug Research* ,
43. DS Sharma, **PM Dongre**, V Mhatre, M Heigrujam (2011) Physical and Dosimetric characteristic of High Definition Multileaf Collimator (HDMLC) for image guided Stereotactic Radiosurgery (SRS) and Intensity Modulated Radiotherapy , *Journal of applied clinical medical physics, Vol.12, No3, Summer 2011*
44. J Mariam, **PM Dongre**, DC Kothari (2011) A study the interaction of silver nanoparticles with bovine serum albumin using fluorescence Spectrophotometry, *Journal of Fluorescence, Vol 21, Issue 3.*
45. Gangadhar Meshram, Jayant Shelake, **Prabhakar Dongre (2010)** Simple, Efficient synthesis, Antibacterial activity and molecular docking study of 3-(1H-benzimidazole-2yl)- chloroquinolines compounds, *Journal of Pharmacy Research*, **3(8)**.
46. AA Yadav, MA Barote, **PM Dongre**, EU Masumdar (2010) Studies on growth and characterization of CdS_{1-x}Se_x (0.0 ≤ x ≤ 1.0) alloy thin films by spray pyrolysis , *Journal of Alloys and compounds Volume 493, Issue 1-2, 18, Pg 179-185*
47. TN Bansod, **PM Dongre**, VG Dongre (2009) Synthesis antibacterial and antifungal activity of 1,3-Di (2-substituted 10H-phenothiazine 10-YL) propane-1-one, *Pharmaceutical Chemistry Journal*, Vol 43, No.6.
48. TN Bansod, **PM Dongre**, VG Dongre (2009) Synthesis antibacterial and antifungal activity of 1,3-Di (2-substituted 10H-phenothiazine 10-YL) propane-1-one , *Pharmaceutical Chemistry Journal*, Vol 43, No.6.

49. **PM Dongre**, BB Kadu and Vijay Khole (2006) Radiosensitizing effect of Paracetamol with biological metal ions in *Thiobacillus ferrooxidans* , ***Asian J Microbial Biotech & Env. Sci. Vol.8 No (1) 165-66***
50. **PM Dongre**, BB Kadu and Vijay Khole (2001) Radiomodifying effect of some Phenothiazine drugs with biological metal ions in *Thiobacillus ferrooxidans*. ***Asian J Microbial Biotech & Env.Sci. Vol. 3, No. 4 307-309***
51. **PM Dongre**, BB Kadu & V V Khole (1999) Modification of radiosensitivity of chlorpromazinewith biological metal ions in *Thiobacillus ferrooxidans*, ***Indian J Exp Biol. 37, 1245-47.***

b) Patent filled/published/ awarded

Indian patent Awarded

1. Human plasma proteins-GNP (Gold Nanoparticle) conjugate – An alternative novel polyvalentAnti Snake Venom (ASV) **Feb 2024**
2. An enzymatic method for synthesis of silver nanostructures with various sizes and less time-consuming (**Feb 2014**)

Patent Published

1. An enzymatic method for synthesis of silver nanostructures with various sizes and less time-consuming,(24/08/2028)
2. Teaching, training, and learning kit for the synthesis of silver and gold metal nanostructure usingenzyme, (24/08/2018)
3. Human plasma proteins-GNP (Gold Nanoparticle) conjugate – An alternative novel polyvalentAnti Snake Venom (ASV) Application No 2021011364 date 27.03.2020
4. An enzymatic method for the synthesis of silver nanostructures with various sizes and less time-consuming (Patent No 201821031761, date 24/08/2028)
5. Ayurvedic proprietary medicine for the treatment of severe acute respiratory syndrome coronavirus 2 (SARC-COV2), 22/11/ 2020
6. PROTEIN CORONA-NANOPARTICLE AND THE PROCESS FOR PREPARING THEREOF (05/04/2024)

c) Conference/symposia proceeding publications

1. Vinod Jaiswal, P M Dongre (2018) Biophysical Characterization of albumin-bound silver nanoparticles International Conference on Nanotechnology for Human Welfare-Pune, (ISBN: 978-93-80747-98-7)

2. M Waghmare, BS Khade, V Jaiswal, **PM Dongre (2018)** Mechanistic Understanding of Protein- Nanoparticles Corona- Relevance to Targeted Drug Delivery, International Conference on Nanotechnology for Human Welfare-Pune (ISBN: 978-93-80747-98-7)
3. M Waghmare, BS Khade, **PM Dongre (2018)** Spectroscopic Study of Albumin Adsorbed on SilverNanoparticles, International Conference on Nanotechnology for Human Welfare-Pune, (ISBN: 978-93-80747-98-7)
4. BS Khade, **PM Dongre (2018)** Kinetic study of α -amylase bound on Zinc oxide nanosheet International Conference on Nanotechnology for Human Welfare, (ISBN: 978-93-80747-98-7)

d)Books/ chapter publications:

1. Radiation in Medicine and Biology, Chapter “**Gold Nanoparticles Assisted Radiation Therapy**”Jenny Stanford Publication, 2017, CRC Press Taylor & Francis

12. : International / National Exposure through conference/symposia organization

1. International Conference On Emerging Trends and Challenges in Science and Technology”(ETCST-2014), November 3-8, 2014, Bangkok, Thailand
2. International Conference on Emerging Trends and Challenges in Science and Technology & Society (ETCST-2017), May 12-16, 2017, University of Mauritius, Mauritius

13. Experience of organizing events such as workshops, seminars, conference at an international levelwithin the country in the field of higher education.

Role played as Convener

1. Indian Biophysical meeting (Symposium on Frontiers of Biophysics, Biotechnology & Bioinformatics), Feb 13-16, 2013, University of Mumbai.
2. International Conference On emerging Trends and Challenges in Science and Technology”(ETCST-2014) , May 22-26, 2016, University of Mauritius, Mauritius,
3. 14th International conference on Metal Ions in Biology & Medicine and green health conference(Jointly organized by National Environmental Research Institute, Mumbai & University of Mumbai), Nov 28-30, 2016, Mumbai University
4. Second International School on Radiation Research (ISRR-2020) Theme: Radiation InducedDNA damage Response: Mechanisms and human health implications, Sept 6-20,2020, E- Conference Platform: Google Meet

14. Lecture delivered in national/ International symposia /conference/workshop etc

1. Synthesis and characterization of nanoparticles, Photonics Materials & Nanotechnology, Shahu Mahavidyalaya, Latur, 23 & 24 Jan,2009. (National)
2. Nanotechnology- Application in medicine and biology, Applied Aspects of Life Sciences for the welfare of Mankind, Deogiri College, Aurangabad, Jan 15-16, 2011.
3. Nanotechnology as Interdisciplinary approach, Interdisciplinary Applications of Nanotechnology,SMT Pushatai Hire Arts, Science, Commerce Mahila College, Malegaon, Dist Nashik, Jan 24, 25th,2011.
4. Impact of Nanotechnology on Environment, Environment & Climate Changes, MVM Home Science College Rajkot, Gujarat state, Dated Feb 13, 2011
5. Interaction of nanoparticles with biological system, Eco Revolution-2011, Eco Need Foundation, Feb 19-20, 2011
6. Research Grants and preparation of research proposal under BRNS scheme, Avenues for Scientific Research Proposal Grants, B.N. Bhandodkar College of Science, Thane, 18th August,2011
7. Biosynthesis of Nanoparticles, Recent Advances in Nanoscience and Nanotechnology, School of Chemical Technology, North Maharashtra University, Jalgaon , June 15-30, 2012.
8. Structure-function relation of BSA in presence silver nanoparticles” National Conference on Nanotechnology, Maharashtra Mahavidyalaya Nilanga, Dist, Latur.
9. Nanotechnology, Career Guidance and Opportunities in electronics, Department of Electronics, Shivaji University, Kolhapur, 15th to 16th Sept 2012
10. Probing interaction between silver nanoparticles and protein” Biomedical Physics (UGC/BCU DPune), Anantrao Pawar College, Pirangut, Pune, Nov 2014
11. Interaction of nanostructures with biological macromolecules- A biophysical study, Emerging Trends & Challenges in Science and Technology, International of Society of Science and Technology, Mumbai, Nov 3-8, 2014
12. Aspects of Biophysical Curriculum: An Indian Perspective, Role of Biophysics in Academia & Industry, Department of Biophysics, Panjab University, October 11-13, 2017
13. Interaction of silver Nanostructure with snake venom, Emerging Trends and Challenges in Science , Bionano Frontier-India University, May 12-14, 2017
14. Mechanistic understanding of protein-nanoparticles corona- relevance to targeted drug delivery, International Conference on Nanotechnology for Human Welfare (ICNHW-2018) , Department of Physics, Haribhai V. Desai College, Pune. Feb 1-3, 2018.
15. Nanostructure –Protein conjugate –A strategic approach for targeted drug delivery, Indo-Egyptian Symposium, Dept of Biosciences IITB, Jan 30-31, 2019
16. How to write Research Proposal for financial Assistance, Research Methodology & writing research Project, Hirval Trust , Mahad, Mumbai, 7th March 2019
17. Bionanomaterials: A Biophysical perspective and their applications, Preparative workshop on Biomaterials, Bhandokar College, Thane, July 19, 2019

18. Protein Purification and characterization Techniques, UGC Refresher course, Science and Technology. Dr Babasaheb Ambedkar University Aurangabad, Sept 14, 2019
19. Targeted Drug Delivery, UGC Refresher course, Science and Technology. Dr Babasaheb Ambedkar University Aurangabad, Sept 14, 2019
20. Smart Phone and Health Risk, Online UGC Refresher Course in Social Sciences, Dr Babasaheb Ambedkar University Aurangabad, 09/12/2020
21. Research Publication process and selection of research journal for publication, Online National Symposium on Research paper writing and its publication, Azad Mahavidyalaya , AUSA. Dist Latur, October 13, 2021

14: Leadership Experience:

The University of Mumbai stands as one of India's pioneering institutions in establishing the Department of Biophysics during the 2001-2002 academic year, marking a significant milestone in the integration of Biology and Physics. I consider myself exceptionally fortunate to have had the opportunity to lead the establishment of this department upon joining in May 2006. Initially, the department functioned within the Life Sciences division before transitioning into an independent entity.

Navigating numerous challenges, especially as the sole faculty member at the time, was no small feat. Establishing advanced laboratory facilities for both research and student training posed a significant challenge. To ensure the highest quality of education and training, I diligently pursued research funding from various governmental agencies such as BRNS, DAE, DST, DBT, and NGOs. Through successful grant acquisitions, I was able to develop state-of-the-art research facilities within the Department of Biophysics.

Teaching presented its own set of challenges, given the specialized nature of the subject and the scarcity of experts in colleges affiliated with Mumbai University. In response, I actively sought collaboration with renowned institutions such as IITB, TIFR, BARC, and medical colleges for teaching and training purposes.

Our efforts bore fruit, evident in the quality of education imparted, which led to student placements in esteemed international institutions for higher education, including PhD and post-doctoral programs. Today, the department stands prominently on the national stage, a testament to our dedication and perseverance in advancing the field of Biophysics.

As the chair of the Board of Studies in Biophysics, I introduced constructive changes to the biophysics curriculum and established a choice-based credit system. This program provides students with broad-based training in the subject, grounded in fundamental concepts while

exposing them to advanced fields. The curriculum focuses on recent developments, emphasizing both theoretical knowledge and practical, hands-on experience. A multidisciplinary approach has been employed to equip students with the best possible foundation, enabling them to pursue advanced and frontier areas of biological research in the future.

15. Experience of handling Quality issues, assessment and accreditation procedures, etc.

Sr.No.	Area	Institution	Duration	Achievements and evidence therefor
1	Quality issues National Institute of Ranking Framework (NIRF)	University of Mumbai	2017- till date	Actively involved in NIRF data preparation of the Department, NIRF data achievement helped in ranking year 2019-20 University placed (NIRF) 81 number(2019-20)
2	Assessment and accreditation procedures	University of Mumbai	2007- till date	Actively involved in NAAC accreditation procedure, worked as coordinator at dept level and maintained and prepared IQAC data for NAAC accreditations. It has helped to University for NAAC ranking
3	Any other issue (Please specify) ISO 9001-2000	MIMSR Medical College, Latur	Oct 2003 to April 2006	Obtained training of ISO 2001- 2002(Auditing of quality management system) and maintained quality of education and training at department level as per the ISO requirement.

16. State or national or international level in handling youth development work:

Sr.No.	Nature of Activity / Event	Institution	Duration	Achievements
1	Blood donation camp, organized residential NSS camps (minimum 10 days) in rural areas (adopted villages), science exhibitions (medical related), organization of special lecture on social issues. Organized health camp in flood areas (Nanded)	MIMSR Medical College, Latur	Jan 2002 – April 2006	Yearly 2-3 blood donation camps were organized and average 80-100 blood units were collected of each camp
2	Biophysics Week (this activity is related to career and opportunities in interdisciplinary science in India and abroad): Organised lecture of experts in the interdisciplinary science, organized science exhibition. Motivated to students for development / preparation of working models for teaching-learning during science exhibition etc	University of Mumbai	March 13-16, 2016	Participants: 60 students It was for limited students
3	Scientific competition: This activity is related to inculcate research and promote scientific culture in students. Students have been guided / motivated to participation in scientific competition as well as participation in conferences / seminar/ workshop etc	University of Mumbai		Students received various prizes (gold, silver, bronze medal) at University as well as inter university level.
4	Organized workshop/ seminar on the occasion National of science day celebration.	University of Mumbai	Feb, 2011, Feb 2012, Feb 2014	More than 100 students were participated from various colleges from Mumbai University of each event
5	Organized Live discussion on career planning in Biophysics in the shadow of the pandemic for Post graduates	Zoom, Facebook Youtube platform	July 7, 2020	70-80 students participation

	and PhD students			
6	Organized live discussion on career advice in interdisciplinary science (Biophysics) for undergraduates.	Zoom Platform	July 29, 2020	More than 170 students participation all over india

17. Innovation process development in teaching, learning process/ Technology development:

Digitization of Radiosensitizers and Radioprotectors: Radiosensitizers and radioprotectors are the compounds that modify the radiation therapy treatment. Radiosensitizers makes tumor cell more sensitiveto radiation therapy which increase the effectiveness of cancer treatment where radioprotectors are the compounds that reduce the damage/ spare normal tissue. Several of these compounds have been studied using appropriate biological model system and their efficacy. The literature of these compounds are highlyscattered and it's required to have on single platform further study/ help in improvement in radiotherapy treatment. Therefore I have developed bioinformatics database of radiosensitizers and radioprotectors usinginformation available in pubmed, scientific journals and other scientific sources. The collected information of these compounds systematically organized on single platform where user can browse typical information of the compound. The information pertaining to these compounds mainly on structural features, radiobiological aspects, biological targets, clinical trials, pharmacological aspects, toxicity etc. The purpose of the preparation of these data is to help clinicians, researchers, scientists for the improvementof radiation therapy treatment. It is freely available on website: <http://bioph.mu.ac.in/Welcome/>

Nanostructure-based snake venom inhibitor Snakebite is one of the most important public health problems in worldwide, specifically in tropical countries. It is a common occupational hazard mainly in rural areas. There is significant morbidity and mortality reported worldwide. In India, about 52 thousand morbidity is reported per year. At present there is no reliable treatment established due to various physiological/ biochemical problems. We have developed snake venom (cardiotoxin and neurotoxins) inhibitor using silver and gold nanostructure

Development of teaching, training materials for graduate, undergraduate & high school students

a) Teaching, training kit for the synthesis of silver and gold nanostructures: Nanoscience and Nanotechnology is an emerging branch of science, It is the study of phenomena and manipulation of materials at atomic, molecular, and macromolecular scales, where properties differ significantly from thoseat a larger scale. Synthesis & characterization of nanostructure is one of the most important component in the nanoscience technology. To prepare easy and economically of nanostructures , I have develop simplekit for synthesis of gold and silver

synthesis of nanostructure, The kit could be used to *train* the students (high school, graduate, post graduate, research scholar etc) in the field of nanoscience and nanotechnology. Kit provides desired chemicals/ constitutes, the students can easily prepare nanostructures using protocol given with kit. The important feature of the kit is that it eliminates sophisticated equipment's and other expenditures.

b) *Teaching training membrane model for understanding diffusion characteristics across biological membranes* Diffusion is an important phenomenon that occurs in living system for carrying out various biological activities. There are not many resources available of experimentally understanding the diffusion phenomenon. I have developed a simple biological membrane model for understanding diffusion characteristics across biological membrane. The chicken egg shell has been used and prepare as membranemodel to perform passive diffusion. It has been tested diffusion for Silver Nanoparticles and amino acids against gravity, towards gravity and lateral state. Chicken eggs cell membrane has been systematically characterized with the help of X-ray Scattering and Scanning Electron Microscopy. This model is being established at large scale level. The current science journal has appreciated this work (*Current Science*, Vol 112, No 7, 2017)

c) Construction of device for understanding thermal properties of biological macromolecules The thermodynamics approach to biological systems plays an important role in understanding the thermal properties of biological materials. Currently, scanning calorimetry is being used for studying thermal characteristics of biological macromolecules, biological reactions which provide key features in terms of entropy, enthalpy and free energy etc. I am developing a specific thermal analyzer for biological macromolecules whose principle is completely different than scanning calorimetry and other methodology. The experimental data are being generated through this new approach. The preliminary results are promising, after understanding the results; this device could be new technology for research and development.

e) Materials for storage of microorganisms and biological macromolecules: Storage/preservation of cells is extremely important to ensure that quality is maintained before usage of cells. Several industries such as the food, pharmaceutical, and horticultural industries require extensive use of various types of cells. Hence there is a requirement to storage of the cells, so cells can be used either directly or for further research at the appropriate time. In order to store the cells, expertise from a variety of disciplines including but not limited to engineering, biology, biotechnology, cryobiology etc is required to design protocols that enable the development of precise and reliable preservation methods. There are many methods that are used today to preserve cells such as cryopreservation, hypothermic preservation, vitrification, freeze-drying etc. All these methods have several advantages, disadvantages, and limitations. My research team has developed a simple and innovative material where cell / biological materials (DNA) can be stored for a longer time (several years). A unique crystal that can store cells longer time without providing nutrients, its cost-effective, novel, and simple. Not much expertise is required. Testing of this technique/materials, experimentation, and data collection/validation are in progress.

18. Participation in curricular development

Development of curriculum : Under the chairmanship of the Board of studies in Biophysics, I have revised curricula and designed as per choice based credit system. The program provides broad based training in Biophysics with strong background of basic concepts as well as well exposing advanced and recent development in the field of subject. A multidisciplinary approach has been employed to provide best leverage to students to enable them move into advance and frontier areas of biological research in future.

- Participated in curricula development of MSc Life Sciences, University of Mumbai
- Participated in curricula development of MSc in Nanoscience and Nanotechnology, University of Mumbai (2017-18)
- Participated in curricula development of BSc Physics, Sophiya College, Mumbai (2019)
- Participated in curricula development of M.Sc. Medical Physics, SRTM University Nanded (2016)

19. Research collaboration / MoU Industry- Academia undertaken:

Established collaboration with internationally reputed Institutes and Industry for research and training. The collaboration involved sharing / exchange research ideas between industry and Institutes. The output of collaboration benefitted to the M.Sc, PhD and post doctorate students in terms of training and research, joint publications in reputed research journal and patents. The Institutes/ Universities involved for collaboration viz. Indian Institute of Technology Bombay, UM DAE Centre for Excellence in basic sciences, Mumbai ; Smt Savitribai Phule Pune University, Pune; Haffkine Institute for Training Research Testing, Mumbai ; Dr Balabhai Nanavati Hospital, Mumbai ; Advanced Centre for Treatment, Research and Education in cancer, Navi Mumbai; Bhabha Atomic Research Centre, Mumbai ; Ashwamedh Medicare Pvt Ltd.; Life Force Trust, Mumbai.

Start-up established (SCINOVA LABS LLP): Ten years of our laboratory research culminated into outstanding publications in peer review journals, creation of patents and formation of start-up. We have been approved start-up (**SCINOVA LABS LLP**) by the Govt of India. We have developed innovative various experimental models for the purpose of teaching-training to undergraduate and post graduate students which will easily to understand complex scientific theory.

21. Reviewer for various research journals

- Journal of Fluorescence
- Journal of Medicinal Chemistry
- Natural Products and Resources Repository, NISCAIR, CSIR
- Journal of Natural Sciences
- Radiation Protection and Environment Sciences.
- New Journal of Chemistry (RSC publ)
- Journal of Hazardous
- International Journal of Biological macromolecules
- Journal of Biomolecular structure and dynamics
- Sensor Technology
- Nature Scientific Report

22. PhD / M.Phil Examiners of various universities/ Institutes

- Smt Savitribai Phule Pune University, Pune
- Banaras Hindu University, Varanasi,
- Dr Babasaheb Ambedkar Marathwada University, Aurangabad
- NIMHANS, Bangalore
- Kalyani University, Kolkatta
- Panjab University, Chandigarh
- University of Lucknow, Lucknow
- Karunya University, Coimbatore
- DY Patil Medical University, Kolhapur
- MGM University, Navi Mumbai

Patent awarded

पेटेंट सं. 503666

887 पेट. सं. 422137179


INTELLECTUAL PROPERTY INDIA

पेटेंट कार्यालय, भारत सरकार | The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
 (पेटेंट विन्यासों का नियम 14) (Rule 14 of The Patents Rules)

पेटेंट सं. / Patent No. : 503666
 आवेदन सं. / Application No. : 230210111364
 मंजूरी की तिथि / Date of Filing : 17/03/2020
 पेटेंटर / Patentee : 1. DR. P.M. DONGRE 2. Dhanashri Pangam

पेटेंट प्रमाण पत्र यह है कि पेटेंटर को, उपरोक्त आवेदन में पता की गई **HUMAN PLASMA PROTEINS-GMP CONJUGATE-AN ALTERNATIVE NOVEL POLYVALENT ANTI SNAKE VENOM (ASV)** नामक आविष्कार के लिए, पेटेंट प्रदान किया गया है, जो 17/03/2020 के दिनांक से प्रभावी है, जो 17/03/2020 के दिनांक से प्रभावी है, जो 17/03/2020 के दिनांक से प्रभावी है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled **HUMAN PLASMA PROTEINS-GMP CONJUGATE-AN ALTERNATIVE NOVEL POLYVALENT ANTI SNAKE VENOM (ASV)** as disclosed in the above mentioned application for the term of 20 years from the 17th day of March 2020 in accordance with the provisions of the Patents Act, 1970.


 Controller of Patents

पेटेंट की तिथि : 25/01/2024
 Date of Grant

ध्यान दें: यह पेटेंट प्रमाण पत्र केवल तभी प्रभावी रहेगा, यदि यह पेटेंट प्रमाण पत्र 17/03/2020 के दिनांक से प्रभावी है, जो 17/03/2020 के दिनांक से प्रभावी है, जो 17/03/2020 के दिनांक से प्रभावी है।
 Note: This has for removal of this patent, it is to be maintained, will till has taken due on 17th day of March 2020 and on the same day in every year thereafter.

पेटेंट सं. 610170

887 पेट. सं. 422137179

INTELLECTUAL PROPERTY INDIA

पेटेंट कार्यालय, भारत सरकार | The Patent Office, Government Of India
पेटेंट प्रमाण पत्र | Patent Certificate
 (पेटेंट विन्यासों का नियम 14) (Rule 14 of The Patents Rules)

पेटेंट सं. / Patent No. : 610170
 आवेदन सं. / Application No. : 201821031781
 मंजूरी की तिथि / Date of Filing : 24/08/2018
 पेटेंटर / Patentee : 1. DR. PRABHAKAR M. DONGRE (PHD BIOPHYSICS) 2. DR. BIPIN SAHADEO KHARDE (PHD BIOPHYSICS)

पेटेंट प्रमाण पत्र यह है कि पेटेंटर को, उपरोक्त आवेदन में पता की गई **AN ENZYMATIC METHOD FOR SYNTHESIS OF SILVER NANOSTRUCTURES WITH VARIOUS SIZES AND LESS TIME CONSUMING** नामक आविष्कार के लिए, पेटेंट प्रदान किया गया है, जो 24/08/2018 के दिनांक से प्रभावी है, जो 24/08/2018 के दिनांक से प्रभावी है, जो 24/08/2018 के दिनांक से प्रभावी है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled **AN ENZYMATIC METHOD FOR SYNTHESIS OF SILVER NANOSTRUCTURES WITH VARIOUS SIZES AND LESS TIME CONSUMING** as disclosed in the above mentioned application for the term of 20 years from the 24th day of August 2018 in accordance with the provisions of the Patents Act, 1970.


 Controller of Patents

पेटेंट की तिथि : 13/02/2024
 Date of Grant

ध्यान दें: यह पेटेंट प्रमाण पत्र केवल तभी प्रभावी रहेगा, यदि यह पेटेंट प्रमाण पत्र 24/08/2018 के दिनांक से प्रभावी है, जो 24/08/2018 के दिनांक से प्रभावी है, जो 24/08/2018 के दिनांक से प्रभावी है।
 Note: This has for removal of this patent, it is to be maintained, will till has taken due on 24th day of August 2018 and on the same day in every year thereafter.



लोकसत्ता विविधा

चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा

मुंबई विद्यापीठाच्या जैवभौतिकशास्त्र विभागात संशोधन

प्रतिनिधी, मुंबई

'सर्पदंशातुळे दरवर्षी ५२ हजार लोकांचा मृत्यू'

मुंबई विद्यापीठाच्या जैवभौतिकशास्त्र विभागाचे प्राध्यापक विष्णू शंभरते यांनी संशोधन करून सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे.



उत्पादन विभाग: उष्णकटिबंधीय प्रदेशात सर्पदंशाचे मृत्यू रोगे ही सर्वाधिक आरोग्य समस्या बनली आहे. विशेषतः जालिम अशा सर्पदंशाच्या प्राणालयातील सर्पदंशाचे आजार दरवर्षी ५२ हजार लोक सर्पदंशाने ठार जातात.

मुंबई | शनिवार, २२ सप्टेंबर २०१८ | mumbai.mtlnline.in

सर्पदंशावर नवी मात्रा

म. टा. विशेष प्रतिनिधी, मुंबई

मुंबई विद्यापीठाच्या जैवभौतिकशास्त्र विभागाचे संशोधन

- चांदीपासून बनवले नवीकण
- चाचण्यामध्ये सापाच्या विषाची तीव्रता ९५ ते ९८ टक्क्यांनी कमी



एकविसाव्या शतकातील केवळ चार ते पाच प्रकारच्या सापांच्या विषावरील लस आणण्याकडे उपलब्ध आहे. यामुळे या क्षेत्रात संशोधन होणे ही कठिणची गरज आहे. ही गरज ओळखून मुंबई विद्यापीठाच्या जैवभौतिकशास्त्र विभागाचे विशेष संशोधन करून सर्पदंशावर मात्रा उपचार नैतिकता चांदीच्या धातूपासून तयार केले आहेत. त्याबाबतच्या प्राथमिक चाचण्याही पूर्ण झाल्या असून त्यांचे चांगले परिणाम दिसले आहेत.



प्रा. प्रभाकर डोंगरे

चाचण्या घेतल्या असत सापाच्या विषाची तीव्रता ९५ ते ९८ टक्क्यांनी कमी झाल्याचे दिसून आले. हे संशोधन जपानमधील जैवभौतिकशास्त्रसंशोधन केंद्रातून प्रकाशित होणार असून, काही भाग 'टॉक्सिकॉन' या संशोधन नियतकालिकात प्रिंटद होणार आहे. जैवभौतिकशास्त्र विभागाचे प्रमुख प्रा. प्रभाकर डोंगरे यांनी चाचण्या घेतल्या असून, काही भाग 'टॉक्सिकॉन' या संशोधन नियतकालिकात प्रिंटद होणार आहे. जैवभौतिकशास्त्र विभागाचे प्रमुख प्रा. प्रभाकर डोंगरे यांनी चाचण्या घेतल्या असून, काही भाग 'टॉक्सिकॉन' या संशोधन नियतकालिकात प्रिंटद होणार आहे.

नॅनो कणांद्वारे मुंबई विद्यापीठाच्या जीवभौतिक शास्त्र विभागात संशोधन सापाच्या दंशानंतर विषाच्या तीव्रतेवर अंकुश

मुंबई : प्रतिनिधी

मुंबई विद्यापीठाच्या जीवभौतिक शास्त्र विभागाचे महत्त्वपूर्ण संशोधन हाती घेतले असून या संशोधनाच्या माध्यमातून सापाच्या विषाची तीव्रता कमी करणे यशस्वी ठरले आहे. जपानमधील जैवभौतिकशास्त्र विभागाचे प्राध्यापक विष्णू शंभरते यांनी संशोधन करून सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे.

सापाचे विष, त्याचे दुष्परिणाम व योग्य उपचार पद्धती यासंबंधी संशोधन क्षेत्रात फारशी प्रगती झाली नाही. मलायेशिया हे क्षेत्र फार दुर्लक्षित केले गेले आहे. जपानमधील जैवभौतिकशास्त्र विभागाचे प्राध्यापक विष्णू शंभरते यांनी संशोधन करून सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे.

लोकमत

मुंबई विद्यापीठाचा दावा : चांदीच्या नॅनो कणांचा वापर करून जैव विभागाचे संशोधन सापाच्या विषबाधेची तीव्रता कमी करणार

लोकमत न्यूज नेटवर्क

मुंबई : सापाच्या विषबाधेची तीव्रता कमी करणे यशस्वी ठरले आहे. जपानमधील जैवभौतिकशास्त्र विभागाचे प्राध्यापक विष्णू शंभरते यांनी संशोधन करून सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे.

सापाचे विष हे मुख्यतः मॅडू, हृदय, स्नायू आणि त्वाकभिरण संस्थेवर हलका करत व त्याचे कार्य निकामी करते. परिणामतः मृत्यू ओढवतो. सध्या साप चाबलेल्या जी उपचार पद्धती केली जाते त्यात काही वेळेस या प्रतिनैतिकता रुग्णालय उलट प्रतिक्रिया (रिअॅक्शन) होते व रोगी अधिक गंभीर होऊन मृत्यूचा शिकार होऊन जातो. यामुळे शाश्वत अशी उपचार पद्धती विकसित करण्याच्या हेतूने विभागाचे हे संशोधन हाती घेतल्याचे विभागप्रमुख प्रा. प्रभाकर डोंगरे यांनी सांगितले.

आपलं महानग

सापाच्या विषावर जालिम उतारा मुंबई विद्यापीठाचे महत्त्वपूर्ण संशोधन

प्रतिनिधी >> मुंबई

connect@mymhnanagar.com

मुंबईचे महत्त्वपूर्ण संशोधन हाती घेतले आहे. जपानमधील जैवभौतिकशास्त्र विभागाचे प्राध्यापक विष्णू शंभरते यांनी संशोधन करून सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे. चांदीच्या सूक्ष्म कणांचा सापाच्या विषावर उतारा सापडविले आहे.

सापाचे विष हे मुख्यतः मॅडू, हृदय, स्नायू आणि त्वाकभिरण संस्थेवर हलका करत व त्याचे कार्य निकामी करते. परिणामतः मृत्यू ओढवतो. सध्या साप चाबलेल्या जी उपचार पद्धती केली जाते त्यात काही वेळेस या प्रतिनैतिकता रुग्णालय उलट प्रतिक्रिया (रिअॅक्शन) होते व रोगी अधिक गंभीर होऊन मृत्यूचा शिकार होऊन जातो. यामुळे शाश्वत अशी उपचार पद्धती विकसित करण्याच्या हेतूने विभागाचे हे संशोधन हाती घेतल्याचे विभागप्रमुख प्रा. प्रभाकर डोंगरे यांनी सांगितले.

आपलं महानग

An Expert Lecture on “Roadmap of Research Activities”



The chief guest, Prof. (Dr.) P. M. Dongre (Research Coordinator, PRES) enumerated and briefly discussed the steps to develop a good research and the related key components.

Date. 28/11/2022.



The chief guest, Prof. (Dr.) P. M. Dongre (Research Coordinator, PRES) enumerated and briefly discussed the steps to develop a good research and the related key components.

Date. 28/11/2022.

**Workshop on “Research Methodology
in Chemical Sciences” (2022-23)**



Loknete Dr. Balasaheb Vikhe Patil
(Padma Bhushan Awardee)
Pravara Rural Education Society's,
**ARTS, COMMERCE AND SCIENCE COLLEGE,
SATRAL**
Tal.-Rahuri, Dist.- Ahmednagar (Pin - 413 711)

Date. 24/04/2023

Notice

The Department of Chemistry and Research Committee organizing one day workshop on “**Research Methodology in Chemical Sciences**” on **Friday, 28th- April- 2023** at 10.00 a. m. in seminar hall. This workshop will be useful for students for gaining better insight into Research Methodology. Students and faculty members are hereby notified that attend the program.

Principal

PRINCIPAL

Art's, Commerce & Science College
Satral, Tal.Rahuri, Dist. Ahmednagar.

ABOUT THE INSTITUTION

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society was founded by Late Padmashri Dr. Vitthalrao Vikhe Patil in 1964. The Education Society since its establishment has expanded its avenues to reach out to the students from the remote areas under the dynamic leadership of late Padma Bhushan Dr. Balasaheb Vikhe Patil. Presently, Hon'ble Shri. Radhakrishna Vikhe Patil, Chairman, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society, Pravaranagar has shouldered the responsibility of providing the best facilities for the all-round development of students from rural background. The college was established in 1998 and re-accredited with "B++" grade by NAAC in 2018. It has grown since its inception in the field of Higher Education. The college offers courses like B.A., B. Com., B.Sc., M.Sc.(Analytical Chemistry) and M. Com (Business Administration and Advance Marketing). The college maintains a perfect blend of quality education and excellence in sports and extra-curricular activities.

PATRONS

Hon'ble Namdar Shri. Radhakrishna Vikhe Patil,

Chairman, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society, Pravaranagar

Hon'ble Adv. Shri. Rajendra Vikhe Patil,

President and Chancellor, Pravara Institute of Medical Sciences, Loni

Hon'ble Sau. Shalinitai Vikhe Patil,

Former Chairman, Z.P. Ahmednagar

Hon'ble Dr Sujay Vikhe Patil,

Member of Parliament, Ahmednagar Constituency

ADVISORY COMMITTEE

Hon'ble Shri Bharat Ghogare Patil

Joint Secretary, PRES, Pravaranagar (Loni Kd.)

Hon'ble Dr Shivanand Hiremath

Additional CEO, PRES, Pravaranagar (Loni Kd.)

Hon'ble Dr. P. M. Dighe

Director, Non-Technical College, PRES Pravaranagar

Hon'ble Members of Local Management Committee



Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's

ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL

Tal- Rahuri, Dist- Ahmednagar-413 711 Maharashtra.

NAAC Re-accredited B++ Grade

**DEPARTMENT OF CHEMISTRY
AND RESEARCH COMMITTEE**

ORGANIZED

One Days Workshop on

**"Research Methodology in
Chemical Sciences"**

28th April 2023

ORGANIZING COMMITTEE

Prof. (Dr.) P. M. Dongre

Principal

Dr. D. N. Gholap

(Vice- Principal)

Dr. J. R. Singar

(Vice- Principal)

Dr. V. A. Kadnor

Convener

Dr. A. S. Waghmare

Coordinator

ABOUT THE WORKSHOP

- ❑ The workshop aims to introduce students to the important aspects of research.
- ❑ The aims of the workshop are to motivate and guide the young researchers so that they can feel comfortable in the research environment.
- ❑ It gives opportunity to young researchers to make familiar with respect to development research tools.

DISCUSSION THEMES

The proposed themes that will be covered during the workshop are as follows:

- ❑ Literature Survey
- ❑ Reference Management Tools
- ❑ Useful Reference Software's in Chemical Sciences
- ❑ Research Paper writing

REGISTRATION

1. No registration fee
3. e-certificates will be given to the participants after submission .

OBJECTIVES OF WORKSHOP

The proposed workshop have following objectives:

- ❑ TO understand some basic concepts of research and its Methodologies
- ❑ To Identify appropriate research topics
- ❑ To select and define appropriate research problem and Parameters
- ❑ Hands on training of Reference Management Tools.
- ❑ To focus on the technology, related to the development of research tools.

EXPECTED OUTCOME

Research is a careful and detailed study of a particular problem or concern, using scientific methods. An in-depth analysis of information creates space for generating new questions, concepts and understandings. The main objective of the workshop is to transfer the existing skills to create a research-friendly environment.

The workshop will be beneficial for the students, young researches and teachers to broaden the perspective towards the research. The effective use of research tools boost the research. The lectures in the workshop will inculcate the importance of different research tools.

**LOKNETE DR. BALASAHEB VIKHE PATIL (PADMA BHUSHAN AWARDEE)
PRAVARA RURAL EDUCATION SOCIETY'S
ARTS, COMMERCE & SCIENCE COLLEGE, SATRAL**

Name and Type of Event	One day Workshop on “ Research Methodology in Chemical Sciences ”
Date of Event	28- April 2023
Conducted by	Department of Chemistry and Research Committee
No. Of Participant	71

Department of Chemistry and Research Committee had organized an one day Workshop on “**Research Methodology in Chemical Sciences**” for UG, PG students and research scholars on 28- April 2023. For this workshop we have invited resource persons Dr. Aslam C. Shaikh (Assistant Professor in Chemistry Indian Institute of Technology, Ropar Punjab, India).

The inauguration of the workshop was done by the auspicious hands of Dr. Aslam C. Shaikh, Principal Prof. (Dr) P. M. Dongre, vice Principal Dr. D. N. Gholap, Dr. J. R. Singar, Dr. S. S. Pandit , Dr A. S. Waghamre (HOD Chemistry) and Research Committee Coordinator Dr. V. A. Kadnor. The program started at 10:15 am with the Welcoming of Guests and participants with vandana of Padmashri Dr. Vitthalrao Vikhe Patil and Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) and Lamp Lightning.

The Chief Guest, Dr. Aslam C. Shaikh (Assistant Professor in Chemistry Indian Institute of Technology, Ropar Punjab, India).was welcomed by, Principal Prof. (Dr) P. M. Dongre .

The welcome address was given by the Dr. D. N. Gholap. First lecture of the workshop addressed by Principal Prof. (Dr.) P. M. Dongre ((Research Coordinator, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society Pravaranagar).

highlighted the importance of uplifting the culture of research in the academic and explained the importance of the research development process specially for the researchers and the importance of research.

Second lecture of the workshop delivered by the chief guest, Dr. Aslam C. Shaikh enumerated and briefly discussed the steps to develop a good research and the related key components. Sir also listed good books, journals and stressed on the importance of carrying out

an Ethical research. Sir also emphasized on addressing issues, mapping them in one's own service/product and then being able to practically apply that research in one's own domain. enlightened the participants and emphasized on the importance of contribution of research in the larger domain and benefaction to the society at large also introduced the participants to Notable features of the Mendeley Desktop which is very practical and helpful.

At the end of programme Dr. Vijay Kadnor ARC proposed vote of thanks towards resource persons, institute. Mr. Akash Puri, Rahim Shaikh, Rutik Londhe Miss. Nikita Kothule, Renuka, Pranjal Shingote and More from the Department of Chemistry worked as volunteers in conducting this workshop. There were 71 students participated in workshop programme. The Research Scholars and all the other participants were benefitted immensely from this workshop. The workshop motivated the aspiring researchers and also helped the PhD holders update themselves.



The Chief Guest, Dr. Aslam C. Shaikh (Assistant Professor in Chemistry Indian Institute of Technology, Ropar Punjab, India).was welcomed by, Principal Prof. (Dr) P. M. Dongre .



Latitude: 19.509969
 Longitude: 74.481386
 Elevation: 532.28±100 m
 Accuracy: 8.1 m
 Time: 04-28-2023 11:14
 Note: Research Methodology in Chemical Sciences

The welcome address was given by the Dr. D. N. Gholap (Vice Principal)



Latitude: 19.505191
 Longitude: 74.479489
 Elevation: 537.68±56 m
 Accuracy: 2300.0 m
 Time: 04-28-2023 12:01
 Note: Research Methodology in Chemical Sciences

First lecture of the workshop addressed by Principal Prof. (Dr.) P. M. Dongre (Research Coordinator, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society Pravaranagar).



Second lecture of the workshop delivered by the chief guest, Dr. Aslam C. Shaikh enumerated and briefly discussed the steps to develop a good research and the related key components.



At the end of programme Dr. Vijay Kadnor ARC proposed vote of thanks towards resource persons, institute.



Dongre PM
 PRINCIPAL
 Art's, Commerce & Science College
 Satral, Tal. Rahuri, Dist. Ahmednagar.

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)

Pravara Rural Education Society's

Arts, Commerce and Science College, Satral

A/P. Satral, Tal. Rahuri, Dist. Ahmednagar MS

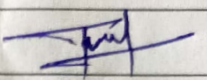
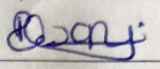
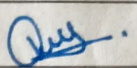

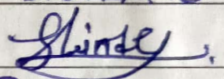
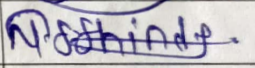
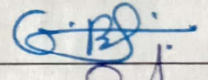
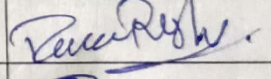
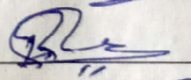
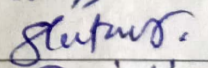
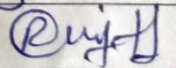

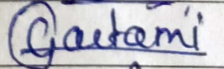
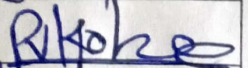
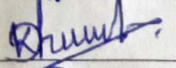
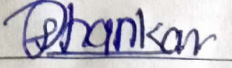
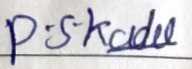
Department of Chemistry and Research Committee Organized

One Day Workshop on

"Research Methodology in Chemical Sciences"

Date: 28-04-2023

Participant Attendance Report

Sr. No.	Name of the Students	Class	Sign
1]	Wani Pallavi Sanjay	MSC-I	
2]	Wani Prajakta Gonakh	MSC-I	
3]	Wani Sahil Sitarum	MSC-I	wani.s.s
4]	Unde Vaibhav Namdev	Msc-I	
5]	Solunke Ruturaj Radhaktushna	MSC-I	
6]	Sinare pooja Gopinath	MSC-I	Sinare
7]	Shinde Rushikesh Balasaheb	MSC-I	
8]	Shinde Nilesh Sanjay	MSC-I	
9]	Sangule Gaurav Bhausahab	MSC-I	
10]	Pawar Rushikesh Dipak	MSC-I	
11]	Pawar Ajit Karbhari	MSC-I	
12]	Pathare Sanjay Balasaheb	MSC-I	
13]	Pathan Rajiya Rajjak	MSC-I	
14]	Musmade Rameshwar R.	MSC-I	
15]	Kulkarni Gaetami Vikas	MSC-I	
16]	Kobane Pandurang Vilas	MSC-I	
17]	Akhule Dnyaneshkhar Balasaheb	MSC-I	
18]	Khemnar Shankar Ganpatkar	MSC-I	
19]	Kadu Pallavi Sham	MSC-I	

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's
Arts, Commerce and Science College, Satral
A/P. Satral, Tal. Rahuri, Dist. Ahmednagar MS
Department of Chemistry and Research Committee Organized
One Day Workshop on
"Research Methodology in Chemical Sciences"

Date: 28-04-2023

Participant Attendance Report

Sr. No.	Name of the Students	Class	Sign
20	Jare Dhananjay Babasaheb	MSC-I	<u>Dhananjay</u>
21	Jadhav Kshitija Babasaheb	MSC-I	<u>K. Jadhav.</u>
22	Harde Rushikesh Subhash	M.Sc-2	<u>RKH</u>
23	Gholap ANKITA RAMESH	MSC-I	<u>ANKITA</u>
24	Gogare Rahul Pandharinath	MSC-I	<u>Rahul</u>
25	Gagare Dipak Sundarbh	MSC-I	<u>Dipak</u>
26	Godhe Vipul Sanjay.	MSC-I	<u>Godhe</u>
27	Pradhan Gaurav Vijay	TY.BSC	<u>G.Pradhan</u>
28	Musmade Sachin Ravji	T.Y.BSC	<u>Sachin</u>
29	Shelar Siddharth Prabhakar	TY.BSC	<u>Sshelar</u>
30	Shinde Divya Rajendra	TY.BSC	<u>Divya</u>
31	Dighe Priyanka Babasaheb	TY.BSC	<u>Priyanka</u>
32	Pawade Bhakti Rajendra	T.Y.BSC	<u>Bhakti</u>
33	Nehe Ashvini Babasaheb	T.Y.BSC	<u>Ashvini</u>
34	Pathare Megha Madhindra	T.Y.BSC	<u>Megha</u>
35	Gagare Pallavi Annasaheb	T.Y.BSC	<u>Pallavi</u>
36	Nagare Mayuri Ashok	T.Y.BSC	<u>Mayuri</u>
37	Wani Rutuja Jaysam	T.Y.BSC	<u>Rutuja</u>
38	pawade Sakshi Ashok	T.Y.BSC	<u>Sakshi</u>

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's
Arts, Commerce and Science College, Satral
A/P. Satral, Tal. Rahuri, Dist. Ahmednagar MS
Department of Chemistry and Research Committee Organized
One Day Workshop on
"Research Methodology in Chemical Sciences"

Date: 28-04-2023

Participant Attendance Report

Sr. No.	Name of the Students	Class	Sign
39)	Vyavhare Monali Madhukar	T.Y. Bsc	
40)	Balme Durga Dadasaheb	T.Y. Bsc	
41)	Shinde Kalyani Bhausaheb	T.Y. Bsc	
42)	Sinase Trupti Sunil	T.Y. B.Sc	
43)	Gawade Akshada Mohan	T.Y. Bsc	
44)	Gogare Gayali Babasaheb	T.Y. Bsc	
45)	Upadhye Naishnavi Vikas	T.Y. Bsc	
46)	Hani Pallavi Vishwanath	T.Y. B.Sc	
47)	wani sakshi bigambar	T.Y. Bsc	
48)	Gogare Kalyani Shivaji	T.Y. Bsc	
49)	Ghadake priyanka vijay	T.Y. Bsc	
50)	Sinase Shital Marchhinda	T.Y. Bsc	
51)	Harde shweta Paraji.	T.Y. Bsc	
52)	Harde shubhangi sanjay	T.Y. Bsc	
53)	Antre Tariveni Sunil	T.Y. Bsc	
54)	Anap Samiksha Surgh	T.Y. Bsc	
55)	Kadern vi shakha subhash	T.Y. Bsc	
56)	Dighe shubhangi Ravisahab.	T.Y. Bsc	
57)	Harde Akshada Rajendra	T.Y. Bsc	

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)

Pravara Rural Education Society's
Art, Commerce and Science College, Satral
P. Satral, Tal. Rahuri, Dist. Ahmednagar
Department of Chemistry and Workshop Committee Organized
Research and Workshop on
"Research Methodology in Chemical Science"

Date : 28-04-2023

Participant Attendance Report

Sr. No.	Name of the Student	Class	Signature
58]	Ghorpade Nikita Sanjay	T. Bsc	
59]	Musmade AKshada Rajendra	T.Y.BSC	
60]	Gogare Vaishnavi Kailas	T.Y.BSC	
61]	Pawade Dhanashy Popat	T.Y.BSC	
62]	Shirsath Rohit Satish	T.Y.BSC	
63]	Londhe Mahesh Nanasaheb	T.Y.BSC	
64]	Musmade Rohan Sanjay	T.Y.BSC	
65]	Londhe Uddhav Shamrao		
66]	Shirsath Vishal Suresh	T.Y.BSC	
67]	Anap Swapnil Jaywant	T.Y.B.S.C	
68]	Gholap Abhinav Sahendra	T.Y.BSC	
69]	Gani Saniket Dadasaheb	T.Y.BSC	
70]	Nerkar Vikas Ramnath	T.Y.BSC	
71]	Chavan Amit Kishor	T.Y.B.S.C	

PRINCIPAL
Art's, Commerce & Science College
Satral, Tal. Rahuri, Dist. Ahmednagar.

पुण्य नगरी

परदेशात संशोधनाच्या उत्तम संधी : डॉ. शेख

सात्रळ महाविद्यालयात शिबीर उत्साहात

सात्रळ : रसायनशास्त्र विषयाच्या विद्यार्थ्यांना परदेशात संशोधनाच्या उत्तम संधी असल्याचे मत डॉ. अस्लम शेख यांनी व्यक्त केले. प्रवरा ग्रामीण शिक्षण संस्थेच्या येथील कला, वाणिज्य व विज्ञान महाविद्यालयात आयोजित मार्गदर्शन शिबिरात ते बोलत होते.

यावेळी प्राचार्य डॉ. प्रभाकर डोंगरे, उपप्राचार्य डॉ. दीपक घोलप, उपप्राचार्य डॉ. जयश्री सिनगर, रसायनशास्त्र विभागप्रमुख डॉ. अमित वाघमारे, संशोधन समिती समन्वयक डॉ. विजय



सात्रळ : येथील कला, वाणिज्य व विज्ञान महाविद्यालयात मार्गदर्शन शिबिरात बोलताना डॉ. अस्लम शेख. समवेत मान्यवर.

कडनोर, ट्रेनिंग प्लेसमेंट समन्वय प्रा. छाया कार्ले व प्रो. डॉ. शिवाजी पंडित आदी उपस्थित होते.

डॉ. अस्लम शेख हे

महाविद्यालयाच्या रसायनशास्त्र विभागाचे माजी विद्यार्थी असून नुकतीच त्यांची भारतीय तंत्रज्ञान संस्था रोपड, पंजाब येथे सहाय्यक

प्राध्यापक म्हणून नियुक्ती झाली आहे. डॉ. शेख यांच्या भारतीय तंत्रज्ञान संस्था, रोपड पंजाब येथील रसायनशास्त्र विभागाचे प्राध्यापक म्हणून नियुक्ती झाल्याबद्दल महाविद्यालयाकडून त्यांचा सत्कार करण्यात आला.

डॉ. शेख यांच्या यशाबद्दल संस्थेचे अध्यक्ष नामदार राधाकृष्ण विखे पाटील, शालिनीताई विखे पाटील व खासदार डॉ. सुजय विखे पाटील, प्रवरा ग्रामीण शिक्षण संस्थेचे सहसचिव भारत घोगरे, अति. मुख्य कार्यकारी अधिकारी डॉ. शिवानंद हिरेमठ तसेच स्थानिक सल्लागार समितीने कौतुक केले आहे.

Aslam Chandbhai Shaikh, Ph.D

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**PROFESSIONAL SUMMARY**

- Synthetic in/-organic chemist with 11+ years of experience in multi-step organic synthesis for drug discovery, novel reaction methodology development, diversity-oriented small molecule library generation, ligand design in organometallic chemistry, development, and synthesis of organic fluorophore analogue for bio-imaging, and OLEDs.
- 30 peer-reviewed publications/patents with various presentations and conferences in India and abroad.
- Strong interest in learning and exploring new concepts in organic chemistry which could possibly enhance the access to naturally occurring bioactive molecules and making useful materials.
- Excellent communication skills and ability to work independently or in multidisciplinary teams and involved in extensive collaborations with other scientific groups.

EDUCATION

08/2013 – 04/2018	Ph.D. , Chemical Sciences, CSIR-National Chemical Laboratory, Pune, India Research supervisor: Dr. Nitin. T. Patil; Thesis title: “ <i>Design and Development of Organic Fluorophores via Catalytic Alkyne Functionalization</i> ” (CGPA-9.12)
07/2010 – 07/2012	M.Sc. , Organic Chem., SP Pune University, Pune, Distinction, Class (80.95%)
07/2007 – 07/2010	B.Sc. , Chemistry, SP Pune University, Pune, Distinction, Class (90.56%)

RESEARCH AND TEACHING EXPERIENCE

Mar 2023 – To date	Assistant Professor , Department of Chemistry, Indian Institute of Technology Ropar, Rupnagar, Punjab.
Feb 2022 – Feb 2023	Postdoctoral Research Associate , King Abdullah University of Science and Technology, KSA. Research supervisor- Prof. M. Eddaoudi
Aug 2019 – Jan 2022	Postdoctoral Research Associate , University of Arizona, AZ, USA. Research supervisor- Prof. Thomas Gianetti
Aug 2018 – July 2019	Postdoctoral Research Associate , University of California Los Angeles, CA Research supervisor- Prof. Kwon Ohyun
Aug 2013 – Apr 2018	Shyama Prasad Mukherjee (SPM) Fellow , CSIR-National Chemical Laboratory, Pune, India; Research supervisor: Dr. Nitin T. Patil
Jan 2013 – Aug 2013	Research Assistant , CSIR-National Chemical Laboratory, Pune, India; Research supervisor: Dr. M. Muthukrishnan
Aug 2012 – Dec 2012	Lecturer in Chemistry , Padmashri Vikhe Patil College of Arts, Science and Commerce, Pravaranagar, Loni, India

LIST OF PUBLICATIONS**Indian Institute of Technology Ropar**

1. P. Singh, B. König,* and **A. C. Shaikh***, Electro-photochemical Functionalization of C(sp³)-H bonds: Synthesis toward Sustainability, *JACS Au*, **2024**, Just accepted, DOI:10.1021/jacsau.4c00496.
2. P. Singh, and **A. C. Shaikh***, Photochemical Sonogashira coupling reactions: beyond traditional palladium-copper catalysis. *Chem. Commun.*, **2023**, *59*, 11615–1630. DOI: 10.1039/D3CC03855F.
3. P. Singh, Nandlal Singh, and **A. C. Shaikh***, Solvated Electrons: Dynamic Reductant in Visible Light Photoredox Catalysis. *Adv. Synth. Catal.*, **2024**, *366*, 1906–1921. DOI:10.1002/adsc.202400001.
4. N. Lal, P. Singh, and **A. C. Shaikh***, Allylsilane as a versatile handle in photoredox catalysis. *Chem. Commun.*, **2024**, *60*, 4633–4647. DOI:10.1039/D4CC00734D.

5. Md M. Hossain, **A. C. Shaikh**, R. Kaur, and T. L. Gianetti, Red light–blue light chromoselective C(sp²)–X bond activation by organic helicenium-based photocatalysis. *J. Am. Chem. Soc.* **2024**, *146*, 7922–7930. DOI:10.1021/jacs.3c13380 (IIT Ropar affiliation).

Postdoctoral and Ph.D. studies:

6. P. T. Parvatkar, S. Kandambeth, **A. C. Shaikh** I. Nadinov, J. Yin, V. S. Kale, G. Healing, A.-H. Emwas, O. Shekhah, O. F. Mohammed and M. Eddaoudi, A Tailored COF for Visible-light Photosynthesis of 2,3-Dihydrobenzofurans. *J. Am. Chem. Soc.* **2023**, *145*, 9, 5074–5082. doi.org/10.1021/jacs.2c10471.
7. M. Barsukova, A. Sapanik, V. Guillerm, **A. C. Shaikh**, et al. Face-directed assembly of tailored isorecticular MOFs using centring structure-directing agents. *Nat. Synth*, **2023**, *3*, 33–46. doi.org/10.1038/s44160-023-00401-8.
8. A. M. El-Zohrya, T. Søllinga, A. E. Hussien, O. Shekhah, **A. C. Shaikh** and M. Eddaoudi, The Charge Transfer Process of Solvated Hydrogen-Bonded Organic Network. *J. Phys. Chem., B* **2023**, *127*, 42, 9050–905.
9. **A. C. Shaikh**, Md M. Hossain, J. Moutet, A. Kumar, R. Kaur, B. Thompson, V. Huxter, and T. L. Gianetti, Isolated Neutral [4]Helicene Radical Provides Insight into Consecutive Two-Photon Excitation Photocatalysis. *ChemRxiv preprint: DOI- 10.26434/chemrxiv-2022-6qpb8*.
10. Md M. Hossain*, **A. C. Shaikh***, J. Moutet, and T. L. Gianetti, Photocatalytic α -Arylation of cyclic ketones. *Nature Synthesis*, **2022**, *1*, 147-157. DOI: 10.1038/s44160-021-00021-0. (*work equally contributed); *ChemRxiv*: DOI-10.33774/chemrxiv-2021-gsq6s.
11. **A. C. Shaikh**, J. M. Veleta, J. Moutet and T. L. Gianetti, Trioxatriangulenium (TOTA+) as a Robust Carbon-based Lewis Acid in Frustrated Lewis Pair Chemistry. *Chem. Sci.*, **2021** *12*, 4841-4849. *ChemRxiv*: DOI-10.26434/chemrxiv.13071821. doi.org/10.1039/D0SC05893A.
12. **A. C. Shaikh**, J. Moutet, J. M. Veleta, Md M.Hossain, J. Bloch, A. V. Astashkin and T. L. Gianetti, Persistent, Highly Localized, and Tunable [4]Helicene Radicals, *Chem. Sci.*, **2020**, *11*, 11060-11067 (*ChemRxiv*. doi.org/10.26434/chemrxiv.12408245.v2. doi.org/10.1039/D0SC04850J).
13. **A. C. Shaikh**, J. M. Veleta, J. Bloch, H. J. Goodman, T. L. Gianetti, Syntheses of Phosphonium salt from Phosphines and carbenium: Efficient CO₂ Fixation and Phase-Transfer Catalysts, *Eur. J. Org. Chem.*, **2020**, *17*, 2553 - 2559. doi.org/10.1002/ejoc.202000221.
14. A. J. Smaligo, J. Wu, N. R. Burton, A. S. Hacker, **A. C. Shaikh**, J. C. Quintana, R. Wang, C. Xie, and O. Kwon, Oxodealkenylative cleavage of alkene C(sp³)–C(sp²) bonds: A practical method for introducing carbonyls in chiral pool materials, *Angew. Chem. Int. Ed.* **2020**, *59*, 1211 –1215. DOI: 10.1002/anie.201913201.
15. **A. C. Shaikh** and Ohyun Kwon, Phosphine-Catalyzed [3 + 2] Annulation: Synthesis of Ethyl 5-(tert-Butyl)-2-Phenyl-1-Tosyl-3-Pyrroline-3-Carboxylate, *Org. Synth.* **2019**, *96*, 214-231. DOI: 10.15227/orgsyn.096.0214.
16. **A. C. Shaikh** and Ohyun Kwon, Phosphine-Catalyzed [4+2] Annulation: Synthesis of Ethyl 6-Phenyl-1-Tosyl-1,2,5,6-Tetrahydropyridine-3-Carboxylate, *Org. Synth.* **2019**, *96*, 110-123. DOI: 10.15227/orgsyn.096.0110.
17. **A. C. Shaikh**, S. Banerjee, R. D. Mule, Saibal Bera and N. T. Patil, External Oxidant-Dependent Reactivity Switch in Copper-Mediated Intramolecular Carboamination of Alkynes: Access to New Classes of Fluorescent Ionic Nitrogen-Doped Polycyclic Aromatic Hydrocarbons, *J. Org. Chem.*, **2019**, *84*, 4120–4130. doi.org/10.1021/acs.joc.9b00120.
18. **A. C. Shaikh**, M. E. Varma, R. D. Mule, S. Banerjee, P. P. Kulkarni, and N. T. Patil, Ionic Pyridinium-Oxazole Dyads: Design, Synthesis, and their Application in Mitochondrial Imaging, *J. Org. Chem.*, **2019**, *84*, 1766–1777. doi.org/10.1021/acs.joc.8b02528.
19. **A. C. Shaikh**, D. S. Ranade, P. R. Rajamohanam, P. P. Kulkarni, and N. T. Patil, Oxidative Intramolecular 1,2-Amino-oxygenation of Alkynes under Au(I)/Au(III)-Catalysis: Discovery of Pyridinium-Oxazole Dyad as Novel Ionic Fluorophore, *Angew. Chem. Int. Ed.*, **2017**, *56*, 757-761. DOI: 10.1002/anie.201609335.

20. **A. C. Shaikh**, D. R. Shinde, and N. T. Patil, Gold vs Rhodium Catalysis: Tuning Reactivity through Catalyst Control in the C-H Alkynylation of Isoquinolones, *Org. Lett.*, **2016**, *18*, 1056-1059. (Highlighted in ChemInform Abstract) doi.org/10.1021/acs.orglett.6b00175.
21. **A. C. Shaikh**, D. S. Ranade, S. Thorat, A. Maity, P. P. Kulkarni, R. G. Gonnade, P. Munshi, and N. T. Patil, Highly Emissive Organic Solids with Remarkably Broad Color Tunability Based on N, C Chelate Four-coordinate Organoborons, *Chem. Commun.*, **2015**, *51*, 16115-16118. doi.org/10.1039/C5CC06351E.
22. **A. C. Shaikh**, S. Shalini, R. Vaidhyanathan, M. V. Mane, A. K. Barui, C. R. Patra, Y. Venkatesh, P. R. Bangal, and N. T. Patil, Identifying Solid Luminogens through Gold-catalyzed Intramolecular Hydroarylation of Alkynes, *Eur. J. Org. Chem.*, **2015**, 4860-4867. doi.org/10.1002/ejoc.201500503.
23. D. More, G. Shinde, **A. C. Shaikh** and M. Muthukrishnan, Oxone Promoted Dehydrogenative Povarov Cyclization of N-Aryl Glycine Derivatives: An Approach towards Quinoline Fused Lactones and Lactams, *RSC Adv.*, **2019**, *9*, 30277-30291. DOI: [10.1039/C9RA06212B](https://doi.org/10.1039/C9RA06212B).
24. G. S. Ghotekar, S. R. Shirasath, **A. C. Shaikh** and M. Muthukrishnan, Palladium-catalyzed [4+2] annulation of Sulfonyl allenols with p-Quinone Methides: Highly Regio- and Diastereoselective Access to Spiro[5.5]undeca-1,4-dien-3-one Scaffolds, *Chem. Commun.*, **2020**, *56*, 5022-5025. DOI: [10.1039/D0CC01005G](https://doi.org/10.1039/D0CC01005G).
25. G. S. Ghotekar, **A. C. Shaikh** and M. Muthukrishnan, Transition Metal Free Benzannulation of tricarbonyl Derivatives with Arynes: Facile access to 1,3-Dinaphthol Precursors for the Synthesis of Rhodamine dye Analogues, *J. Org. Chem.*, **2019**, *84*, 2269-2276. doi.org/10.1021/acs.joc.8b02560
26. R. D. Mule, **A. C. Shaikh**, Amol B. Gade, S. Bera, and N. T. Patil, A new class of N-doped ionic PAHs via intramolecular [4+2]-cycloaddition between arylpyridines and alkynes, *Chem. Commun.*, **2018**, *54*, 11909-11912. (Highlighted in Synfacts 02-01-2019, 15(01), 0015, DOI: [10.1055/s-0037-1611930](https://doi.org/10.1055/s-0037-1611930)) doi.org/10.1039/C8CC05743E.
27. S. R. Shirasath, G. H. Shinde, **A. C. Shaikh** and M. Muthukrishnan, Accessing the α -aryl Nitriles via BF₃.OEt₂ Mediated Cyanation of *para*-Quinonemethides using *ter*-Butyl isocyanide as a Cyanide source, *J. Org. Chem.*, **2018**, *83*, 12305-12314. DOI: [10.1021/acs.joc.8b01926](https://doi.org/10.1021/acs.joc.8b01926).
28. V. Nalla, G. S. Ghotekar, M. B. Thoke, R. Velayudham, **A. C. Shaikh**, M. Karthikeyan and M. Muthukrishnan, Transition Metal Free Regio-selective C-H Hydroxylation of Chromanones towards Synthesis of Hydroxyl-Chromanones using PhI(OAc)₂ as an Oxidant, *Chem. Commun.*, **2018**, *54*, 2252-2255. doi.org/10.1039/C7CC08588E.
29. V. Nalla, **A. C. Shaikh**, S. Bapat, R. Vyas, M. Karthikeyan, P. Yogeewari, D. Sriram, and M. Muthukrishnan, Identification of potent chromone embedded [1,2,3]-triazoles as novel antitubercular agents, *RSC Open Science*, **2018**, *5*, 171750. doi.org/10.1098/rsos.171750.
30. P. S. Shinde, **A. C. Shaikh**, and N. T. Patil, Efficient Access to Alkynylated Quinalizines via Gold(I)-catalyzed Aminoalkynylation of Alkynes, *Chem. Commun.*, **2016**, *52*, 8152-8155. (Highlighted in ChemInform Abstract) doi.org/10.1039/C6CC03414D.
31. A. H. Bansode, **A. C. Shaikh**, R. D. Kavthe, S. Thorat, R. G. Gonnade, and N. T. Patil, Catalyst Dependent Selectivity in Relay Catalytic Branching Cascade, *Chem. Eur. J.*, **2015**, *21*, 2319-2323. (Selected as a Hot Article and Inside Back Cover) doi.org/10.1002/chem.201405736.

LIST OF PATENTS

32. N. T. Patil, **A. C. Shaikh**, P. P. Kulkarni, D. S. Ranade; Pyridinium oxazole dyad scaffold and a process for preparation thereof,
U. S. Patent-US10711012B2, U. S. Patent- US11021490B2, WIPO (PCT) WO2018073838A1
Indian Patent: IN 201611035581 (Filing date: 2016-10-18).
33. N. T. Patil, **A. C. Shaikh**, N C-Chelates four-coordinate organoborones with full colour tenability,
U. S. Patent-US10301330B2, WIPO (PCT)- WO2016207910A1
Indian Patent: IN 2015DE01844 (filing date: 2016-06-22).
34. O. Kwon, C. Xie, J. Zhao, N. J. Dupper, **A. C. Shaikh**, J.-N. Chen and A. Langenbacher, Compounds, compositions, and methods for modulating calcium ion homeostasis,
WIPO (PCT)- WO2021163493A1, U. S. Patent- US202062975541P

Fundings

- ISIRD grant, IIT Ropar, 2023.
 - SERB-Startup Research Grant (SRG)-2023.
-

PRESENTATIONS

- **ACS Fall 2021**, Live talk for research article- conPET or XAT? Isolated Neutral Helicene Radical Provides Insight to Two-Photon Excitation Photocatalysis.
 - **ACS Spring 2021**, Live talk for research article- Exploiting helicene radical in photoredox catalysis as a photoreductant for aryl halides.
 - **Seal of Excellence** awarded for Quality Proposal from MSCA-Horizon 2020 in March 2019.
 - Science day Poster Session, CSIR-National Chemical Laboratory, Pune, **February 2017 (Best Poster Prize)**, 21th ICOS International Symposium in Chemistry (ICOS-21), Indian Institute of Technology Bombay, **December 2016**.
 - Science day Poster Session, CSIR-National Chemical Laboratory, Pune, February 2015.-**Best Poster award**.
 - **“RAJAPPA AWARD”** - “Best Published Research Paper in Organic Chemistry” with the highest impact factor for the year **2017**.
 - **“NCL-Agnimitra Memorial Best Poster Award”** -Award best poster award on Feb-2017
-

ACADEMIC ACHIEVEMENTS

- **Aug 2021**, Postdoctoral Professional Development Certificate by University of Arizona
 - CSIR Shyama Prasad Mukherjee - Senior Research Fellowship-2015 and Junior research Fellowship-2013 from the CSIR, New Delhi, India.
 - Graduate Aptitude Test in Engineering (Chemistry) conducted by the IIT-Mumbai, India (Jan 2013, with 97.03 percentile and All India Rank-416).
 - State Eligibility Test, Maharashtra, Feb 2013, Rank-001.
 - National Eligibility Test (NET) for Ph. D. and Lectureship, December-2012, June-2012, December-2011, June-2011 UGC-CSIR, New Delhi, India. (All India Rank-04).
 - **1st Ranker with several awards**, M.Sc. Chemistry, University of Pune, Pune, June 2012
 - **2nd Ranker**, B.Sc. Chemistry, University of Pune, Pune, June 2010.
 - The **Late K.B. Mavalankar Prize** – Highest Number of marks in M.Sc. chemistry 2012- University of Pune
 - The **High Explosive Factory Silver Jubilee Commemoration Prize**-Highest mark in M.Sc. organic chemistry 2012 -University of Pune
 - The **N.S. Parashuraman Memorial Commemoration Prize**-Highest marks in M.Sc. organic chemistry 2012- University of Pune.
-

REFERENCES

1. Prof. Nitin T. Patil
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462 066, India, E-mail -
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Curriculum Vitae

4. Dr. M. Muthukrishnan,
Sr. Principal Scientist, Organic
Chemistry Division, National
Chemical Laboratory, Dr.
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I hereby declared that all the particulars provided above are true and correct to the best of my knowledge and belief.

Aslam Shaikh

Aslam C Shaikh

One Day Workshop on “Research Methodology in Chemical Sciences”



The Chief Guest, Dr. Aslam C. Shaikh (Assistant Professor in Chemistry Indian Institute of Technology, Ropar Punjab, India). was welcomed by, Principal Prof. (Dr) P. M. Dongre. **Date.28/04/2023.**



The welcome address was given by the Dr. D. N. Gholap (Vice Principal) **Date.28/04/2023**



Latitude: 19.509948
 Longitude: 74.481515
 Elevation: 552.96±100 m
 Accuracy: 7.6 m
 Time: 04-28-2023 12:02
 Note: Research Methodology in Chemical Sciences

Powered by NoteCam

First lecture of the workshop addressed by Principal Prof. (Dr.) P. M. Dongre (Research Coordinator, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society Pravaranagar). Date. **28/04/2023**



Latitude: 19.510017
 Longitude: 74.48154
 Elevation: 536.06±30 m
 Accuracy: 8.0 m
 Time: 04-28-2023 11:20
 Note: Research Methodology in Chemical Sciences

Powered by NoteCam

Second lecture of the workshop delivered by the chief guest, Dr. Aslam C. Shaikh enumerated and briefly discussed the steps to develop a good research and the related key components. **Date.28/04/2023.**



At the end of programme Dr. Vijay Kadnor ARC proposed vote of thanks towards resource persons, institute. **Date.28/04/2023**

**Workshop on Research
Methodology (2021-22)**

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)

Pravara Rural Education Society's
Arts, Commerce and Science College, Satral
A/P Satral, Tal. Rahuri, Dist. Ahmednagar

Date: 16th Dec. 2021

Notice

All the faculty members and students are informed that, the Department of Zoology in collaboration with IQAC have organized a **“Workshop on Research Methodology”** on **18-19th December 2021** at 11.00am. Faculty members and students are requested to attend the lecture and take part in the discussion.



Dr. V. M. Pulate
Department of Zoology

HEAD
DEPARTMENT OF ZOOLOGY
Arts, Commerce & Science College, Satral
Tal. Rahuri, Dist. Ahmednagar-413711

ABOUT THE INSTITUTION

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society was founded by Late Padmasri Dr. Vitthalrao Vikhe Patil in 1964. The Education Society since its establishment has expanded its avenues to reach out to the students from the remote areas under the dynamic leadership of late Padma Bhushan Dr. Balasaheb Vikhe Patil. Presently, Hon'ble Shri. Radhakrishna Vikhe Patil, Chairman, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee) Pravara Rural Education Society, Pravaranagar has shouldered the responsibility of providing the best facilities for the all-round development of students from rural background. The college was established in 1998 and re-accredited with "B++" grade by NAAC in 2018. It has grown since its inception in the field of Higher Education. The college offers courses like B.A., B. Com., B.Sc., M.Sc.(Analytical Chemistry) and M. Com (Business Administration and Advance Marketing). The college maintains a perfect blend of quality education and excellence in sports and extra-curricular activities.

PATRONS

Hon'ble Namdar Shri. Radhakrishna Vikhe Patil,
Chairman, Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society, Pravaranagar

Hon'ble Adv. Shri. Rajendra Vikhe Patil,
President and Chancellor, Pravara Institute of Medical Sciences, Loni

Hon'ble Sau. Shalinitai Vikhe Patil,

Former Chairman, Z.P. Ahmednagar

Hon'ble Dr Sujay Vikhe Patil,
Member of Parliament, Ahmednagar Constituency

ADVISORY COMMITTEE

Hon'ble Shri Bharat Ghogare Patil
Joint Secretary, PRES, Pravaranagar (Loni Kd.)

Hon'ble Dr Shivanand Hiremath
Additional CEO, PRES, Pravaranagar (Loni Kd.)

Hon'ble Prof. (Dr) Somnath Gholap
Coordinator, Non-Technical Colleges, PRES, Pravaranagar (Loni Kd.)

Hon'ble Members of Local Management Committee



Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)
Pravara Rural Education Society's

ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL

Tal- Rahuri, Dist- Ahmednagar-413 711 Maharashtra.

NAAC Re-accredited B++ Grade

DEPARTMENT ZOOLOGY

ORGANIZED

Two Days State Level Workshop on

"Workshop On Research Methodology "

December 18-19, 2021

ORGANIZING COMMITTEE

Smt. J. R. Singer
(I/c Principal)

Prof. (Dr) S. S. Gholap
(Vice- Principal)

Mr D. N. Gholap
(Vice- Principal)

Dr. R.S.Tambe
Convener

Dr.V.M.Pulate
Coordinator

ABOUT THE WORKSHOP

- The workshop will provide hands on training on different topics related to useful software and research tools.
- The aims of the workshop are to motivate and guide the young researchers so that they can feel comfortable in the research environment.
- It gives opportunity to young researchers to make familiar with respect to development research tools.

DISCUSSION THEMES

The proposed themes that will be covered during the workshop are as follows:

- Data analysis and graph plotting tools
- Reference Management Tools
- Useful Software's in Sciences

REGISTRATION

1. Registration fee-(600/300) for faculty & students
2. Certificates will be given to the participants after submission of feedback form.

OBJECTIVES OF WORKSHOP

The proposed workshop have following objectives:

- To unlock the existing knowledge and boost research.
- To aware the open/free and useful software's for young researchers and students
- Use of different research tools and training of these software's.
- Hands on training of Reference Management Tools.
- To focus on the technology, related to the development of research tools.

EXPECTED OUTCOME

Research is a careful and detailed study of a particular problem or concern, using scientific methods. An in-depth analysis of information creates space for generating new questions, concepts and understandings. The main objective of the workshop is to transfer the existing skills to create a research-friendly environment.

The workshop will be beneficial for the students, young researches and teachers to broaden the perspective towards the research. The effective use of research tools boost the research. The lectures in the workshop will inculcate the importance of different research tools.

Arts, Commerce and Science College, Satral
A/P Satral, Tal. Rahuri, Dist. Ahmednagar PIN 413 711

**A Report on Department of Zoology organized
“Workshop on Research Methodology”
December 18-19, 2021**

Workshop on Research Methodology has been organized by Department of Zoology, Arts, Commerce and Science College, Satral on December 18-19, 2021.

The seminar was started at 11.00 am on Monday 18th December 2021 with a welcome and theme of workshop, was delivered by Dr. Ram Tambe, Coordinator of workshop .Afterward inaugural speech was delivered by Smt. Jayashri Singer I/C Principal, Arts, Commerce and Science College, Satral. The program was anchored by Assistant Professor Mrs. Dipti Agarkar, Department of Chemistry who explained objectives of the program. Subsequently Dr. Vijay Pulate, Head of Department introduced the first session resource person Dr. Mrs. Banerjee, Director, DST, Govt. of India, and New Delhi. of workshop. At the outset, Dr. Arun Kharat, BAMU, Aurangabad explained the overall Research Methodology. This session was followed by questionanswer session.

The next day session of workshop was started at 11.00 am. In the beginning Dr. Vijay Pulate, Head of Department of Zoology introduced the resource person of the session, Prof. R.S. Pandit, SPPU, Pune. The lecture of Dr. Ashok Giri, Scientist NCL, Pune was focused on Write a research report, article/paper and thesis. The talk was followed by question answer session .Dr. Prakash Pulate, Assistant Professor, Department of Zoology, expressed the vote of thanks. Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardees’) Pravara Rural Education Society, Pravaranagar for granting permission for this workshop support. There are 39 participants attended the the workshop.



Dr. V. M. Pulate
HOD
Department of Zoology

Participants Attendance List (Within Maharashtra)

"Workshop on Research methodology" (Dec. 18/19/2021)

Sr. No.	Name of the Participant	Address	Contact No./ Mobile Number	Registration Fee	Signature	
					1 st Day	2 nd Day
1.	Prof. Makasare Sachin Petras	PMT's Arts, Commerce & Science college, shevgaon.	9403004954 sachinmakasare7@gmail.com	500/-	<i>[Signature]</i>	<i>[Signature]</i>
2.	Prof. Waghmare Rupali Sahabrao	PMT's Arts Commerce & Science College, shevgaon.	7381182823 rupali21791@gmail.com	500/-	<i>[Signature]</i>	<i>[Signature]</i>
3.	Prof. Amol Sopanrao Dighe	P.R.C.O.P., Pravaranagar (Pharmacy, Degree)	9921642747 amoldighe143@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
4.	Prof Amol Ramesh Sawant	College of Aqril. Biotech lend.	9823781346 amolsawant11@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
5.	Prof. Bhausaheb Gharpade.	College of Aqril Biotech lend.	7028587950 gharpadebb84@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
6.	Prof. Raut Vikram Keshavnar	College of Agriculture loni.	9823064753 vickyrout213@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
7.	Dr. Prakash D. Pawate	Arts, Science & Commerce College, Kolhar	9921742482 pdpawate@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
8.	Dr. Vikhe Pratibha S	Asc college, Kolhar	9709336956	600/-	<i>[Signature]</i>	<i>[Signature]</i>

money transfer to English

Name & Sign. of Co-ordinator



Name & Sign. of Principal
I/C (Seal) DIPAL
Art, Commerce & Science College
Satral, Tal. Rahuri, Dist. Ahmednagar

Participants Attendance List (Within Maharashtra)

"Workshop on Research methodology (Dec-18/19/2021)"

Sr. No.	Name of the Participant	Address	Contact No./ Mobile Number	Registration Fee	Signature	
					1 st Day	2 nd Day
9	Prof. Varpe Santosh. Sopan.	ACS & BCS college. Ashviki.	9604541273. varpe.santosh.2014@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
10	Prof. Lokhande Dattabhai Vithhal	ACS & BCS college Ashviki.	9308791806 dattajlokhande1917@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
11	Prof. Sanap Shradha Haribhai.	Arts, Commerce & Science College Talegaon Dnyha.	9657136638 sanapshradha100@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
12	Dr. Tambe Dinkar Sayaji	P.V.P. college Pravara nagar.	9960398170 dinkar.tambe.1879@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>
13	Dr. Pawade R. Vishnu Rakmes	ACS college Arts, Science, Commerce College Raheta.	9960398170	600/-	<i>[Signature]</i>	<i>[Signature]</i>
14	Prof Thorat Aruna Machhindranath	Institute of Agriculture & Pure sciences Loni	8275081983	600/-	<i>[Signature]</i>	<i>[Signature]</i>
15	Prof Ganesh J. Nagre	Deogiri coll				
15	Prof. Ravindra S. Jadhav	Pravara Rural college of Pharmacy Loni	9960355275 ravijadhavs1@gmail.com	600/-	<i>[Signature]</i>	<i>[Signature]</i>

[Signature]
Name & Sign. of Co-ordinator



[Signature]
Name & Sign. of Principal
I/C PRINCIPAL
Art, Commerce & Science College
Satral, Tal. Rahuri, Dist. A'Nagar

Participants Attendance List (Within Maharashtra)

"Workshop on Research methodology (Dec-18/19/2021)"

3

Sr. No.	Name of the Participant	Address	Contact No./ Mobile Number	Registration Fee	Signature	
					1 st Day	2 nd Day
16)	Dr. G. D. Suryawanshi	Yogeshwari Mahavidyalaya, Ambasogai Dist Beed	9860819610 gdsyuma@yahoo.com.	600		
17)	Dr. R. M. Dhere Dr. Rajesh Marotirao Dhere	Swa. Sawarkar Mahavidyalaya, Beed.	9421335301 rmdhere@gmail.com.	600/-		
18)	Shri. Gopal Martandrao Dhond	Swa. Sawarkar Mahavidyalaya, Beed.	9421343750 rmdhere@gmail.com.	600/-		
19)	Dr. Sirsat Premchand Bhimrao	K.S.K. College, Beed.	9423470367 rmdhere@gmail.com.	600/-		
20)	Dr. Anil Kumar Pandeshi	Deogiri College, A'bad.	9423153402	600		
21)	Dr. Pratibha Rohan Kar	Government Institute of Science & Humanities Amravati	9423743850	600/-		
22)	Dr. Milind D. Kele	" "	" "	600/-		
23)	Dr. Shabirha Nazmeen	Dept. of Zoology Dr. Rafiq Zakaria college for women Aurangabad.	9149907211	600/-		

Name & Sign. of Co-ordinator

Name & Sign. of Principal
I/C (Seal) DIPAL
Art, Commerce & Science College
Satral, Tal. Rahuri, Dist. A'Nagar



Participants Attendance List (Within Maharashtra) (Students)

"Workshop on Research methodology (Dec-18/19/2021)"

Sr. No.	Name of the Participant	Address	Contact No./ Mobile Number	Registration Fee	Signature	
					1 st Day	2 nd Day
1	Dale Nilesh Sahasrabud	College of Agriculture, Loni Assoc. Prof. of Entomology Research Scholar - Entomology	982343399	300/-		
2	Domburkar Rohit Baburao	College of Agriculture, Loni Assoc. Prof. of Agronomy Research Scholar - Agronomy	9822 878709	300/-		
3	Dagtap Mrunali Appasaheb	College of Agriculture biotechnology Loni	9588 408926	300/-		
4	Abhang Pratiksh Sureh	College of Agri-Biotech Loni	878870242	300/-		
5	Andhale Monika Suresh Dharmendra	College of -12	9552096628	300/-		
6	Mhaske Nikita Kailas	-11-	9168880328	300/-		
7	Nawale swamini Narendra	-11-	9422835490	300/-		
8	Gosavi Priyanka Sunjay	College of Agri- Biotech Loni	7448165843	300		

Name & Sign. of Co-ordinator



Name & Sign. of Principal
Art. Commerce & Science College
Satral, Tal. Rahuri, Dist. A/Nagar

Participants Attendance List (Students)

"Workshop on Research methodology (Dec. 18/19/2021)"

5

Sr. No.	Name of the Participant	Address	Contact No./ Mobile Number	Registration Fee	Signature	
					1 st Day	2 nd Day
9	Ghalke Ashwini Saudagar	College of Agri - Biotechnology, Loni	9422683475	300/-	Ashwini	Ashwini
10	Gaikwad Jyoti Kantaram	College of Agriculture Loni,	9350909297	300/-	Gaikwad	Gaikwad
11	Gadhakh Pritam Sanjay	College of Agriculture Loni,	9766142745	300/-	Gadhakh	Gadhakh
12)	Gajare Tushar Popat	101, Akk Apartment Police Colony, Samedli, A. Nagar	8625816118	300/-	Tushar	Tushar
13)	Misal Rohit Bhausaheb	PMT's arts. comm. & sci. college. shergaon.	8329913310	300/-	Misal R.B.	Misal R.B.
14)	Priyanka Prakash Lohar	MSC D r. PDKV, Akola	9890948929	300/-	Priya	Priya
15)	Priyanka Ramesh Brahmara	P&I, Rahuri	8975442432	300/-	Priyanka	Priyanka
16)	Ghadage Ashwini Ganpati	College of Agri, Kohlapur	9665548514	300/-	Ghadage	Ghadage

Name & Sign. of Co-ordinator



Name & Sign. of Principal
(Seal)
Arts, Commerce & Science College
Satral, Tal. Rahuri, Dist. Ahmednagar

Dr. (Prof.) Arun Sidram Kharat (M.Sc. SET, Ph.D.)

E-Mail: arunkharat2007@rediffmail.com, aru@teacher.com

Mobile: +91-99235 55705

Seeking senior managerial assignments in R&D/ Product Development, Process Management, Quality Assurance/ General Administration with a growth-driven Research-based Company in the Biotechnology/ Pharmaceutical/ Biological segment.

Professional Profile

Eleven years experience in Teaching and more than 11 years in Research in the field of Microbiology/Biotechnology. Currently associated with Department of Biotechnology, Dr. Babasaheb Ambedkar Marathwada University, Sub-centre, Osmanabad as Professor & Head of Department. Possesses a detail-oriented approach and keen eye for quality. An effective communicator with strong people management, coordination, planning, analytical and problem-solving abilities.

Core Functional Skills include:

Analytical Development	Product Identification & Authentication	Validation
Process Standardisation	Process Management	Lab Operations
Equipment Calibration	Lab Maintenance	Product Development
Quality Control	Quality Assurance	Systems Implementation
Regulatory Compliance	Chemical Analysis	Protocol Development

Domain: Microbiology/Biotechnology

- ☞ Analysing and/ or performing tests and experiments on micro-organisms.
- ☞ Identifying and characterise micro-organisms including those that cause disease
- ☞ Developing micro-organisms and products of their growth for use in vaccines and medicines.
- ☞ Growing micro-organisms for various research purposes.
- ☞ Seeking out micro-organisms that may pollute food, water and the environment.
- ☞ Determining measures for micro-organisms to help humans.
- ☞ Compiling reports and papers; making a presentation of the results.
- ☞ Rendering technical guidance to assistants.

Experience Chronology

Teaching Experience

Since Jan'07 with Department of Biotechnology, Dr. Babasaheb Ambedkar Marathwada University, Sub-campus, Osmanabad

- ☐ Joined as Reader and rose to the current position of Professor in August 28th 2008.
- ☐ Working as Head of Department.

Key Highlights

- ☞ Introduced research seminars to PG students to make them aware of research.
- ☞ Started research on Molecular aspects of Medicinal Plants, Natural compounds and search for organisms producing β -glucosidases from ruminant animals.
- ☞ PG students are made competent in research along with resource development
- ☞ Department had granted seats of 16, after I have become head, strength is raised up to 26 of which 10 are non grant for which students compete not only from region but from Nation for entrance test.
- ☞ During my tenure, two students qualified GATE, one qualified CSIR, Four received national fellowship of BCIL(Biotechnology Consortium India Limited, New Delhi) for Industrial training, one received national fellowship (of 57 selected thru nation one of them is from my department) for 2010-11 summer training at CCMB (Centre for Cellular and Molecular Biology, Hyderabad). Also developed good ties with seed industries.
- ☞ We are currently working on international collaboration, yet to be finalized.
- ☞ Most prestigious award would be I was selected as Professor before completion of my probationary period for the post of Reader.

July 94 to January 01 with Abasaheb Garware College, Pune as Lecturer, Microbiology

Key Highlights

- ☞ Taught Graduate and Post-graduate classes.

- ✓ Papers taught to B.Sc. students: Fundamentals of Microbiology, Genetics and Industrial Microbiology.
- ✓ Papers covered for M.Sc. students: Molecular Biology, Bio-technology, Immunology and Virology.

Research Experience

June 01 to Jan'07 with Laboratory of Microbiology at the Rockefeller University, New York (USA) as Postdoctoral Fellow)

Key Highlights

- ↳ Conducted research on the topic of "**Cell Wall associated Virulence Factors of Streptococcus pneumoniae**", as part of a group led by Professor Alexander Tomasz.

January 00 to January'00 :Pursued Postdoctoral Fellowship at University of Joseph Fourier, Grenoble-France

Key Highlights

- ↳ Carried out research on "**Effect of Extreme Glucose Concentrations on the Transposition of IS Elements in E. coli K12,**" as Member of a group led by late Professor Michel Blot; PEGM, CERMO, UJF, Grenoble, France.

August 96 to October 99 :Submitted Ph.D. Thesis

Key Highlights

- ↳ Completed and submitted Ph.D. thesis titled "**Molecular and Functional Characterisation of the β -glucoside Utilisation Genes of the Shigella Group of Organisms**", under the supervisory guidance of Professor Mahadevan S. at the Indian Institute of Science, Bangalore (India).

June 93 to July 94 with Tata Institute of Fundamental Research (TIFR), Mumbai as Scientific Assistant C.

Key Highlights

- ↳ Completed research on "**Glucose Catabolism by Glycolysis and Shunt Pathway in Budding and Fission Yeast**" as part of the Research Group led by the late Dr. Zita Lobo.

Academics

- ↳ **Ph.D. (Molecular and Microbial Genetics)** from Indian Institute of Science, Bangalore in 2000.
- ↳ **SET** (Eligibility Test for Lecturer-ship), conducted by Pune University, Pune in 1995 (Subject: Microbiology).
- ↳ **M.Sc. (Microbiology; Industrial-Special)** from Shivaji University, Kolhapur in 1993 (Secured 64.25%).
- ↳ **B.Sc. (Microbiology)** from Shivaji University, Kolhapur in 1991 (Secured 68.71% marks).

Technical Competencies

- ↳ Cloning and Recombinant DNA technology, DNA finger printing, RFLP,
- ↳ mRNA Extractions, Transcription, S1 Nuclease Mapping, Northern
- ↳ DNA Microarrays
- ↳ Real-time RT PCR
- ↳ Gene Expression, Protein Purification
- ↳ Animal Tissue Culture Maintenance and Proliferation for various purposes.
- ↳ Testing Adherence and Invasion Assays of Human Cell Lines.
- ↳ Mouse Handling, Maintaining, Husbandry, Mating and Maintaining Colony.
- ↳ Intraperitoneal, Intravenous Injections of Mouse
- ↳ Intranasal Inoculations of Mouse
- ↳ Estimating Bacterial Colonization Efficiency in Mouse Nasopharynx, both inoculations and surgical procedures.
- ↳ Crude Preparations of Dendritic Cells and studying maturation of the same
- ↳ Handling Immunological Transgenic Mouse for Cytokines and/ or for toll like receptors
- ↳ Handling Murine Cytokine Analysis
- ↳ Blood Process for Serum Preparation and for Cytokines Estimation by Multiplex
- ↳ Screening of Bacteria for Industrial Purpose
- ↳ Cultivating Bacteria from Aquatic, Fastidious, Saprophytes, Anaerobic and Facultative Anaerobic.
- ↳ Demonstrating all of the above expertise for training purpose.
- ↳ Protein Expression
- ↳ Western Blotting

Scholarships Secured

- ↳ One year Fellowship awarded by French Ministry of Science to carry out postdoctoral research at Universite Joseph Fourier, Grenoble, France in 2000.

- ↳ Received Scholarship by Dr. James for travel while attending meeting on Genetics of Bacteria and Phages, 1998 that was held at Cold Spring Harbor, NY, USA.
- ↳ Department of Biotechnology, India Scholarship as Research Scholar (Ph.D.) at Indian Institute of Science, Bangalore from 1996 to 2001 –Completed Ph.D. before fellowship was expired.
- ↳ State Bank of India Scholarship: High-school, Higher Secondary School, graduation and post-graduation studies.

Personal Details

Date of Birth : 1st June, 1971

Correspondence Address : Professor and Head, Department of Biotechnology, Dr. Babasaheb Ambedkar Marathwada University, Sub-centre Osmanabad-413 501 (Maharashtra)

Permanent Address : Ramai, 1690, Zadbuke Maidan, Behind B.T.M., Agalgoan Road, Barshi, District Sholapur-413 401 (Maharashtra, India)

Tel. (Res.) : +91-2184-224816

Tel. (cellular) : +91-992-355-5705

References :

1. Dr. S. Mahadevan (M. Sc. Ph.D)
Professor
Department of Molecular Reproduction, Development and Genetics
Indian Institute of Sciences, Bangalore
KS, India, Pin: 560 012
Email: mahi@mrdg.iisc.ernet.in
2. Dr. Dominique Schneider (Ph.D.)
Professor,
INSERM, Rue de la Piscine,
Universite Joseph Fourier,
Grenoble Cedex 9
France
Email : dominique.schneider@ujf-grenoble.fr
3. Dr. Alexander Tomasz (Ph.D)
Professor,
Laboratory of Microbiology,
1230, York Avenue,
Rockefeller University, New York, USA, 10021.
Email: Tomasz@rockefeller.edu

ANNEXURE OF RESEARCH CONTRIBUTIONS

Papers in International Meetings

- ☞ Presented a Poster-"Molecular and Functional Analysis of the β -glucoside Utilisation Genes in *Shigella sonnei*." In the discussion meeting on the "Molecular Genetics of bacteria and phages", held from 25th August to 29th August 1998, held at Cold Spring Harbour Laboratory, USA.
- ☞ Delivered a lecture on "Molecular Evolution of the β -glucoside Utilisation Genes in the *Shigella* Group of Organisms" during the 5th Meeting of the students in Evolutionary Biology. 23rd March-26th March, 1999. Umea University, Umeå, Sweden.
- ☞ Participant of "Pneumococcal Resistance Epidemicity and Virulence an International Study (PREVIS)" from January 2004 to December 2006.

Papers in National Meetings

- ☞ Presented a poster- "Molecular and functional characterization of the β -glucoside Utilisation in the *Shigella* Group of Organisms" in the 67th Annual meeting of the Society of the Society of Biochemists in India,"- 9th December - 12th December 1998. Jawaharlal Nehru University, New Delhi, India.

Guest Lectures

- ☞ Delivered series of guest lectures: Recombinant DNA technology and Genetic transfer in bacteria during 1994 & 1995 for the Department of Zoology, Mahatma Phule College, Pimpri, Pune-17.
- ☞ Delivered guest lecture on:
 - ✓ "Molecular Evolution of the β -glucoside Utilisation Genes within a few members of the family Enterobacteriaceae." 6th August 2000, University of Gdansk, Gdansk, Poland.
 - ✓ "The β -glucoside Utilisation Genes, Role Model to study Bacterial Evolution and Translation Fidelity by Transposition of IS Elements in Enteric Bacteria", held on 17th Sep 2001 at Tufts University Boston, USA.
 - ✓ "Recombinant Bio-technology subject of 21st century. 24th November 2004, Shri Man Bhausaheb Zadbuke Mahavidyalaya, Barshi, Sholapur, MS, India.
 - ✓ "Pneumococcal Surface and Virulence Determinants" from February 6th 2007. Department of Molecular Reproduction, Development and Genetics, Indian Institute of Science, Bangalore, KS, India.
 - ✓ "Recombinant DNA Technology-An Overview" on 26th Feb 2007 at Rajashtri Shahu College, Lature, MS, India.

Membership of Committees

- ☞ Member of PREVIS—an international committee for Pneumococcal Resistance Evaluation, whose members are mostly European (Dec'04 to Dec'06).
- ☞ National Advisory committee member for National Symposium on Genomics, Proteomics and Bioinformatics, February 09-10th, 2007.
- ☞ Chairman, Ad Hoc Board of Studies of Biotechnology since September 2008 at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- ☞ Chairman, Ad Hoc Board of Studies, Subcommittee for Genetics and Bioprocessing at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- ☞ Member of Ad Hoc Board of studies of Biotechnology at Shri Ramanand Teerth Marathwada University, Nanded; and Sholapur University, Sholapur.
- ☞ Member of Ad Hoc Board of Studies of Biotechnology at Sholapur University, Sholapur.
- ☞ Member of Ad Hoc Board of Studies of Genetics at Sholapur University Sholapur
- ☞ Member of Local Advisory Committee -Lokmangal College of Biotechnology, Wadala, Uttar Sholapur, Sholapur.

Resource Person for Conferences

- ☞ National Committee Member of the National Symposium on Genomics, Proteomics and Bioinformatics. Arranged by Department of Biotechnology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Sub-centre Osmanabad. February 9th 10th 2007.
- ☞ Delivered plenary talk during National Conference on:
 - ✓ Animal Biodiversity with reference to Biotechnology. Arranged by Arts, Commerce and Science College, Indapur, District Pune. January 28th 2008 to January 30th 2008.
 - ✓ New Horizons of Biotechnology. Arranged by Swami Vevekanand Mahavidyalaya, Udgir on February 6th and 7th 2008.
 - ✓ State level event on Biotechnology, Bioinformatics, Lokmangal College of Biotechnology, December 2009.
 - ✓ State level conference on Biotechnology for Better tomorrow, HPT/RVK College, Nashik, January 5th and 6th 2010.
 - ✓ National Conference on Foresights in to Biotechnology, Maulana Azad College, February 20th and 21st 2010.
- ☞ Invited Speaker:
 - ✓ Delivered two expert lectures in Refresher course for Life Sciences, arranged by Dr. Meena Patil and Dr. Bharati Jadhav, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. May 11th 2008.
 - ✓ Delivered expert lecture in Refresher Course for Environmental Sciences on the topic of **Toxicology**, Arranged by Prof. Dr. M. B. Mule, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad December 2008
 - ✓ Delivered an expert lecture in Refresher Course for Chemistry on **Microbiological procedures, natural products and fusion chemistry**, Arranged by Dr. R. A. Mane, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad December 18th 2009
 - ✓ Delivered two expert lectures in Refresher Course for Environmental Sciences on the topic of **Microbiology and environmental pollution as well as Why science is difficult?**, Arranged by Prof. Dr. M. B. Mule, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad December 2008
 - ✓ Delivered speech on:
 - ⇒ "Approaches for Global Gene Expression", a National Level Conference held on January 28th -30th 2008 at ASC college, Indapur, District. Pune.
 - ⇒ "Pneumococcal Virulence" in National Conference on New Horizons of Biotechnology, held at Udgir between February 7th and 8th 2008.
 - ⇒ "Sortase and catalysed surface virulence proteins of pneumococcus, Mahatma Gandhi's Mission, Aurangabad, 2008."
- ☞ Key Note Address: Delivered key note talk, "Choline and Pneumococcus" at a state level conference arranged by department of Botany, Vinayakarao Patil Mahavidyalaya, Vaijapur, Aurangabad.

Research Publications

- ☞ Arun S. Kharat & S. Mahadevan (1999) "Plasmid mediated Suppression of the mutational activation of the bgl operon of Shigella sonnei" Acta. Biochemica. Polonica 46(4): pp156-167.
- ☞ Arun S. Kharat & S. Mahadevan (2000) "Analysis of the β -glucoside utilisation (bgl) genes of and Shigella sonnei: Evolutionary implications for their maintenance in a cryptic state." Microbiology 146(8) 2039-2049.
- ☞ Arun Sidram Kharat* (2001) "Phenotypic variability of β -glucoside utilization and its correlation to pathogenesis process in a few enteric bacteria." FEMS Microbiology Letters 199 (2) 241-246.
- ☞ Arun S. Kharat and Alexander Tomasz (2003). "Inactivation of the srtA gene affects localization of surface proteins and decreases adhesion of Streptococcus pneumoniae to human pharyngeal cells in vitro." Infection and Immunity 71(5) 2758-2565.
- ☞ Arun S. Kharat and Alexander Tomasz (2006). "Drastic reduction in the virulence of Streptococcus pneumoniae expressing type-2 capsular polysaccharide but lacking choline residues in the cell wall." Molecular Microbiology 60(1) 93-107.
- ☞ M. Inês Crisóstomo, Waldemar Vollmer, Arun Kharat, Silja Inhülen, Florian Gehre, Stephan Buckenmaier and Alexander Tomasz (2006). "Attenuation of penicillin resistance in a peptidoglycan O-acetyl transferase mutant of Streptococcus pneumoniae. Molecular Microbiology 61(6) 1497-1509.
- ☞ Arun S. Kharat*, Marjolaine Noirclerc-Savoye, Evelyne Coursange, and Michel Blot (2006). Effect of limiting and excess glucose concentrations on transposition of IS1 in Escherichia coli K12. Acta Biochimica polonica 53(4) 729-738.
- ☞ Marlene Damjanovich, Arun. S. Kharat, Waldemar Voller and Alexnader Tomasz (2007). The essential tacF gene is responsible for choline-dependent growth phenotype of Streptococcus pneumoniae. Journal of Bacteriology 189(19) 7105-7111. Both; Marlen Damjanovich and Arun S. Kharat should be treated as first author, contributed equally for this work, statement is available with publication.
- ☞ Florian Gehre, Stephen Leib, Denis Grandgirard, Jurg Kummer, Angella Buhlmann, Franziska Simon, Rahel Gaumann, Arun S. Kharat, Martin Tauber, and Alexander Tomasz (2008). Essential role of choline for pneumococcal virulence in an experimental model of Meningitis. Journal of Internal Medicine Aug 264(2): 143-54
- ☞ Arun S. Kharat, Florian Gehre, Waldemar Vollmer and Alexander Tomasz. Different pathways of choline metabolism – in two choline-independent strains of Streptococcus pneumoniae. Journal of Bacteriology Sep 2008 190: 5907-5914.
- ☞ Ghare F, Spisek R, Arun S. Kharat, Matthews P, Kukreja A., Anthony RM., Dhodapkar MW., Vollmer W., and Tomasz A. (2009) Role of teichoic acid choline moieties in the virulence of Streptococcus pneumoniae. Infection and Immunity Jul 77(7):2824-31

- ☞ Arun S. Kharat, Helena Zemlickowa and Alexander Tomasz. Distribution of the srtA, srtB, srtC, and srtD sortase gene in *Streptococcus pneumoniae*: role of srtB srtC and srtD in mouse nasopharynx colonization. Manuscript in Preparation.
- ☞ Arun S. Kharat and Alexander Tomasz. Functional and molecular characterization functional coupling of gryA-srtA in *Streptococcus pneumoniae*: a note on gyrA mediated polar effect on srtA activity. Manuscript in Preparation.

Publications in the Form of Nucleotide Submissions to NCBI

Reviewed articles for, *Journal of Experimental Medicine, Molecular Microbiology, Infection and Immunity, Antimicrobial Agents and Chemotherapy and Microbial Drug Resistance.*

- ☞ Arun S. Kharat and S. Mahadevan (2000). *Shigella sonnei* insertion sequence IS1, partial sequence. Accession number AF12368 available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=12044359>
- ☞ Arun S. Kharat and M. Blot (2000). *Escherichia coli* K12 ribosomal protein S12 (rpsL) gene, complete cds. Accession number AF312717. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=11120596>
- ☞ Arun S. Kharat and M. Blot (2000). *Escherichia coli* ribosomal protein S12 (rpsL) gene, rpsL150 allele, complete cds. Accession number AF312716. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=1112059>
- ☞ Arun S. Kharat and S. Mahadevan (2000). *Escherichia coli* K12 antiterminator BglG (bglG) gene, partial cds. Accession number AF316396. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=11096327>
- ☞ Arun S. Kharat and S. Mahadevan (1999). *Shigella sonnei* strain AK1 PhoU (phoU) and BglG (bglG) genes, partial cds. Accession number AF183894. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=7159048>.
- ☞ Kharat,A.S. and Mahadevan,S (1999) Molecular characterization of the bglR and bglG genes of *Shigella boydii* (SBYR). Accession number 185096. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=7385013>.
- ☞ Kharat,A.S. and Mahadevan,S (1999) Molecular characterization of the bglR and bglG genes of *Shigella dysenteriae* (SFXR). Accession number 185095. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=7385010>.
- ☞ Kharat, A.S. and Mahadevan,S (1999)Molecular characterization of the bglR and bglG genes of *Shigella sonnei* CR+. Accession number 185094. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=7385007>.
- ☞ Kharat, A.S. and Mahadevan,S (1999) Molecular characterization of the bglR and bglG genes of *Shigella sonnei* CR-. Accession number AF185093. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=7385004>.
- ☞ Kharat, A.S. and Mahadevan,S (1999). Cloning and characterization of the bglR, bglG region of *Shigella sonnei* SSOR. Accession number AF183895. available at <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=7159051>.

Dr. Ashok P. Giri

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 Division of Biochemical Sciences
 CSIR-National Chemical Laboratory
 (Council of Scientific and Industrial Research)
 Pune 411008 (MS), India

Professor, Academy of Scientific and Innovative Research, India
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E-mail: ap.giri@ncl.res.in

Home Address: Bungalow 4, NCL Colony, Dr. Homi Bhabha Road, Pune 411008, MS, India

Date of Birth: 05/06/1967 (5th June, 1967)

Education:

1989	B.Sc.	Chemistry/Botany/Zoology	Balbhim College Beed (Dr. BAMU)*
1991	M.Sc.	Biochemistry	Dr. BAM* University, Aurangabad, India
1995	Ph.D.	Biochemistry**	Dr. BAM* University, Aurangabad, India

*Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India

****Title of thesis:** Role of proteinaceous inhibitors of proteinase and amylase of pigeon pea in insect pest resistance (PhD Supervisor: Prof. M. Kachole)

Research Experience

Place	Position	Period (M/Y)	Project(s) – Research Areas
CSIR-National Chemical Laboratory, Pune, India	Sr. Principal Scientist Chair, Biochemical Sciences Division Principal Scientist Senior Scientist Scientist	8/2016 10/2017 to 09/2020 8/2012 8/2009 5/2002	Molecular plant-insect and -pathogen interactions, and metabolic pathway analysis and engineering; Fundamental research in the area of biochemistry and molecular biology on various systems.
Technical University Munich, Germany	Alexander von Humboldt Fellow	10/2014 to 12/2014	Comparative genomics for detection of terpene glycosyl transferases in grape (<i>Vitis vinifera</i>)
Weizmann Institute of Science, Rehovot, Israel	Raman Research Fellow	06/2011 to 10/2011	Glycoalkaloids metabolism in <i>Solanaceae</i> crops, potato and tomato
University of Nebraska, Lincoln, USA	Borlaug Fellow	01/2010 to 03/2010	Bio-Safety of recombinant CanPI-7 protein for transgenic application
Max Planck Institute for Chemical Ecology, Jena, Germany	Alexander von Humboldt Fellow	08/2009 to 10/2009	New digestion enzymes for proteomic applications
		12/2005 to 02/2007	The costs of proteinase inhibitor-based defenses in plants
	Max Planck Postdoctoral Fellow	4/2005 to 7/2005 9/2004 to 10/2004	Comparative proteome of <i>Nicotiana attenuata</i> herbivore induced leaves Proteomic and microarray training
Washington State University, Pullman, USA	Visiting Scientist	9/2003 to 11/2003	Cloning and expression of winged bean proteinase inhibitors in yeast
		9/1999 to 1/2001	Isolation of defense-related genes from plants
Plant Research International, The Netherlands	Visiting Scientist	10/2001 to 2/2002	Metabolic pathway analysis and engineering for terpenoid production in plants
CSIR-National Chemical Laboratory, Pune, India	Research Associate	12/1995 to 4/2002	Deciphering the defense mechanism of chickpea and non-host plants
Dr. BAMU, Aurangabad	PhD Scholar	07/1991 to 11/1995	Role of proteinaceous inhibitors of proteinase and amylase of pigeon pea

Current Interests

Major goal of the group is to use chemical-biology approaches and validate function of specific small molecules, proteins, peptides and genes. In particular we are working on (i) Plant chemical, biochemical and molecular defense mechanisms, (ii) Detoxification mechanisms in insects and pathogens to chemicals/biochemicals and (iii) Synthetic biology – Plant/Insect/Fungal specialized metabolic pathway analysis and engineering

Research Supervision

- **Abroad Scientists:** 1- Hosted CSIR-Humboldt Reciprocity Research Awardee from Germany
- **Scientists:** 5 - Young Scientists/Women Scientists of Department of Science and Technology
- **Postdoctoral:** 15 - Research Associates of Department of Biotechnology, Department of Science and Technology, University Grants Commission and Council of Scientific and Industrial Research, India
- **PhDs:** 21 students awarded; Currently working: 15 (10 PhD Scholars)
- **Project Assistants:** 55
- **M. Sc./M. Tech:** 100

Scholarships and Awards

- Fellow of National Academy of Sciences (2018), India
- Twice Merit Promotion from Senior Scientist to Principal Scientist (2012) & Principal Scientist to Senior Principal Scientist (2016)
- Alexander von Humboldt Return Research Fellow (2014), Germany
- Fellow of Maharashtra Academy of Sciences (2013), India
- Raman Research Fellow (2011) Council of Scientific and Industrial Research, India
- Borlaug Fellow (2009) United States Department of Agriculture, USA
- Alexander von Humboldt Return Research Fellow (2009), Germany
- National Chemical Laboratory Research Foundation Scientist of the Year Award (2007), Sponsored by Dr. R. A. Mashelkar Endowment Fund, India
- Max Planck Partner Group Award (2006), Germany
- Alexander von Humboldt Research Fellow (2005), Germany
- Marathwada Gourav Pursakar (2005), India
- Max Planck Society Postdoctoral Fellow (2004 and 2005), Germany
- Career Development Program Fellow (1999-2001 and 2003), McKnight Foundation, USA
- Postdoctoral Fellow of International Agricultural Co-operation (2001-2002), The Netherlands
- Research Associate of the Council of Scientific and Industrial Research (1998-2002), India
- Scholarship for Higher Education (1984-1991), India

Research Projects: Principal Investigator (PI)/Co-investigator (Co-PI)

- **Co-PI:** Department of Biotechnology-BIRAC, Government of India with partners (Pandit Bhagwat Dayal Sharma University of Health Sciences, Rohtak and INTOX Pvt. Ltd., Pune), Selection and Prioritization of Antiviral Drugs used for Hepatitis C Virus HCV and evaluation of their efficacy and safety in COVID-19 Patients: A Rational target-based Pilot Repurposing Trial, 2020-2021 (INR 86.59 Lakhs)
- **PI:** Fundamental Basic Research project by Council of Scientific and Industrial Research, Design and development of indigenous strain portfolio for the production of penicillin V (PenV-IP), 2020-2023 (INR 500.07 Lakhs)
- **PI:** Fundamental Basic Research project by Council of Scientific and Industrial Research, Genome-editing for crop improvement (GE-Crop), 2020-2023 (INR 116.40 Lakhs)
- **PI:** Niche Creating Project by Council of Scientific and Industrial Research, Phyto-inspired peptides derived from plant protease inhibitors for crop protection. 2020-2023 (INR 140 Lakhs)
- **PI:** Fundamental Basic Research project by Council of Scientific and Industrial Research, Screening of elite genotypes, elucidation of biosynthetic pathway and extraction process improvisation of colchicine in *Gloriosa superba* 2020-2023 (INR 89.10 Lakhs)

- **Co-PI:** Fundamental Basic Research project by Council of Scientific and Industrial Research, developing microRNA-based strategies to control plant-fungal pathogens 2020-2023 (INR 83.60 Lakhs)
- **PI:** Facility Creation project on testing COVID-19 samples by Council of Scientific and Industrial Research, 2019-2020 (INR 195 Lakhs)
- **PI:** Department of Biotechnology, Government of India in collaboration with Indian Agricultural Research Institute, New Delhi and University of Delhi, North Campus, Global perspective of transcriptome, proteome and metabolome of root-knot nematode effectors confirming host specificity and host response to them during disease development, 2019-2022
- **PI:** Rajiv Gandhi Science and Technology Commission, Government of Maharashtra, in collaboration with Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon and Shivaji University, Kolhapur, Application of plant proteinaceous α -amylase inhibitors in food processing and post-harvest preservation, 2019-2022
- **PI:** CSIR-Agriculture, Nutrition and Biotechnology theme, Government of India under Focused Basic Research in collaboration with CSIR-Unit for Research & Development of Information Products, Pune, Design and development of indigenous strain portfolio for the production of Penicillin V (PenV-IP), 2018-2020
- **PI:** Department of Biotechnology-BIRAC, Government of India with industrial partners (Auraphyll Pvt. Ltd., Chennai and Greenvention Biotech Pvt. Ltd., Pune), Production of low molecular weight fungal chitosan for healthcare applications, 2018-2019
- **PI:** Rajiv Gandhi Science and Technology Commission, Government of Maharashtra, Wide spectrum microbial pesticide useful in single crop system, 2017-2019
- **PI:** Department of Biotechnology, India project, Structure-functional insights in to *Helicoverpa armigera* protease and *Capsicum annuum* protease inhibitor interactions, 2015-2018
- **PI:** Department of Science and Technology, Indo-Australia network project, CSIR-National Chemical Laboratory, Pune, Tata Institute for Fundamental Research, Mumbai and University of Queensland, Australia. Tailoring plant protease inhibitors for control of the crop pest *Helicoverpa armigera*, 2015-2018
- **PI:** XII Five-year plan projects in CSIR-Chemistry Cluster PI (i. Flavour compound biosynthesis in Alphonso and ii. Molecular dissection of biosynthetic pathway for important phytochemicals in *Ocimum sp.*) and **Co-PI** in other 2-projects, 2012-2017
- **PI:** Two XII Five-year plan projects in CSIR-Biology Cluster and **Co-PI:** other 4-projects in Biology cluster, (i. Engineering protease inhibitor or other peptides/molecules with enhanced bio-pesticidal activity on Lepidopteran insect *Helicoverpa armigera*, and ii. Development of transgenic tomato expressing protease inhibitor gene), 2012-2017
- **PI:** Department of Biotechnology, India network project between North Maharashtra University, Jalgaon and CSIR-National Chemical Laboratory, Pune entitled, "Amylase inhibitor interactions", 2010-2014
- **PI:** Department of Biotechnology, India network project between Interactive Research School for Health Affairs, Bharati Vidyapeeth University, Pune and CSIR-National Chemical Laboratory, Pune entitled, Comparison of placental proteomic patterns in pregnancy complications, 2011-2014
- **PI:** Research Development and Planning Division, Council of Scientific and Industrial Research, New Delhi, India funded National Network Project entitled, Transgenic crop plants and genes for resistance to insect pests, 2007-2012
- **PI:** The Max Planck Society-India partnership project funded by the Max Planck Society, Munich, Germany in collaboration with I. T. Baldwin, Director, Max Planck Institute for Chemical Ecology, Jena, Germany, Bridging the basic-applied science research gap: Developing a pest protection strategy for chickpea based on proteinase inhibitor defenses, 2006-2010
- **PI:** Department of Biotechnology, India, Increasing the efficacy and specificity of

proteinase inhibitors towards *Helicoverpa armigera* gut proteinases to combat lepidopteran insect attack on crop plants, 2004-2007

- **PI:** Special Task Force of Cell and Tissue Engineering Project by Department of Scientific and Industrial Research, India. Revealing secrets of mango: Studies of genetic mechanisms involved in Alphonso flavor biogenesis, 2002-2007
- **Co-PI:** Department of Biotechnology, India network project, National Chemical Laboratory, Interactive Research School for Health Affairs, Bharati Vidyapeeth University, Pune and NRC-Plant Biotechnology Institute, Saskatoon, Canada, Towards genetic improvement of flax for oil and agronomic traits, 2009-2014
- **Co-PI:** Research Development and Planning Division, Council of Scientific and Industrial Research, New Delhi, India funded National Network Project, Plasma Proteomics for Health and Disease, 2009-2012
- **Co-PI:** The McKnight Foundation, USA, in collaboration with Washington State University, USA; University of Durham, UK; CSIRO, Australia; Assam Agriculture University and Mahatma Phule Krishi Vidyapeeth, India Increasing the efficiency of production of chickpea, 2002-2008

Convener/Organizer of International conferences/symposium/meetings

- Convener of International Virtual Symposium on Integrated Omics Approaches in Health and Agriculture and 12th Meeting of Proteomic Society of India (2020) organized by CSIR-National Chemical Laboratory (~200 participants).
- Co-Convener, 7th Indian Chitin and Chitosan Society Meeting, India (2018) organized by CSIR-National Chemical Laboratory (~200 participants).
- Co-Convener, Insight in Biology 2025, India (2015) jointly organized by Maharashtra Academy of Sciences and CSIR-National Chemical Laboratory (~400 participants).
- Organizing Committee Member of Symposium attempting to bring out Multidisciplinary issues related to Genetically Modified Crops in India (2015) jointly organized by Vijnana Bharati, CSIR-National Chemical Laboratory, National Bank for Agriculture and Rural Development and Maharashtra Association for the Cultivation of Science (~150 participants)
- Organizing Committee member of Indo-Mexico Workshop on Biotechnology Beyond Borders, India (2013) supported by DST, India and CONACYT, Mexico (~150 participants)
- Convener of International Symposium on Proteomics beyond IDs... and 4th Meeting of Proteomic Society of India (2012) (~400 participants).
- Organizer of Seminar on Food Safety Issues with specific emphasis on GM Food Crops (2010) supported by United States of Department of Agriculture, USA under Borlaug Fellowship program (~150 participants)
- Organizer of the First Heads of MPG partner group meeting at NCL, Pune, India (2007) to enhance bilateral research programs between India and Germany funded by the Max Planck Society, Munich, Germany (~50 participants)
- Organizer of the Workshop on 'Proteomic insights into plant-insect interactions' at NCL, Pune, India (2006) funded by the Max Planck Society, Munich, Germany (~150 participants)

Academic activities

- Secretary, the Alexander Von Humboldt Foundation, Pune Chapter, India
- Member, Board of Studies, School of Life Sciences, Maharashtra Institute of Technology World Peace University, Pune, MS, India (2021-onwards)
- Member, Board of Studies, School of Consciousness, Maharashtra Institute of Technology World Peace University, Pune, MS, India (2021-onwards)
- The Advisory Board Member, School of Pharmacy, Maharashtra Institute of Technology World Peace University, Pune, MS, India (2020-onwards)
- Member represent research component of Internal Quality Assurance Cell, MIT Art, Design and Technology University, Pune (2019-2021)
- Adjunct Professor at Nano Science and Technology and Plant Biology and Biotechnology, Tamil Nadu Agricultural University, Coimbatore, India (2018-2019)

- Academic Council Member, Shivaji University, Kolhapur (2018 onwards)
- Chancellor Nominee of Board of Postgraduate onwards Studies on Interdisciplinary subject at Shivaji University, Kolhapur (2018-2020)
- Scientific Panel on Genetically Modified Organisms and Foods, Food Safety and Standards Authority of India, New Delhi (2017-2019)
- Chair and Head Institutional Research and Development Review Committee, Maharashtra Institute of Pharmacy, Pune, MS, India (2017-2019)
- Vice Chancellor's Nominee on the Board of Studies in Botany, Fergusson College, Pune (2016-2018)
- Elected Board of Directors - Naoroji Godrej Centre for Plant Research, Shirval (2015 onwards)
- Member Board of Studies for Schools of Engineering and Bioengineering Science and Research, MIT Art, Design and Technology University, Pune (2017-2020; 2019-2021)
- Member of Board of Studies for Biotechnology, Rajarshi Shahu Mahavidyalaya, Latur (2016 to 2018)
- Adjunct Professor at Department of Biochemistry, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, MS, India, 2016-2018
- Adjunct Faculty at Department of Botany, Savitribai Phule Pune University, Pune, MS, India, 2015-2018
- Divisional Affair Committee member of Biochemical Sciences Division, CSIR-National Chemical Laboratory, Pune 2015 onwards
- Member of Students Academic Committee at CSIR-National Chemical Laboratory, Pune 2015-2017
- Expert Member on the Board of Studies in Biochemistry, Mahatma Phule Krishi Vidyapeeth, Rahuri (2014-2017)
- Executive Committee Member of the Alexander Von Humboldt Foundation, Pune Chapter, India
- Life Member of Society of Biological Sciences India
- Assistant Editor of book entitled, "Biotechnology: Beyond Borders". Editors M. V. Deshpande and J. R. Herrera, publishers CSIR-National Chemical Laboratory (India), ISBN: 978-93-5212-714-6, 29-chapters and total pages 407.
- Member of Students Academic Committee at National Chemical Laboratory (CSIR), Pune 2010-2012
- Assistant Secretary of International Plant Proteomics Organization, India-Nepal Chapter
- Member of Board of Studies in Biotechnology, Bharati Vidyapeeth University, Pune 2010
- Academic member of School of Life Sciences, Biotechnology Department, North Maharashtra University, Jalgaon 2009-2012
- Member of Syllabus Committee for Master degree in Biochemistry at University of Pune, India 2009-2011
- Editorial Member NCL's Annual Report 2008
- Research Recognition Committee member for the subject Biotechnology of Shivaji University Kolhapur, India 2007-2010

Other teaching and science popularization activities

- More than 290-invited scientific talks in national and international conferences, workshops, Innovations and Avishkar programs, Inductions programs & DST-supported inspire camps
- Served as judge for scientific competition Anveshan – national level, Avishkar –state level and university level
- Teaching Master courses for the subject Biotechnology and PhD courses for Life Sciences at University of Pune, India
- Interview and research news coverage in Agrowon and The Indian Express, a daily newspaper (2007)
- Interview on Deutsche Velle (German National Radio) on research activities (2006)
- Interview on popular E-TV program SANVAD on research activities (2005)
- Reviewer of several manuscripts submitted to internationally reputed journals

Total publications: Research articles: **145**; Reviews: **25**; Book chapters: **16**; World/US Patents (filed/granted): **9**

Citation Index: *h*-index **45***; *i10*-index **121**; Scopus Author ID 7102961249; Citations **7950**

Details of Top 10 cited research papers	Number of citations*
The Plant Cell (2003) 15, 2866-2884	620
The Plant Cell (2004) 16, 3110-3131	460
Science (2013) 341, 175-179	384
The Plant Cell (2006) 18, 3303-3320	263
Plant Physiology (1998) 116, 393-401	223
Insect Biochemistry & Molecular Biology (2001) 31, 453-464	218
Plant Physiology (2006) 142, 1621-1641	185
Nature Communications (2016) 7, 1-16	167
Phytochemistry (2003) 63, 643-652	155
Plant Physiology (1999) 121, 497-505	147

*Source: Google scholar, ISI Web of Knowledge and Scopus

Peer Reviewed Research Articles in International Journals (IF - impact factor of the journal)

1. Sonawane P, Jozwiak A, Barbole R, Panda S, Abebie B, Kazachkova Y, Gharat S, Ramot O, Unger T, Guy Q, Meir S, Rogachev I, Faigenboim A, Petrikov M, Schaffer A, **Giri A**, Tali S, Aharoni A (2022) 2-Oxoglutarate-dependent dioxygenases drive expansion of steroidal alkaloid structural diversity in the Genus *Solanum*. **New Phytologist** (In Press). IF 10.1
2. Oak PS, Jha V, Deshpande A, Tanpure R, Dawkar V, Mundhe S, Ghuge S, Krishnapal A, Kadoo N, Jere A, **Giri AP**, Gupta VS (2022) Transcriptional and translational perturbation in abiotic stress induced physiological activities and metabolic pathway networks in spongy tissue disorder of mango fruit. **Postharvest Biology and Technology** **188**, 111880. IF 5.3
<https://doi.org/10.1016/j.postharvbio.2022.111880>
3. Panda S, Jozwiak A, Sonawane P, Szymanski J, Kazachkova Y, Vainer A, Kilambi H, Almekias-Siegl E, Dikaya V, Bocobza S, Shohat H, Meir S, Wizler G, **Giri A**, Schuurink R, Weiss D, Yasour H, Kamble A, Aharoni A (2022) Steroidal alkaloids defense metabolism and plant growth are modulated by the joint action of gibberellin and jasmonate signalling. **New Phytologist** **233** 1220-1237. IF 10.1 <https://doi.org/10.1111/nph.17845>
4. Kallure G, Shinde BA, Barvkar V, Kumari A, **Giri AP** (2022) Dietary influence on modulation of *Helicoverpa armigera* oral secretion composition leading to differential regulation of tomato plant defense. **Plant Science** **314**, 111120. IF 4.75 <https://doi.org/10.1016/j.plantsci.2021.111120>
5. Gurjar G, Nimbalkar S, **Giri AP**, Gupta VS (2021) Genome wide analysis of 14-3-3 proteins in *Cicer arietinum* L. and identification of isoforms responsive to *Fusarium oxysporum*. **Current Science** 120, 1464-1470. IF 0.75 [doi: 10.18520/cs/v121/i8/1039-1045](https://doi.org/10.18520/cs/v121/i8/1039-1045)
6. Yadav N, Saikhedkar N, **Giri AP** (2021) PINIR: a comprehensive information resource for Pin-II type protease inhibitors. **BMC Plant Biology** 21 (1), 1-14. IF 3.5 <https://doi.org/10.1186/s12870-021-03027-0>
7. Lavhale S, Joshi RS, Kumar Y, **Giri AP** (2021) Functional insights into two *Ocimum kilimandscharicum* 4-coumarate-CoA ligases involved in phenylpropanoid biosynthesis. **International Journal of Biological Macromolecules** **181**, 202-210. IF 5.2
<https://doi.org/10.1016/j.ijbiomac.2021.03.129>
8. Joshi RS, Jagdale S, Bansode SB, Shankar SS, Tellis MB, Pandya VK, Chugh A, **Giri AP**, Kulkarni MJ (2021) Discovery of potential multi-target-directed ligands by targeting host-specific SARS-CoV-2 structurally conserved main protease. **Journal of Biomolecular Structure and Dynamics** **39** (9), 3099-3114. IF 3.4 <https://doi.org/10.1080/07391102.2020.1760137>

Total publications: Research articles: **145**; Reviews: **25**; Book chapters: **16**; World/US Patents (filed/granted): **9**

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2. Oak PS, Jha V, Deshpande A, Tanpure R, Dawkar V, Mundhe S, Ghuge S, Krishnapal A, Kadoo N, Jere A, **Giri AP**, Gupta VS (2022) Transcriptional and translational perturbation in abiotic stress induced physiological activities and metabolic pathway networks in spongy tissue disorder of mango fruit. **Postharvest Biology and Technology** **188**, 111880. IF 5.3
<https://doi.org/10.1016/j.postharvbio.2022.111880>
3. Panda S, Jozwiak A, Sonawane P, Szymanski J, Kazachkova Y, Vainer A, Kilambi H, Almekias-Siegl E, Dikaya V, Bocobza S, Shohat H, Meir S, Wizler G, **Giri A**, Schuurink R, Weiss D, Yasour H, Kamble A, Aharoni A (2022) Steroidal alkaloids defense metabolism and plant growth are modulated by the joint action of gibberellin and jasmonate signalling. **New Phytologist** **233** 1220-1237. IF 10.1 <https://doi.org/10.1111/nph.17845>
4. Kallure G, Shinde BA, Barvkar V, Kumari A, **Giri AP** (2022) Dietary influence on modulation of *Helicoverpa armigera* oral secretion composition leading to differential regulation of tomato plant defense. **Plant Science** **314**, 111120. IF 4.75 <https://doi.org/10.1016/j.plantsci.2021.111120>
5. Gurjar G, Nimbalkar S, **Giri AP**, Gupta VS (2021) Genome wide analysis of 14-3-3 proteins in *Cicer arietinum* L. and identification of isoforms responsive to *Fusarium oxysporum*. **Current Science** 120, 1464-1470. IF 0.75 [doi: 10.18520/cs/v121/i8/1039-1045](https://doi.org/10.18520/cs/v121/i8/1039-1045)
6. Yadav N, Saikhedkar N, **Giri AP** (2021) PINIR: a comprehensive information resource for Pin-II type protease inhibitors. **BMC Plant Biology** 21 (1), 1-14. IF 3.5 <https://doi.org/10.1186/s12870-021-03027-0>
7. Lavhale S, Joshi RS, Kumar Y, **Giri AP** (2021) Functional insights into two *Ocimum kilimandscharicum* 4-coumarate-CoA ligases involved in phenylpropanoid biosynthesis. **International Journal of Biological Macromolecules** **181**, 202-210. IF 5.2
<https://doi.org/10.1016/j.ijbiomac.2021.03.129>
8. Joshi RS, Jagdale S, Bansode SB, Shankar SS, Tellis MB, Pandya VK, Chugh A, **Giri AP**, Kulkarni MJ (2021) Discovery of potential multi-target-directed ligands by targeting host-specific SARS-CoV-2 structurally conserved main protease. **Journal of Biomolecular Structure and Dynamics** **39** (9), 3099-3114. IF 3.4 <https://doi.org/10.1080/07391102.2020.1760137>

9. Pandey M, Dholakia, BB, Ramesha HJ, Punekar SA, **Giri AP** (2021) Combinatorial approach through *in vitro* regeneration and phytochemical profiling of *Ceropegia media* (Huber) Ans.: A potential way forward in the conservation of an endangered medicinal plant from the Western Ghats in India. **Journal of Plant Growth Regulation** **40** (3), 1139-1151. IF 2.7
<https://doi.org/10.1007/s00344-020-10173-6>
10. Joshi RS, **Giri AP**, Kulkarni MJ, Gupta M, Verma S, Chaudhry D, Deshmukh N, Chugh A (2021) Rationale based selection and prioritization of antiviral drugs for COVID-19 management. **Current Science** **120**, 1464-1470. IF 0.75
11. Joshi RS, **Giri AP**, Kulkarni MJ, Gupta M, Verma S, Chaudhry D, Deshmukh N, Chugh A (2020) Rationale based selection and prioritization of antiviral drugs for COVID-19 management. **ChemRxiv**, <https://doi.org/10.26434/chemrxiv.12429629.v1>
12. Dar SM, Kumar Y, Punekar SA, Gupta VS, Subramanian KS, Dholakia, BB, **Giri AP** (2020) Comparative non-targeted metabolomics reveals differentiation of biochemical pathway network among fruits of natural populations and Cv. Alphonso of mango (*Mangifera indica* L.). **Journal of Proteins and Proteomics** **11**, 112859. <https://doi.org/10.1007/s42485-020-00047-6>
13. Gurav TA, Ramesha HJ, Punekar SA, Dholakia, BB, **Giri AP** (2020) Generation of novelties in the genus *Ocimum* as a result of natural hybridization: A morphological, genetical, and chemical appraisal. **Industrial Crops and Products** **156**, 112859. IF 4.2
<https://doi.org/10.1016/j.indcrop.2020.112859>
14. Dar SM, Dholakia, BB, Shanmugam H, Gupta VS, Subramanian KS, Subramanian L, **Giri AP** (2020) Differential modulation in metabolites revealed improvement in the shelf-life of Alphonso fruits. **Molecular Biotechnology** **62**, 508-520. IF 2.27 <https://doi.org/10.1007/s12033-020-00267-7>
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2. Tanpure R, Kondhare KR, Venkatesh V, Gupta VS, Joshi RS, **Giri AP** (2021) Non-host armor against insect: Characterization and application of *Capsicum annuum* protease inhibitors in developing insect tolerant plants. **Genetically Modified Crops - Current Status, Prospects and Challenges** Editors, P. B. Kavi Kishor, M. V. Rajam, T. Pullaiah, ISBN 978-981-15-5896-2, Springer Nature Pte Ltd, Singapore Volume 1, Chapter 3, 85-110.
3. Kotkar H, **Giri AP** (2020) Plant epigenetics and the 'intelligent' priming system to combat biotic stress. **Kabelitz: Epigenetics of the Immune System**. Editors, Kabelitz D, Bhat J, ISBN: 9780128179642, Elsevier Inc., USA, Volume 6, Chapter 2, 25-38
4. **Giri AP**, Bhide AJ, Gupta VS (2019) Targeting digestive physiology: Trends in strategic exploitation of plant defensive proteinaceous inhibitors against insect pests. **Genetic Engineering of Plants – Enhancing Productivity and Product Value**. Editors: Trivedi PK, Nath P and Bouzayen M, John Wiley & Sons Limited, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ
5. Dawkar VV, Chaugale A, Barvkar V, Tanpure RS, **Giri AP** (2018) Genetically engineered crops: opportunities, constraints, and food security at a glance of human health, environmental impact, and food quality. **Genetically Engineered Foods (Handbook of Food Engineering Volume 6)**. Editors: Holban AM, Grumezescu AM, ISBN: 978-0-12-811519-0, Elsevier Inc., Academic Press, Chapter #12, pp 311–330.
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2. **Giri AP**, Saikhedkar N, Joshi RS (2016) Synthetic Peptides as inhibitors of proteases for effective pest control and compositions thereof” (Application no. 201611019109, India). Published: February 2018.
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4. **Giri AP**, Bhide AJ, Gupta VS, Ramasamy S (2014) Compositions and method for effective management of storage and sucking insect-pests. Patent file numbers – India/World (3706/DEL/2014, 15.12.2014)/(PCT/IN2015/050200).
5. Gupta VS, Kulkarni R, Pandit S, **Giri AP**, Pujari KH (2013) Primer for amplifying geranyl pyrophosphate synthases from mango. **USA Patent file numbers** US Patent App. 14/376,403
6. Gupta VS, Deshpande AB, Chidley HG, **Giri AP** (2015) Recombinant polynucleotide involved in lactone synthesis and process for synthesis of lactones thereof. **US Patent 16091229**
7. Gupta VS, Chidley HG, Deshpande AB, **Giri AP** (2015) Molecular cloning and expression of cDNA encoding o-methyltransferase isolated from *Mangifera indica*. **USA patent number 10563181**

8. Gupta VS, Kulkarni R, **Giri AP**, Pujari KH (2013) cDNA encoding enone oxidoreductase from mango. **USA patent number 9, 790, 526 (2017) European patent number: EP2809809B1.**
9. **Giri AP**, Gupta VS, Tamhane VA, Joshi RS, Mishra M, Joshi RR, Sonavane U, Ghosh A (2012) Method for effective management of *Helicoverpa armigera*. **USA patent number: 9, 357, 777 & Australia AU 2013207052B2,**
10. Gupta VS, Kulkarni R, Pandit S, **Giri AP**, Pujari KH (2012) Primer for amplifying farnesyl pyrophosphate synthase from mango. **US patent number: 9,650,683**

References:

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In my lab, I am working on following areas: Entomology, Applied Entomology

- 1 Insect pest Management-.Biological Control of *Helicoverpa armigera* (Hubner) by using Insect Parasitoids, Pathogens -microbial Insecticides, Insect and their host plants interactions
- 2 Vector Biology-.Dengue and Filariasis Vector control by using plant extracts .
- 3.Molecular changes during the Interactions of Entomopathogenic Fungi, bacteria against *Helicoverpa armigera*
- 4.Foraging Behavioural and Floral Preference of Honey bees
- 5.Ecobiology, Behavioral and Biochemical aspects of Insect pests and Parasitoids.
- 6.Interaction of *Vibrio* spp with non biting midges (Diptera)

Recent five Publications:

- Pandit, R. S., Sharbidre A. A. and Jaybhay. Y. S. (2009) Effect of Temperature on Development and Survival of *Trichogramma brasiliensis* an egg parasitoid of *Helicoverpa armigera* (Hubner). National J. Life Sciences, 6:169-172.
- Bagde, U.S. and Pandit, R. S. (2009) Antagonistic Effect of *Bacillus thuringiensis* subsp. H12 on Pathogens of *Tilapia* species. Asian Jr. Microbiol. Biotech. Env. Sc., 11:917-922.
- Sirsath, M.S., Pandit, R. S., and Bagde U.S. (2008) Mechanisam of Action of *Ageratum conyzoids* plant extract on pathogenic bacteria. National J. Life Sciences, 5:147-152.
- Sirsath, M.S., Pandit, R. S., and Bagde U.S. (2008) Evaluation of Antimicrobial activity of *Ageratum conyzoids* plant extract. National Jr. Life Sciences Vol. 5 (1): 7-13
- Pandit, R. S. (2008) Effect of Temperature on Development and survival of *Trichogramma chilonis* Ishii, an egg parasitoids of *Helicoverpa armigera* (Hubner), Bionano Frontier, 1:164-166.
- Kalpana Pai, (2019) UGC - MRP - Executive Summary [“ Evaluation of effect of chlorophyllin Gallic acid on Macrophage Activation”](#).
- Dr. Richa Ashma, (2019) UGC - MRP - Executive Summary [“Characterization of Human Sweat molecules among Indians ”](#).

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- Jyoti Chintalchere
- Kishor Raut kishor5raur@rediffmail.com

PHOTO GALLERY



Dr. Ashok Giri Guiding the students about Research Paper Writing. 18/12/2021



Dr. R. S. Pandit Guiding the students about Research Ethics. 18/12/2021

Workshop on Research Methodology (2021-22)

Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)

Pravara Rural Education Society's


ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL

DEPARTMENT OF ENGLISH

Date: 21/02/2022

STUDENT NOTICE

All the students are hereby informed that the Department of English organised a One Day Workshop on **Research Methodology** on 25/2/2022 at 10.00 a. m. in the Commerce Lab. All are cordially invited for the said programme.


Head of Dept.
P.D.
Department of English
Arts, Commerce & Science College, Satral




Principal
Arts, Commerce and Science College, Satral
Tal- Rahuri, Dist- Ahmednagar- 413711



Loknete Dr. Balasaheb Vikhe Patil (Padmabhushan Awardee)
Pravara Rural Education Soc
ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL
DEPARTMENT OF ENGLISH



A One Day Workshop on Research Methodology

Organised by: Department of English

In Association with

IQAC, ACS College, Satral

Overview

The Department of English is hosting **A One Day Workshop on Research Methodology** to enhance the research skills of students and faculty. The session will focus on key aspects of conducting academic research, with an emphasis on methodologies and best practices.

Event Details:

- **Date:** 25th February 2022
- **Time:** 10.00 a. m.
- **Venue:** Commerce Lab.
- **Guest Speaker:** Dr. Rajendra Dange, Wadia College, Pune

Topics to be covered:

1. **Introduction to Research Methodology:** Fundamental principles and importance of research.
2. **Types of Research:** Overview of qualitative and quantitative methods.
3. **Research Design:** Guidelines for creating effective research frameworks.
4. **Data Collection Techniques:** Practical approaches to gathering data.
5. **Ethical Considerations in Research:** Research ethics and integrity.
6. **Writing Research Papers:** Steps to structure and write impactful research papers.

Target Audience:

- Undergraduate and postgraduate students
- Faculty members and aspiring researchers

Registration Details:

- **Fee:** Free of charge
- **Last Date for Registration:** [Insert Date]
- **Contact:** [Insert Email/Phone]

Don't miss this opportunity to develop your research skills and gain valuable insights from an expert in the field!



Loknete Dr. Balasaheb Vikhe Patil [Padma Bhushan Awardee]

Pravara Rural Education Society's


ARTS, COMMERCE AND SCIENCE COLLEGE, SATRAL

DEPARTMENT OF ENGLISH


Report of One Day Workshop on “**Research Methodology**”

Date: 25/02/2022

The English Department, in collaboration with the Internal Quality Assurance Cell (IQAC), organised a one-day workshop on **Research Methodology** on 25/02/2022. The workshop aimed to provide participants with a comprehensive understanding of the principles and techniques essential for conducting research effectively. The workshop commenced at 10:00 a.m. with an inaugural session, where faculty members from the English Department and representatives from IQAC welcomed the participants. The significance of research methodology in academic pursuits was emphasized. Topics included research design, data collection techniques, sampling methods, data analysis, and ethical considerations in research. Participants had the opportunity to share their experiences, ask questions, and engage in hands-on activities related to research methodology. The one-day workshop on Research Methodology organized by the English Department in association with IQAC was a resounding success. It provided participants with valuable insights into the research process and equipped them with the necessary tools to conduct high-quality research. The Principal, Vice-Principal and staff were supported us to make the event successful.


H.O.D.
Head of Dept.
Department of English
Arts, Commerce & Science College, Satral




Principal
Arts, Commerce and Science College, Satral
Tal- Rahuri, Dist- Ahmednagar- 413711

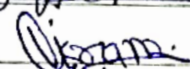
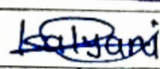
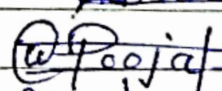
DEPARTMENT OF ENGLISH

Attendance Record [2021-22]

Name of the Activity: One Day Workshop on Date: 25/2/2022
Research Methodology

Name of the Speaker: Dr. Rajendra Dange, Wadia College, Pune

Name of the Topic: Research Methodology

Sr. No.	Name of the Student	Signature
1)	pute Sakshi Ravasheb	Sakshi.
27	Sabare Yash Balasaheb	
3)	Sansare Anuja Annasaheb	Sansare A.A
4)	Sanyal Altamash Raju	Sanyal AR.
5)	Shinde Vikram Sharad	
6)	Shingote Sakshi Balasaheb	Sakshi
7)	Shirsath Kalyani Ramesh	
8)	Shirsath Ruchika Rajendra	Ruchika
9)	Sinare Tushar Appasaheb	Tushar
10)	Soni Maachindra Anup	
11)	Tathe Nikita Balasaheb	Nikita
12	Tilake Nikita Ravindra.	
13	Wable Prasad Sada Kale	
14	Wani Abhishek vasant	
15	Wani Pooja Lahanu	
16	Wani Rutuja Lahanu	
17	Wani Vishal Sasaba	Vishal
18	Belkar Sachin Tukaram	

DEPARTMENT OF ENGLISH

Attendance Record | 2021 - 22 |

Name of the Activity: One Day Workshop Date: 25/2/2022

Name of the Speaker: Dr. Rajendra Dange

Name of the Topic: Research Methodology

Sr. No.	Name of the Student	Signature
19)	Chitalkar Adhika Shambhal	
20)	Dukre Pallavi vikas	
21)	Gagare Nikita Sayaji	
22)	Ghorpade Ishwari Vitthal	
23)	Ghorpade Shanti Vilas	
24)	Pawar Priyanka Kashinath	
25)	Wane Abhishek Dnyanesh	
26)	Khemnar Prajakt sukhdew	

N.D. Bhandari
(Coordinator)

H.O.D.
Department of English
Arts, Commerce & Science College, Satral.

BRIEF RESUME

Personal Information

Name : Dr. Rajendra Sudhir Dange
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Strengths : Sincerity, Commitment and hard Work

Academic Summary

M. A. : Department of English,
S.P. Pune University, Pune [2011]
SET : S.P. Pune University, Pune [2015]
Research Work : Awarded PhD [December 2020]

Work Experience

Institute	Level	subject	Duration
Wadia College, Pune	UG	English	From August 2017 to till today [On CHB]

GLIMPSES OF THE PROGRAMME

ONE DAY WORKSHOP ON “RESEARCH METHODOLOGY”



The Guest Speaker addressing students on Research Methodology... Date. 25/02/2022



The Guest Speaker interacting with students ... Date. 25/02/2022