



R. L. TAWDE FOUNDATION'S
SAROJINI COLLEGE OF PHARMACY

R. S. No. 576, Near Rajendranagar Water Tank, Rajendranagar, Kolhapur. - 416008
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SUMMARY OF FUNCTIONAL MOUS

Sr.No.	Academic Year	Name of the institution /industry/ with whom the MoU is made	Purpose of the MoU (internship, on-the-job training, project work, student / faculty exchange and collaborative research)	Date	Valid till (Duration / termination)
1	2022-23	Insta Vision Laboratory and Services , 89,Raviwar Peth, Satara (MS)	Research, project work of students Industrial training Joint organization of workshop and seminar Guidance and cooperation of training and placement activities Consultancy and exchange of knowledge on charge basis with mutual consent.	01/01/2023	05 years from the effective date.
2	2022-23	Salgo Research Equipment Miraj (MS)	Quality improvement programs Training of faculty for effective teaching Training to students Enhance institutional effectiveness	01/01/2023	01/01/2026
3	2022-23	Bharati Vidyapeeth College of Pharmacy Kolhapur	Support to research activity by students and staff. Sharing of educational material and creations.	02/07/2022	Period of 10 years
4	2022-23	Ripcord Pharmaceutical Ltd. Kolhapur	Students training	01/01/2023	05 years from the effective date.
5	2022-23	Patco Healthcare Pvt.Ltd.	Students training in various department including production, QC, QA, Marketing Support students in their live projects Training of faculty	01/12/2022	30/11/2025

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6	2021-22	Biocyte institute of research and development, Sangli (MS).	Support to research activity by students and staff Internship Collaborative research	29/07/2021	28/07/2023 Renewal has been done on A.Y.23
7	2021-22	Women's College of Pharmacy, Peth Vadgao	Collaborative research	16/01/2022	15/01/2027
8	2021-22	KDCA Institute of Pharmacy, Ujlaiwadi Kolhapur	Collaborative research	13/12/2021	12/12/2026
9	2021-22	Sant Gajanan Maharaj College of Pharmacy, Mahagao	Collaborative research	16/12/2021	15/12/2026
10	2021-22	Ashokrao Mane College of Pharmacy, Peth Vadgao	Collaborative research	16/01/2022	15/01/2027
11	2021-22	Anandi Pharmacy College, Kale, Kolhapur	Collaborative research	20/01/2022	19/01/2027
12	2021-22	Annasaheb Dange College of Pharmacy, Ashta	Support to research activity by students and staff.	16/01/2022	15/01/2027
13	2021-22	Tatyasaheb Kore College of Pharmacy, Warananagar	Sharing of educational material and creations	09/12/2021	08/12/2026
14	2021-22	Appasaheb Birnale College of Pharmacy, Kolhapur	Support to research activity by students and staff.	15/01/2022	14/01/2027
15	2021-22	Rajarambapu College of Pharmacy, Kasegao	Support to research activity by students and staff.	15/01/2022	14/01/2027
16	2021-22	J J Magdum College of Pharmacy, Jaysingpur	Sharing of educational material and creations	20/01/2022	20/01/2027
17	2021-22	Dr. Shivajirao Kadam College of Pharmacy, Digraj	Support to research activity by students and staff.	20/01/2022	20/01/2027
18	2021-22	Vasantidevi Patil Institute of Pharmacy, Kodoli	Sharing of educational material and creations	15/01/2022	14/01/2027

Sr.No.	Academic Year	Name of the institution /industry/ with whom the MoU is made	Purpose of the MoU (internship, on-the-job training, project work, student / faculty exchange and collaborative research)	Date	Valid till (Duration / termination)
19	2020-21	Shrutika imaging and diagnostic centre, Kolhapur.	Short study tour or pathology visit to students	02/02/2021	01/03/2023
20	2020-21	Mahalaxmi Hospital, Rajarampuri, Kolhapur.	Short study tour or hospital visit to students	23/02/2021	22/02/2023
21	2019-20	Rubicon Skill Development Pvt.Ltd.	Training to students on Rubicon's Campus to corporate Program	24/02/2020	24/02/2022 Renewal has been done on 18 th August 2023
22	2019-20	SG Phyto pharma Ltd.	Training to students in various department including production, packaging, QC, QA, Marketing etc.	25/02/2020	24/02/2022
23	2018-19	ADITYA PHARMA Plot No- 317, Near Mahalakshmi Net Café R.K. Nagar Kolhapur 416013.	Internship	16/8/2018	16/8/2028
24	2018-19	Heart To Heart Medical Store 106 A Ward Plot No 2, Rankala, Opposite Rasai Hospital, Rankala Road Kolhapur – 416012.	Practice school Training under the domain “Practice in Retail Pharmacy “	27/8/2018	27/8/2018
25	2018-19	New Laxmi Medical opposite Bus Stop, Saneguruji Vasahat, Shivganga Colony, Kolhapur, Maharashtra 416001	Practice school Training under the domain “Practice in Retail Pharmacy “	07/10/2018	07/10/2028

Sr.No.	Academic Year	Name of the institution /industry/ with whom the MoU is made	Purpose of the MoU (internship, on-the-job training, project work, student / faculty exchange and collaborative research)	Date	Valid till (Duration / termination)
26	2018-19	Shetkari Seva Sangh Aushedh Dukan 256 D, Gangavesh Road, D Ward, Papachi Tikati, Kolhapur, Maharashtra 416002	Practice school Training under the domain “Practice in Retail Pharmacy”	24/10/2018	24/10/2028
27	2018-19	Siddhi Pharma (Wholesale Generic Medicine Shop) Ground floor, G no 1, Manoj plaza, 1st Lane, opposite the commercial co- operative Bank, E Ward, Shahupuri, Kolhapur, Maharashtra 416001	Practice school Training under the domain “Practice in Retail Pharmacy “	15/11/2018	15/11/2028
28	2018-19	Siddhkala Medical Gala No 1, Shivshakti Grihanirmarn Sanstha, Morewadi Road, Near Rajendra Nagar Jakat Naka, Kolhapur – 416004.	Practice school Training under the domain “Practice in Retail Pharmacy “ Internship	30/11/2018	30/11/2028
29	2018-19	Yash Medicals,shop no. 6 mukta Sainik Vasahat market, muktra sainik vasahat Kolhapur.	Practice school Training under the domain “Practice in Retail Pharmacy “ Internship	01/12/2018	01/12/2028

SUMMARY OF YEAR WISE ACTIVITY CONDUCTED

Sr. No.	Name of Collaborating organization	Name of Activity	Type of collaboration	Activity details	Activity conducted (Academic Year)
1	Gardens Club	Students / faculty research work	Collaborative research	Student planted medicinal plants	2023-24
6	Salgo Research Equipment	Guest lecture on : Entrepreneurship Development for Pharmacy Students	Industrial Collaboration	Guest lecture was conducted for the students to thoroughly understand various job opportunities after course	2022-23
7	Bharati Vidyapeeth college of pharmacy (Lead college Shivaji university Kolhapur)	Research Proposal : Presentation	Students exchange, Collaborative research	Research proposal was submitted by the students of final year B. Pharm under lad college scheme Sanctioned amount was 10,000/-	2022-23
8	Ripcord Pharmaceutical Ltd. Kolhapur	Students internship	Student exchange	Students had undergone internship	2022-23
10	Biocyte institute of research and development, Sangli	Research work (Students)	Student exchange	Research Project: Sample analysis	2022-23
11	Womens's College of Pharmacy Peth Vadgaon	Faculty Research work	Collaborative research	Published Book	2022-23
12	KDCA Institute of Pharmacy, Ujlaiwadi Kolhapur	Scientific session	Student / Faculty exchange	Conducted scientific session for students during Parents meet	2022-23

13	Sant Gajanan Maharaj College of Pharmacy, Mahagao	Guest lecture conducted by faculty (Faculty exchange)	Faculty exchange	Sharing of research and inovative ideas	2022-23
14	Ashokrao Mane College of Pharmacy, Peth Vadgao	Research work (Faculty)	Collaborative research	Publsiherd research paper	2022-23
15	Anandi Pharmacy College, Kale.	Guest lecture conducted by faculty (Faculty exchange)	Faculty exchange	Sharing of research and inovative ideas	2022-23
16	Annasaheb Dange College of B Pharmacy	Research work (Students)	Student exchange	Research Project: Sample analysis	2022-23
17	Tatyasaheb Kore College of Pharmacy, Kolhapur.	Faculty Research work	Collaborative research	Faculty Participation in Conference	2022-23
18	Appasaheb Birnale college of pharmacy, Sangli .	Research work (Faculty)	Collaborative research	Published research paper	2021-22
19	Rajarambapu College of Pharmacy, Kasegaon	Scientific session	Student / Faculty exchange exchange	Organized session on: NLP learning , competence & Professional skills	2021-22
21	Dr. Shivajirao Kadam College of Pharmacy, Digraj	Research work (Faculty)	Collaborative research	Faculty registered for Higher education(PhD) and conducted research work	2021-22
22	Vasantidevi College of Pharmacy Kodoli	Scientific session	Student / Faculty exchange exchange	Organized session on: NLP learning , competence & Professional skills	2021-22
25	Rubicon Skill Development	Skill development program	Industrial Collaboration	Students had undergone skill development program	2019-20

25.1	Rubicon Skill Development	Campus to Corporate Skill Development Session	Industrial Collaboration	Students had undergone skill development program	2022-23
26	SG Phyto pharma Ltd. D21, MIDC Gokul Shirgaon	Guest Lecture on scope of Pharmacy	Industrial Collaboration	Activity conducted to get students familiar with the pharmaceutical industries	2018-19
26.1	SG Phyto pharma Ltd. D21, MIDC Gokul Shirgaon	Industrial Visit	Industrial Collaboration	Activity conducted to get students familiar working culture in various department	2019-20
26.2	SG Phyto pharma Ltd. D21, MIDC Gokul Shirgaon	Industrial Visit	Industrial Collaboration	Activity conducted to get students familiar working culture in various department	2022-23
27	Aditya Pharma Kolhapur	Students internship	Collaborative work	Students had undergone internship	2021-22
28	Heart to Heart Medicine Kolhapur	Students internship	Collaborative work	Students had undergone internship	2021-22
29	New Laxmi Medical Kolhapur	Students internship	Collaborative work	Students had undergone internship	2021-22
30	Shetkari Seva Kolhapur	Students internship	Collaborative work	Students had undergone internship	2021-22
33	Yash Medical Kolhapur	Students internship	Collaborative work	Students had undergone internship	2021-22
	Lead Colleges (Affiliated Colleges under Shivaji University Kolhapur)	Sports , cultural activities	Student exchange Collaborative research	Students participated in various lead college activities including sports, cultural events etc.	2018-2023

SUPPORTIVE DOCUMENTS OF YEAR WISE ACTIVITY CONDUCTED UNDER MOUS'S

Activity conducted under: MOU No.06

Name of collaborating organization: Salgo Research Equipment , MIDC ,Shaha Lulla Mahanagar ,Savali,Tal.Miraj

Name of activity: Guest lecture on: Entrepreneurship Development for Pharmacy Students

Type of collaboration: Industrial collaboration

Date: 15/10/2022

Year: 2022-23

Supportive documents/Brief report:

The objective of the given seminar was to make students understand the basics of Entrepreneurship Development after they pass out from the college and start their career as an entrepreneur. The session was chaired by Principal Dr. R. S. Bagali alongwith the Chief Guest Prof. Sachin Lokapure and Prof. Z. J. Tamboli, Teacher Incharge of Entrepreneurship Development Cell (EDC). Professor lokapure emphasized upon the basics of starting entrepreneur venture from scratch and managing it with different techniques, such that it starts to create positive returns at earliest. He spoke about different kind of schemes that the government has started for budding entrepreneurs and how to make and apply these schemes to create the capital required at early stages of entrepreneurship. He also answered basic doubts of students who wish to make a career in different entrepreneurial ventures and had ideas of their own. The event was well received by students, who came across some new concepts of entrepreneur's journey and the basics required for converting an idea into a concrete product, which is available to the society for its betterment. Students also appreciated the financial aspects which are mandatory for every entrepreneur, while he is busy with conversion of an idea into a product.



Collaborating organization: Salgo Research Equipment Miraj
Guest lecture on: Entrepreneurship Development for Pharmacy Students

Activity conducted under : MOU No.07

Name of collaborating organization: Bharati Vidyappeth College of Pharmacy Kolhapur.

Name of activity: Research Proposal: Presentation

Type of collaboration: Students exchange, collaborative research

Date: 22/08/2022

Year: 2022-23

Supportive documents/Brief report:

The student of Final year B. Pharm Mr. Rohan Ingawale submitted the research proposal to the Bharati Vidyappeth college of pharmacy, Kolhapur under lead college research sensitization scheme with title: ‘‘Extraction and isolation of phytoconstituents of Apium graveolens and its In-vitro assessment of Anti-tubercular activity’’.

The research project was sanctioned and received grant of rs.10,000/- .



Research proposal presentation at: Bharati Vidyapeeth College of Pharmacy Kolhapur



BHARATI VIDYAPEETH COLLEGE OF PHARMACY, KOLHAPUR

Founder :
Vitangrao Kadam
A. LL.B. Ph.D.

Courses: D.Pharm, B. Pharm, M. Pharm, Ph.D, DTE College Code No. - 6256
(Approved by A.I.C.T.E., P.C.I., New Delhi)
Affiliated to MSBTE, Mumbai, Permanently Affiliated to Shivaji University, Kolhapur & included in list under Sect.2(F) & 12(B) of UGC Act. 1956
B.Pharm. Course reaccredited by NBA, New Delhi

Principal :
Dr. H.N. MORE
M.Pharm., Ph.D.

LEAD COLLEGE, SHIVAJI UNIVERSITY, KOLHAPUR, NIRF INDIA RANKING 2022:74th
Near Chitranagari, Kolhapur - 416013 (MS) Tel. (0231) 2637286, 2638392, Fax : 2638833

No. : BV/CPK / 338 /2023 - 2024.

Date : 27/05/2023

To
The Principals and Project guides,
Pharmacy colleges under Lead College
Shivaji University,
Kolhapur.

Subject: Regarding research grant of Rs.10,000/- per project sanctioned under Research
Sensitization Scheme of Shivaji University 2022-23 (Lead College Activity).

Sir/Madam

With reference to subject cited above, all the participated colleges in research promotion activity under lead college research sensitization scheme of Shivaji University hereby informed that research projects submitted by your college have been sanctioned from Shivaji University, Kolhapur for the research grant of Rs.10,000/- to meet the expenditure of recurring nature towards the project work. The grant should be utilized for the sanctioned project work only. List of sanctioned projects is attached herewith.

Regards,



Dr. H. N. More
PRINCIPAL
Bharati Vidyapeeth
College of Pharmacy, Kolhapur



Sanctioned research proposal by lead college: Bharati
Vidyapeeth college of Pharmacy, Kolhapur

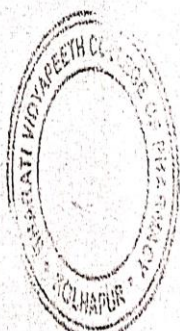
List of research proposals selected for Research Sensitization Scheme 2022-2023

Sr. No.	Name of College	Research Title	Names of Students	Name of Advisor	Sanctioned amount Rs.
1	BVCOP, Kolhapur	Estimation of caffeine from Different Marketed formulations of Tea and Coffee	Ms. Rathod Kejal J. Ms. Mane Priyanka S. Mr. Shewale Vinayak R. Mr. Jadhav Sambhaji S.	Mr. V. T. Pawar	10,000/-
2	AMCOP, Pethvadgaon	Formulation and evaluation of Pale catechu and red Lentils extract for treatment of Melasma skin disease	Mr. Patil Shivtej A. Mr. Nagargoje Ganesh S. Ms. Patil Pratiksna P. Ms. Jadhav Samruddhi S.	Mrs. P. N. Chougule	10,000/-
3	GCOP, Karad	Phytochemical and Pharmacological evaluation of Spirulina as Antidiabetic agent	Mr. Tapekar Saurabh B. Mr. Albal Omkar P. Ms. Vadgaonkar Gayatri S. Ms. Allapurkar Vaishnavi S.	Dr. R. D. Chakole	10,000/-
4	VPIOP, Kodoli	Development and evaluation of microsphere based novel drug delivery systems for smoking cessation therapy	Ms. Khude Sukshi Mr. Phulari Santosh	Dr. S. R. Desai	10,000/-
5	ABCOP, Sangli	Phytochemical Investigation and In-vitro Anti-tubercular & Anti- HIV activity of <i>Delonix regia</i> (Fabaceae)	Ms. Chavan Vaishnavi V. Ms. Devarshi Shrutika D. Mr. Hulage Prashant S. Mr. Godad Irshad A.	Mrs. B. U. Jain	10,000/-
6	AGCOP, Jalapur	Design And in-silico studies of benzimidazole hybrids as promising DNA polymerase IIIIC inhibitors in treatment of gram positive bacterial infections	Mr. Sayyad Adil A. Ms. Shane Trupti S. Mr. Tambe Prashant M. Ms. Bagwan Aasiya S.	Dr. N. V. Bhilare	10,000/-
7	TKCP, Warnanagar	Development and Characterization of Pro-liposomes of Erlotinib for treatment of Non Small Cell Lung Cancer	Ms. Kale Minakshi B. Mr. Karande Mayur D. Mr. Lambore Babu B. Mr. Gaikwad Nayan	Mrs. S. S. Shinde	10,000/-
8	DSKCOP, Digraj	Design & Assessment of in- situ Sol-Gel spray formulation for Treatment of oral Mucositis	Ms. Gadade Rutuja S. Ms. Ingle Nisha S. Ms. Jadhav Pratiksna S.	Miss. N. H. Gurav	10,000/-

List of Sanctioned research proposal by lead college: Bharati Vidyapeeth college of Pharmacy, Kolhapur

9	SSCOP, Ghogaon	Design & optimization of nanosponges of poorly soluble voriconazole using central composite design	Ms. Chalke Pratiksha M. Ms. Lonhe Shreya P. Ms. Sawant Rutuja R. Ms. Patil Monika A.	Dr. J. S. Mulla	10,000/-
10	ACOP, Kale	Development of Anti-diabetic Herbal Nano-formulation from leaves of <i>Chamaecostus cuspidatus</i>	Mr. Nalawade Shekhar S. Mr. Mohite Prathamesh P. Mr. Patil Adesh A. Mr. Kumbhar Rohit K.	Miss A. A. Varne	10,000/-
11	SCOP, Kolhapur	Extraction, Isolation of Phytoconstituents of <i>Apium graveolens</i> and its in-vitro assessment of Antitubercular Activity	Ms. Bhandare Sakshi Mr. Dhavale Rahul Mr. Ingawale Rohan Mr. Chavan Sandesh	Ms. P. B. Vibute-Patil	10,000/-
12	SGMCP, Mahagaon	In Vitro screening & evaluation of antivenom phytochemicals from <i>Buchnanian Lanza Spreng</i> bark against <i>Vipera russelli</i>	Ms. Barad Vaishnavi D. Ms. Chille Shalaja C. Ms. Ravan Prajakta R. Ms. Bhikale Ankita A.	Mr. M. R. Holam	10,000/-

Note: Titles in Bold are corrected titles as per suggestions of evaluators.



Dr. H. N. More
PRINCIPAL
Bharati Vidyapeeth
College of Pharmacy, Kolhapur

Sanctioned research proposal to: Sarojini College of Pharmacy Kolhapur

Activity conducted under : MOU No.08

Name of collaborating organization: Ripcord Pharmaceutical Ltd. Kolhapur

Type of collaboration: Students exchange

Activity details: Students had undergone internship

Date: 22/09/2023

Year: 2022-2023

Supportive documents/Brief report:

Students of Academic year 2022-23 undergone the training in the industry to get practical knowledge as well as to know the various departments in the industry like production, packaging, QA, QC etc

Training Certificate	
	<p>Plot No. T-4/23A, MIDC Kagal, Kolhapur - 416236 9838634695, 9527918527 ripcoarpharmaceuticalspvtltd@gmail.com</p>
Date : 24 Sep. 2023	
TO WHOMSOEVER IT MAY CONCERN	
<p>This is to certify that Miss. Sanika Rajendrakumar Powar , Studying in B. Pharmacy from Sarojini College of Pharmacy, Kolhapur . Has undergone Industrial Training at our plant . The candidate has taken specific training from 14/08/2023 to 24/09/2023 in following departments-</p> <ol style="list-style-type: none">1. Warehouse2. Tablet manufacturing and Packing3. Capsule manufacturing and Packing4. Quality Control5. Quality Assurance <p>We have observed that the candidate is having hard working nature and sincere during the training period and wish her far better prospectus in studies as well as in career.</p> <p>For Ripcord Pharmaceutical Pvt. Ltd.</p>	
 DIRECTOR	

Activity conducted under : MOU No.10

Name of collaborating organization: Biocyte institute of research and development, Sangli


Type of collaboration: Research collaboration

Activity details: Research Project: Sample analysis

Date: 19/04/2023

Year:2022-23

Supportive documents/Brief report:



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Registered under CPCSEA 2114/PO/Ra/5/20/CPCSEA

BIOCYTE
RESEARCH & DEVELOPMENT PVT LTD

Flat No.11, Shri-Ram Residency, Near Bypass Road,
Kalanagar, Sangli, Maharashtra – 416416

Mob.9595753875, www.biocyte.in E-mail-biocytelabsangli@gmail.com

Certificate of Analysis

Ref: BiRD /123/2023-24Date: 05/06/2023

A) Name of Client	Kajal Darade
B) Name of College or Organization	Kolhapur
C) Sample Description	Sample – PPD Sample – PSD Sample – PPM Sample – PSM
D) Sample Form	Liquid
E) Activity:	In vitro Antioxidant activity by DPPH (96 well method)

F) Principle:
1, 1 Diphenyl 2- Picryl Hydrazyl is a stable (in powder form) free radical with red color which turns yellow when scavenged. The DPPH assay uses this character to show free radical scavenging activity. The scavenging reaction between (DPPH) and an antioxidant (HA) can be written as, $DPPH-H + (A) \rightleftharpoons (DPPH) + (H-A)$ Antioxidants react with DPPH and reduce it to DPPH-H and as consequence the absorbance decreases. The degree of discoloration indicates the scavenging potential of the antioxidant compounds or extracts in terms of hydrogen donating ability

G) Procedure:
Determination of Anti-oxidant activity
Antioxidant activity in the sample compounds was estimated for their free radical scavenging activity by using DPPH (1, 1-Diphenyl-2, Picryl-Hydrazyl) free radicals (George et al., 1996). 100µL of test compounds water were taken in the micro titer plate. 100µL of 0.1% methanolic DPPH was added over the samples at different concentration (1000µg/ml) and incubated for 30 minutes in dark condition. The samples were then observed for discoloration; from purple to yellow and pale pink were considered as strong and weak positive respectively and read the plate on Elisa plate reader at 490nm
Radical scavenging activity was calculated by the following equation:

Activity conducted under : MOU No.11

Name of collaborating organization: Womens's College of Pharmacy Peth Vadgaon

Type of collaboration: Faculty exchange

Activity details: Book Publication

Date: ---

Year: 2022-23

Supportive documents/Brief report:



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Activity conducted under : MOU No.12

Name of collaborating organization: KDCA institute of Pharmacy,Kolhapur.

Type of collaboration: Students and faculty exchange

Activity details: Conducted scientific session for students during the parent's meet

Year: 2022-23

Supportive documents/Brief report:

The Sarojini College of Pharmacy, Kolhapur organized this year's parents-teachers meeting on 14th January 2023 to discuss about departmental activities, students progress and performance. The parents were intimated about the meeting well in advance. The meeting was conducted at seminar hall from 10.am to 1.30 pm. The meeting was started by welcome function by watering of plant and National anthem by auspicious hands of chief guest Dr.Hiremath Sir, Principal KDC College of pharmacy, Kolhapur. The function was graced by presence of imminent personality, secretary of R. L. Tawde Foundations Hon. Mrs. Shobha Tawde madam and Principal of Sarojini College of Pharmacy Dr. Rajkumar Bagali sir. Felicitation of Ho. Chief guest Dr. Hiremath was done by the hands of respected principal sir. During this Parents meeting the scientific session of Dr. Hiremath was organized for the students.

During the session Dr. Hiremath Sir explained the importance and significant of research in field of Pharmacy. He also highlighted the various aspects including patents, need of patent, what are scientific literature, what are the different web search to find good literature etc.



Activity conducted under : MOU No.13

Name of collaborating organization: Sant Gajanan Maharaj College of Pharmacy, Mahagao

Type of collaboration: Faculty exchange

Activity details: Sharing of human resource activity

Date:15/03/2023

Year: 2022-23

Supportive documents/Brief report:

Under lead college scheme, sharing of human resource activity, session for final year B.Pharm students was conducted . The faculty members Dr. R.S.Bagali, Pricipal and Mr. U.V.Nagvekar, Assistant professor of Sarojini College of Pharmacy were appointed as a guest speaker for the session at Shri Sant Gajanan. Maharaj College of Pharmacy Mahagaon Taluka Gadhinglaj, The purpose behind the session was to highlight the significant topics in the field of research which will be helpful to the while completing their research work . The faculty from affiliated colleges were actively participated in the scheduled event.



**Sharing of Human resource activity
(Participated by Dr. Rajkumar Bagali)**



**Sharing of Human resource activity
(Participated by Mr. U.V.Nagvekar)**



**BHARATI VIDYAPEETH
COLLEGE OF PHARMACY, KOLHAPUR**

Ranked 62nd in India by NIRF, MHRD, New Delhi
Approved by AICTE and PCI, New Delhi
Permanently Affiliated to Shivaji University, Kolhapur & included in list under Sect: 2 (F) & 12 (B) of UGC Act, 1956

FOUNDER & CHANCELLOR Dr. Patangrao Kadam M. A. L.L.B. Ph. D.	B. Pharm. Course Re-accredited by NBA, New Delhi Lead College-Shivaji University, Kolhapur Near Chitranagari, Kolhapur-416013 (MS)	PRINCIPAL Dr. H. N. More M. Pharm. Ph.D.
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BV/CPK/ SHR-Lead College-123 /2021-2022

Date: 28/02/2022

To,
The All Principal's,
Pharmacy Colleges under the purview of
Shivaji University, Kolhapur

Subject: Regarding implementation of 'Sharing of Human Resources' activity for the academic year 2021-22.

Respected Sir/Madam,

With reference to the subject cited above, please find the list of approved expert appointments for Sharing of Human Resources activity that will be conducted at your college.

You are therefore requested to make necessary arrangement and cooperation for the smooth conduction of the activity as follows:

- 1) Kindly confirm the date, time and topic from expert.
- 2) Issue the attendance certificate to the expert after completion of the lecture.
- 3) Hospitality of the expert will be taken care by concerned college.
- 4) It is mandatory to conduct the activity before 15th March 2022.
- 5) Feedback of the concerned expert should be communicated immediately.
- 6) Resource faculty will be given minimum Rs. 1000/- remuneration from the respective allotted college.

Thanking you.

Regards,

Dr. D. T. Gaikwad
Secretary,
Lead College Working Committee

Dr. H. N. More
Chairman,
Lead College Working Committee

Web: <http://copkolhapur.bharatividyapeeth.edu>

E-mail: bvcpkc@rediffmail.com

Appointment of faculty: Sharing of Human resource activity

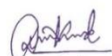
‘Sharing of Human Resources’ activity for the academic year 2021-22

Approved expert appointments for Sharing of Human Resources activity at your college

Sr No	Name of faculty with designation	Name of College	Topics		Area of expertise	Allotted College
			UG	PG		
1)	Dr. Javeed Y Manure Asst. Prof.	ABCP, Sangli	IR Spectroscopy	--	Modern Techniques of Analysis	ADCP, Ashta
2)	Shri. Sachin G Lokapure Asst. Prof.		--	Intellectual Property Rights	Patent drafting, patent act, patent prosecution and granting procedure	ADCP, Ashta
3)	Smt. Pradnya P. Wadekar (Asst. Professor)		Role of free radicals in different diseases.		Role of free radicals in different diseases.	ADCP, Ashta
4)	Dr. Smt. P. L. Ladda		Therapeutic Drug monitoring	Recombinant DNA Technology	Pharmacology, Molecular Biology	DSKCP, Digraj
5)	Dr. Smt. T. S. Shikalgar		Congestive Cardiac failure	Acute and Chronic toxicity studies	Pharmacology, Toxicology	DSKCP, Digraj
6)	Dr. Smt. Preeti G. Karade Assistant Prof.		Flow of fluids, Heat Transfer	--	Pharmaceutical Engineering	DSKCP, Digraj
7)	Dr. Jagtap R. S. Associate Professor	ADCP, Ashta	Subject: Pharmaceutical Biotechnology Semester-VI Topics: Fermentation methods and general requirements, study of media, equipments, sterilization methods, aeration process, stirring Recombinant DNA technology. Application of genetic engineering in medicine	----	Pharmaceutics	ABCP, Sangli
8)	Dr. Tamboli E. T. Associate Professor		Subject: Pharmacognosy and phytochemistry-I Semester IV Topics: Plant tissue culture: Historical development of plant tissue culture, Nutritional requirements, growth and their maintenance.	----	Pharmacognosy and phytochemistry	ABCP, Sangli
9)	Mr. Pattekari S. N.		Subject:	----	Pharmaceutics	ABCP, Sangli

Allotted faculty: Sharing of Human resource activity

43)	Dr. Mangesh Anil Bhutkar Assistant Professor		Absorption and Distribution Marketing Pharmaceutical market Product decision Regulatory requirements for drug approval	Drug Absorption from the Gastrointestinal Tract Biopharmaceutic considerations in drug product design and In Vitro Drug Product Performance Transdermal Drug Delivery Systems Computational Modeling of Drug Disposition Regulatory requirements for drug approval	Formulation Development, Biopharmaceutics, NDDS	SSCOP, Ghogaon
44)	Dr. S. R. Kane Assistant Professor		IMA- HPLC		Pharm. Chem.	SSCOP, Ghogaon
45)	Dr A S Manjappa Assistant Professor	TKCP, Warananagar		Micellar Drugs.	Novel Drug Delivery System	APC, Kale
46)	Dr. A. S. Sherikar Assistant Professor		NMR Spectroscopy		Mass Spectroscopy	APC, Kale
47)	Mr. P. S. Kumbhar		Pharmaceutical Biotechnology		Hybridoma Technology	ABC, Kale
48)	Dr. R. S. Bagali Principal	SCOP, Kolhapur	Chronopharmacology and Cardiovascular system	Screening methods of hypoglycemic drugs	Pharmacological Screening tech.	SGMCOP, Mahagaon
49)	Mr. Utkarsh V. Nagvekar Assistant Professor		Basics of anticancer agents Practical aspects in TLC and Column chromatography		Pharm Chem and PA.	SGMCOP, Mahagaon



Dr. D. T. Gaikwad
Secretary,
Lead College Working Committee



Dr. H. N. More
Chairman,
Lead College Working Committee

**Allotted faculty from Sarojini college of pharmacy for
Sharing of Human resource activity**

Activity conducted under : MOU No.14

Name of collaborating organization: Ahsokrao Mane College of Pharmacy

Type of collaboration: Collaborative research

Activity details: Published research paper

Date: ---

Year: 2022-23

JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS
<https://doi.org/10.1080/07391182.2023.2258467>

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Identification of hits as anti-obesity agents against human pancreatic lipase via docking, drug-likeness, *in-silico* ADME(T), pharmacophore, DFT, molecular dynamics, and MM/PB(GB)SA analysis

Sujata Choudhari^{1,2}, Sachin Kumar Patil³ and Sanket Rathod² 

¹Department of Pharmaceutical Chemistry, Sarojini College of Pharmacy, Kolhapur, MS, India; ²Department of Pharmaceutics, Ahsokrao Mane College of Pharmacy, Peth Vadgaon, MS, India; ³Department of Pharmaceutical Chemistry, Bharati Vidyapeeth College of Pharmacy, Kolhapur, MS, India

Communicated by Ramaswamy H. Sarna

ABSTRACT
Obesity, characterized by excessive fat accumulation, is a major health concern. Inhibition of human pancreatic lipase, an enzyme involved in fat digestion, offers a potential strategy for weight loss and obesity treatment. This study aimed to identify polyphenols capable of forming stable complexes with human pancreatic lipase to block its activity. Molecular docking, density functional theory (DFT), molecular dynamics (MD) simulations, and MM/PB(GB)SA calculations were employed to evaluate ligand binding, stability, and energy profiles. Pharmacophore modeling was also performed to identify key structural features for effective inhibition. Virtual screening identified ZINC000015120539, ZINC000000899200, ZINC000001531702, and ZINC000013340267 as potential candidates, exhibiting favorable binding and stable interactions over 100 ns MD simulations. These findings provide insights into the inhibitory potential of selected polyphenols on human pancreatic lipase and support further experimental investigations for obesity treatment.

ARTICLE HISTORY
Received 19 June 2023
Accepted 7 September 2023

KEYWORDS
Molecular docking;
molecular dynamics;
obesity; pancreatic lipase;
polyphenol

1. Introduction

According to the World Health Organization (WHO), obesity is an abnormal deposition of body fat that may have an influence on overall health (Haji et al., 2021). Obesity is a leading cause and the increased risk factor of all-cause death and morbidity, particularly from cardiovascular disease and diabetes mellitus, but also from chronic diseases, and cancer (Pi-Sunyer, 2009). More than 300 million persons are currently affected by obesity, the majority of whom lived in industrialized countries (Bleich et al., 2008). WHO also indicated that 30% of mortality will be caused by lifestyle diseases like overweight and obesity over the world by 2030, and by properly recognizing and resolving significant risk factors, this death can be prevented and implementing a behavioral strategic approach (Safaei et al., 2021). A serious need will develop for organized strategies across all nations and groups in society that should focus on lowering obesity hazardous factors in the future decades as the world suffers the increasing burdens of chronic disease and obesity in addition to infectious diseases (Malik et al., 2020). The primary rationale for identifying obesity as a chronic disease is the unique pathophysiology of obese individuals, which results in potent homeostatic mechanisms that disrupt weight loss and stimulate further weight gain (Blüher, 2019). Obesity leads to worse disease results in viral infections and is linked to an increase in the prevalence of both lower and upper respiratory tract infections (Kwok et al., 2020). The

increase in overweight and obesity statistics has correlated with socioeconomic and epidemiological changes in developing nations such as India, where death and fertility have decreased while lifestyle-related disorders have risen in prevalence (Luhar et al., 2020). An imbalance in energy balance, the number of calories lost relative to the excess calories consumed, is the main reason for childhood and adult obesity (Kansra et al., 2021). Obesity is a complicated disorder with numerous underlying causes, including hereditary and environmental ones (Allison et al., 2008). A less demanding, less restrictive, and nevertheless successful therapy for obesity may be achieved by pharmacotherapy as a major supplementary treatment to lifestyle behavior changes (Kahan, 2016).

Pancreatic lipase is an important therapeutic target in the management of obesity, its prevention, and the discovery of anti-obesity drugs. Triacylglycerols from the food are intestinally digested by this enzyme, which inhibits their absorption in the gastrointestinal tract (Coronado-Cáceres et al., 2020). PL inhibitors are essential for the metabolism of human fat. They change the oil in the food system into small molecules of glycerol and fatty acid that the body absorbs and uses for metabolism (Liu et al., 2020). The primary class of pancreatic lipase inhibitors is polyphenols and they have polyvalent sites that allow them to bind to the enzyme (Tazeddinova et al., 2022). Due to the presence of polyphenols, a variety of fruits and herbal teas have been widely examined for their ability to inhibit pancreatic lipase (Lunagariya et al., 2014). Triglyceride

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Activity conducted under : MOU No.15

Name of collaborating organization: Anandi Pharmacy College , Kalambe tarf Kale

Type of collaboration: Faculty exchange

Activity details: Sharing of research and innovative ideas

Date:15/03/2023

Year: 2022-23

Supportive documents/Brief report:

Under lead college scheme, sharing of human resource activity, session for final year B.Pharm students was conducted . The faculty member Mrs. Sujata Choudhari appointed as a guest speaker for the session at Anandi Pharmacy College , Kalambe tarf Kale, The purpose behind the session was to highlight the significant topics in the field of research which will be helpful the students while completing their research work .



Session on : Sharing of research and innovative

Activity conducted under : MOU No.16

Name of collaborating organization: Annasaheb Dange College of Pharmacy, Ashta


Type of collaboration: Students exchange

Activity details: Research Project: Sample analysis

Date: 15/03/2023

Year: 2022-23

Supportive documents/Brief report:

**R. L. TAWDE FOUNDATION'S
SAROJINI COLLEGE OF PHARMACY**
576, E, Near Rajendra Nagar Water Tank, Rajendra Nagar, Kolhapur.
E-mail - sarojini.instituteofpharmacy@gmail.com

Ref. No. SCOP/2021-22/959 Date: 7th March 2022

To,
The Principal,
Annasaheb Dange College of B. Pharmacy,
Ashta, Sangli

Subject: Request for performing Infrared Spectroscopy Analysis.


Respected Sir,


Ours, Sarojini College of Pharmacy, Kolhapur affiliated to Shivaji University Kolhapur. Our students Ms. Sakshi S. Bhandare, Ms. Akalisha G. Gourkar, Ms. Snehal S. Chayan and Ms. Utkarsha D. Ghatge are undergoing the research project in pursuance of "Research Promotion Activity 2021-2022" under Lead College Scheme of Shivaji University, Kolhapur under the guidance of Ms. Preeti B. Patil for which they need to perform Infrared spectroscopy analysis of samples. We are herewith sending total 12 samples. We request kindly analyze the samples for Infrared spectroscopy analysis as soon as possible and convey us the results of the same.

Kindly grant your acceptance. Awaiting for your humble response.


Thanking You.

FTIR 12x100 = 1200 RJ
(120)
Ms. Motc A.O.


Principal
Sarojini College of Pharmacy
R.S. No. 576, Rajendra Nagar,
Kolhapur - 413008.
(Dr. R. S. Bagali)


Project Advisor
(Ms. P. B. Patil)

To
A/C
Accept Rs. 1200/-
11/3/22



Sant Dnyaneshwar Shikshan Santhas
Annasaheb Dange College of B Pharmacy(2021-2022)
Ashta, Tal. Walwa, Dist. Sangli PIN 416 301

CASH RECEIPT / CREDIT

Receipt No: **CR-241**

Date : **11/03/2022**

Received from STUDENT AS PER LIST Sum of Rs. 1200 /- for Sample analysis of FTIR	Amount (Rs.)
403083 Other Service Charges	1200.00
Total Rs.	1200.00

Rs. One Thousand Two Hundred Only

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Page 1 of 1



Activity conducted under : MOU No.17

Name of collaborating organization: Tatyasaheb Kore College of Pharmacy, Kolhapur.

Type of collaboration: Faculty Research work

Activity details: Faculty Participation in conference

Date: ---

Year: 2020-21

Supportive documents/Brief report:



Participation of Faculty in scientific session



Participation of Faculty in scientific session



Two Days Workshop on
'Innovation & Incubation in Academia'
10th & 11th March 2022

CERTIFICATE

This is to certify that

~~Dr./Prof./Mr./Miss./ Mrs.~~ Diwate Sonali Krishna, Assistant Professor of
Sarojini College of Pharmacy, Kolhapur has actively participated as Delegate
in 'Two Days Workshop on 'Innovation & Incubation in Academia'
on 10th & 11th March 2022 sponsored by Shivaji University, Kolhapur under Lead College Scheme
organised at **Bharati Vidyapeeth College of Pharmacy, Kolhapur.**

Dr. N. R. Jadhav
Programme Co-ordinator

Dr. John I. Disouza
Zonal Co-ordinator

Dr. D. T. Gaikwad
Secretary, Lead College

Dr. H. N. More
Principal & Chairman, Lead College

Skill Partner



Co-organized By
Kolhapur Zone Pharmacy Colleges



Activity conducted under : MOU No.18

Name of collaborating organization: Appasaheb Birnale College of Pharmacy Sangli

Type of collaboration: Collaborative research

Activity details: Faculty research collaboration during PhD work

Date: -----

Year: 2022-23

Supportive documents/Brief report:

SHIVAJI UNIVERSITY, KOLHAPUR - 416 004, MAHARASHTRA
PHONE: EPBX-2609000 PGBUTR - 2609139 FAX +91-0231-2691533 & 2692133 website: www.unishivaji.ac.in
शिवाजी विद्यापीठ, कोल्हापूर - ४१६ ००४, महाराष्ट्र
दूरभाषी (एपिक्स/एक्स) २६०९०००, (पीजीयूटीआर) २६०९१३९, फैक्स : +९१-०२३१-२६९१५३३ & २६९२१३३
e-mail : pgbutr@unishivaji.ac.in, pgbutr2@unishivaji.ac.in
Estd : 1962
NAAC A" Grade

Ref. No. S.U./P.G.B.U.T.R./Ph.D./R.R.C./826 7451 Date : 25 NOV 2021

To,
Smt. Patil-Vibhute Preeti Bhimashankar,
Flat No. 09, Chanakya, Housing Society,
Tarabai Park, Kolhapur.

Sub : Confirmation of admission to Ph.D. Degree Course.


Sir / Madam,

With reference to your application I am directed to inform you that you are hereby admitted to Ph.D. degree programme in Pharmacy in the faculty of Science and Technology, effective 01 Jan 2020 under the guidance of Dr. Patil S. B. (Research Guide) on the following conditions.

i. You will have to pay the yearly fees as mentioned below from the date of admission.
ii. If you fail to pay the fees in month of January of every year the fine will be imposed as per University rules.

Sr. No.	Particulars	Regular Students & DRF	Form JRF/UGC Teacher Fellow/Full Time Teacher at Jr./Sr. College, Laboratory, Private & Govt. Organization Employed Persons
i)	Tuition Fee	Rs. 7405	Rs. 7405
ii)	Library Fee	Rs. 976	Rs. 1948
iii)	Internet fees	Rs. 1948	Rs. 1948
iv)	Medical Charges	Rs. 195	Rs. 195
	Total	Rs. 10524	Rs. 11496

Successful completion of M. Phil course / M. Phil theory course work / pre Ph.D. theory course work shall be pre-requisite for the submission of thesis as per R.R.D. 14. If you fail to pay the above fees within one month from the receipt of this letter, your admission will be automatically cancelled.

Yours faithfully,

Dy. Registrar

Copy to:

1. The Director, Department of Technology, Shivaji University, Kolhapur.
2. (Research Guide) - Dr. Patil S.B., Appasaheb Birnale college of Pharmacy, Sangli.
3. The Principal, Appasaheb Birnale college of Pharmacy, Sangli.
4. The Director, Barr. Balasaheb Khardekar Knowledge Resource Centre, Shivaji University, Kolhapur.

The Approved title of your proposed research work is,
"FORMULATION AND EVALUATION OF HERBAL NANOSYSTEMS CONTAINING CUCURBITACEAE GLYCOSIDES FOR TREATMENT OF CANCER"

Activity conducted under : MOU No.19

Name of collaborating organization: Rajarambapu College of Pharmacy, Kasegaon

Type of collaboration: Students and faculty exchange

Activity details: Organized session on: NLP learning, competence & Professional skills

Year: 2021-22

Supportive documents/Brief report:



Shivaji University, Kolhapur
(Under Lead College Scheme)

One Day NLP, Learning Competence, & Corporate Skills Program

Resource Persons

 <p>Sachin Kumbhoje Serial Entrepreneur</p>	 <p>Ranjit Oak NLP Master Practitioner, Executive Coach, Professional Trainer, Alumni of IIM Lucknow</p>
 <p>Priya Jagtap Learning and Development Consultant and Executive Coach</p>	 <p>Brijesh Talawadekar Internationally Certified A+ Trainer, Professional Skills and TTT Coach, Motivator, Life Coach</p>
 <p>Aarti Topale Founder, Academy for Inspired Minds</p>	 <p>Vinay Gosavi Corporate Trainer, Author, Life Coach</p>
 <p>LeeAna Sane Regional Director, Vedhik IAS Academy, Nahargarhtra</p>	 <p>Siddharth Pandit Life Coach Personal Development Soft Skills Trainer Mindfulness Trainer</p>

Appasaheb Birnale College of Pharmacy, Sangli	14-Mar-22
Bharati Vidyapeeth College of Pharmacy, Kolhapur	15-Mar-22
Rajarambapu College of Pharmacy, Kasegaon	15-Mar-22
Tatyasaheb Kore College of Pharmacy, Warananagar	15-Mar-22
Annasaheb Dange College of Pharmacy, Ashta	16-Mar-22
Ashokrao Mane College of Pharmacy, Peth Vadgaon	16-Mar-22
Sant Gajanan Maharaj College of Pharmacy, Gadchिंगला	17-Mar-22
Dr Shivajirao Kadam College of Pharmacy, Kasabe Digrā	17-Mar-22
Late Narayandas Bhawandas Chhabada Institute of Pharmacy, Satara	17-Mar-22
Anandi Pharmacy College, Kalambe tarf Kale, Kolhapur	18-Mar-22
Shree Sanikrupa College of Pharmacy, Ghogaon	18-Mar-22
Sarojini College of Pharmacy, Kolhapur	19-Mar-22
Adarsh Institute of Pharmacy, Vita	19-Mar-22
Vasantidevi Patil Institute of Pharmacy, Kodali	19-Mar-22
Arvind Gavali College of Pharmacy, Satara	19-Mar-22

Skill Partner



Organized By
Kolhapur Zone Pharmacy Colleges

					
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Conducted session in Collaboration

Activity conducted under : MOU No.21

Name of collaborating organization: Dr. Shivajirao Kadam College of Pharmacy

Type of collaboration: Collaborative research

Activity details: Faculty research collaboration during PhD work

Date: ---

Year: 2022-23

Supportive documents/Brief report:

SHIVAJI UNIVERSITY, KOLHAPUR - 416 004, MAHARASHTRA
PHONE: (PABX)-2609000 COLLEGE - 2609139 FAX: 021-2671533 & 2682133 website: www.shivaji.ac.in
शिवाजी विद्यापीठ, कोल्हापूर - ४१६ ००४, महाराष्ट्र
दूरधर्मा (फोन) २६०९०००, कॉलेज (फोन) २६०९१३९, फॅक्स : ०२१-२६७१५३३ व २६८२१३३
Estd: 1962
NAAC "A" Grade
e-mail: reg@shivaji.ac.in, phd@shivaji.ac.in

Reg. No. S.U./P.G.D.U.T.B./Ph.D./R.R.C./826 7451 Date: 25 NOV 2021

To,
Smt. Patil-Vibhute Preeti Bhimashankar,
Flat No. 09, Chanakya, Housing Society,
Tarabal Park, Kolhapur.

Sub : Confirmation of admission to Ph.D. Degree Course.


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Sr. No.	Particulars	Regular Students & DRP	Form JRF/UGC Teacher Fellow/Full Time Teacher at Jr./Sr. College, Laboratory, Private & Govt. Organization Employed Persons
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Yours faithfully,

Dy. Registrar

Copy to:

- The Director, Department of Technology, Shivaji University, Kolhapur.
- (Research Guide) - Dr. Patil S.B., Appasaheb Birnale college of Pharmacy, Sangli.
- The Principal, Appasaheb Birnale college of Pharmacy, Sangli.
- The Director, Barr. Balasahab Khardekar Knowledge Resource Centre, Shivaji University, Kolhapur.

The Approved title of your proposed research work is,
"FORMULATION AND EVALUATION OF HERBAL NANOSYSTEMS CONTAINING CUCURBITACEAE GLYCOSIDES FOR TREATMENT OF CANCER"

Folic Acid Conjugated Nano Systems: A Systematic Review

Preeti Bhimashankar Patil Vibhute^{1*} and Sandeep Balwant Patil²

¹Department of Pharmaceutics, Sarojini College of Pharmacy, Rajendranagar, Kolhapur, India

²Department of Pharmacology, Dr. Shivajirao Kadam College of Pharmacy, Baganwat, India

Abstract

Cancer is the leading cause of death worldwide though it can be treated by the common ways of chemotherapy, radiotherapy, and surgery. The major limitation of conventional chemotherapy is the non-selective action of chemotherapeutic agents which leads to serious side effects such as damage to normal cells that hampers the immunity of the patient to fight against the disease. Active targeting mechanism is one of the approaches through which a chemotherapeutic agent can be delivered to malignant cells more selectively to the tumor-specific tissue with the help of ligands including proteins, peptides, hyaluronic acid, folic acid, antibodies, antibody fragments, aptamer, carbohydrates, and polysaccharides, etc. Folic acid conjugated nano systems have proved their efficiency in site-specific targeting of chemotherapeutic agents with reduced side effects as folic acid has an affinity for folate receptors which are overexpressed on several cancer cell surfaces. Various polymers have been utilized to prepare such nanomicelles in an active targeting approach including chitosan, Poly lactic-co-glycolic acid, alginates, human serum albumin, etc. In this review, active targeted nano systems of vincristine, methotrexate, mitoxantrone, doxorubicin, gemtastin, 5-aminolevulinic acid (5-ALA), carboplatin, 6-mercaptopurine, and gemcitabine, kaempferitin, curcumin, paclitaxel, saquinavir, 5-Fluorouracil, tamoxifen, nevirapin, isolaranolactone, and cabazitaxel were discussed which are successfully prepared using various polymers.

Keywords: Folic acid Conjugates; Folate receptor targeted systems; Polymeric nano systems; Active targeted nano systems; Chitosan; PLGA; Alginates; Human Serum Albumin

Introduction

Cancer is one of the leading causes of mortality and morbidity all around the globe regardless of developments in the tools of disease diagnosis, treatment, and prevention measures however the number of cases is constantly increasing and is estimated to be 21 million by 2030 [1]. Most patients treated with conventional chemotherapy suffer from serious side effects due to the non-selective action of chemotherapeutic drugs on normal cells. The fast-growing cells are killed using a single or a combination of drugs. Also, chemotherapeutic agents are cytotoxic by the way of interfering with the mitosis or cell division of cancer cells and inducing stress, and initiating apoptosis which results in the damaging of cells. Normal cells are also found to be susceptible to these effects, in particular cells of bone marrow, digestive tract, and hair follicles [2, 3]. An ideal delivery carrier for anticancer drugs must be capable of transporting the drug specifically to the cancerous tissues and releasing the drug molecules inside the tumor cells [4].

New technologies include nanoparticles for nano-medicines which aim to enhance anticancer activities of plant-derived drugs by controlling the release of the compound and investigating new methods for site-specific administration [5]. Nanoparticle-based targeted drug delivery systems have been extensively investigated for biomedical applications [6]. The unique features of nanoscale carriers are their huge surface area versus volume, ease of surface modification, prolonged circulation in the blood through avoidance of the reticuloendothelial system, and small size that facilitates specific interaction with cell surface receptors, enabling the targeting of specific cells or tissues having the disease in the specific organs. Furthermore, tumor-specific targeting of nanoparticles allows the killing of tumor cells selectively without harm to healthy tissues or cells [7].

Nanoparticles play an important role in increasing drug concentration in cancer cells by enhancing drug accumulation. Since nanoparticles themselves do not possess tumor specificity, various kinds of passive and active targeting mechanisms have been used to

bestow tumor-specific drug targeting of nanoparticles [7]. The passive targeting nanoparticle is the mechanism by which the drugs leak from blood vessels supplying cancer cells and accumulate in the cells by enhanced permeability and retention (EPR) effect. The active targeting nanoparticles, on the other hand, various target ligands conjugated on the surface of nanoparticles, resulting in increased cellular uptake by receptor-mediated endocytosis (RME) and therefore increased drug accumulation in cancer cells. These tumor-specific ligands included proteins, peptides, hyaluronic acid, folic acid, antibodies, antibody fragments, aptamer, carbohydrates, and polysaccharides. Nanoparticles acting via both mechanisms have been shown to increase drug concentration in cancer cells resulting in the more efficient delivery of drugs to cancerous cells.

Folic Acid

Water-soluble vitamin B9 can occur as 'folate' when enriched in dark leafy vegetables whereas 'folic acid' is when a synthetic folate compound is used as a vitamin supplement. [8]. Folate is a basic component of cell metabolism and DNA synthesis as well as repair and rapidly dividing cancer cells have an increased requirement for folate to maintain DNA synthesis [9]. Folate is transported across the cellular membrane in three ways. The main route of uptake is through the reduced folate carrier (RFC), which is ubiquitously distributed and aids the uptake of dietary folate. The second route is through the proton-coupled folate transporter (PCFT), which utilizes the Trans

*Corresponding author: Preeti Bhimashankar Patil Vibhute, Department of Pharmaceutics, Sarojini College of Pharmacy, Rajendranagar, Kolhapur, India, E-mail: preeti106patil@gmail.com

Received: 17-Apr-2022, Manuscript No. bsh-22-61063, Editor assigned: 19-Apr-2022, Pre QC No. bsh-22-61063 (PQ), Reviewed: 08-Jun-2022, QC No. bsh-22-61063, Revised: 13-Jun-2022, Manuscript No. bsh-22-61063 (R), Published: 20-Jun-2022, DOI: 10.4172/bsh.1000117

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MOU No.22

Name of collaborating organization: Vasantidevi College of Pharmacy, Kodoli

Type of collaboration: Students and faculty exchange

Activity details: Organized session on: NLP learning, competence & Professional skills

Year: 2021-22

Supportive documents/Brief report:



Shivaji University, Kolhapur
(Under Lead College Scheme)

One Day NLP, Learning Competence, & Corporate Skills Program

Resource Persons

 Sachin Kumbhoje Self Entrepreneur	 Ranjit Oak NLP Master Practitioner, Executive Coach, Professional Trainer, Alumni of IBM Lucknow
 Priya Jagtap Learning and Development Consultant and Executive Coach	 Brijesh Talawadekar Internationally Certified A+ Trainer, Professional Skills and TTT Coach, Mentor, Life Coach
 Aarti Topale Founder, Academy for Inspired Minds	 Vinay Gosavi Corporate Trainer, Author, Life Coach
 LeeAna Sane Regional Director, Vedhik SAS Academy, Maharashtra	 Siddharth Pandit Life Coach Personal Development Soft Skills Trainer Mindfulness Trainer

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Annasaheb Donge College of Pharmacy, Ashli	16-Mar-22
Ashokrao Mane College of Pharmacy, Peth Vadgaon	16-Mar-22
Sant Gajanan Maharaj College of Pharmacy, Gadhingla	17-Mar-22
Dr Shivajirao Kadam College of Pharmacy, Kasabe Digra	17-Mar-22
Late Narayandas Shrawandas Chhabada Institute of Pharmacy, Satara	17-Mar-22
Anandi Pharmacy College, Kalambe Iar Kale, Kolhapur	18-Mar-22
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Sarajini College of Pharmacy, Kolhapur	19-Mar-22
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Arvind Gavali College of Pharmacy, Satara	19-Mar-22

Logos: Shivaji University, Kolhapur; Vasantidevi College of Pharmacy, Kodoli; and other participating colleges.

Conducted session in Collaboration

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COMPETENCE &
PROFESSIONAL SKILLS**

14th To 19th March, 2022

SPONSORED BY



**SHIVAJI UNIVERSITY, KOLHAPUR
UNDER LEAD COLLEGE SCHEME**

JOINTLY ORGANIZED BY



Lead College



Skill Partner

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CO-ORGANIZED BY:

Pharmacy Colleges of Kolhapur Zone



**Bharati Vidyapeeth
College of Pharmacy, Kolhapur
Lead College (Pharmacy)**



Anand College of Pharmacy, Kale



**Vasantidevi Patil Institute of Pharmacy,
Kodali**



**Tatyasaheb Kore College of Pharmacy,
Warananagar**



**Sant Gajanan Maharaj College of Pharmacy,
Mahagaon**



**Sarojini College of Pharmacy,
Kolhapur**

ABOUT WORKSHOP:

We proudly announce and invite all the students for the One day training program on "NLP, Learning Competence and Professional Skills", under category of Academic Extension and Research, Lead College Scheme, Shivaji University Kolhapur, has been organized at the backdrop of NLP 2020. In today's world which is continuously changing, leaps are exponential and gaps may become impossible to recover. It is obvious that theoretical knowledge is essential but training arises as an alternative to the academic education that gives students the opportunity to acquire the necessary competencies for the time when they will develop themselves within the professional environment. The short duration of trainings, the various teaching techniques used, demonstrate that this type of program can be a valuable alternative to the classical education. Certainly, it has been a need for academia to keep students abreast with the professional competency. Neuro Linguistic Programming or NLP is a science of minds which helps people in getting out of any problem faster with long lasting effects and achieve any goal in easiest way. Be it health, Financial Success, Relationship, Communication etc. Hence the one day training program has been organized to equip the students in with NLP, and other professional skills.

Objectives of Program:

The following objectives have been set so as to prepare students for rational professional needs.

- To provide comprehensive strategic courses, generating resources, and engaging forth practices in the classroom.
- To provide a standardised method for coordinating, assessing, and developing talent which emphasises and demonstrate the personal accountability and effective work practices.
- To assess the significance of learning competences and professional abilities.
- To consult and comprehend theoretical, scientific, and practical implications.

Conducted session in Collaboration

Activity conducted under : MOU No.25

Name of collaborating organization: Rubicon Skill Development Pvt.Ltd.Pune

Type of collaboration: Industrial collaboration

Activity details: Skill development program

Date:05/03/2020 to 07/03/2020

Year: 2019-20

Supportive documents/Brief report:

The Training and Placement Cell of Sarojini College of Pharmacy had organized a Rubicon Training Workshop for all students of B. Pharmacy and D. Pharmacy in order to enable youth to build competencies and to empower them to get employed with the most preferred employers. This training workshop was conducted for three days from 5th march 2020 to 7th March 2020 by a renowned training company, Rubicon Skill Development Center, Pune. The workshop started with welcome programme in the morning of 5th march 2020. After felicitation programme soft skill trainers Mr. Kumud Lagade sir, Ms. Ashwini Gole maam and Mr. Prashant Shinde sir took the charge. They divided all students in three different batches and trained them in various subjects like communication skills, group discussion and debate, personality development, logical thinking, attitude modification and interview skills etc. Also they conducted various games for students in order to check and improve concentration and grasping level of students. In three days students experienced a great change in their personality, communication and overall behavior.



Collaborating organization: Rubicon Skill Development Pvt.Ltd.Pune
Soft Skill development program

Activity conducted under : MOU NO. 25 (activity no.25.1)

Name of collaborating organization: Rubicon Skill Development Pvt.Ltd.Pune

Type of collaboration: Industrial collaboration

Activity details: Skill development program

Date: 29/08/2023 to 01/09/2023

Year: 2022-23

Supportive documents/Brief report:

The soft skill development session was conducted with the primary objective of enhancing the interpersonal and professional skills of the students. The focus was on providing practical insights and guidance to help the participants cultivate key soft skills crucial for their personal and professional growth.

Key Topics Covered:

Communication Skills, Teamwork - Collaboration Problem-solving, Critical Thinking

Emotional Intelligence, Leadership Skills etc.

The soft skill development session concluded with a recap of the key takeaways and a motivational message to encourage the students to continuously work on honing their soft skills. Participants were encouraged to apply the knowledge gained during the session in their academic pursuits and personal lives.



Collaborating organization: Rubicon Skill Development Pvt.Ltd.Pune
Soft Skill development program

Activity conducted under : MOU NO. 26

Name of collaborating organization: SG Phyto pharma Ltd., Gokul Shirgaon.

Name of activity: Guest lecture by industrialist

Type of collaboration: Industrial collaboration

Date:18/02/2018

Year: 2018-19

Supportive documents/Brief report:

As a part of the guest lecture by industrial expert, guest lecture was conducted at Sarojini college of pharmacy, Kolhapur for second year B. Pharm students . The speaker of the guest lecture was Mr.D.G.Gune, Mr. D.G.Gune, Director of S. G. Phyto pharma Private Ltd., Kolhapur.It was organized on 18th Feb. 2018 at 2.00pm at seminar hall. All the students of B. Pharm and D.Pharm as well as teaching and non-teaching staff has attended the event.

Mr. Gune sir explained about the western and Indian scenario of Pharmacy education and research. He commenced the talk with an article titles with “Pharmacy education system in India : Time to visit teaching and training modules to meet global expectation”.

He discussed various strength and weakness of our Indian pharmaceutical education system. He concluded the talk by igniting a necessity of pharmaceutical research to bring in new molecules for human welfare rather than just sticking on therapeutic drugs available in the market. The session was very interactive and students participated enthusiastically.



Collaborating organization: S. G. Phytopharma
Mr. D. G. Gune (Owner of S. G. Phytopharma)

Activity conducted under: MOU NO. 26(Activity no.26.1)

Name of collaborating organization: S.G Phyto pharma Ltd., Gokul Shirgaon.

Type of collaboration: Industrial collaboration

Activity details: Industrial visit at S.G Phyto pharma Ltd.

Date:18/02/2028

Year: 2019-20

Supportive documents/Brief report:

Sarojini College of Pharmacy, organized this year industrial visit to S.G. Phytopharma for students of third year B.Pharm in order to get the practical knowledge about “advanced technology used in manufacture of sophisticated moulds, dies and tools” etc. on 29th Feb.2020. The visit was organized for third year students to enhance their interest in various fields. The students participated actively in the visit. The visit was started from 9.00am till 5.00pm. Students visited different areas as manufacturing unit, quality control, labeling, packaging etc. They were able to know about different machineries, handling techniques etc.



Collaborating organization: S. G. Phytopharma
Industrial Visit

Activity conducted under : MOU NO. 26(26.2)

Name of collaborating organization: S.G Phyto pharma Ltd., Gokul Shirgaon.

Type of collaboration: Industrial collaboration

Activity details: Industrial visit at S.G Phyto pharma Ltd.

Date:22/02/2023

Year: 2022-23

Supportive documents/Brief report:

The objective of the given program was to make B. Pharm students know about different industrial processes, during and after their graduation, so that they get familiar with the daily unit operations in herbal and Ayurveda pharma industry.

Prof. Z. J. Tamboli, Ms. Sonali Divate and Dr. K. K. Hullatti with 30 students of final year B.Pharm, gathered at the venue mentioned above. After proper gowning and sterilization as per the industry standards, all students and teachers were allowed to enter inside the factory premises. Students were made aware of the fundamental unit operations of the tableting section. Mrs. S.R. Deshpande, Head of QA/QC explained the detailed procedures of Ayurveda for the best possible medicine to be made. Students interacted positively with the speaker and were quite happy with the level of information they received, which was unknown to them till then. Many students also showed interest for undergoing in-plant training in SG Phyto Pharma



**Collaborating organization: S. G. Phytopharma
Industrial Visit**

Activity conducted under : MOU no. 27

Name of collaborating organization: Aditya Pharma Kolhapur.

Type of collaboration: Students internship

Activity details: Students had undergone training

Date: ---

Year: 2021-22

Supportive documents/Brief report:



Activity conducted under : MOU NO. 28

Name of collaborating organization: Heart to Heart Medical , Kolhapur .

Type of collaboration: Students internship

Activity details: Students had undergone training

Date: ---

Year: 2021-22

Supportive documents/Brief report:



Activity conducted under : MOU NO. 29

Name of collaborating organization: New Laxmi Medical , Kolhapur.

Type of collaboration: Students internship

Activity details: Students had undergone training

Date: ---

Year: 2021-22

Supportive documents/Brief report:



Sanctioned research proposal by lead college: Bharati Vidyapeeth college of Pharmacy, Kolhapur

Activity conducted under : MOU NO. 30

Name of collaborating organization: Shetkari Seva Sangha , Aushad Dukan, Kolhapur .

Type of collaboration: Students internship

Activity details: Students had undergone training

Date: ---

Year: 2021-22

Supportive documents/Brief report:



Students training certificate

Activity conducted under : MOU NO. 33

Name of collaborating organization: Yash Medical , Kolhapur.

Type of collaboration: Students internship

Activity details: Students had undergone training

Date: ---

Year: 2021-22

Supportive documents/Brief report:



STUDENT EXCHANGE UNDER LEAD COLLEGE SCHEME

(Including colleges affiliated to Shivaji university along with MOU has been done)

INDEX

Sr. No.	Student Name	Details of exchange	Organized By	Conducted by	Sports/ Cultural /Other	Date	Academic Year
1.	Kuldeep Burewad	Lead College sports event	Shivaji University Kolhapur	Colleges of sangali zone	Sports	12/03/2022	2021-22
2.	Nidhi Khade	Lead College cultural event (Pharmakarandak 2K22) Solo Dance	Shivaji University Kolhapur	Colleges of sangali zone	Cultural	12/03/2022	2021-22
3.	Priti Ghorpade	Lead College cultural event (Pharmakarandak 2K22) Mime	Shivaji University Kolhapur	Colleges of sangali zone	Cultural	12/03/2022	2021-22
4.	Utkarsha Ghatge	Lead College cultural event (Pharmakarandak 2K22) Fashion Show	Shivaji University Kolhapur	Colleges of sangali zone	Cultural	12/03/2022	2021-22
5.	Namrata Vadar	Lead College cultural event (Pharmakarandak 2K22) Group Dance	Shivaji University Kolhapur	Colleges of sangali zone	Cultural	12/03/2022	2021-22
6.	Dimpal Yesansure	Lead College sports event	Shivaji University Kolhapur	Bharati Vidyapeeth College of Pharmacy, Kolhapur.	Sports	05/03/2021	2020-21
7.	Tapasya Shah	Shivaji University e-dance competition Third Prize	Shivaji University Kolhapur	Shivaji University Kolhapur	Cultural	01/02/2021	2020-21
8.	Pratiksha Patil	Shivaji University Mono- Act competition	Shivaji University Kolhapur	Shivaji University Kolhapur	Cultural	01/02/2021	2020-21
9.	Utkarsha Ghatage	Shivaji University Light vocal competition	Shivaji University Kolhapur	Shivaji University Kolhapur	Cultural	01/02/2021	2020-21
10.	Nidhi	Shivaji University	Shivaji	Shivaji	Cultural	01/02/2021	2020-21

	Khade	Elocution competition	University Kolhapur	University Kolhapur			
11.	Vanita Khade	Lead College sports event(Kho-Kho)	Shivaji University Kolhapur	Ashokrao Mane College of Pharmacy,Peth Vadgaon	Sports	31/01/2020 to 01/02/2020	2019-20
12.	Smita Kesarkar	Lead College sports event (Relay girls 400 M)	Shivaji University Kolhapur	Tatyasaheb Kore College of Pharmacy , Warananagar	Sports	05/02/2020 To 06/02/2020	2019-20
13.	Madhuri Pukale	Lead College sports event (Relay girls 400 M)	Shivaji University Kolhapur	Tatyasaheb Kore College of Pharmacy , Warananagar	Sports	05/02/2020 To 06/02/2020	2019-20
14.	Bhakti Nirmal	Lead College sports event (Relay girls 400 M)	Shivaji University Kolhapur	Tatyasaheb Kore College of Pharmacy , Warananagar	Sports	05/02/2020 To 06/02/2020	2019-20
15.	Vanita Khade	Shivaji University Kolhapur (Relay girls)	Shivaji University Kolhapur	Tatyasaheb Kore College of Pharmacy , Warananagar	Sports	05/02/2020 To 06/02/2020	2019-20
16.	Vanita Khade	Shivaji University Kolhapur (100M running)	Shivaji University Kolhapur	Tatyasaheb Kore College of Pharmacy , Warananagar	Sports	05/02/2020 To 06/02/2020	2019-20
17.	Dimpal Yesansure Leadership Skill	Shivaji University Kolhapur (e-Workshop)	Shivaji University Kolhapur	Bharati Vidyapeeth College of Pharmacy, Kolhapur.	Other	05/03/2020	2019-20
18.	Madhuri Pukale	Shivaji University Kolhapur (Kho-Kho)	Shivaji University Kolhapur	Ashokrao Mane College of Pharmacy,Peth Vadgaon	Sports	30/01/2020	2019-20
19.	Madhuri Pukale	Shivaji University Kolhapur (Throw Ball)	Shivaji University Kolhapur	Bharati Vidyapeeth College of Pharmacy, Kolhapur	Sports	01/02/2020	2019-20
20.	Varsh Khade	Lead College cultural event (Pharmakarandak 2K20)	Shivaji University Kolhapur	Satara college of Pharmacy	Sports	22/02/2020	2019-20
21.	Shruti Kundale	Lead College cultural event Pharmakarandak	Shivaji University Kolhapur	Satara college of Pharmacy	Sports	22/02/2020	2019-20

22.	Kajal Mohite	Lead College cultural event (Pharmakarandak 2K20)	Shivaji University Kolhapur	Satara college of Pharmacy	Sports	22/02/2020	2019-20
23.	Yogita Pawar	Lead College sports event (Throw ball)	Shivaji University Kolhapur	Bharati Vidyapeeth College of Pharmacy, Kolhapur	Sports	01/02/2020	2019-20
24.	Shweta Kate	Lead College cultural event (Pharmakarandak 2K20)	Shivaji University Kolhapur	Satara college of Pharmacy	Sports	22/02/2020	2019-20
25.	Shweta Bobade	Lead College sports event (Carrom double) *Winner	Shivaji University Kolhapur	Sant Gajanan Maharaj College of Pharmacy, Gadhinglaj	Sports	10/01/2019	2018-19
26.	Shruti Kundale	Lead College cultural event (Pharmakarandak)	Shivaji University Kolhapur	Satara College of Pharmacy	Sports	18/01/2019	2018-19
	Yogita Pawar	Lead College sports event (Carrom) First Rank	Shivaji University Kolhapur	Shree Sant Krupa College of Pharmacy Ghogaon	Sports	08/01/2019	2018-19
27.	Kajal Yadav	Lead College cultural event (Pharmakarandak)	Shivaji University Kolhapur Shivaji University Kolhapur	Satara College of Pharmacy	Culture	08/01/2019	2018-19
28.	Smita Patil	Lead College sports event(Kho-Kho)	Shivaji University Kolhapur	Adarsh College of Pharmacy Vita	Sports	04/01/2019 to 05/01/2019	2018-19
29.	Vanita Khade	Lead College sports event (Chess)	Shivaji University Kolhapur	Kolhapur Zone	Sports	03/01/2018 to 09/01/2018	2017-18
30.	Madhuri Pukale	Lead College sports event (Kho-Kho)	Shivaji University Kolhapur	Kolhapur Zone	Sports	03/01/2018 to 09/01/2018	2017-18

31.	Shreya Sarda	Lead College sports event (Carrom double)	Shivaji University Kolhapur	Kolhapur Zone	Sports	03/01/2018 to 09/01/2018	2017-18
32.	Priyanka Patil	Lead College sports event (Carrom double)	Shivaji University Kolhapur	Kolhapur Zone	Sports	03/01/2018 to 09/01/2018	2017-18

Proof of the student's exchange (Participation of students in various activities)

Academic Year 2021-22



Kuldeep Bhurewad : A.Y. 2021-22 : Lead College Cultural event (Technical team support)



Nidhi Khade : A.Y. 2021-22 : Lead College Cultural event (Pharmakarandak 2k22 solo dance)



Priti Ghorpade : A.Y. 2021-22 : Lead College Cultural event (Pharmakarandak 2k22 Mime)



Utkarsha Ghatge : A.Y. 2021-22 : Lead College Cultural event (Pharmakarandak 2k22 Fashion Show)



Namrata Vadar : A.Y. 2021-22 : Lead College Cultural event (Pharmakarandak 2k22 Group dance)



Dimpal Yeshansure : A.Y. 2020-21 : On day workshop under lead college scheme



Nidhi Khade : A.Y. 2020-21 : Elocution (Inter college cultural competition)



Tapasya Shah : A.Y. 2020-21 : E-dance (Inter college cultural competition) **Third Prize**



Pratiksha Patil : A.Y. 2020-21 : Mono act (Inter college cultural competition)



Utkarsha Ghatage : A.Y. 2020-21 : Light Vocal (Inter college cultural competition)



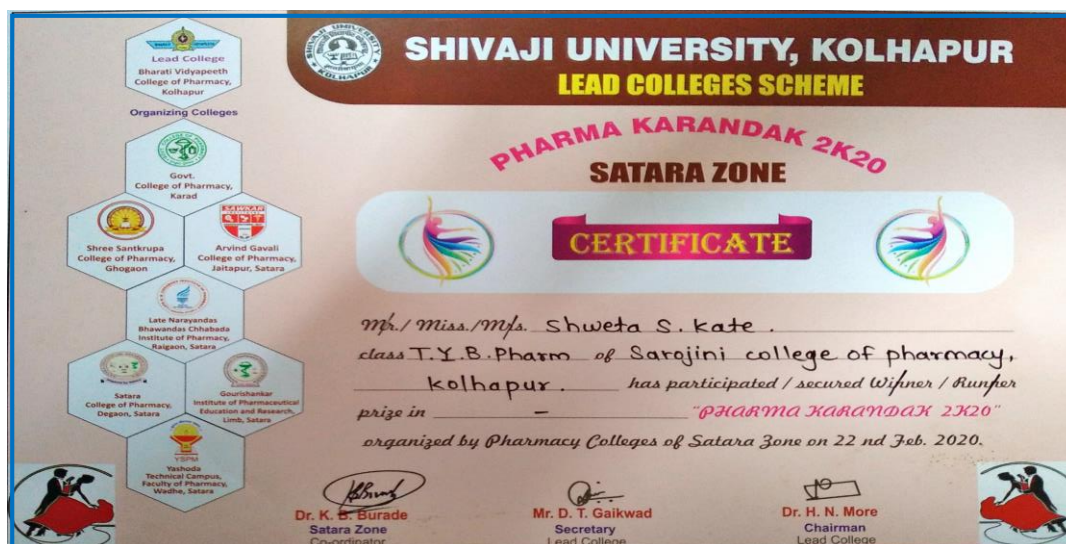
Yogita Powar: A.Y. 2019-20 : Lead College sports event (Throw Ball)



Shruti Kundale A.Y. 2019-20 : Lead College cultural event (Pharmakarandak)



Kajal Mohite: A.Y. 2019-20: Lead College cultural event (Pharmakarandak)



Shweta Kate A.Y. 2019-20: : Lead College cultural event (Pharmakarandak)



Varsha Kate A.Y. 2019-20: : Lead College cultural event (Pharmakarandak)



Madhuri Pukale A.Y. 2019-20: Lead College sports event (Throw Ball)



Madhuri Pukale A.Y. 2019-20: Lead College sports event (Kho Kho)



Vanita Khade A.Y. 2019-20: Lead College sports event (100 M Running)



Vanita Khade A.Y. 2019-20: Lead College sports event (400 M Relay)



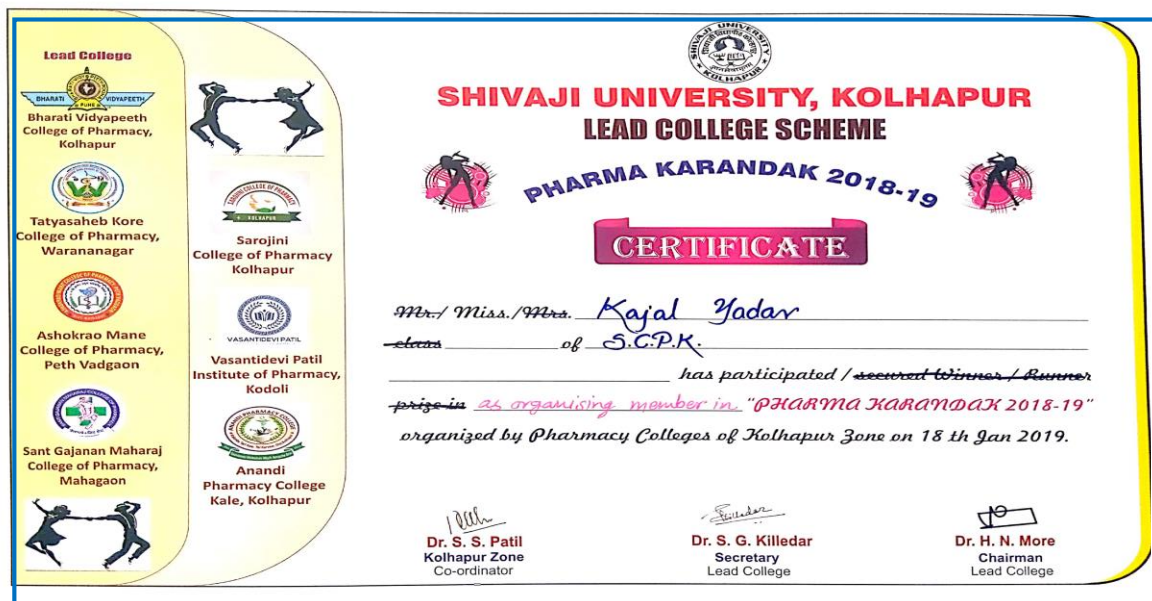
Bhakti Nirmal : A.Y. 2019-20: : Lead College sports event (400 M Relay)



Madhuri Pukale : A.Y. 2019-20: : Lead College sports event (400 M Relay)



Dimpal Yeshansure : A.Y. 2019-20: : One day workshop under lead college scheme



Kajal Yadav A.Y. 2018-19: Lead College cultural event (Pharmakarandak)



Yogita Pawar A.Y. 2018-19: Lead College sports event (Carom)



Shruti Kundale A.Y. 2018-19: Lead College Cultural event (Carom)



Smita Patil A.Y. 2018-19: Lead College sports event (Kho -Kho)



Priyanka Patil: A.Y. 2017-18: Lead College cultural event (Kho-Kho)



Shreya Sarda : A.Y. 2017-18: Lead College cultural event (Carrom Double)



Madhuri Pukale : A.Y. 2017-18: Lead College sports event (Kho Kho)