3.5

**MoUs** /Collaboration

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# 3.5.1

List and Copies of documents indicating the Functional MoUs /linkage/collaborations activity with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years -

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# LIST OF ACTIVITIES UNDER

# **MEMORANDUM OF UNDERSTANDING**

	3.5.1 LIST OF	ACTIVITIES	S UNDER M	EMORANDUM OI	UNDERSTANDIN	G
ör. No.	With MoU	Name of Activity	Date of Event	Name of Expertise Called	Name of Expertise Deputed	Type of Activity
1		Session at Teachers Training Programme	26/09/2017	Dr. S. V. Patil		Sharing of Human Resource
2	Shree Santkrupa College of	Book	2020	Dr. S. V. Patil	Ms. S. V. Sutar	Book Publication
3	Pharmacy, Ghogaon, Karad	Book	2018	Dr. S. V. Patil	Mr. S. S. Shelake	Book Publication
4	Ghogaon, Karau	Research	04/12/2019	Dr. S. V. Patil	Mr. P. A. Salokhe	Research Publication
5		Research	13/09/2021	Ms. A. S. Rakshe	Dr. S. V. Patil	Research Publication
6		Workshop	10/06/2020 to 15/07/2020	Mr. Abhijit Yeole	-	How to kick of the academics for 2021 using digital platform
7	VMEdulife, Pune	Workshop	30/07/2020	Mr. Abhijit Yeole	-	Use LMS e- learning and OBE software
8		Assistance Helpdesk	-	-	-	Online Assistance
9		Industrial Training	2019		100 miles - 100 miles	Student Industrial Training
10	S. G. Phyto Pharma Pvt. Ltd. Kolhapur	Poster Presentation Activity	15/02/2022	Shri. G.Y.Gune		Poster Presentation
11		Industrial Visit	26/05/2022	-	-	Industrial Visit
12	Arjit Remedies Pvt. Ltd., Kolhapur	Industrial Training	2019	-		Industrial Training
13	Gourishankar Institute of Pharmaceutical Education and Research Limb, Satara	Sharing of Human Resource	04/02/2020		Dr. R. S. Bagali	Expert Lecture
14	College of	Sharing of	04/02/2020	-	Mr. S. A. Bandgar	Expert

	Pharmacy,	Human				Keeture
	Medha, Dist. Satara	Resource				( Seig
15	Symbiosis Co- operative Pharmaceutical Ltd., Sangli	Industrial Training	2020	-		Industrial Training
16	Rubicon Skill Development Pvt. Ltd.	Student Training		an a company	ale la si <sup>-</sup> nicanana	Training on Interview Skills
17	Lecuris Pharmaceuticals	Seminar	19/01/2019	Dr. Pramod Bhoi	-	Seminar on Polycystic Ovary Syndrome
18	The second		10/03/2022	-	Dr. A. P. Gadad	Guest Lecture
19			15/03/2022	-	Mrs. P. B. Patil	Guest Lecture
20			10/03/2022	-	Mrs. P. P. Patil	Guest Lecture
21		Sharing of Human Resources	11/03/2022	Dr. Mrs. N. M. Bhatia	In the second	Guest Lecture
22			11/03/2022	Dr. P. B. Choudhari	-	Guest Lecture
23	Bharati Vidyapeeth College of	in the second	11/03/2022	Dr. D. A. Bhagwat	-	Guest Lecture
24	Pharmacy, Kolhapur	Required	20/06/2019	Dr. S. S. Patil	Dr. M. S. Bhatia	Brance -
25			30/05/2020	Ms. N. D. Desai	Ms. Mayuri Shitole	
26		Research	25/09/2021	Mr. S. A. Bandgar	Dr. N. R. Jadhav	Research Publication
27			11/04/2022	Ms. P. S. Patil	Ms. Poonam Karekar	-
28			07/09/2020	Ms. S. V. Sutar	Dr. P. B. Choudhari	
29	Saglo Research Equipment's, Miraj	Training and Workshop	23/11/2022	Mr. S. G. Lokapure	-	Guest Lecture

Very Ser	/						
-00		Facility Exchange	2022	-	-	FTIR Sample Analysis	
31	Annasaheb Dange College of B.Pharmacy, Ashta	Sharing of Human Resource	01/02/2020	-	Ms. S. V. Sutar	Guest Lecture	
32	- Coma	Research	04/02/2020	Mr. S. A. Bandgar	Mr. S. M. Honmane	Research Publication	
33	Desai Ayurvedic	Industrial Training	2021	-	-	Industrial Training	
34	The Indian Pharmaceutical Association, Local Branch Kolhapur	Poster Presentation	20/02/2022	-	Dr. J. I. D'souza	Poster Presentation	
35			10/03/2022	-	Dr. P. S. Patil	Guest Lecture	
36	Vasantidevi Patil Institute of Pharmacy, Kodoli	Sharing of Human Resource	10/03/2022	-	Dr. B. V. Udugade	Guest Lecture	
37			10/03/2022	-	Miss. S. S. Suryawanshi	Guest Lecture	
38	Tatyasaheb Kore College of	Facility Exchange	2021	-	-	HPH Sample Analysis	
39	Pharmacy, Warananagar	Research Publication	27/03/2020	Mr. S. A. Bandgar	Dr. A. S. Manjappa	Research Publication	
40			15/03/2022	Miss. A. R. Dhole	-	Guest Lecture	
41	Rajarambapu College of Pharmacy, Kasegaon	College of	Sharing of Human Resource	15/03/2022	Dr. I. D. Raut	-	Guest Lecture
42			15/03/2022	Mr. D. S. Gumate	-	Guest Lecture	
43		Research	12/11/2021	Ms. Poournima Patil	Mr. Ganesh Wabhujkar	Research Publication	
44	Biocyte Institute of Research, Sangli	Facility Exchange	-	-	-	Sample Analysis	
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Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's ASHOKRAO MANE COLLEGE OF PHARMACY

AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006

Principal : Dr. S. S. PATIL Founder President : LATE SHRI. ASHOKRAO MANE President : SHRI. VIJAYSINH MANE Peth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com

Ref. No.: 209/2017-18

Date: 22/09/201

2

To,

Dr. S. V. Patil Associate Professor, Shree Santkrupa College of Pharmacy, Ghogaon.

Subject: Invitation as a resource person for 'Teachers Training Programme'.

Respected Sir,

We are inviting you as a resource person for Shivaji University; Kolhapur sponsored 'Teachers Training Programme' for First B. Pharm. Pharmaceutics (BP103T)' on Tuesday, 26<sup>th</sup> September 2017.

I hope that your guidance will update the academicians for promotion of enhancement of professionalism and teaching attitude.

Please accept our invitation and do the honor.

Thanking You.

Dr. S. S. Patil PRINCIPAL Ashokrao Mane College of Pharmacy Peth - Vadgaon, Dist. Kolhapur.



Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's

ASHOKRAO MANE COLLEGE OF PHARMACY AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006

Principal : Dr. S. S. PATIL Founder President : LATE SHRI. ASHOKRAO MANE President : SHRI. VIJAYSINH MANE

Peth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com Ref. No.: 216/2017-18.

Date:7 SEP 2017 S

3

To, Dr. S. V. Patil Associate Professor, Shree Santkrupa College of Pharmacy, Ghogaon.

#### LETTER OF APPRECIATION

Dear Sir,

On the behalf of Management and Shivaji University, Kolhapur; we are exceedingly pleased for accepting our invitation of 'Teachers Training Programme of Pharmaceutics (First B. Pharm). We have successfully concluded this programme by your auspicious presence.

I sincerely express my deep sense of appreciation for gracing the occasion with valuable guidance.

Thanking You.

ne Coll Estd. 2006

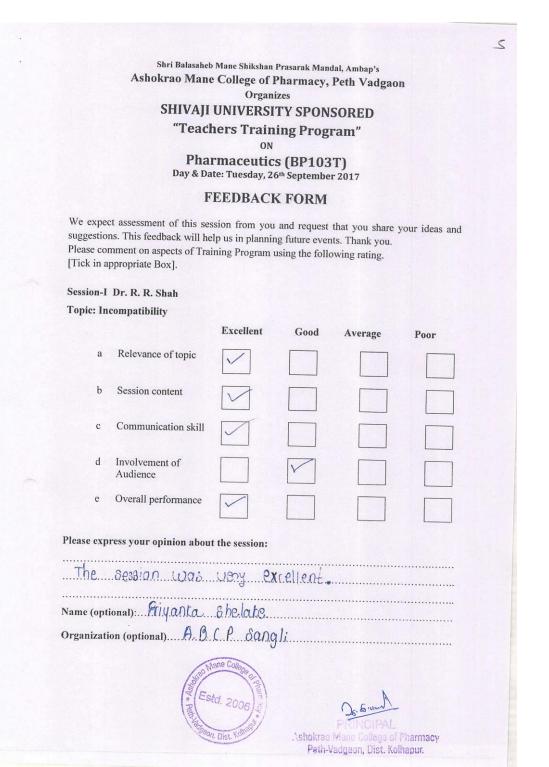
Yours Truly

Dr. S. S. Patil PRINCIPAL Ashokrao Mane Gollege of Pharmacy Peth - Vadgaon, Dist. Kolhapur.

Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



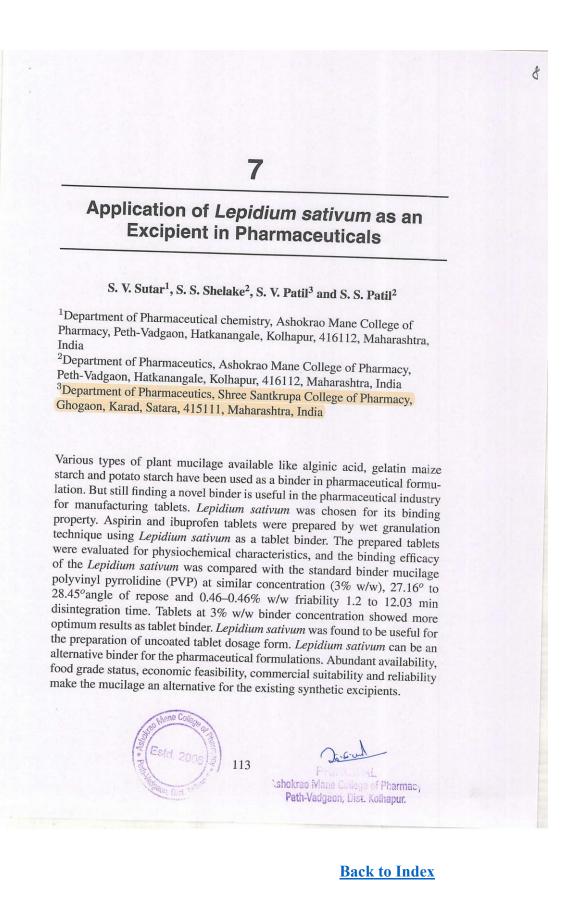


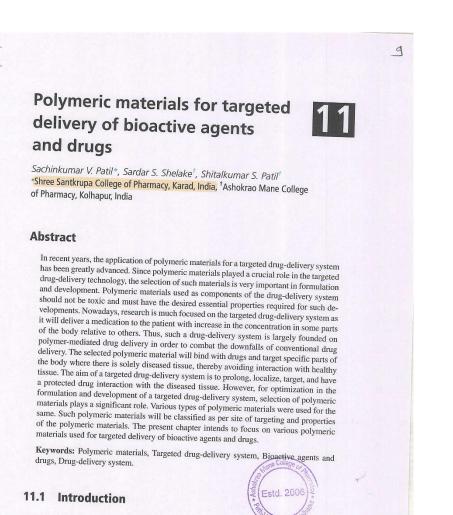






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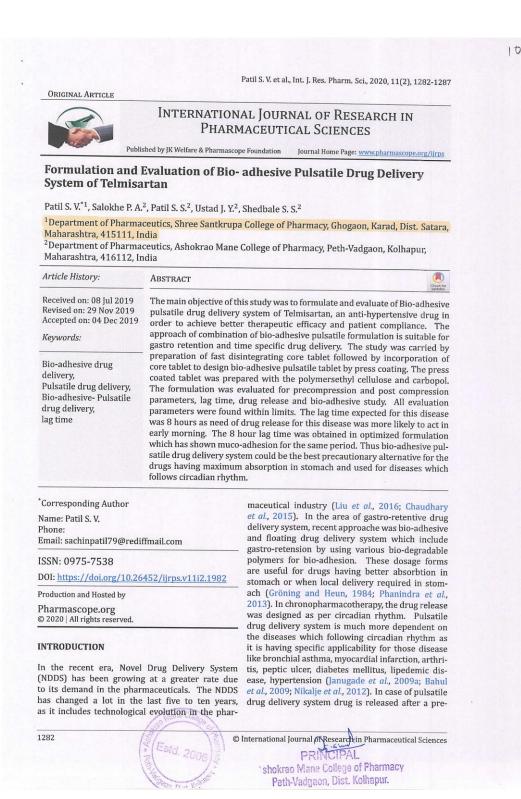




A polymer is a large molecule, macromolecule, composed of many repeated subunits. Owing to their broad range of properties, both synthetic and natural polymers play an essential and ubiquitous role in every day of life. The term "polymer" derives from the ancient Greek word (*polus*, meaning "many, much") and (*meros*, meaning "parts"), and refers to a molecule whose structure is composed of multiple repeating units, from which originate a characteristic of high relative molecular mass and attendant properties. The units composing polymers derive, actually or conceptually, from molecules

Fundamental Biomaterials: Polymers. https://doi.org/10.1016/B978-0-08-102194-1.00011-6 Copyright © 2018 Elsevier Ltd. All rights reserved.

PRINCIPAL nokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.





Research J. Pharm.	
	and Tech. 15(7): July 2022
ISSN 0974-3618 (Print) www.rjp 0974-360X (Online)	
RESEARCH ARTICLE	
Press coated Bioadhesive Pulsatile T of Cardiac Disorder	ablet of Lisinopril for Chronotherapy s: <i>in-vitro</i> Evaluation
<sup>2</sup> Shree Santkrupa College of Pharmacy, Pethw. <sup>2</sup> Shree Santkrupa College of Pharmacy Ghoga Late Adv. Dadasaheb Chavan Memorial Karad, Satara Maha	<sup>27</sup> , Rajesh Jagtap <sup>3</sup> , Sneha Jagtap <sup>4</sup> adgaon, Kolhapur, Maharashtra, India - 416112. on, Karad, Satara, Maharashtra, India - 415111. Institute of Pharmacy, Malwadi (Masur), rashtra, India 415 106. sachinypatil10000@gmail.com
suitable for complete release of drug in acidic medium i indicate that selected polymers are compatible with compatibility studies. The dissolution study clearly in HPMC K100M and Carbopol reduces free water vo reduction in drug release. The prepared Bioadhesive pu mucoadhesion strength. The obtained results showed cap system in a drug release for a programmable period of time. A stability results clearly indicate that developed n	
INTRODUCTION: Modified release dosage form show different release profiles depending on its type. This dosage form is used to describe products that alter the timing and rate of release of drug substance. Pulsatile drug delivery system	release follows the lag time <sup>1</sup> . Pulsatile drug delivery f system is an important and focusing part among time

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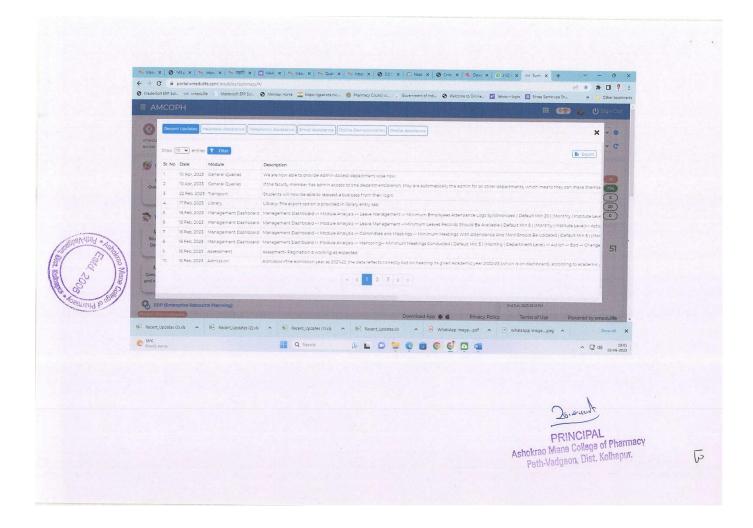


#### VMEdulife, Pune

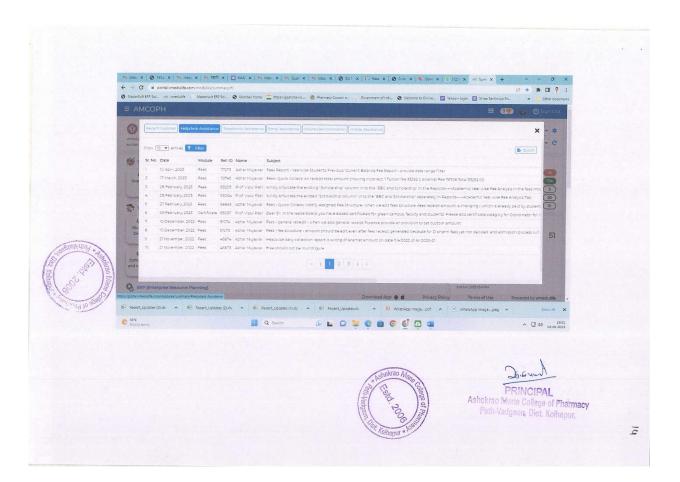




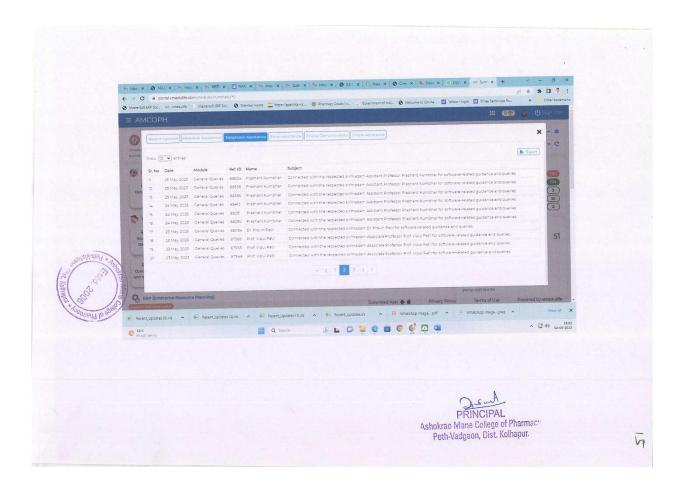




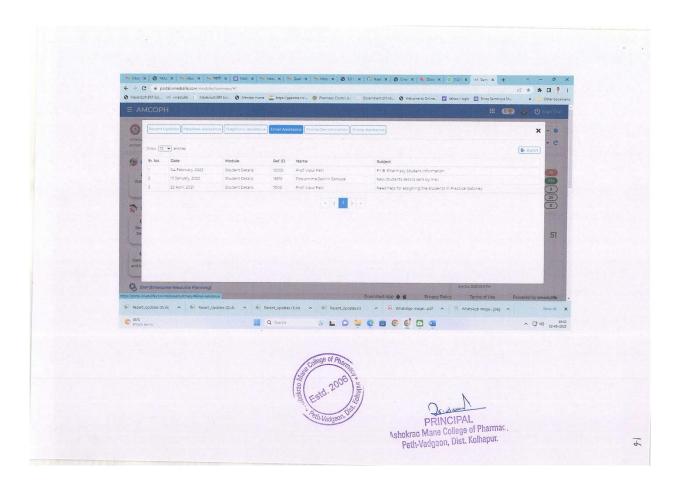




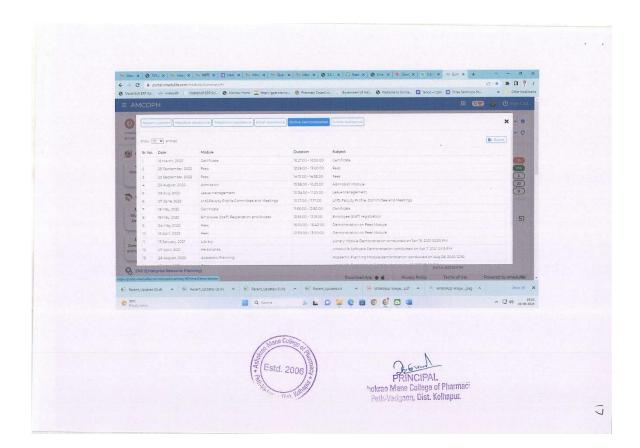




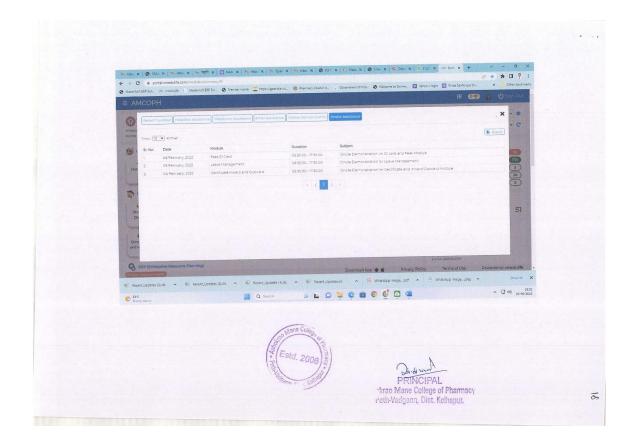








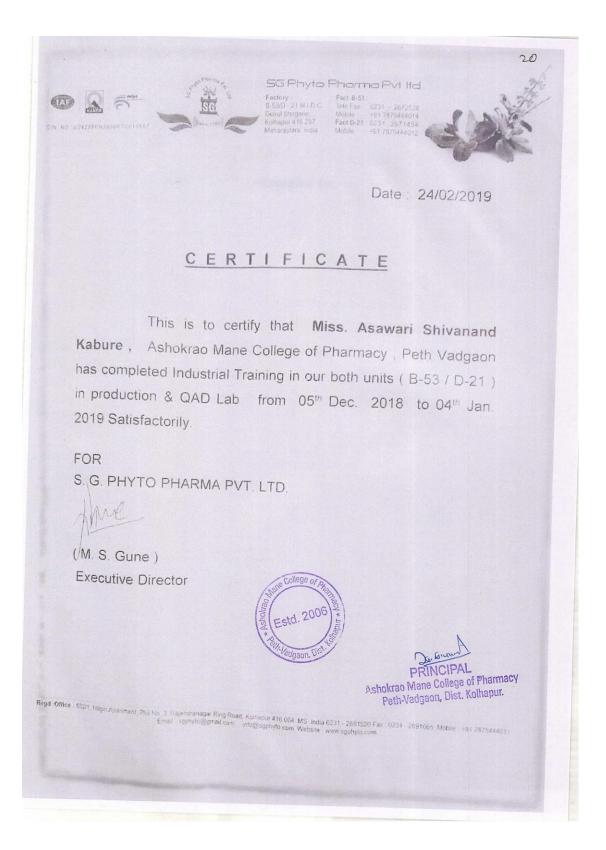


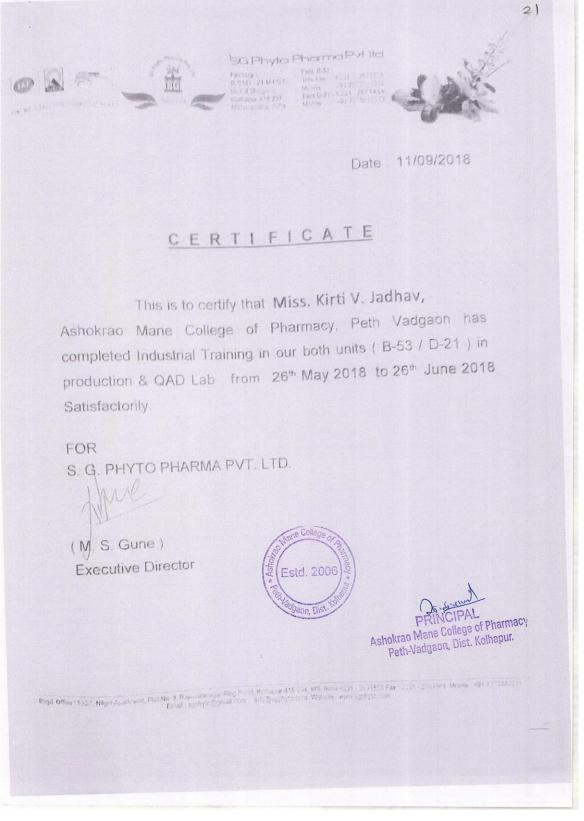


## Activities conducted under the MoU of S. G. Phyto Pharma Pvt. Ltd. Kolhapur.

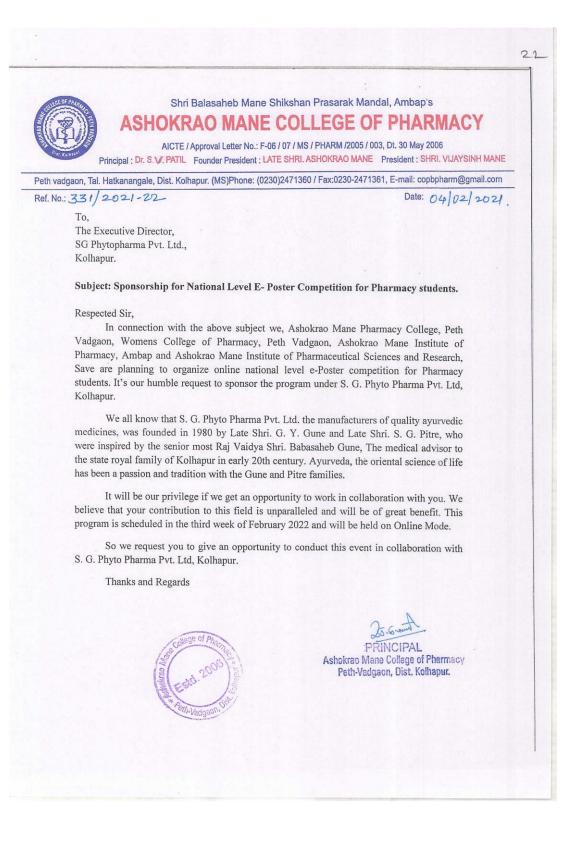












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## Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap s ASHOKRAO MANE COLLEGE OF PHARMACY

AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006 Principal : Dr. S. S. PATIL Founder President : LATE SHRI. ASHOKRAO MANE President : SHRI. VIJAYSINH MANE

Peth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com Date: 15[3]2.2

Ref. No.: 407/2021-22

To, The Executive Director, S. G. Phyto Pharma Pvt. Ltd. 532/1, Nilgiri Apartment, Plot. 3, 'E', Rajendranagar Ring Road, Kolhapur 416004/1. Maharashtra. India.

Subject: Invitation for prize distribution ceremony

Respected Sir,

With the reference to subject cited above and as per our previous communication, We, Ashokrao Mane College of Pharmacy, Peth- Vadgaon have successfully conducted A State level E- poster competition on 15<sup>th</sup> February 2022. This state level poster competition was sponsored (Rs. 5000/-) by your reputed company S.G. Phyto Pharma and we are thankful to you for sponsoring this competition.

The prize distribution ceremony of conducted State level E- poster competition is scheduled on 16<sup>th</sup> March 2022 at 11.00 am and herewith, we are cordially inviting you to join the prize distribution ceremony program.

It would be a great honor for us that you are attending the prize distribution ceremony and hand out the certificates and prizes to the winners of competition. We from the "Ashokrao Mane College of Pharmacy, Peth- Vadgaon" would be in your gratitude if you accept this invitation and grace the event.

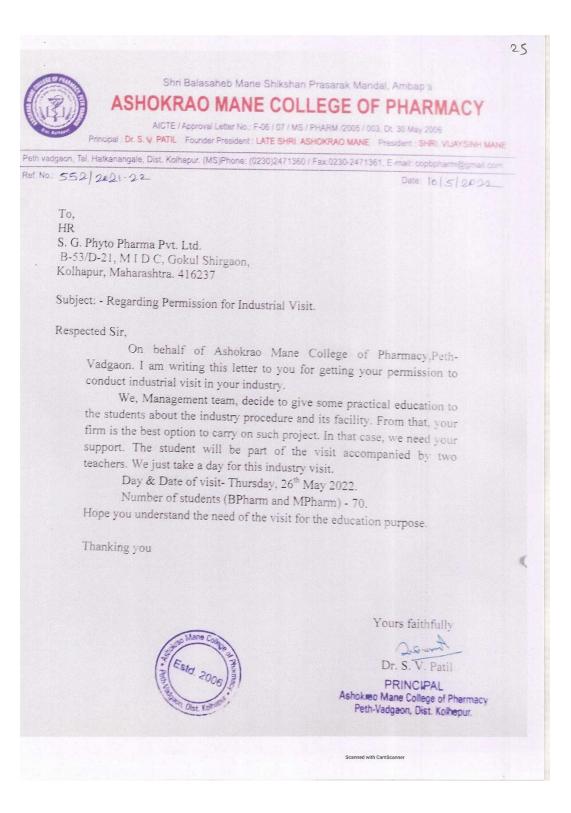
Thanking you,

PRINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

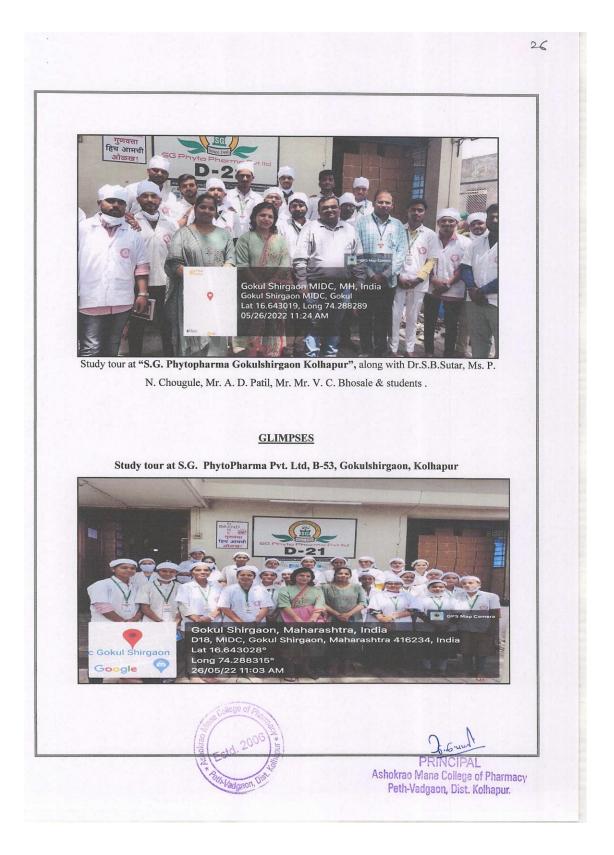












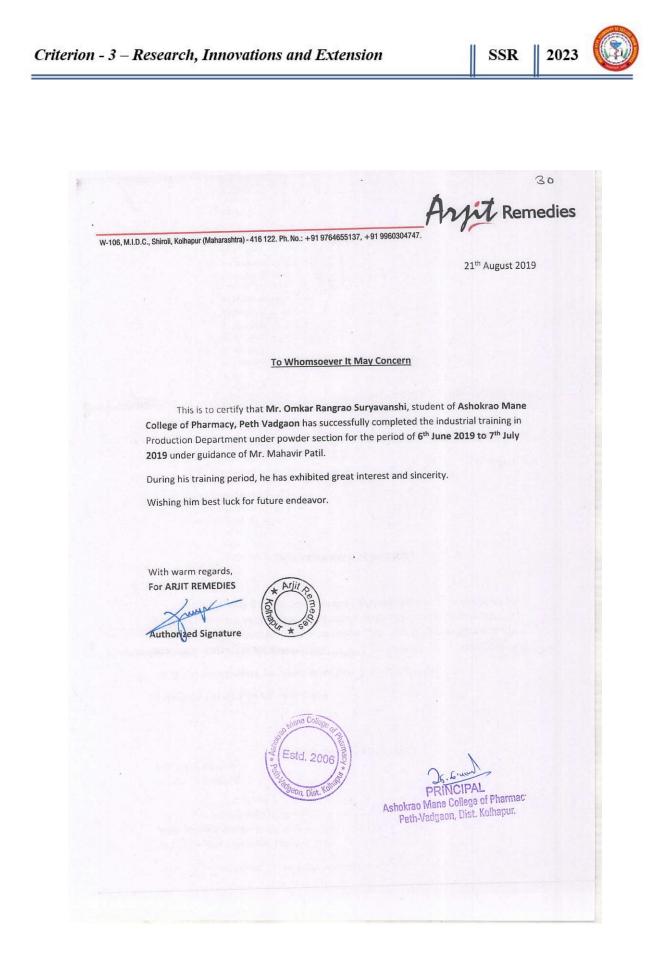


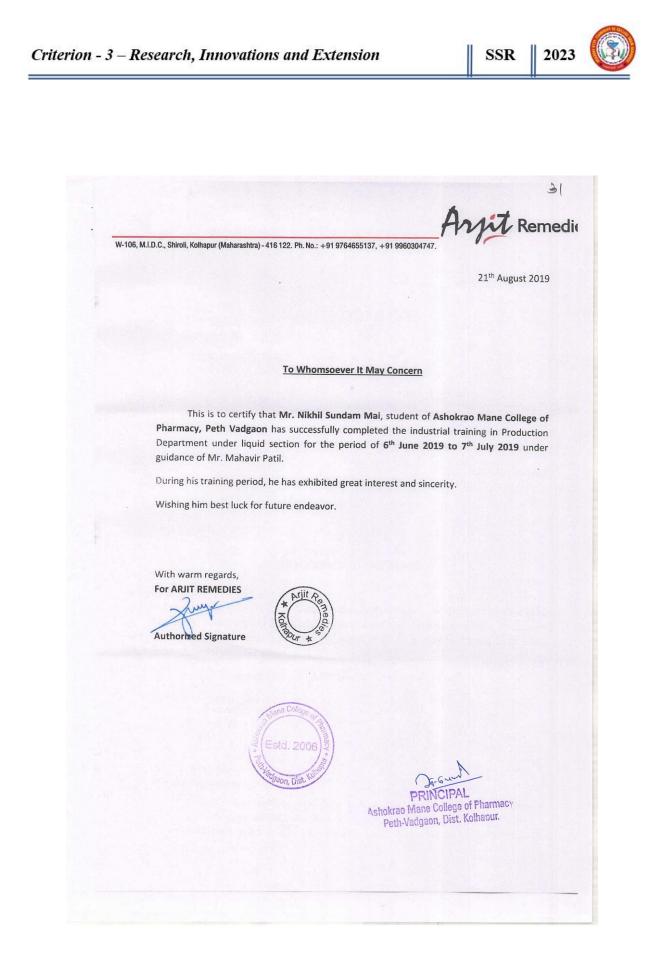




### Activities conducted under the MoU of Arjit Remedies Pvt. Ltd., Kolhapur.

29 MR Remedies W-106, M.I.D.C., Shiroli, Kolhapur (Maharashtra) - 416 122. Ph. No.: +91 9764655137, +91 9960304747. 21<sup>th</sup> August 2019 To Whomsoever It May Concern This is to certify that Mr. Yogesh Sadashiv Mananiy, student of Ashokrao Mane College of Pharmacy, Peth Vadgaon has successfully completed the industrial training in Production Department under granulation section for the period of 6th June 2019 to 7th July 2019 under guidance of Mr. Mahavir Patil. During his training period, he has exhibited great interest and sincerity. Wishing him best luck for future endeavor. With warm regards, For ARJIT REMEDIES Authorized Signature Estd. 2006 PR NCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.







### Activities conducted under the MoU of Gourishankar Institute of Pharmaceutical **Education and Research Limb, Satara.**

33 BHARATI VIDYAPEETH COLLEGE OF PHARMACY, KOLHAPUR 'SHARING OF HUMAN RESOURCES ACTIVITY' Under Lead College Scheme of Shivaji University, Kolhapur. To. The Principal, Ashokrao Mane College of Pharmacy, Pethvadgaon Sub: Appointment of experts to conduct Sharing of Human Resources activity under lead college scheme of Shivaji University, Kolhapur. Dear Sir/Madam, With reference to the subject cited above, please find the list of experts from your institute to conduct Sharing of Human Resources activity as per the schedule given below. You are therefore requested to make necessary arrangement and cooperation for the smooth conduction of the activity. Faculty/expert name, Center name Date Class Topic contact no. Sant Gajanan Maharaj College of Dr. Santosh Gejage 01 to 05 UG/PG Patent law management Pharmacy, Mahagaon Mobile: 9665388581 Feb 2020 Mrs. S. V. Sutar Annasaheb Dange College of 01 to 05 Forced degradation and Mobile: 9604260633 UG/PG Pharmacy, Ashta Feb 2020 stability studies of drugs Mr. S. A. Bandgar 01 to 05 BA and BE in drug College of Pharmacy, Medha Mobile: 8600009719 UG/PG Feb 2020 development Mr. V. M. Patil Satara College of Pharmacy, 01 to 05 Mobile: 9762314337 UG/PG Stereochemistry Degaon Feb 2020 Dr. R. S. Bagali 01 to 05 GIPER, Limb UG/PG Chronopharmacology Mobile: 8788185450 Feb 2020 Kindly requesting you to relieve the above-mentioned faculty of your college Note:1) Concerned expert should confirm the time and date schedule from respective college. 2) Expert should collect the attendance certificate from respective college after completion of the lecture. It is mandatory to conduct the activity before 5th Feb 20. 3) Expert will be given minimum Rs. 1000/- remuneration from the respective allotted college. 4) Honorarium amount of Rs. 1000/- per expert will be paid from Lead college for one session which will not be less than two hours only after submission of detail report consisting scanned copy of attendance certificate and honorarium voucher (signed scanned copy) to lead college email. Thanking you. Regards,

Mr. D. T. Gaikwad Secretary

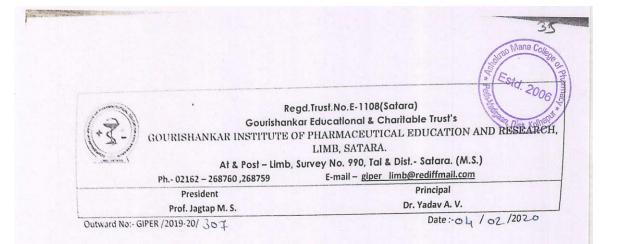
Dr. H. N. More Chairman, Lead College Working Committee

> PRINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



34 TOTA . Mane Cou Estd. 2006 Sharing of Human Resource Activity Under Lead College Scheme of Shivaji University, Kolhapur Receipt Date: 05/02/2020 To, Principal, Bharati Vidyapeeth College of Pharmacy, Kolhapur From, Name of Expert: Dr. R.S. Bagali, Brof. Address: Ashokrao Mane College of Pharmacy Bank details of Expert: Bank details of Expert: Name of Bank with branch-Syndicate Bank, G1B College Nipans Account No- 05572200003418 IFSC- SYNBOOD0557 Mobile No- 9421201996/8788185450 Details Amount in Rs. Honorarium for. Expert Remuneration 1000-as sharing of Human Resource 1000-adivity of GIPER, Limb in 04/02/2020 Mnount in words: Received a words: One thousand only Received as per above by eash cheque/account transfer Bagali Kindly mail this scanned copy (signed) with attendance certificate to email- byepkle a rediffmail.com PRINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.





#### ATTENDANCE CERTIFICATE

This is certify that Professor, Dr. R. S. Bagali from Ashokrao Mane College of Pharmacy, Peth Vedgaon, Kolhapur delivered informative lecture on "Chronopharmacology" held on 04 Feb. 2020, Under Lead College Scheme of Shivaji University, Kolhapur.

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PFIRCHPAPAL Ashokiab Malle confodie or Philippinacy Peth-Vadgaon, Dist Kelhabaour.

Gourishankar in

**Back to Index** 

Ashokrao Mane College of Pharmacy, Peth Vadgaon

36

### Activities conducted under the MoU of College of Pharmacy, Medha, Dist. Satara.

Estd. 2006 BHARATI VIDYAPEETH COLLEGE OF PHARMACY, KOLHAPUR 'SHARING OF HUMAN RESOURCES ACTIVITY' Dist Under Lead College Scheme of Shivaji University, Kolhapur. To, The Principal. Ashokrao Mane College of Pharmacy, Pethvadgaon Sub: Appointment of experts to conduct Sharing of Human Resources activity under lead college scheme of Shivaji University, Kolhapur. Dear Sir/Madam, With reference to the subject cited above, please find the list of experts from your institute to conduct Sharing of Human Resources activity as per the schedule given below. You are therefore requested to make necessary arrangement and cooperation for the smooth conduction of the activity. Faculty/expert name, Date Class Topic Center name contact no. 01 to 05 Dr. Santosh Gejage Sant Gajanan Maharaj College of UG/PG Patent law management Mobile: 9665388581 Feb 2020 Pharmacy, Mahagaon Mrs. S. V. Sutar Forced degradation and 01 to 05 Annasaheb Dange College of UG/PG Mobile: 9604260633 Feb 2020 stability studies of drugs Pharmacy, Ashta Mr. S. A. Bandgar BA and BE in drug 01 to 05 Mobile: 8600009719 UG/PG College of Pharmacy, Medha Feb 2020 development Mr. V. M. Patil 01 to 05 Satara College of Pharmacy, UG/PG Stereochemistry Mobile: 9762314337 Degaon Feb 2020 01 to 05 Dr. R. S. Bagali UG/PG Chronopharmacology GIPER, Limb Feb 2020 Mobile: 8788185450 Kindly requesting you to relieve the above-mentioned faculty of your college. Note:1) Concerned expert should confirm the time and date schedule from respective college. 2) Expert should collect the attendance certificate from respective college after completion of the lecture. It is mandatory to conduct the activity before 5th Feb 20. 3) Expert will be given minimum Rs. 1000/- remuneration from the respective allotted college. 4) Honorarium amount of Rs. 1000/- per expert will be paid from Lead college for one session which will not be less than two hours only after submission of detail report consisting scanned copy of attendance certificate and honorarium voucher (signed scanned copy) to lead college email.

Thanking you.

Regards,

Mr. D. T. Gaikwad Secretary

Dr. H. N. More

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

RINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.





# Letter of Appreciation

This is to certify that Mr. S. A. Bandgar has conducted a lecture on **"BA and BE in Drug Development".** Under Sharing Of Human Resources Activity under Lead College Scheme of Shivaji University, Kolhapur.

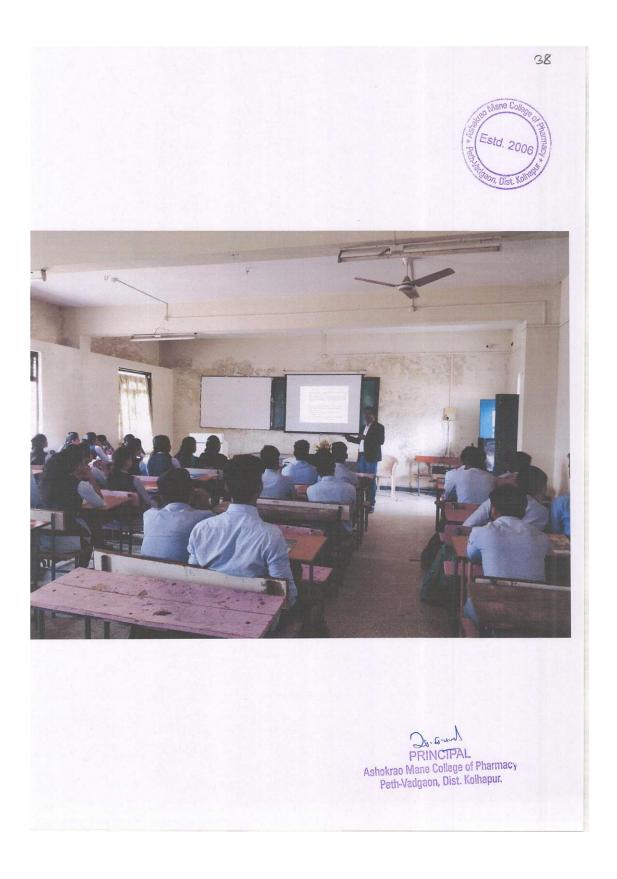
The lecture was conducted for Final Year students of College of Pharmacy (B. Pharm), Medha.

It was honor of our college that Mr. S. A. Bandgar came and delivered a motivational lecture for all the students.

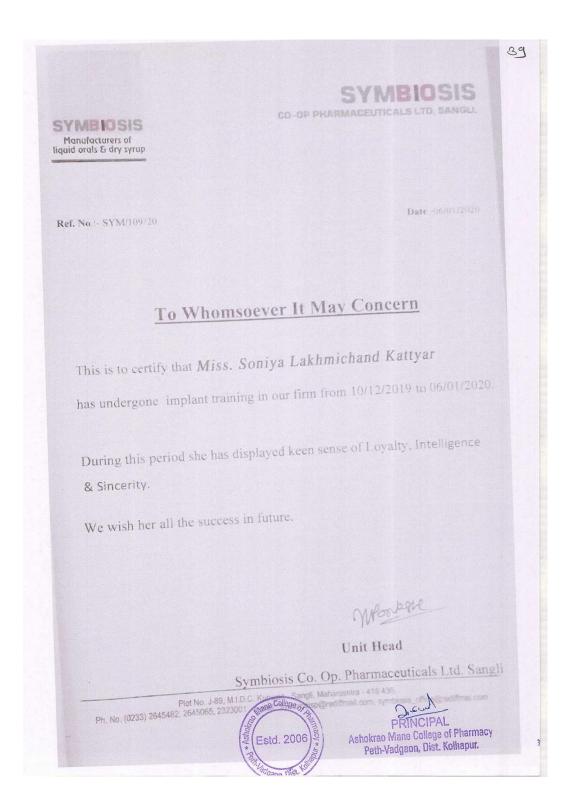
I really appreciate Mr. S. A. Bandgar for giving us such an informative and valuable lecture to all the students.







## Activities conducted under the MoU of Symbiosis Co-operative Pharmaceutical Ltd., Sangli.



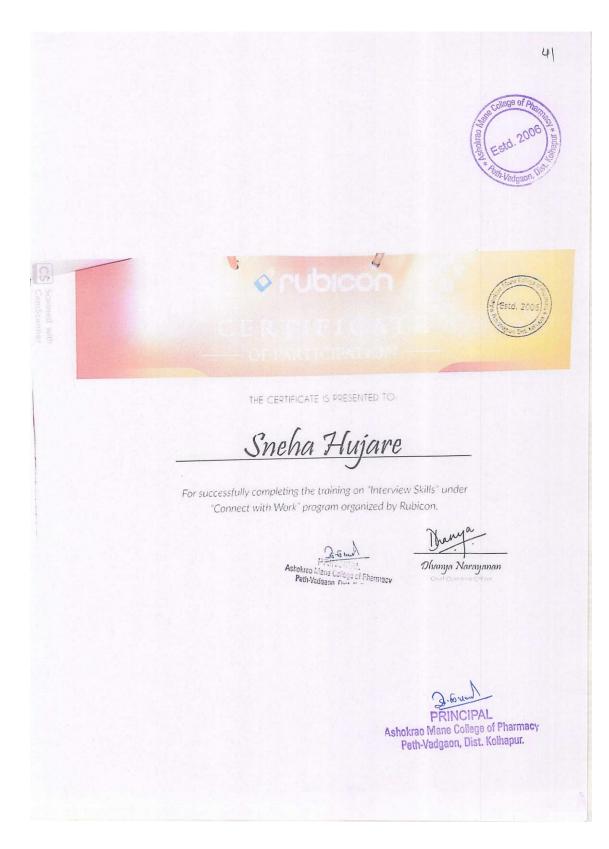


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Rel No - STUDIA	Date - montants
<u>To W</u>	homsoever It May Concern
This is to certify that M	fiss. Vaishnavi Vasant Adake
	training in our firm from 10/12/2019 to 06/01/2020.
During this period she & Sincerity	has displayed keen sense of Loyalty, Intelligence
We wish her all the su	ccess in future.
	MARTARE
	Unit Head
	Symbiosis Co. Op. Pharmaceuticals I td. Sangli
Personal Per	NUT CARACTER Sand Manufacture and an and an advertised on a
	Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur,

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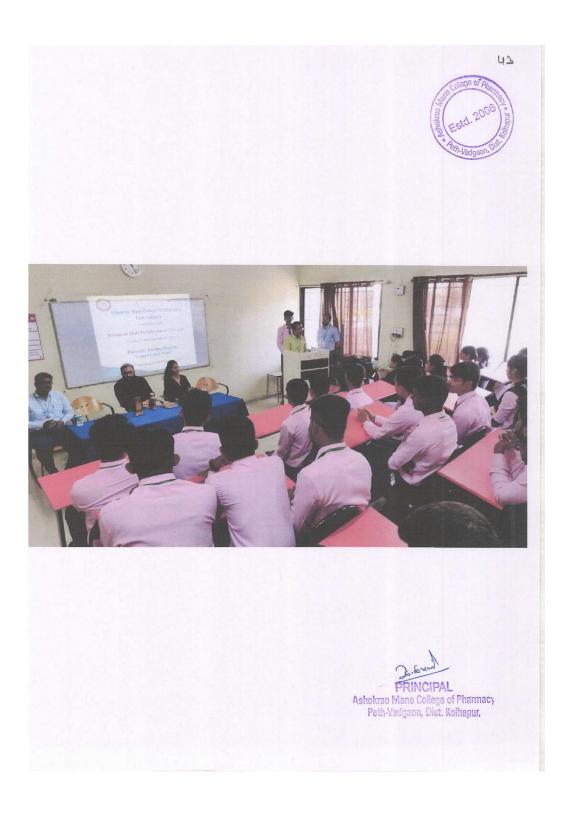
### Activities conducted under the MoU of Rubicon Skill Development Pvt. Ltd.Mumbai.











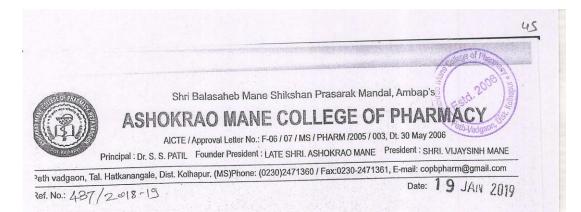
# **Back to Index**

Ashokrao Mane College of Pharmacy, Peth Vadgaon

# Activities conducted under the MoU of Lecuris Pharmaceuticals Pvt. Ltd. Kolhapur.

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THE OF PRINT	ASHOKRAO MA Approved by PCI & AI Affili Estd. 2006   Found	Mane Shikshan Prasarak Mandal, Ambap's ANE COLLEGE OF PHARMACY CTE New Delhi, DTE-Government of Maharashtra, ated to Shivaji University, Kolhapur der President: LATE SHRI. ASHOKRAO MANE . PATIL   President: SHRI. VIJAYSINH MANE
Web	Peth Vadgaon Tal. Hatkanang www.amcoph.org   Phone: 0230	zale, Dist. Kolhapur (MH) PIN 416 112 )-2471360/61   E mail: copbpharm@gmail.com
Name of Con	nmittee: SEMINAR/WORKSHC	DP Date: 10/01/2019
То		R / NOTICE
Subject	ONE DAY SEMINAR	
informed Syndron		Final Year Bpharm And Mpharm are hereby One Day Seminar on "Polycystic Ovarian January 2019(10.00am).
	Prepared By	Approved By
	- Starten .	1000m.
	Miss. S. V. Sutar	Dr. S. S. Patil
1		PRINCIPAL Ashokrao Mane College of Pharmacy Peth - Vadgaon, Dist. Kolhapur.





To, Dr. Pramod Bhoi Aradhya Maternity Home, Peth- Vadgaon.

#### LETTER OF APPRECIATION

Dear Sir,

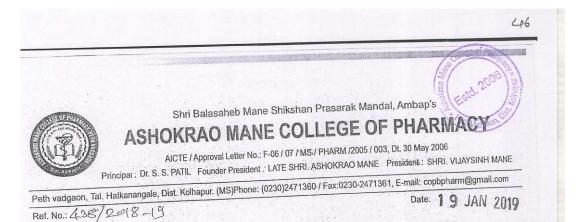
On behalf of Management and Principal of Ashokrao Mane College of Pharmacy, Peth-Vadgaon we are exceedingly pleased for accepting our invitation and conducting a guest lecture on the topic 'Polycystic Ovarian Syndrome'.

Thank you for such an enthusiastic execution and explanation of the topic and guiding the students about the **"Polycystic Ovarian Syndrome"**. I hope to receive similar cooperation from you in future.

Thanking you,

Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

Yours Truly, Dr. S. S. Patil PRINCIPAL Ashokrao Mane College of Pharmacy Peth - Vadgaen, Dist. Kolhapur.



To, Dr. Pallavi Bhoi Aradhya Dental Clinic, Peth- Vadgaon.

# LETTER OF APPRECIATION

Dear Sir,

On behalf of Management and Principal of Ashokrao Mane College of Pharmacy, Peth-Vadgaon we are exceedingly pleased for accepting our invitation and conducting a free Dental Check up camp.

Thank you for such an enthusiastic execution and guiding the students about the Dental Health. I hope to receive similar cooperation from you in future.

Recieved

Thanking you,

Yours Truly, S. Patil

PRINCIPAL. Ashokrao Mane College of Pharmacy Peth - Vadgaon, Dist. Kolhapur.

**Back to Index** 

PR Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



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		Ashokrao Mane College of		aon
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		Attendance Sheet	Date-19/01/2019	
		Attendance Sheet	Datt-1)/01/2013	
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S	r. No.	Name of the Students	Class	Signature Damod S
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-	4.	sharyu Babalaheb Nagare	3rd year Bipharm	SBNagael
-	6.	Dhanashri Uttam Patil	3rd year B. Pharm	Dupartiel
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-	11.	Gaikwad Dipali Ramchandma		Daikwad-
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Sr. No.	Name of the Students	Class	Signature	
43	Shivani Vinod Choudhari	First Year B. Pharm	Ø.	
42.	Nilam BaBaji Gurav	-11	(NBOM/ .	
45.	Akanksha Uday Ingawale		AL	
46.	Rasika Ravindra Bhute		RRBhute Boollow	
48.	Sanjana Dayamnd Jadhav Nijati Digamper Dalvi	-11	· Walk	
4B.	Apurva pundlik patil	-11-	Ratty ~	
47. 50.	Rutuia Vilas Nalawade	_11_	Ralans	
59.	Samarciany Bahant Patil	-11-	Sepertel	
52	Prevano Raikumar Teli	Second Year	Bette	
53	Ashedini machindra pacoal	-11-	Accorde	
54	Priyanka Ravindra Ingale	Final year B. Pharm	Physice dule	
55	Shame Bhagavan Mali	3.4 9207		
56	Asmita Janasdon Gaikwad. Siddhi T. Khandelwal	Final Year B. Phar	Alls.	
58.	Praliksha - S- Teli	first year	CERT	
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# Activities conducted under the MoU of Bharati Vidyapeeth College of Pharmacy, Kolhapur.

Sr	Name of faculty with	Name of	Торі	ics	Area of expertise	Allotted College
No	designation	College	UG	PG	Area of expertise	Anotica Conege
1)	Dr. Javeed Y Manure Asst. Prof.		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)	ABCP, Sangli	Role of free radicals in different diseases.		Role of free radicals in different discases.	ADCP, Ashta
4)	Dr. Smt. P. L. Ladda	Aber, Sungh	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.		Pharmacognosy and phytochemistry	ABCP, Sangli
			growth and their maintenance.		PRINCIPAL Pharmaceutics ASHORTAC Mane College of	



	Assistant Professor		Physical Pharmaceutics-II Semester IV Topies: Micromeritics, Rheology, Colloidal dispersions, Coarse dispersions, Drug Stability			The state of the s	std. 2(
10)	Mr. Honmane S. M. Assistant Professor		Subject: Physical Pharmaceutics-II Semester IV Topics: Solubility and Solutions, Surfactant: Micellization, CMC, Adsorption Isotherm, Dispersed System, Drug Stability: Accelerated Stability study	Preformulation, Drug Discovery and Development	Pharmaceutics	DSKCP, Digraj	
11)	Ms. Jadhav P. H. Assistant Professor		Subject: Pharmaceutical Analysis-I Semester I Topic: Fundamentals of acid-base titrations		Pharmaceutical Chemistry	DSKCP, Digraj	
12)	Mr. Mote G. D. Assistant Professor		Subject: Pharmaceutical Organic Chemistry-III Semester- IV Topics: Optical Isomerism Geometrical Isomerism	-	Pharmaceutical Chemistry	DSKCP, Digraj	
13)	Dr. Neha V. Bhilare Associate Professor Department of Pharmaceutical Chemistry		In Impurities in Pharmaceutical Substances     Substances     Guiders in pharmaceutical systems and methods of adjusting isotonicity     A. Radiopharmaceuticals     Gastrointestinal agents		Prodrug Design and Bioanalytical method development	GCOP, Karad	
		AGCOP, Jaitapur	First Year B. Pharm. Sem - I Pharmaceutical Inorganic Chemistry (TH) Topics –		Teaching Pharmaceutical inorganic chemistry, Biochemistry,		
14)	Ms. Pallavi L. Salve Assistant Professor		<ol> <li>Major extra and intracellular electrolytes.</li> <li>Antimicrobial agents.</li> <li>First Year B. Pharm. Sem -II Biochemistry (TH)</li> <li>Topics –</li> </ol>	PRINCIPAI Ashokrao Mane College Peth-Vadgaon, Dist. I	Instrumental methods analysis with modern pedagogical tools and techniques.	GCOP, Karad	

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			<ol> <li>Carbohydrate metabolism Glycolysis – Pathway, energetics and significance</li> <li>Citric acid cycle- Pathway, energetics and significance</li> <li>Lipid metabolism β- Oxidation of saturated fatty acid (Palmitic acid)</li> </ol>			aller + Pathings
15)	Mr. Vinayak S. Marulkar	-	I. Titrimetric monograph assay methods with comparison of different analytical techniques 2. Electrochemical Methods: Fundamentals, Pharmacopoeial assays and applications		Pharmaceutical drug analysis and analytical method development, Drug design and development, Herbal drug development.	GCOP, Karad
16)	Dr. ANAND P. GADAD PROFESSOR DEPT. OF PHARMACEUTICS		PHARMACEUTICS 1		INCOMPATIBILITY	BVCP, Kolhapur
17)	Mr. P. B. Patil Assistant Professor		Polarography, Acid base titration		Pharmaceutical Chemistry, Pharmaceutical Analysis	BVCP, Kolhapur
18)	Mrs. Pranali Pradeep Patil Assistant professor	AMCP, Pethvadgaon	Impurities in Pharmaceutical analysis	-	Analytical Chemistry Stress degradation study Standardization of Herbal formulation Pharmaceutical Inorganic Chemistry	BVCP, Kolhapur
19)	Dr. Pravin Subhash Patil			Gastro-Retentive Drug Delivery Systems	NDDS	VPIOP, Kodoli
20)	Ms. Sarika Suryawanshi		Dosage forms and prescription		Dosage form develoment	VPIOP, Kodoli
21)	Dr. Udugade Babaso Vitthal (Associate Professor)		Biochemistry: Nucleic acid metabolism and genetic information transfer	-	Analytical Chemistry Medicinal Chemistry	VPIOP, Kodoli
22)	Dr. Dipak P. Mali Assist. Professor	BVCP, Kolhapur	<ol> <li>Effect of substituents on reactivity and orientation of mono substituted benzene during electrophilic substitution reaction</li> <li>DNA/RNA biosynthesis</li> </ol>	Quality risk management	Organic Chemistry Biochemistry Quality Management System	TKCP, Warana
					PRINCIPAL Ashokrao Mane College of Pharma Peth-Vadgaon, Dist, Kolhapur.	су

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23)	Dr. N. R. Jadhav Professor and HOD of Pharmaceutics		Fundamentals of novel drug delivery systems	Design of novel drug delivery systems	Novel formulation design	TKCP, Warana
24)	Mr. Ravindra J Jarag Associate Professor		Pharmacovigilance Clinical Pharmacy Role of Pharmacist in Pharmacy Practice	Preclinical and toxicological testing of drugs Applications of Physiograph (Biopac-Mp-35 and Powerlab) Formulation and Invitro/In vico evaluation of herbal/synthetic drugs	Clinical Research Phytopharmacovigilance Insilicopharmacology	TKCP, Warana
25)	Dr. Mrs. N. M. Bhatia Professor		cGMP, GLP, Validation, Regulatory agencies. Document maintenance in pharmaceutical industry Antineoplastics Prodrugs	General research methodology ICH Guidelines GLP eGMP Equipment/Instrument validation Method validation Cleaning Validation Pharmaceutical Quality Management Process Validation	Pharmaceutical Analysis Drug discovery	AMCP, Pethvadgaon
26)	Dr. P. B. Choudhari Assistant Professor		Computational Tools in Drug design and Discovery	Computational Tools in Drug design and Discovery	Drug Design	AMCP, Pethvadgaon
27)	Dr. D. A. Bhagwat Assistant Professor		1) Pharmaceutics (F. Y. B. Pharm. Sem-J) Topic: Suppositories 2) Industrial Pharmacy-I (T. Y. B. Pharm. Sem-V) Topic: Tablet Dosage Form	1) Modern Pharmaceutics (F, Y, M, Pharm, Sem-I) Topic: Preformulation Concept 2) Molecular Pharmaceutics (F, Y, M, Pharm, Sem-II) Topic: Micro Capsules/ Micro Spheres	Pharmaceutics, Industrial Pharmacy	AMCP, Pethvadgaon
28)	Mr. Pankaj Ashok Jadhav	DSKCP, Digraj	Pharmaceutical Dosage Forms Design		Pharmaceutical Dosage Forms	ABCP, Sangli

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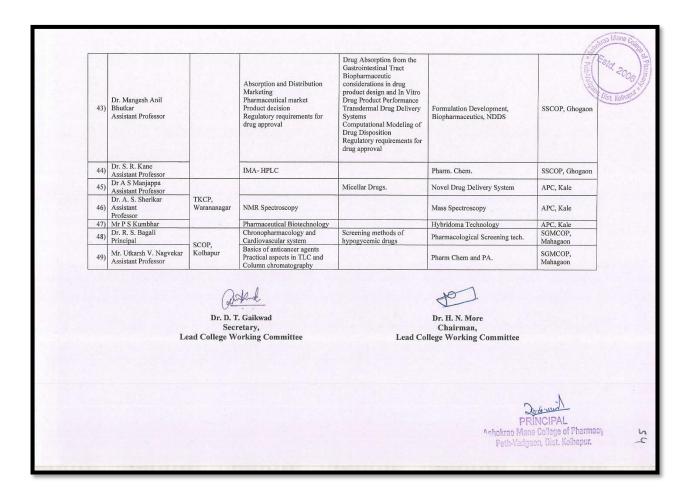


29)	Mr. Shankar Jaiprakash Joshi, Assistant Professor		Cardiac Arrhythmias and their Management	Cellular and Molecular Pharmacology – Gene Expression and Gene Regulation	Physiology, Pathophysiology and Pharmacology	ABCP, Sanglis
30)	Dr. V. R. Aralelimath Principal & Professor		Pharmacology -III Sem VI		Chemotherapy	RCP, Kasegaon
31)	Dr. A. V. Belvotagi Professor		POC-III Sem IV AIT Sem VIII		Stereochemistry Hyphenated techniques	RCP, Kasegaon
32)	Dr. J. S. Mulla Asso. Prof.	SSCOP, Ghogaon	Research Methodology DDS	Research Methodology DDS	Literature Search	RCP, Kasegaon
33)	Mr. P. D. Lade Assistant Professor		QA Sem VI		Calibration and validation of equipments	AGCOP, Jaitapur
34)	Mr. M. N. Urade Assistant Professor		Pharmacology -III Sem VI		Antiulcer agents Basics of Pharmacokinetics	AGCOP, Jaitapur
35)	Mr. A. M. Kadam Assistant Professor		Pharmacy Practice Sem VII		Clinical Pharmacy Drug Information Pharmaceutical Care	AGCOP, Jaitapur
36)	Ms. Supriya Patil	IDIOD	Stains and staining tech		Solubility enhancement of poorly water soluble drugs	TKCP, Warana
37)	Mr. A. A. Deshmukh	VPIOP, Kodoli	The changing nature of biomedical research-animal alternative		Preclinical research	TKCP, Warana
38)	Dr. Suresh G. Killedar Principal	SGMCOP, Mahagaon	Nutraceuticals and dietary supplements: A new avenue for pharma graduates	Phytochemical Investigations: Opportunities, Challenges and Future perspectives	Phytochemical investigations Herbal/Ayurvedic drug formulations Herbal NDDS Nutraceuticals	SCOP, Kolhapur
39)	Ms. Archana Dhole	DCD		ICH guideline or CTD and eCTD	QA	AMCP, Pethvadgaon
40)	Dr. I. D. Raut	RCP, Kasegaon	Basic understanding on pharmaceutical monophasic liquid dosage forms		NDDS, Nanotech., Particle engg.	AMCP, Pethvadgaon
41)	Mr. D. S. Gumate		Cardiovascular system		Anatomy and physiology	AMCP, Pethvadgaon
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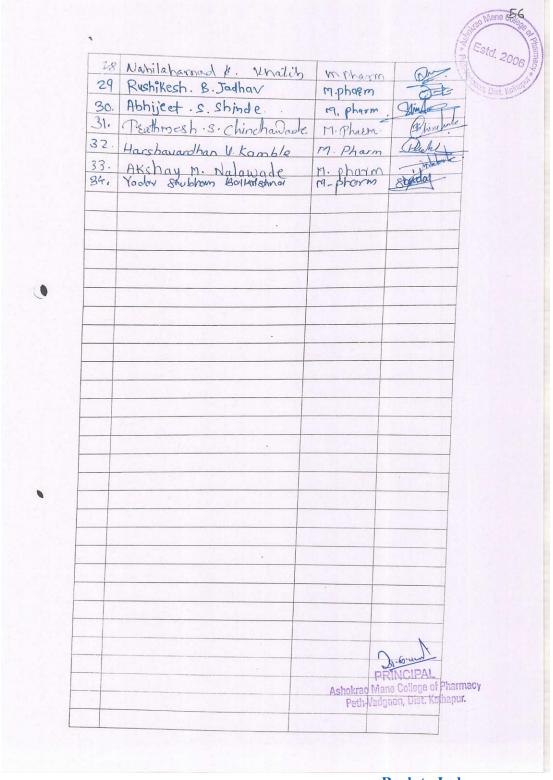
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	We expect assessment of this event from you and request that you share your ideas and suggestions. This feedback will help us in planning future events. Thank you.
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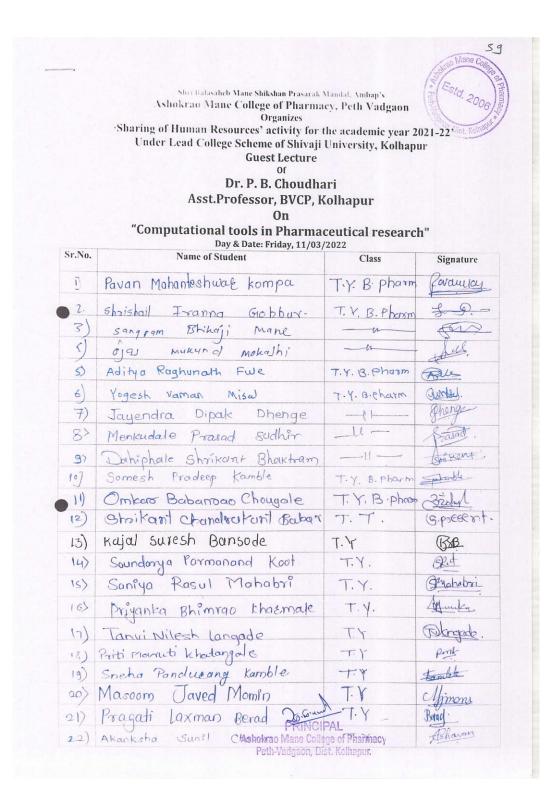
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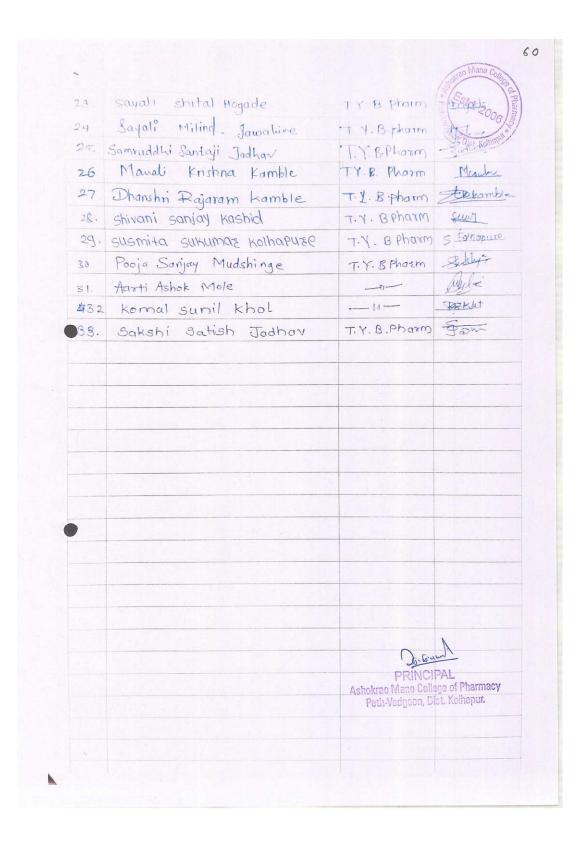
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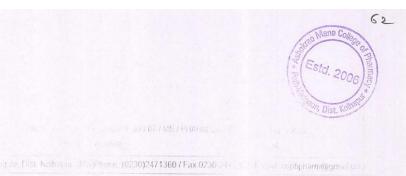
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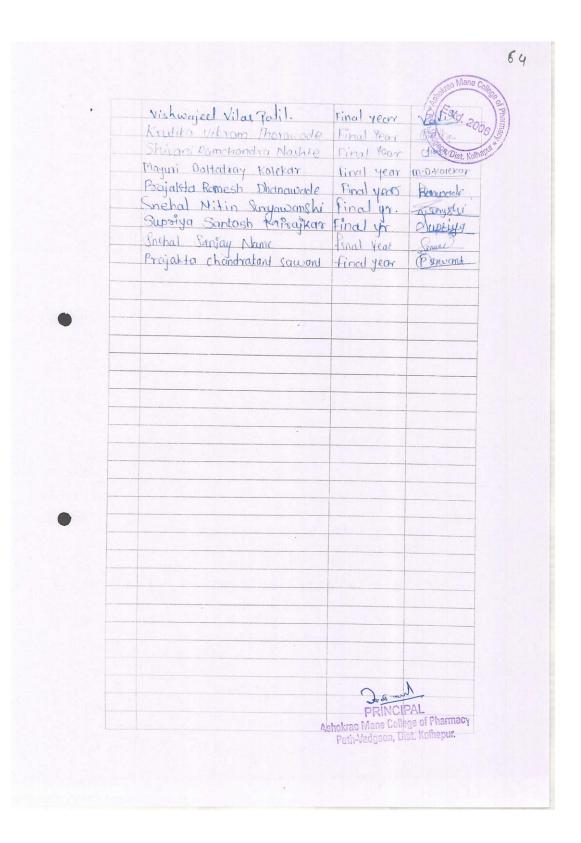
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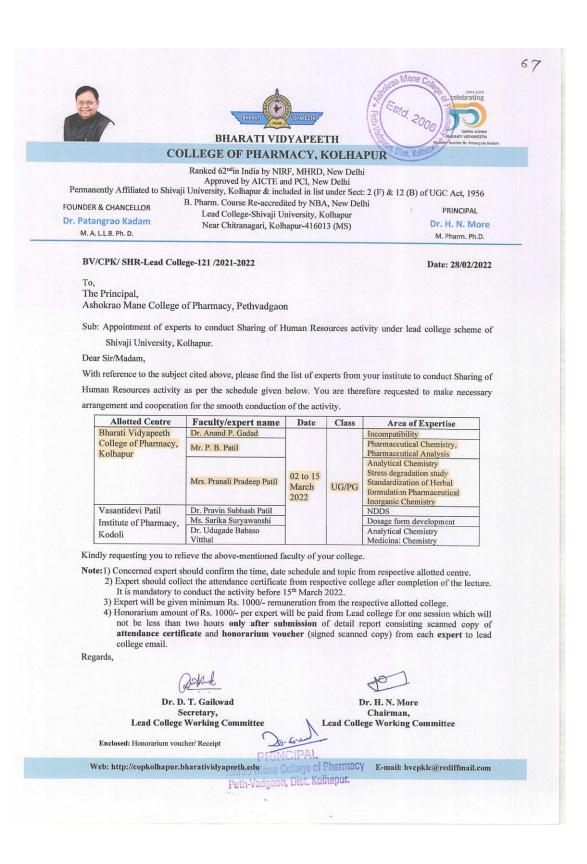
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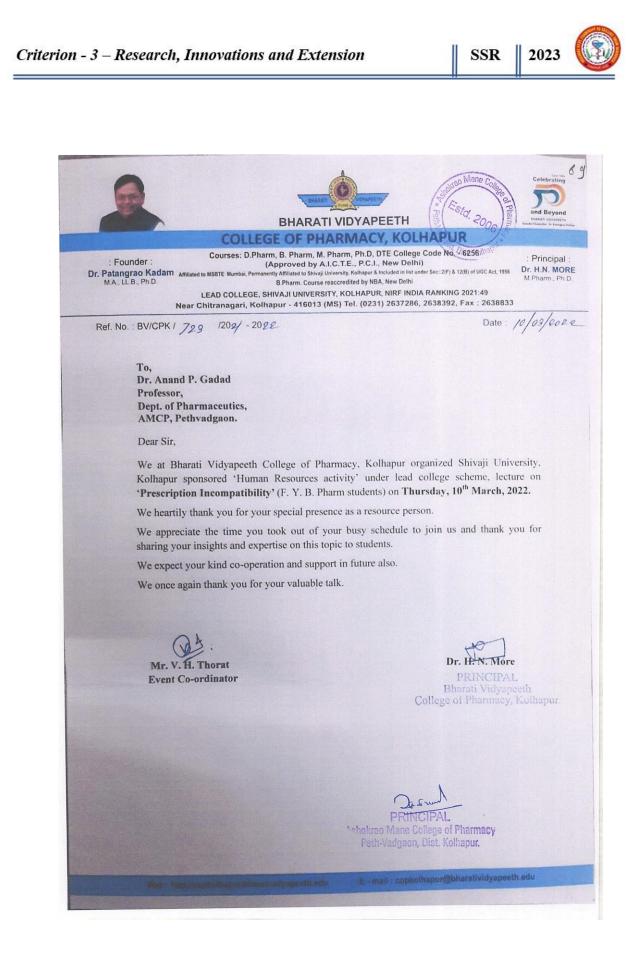


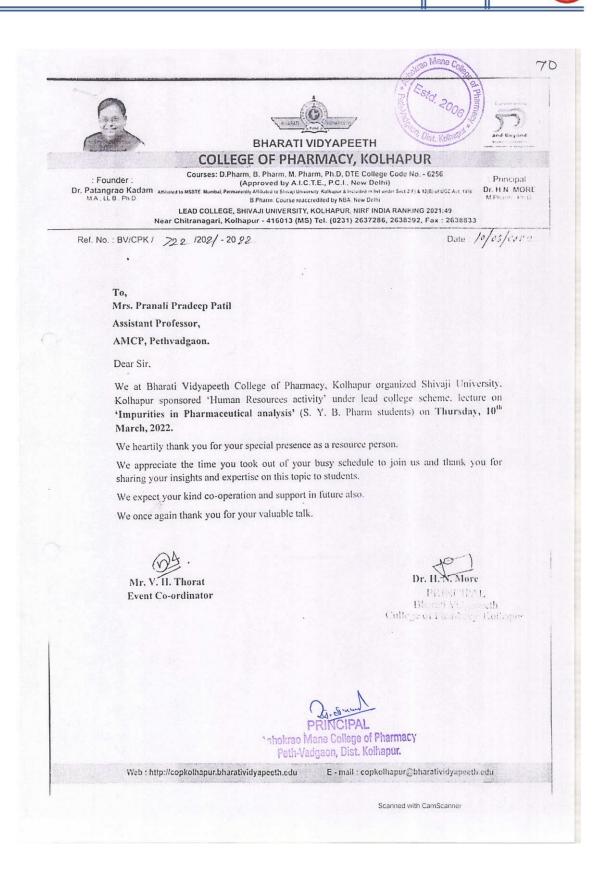
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#### **Research Article**

Design and development of aliphatic amino acid-cholesterol biomolecular scaffold as anticancer conjugates.

Mayuresh Shinde<sup>1\*</sup>, Shitalkumar Patil<sup>2</sup>, Manish Bhatia<sup>3</sup>, Dhanashri Patil<sup>4</sup>, Sanjay Mishra<sup>4</sup>

<sup>1</sup>Department of Pharmaceutical Chemistry, Tatyasaheb Kore College of Pharmacy, Warananagar, 416113, Maharashtra, India.

<sup>2</sup>Ashokrao Mane College of Pharmacy, Peth Vadgaon, 416112, Maharashtra, India.

<sup>3</sup>Department of Pharmaceutical Chemistry, Bharati Vidyapeeth College of Pharmacy, Kolhapur, 416013, Maharashtra, India.

<sup>4</sup>KAHER's Dr. Prabhakar Kore Basic Science and Research Center, Belagavi, 590010, Karnataka, India.

Received 22 March 2019; received in revised form 18 June 2019; accepted 20 June 2019

\*Corresponding author E-mail address: mvshinde.tkcp@gmail.com

### ABSTRACT

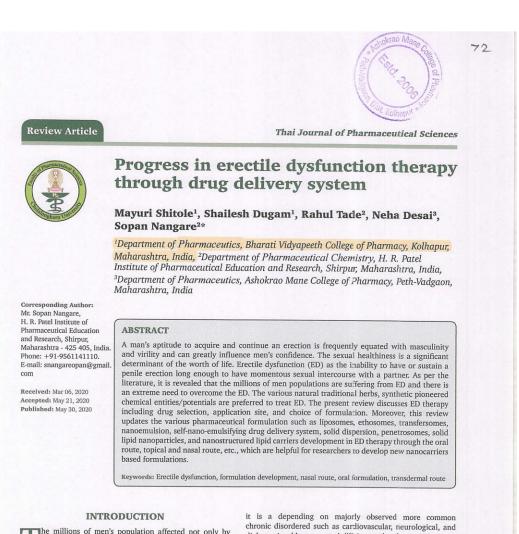
We have developed lipoprotein macromolecular motif to target multiple type of cancerous cells. These scaffold moieties linked with anticancer agents for targeting release at specific site. Biomolecular network increases cellular penetration, specificity and efficacy. Molecular motifs containing these agents are readily degradable by enzymatic cleavage. Structural functionalities of these modified molecules generate response against cancerous cells. Lipids and protein conjugates improve drug delivery towards target tissues. Bioactive lipoprotein exerts inhibitory effect for progressing tumor tissues. Lipid-protein bioconjugates interact with tumor tissue proteins selectively for reducing toxicity of antitumor agents. Complexation of cholesterol with bioactive aliphatic amino acid yields complex scaffold possessing anticancer activity. Reaction was conducted using dicyclohexyl carbodiimide (DCC) and 4-dimethylamino pyridine (DMAP) in pyridine solvent. Developed conjugates were characterized by using TLC, IR, NMR and HRMS studies. Conjugates were screened for anticancer activity by using MTT assay for human lung cancer (A549), liver hepatocellular carcinoma (HepG2), Human colon cancer (HT-29), Breast carcinoma (MCF-7), Glioblastoma cell lines (U87 MG).All molecular motifs exhibited remarkable antitumor activity against specified cell lines. Non-toxicity towards normal mouse fibroblast (L-929) is the promising feature of synthetic biomolecular scaffold which indicates selectivity of molecular complexes on tumor tissues. Current synthetic protocol can be used for development of biochemical molecular motif with high specificity, selectivity and antitumor potential.

#### **KEYWORDS**

Cholesterol, aliphatic amino acids, anticancer, bioconjugates.

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it is a depending on majorly observed more common chronic disordered such as cardiovascular, neurological, and diabetes in older age men's.<sup>[12]</sup> It may be the partial reason for prevalence in older males. In addition, it is more common in the obses age group and more specifically in the existence of hypertension, diabetes, dyslipidemia, etc.<sup>[13,14]</sup> Hence, the prevalence and incidence of ED problems are highly correlated with the known risk factors, ag:ng factors, and comorbidities. Moreover, lifestyle-based individual factors such as obesity, tobacco chewing, and frequency of exercise have all been associated with ED.<sup>[15]</sup> Nowadays, predominantly ED is a rising issue in under 40 age mers.<sup>[16]</sup> A literature survey resolved that near about 20–25% of cases of ED observed in the same age group.<sup>[17]</sup> ED influences unsatisfactory sexual life and severely impaired the cuality of life of men and their sex partners also.<sup>[18,19]</sup> Moreover, it is a major route cause of depression, anxiety etc.<sup>[20]</sup>

Hence, there is a huge demand from the suffered population to investigators for the treatment of ED. The

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### SIMULTANEOUS ESTIMATION OF IMPURITIES IN MELATONIN BY BR-HPLC METHOD COUPLED WITH DIODE ARRAY DETECTION

Shubhangi Sutara\*, Veerendra Yeligarb, Prafulla Choudharic and Sachinkumar Patila

(Received 15 December 2019) (Accepted 07 September 2020)

#### ABSTRACT

In the present research work, RP-HPLC method coupled with diode array detection for separation and quantitation of impurity-I (2-(5-methoxy-1*H*-indol-3-yl)ethanamine), impurity-II (3-(2-aminoethyl)-1*H*-indol-5-ol) along with melatonin was developed. Mobile phase containing <sup>-</sup>0 mMolL<sup>-1</sup> sodium dihydrogenphosphate: acetonitrile (75:25 V/V) was found to give good resolution, effectively separating melatonin and its impurities. Calibration curve for impurity-I was found to be linear in the concentration range 2.5 µg mL<sup>-1</sup> to 7.5 µg mL<sup>-1</sup>. Calibration curve for impurity-I was found to be linear in concentration range 2.5 µg mL<sup>-1</sup> to 7.5 µg mL<sup>-1</sup> and the calibration curve for impurity-I was found to be linear in concentration range of 1.8 µg mL<sup>-1</sup> to 5.4 µg mL<sup>-1</sup>. The percentage recovery estimated of melatonin, impurity-I and inpurity-II was found to be within 98.20 to 99.91, 97.42 to 104.04, 98.35 to 100.06, respectively with R.S.D. The reported method is simple, precise, accurate and rapid for quantitation of melatonin impurities along with melatonin.

Keywords: Melatonin, RP-HPLC, Simultaneous estimation, Impurity

### INTRODUCTION

Melatonin, *N*-acetyl -5-methoxy tryptamine(MT) Fig .1A, is a neurohormone produced mainly at night by the pineal gland, subsequently decreasing to minimum during the day. It helps to treat sleep disorders with diminishing latency of sleep inception, effective as free radicals remover and seeing that endogenous antioxidant. Melatonin has been used with magnificent therapeutic results in Alzheimer treatment, indicated for the neurotoxicity induced by glutamate and in jet lag treatment. It is found available as tablets and capsules for human consumption and is sold without medical prescription in many countries, including Canada and United States of America and off the shelves even in nutrition supplement stores.

Now a days there is a range of methods for determining melatonin, its pharmaceutical dosage form, such like HPLC method, spectrophotometric method and thin layer chromatography scanning method and so on<sup>1-11</sup>. Despite the existence of these methods, till date none of methods for performing identification and simultaneous

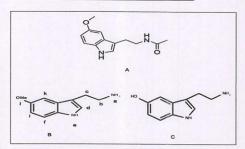


Fig.1: A) Structure of melatonin B) Structure of Impurity -I:2-(5-methoxy-1*H*-indol-3-yl) ethanamine) C) Structure of Impurity-II: 3-(2-aminoethyl)-1*H*-indol-5-ol))

estimation of melatonin and its two impurities has been reported. Hence, on the basis of literature survey the main intention of this work was to establish a precise, accurate, simple, reliable, sensitive, validated method for melatonin in the presence its impurities (impurity-I,2-(5methoxy-1*H*-indol-3-yl)ethanamine) (Fig. 1B), (impurity-II, 3-(2-aminoethyl)-1*H*-indol-5-ol) (Fig. 1C) for estimation of the purity of the bulk drug and furthermore the stability of its dosage forms. The method was validated in accordance with ICH guidelines<sup>12-15</sup>.

<sup>a</sup> Department of Pharmaceutical Quality Assurance, Ashokrao Mane College of Pharmacy, Peth-Vadgaon- 416 112, Maharashtra, India

- <sup>b</sup> Department of Pharmaceutical Chemistry, Krishna Institute of Pharmacy, Malkapur, Karad 415 539, Maharashtra, India
   <sup>c</sup> Department of Pharmaceutical Chemistry, Bharati Vidyapeeth College of Pharmacy, Kolhapur 416 013, Maharashtra, India
- Department of Pharmaceutical Chemistry, Bharati Vidyapeeth College of Pharmacy, Kolhapur 416 013, Maharashtra, Indi \*For Correspondence: E-mail: shubhangi.sutar28@gmail.com

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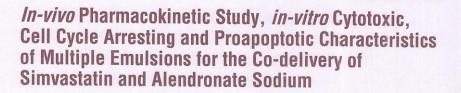
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Sandip Akaram Bandgar<sup>1,2</sup>, Namdeo Ramhari Jadhav<sup>2,\*</sup>

<sup>1</sup>Department of Pharmaceutics, Ashokrao Mane College of Pharmacy, Peth Vadgaon, Kolhapur, Maharashtra, INDIA. <sup>2</sup>Department of Pharmaceutics, Bharati Vidyapeeth College of Pharmacy, Kolhapur, Maharashtra, INDIA.

#### ABSTRACT

Purpose: Development of nanocarriers that can provide efficient co-delivery of immiscible hydrophilic/ hydropholic drugs with established technology for industrial production is crucial. Due to this reason, multiple emulsions (MEs) were selected as the desired carriers to achieve the co-delivery ability of many drugs and the improvement of cancer therapeutic effect. MEs could entrap the drug in the inner oil phase and hence avoid the drug leaking and co-deliver the drugs into the tumor sites. Therefore, in the present study, an attempt is made to devide a wide/u multiple emulsion for a first first first first bit. is made to develop w/o/w multiple emulsion for co-delivery of lipophilic Simvastatin (SVS) and hydrophilic Alendronate Sodium (ADS) with improved oral pharmacokinetics. Methods: The MEs were formulated by the use of Poloxamer-407, TPGS and Soyabean Oil. Tween 80 and Span 80 were used as surfactant and co-surfactant respectively. The MEs was prepared by the process of primary and secondary emulsification and evaluated in terms of visual assessment, turbidity, viscosity, particle size and zeta potential. The optimized batch was evaluated in terms of TEM analysis, X-Ray diffraction, FTIR study, in-vitro release and screened for cytotoxicity study, cell cycle arresting, apoptosis study and quantification of SVS and ADS in Rat Plasma. Results: The MEs treatment inhibited the cell growth with low IC<sub>50</sub> value against all cells (A549: 0.030 ± 0.014 µg/mL, MDAMB-231: 0.088 ± 0.013 µg/mL, PC-3: 0.019 ± 0.002 µg/mL). The AUC in case of ADS and SVS was found to be 710.01 ng/mL and 14.413 ng/mL respectively by oral administration and 42.308 ng/mL and 28.902 ng/mL in 12 and 1 hr respectively by IV administration. Conclusion: This strategy has improved simultaneous oral bioavailability of very poorly bio-available both ADS and SVS and thus improved the oral therapeutic efficacy of this combination therapy.

Key words: Simvastatin, Alendronate Sodium, In-vivo Pharmacokinetic Study, Cytotoxicity Study, Cell cycle arresting, Apoptosis Study.

#### INTRODUCTION

Statins clinically used to reduce blood with bone anti-resorption activity. Alendronate cholesterol levels, are the second-most prescribed drugs after analgesics and are of geranyl transtransferase, an enzyme considered to be the safest drugs.1 In involved in terpenoid biosynthesis. Nitrogen cell-based experiments, the hydrophobic statins displayed inhibitory effects on many cancers.1,2

alendronate, a second generation bisphosphonate and synthetic analogue of pyrophosphate

sodium binds to and inhibits the activity containing Bisphosphonates have been proved to reduce and delay bone complications from bone metastasis, and have been Alendronate Sodium is the sodium salt of used worldwide for the treatment of bone metastasis from solid tumors, bone complications and pain from multiple myeloma.

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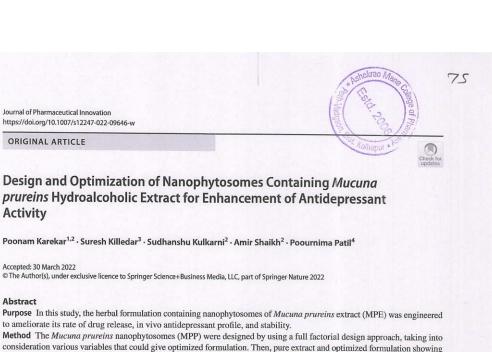
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DOI: 10.5530/ijper.55.3s.178 Correspondence: Dr. Namdeo Ramhari Dr. Namcleo Ramhari Jadhav, Bharati Vidyapeeth College of Pharmacy, Kolhapur, Maharashtra, INDIA. Phone: +91-09823751579, Email: ended:ede0.2016 Email - nrjadhav18@rediff mail.com



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consideration various variables that could give optimized formulation. Then, pure extract and optimized formulation showing higher entrapment efficiency were studied for in vitro dissolution and in vivo antidepressant activity in depression models like forced swimming test (FST) and tail suspension test (TST) in Swiss albino mice. The physicochemical characterization was carried out using particle size analysis and zeta potential, Fourier transformation infrared spectroscopy, differential scanning calorimetry, proton nuclear magnetic resonance, powder X-ray diffractometer, scanning electron microscopy, and solubility studies. Moreover, the stability of nanophytosomes was assessed by subjecting optimized formulation to freeze–thaw cycle stability testing and calculating entrapment efficiency at the end of the cycle.

**Results** PXRD and SEM revealed a decrease in the crystalline nature of nanophytosomes. <sup>1</sup>H NMR, DSC, and FTIR asserted the formation of the phyto-phospholipids complex. The rate and extent of dissolution were also found enhanced and sustained in nanophytosomes as compared to pure extract. In vivo antidepressant activity depicted a significant reduction of immobility in mice treated with nanophytosomes as compared to those treated with the pure extract. Moreover, optimized formulation was found stable as entrapment efficiency values were not reduced significantly.

**Conclusion** Thus, nanophytosomes drug delivery could be the best strategy to improve physicochemical properties of extract and thus could be exploited for the extracts having poor solubility, poor permeability, and poor stability.

Keywords Nanophytosomes · Mucuna prureins extract · Antidepressant activity · Physicochemical characterization

### Introduction

Depression is considered a life-threatening psychological disorder nowadays as almost 20% of the world's population is affected by such a chronic and recurring one. [1-3]

Poonam Karekar poonamkarekar16@rediffmail.com

Suresh Killedar sureshgk\_64@rediffmail.com

Sudhanshu Kulkarni

sudhanshukulkarni968@gmail.com Amir Shaikh

amir.shaikh@indiraicp.edu.in

Poournima Patil poournima6@gmail.com

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The disorder has established its relation to psychosocial, behavioral abnormalities, although the complete etiology of it has not been fully explored. The disorder is regarded as a common cause of suicidal tendencies. [4, 5] Depression is characterized by aberration of emotional, behavioral

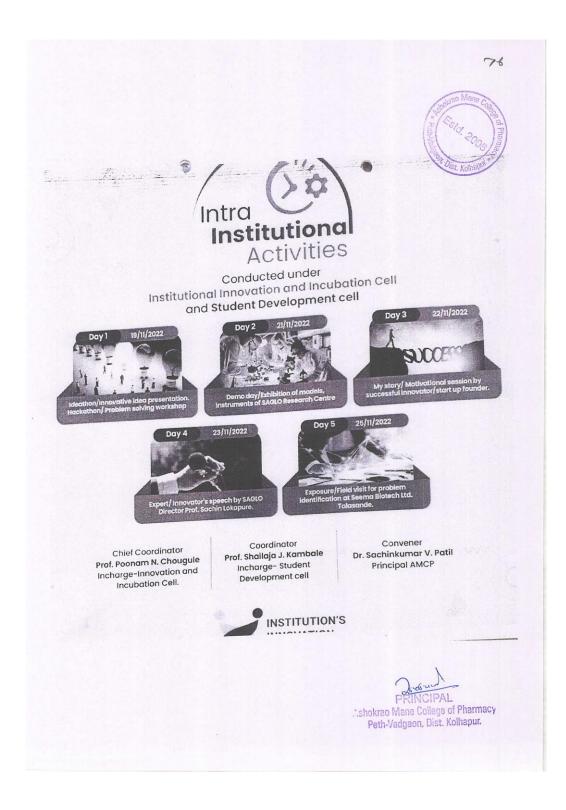
- <sup>1</sup> Department of Pharmaceutics, Bharati Vidyapeeth College of Pharmacy Kolhapur, Kolhapur, Maharashtra, India
- <sup>2</sup> Department of Pharmaceutics, Indira College of Pharmacy, Pune, Maharashtra, India
- <sup>3</sup> Department of Pharmacognosy, Shree Sant Gajanan Maharaj College of Pharmacy, Gadhiglaj Mahagaon, Kolhapur, Maharashtra, India
- Department of Pharmaceutical Chemistry Ashokrao Mane College of Pharmacy, Peth Vadgaon, Maharashtra, India

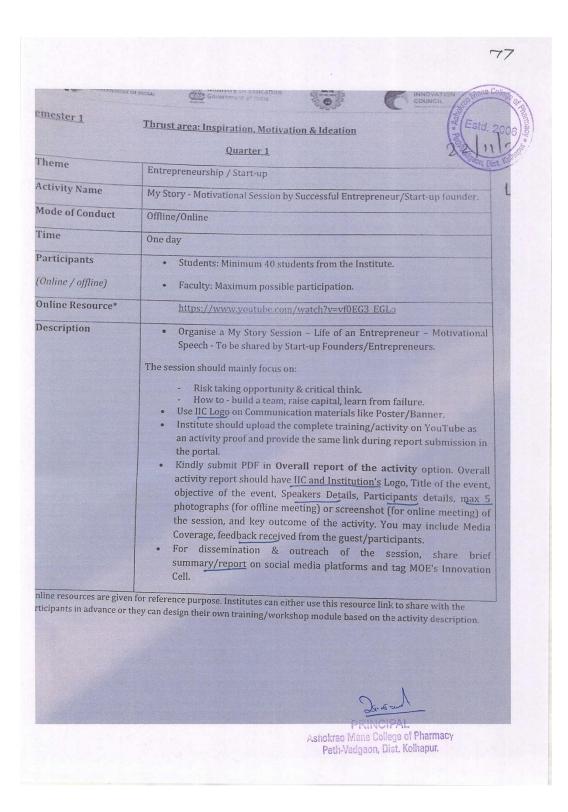
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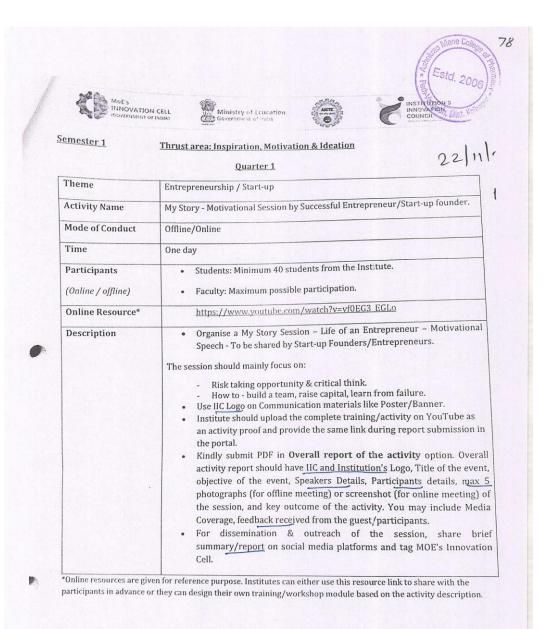
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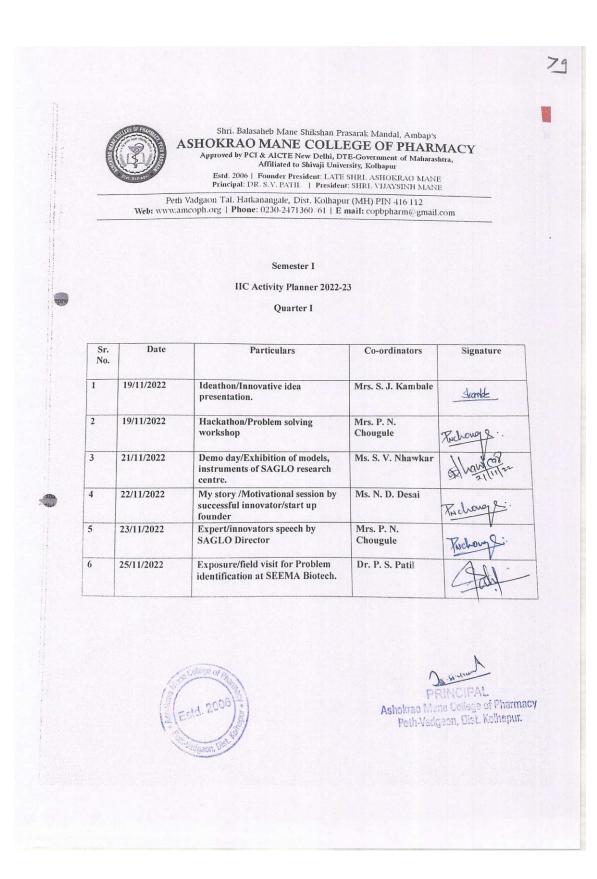
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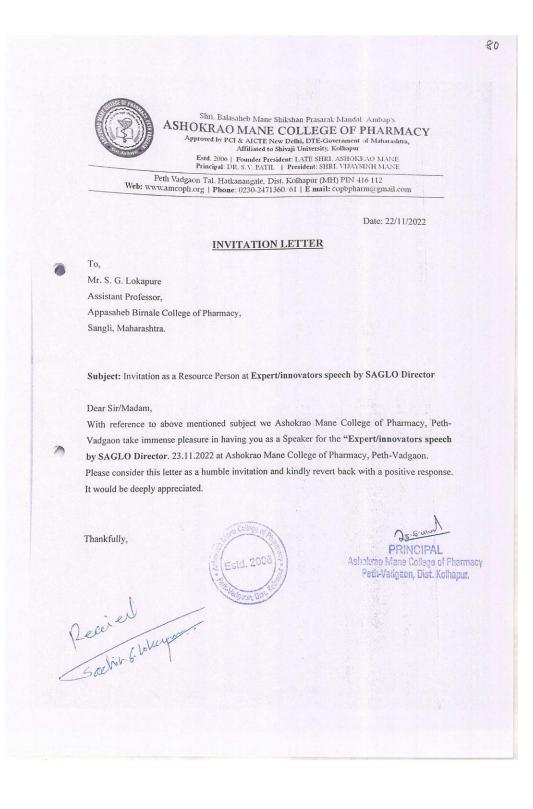


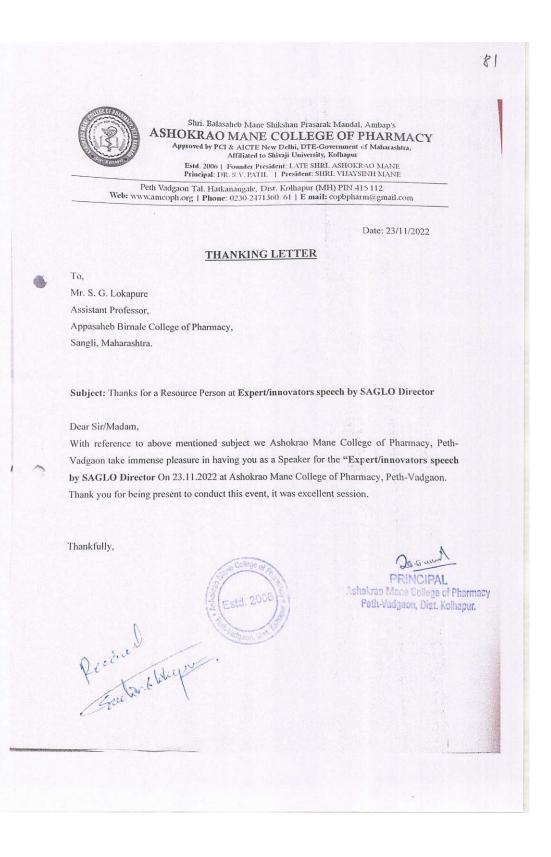




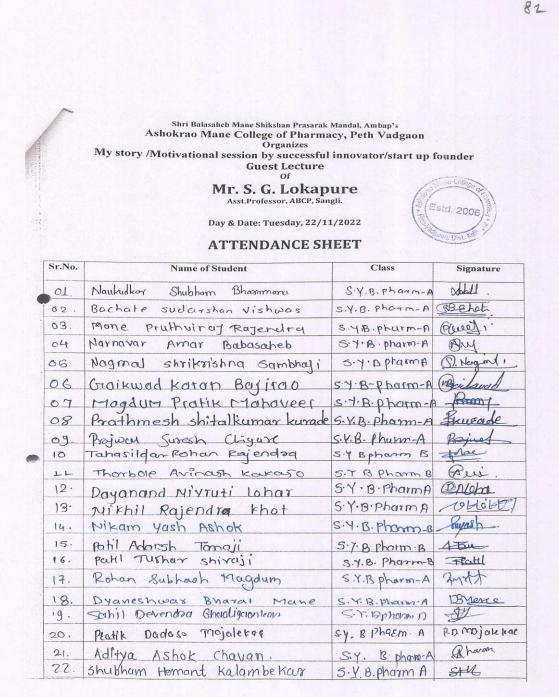
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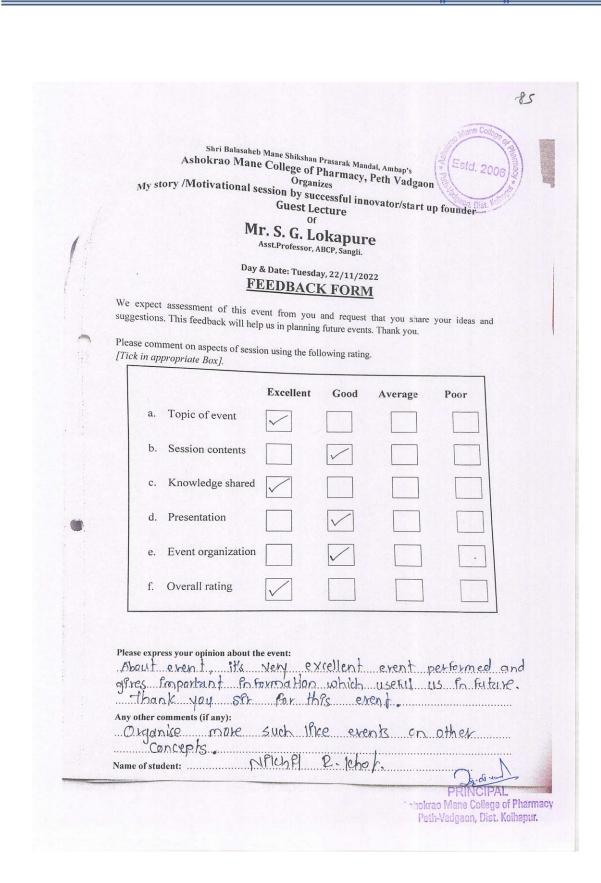




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47.	Neha Sontosh Chavan	S.Y.B. Phanm-A N.S. chaud
48.	Manasi Prakash Kadam	S.Y. B. Pharm A - Budan
19.	Rifika Ravindro Chougule.	S.Y.B. Pham A R.R.C.
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Criterion - 3 - Research, Innovations and Extension



/	Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's Ashokrao Mane College of Pharmacy, Peth Vadgaon Organizes My story /Motivational session by successful innovator/start up founder Guest Lecture of Mr. S. G. Lokapure
	Asst.Professor, ABCP, Sangli. Day & Date: Tuesday, 22/11/2022 FEEDBACK FORM
We . sug	expect assessment of this event from you and request that you share your ideas and gestions. This feedback will help us in planning future events. Thank you.
Ple	ase comment on aspects of session using the following rating. ck in appropriate Box].
	Excellent Good Average Poor
	a. Topic of event
	b. Session contents
	c. Knowledge shared
	d. Presentation
	e. Event organization
	f. Overall rating
Plc	ase express your opinion about the event: This lecture is very knowledgeble for us. Fram these lecture helps in improve our knowledge,
An	y other comments (if any):
Name	of Student :- Doyanand Nivruti Lohar Decount

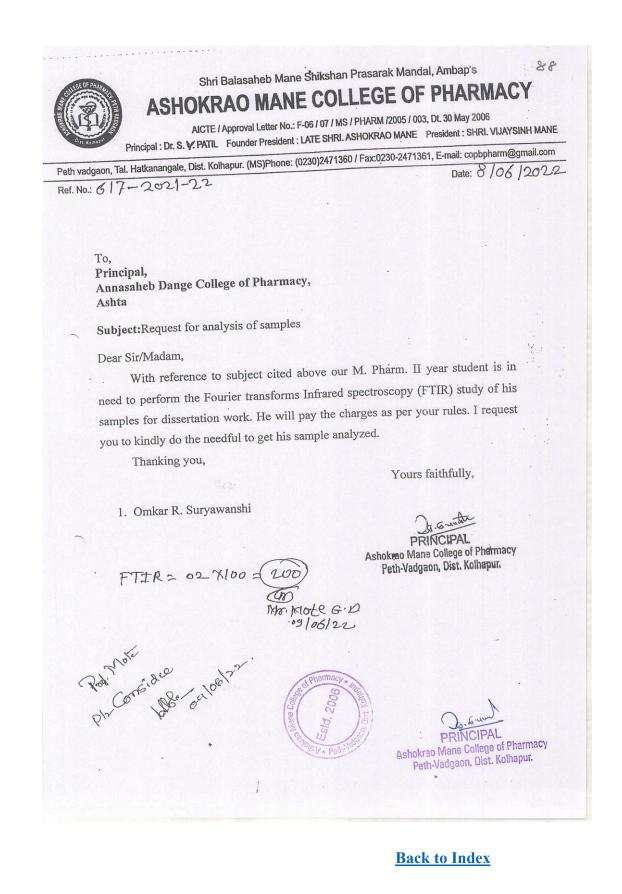
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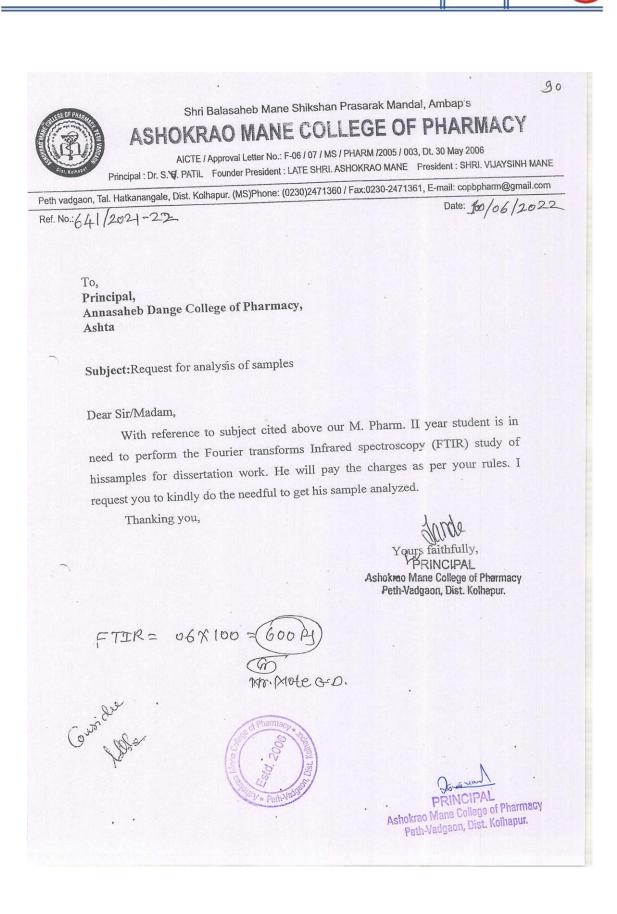
## Activities conducted under the MoU of Annasaheb Dange College of B. Pharmacy, Ashta.





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**Back to Index** 

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Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's ASHOKRAO MANE INSTITUTE OF PHARMACEUTICAL SCIENCES & BUSINESS (Approved by PCI & AICTE, New Delhi, DTE & MSBTE, Govt. of Maharashtra, Mumbai & Affiliated to Dr. Babasaheb Ambedkar Technological University. Lonere)

President

Date: 10-8-2022

LATE SHRI. ASHOKRAO MANE Founder President

Ref. No.: AMIP5R5/700/2021-22

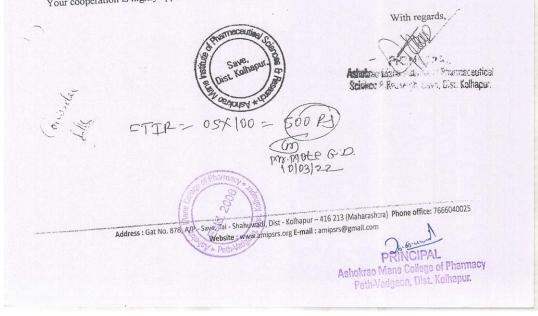
### To,

The Principal, Annasaheb Dange college of Pharmacy., Ashta, Sangli.

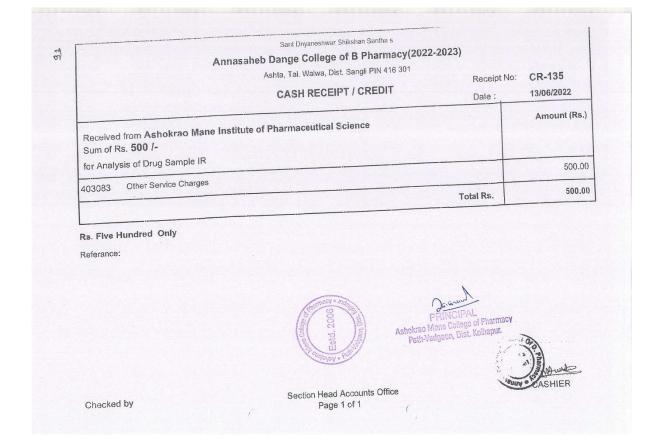
Sub: Seeking permission for testing Samples by IR Spectroscopy

With reference to the subject cited above, I request you to permit our students for testing samples on Infrared Spectrophotometer at the facility available at Annasaheb Dange college of Pharmacy, Ashta . As a part of Academic project work they need to take IR of some samples. So Sir I request you to kindly allow our students for testing samples at your college. We are ready to pay all charges as per

your norms. Your cooperation is highly appreciable and acknowledged.









94 Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's ASHOKRAO MANE INSTITUTE OF PHARMACEUTICAL SCIENCES & (Approved by PCI & AICTE, New Delhi, DTE & MSBTE, Govt. of Maharashtra, Mumbai & Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere)

LATE SHRI. ASHOKRAO MANE Founder President

Ref. No.: AMIP5R5/700/2021-22

President Date: 10-3-2022

To,

The Principal, Annasaheb Dange college of Pharmacy.,

Ashta, Sangli.

Sub: Seeking permission for testing Samples by IR Spectroscopy

With reference to the subject cited above, I request you to permit our students for testing samples on Infrared Spectrophotometer at the facility available at Annasaheb Dange college of Pharmacy, Ashta As a part of Academic project work they need to take IR of some samples. So Sir I request you to kindly allow our students for testing samples at your college. We are ready to pay all charges as per

your norms. Your cooperation is highly appreciable and acknowledged.

With regards, ราสากระอบที่เวล Astata inches st. Science F. Rause of Laws, Bist, Kolhapur. 05×100 = 500 (rs MOLE G'D Remark: The studenty of AMCP, save were attended the bainin. of FTIR (BN/Kers - APP/19-11) & Porsformed FTIR analysis of as sapping on 13/06/2022 from to an am of a phone office: 7656040025 Address: Gat No. 878, A/P - Save, Tal - Shahuwadi, Dist. Kalhabur - 416 213 (Maharashtra) Phone office: 7656040025 samples on Website : www.amipsrs.org E-mail : amipsrs@gmail.com iress : Gat No. 878, A/P - Save, Tal - Shahuv 13/00/2022 NCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



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Shri. Balasaheb Mane Shikshan Prasarak Mandal. Ambap's ASHOKRAO MANE COLLEGE OF PHARMACY Approved by PCI & AICTE New Delhi, DTE-Government of Maharashtra, Affiliated to Shivaji University, Kolhapur

Estd. 2006 | Founder President: LATE SHRI, ASHOKRAO MANE Principal: DR. S. V. PATIL | President: SHRI, VIJAYSINH MANE

Peth Vadgaon Tal. Hatkanangale, Dist. Kolhapur (MH) PIN 416 112 Web: www.amcoph.org | Phone: 0230-2471360. 61 | E mail: copbpharm@gmail.com

Ref.:

Date: 16/06/2022

To, Principal Annasaheb Dange College of B Pharmacy, Ashta, Tal. Walwa, Dist. Sangli, Maharashtra, Pin- 416301.

Subject: Analysis of samples for FTIR.

Respected Sir,

With reference to the abovecited subject, the following mentioned student of our college studying in S. Y. M. Pharm (PQA) and carrying out his research work on phytochemical analysis of selected plant species. To complete his work, he would like to analyze hissamples for FTIR.

The details are as below:

sis Type of samples	Samples
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	Isolated compounds of the

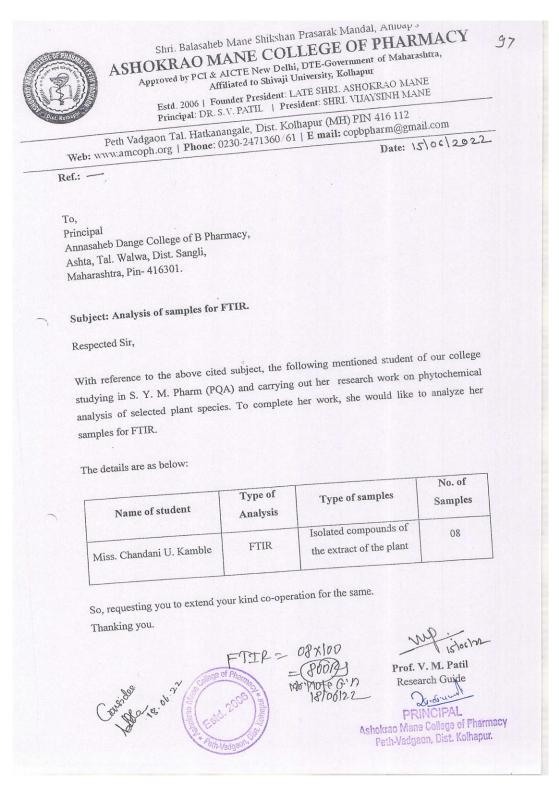
So, requesting you to extend your kind co-operation for the same.

Thanking you. FTTP=06 K100-600 Prof. V. M. Patil Contra & a . a. a. Un Research Guide 18/06/22 PRINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



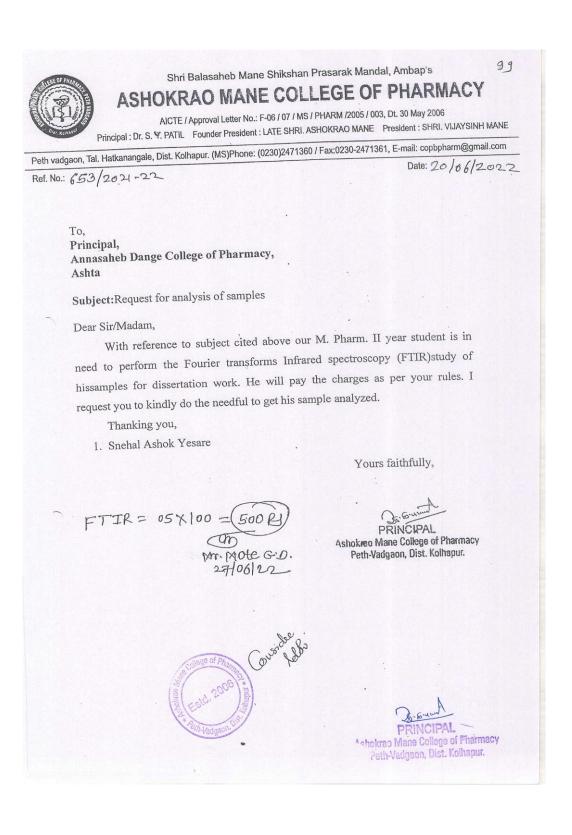
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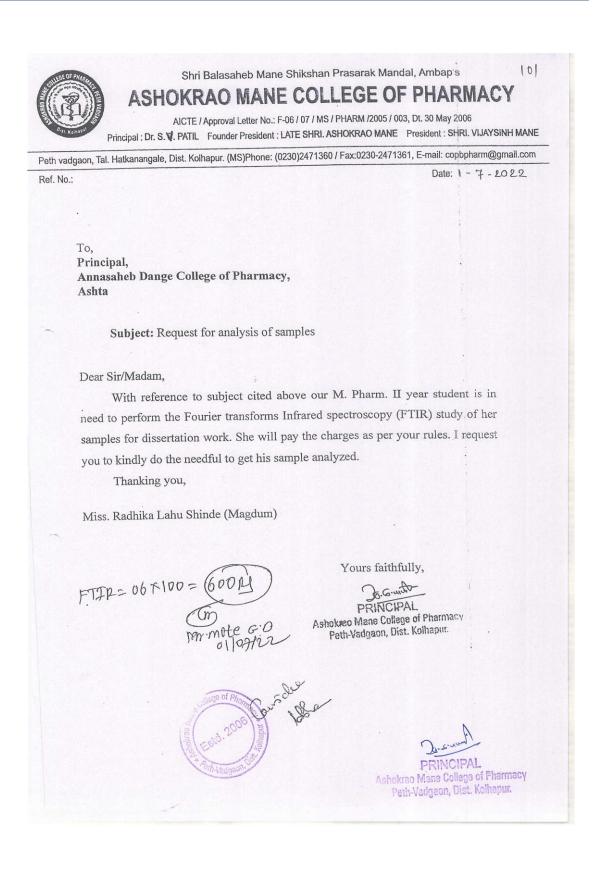
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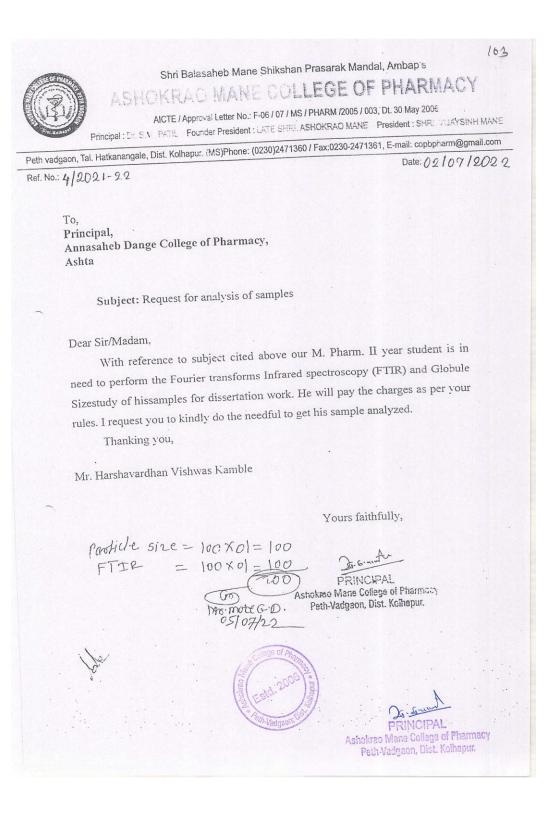
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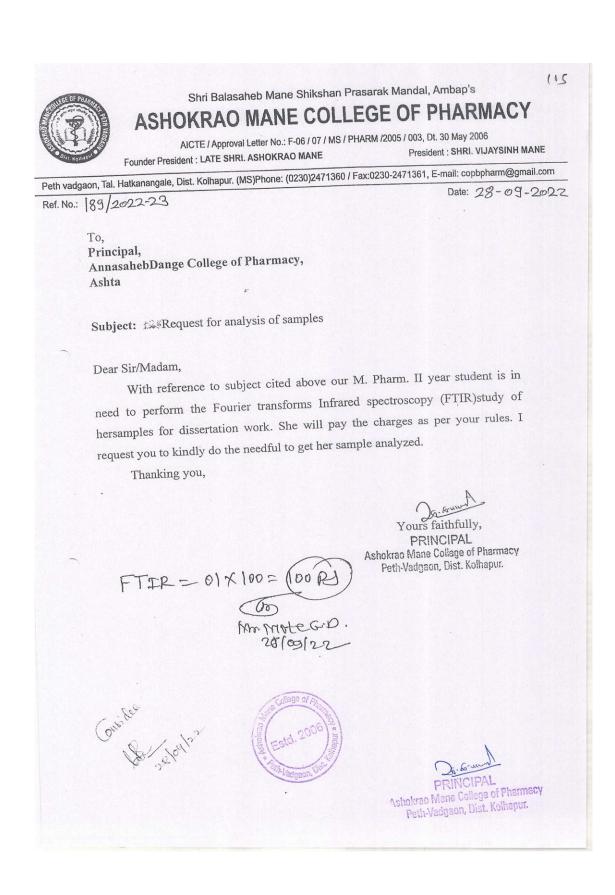
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Fell-Vadgaon, Dist. )	Section Head Accounts Office Page 1 of 1		



To,

The Principal,

Annasaheb Dange College of Pharmacy, Ashta

Respected Sir,

# REQUEST FOR PARTICLE SIZE AND ZETA POTENTIAL ANALYSIS

With reference to the subject cited above, I undersigned Dr. Rajkumar S Bagali, Professor, Ashokrao Mane College of Pharmacy, Vadagaon required to carry out Particle size and Zeta Potential analysis of 18 samples as a part of my research project.

I will be highly obliged if you avail the same at your college. I will pay the requisite fees for the same. Please do the needful Dhanraf Suresh Shetty

Thanking you,

Yours Sincerely,

Dr. Rajkumar S Bagali,

Professor,

Ashokrao Mane College of Pharmacy, Vadagaon

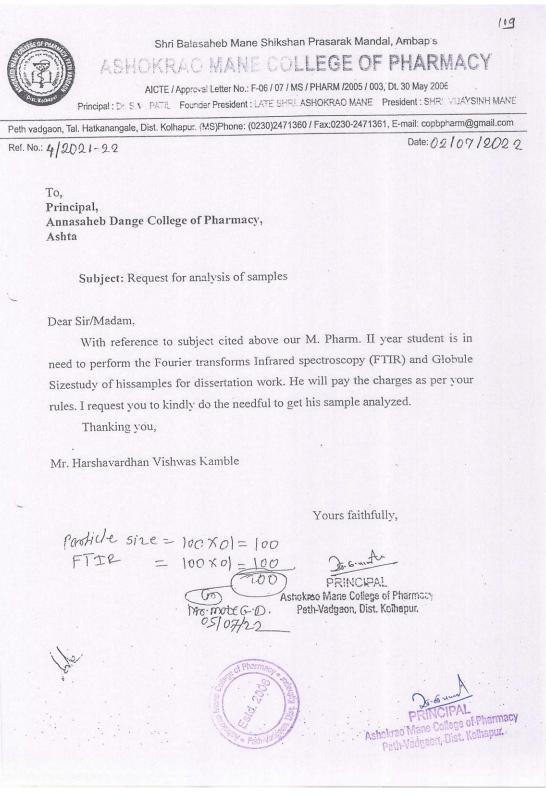
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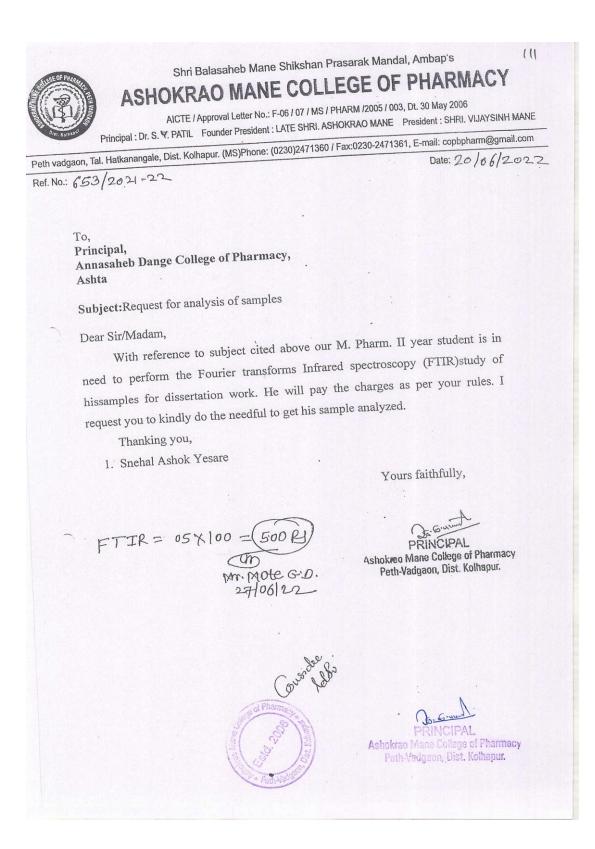
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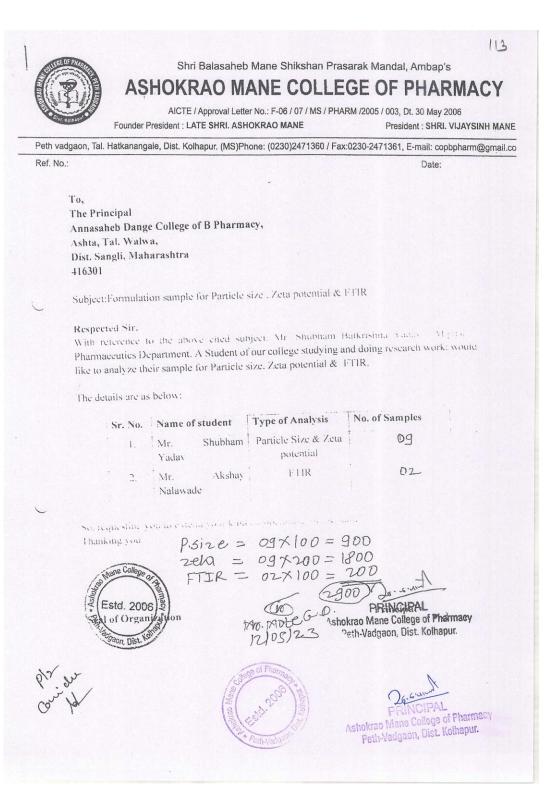




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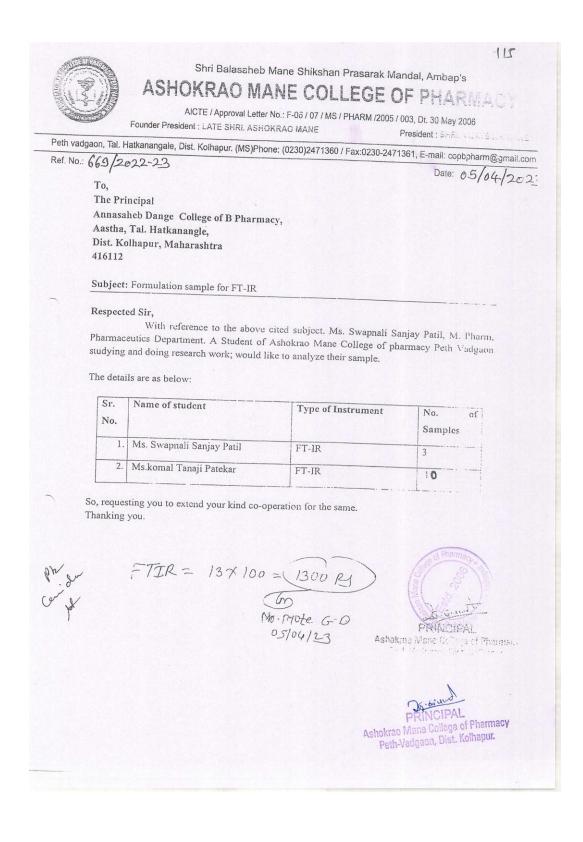


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the second Tal	Hatkananga	ale, Dist. Kolhapur. (MS)Phone: (02	230)2471360 / Fax:0230-24713	361, E-mail: copbpharm@gmail.com Date:
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	espected S	With reference to the above c	ited subject, Ms. Chole Div	vya Sambhaji, M. Pharmacy, of pharmacy Pethvadgaon
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P s	harmaceuti tudying and The details	are as below: Name of student	ited subject, Ms. Chole Div f Ashokrao Mane college like to analyze their sample	No. of Samples

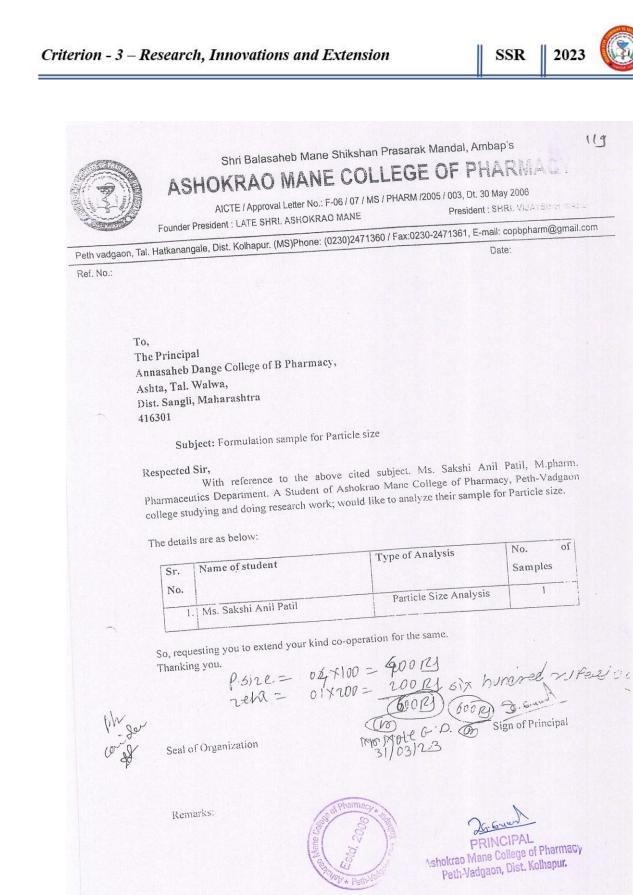
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	Sant Dnyaneshwar Shikshan Santha Annasaheb Dange College of B Pharma Ashta, Tal. Walwa, Dist. Sangli PIN 416 CASH RECEIPT / CREDIT	cy(2022-2023) 301 Receipt No: CR-603 Date : 31/03/2023
Sum of I	d from <b>Mr. Chole Divya Sambhaii</b> Rs. <b>1300 /-</b> ysis for Partical Size & zeta Potentinal	Amount
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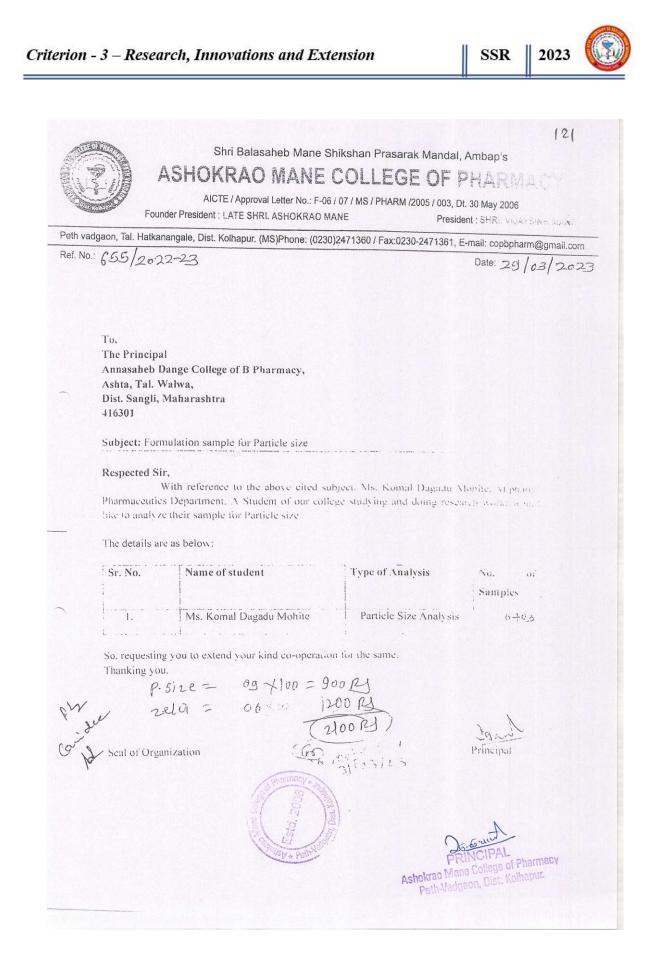
Section Head Accounts Office Page 1 of 1



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**Back to Index** 

Checked by Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

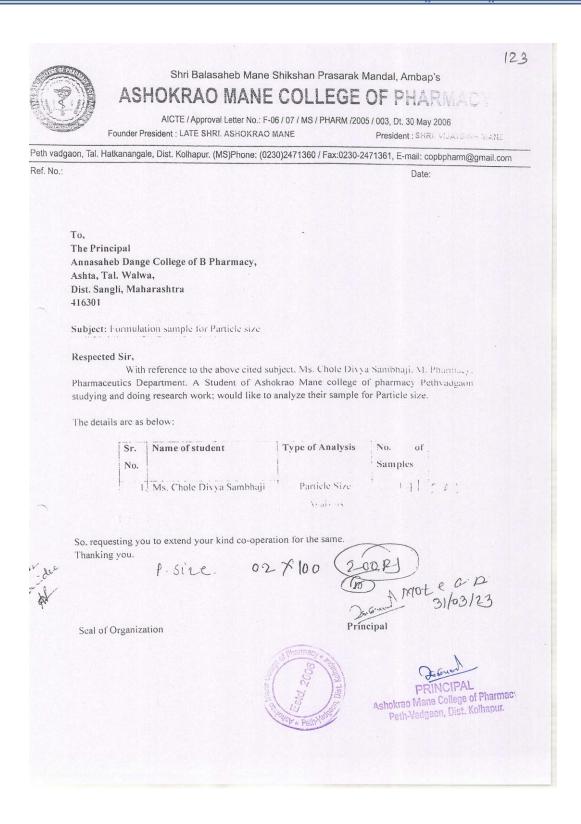




	saheb Dange College of B Pharmacy(20 Ashta, Tal. Walwa, Dist. Sangli PIN 416 301	122-2023)	
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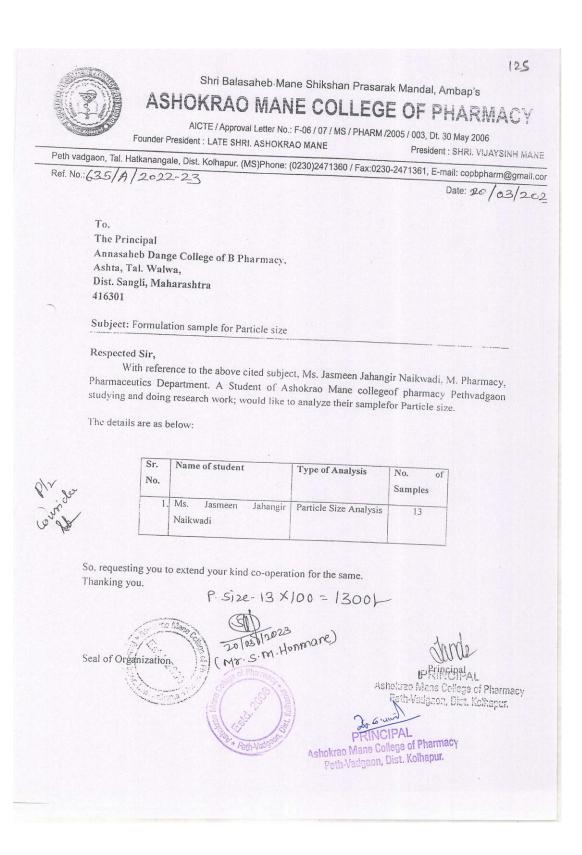
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#### BHARATI VIDYAPEETH COLLEGE OF PHARMACY, KOLHAPUR 'SHARING OF HUMAN RESOURCES ACTIVITY' Under Lead College Scheme of Shivaji University, Kolhapur.

To, The Principal,

Ashokrao Mane College of Pharmacy, Pethvadgaon

Sub: Appointment of experts to conduct Sharing of Human Resources activity under lead college scheme of Shivaji University, Kolhapur.

Dear Sir/Madam,

With reference to the subject cited above, please find the list of experts from your institute to conduct Sharing of Human Resources activity as per the schedule given below. You are therefore requested to

make necessary arrangement and cooperation for the smooth conduction of the activity.

Center name	Faculty/expert name, contact no.	Date	Class	Topic	
Sant Gajanan Maharaj College of Pharmacy, Mahagaon	Dr. Santosh Gejage Mobile: 9665388581	01 to 05 Feb 2020	UG/PG	Patent law management	
Annasaheb Dange College of Pharmacy, Ashta	Mrs. S. V. Sutar Mobile: 9604260633	01 to 05 Feb 2020	UG/PG	Forced degradation and stability studies of drugs	
College of Pharmacy, Medha	Mr. S. A. Bandgar Mobile: 8600009719	01 to 05 Feb 2020	UG/PG	BA and BE in drug development	
atara College of Pharmacy, egaon	Mohile 9/6/314337	01 to 05 Feb 2020	UG/PG	Stereochemistry Chronopharmacology	
GIPER, Limb	Dr. R. S. Bagali Mobile: 8788185450	01 to 05 Feb 2020	UG/PG		

Kindly requesting you to relieve the above-mentioned faculty of your college.

Note: 1) Concerned expert should confirm the time and date schedule from respective college.

2) Expert should collect the attendance certificate from respective college after completion of the lecture. It is mandatory to conduct the activity before 5<sup>th</sup> Feb 20.

3) Expert will be given minimum Rs. 1000/- remuneration from the respective allotted college.
 4) Honorarium amount of Rs. 1000/- per expert will be paid from Lead college for one session which will not be less than two hours **only after submission** of detail report consisting scanned copy of attendance certificate and honorarium voucher (signed scanned copy) to lead college email.

Thanking you.

Regards,

Mr. D. T. Gaikwad Secretary Dr. H. N. More Chairman, Lead College Working Committee

PRI

shokrao Mane College of Pharmac Peth-Vadgaon, Dist. Kolhapur.



Sant Dnyaneshwar Shikshan Sanstha's COLLEGE OF B PHARMACY, ASHTA (Approved by AICTE, New Delhi, PCI, New Delhi, Govt. of Maharashtra and Affiliated to Shivaji University, Kolhapur)

Ref. AD(BP/10-20/164.

Date: 01/02/2020.

To, Mrs. S. V. Sutar Assistant Professor, Dept of Pharmaceutical Chemistry, Ashokrao Mane College of Pharmacy Pethwadgaon, Dist- Kolhapur.

#### LETTER OF APPRECIATION

#### Dear Madam,

On the behalf of Annasaheb Dange College of Pharmacy, Ashta and Shivaji University, Kolhapur; we are exceedingly pleased for delivering lecture on 'Forced degradation and stability studies of Drugs' for Final B. Pharm (Sem-VIII) students as a part of Sharing of Human Resources activity under lead college scheme of Shivaji University Kolhapur. We have successfully concluded this programme by your auspicious presence and guidance on Saturday, 01/02/2020.

I sincerely express my deep sense of appreciation for gracing the occasion with valuable guidance to our students.

Thanking You. Yours The Toleson Annascheb Dame College of Dr. R. B. Jadhav



PRINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

Ashta, Tal.-Walwa, Dist.-Sangli. Maharashtra - 416 301. Ph. 02342-241125, E-mail: principaladcbp@gmail.com



# Development and Optimization of Capecitabine loaded Nanoliposomal System for Cancer Delivery

Sandip Mohan Honmane<sup>1</sup>, Sagar Maruti Chimane<sup>2</sup>, Sandip Akaram Bandgar<sup>2,\*</sup>, Shitalkumar Shivagonda Patil<sup>2</sup>

Department of Pharmaceutics, Annasaheb Dange College of B. Pharmacy, Ashta, Shivaji University, Kolhapur, Maharashtra, INDIA. 2Department of Pharmaceutics, Ashokrao Mane College of Pharmacy, Peth-Vadgaon, Shivaji University, Kolhapur, Maharashtra, INDIA.

#### ABSTRACT

Objectives: The Main objective of this study was to develop and optimize Capecitabine Objectives: The Main objective of this study was to develop and objinize dependent loaded nanoliposomes for prolonged drug delivery in cancer treatment. Methods: Liposomes were prepared by the thin film hydration method followed by sonication. The parameters affecting the vesicle size and percentage drug entrapment of liposome are amount of soyaphosphatidyl choline and cholesterol used in their preparation. The Capecitabine liposomal formulation was optimized using 3<sup>2</sup> factorial design in this amount of soya Phosphatidylcholine and cholesterol were selected as two independent variables to obtain stable liposome with small vesicle size and maximum entrapment efficiency. Results: Compatibility studies were carried out by using FT-IR and DSC, the results showed that there was no significant interaction between drug and excipients. The formulated liposomal prepartions were evaluated for various parameters and results were obtained for optimized batch (B3) Showed vesicle size 178.9nm, zeta potential -77.9mV to -82.7mV, entrapment efficiency 79.65% and percentage drug release 92.07% up to 12 h. Conclusion: Liposomal drug delivery is targeted as to provide more drug concentration at the site of action and with a sustainable drug release followed Higuchi-matrix model. Ultimately, reducing the dosing frequency with minimizing the side effects related to high drug intake. Liposome has been provided a spectrum of options and opportunities for designing and practicing site specific, targeted drug therapy.

Key words: Capecitabine, Liposome, 3<sup>2</sup> Factorial design, Percent drug entrapment, **Release kinetics** 

#### INTRODUCTION

Nowadays cancer is the main cause of death in human beings after cardiovascular disease. The most common forms of cancer are breast, prostate, colon and lung cancers. Presently chemotherapy, hormonal, gene, surgery and radiation therapies are used to treat cancer. But chemotherapeutic agents are commonly preferred to treat cancer. However, due to high doses of these drugs cause toxic effects. Most common side effects like gastrointestinal problems and systemic side effects will appear in anticancer therapy.1 Successfully translating anticancer nano medicines to demonstration of therapeutic value in the clinic is challenging. Despite liposomes have been proven Indian Journal of Pharmaceutical Education and Research |Vol 54 | Is

to be an ideal drug carrier that has a strong impact on the pharmacokinetics and tissue distribution of incorporated drugs, resulting in enhanced efficacy as well as greatly reduced systematic toxicity of drugs. Liposome have gained attention as a carrier system for a therapeutically active agent, owing to their unique characteristics, biocompatible, biodegradable, low toxicity, lack of opsonization and improves the pharmacokinetics and pharmacodynamics profile of therapeutic agent.2 Structurally, liposomes are concentric bilayer vesicles of natural or synthetic phospholipid.34 Due to their hydrophobic, hydrophilic and small size; liposomes are promising systems for drug Submission Date: 30-08-2019; Revision Date: 18-11-2019; Accepted Date: 04-02-2020

DOI: 10.5530/ijper.54.2.43 Correspondence. Mr. Sandip Akaram Mr. Sandip Akaram Bandgar Department of Pharmaceutics, Ashokrao Mane College of Pharmacy, Peth-Vadgaon, Shivaji University, Kolhapur-416112, Maharashtra, INDIA. Phone: +91-8600009719 E-maii: sandiphonmane@ amaii.com gmail.co



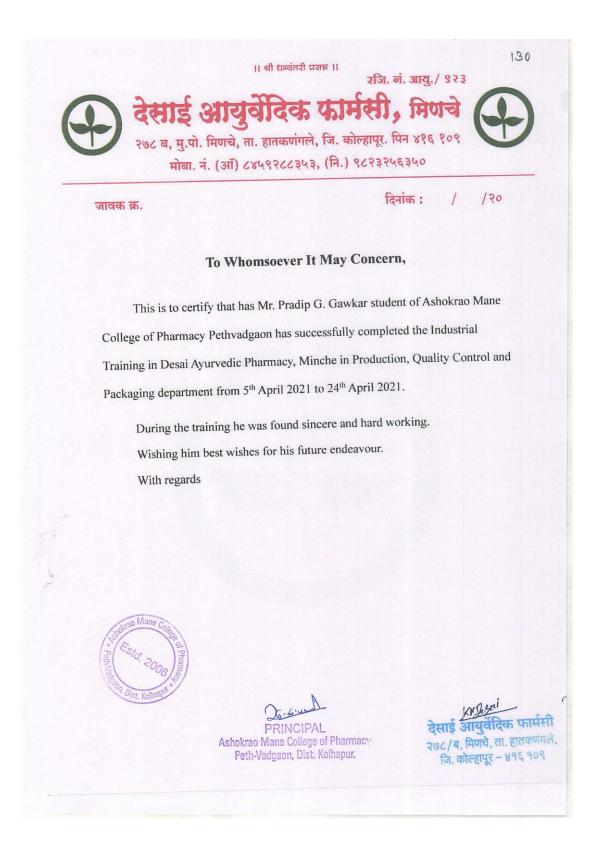
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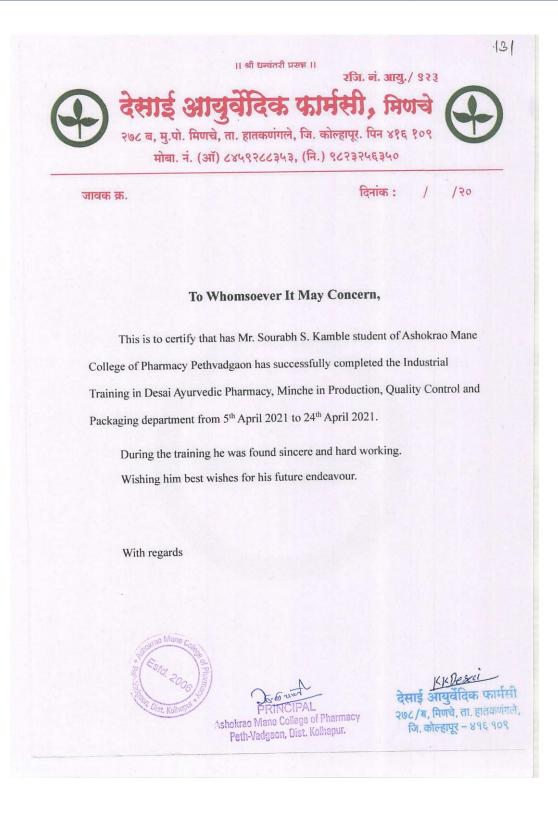
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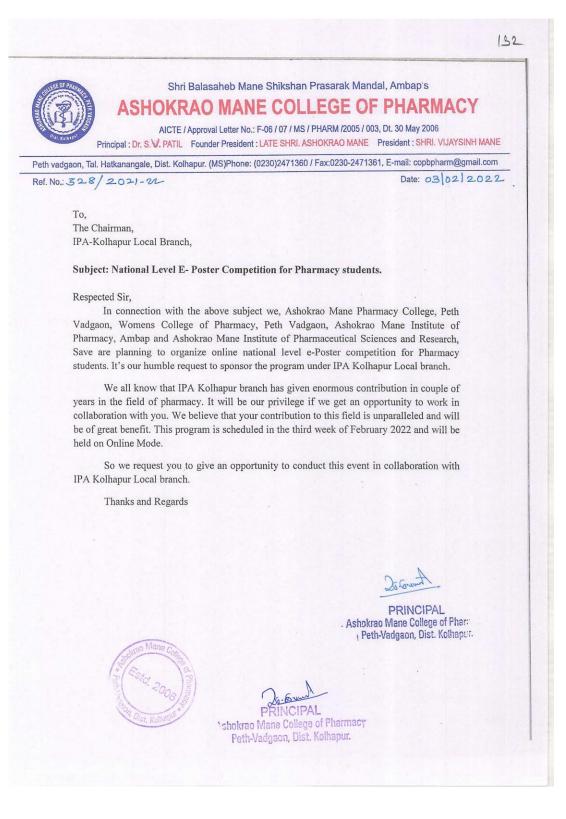
## Activities conducted under the MoU of Desai Ayurvedic Pvt. Ltd. Pethvadgaon.



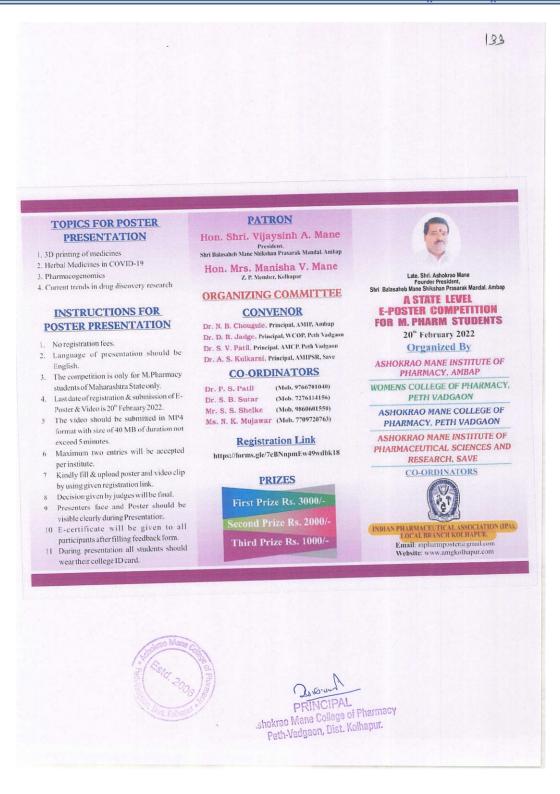




# Activities conducted under the MoU of The Indian Pharmaceutical Association, Local Branch Kolhapur.





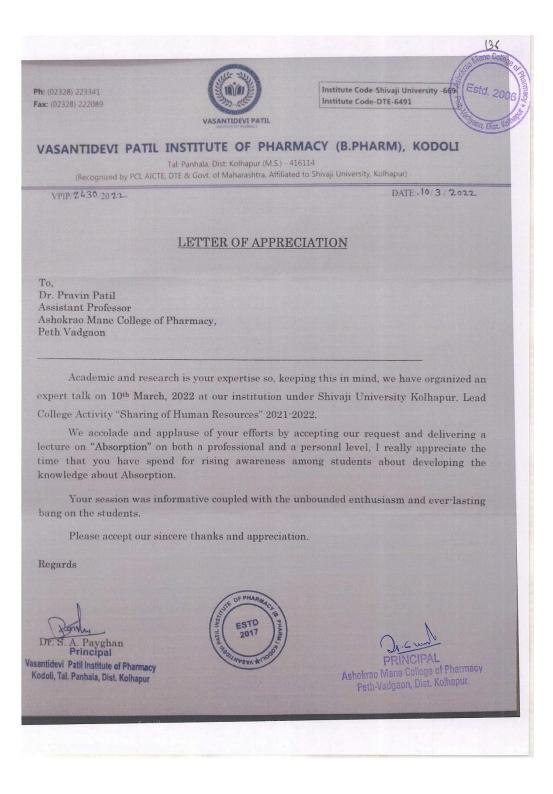


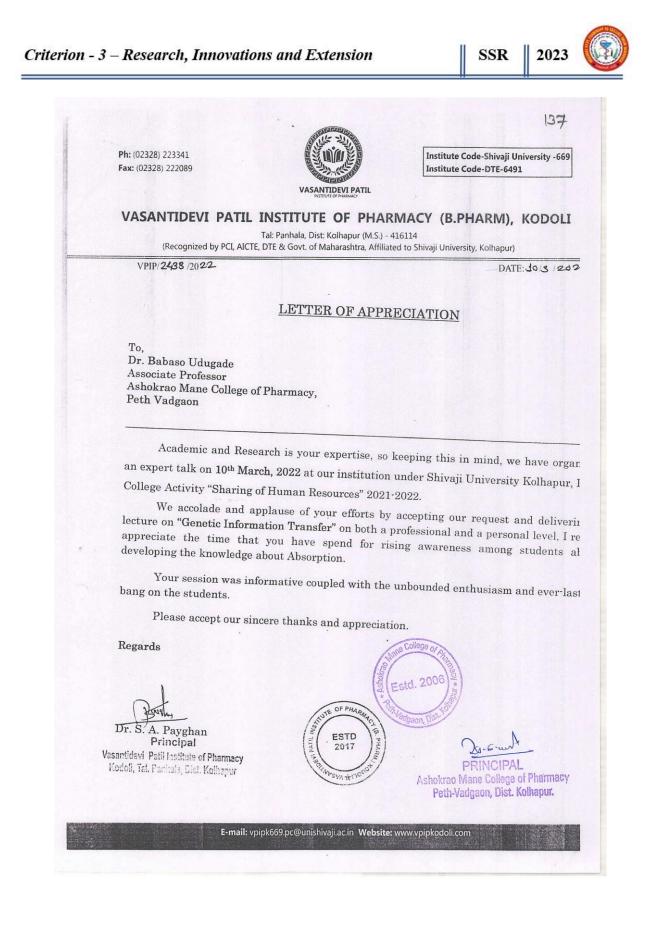




# Activities conducted under the MoU of Vasantidevi Patil Institute of Pharmacy, Kodoli.

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	<b>COLLEGE OF PHARM</b>	IACY, F	<b>KOLHA</b>	PUR
Permanently Affiliated to FOUNDER & CHANCELLOR Dr. Patangrao Kadam M. A. L.L.B. Ph. D.	Ranked 62 <sup>nd</sup> in India by NIF Approved by AICTE a o Shivaji University, Kolhapur & incl B. Pharm. Course Re-accredi Lead College-Shivaji U Near Chitranagari, Koll	nd PCI, New luded in list ited by NBA niversity, K	v Delhi under Sect A, New Del olhapur	: 2 (F) & 12 (B) of UGC Act, 1956
To, The Principal, Ashokrao Mane C	ad College-121 /2021-2022 ollege of Pharmacy, Pethvadgao			Date: 28/02/2022
Shivaji Unive Dear Sir/Madam, With reference to th Human Resources a	ersity, Kolhapur. ne subject cited above, please find th	e list of exp below. Yo	perts from u are ther	your institute to conduct Sharing of efore requested to make necessary
Allotted Ce		Date	Class	Area of Expertise
Bharati Vidyap College of Phar Kolhapur		02 to 15 March	UG/PG	Incompatibility Pharmaceutical Chemistry, Pharmaceutical Analysis Analytical Chemistry Stress degradation study Standardization of Herbal formulation Pharmaceutical
Vasantidevi Pa Institute of Pha Kodoli	M. C. H. C. 11	2022		Inorganic Chemistry NDDS Dosage form development Analytical Chemistry Medicinal Chemistry
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Enclosed: Honora	arium voucher/ Receipt			PRINCIPAL Ashokrao Mane College of Pharma
Web: http://copko	olhapur.bharatividyapeeth.edu			Peth-Vadgaon, Dist. Kolhapur. E-mail: bvcpklc@rediffmail.com





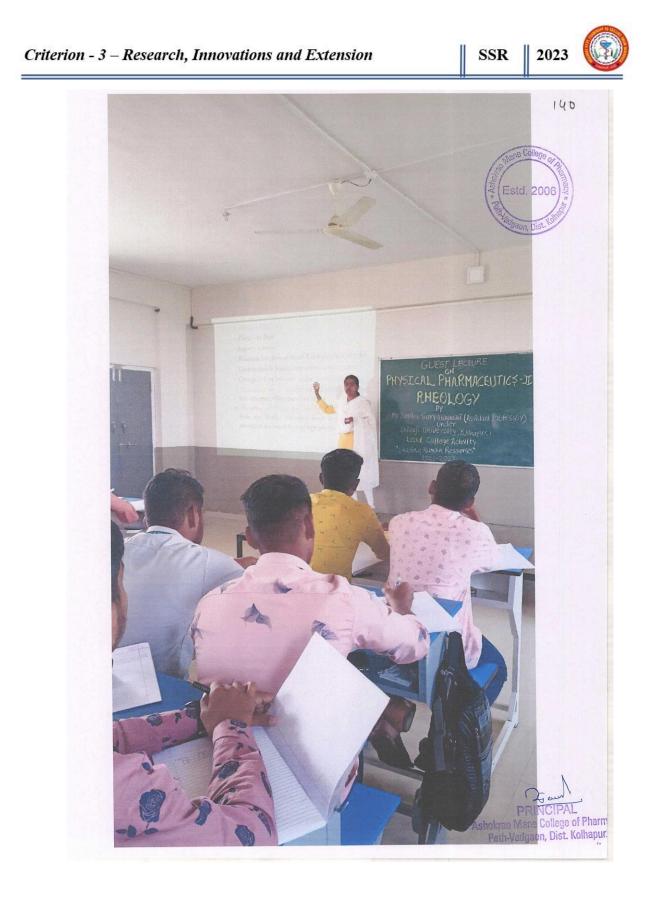


138 Ph: (02328) 223341 Institute Code-Shivaji University -669 Fax: (02328) 222089 Institute Code-DTE-6491 ASANTIDEVI PATIL VASANTIDEVI PATIL INSTITUTE OF PHARMACY (B.PHARM), KODOLI Tal: Panhala, Dist: Kolhapur (M.S.) - 416114 (Recognized by PCI, AICTE, DTE & Govt. of Maharashtra, Affiliated to Shivaji University, Kolhapur) VPIP/2421/20 22 DATE: 09/3/2=22 Invitation To. Ms. Sarika Survawanshi Assisstant Professo Ashokrao Mane College of Pharmacy, Peth Vadgaon Reference: BV/CPK/ SHR-Lead College-121 /2021-2022 Date: 28/02/2022 Subject: Invitation for expert talk on topic, "Physical Pharmaceutics-Rheology" Madam. With reference to the subject cited above, you are invited as expert to conduct Sharing of Human Resources Activity under Lead College Scheme of Shivaji University, Kolhapur. - Nurturing creativity and inspiring innovation are the key elements of a successful education. Vasantidevi Patil Institute of Pharmacy, Kodoli established in 2003 with the aim to enhance the quality education in the field of Pharmacy and empower the quality pharmacist to serve the society. It strives for an intellectual endeavor that focuses on critical and creative thinking, while the aim of social transformation. Your guidance will definitely provide a platform to students for developing and applying their skills which will explore them to the world of pharmacy, where skills are recognized, respected, ad rewarded. Keeping this mind we are organized an expert talk on topic of "Physical Pharmaceutics-Rheology" on 09th March, 2022 under Shivaji University Kolhapur, Lead College Activity "Sharing of Human Resources" 2021-2022. For the same I would like to invite you to deliver an expert talk on topic of "Physical Pharmaceutics Rheology". Your valuable guidance will really be beneficial for the students as well as institution. So, kindly confirm your presence by acknowledging this invitation. OF PHAN Thanking you, ESTD Regards ..... 2017 Ashokrao Mane College of Pharmac Agrishan Peth-Vadgaon, Dist. Kolhapur. Dr. Sprinefyshan SVANT E-mail: vpipk669.pc@unishivaji.ac.in Website: www.vpipkodoli.com til Inchitute

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	LETTER OF APPRI	ECIATION		
To, Ms. Sarika Suryawanshi Assisstant Professor Ashokrao Mane College o Peth Vadgaon	f Pharmacy,			
Academic and soci:	il excellence with develo	oning the knowled	ge of host's adaptiv	7e
and the effects of dosag				
molecular level. Keeping i	his in mind, we have or	rganized an exper	t talk on 09 <sup>th</sup> Marc	h,
2022 at our institution	under Shivaji Univers	sity Kolhapur, L	ead College Activi	ty
"Sharing of Human Resou	rces" 2021-2022.			
We accolade and ap lecture on "Physical Phai level, I really appreciate students about developing	the time that you have	n both a profess ve spend for risi	ional and a person	nal
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Regards		Name Collas		
Dr. S. A. Payghan Principal Vasantidevi Patil Institute of Phermocy	COS PHARMACH BY MARMACH BY MARMAC	Estd. 2008	PRINCT Ashokrao Mane Colle Peth-Vadgaon, D	PAL ege of Pharmacy ist. Kolhapur.
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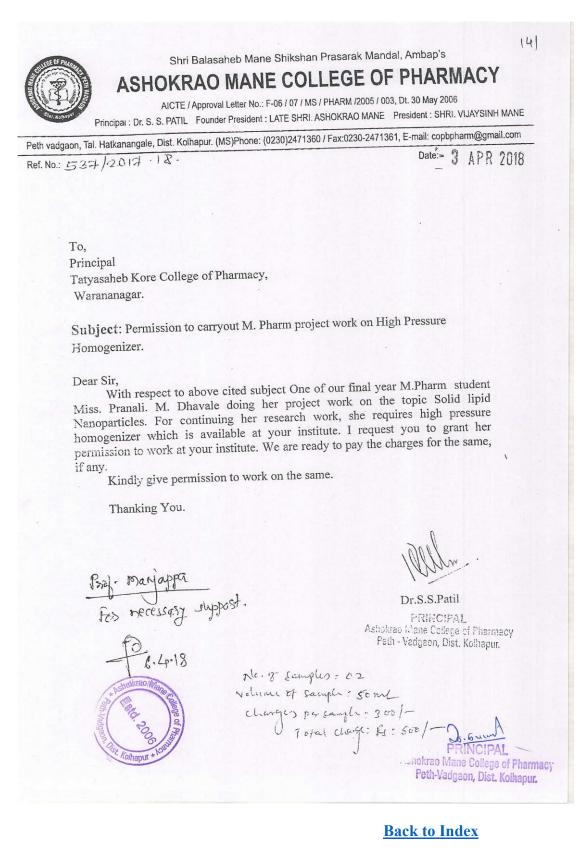
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### <u>Activities conducted under the MoU of Tatyasaheb Kore College of Pharmacy,</u> <u>Warananagar.</u>





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Print Constant

# Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's ASHOKRAO MANE COLLEGE OF PHARMACY

AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006 Principal : Dr. S. S. PATIL Founder President : LATE SHRI. ASHOKRAO MANE President : SHRI. VIJAYSINH MANE Peth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com

Ref. No.: 520 /2018-19

Date: 1 8 FEB 2019

To, The Principal, Tatyasaheb Kore College Of Pharmacy, Warananagar.

Subject- About FTIR study of samples

Dear Sir,

With respect to above cited subject one of our M. Pharm II year student Miss. Aditi Prakash Sutar is in need of performing FTIR study of sample at your esteemed institute.

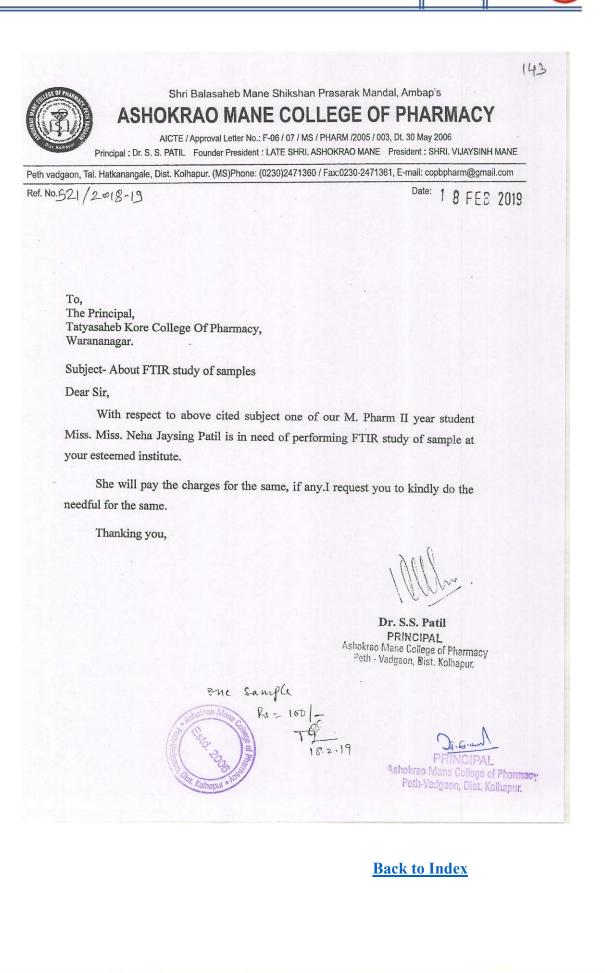
She will pay the charges for the same, if any.I request you to kindly do the needful for the same.

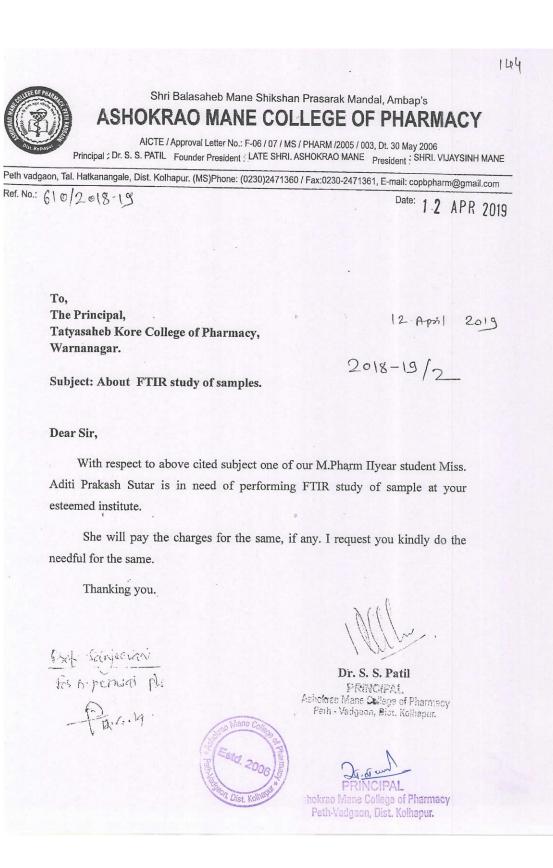
Thanking you,

Dr. S.S. Patil PRINCIPAL Ashokrao Mane College of Pharmacy Peth - Vadgaon, **B**ist. Kolhapur,

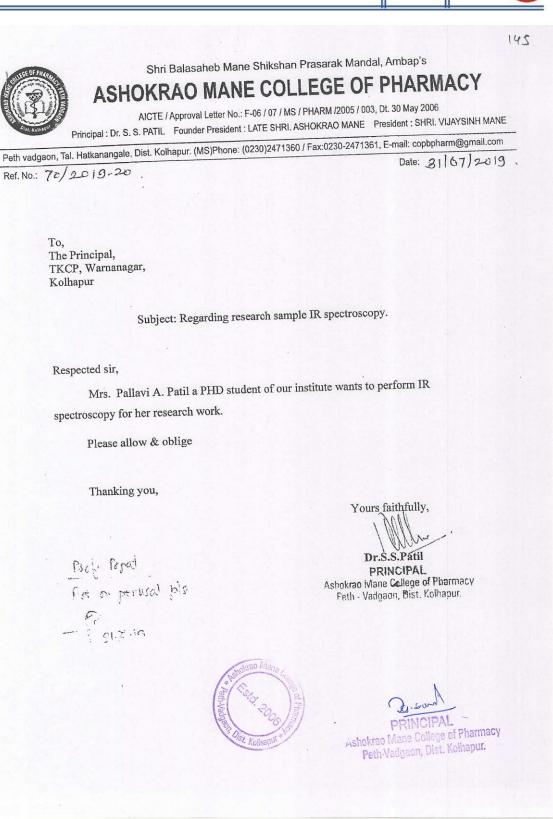
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Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.









Date: 11-07-2022

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Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's ASHOKRAO MANE COLLEGE OF PHARMACY

AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006 Principal : Dr. S. V. PATIL Founder President : LATE SHRI. ASHOKRAO MANE President : SHRI. VIJAYSINH MANE

Peth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com

Ref. No.: 22/2022-23

To. The Principal. T.K.C.P. Warananagar.

Subject: Request to carry out practical work at your college.

Respected sir.

One of our M. Pharm II Year student. Mr. Omkar Rangrao Suryawanshi is working on the project titled "Development and Evaluation of Mouth Dissolving Tablet of an Antimalarial Drug". For that he needs to compress tablets in single punch 12 mm die which is available at your college. So, I request you to allow him to carry his work at your college on your apparatus. If required, he will pay charges as per your college norms.

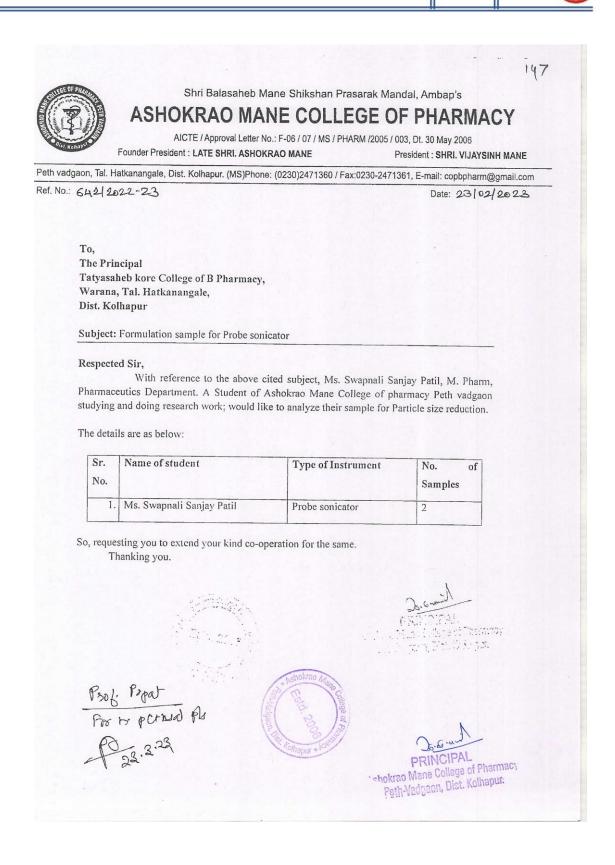
Requesting you to allow him for his work. Thanking you

5.0.

Dr.S.V.Patil PRINCIPAL Ashokao Mana College of Pharmacy Peth-Vadgaon, Dist. Kolheput.

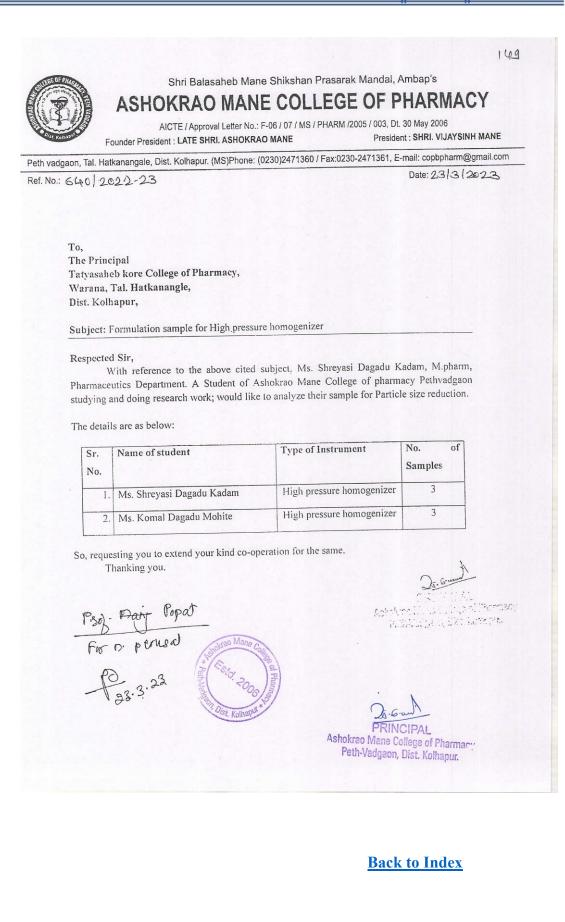
Prof: Siraphil Chopade For p. perusel pla 5.7.22

hokrao Mene College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.



		ASHOKRAO MANE AICTE / Approval Letter No.: F-	06 / 07 / MS / PHARM /2005 / 003, Dt. 3	
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Date: 06/04/2023



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### Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's

# ASHOKRAO MANE COLLEGE OF PHARMACY

AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006 Founder President : LATE SHRI. ASHOKRAO MANE President : SHRI. VIJAYSINH MANE

Peth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com

Ref. No.:671/2022-23

### To,

The Principal Tatyasaheb kore College of Pharmacy, Warana, Tal. Panhała, Dist. Kolhapur, Maharashtra 416112

Subject: Formulation sample for High pressure homogenizer

Respected Sir,

With reference to the above cited subject, Ms.Pooja Vasant Nandnikar, M.Pharm. Pharmaceutics Department. A Student of Ashokrao Mane College of pharmacy Peth Vadgaon studying and doing research work; would like to analyze their sample for Particle size reduction.

The details are as below:

Sr. No.	Name of student		lent	Type o Instrument	f No. of Samples
1.	Ms. Pooja Vasant Nandnikar		Vasant	High pressure homogenizer	3

So, requesting you to extend your kind co-operation for the same. Thanking you.

7.5.0 Seal of Organization Principal Prof. Popat F5 n. perwal PO Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur. **Back to Index** 



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Drug Delivery and Translational Research https://doi.org/10.1007/s13346-020-00752-1 ORIGINAL ARTICLE



A remarkable in vitro cytotoxic, cell cycle arresting and proapoptotic characteristics of low-dose mixed micellar simvastatin combined with alendronate sodium

Sandip A. Bandgar<sup>1,2</sup> • Namdeo R. Jadhav<sup>2</sup> • Arehalli S. Manjappa<sup>3</sup>

C Controlled Release Society 2020

The objective of the present study was to screen the effect of increased simvastatin (SVS) solubility, through mixed micelles as a model approach, on in vitro anticancer efficacy in combination with hydrophilic alendronate sodium (ADS) as a strategy to improve therapeutic efficacy and to repositioning the existing drugs. The SVS-loaded mixed micelles (SVS-MMs) composed of TPGS and Poloxamer-407 were prepared using the film dispersion method and characterized for SVS loading and mean particle size. The optimized SVS-MMs were physically mixed with plain ADS (SVS + ADS MMs) and screened for in vitro cytotoxicity using MTT assay and cell cycle arresting and apoptotic activities using FACS technique. The optimized SVS-MMs showed maximum SVS loading (97.3  $\pm$  2.3%) with minimum particle size (206  $\pm$  8 nm). The SVS + ADS MM treatment significantly (P < 0.001) inhibited the cell growth with low IC<sub>50</sub> values against all cells (A549: 0.037 ± 0.028 µg/mL, MDAMB-231: 0.172 ± 0.028 µg/mL)  $0.031 \mu g/mL$ , PC-3:  $0.022 \pm 0.015 \mu g/mL$ ). Further, the SVS + ADS MM treatment significantly inhibited the cell multiplication in the S phase and resulted in high % of late apoptotic and necrotic cells at low concentration (0.05 and 0.15 µg/mL) as compared other test samples. The above results revealed the significance of encapsulating SVS in the core of MMs (improved solubility), and high efficacy and quick effect of SVS + ADS MM treatment against all cell lines screened.

Keywords Simvastatin  $\cdot$  Bisphosphonate  $\cdot$  Mixed micelles  $\cdot$  Cytotoxicity  $\cdot$  Cell cycle arresting and apoptosis

Estd. 2006

### Introduction

Statins [3-hydroxy-3-methylglutaryl-CoA (HMG-CoA) reductase inhibitors], clinically used to reduce blood cholesterol levels, are the second-most prescribed drugs after analgesics and are also considered to be among the safest drugs [1]. In cell-based experiments (in vitro and experimental animal

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s13346-020-00752-1) contains supplementary material, which is available to authorized users.

Namdeo R. Jadhav nrjadhav18@rediffmail.com

- Department of Pharmaceutics, Ashokrao Mane College of Pharmacy, Peth Vadgaon, Maharashtra 416112, India
- Department of Pharmaceutics, Bharati Vidyapeeth College of Pharmacy, Kolhapur, Maharashtra 416013, India
- Department of Pharmaceutics, Tatyasaheb Kore College of C Pharmacy, Warananagar, Maharashtra 416113, India

Published online: 27 March 2020

models), the hydrophobic statins (simvastatin, lovastatin, and fluvastatin) have displayed inhibitory effects on many cancers [1, 2]. Schmidmaier et al. have proved (in phase II clinical study) the pivotal role of simvastatin (SVS) in reducing drug resistance by inhibition of HMG-CoA reductase and antimyeloma activity in humans [3]. Besides, many researchers are investigating SVS in clinic for the treatment and management of various cancers and associated metastasis (https://clinicaltrials.gov/).

Nitrogen-containing bisphosphonates (NBPs; alendronate sodium (ADS)) have been proved to reduce and delay bone complications from bone metastasis, and have been used in over 4 million patients worldwide for the treatment of bone metastasis from solid tumors, bone complications, and pain from multiple myeloma. In the clinic, NBPs have been demonstrated additional direct anticancer effects [4].

SVS and ADS are known to affect cholesterol metabolism and biosynthesis by inhibiting the mevalonate pathway via potentially inhibiting the critical enzymes of the mevalonate pathway (HMG-CoA reductase and farnesyl pyrophosphate synthase (FPPS) respectively), thus having the negative effects at

D Springer

Shokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

	<u>A</u>	pproveu expe	rt appointments for Sharing			(scholkrao
Sr	Name of faculty with	Name of	Topics		Area of expertise	Allotted College
No	designation	College	UG	PG		
	Dr. Javeed Y Manure Asst. Prof.		IR Spectroscopy	-	Modern Techniques of Analysis	ADCP, Ashta
	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)	ABCP, Sangli	Role of free radicals in different diseases.		Role of free radicals in different diseases.	ADCP, Ashta
	Dr. Smt. P. L. Ladda	ABCP, Sangh	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
	Dr. Smt. Preeti G. Karade Assistant Prof.		Flow of fluids, Heat Transfer	-	Pharmaceutical Engineering	DSKCP, Digraj
	Dr. Jagtap R. S. Associate Professor	ADCP, Ashta	Subject: Pharmaccutical Biotechnology Semester-VI Topies: Media, equirements, study of media, equirements, study of media, equirements, study of stirring Recombinant DNA technology. Application of genetic engineering in medicine		Pharmaceutics	ABCP, Sangli
8)	Dr. Tamboli E. T. Associate Professor		Subject: Pharmacognosy and phytochemistry-1 Semester IV Topics: Plant tissue culture: Historical development of plant tissue culture, Nutritional requirements, growth and their maintenance.	_	Pharmacognosy and phytochemistry Pharmaceutics Count PRINCIPAL	ABCP, Sangli
9)	Mr. Pattekari S. N.		Subject:		Pharmaceutics 1 6. 6.	ABCP, Sangli



	Assistant Professor		Physical Pharmaceutics-II Semester IV Topics: Micromeritics, Rheology, Colloidal dispersions, Coarse dispersions, Drug Stability			A Asloc
10)	Mr. Honmane S. M. Assistant Professor		Subject: Physical Pharmaceutics-II Semester IV Topics: Solubility and Solutions, Surfactant: Micellization, CMC, Adsorption Isotherm, Dispersed System, Drug Stability: Accelerated Stability study	Preformulation, Drug Discovery and Development	Pharmaceutics	DSKCP, Digraj
11)	Ms. Jadhav P. H. Assistant Professor		Subject: Pharmaceutical Analysis-I Semester I Topic: Fundamentals of acid-base titrations		Pharmaceutical Chemistry	DSKCP, Digraj
12)	Mr. Mote G. D. Assistant Professor		Subject: Pharmaceutical Organic Chemistry-III Semester- IV Topics: Optical Isomerism Geometrical Isomerism		Pharmaceutical Chemistry	DSKCP, Digraj
13)	Dr. Neha V. Bhilare Associate Professor Department of Pharmaceutical Chemistry		I. Impurities in Pharmaceutical Substances     Z. Buffers in pharmaceutical systems and methods of adjusting isotonicity     3. Radiopharmaceuticals     4. Gastrointestinal agents		Prodrug Design and Bioanalytical method development	GCOP, Karad
14)	Ms. Pallavi L. Salve Assistant Professor	AGCOP, Jaitapur	First Year B. Pharm. Sem - I Pharmaceutical Inorganic Chemistry (TH) <b>Topics</b> – 1. Major extra and intracellular electrolytes. 2. Antimicrobial agents. First Year B. Pharm. Sem -II Biochemistry (TH) <b>Topics</b> –	-	Teaching Pharmaceutical inorganic chemistry, Biochemistry, Instrumental methods analysis with modern pedagogical tools and techniques.	GCOP, Karad
			Biochemistry (TH)		PRINCIPAL Ashokrao Mane College of Pht Peth-Vadgaon, Dist. Kolhaj	armacy pur.

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15) Mr. V						On Dist. Kolha
	Vinayak S. Marulkar		1. Titrimetric monograph assay methods with comparison of different analytical techniques 2. Electrochemical Methods: Fundamentals, Pharmacopocial assays and applications		Pharmaceutical drug analysis and analytical method development, Drug design and development, Herbal drug development.	GCOP, Karad
16) PROF DEPT	ANAND P. GADAD DEESSOR PT. OF ARMACEUTICS		PHARMACEUTICS I		INCOMPATIBILITY	BVCP, Kolhapur
	P. B. Patil		Polarography, Acid base titration		Pharmaceutical Chemistry, Pharmaceutical Analysis	BVCP, Kolhapur
Mrs. I	stant Professor . Pranali Pradeep Patil istant professor	AMCP, Pethvadgaon	Impurities in Pharmaceutical analysis	-	Analytical Chemistry Stress degradation study Standardization of Herbal formulation Pharmaceutical Inorganic Chemistry	BVCP, Kolhapur
19) Dr. Pr	Pravin Subhash Patil			Gastro-Retentive Drug Delivery Systems	NDDS	VPIOP, Kodoli
20) Ms. S	Sarika Suryawanshi		Dosage forms and prescription		Dosage form develoment	VPIOP, Kodoli
21) Vittha	Udugade Babaso hal sociate Professor)		Biochemistry: Nucleic acid metabolism and genetic information transfer	-	Analytical Chemistry Medicinal Chemistry	VPIOP, Kodoli
Dr. D	Dipak P. Mali ist. Professor	BVCP, Kolhapur	<ol> <li>Effect of substituents on reactivity and orientation of mono substituted benzene during electrophilic substitution reaction</li> <li>DNA/RNA biosynthesis</li> </ol>	Quality risk management	Organic Chemistry Biochemistry Quality Management System	TKCP, Warana

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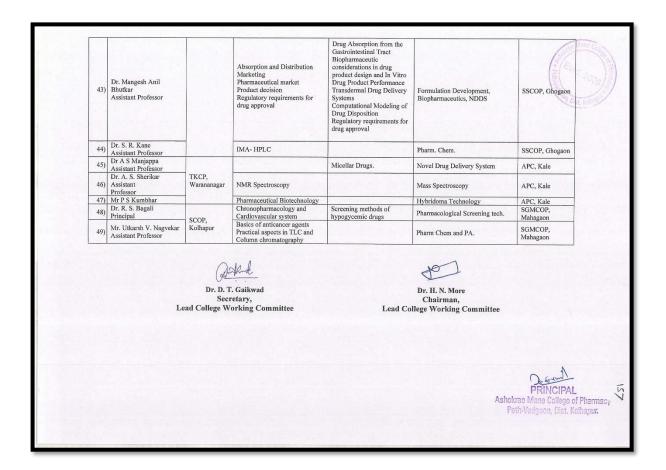
23)	Dr. N. R. Jadhav Professor and HOD of Pharmaceutics		Fundamentals of novel drug delivery systems	Design of novel drug delivery systems	Novel formulation design	TKCP, Warana
24)	Mr. Ravindra J Jarag Associate Professor		Pharmacovigilance Clinical Pharmacy Role of Pharmacist in Pharmacy Practice	Preclinical and toxicological testing of drugs Applications of Physiograph (Biopac-Mp-35 and Powerlab) Formulation and Invitro/In vivo evaluation of herbal/synthetic drugs	Clinical Research Phytopharmacovigilance Insilicopharmacology	TKCP, Warana
25)	Dr. Mrs. N. M. Bhatia Professor		cGMP, GLP, Validation, Regulatory agencies. Document maintenance in pharmaceutical industry Antineoplastics Prodrugs	General research methodology ICH Guidelines GLP eGMP Equipment/Instrument validation Method validation Cleaning Validation Pharmaceutical Quality Management Process Validation	Pharmaceutical Analysis Drug discovery	AMCP, Pethvadgaon
26)	Dr. P. B. Choudhari		Computational Tools in Drug design and Discovery	Computational Tools in Drug design and Discovery	Drug Design	AMCP, Pethvadgaon
27)	Dr. D. A. Bhagwat		1) Pharmaceutics (F. Y. B. Pharm. Sem-I) Topic: Suppositories 2) Industrial Pharmacy-I (T. Y. B. Pharm. Sem-V) Topic: Tablet Dosage Form	<ol> <li>Modern Pharmaceutics</li> <li>(F. Y. M. Pharm. Sem-I) Topic: Preformulation Concept</li> <li>Molecular Pharmaceutics (F. Y. M. Pharm. Sem-II) Topic: Micro Capsules/ Micro Spheres</li> </ol>	Pharmaceutics, Industrial Pharmacy	AMCP, Pethvadgaon
-	) Mr. Pankaj Ashok Jadhav	DSKCP, Digraj	Pharmaceutical Dosage Forms Design		Pharmaceutical Dosage Forms	ABCP, Sangli



29)	Mr. Shankar Jaiprakash Joshi, Assistant Professor		Cardiac Arrhythmias and their Management	Cellular and Molecular Pharmacology – Gene Expression and Gene Regulation	Physiology, Pathophysiology and Pharmacology	ABCP, Sangli
30)	Dr. V. R. Aralelimath Principal & Professor		Pharmacology -III Sem VI		Chemotherapy	RCP, Kasegaon
31)	Dr. A. V. Belvotagi Professor		POC-III Sem IV AIT Sem VIII		Stereochemistry Hyphenated techniques	RCP, Kasegaon
32)	Dr. J. S. Mulla Asso. Prof.	SSCOP, Ghogaon	Research Methodology DDS	Research Methodology DDS	Literature Search	RCP, Kasegaon
33)	Mr. P. D. Lade Assistant Professor		QA Sem VI		Calibration and validation of equipments	AGCOP, Jaitapur
34)	Mr. M. N. Urade Assistant Professor		Pharmacology -III Sem VI		Antiulcer agents Basics of Pharmacokinetics	AGCOP, Jaitapur
35)	Mr. A. M. Kadam Assistant Professor		Pharmacy Practice Sem VII		Clinical Pharmacy Drug Information Pharmaceutical Care	AGCOP, Jaitapur
36)	Ms. Supriya Patil	VPIOP,	Stains and staining tech		Solubility enhancement of poorly water soluble drugs	TKCP, Warana
37)	Mr. A. A. Deshmukh	Kodoli	The changing nature of biomedical research-animal alternative		Preclinical research	TKCP, Warana
38)	Dr. Suresh G. Killedar Principal	SGMCOP, Mahagaon	Nutraceuticals and dietary supplements: A new avenue for pharma graduates	Phytochemical Investigations: Opportunities, Challenges and Future perspectives	Phytochemical investigations Herbal/Ayurvedic drug formulations Herbal NDDS Nutraceuticals	SCOP, Kolhapur
39)	Ms. Archana Dhole	RCP.		ICH guideline or CTD and eCTD	QA	AMCP, Pethyadgaon
40)	Dr. I. D. Raut	Kasegaon	Basic understanding on pharmaceutical monophasic liquid dosage forms		NDDS, Nanotech., Particle engg.	AMCP, Pethvadgaon
41)	Mr. D. S. Gumate		Cardiovascular system		Anatomy and physiology	AMCP, Pethvadgaon
42)	Dr. D. S. Randive			Herbal nanoformulations	Formulation development and evaluation	SSCOP, Ghogaon
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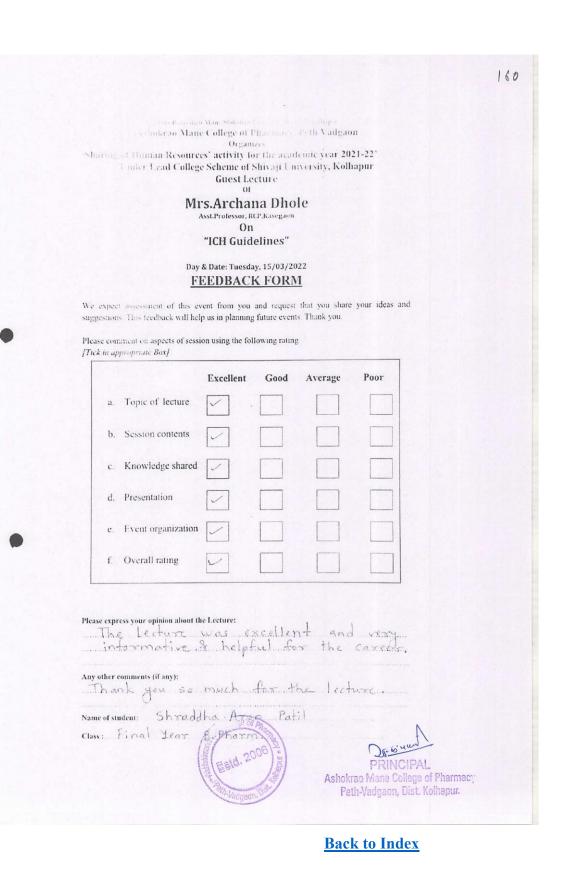




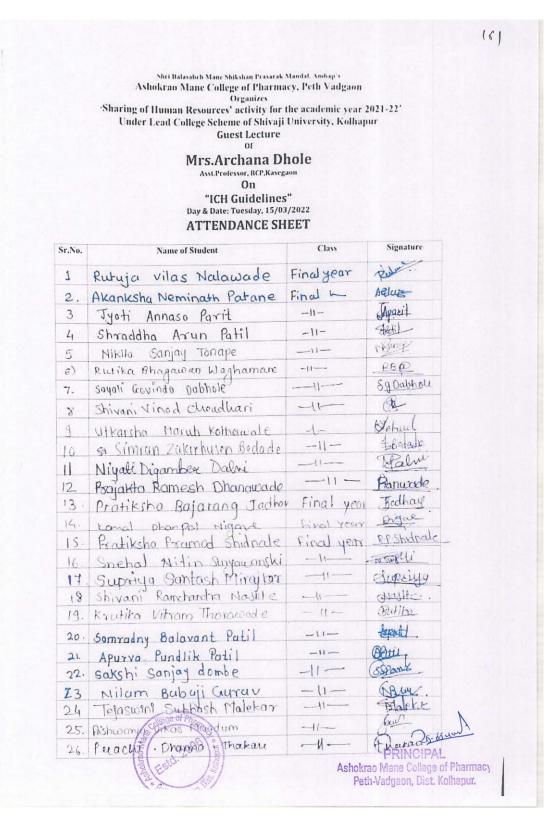
158 ATTENDANCE CERTIFICATE This as to certify that Dr. I.D.Raut, Asst Professor Rajarambapu Paul College of Pharmacy, Kasegaon has delivered a lecture on topic "Basics of ADME Processes " in our college on Tuesday 15/03/2022 as an expert in 'Sharing of Human Resources' activity for the academic year 2021-22, under Lead College Scheme of Shivaji University, Kolhapur to UG students. Thank you for conducting lecture. Date-15/03/20222 Place- Peth Vadgaon 5.6.00 Dr. S V Patil PRINCIPAL Ashtakraa Mane College of Pharmacy Perh Vadgaon, Dist. Kolhapur. PRINCIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur. **Back to Index** 

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### **ATTENDANCE CERTIFICATE**

nor (MS)Phone (0230) 17100771360771361 E-moil.co

This is to certify that Ms. Archana Dhole, Asst. Professor Rajarambapu Patil College of Pharmacy, Kasegaon has delivered a lecture on topic "ICH Guidelines" in our college on Tuesday 15/03/2022 as an expert in 'Sharing of Human Resources' activity for the academic year 2021-22, under Lead College Scheme of Shivan University, Kolhapur to UG students. Thank you for conducting lecture.

Date-15/03/20222 Place- Peth Vadgaon

Recived Aleshozz Dr. S V Patil PRINCIPAL sinekrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

Date



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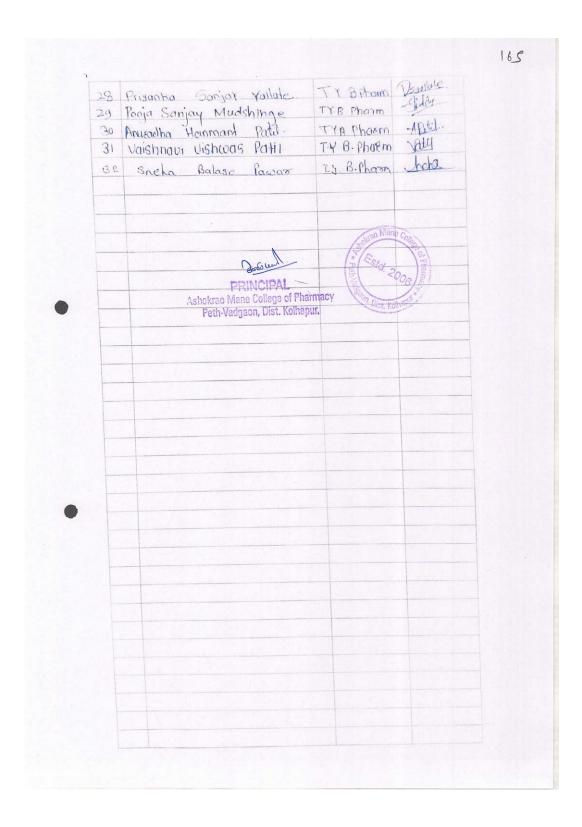
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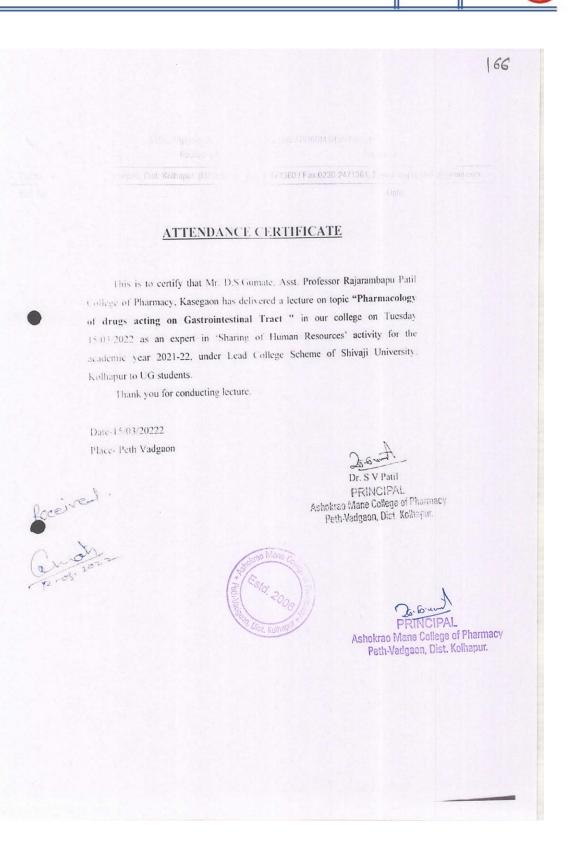


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Under Lead College Scheme of Shivaji University, Kolliapur Guest Lecture Of Dr. I.D.Raut Asst.Professor, RCP,Kasegaon	
On "Basics of ADME Processes"	
Day & Date: Tuesday, 15/03/2022 FEEDBACK FORM	
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Shiri Batasahde Mane Shikshan Prasarak Mandal, Andon's Ashokrao Mane College of Pharmacy, Peth Vadgaon Organizes Sharing of Human Resources' activity for the academic year 2021-22' Under Lead College Scheme of Shivaji University, Kolhapur Guest Lecture of

### Dr. I.D.Raut Asst.Professor, RCP,Kasegaon On

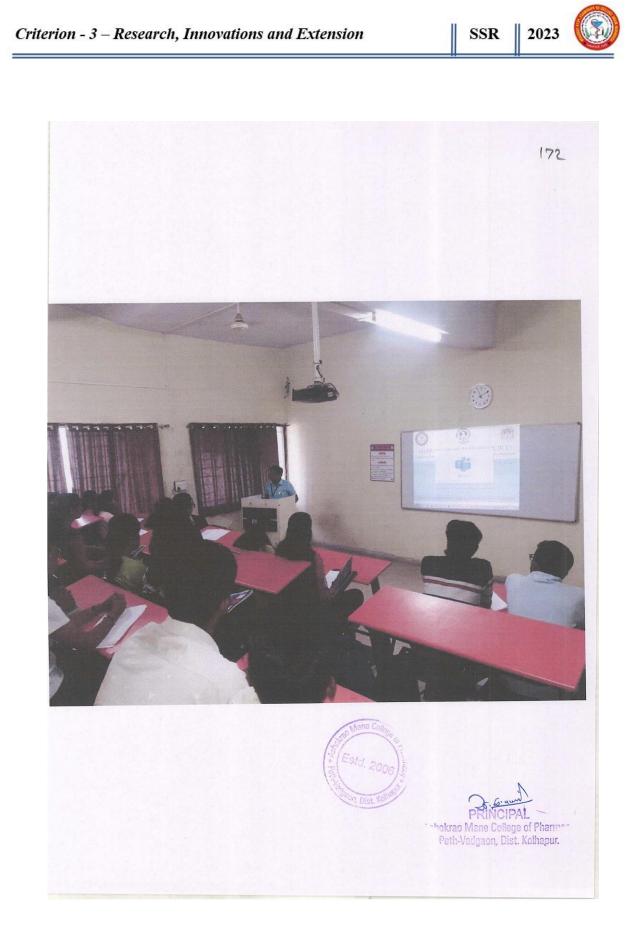
### "Basics of ADME Processes" Day & Date: Tuesday, 15/03/2022 ATTENDANCE SHEET

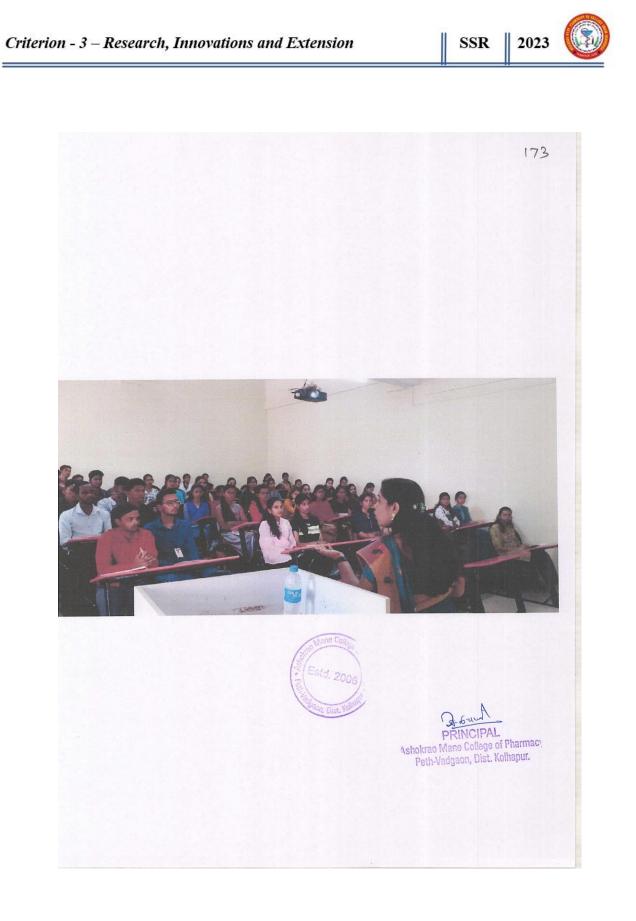
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174 Journal of Pharmaceutical Inno https://doi.org/10.1007/s12247-021-09605-x ORIGINAL ARTICLE () Development and Characterization of 5-Fluorouracil Solid Lipid Nanoparticles for Treatment of Colorectal Cancer Poournima Patil<sup>1,2</sup> · Harinath More<sup>2</sup> · Suresh Killedar<sup>3</sup> · Ganesh Wabhujkar<sup>4</sup> Accepted: 12 November 2021 © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2021 Abstract Purpose In this study, the oral nanotherapeutic approach of 5-fluorouracil solid lipid nanoparticles (5-FU SLNs) for the synergistic treatment of colorectal cancer in preclinical DMH rat model is studied. Method 5-Fluorouracil solid lipid nanoparticles with solvent evaporation emulsification method by using different ratios of polymer and surfactant. Result 5-FU SLNs with chitosan and poloxamer 407 ratio of 2.4:0.1 has shown better particle size (147.9±1.48 nm) with entrapment efficiency  $90.60 \pm 0.01\%$  and loading content  $3.40 \pm 0.03\%$ . In vitro, drug release studies were done by using simulated fluids at various pHs (1.2, 4.5, 7.5, and 7.0) to mimic the GIT tract and achieve 85.16±0.26% at 24 h in a sustained manner. In the current investigation, treatment with 5-FU SLNs increased levels of SOD, CAT, and GSH in the colonic tissue which were considerably DMH-treated rats having lower level. It should be highlighted that the 5-FU SLNs anticancer activity on colorectal was superior over the course of the study, utilizing an in vivo model. Colonic tumour incidence, speed, size, and multiplicity, as well as the number of ACFs, have all decreased. Conclusion Collectively, based on the chitosan-TPP platform, these results suggest that both 5-fluorouracil solid lipid nanoparticles confirmed in vitro and in vivo has shown to provide a promising oral delivery for colorectal cancer. Keywords 5-Fluorouracil · Solid lipid nanoparticles · Colorectal cancer target site results in a lack of site specificity leading to side Introduction effects of both healthy cells and cancerous cells. Unfortunately, a commonly used chemotherapeutic agent results with inad-Colorectal cancer (CRC) is one of the third commonly diagequate therapeutic results because of their hydrophobic type, nosed malignancies in many countries, especially in western improper biodistribution, and their tendency to develop drug civilization dreaded and threatening cancer [1, 2]. Different resistance [3]. All of these conventional treatments have direct treatments available to control or eradicate CRC such as tumor effects on cancerous tissues, the toxicities in normal tissues removal, radiotherapy, and chemotherapy are used in advanced approaches to treat cancer [4]. Different cytotoxic medications, stages, but the inability of the drug to function especially to such as 5-fluorouracil, oxaliplatin, and cisplatin, are used to treat colorectal cancer because of their hydrophobic properties 🖂 Poournima Patil

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M Harinath More

- Department of Pharmaceutical Chemistry, Ashokrao Mane College of Pharmacy, Peth Vadgaon, Maharashtra, India
- Department of Pharmaceutical Chemistry, Bharati Vidyapeeth College of Pharmacy, Kolhapur, Maharashtra, India
- Department of Pharmacognosy, Shree Sant Gajanan Maharaj College of Pharmacy, Mahagaon, Maharashtra, India
- Department of Pharmaceutical Chemistry, Rajarambapu College of Pharmacy, Kasegaon, Maharashtra, India

and their tendency to develop drug resistance [5, 6]. In this case, multiple cytotoxic drugs are used to treat colorectal cancer, but their toxicity to the normal cells is the reason, which can be due to the rapid proliferation of cancer cells [7].

5-Fluorouracil (5-FU) that belongs to the antimetabo lite category has been used alone or in combination with another drug in the treatment of many cancers, such as colorectal, breast, liver, and stomach cancers, as a firstline agent. 5-FU is water soluble with a short circulation half-life in the plasma; a high dose is recommended over a longer period to get desired therapeutic effect; it is also

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### IOCYTE

**INSTITUTE OF RESEARCH&DEVELOPMENT** Flat No.11, Shri-Ram Residency, Near Bypass Road, Kalanagar, Sangli, Maharashtra – 416416

Mob.9595753875, 9226765719E-mail-biocytelabsangli@gmail.com

#### Certificate of Analysis

Date: - 01/08/2022

Name / Organization: Mr. nitin mali Sample Description : Samples 1- Aq extract Antifungal activity against <u>Candida albicans</u>

(Agar well plate diffusion Method)

# WELL DIFUUSION METHOD FOR THE DETERMINATION OF ZONE OF INHIBITION

#### Antifungal activity

Let's Fly Ur ideas!

Stock solution for antifungal activity: For antifungal study each compound was dissolved in DMSO at a concentration of 5mg/ml and 10mg/ml stored in a refrigerator till further used Antifungal activities of the sample A were evaluated by means of agar well diffusion assay. The assay was carried out according to the method of (Hufford *et al.*, 1975). Sabouraud dextrose agar (Hi media) was used for the growth of fungus. Media with acidic pH (pH 5.5 to 5.6) containing relatively high concentration of glucose (40%) is prepared by mixing (SDA) Sabouraud dextrose and distilled water and autoclaved at 121°C for 15 minutes. Twenty five ml of molten (45°C) SDA medium was aseptically transferred into each 100mm×15mm sterile Petri dish.

For counting of spore (fungi) were suspended in normal saline to make volume up to 1 ml and then counted with help of heamocytometer (neubar chamber). Once the agar was hardened, 6mm wells were bored using a sterile cork borer. Then concentration of 5mg and 10 mg was placed in each the well and the plates were incubated for 72 hour at 29°C. Two wells in each petri dish were supplemented with water and reference antifungal drug fluconazole (1mg/ml) dissolved in water serve as negative and positive control respectively. The antifungal activity



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was measured as the diameter (mm) of clear zone of growth inhibition. (Umadevi et al., 2003).

#### Ref:

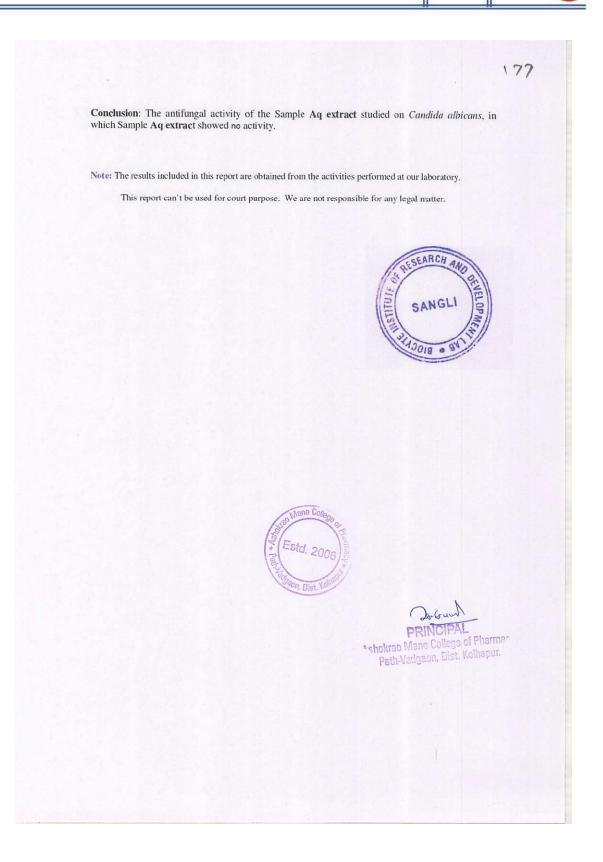
- 1. Hufford CD, Funderburk JM, Morgan JM, Robertson LW (1975). Two antimicrobial alkaloids from heartwood of *Liriodendron tulipifera*. *I.J. pharm. Sci.*, **64**:789-792.
- 2. Umadevi S, Mohanta G P, Chelladurai V, Manna PK, Manavalan R( 2003).Antibacterial and antifungal activity of Andrographis echiodes J. Nat. Remedies., 3:185-188.
  3. Saifullah Khan and Gul Majid Khan, In vitro Antifungal activity of Rhazya stricta, Pak. J. Pharm. Sci., 2007, Vol.20(4), 274-279

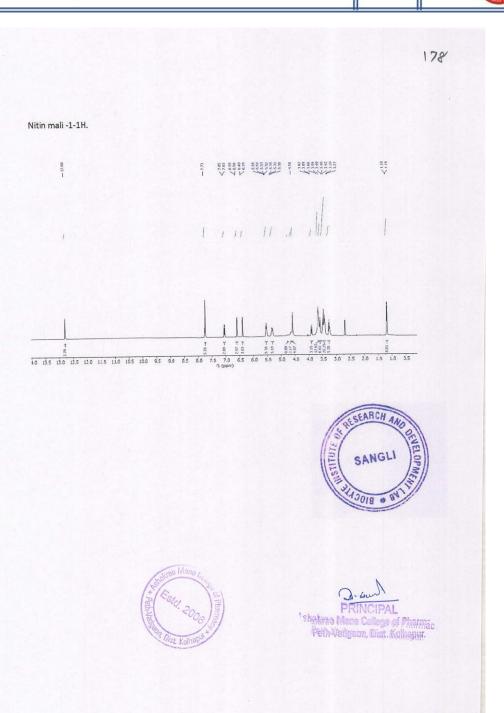
Table No.: 01 Antifungal Activity of Sample Aq extract against candida albicans

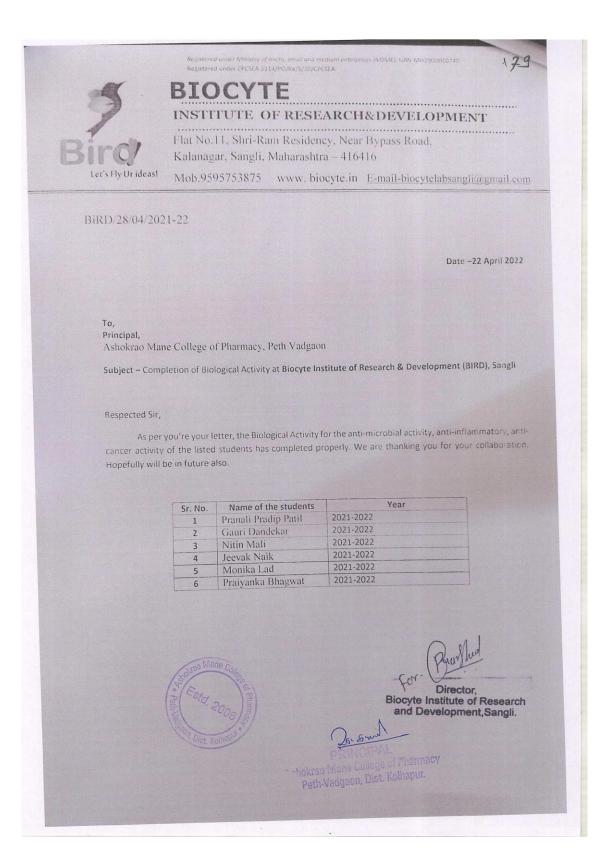
	SAMPLES	CONC. (mg/ml)	ZONE IN DIAMETER(mm) against Candida albican	
	Control	-	00	
	Standard (fluconazole)	1	23	
C	GR	5mg	-	
2	GR	10mg	-	

#### Fig .No. 01 Antifungal Activity of Sample Aq extract against candida albicans



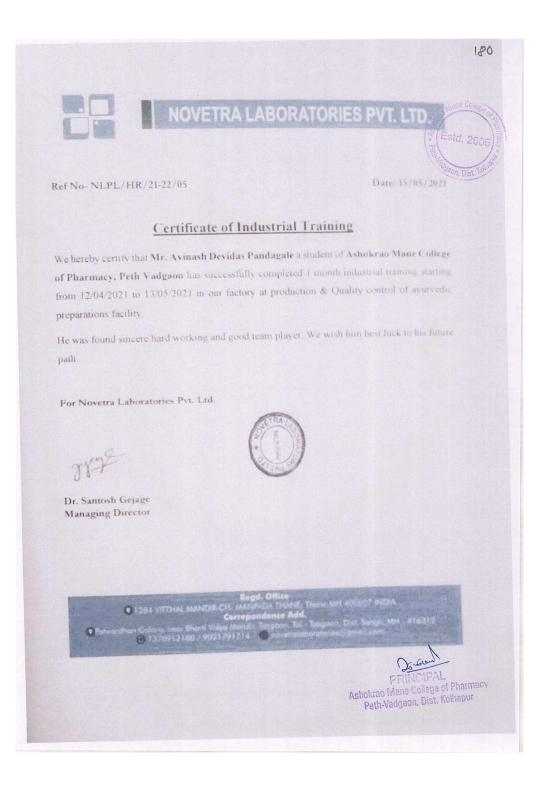




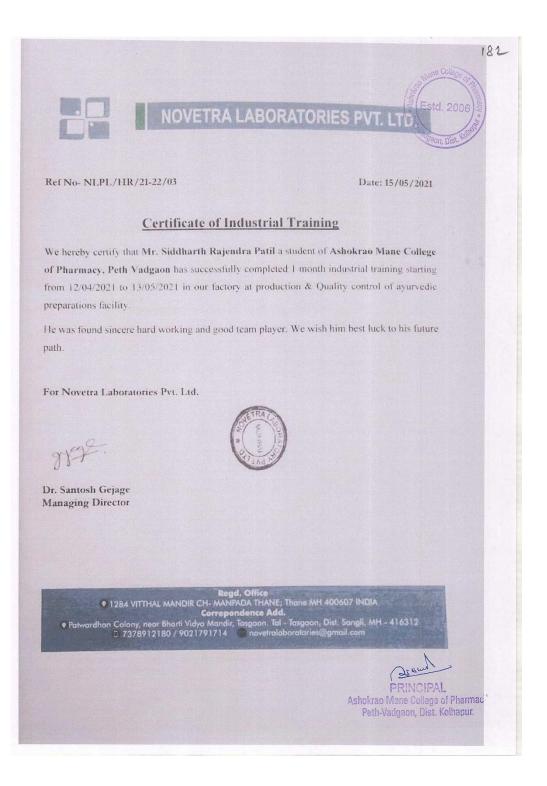




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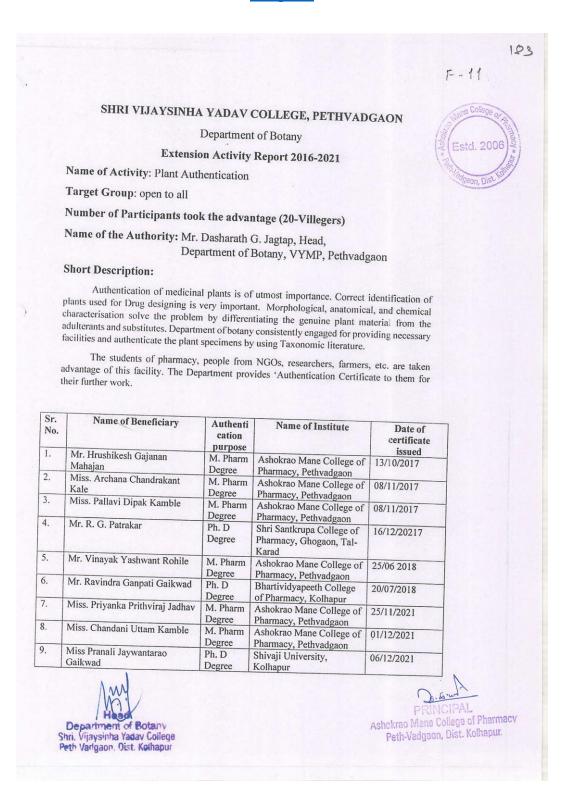




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11.	Miss. Monika Sanjay Lad	M: Pharm Degree	Ashokrao Mane College of Pharmacy, Pethvadgaon	21/01/2022	Shi Dadgaon, Dist. G
12.	Mr. Sudhir Sunil Kamble	Ph. D Degree	T. C. College Baramati, Dist. Pune	22/01/2022	
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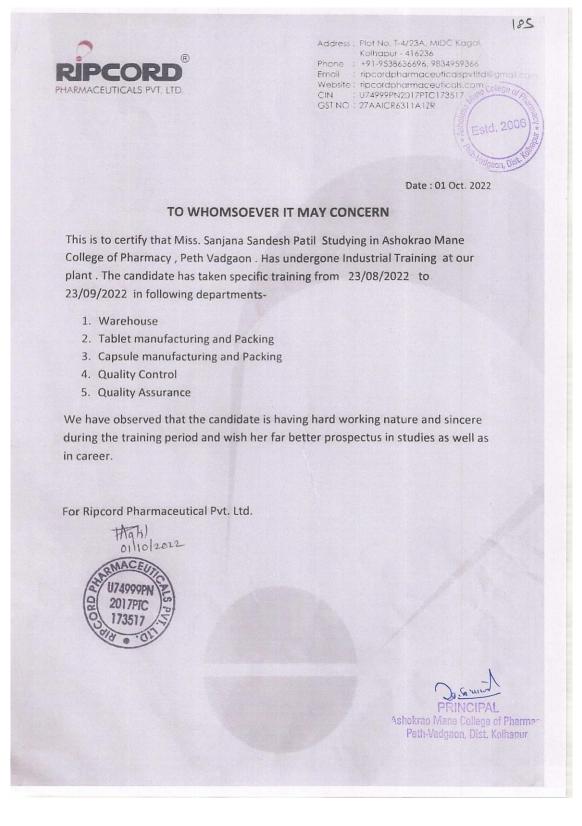
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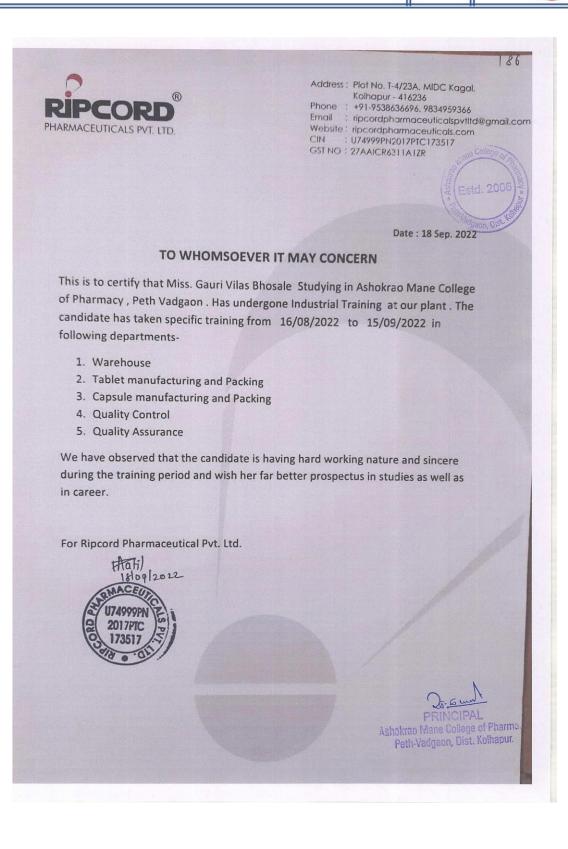
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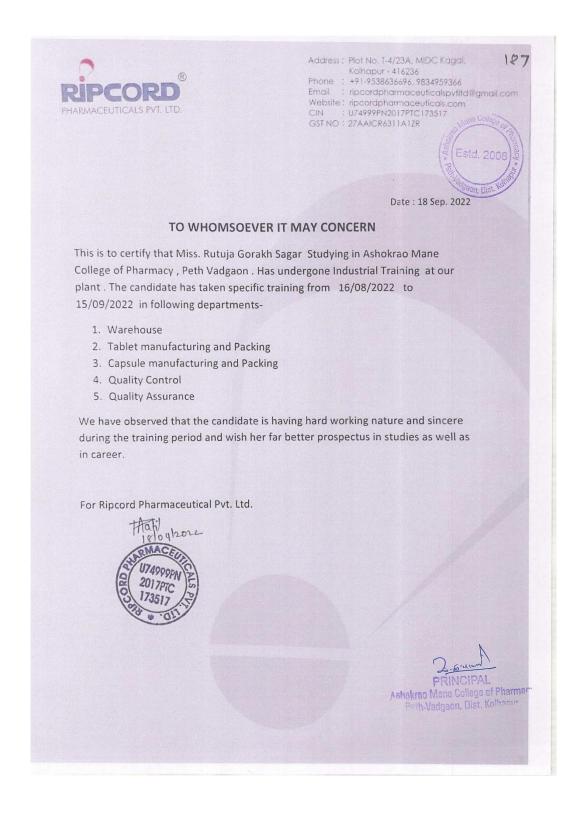


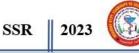
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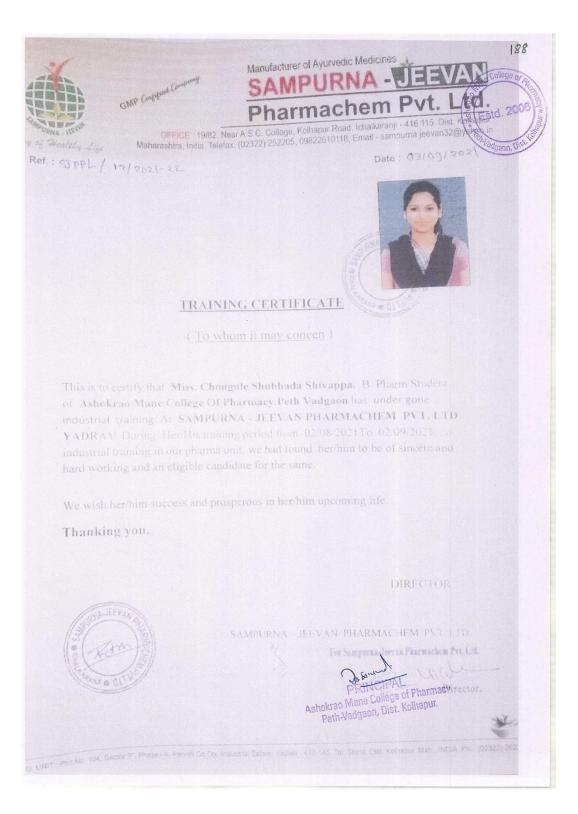




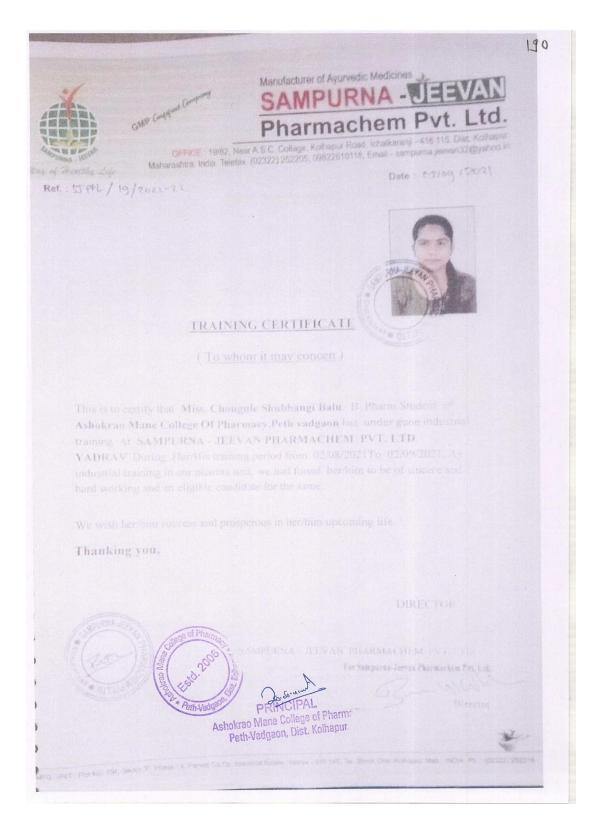




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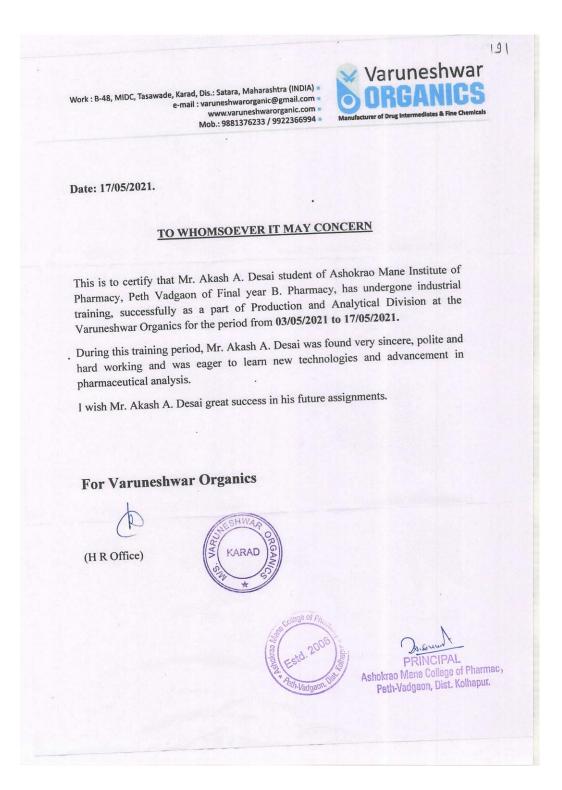




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رور Varuneshwar

Work : B-48, MIDC, Tasawade, Karad, Dis.: Satara, Maharashtra (INDIA) = e-mail : varuneshwarorganic@gmail.com = www.varuneshwarorganic.com = Mob.: 9881376233 / 9922366994 =



#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Suraj K. Dongare student of Ashokrao Mane Institute of Pharmacy, Peth Vadgaon of Final year B. Pharmacy, has undergone industrial training, successfully as a part of Production and Analytical Division at the Varuneshwar Organics for the period from 03/05/2021 to 17/05/2021.

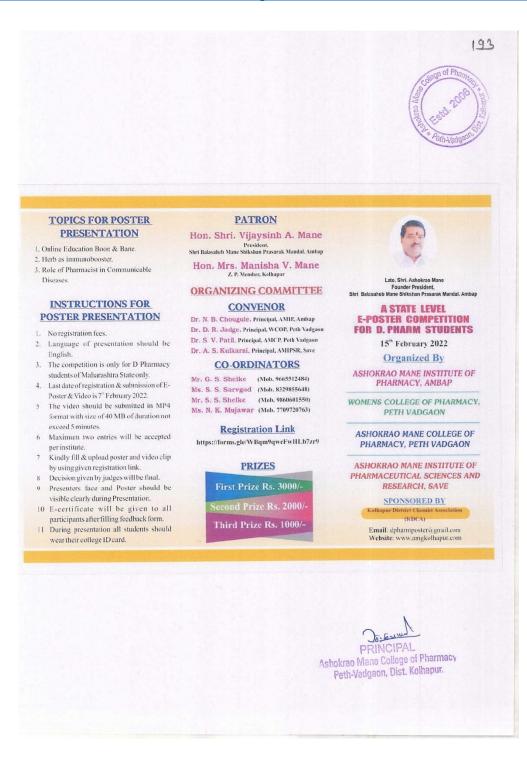
During this training period, Mr. Suraj K. Dongare was found very sincere, polite and hard working and was eager to learn new technologies and advancement in pharmaceutical analysis.

I wish Mr. Suraj K. Dongare great success in his future assignments.

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(H R Office)	KARAD AND
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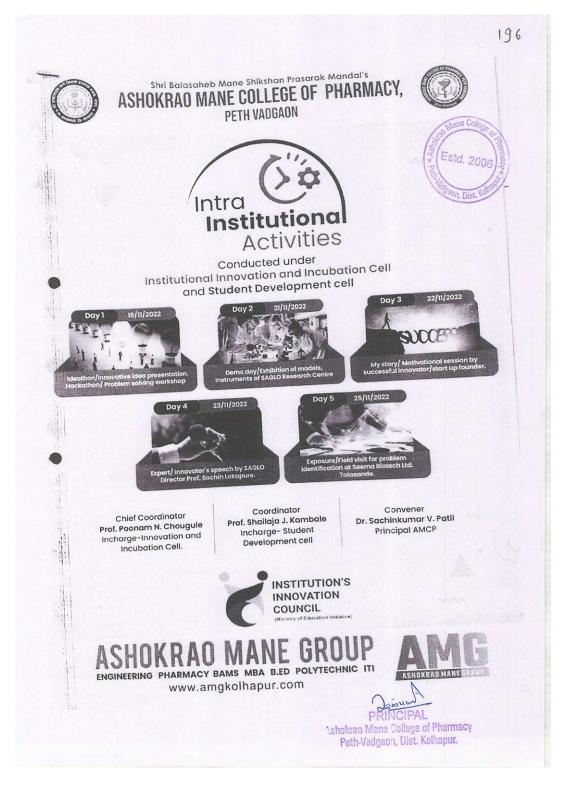


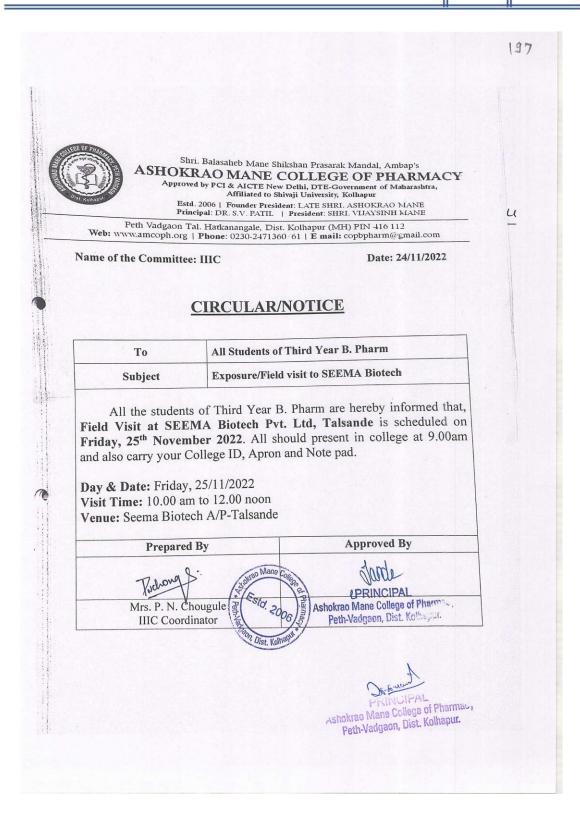






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Criterion - 3 - Research, Innovations and Extension SSR 2023 198 College or Shri Balasaheb Mane Shikshan Prasarak Mandal, Ambap's ASHOKRAO MANE COLLEGE OF PHARMAC Estd. 2006 AICTE / Approval Letter No.: F-06 / 07 / MS / PHARM /2005 / 003, Dt. 30 May 2006 President : SHRI. VIJAYSINH MANE Founder President : LATE SHRI. ASHOKRAO MANE eth vadgaon, Tal. Hatkanangale, Dist. Kolhapur. (MS)Phone: (0230)2471360 / Fax:0230-2471361, E-mail: copbpharm@gmail.com Date: 18/11/2022 tef. No.: 295/2022-23 To. SEEMA Biotech, Pvt. Ltd. Kodoli road, Talasande. Kolhapur, Maharashtra. Subject: Exposure/Field visit for Students. Respected Sir, As per subject cited above, we Ashokrao Mane of Pharmacy, Peth-Vadgaon, Kolhapur, is organizing a One day industrial tour for students, so we are writing this letter to you getting your permission to visit once your SEEMA Biotech, Pvt. Ltd. Talasande, to inspire and get knowledge, problem identification about tissue culture and microbiology. Date and Time of Field visit: 25/11/2022, 10.00AM. So, please allow us and we consider it will be a positive reply. 1 Thanking you, Yours faithfully, Receives Ann. O. S. V. Patil Dr. Principal AMCP. oordinator Traing SEEMA BIOTECH PVT. LTD. PRINCIPAL Ashokrao Mane College of Pharmacy Talsande, Kolhapur - 416 112 Peth-Vadgaon, Dist. Kolhapur. ICIPAL Ashokrao Mane College of Pharmacy Peth-Vadgaon, Dist. Kolhapur.

