



3.4.1

The Institution has several collaborations / linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research etc during the year



K. K. WAGH COLLEGE OF PHARMACY

(B. Pharmacy & D. Pharmacy)

Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422 003. (Maharashtra) India.

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Email: principal-bpharmacy@kkwagh.edu.in, disp-bpharmacy@kkwagh.edu.in

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3.4.2 List of year-wise activities and exchange

Sr. No.	Name of Industry/ Hospital/Institute	A.Y	Activity	Date
a	SNJB's Shriman Suresh Dada Jain College of Pharmacy, Chandwad, Sir Dr. M.S. Gosavi College of Pharmaceutical Education and Research, Nashik MET Institute of Pharmacy, Nashik	2022-23	A textbook of Biochemistry	05/2023
b	Apollo hospital, Swaminarayan Nagar, New Adgaon Naka, Panchvati, Nashik	2022- 23	Hospital visit	03/03/2023 04/03/2023
c	Northwestern University School of Professional studies Chicago USA	2022- 23	Book Chapter on Bioinformatics Tools for Pharmaceutical Drug Product Development	27/02/2023
d	Rajmata Jijau Shikshan Prasarak Mandal's College of Pharmacy, Dudulgaon, Moshi-Alandi Road, Pune	2022- 23	Collaboration of book on "Pharmaceutical Chemistry"	02/2023
e	Bhupal Nobles' College of Pharmacy, Udaipur, Rajasthan, India	2022- 23	Collaborative Research on "Hot Melt Extrusion: A Paradigm-Changing Technology"	06/01/2023
f	Department of Civil Engineering K. K. Wagh Engineering and education and research Nasik	2022- 23	Research Work	19/12/2022
g	Department of Pharmaceutics, MGV's Pharmacy College, Panchavati, Nashik, Maharashtra, India. Department of Pharmaceutics, SMBT College of Pharmacy, Dhamangaon, Nashik,	2022- 23	Collaborative Research On "Effect of Black Grape Juice on Tizanidine pharmacokinetics in Rats"	11/2022
h	K. K. Wagh Institute of Engineering Education & Research, Nashik	2022- 23	Certificate course	10/08/2022
i	Shree Yash Hospital, Nashik	2022- 23	Health Check-up Camp	06/07/2022
j	Talent Management Zone Nashik)	2022- 23	Basic spoken English and business communication	20/06/2022 to 30/07/2022
k	Department of Pharmaceutical Chemistry, S.M.B.T. College of Pharmacy, Nashik, Maharashtra 422403, India	2022- 23	Collaborative Research on "Development of Polyherbal Formulation: Impact of Antioxidants on In Vivo Antidepressant Activity in Animal Models "	06/2022

a.

As Per PCI Regulations
First Year B. Pharmacy Semester II

A TEXTBOOK OF

BIOCHEMISTRY



Dr. Hitesh V. Shahare
Dr. Sunil V. Amrutkar
Dr. Rakesh D. Amrutkar
Dr. Manoj R. Kumbhare
Mrs. Suvarna S. Khairnar



**BRILLIANT
PUBLICATION**



MRP ₹ 190/-

A TEXT BOOK OF

Biochemistry

As Per PCI Regulations
FIRST YEAR B PHARMACY
(SEMESTER II)

The users of *Textbook of Biochemistry* will understand about the basic knowledge of structure and functions of biomolecules and the chemical processes associated with living cells in normal and abnormal states.

- All Units have been much simplified with Multiple Choice Questions, Long Answers Questions and Short Answer Questions bank
- Easy to grasp for students by sufficient illustrations, process flow charts, figures and example
- The coverage of syllabus is complete and sincere reading and solving of question banks, can assure the students and gaining confidence to appear for any viva-voce or examination.

We wish an enjoyable learning for the students and satisfactory teaching for the teachers of subject.

- AUTHORS -

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Department of Pharmaceutical Chemistry SNJB's Shriman Sureshdada Jain College of Pharmacy, Neminagar Chandwad, Nashik, Maharashtra

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Brilliant Publication

Biochemistry





b.
K. K. Wagh Education Society's
K. K. WAGH COLLEGE OF PHARMACY

(B. Pharmacy and D. Pharmacy)

Hirabai Haridas Vidyalaya, Harutdham, Panchavati, Nashik - 422 003.

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by PCI, New Delhi)

Hospital Visit Report

1. Visit Day and Date:

Class I - 03/03/2023, Friday

Class II - 04/03/2023, Saturday

2. Visit Time: 10:30 am to 12:30 pm

3. Venue: Apollo Hospital, Swaminarayan Nagar, New Adgaon Naka, Panchavati, Nashik.

4. Objective of the Hospital visit:

1. To observe the working and management of the hospital.
2. To study supply chain and inventory control of medicines in Hospital Pharmacy and to study various sections of the Hospital.
3. To experience the working environment of Hospital.

5. The outcome of the Hospital visit:

All the present students were made familiar with working environment in Hospital and Pharmacy. Students got overall aides about Hospital layout, setup, supply chain and inventory control of medicine in Hospital Pharmacy and study the concept of medicine supply in Hospital Pharmacy.

6. Number of participants: 100 students of F.Y.B. Pharmacy with five faculty members.

Faculty members:

- 1) M. M. Shinde
- 2) D. V. Jain
- 3) S. N. Kulkarni
- 4) S. B. Jadhav
- 5) M. G. Shinde

7. Guide Person Details:

- 1) Mr. Girish Hibare (IP Pharmacist)
- 2) Wellu Anti (OP Pharmacist)
- 3) Mrs. Rekha Patil (Clinical Pharmacist)
- 4) Mr. Sanchit (OT Pharmacist)
- 5) Mr. Pandharinath Bhagat (Pathology Lab)
- 6) Ms. Swarali Chulbule (Microbiology Lab)





K. K. Wagh Education Society's
K. K. WAGH COLLEGE OF PHARMACY

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8. Outline of Program:

Total 100 students of F. Y. B. Pharmacy with five faculty members participated in Hospital visit. The visit started at 10:30 am and ended at 12:30 pm

We were welcomed by the team members of Apollo Hospital. Students were divided into two groups of 25 Members. There were four pharmacy sections as follows-

- 1) IP (Inpatient) Pharmacy- It supplies medicines to the admitted patients.
- 2) OT (Operation Theatre) Pharmacy- It supplies medicines to the patients who are being operated in the operation theatre and in the ICU.
- 3) OP (Outpatient) Pharmacy-It supplies medicines to the outdoor patients who have come for consultation in the hospital.
- 4) Clinical Pharmacy- clinical pharmacist check the drug therapy to ensure that the patient is getting the most appropriate dose, dosage, dosage form, duration of therapy for their medical/disease state.

A detailed explanation regarding role of hospital pharmacy in hospital, drug distribution systems, inventory management, medication errors, and medicine billing software was given by Mr. Girish Hibare (IP Pharmacist), Outpatient Pharmacy work explained by Mr. Wellu Anti (OP Pharmacist), OT Pharmacy work explained by Mr. Sanchi (OT Pharmacist) and Mrs. Rekha Patil (Clinical Pharmacist) Explained work of clinical pharmacist that they have to ensure the medications prescribed for patients contribute to the best possible health outcomes. Hence students developed a practical approach towards pharmacy profession.

Mr. Pandharinath Bhagat explained about Pathology lab, instruments present in pathology lab like biochemistry apparatus, Electrolyte detector, Cell Counter, Immunoassay Apparatus and all the tests are done on that instruments.

Ms. Swarali Chulbule gave detailed information about microbiology lab, instruments and how the tests are done. She also explained about dengue test, ELISA test, Bacterial culture and media.





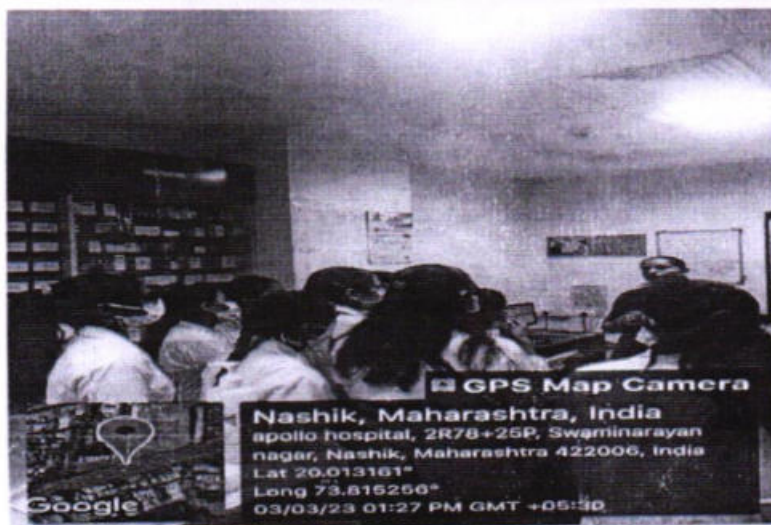
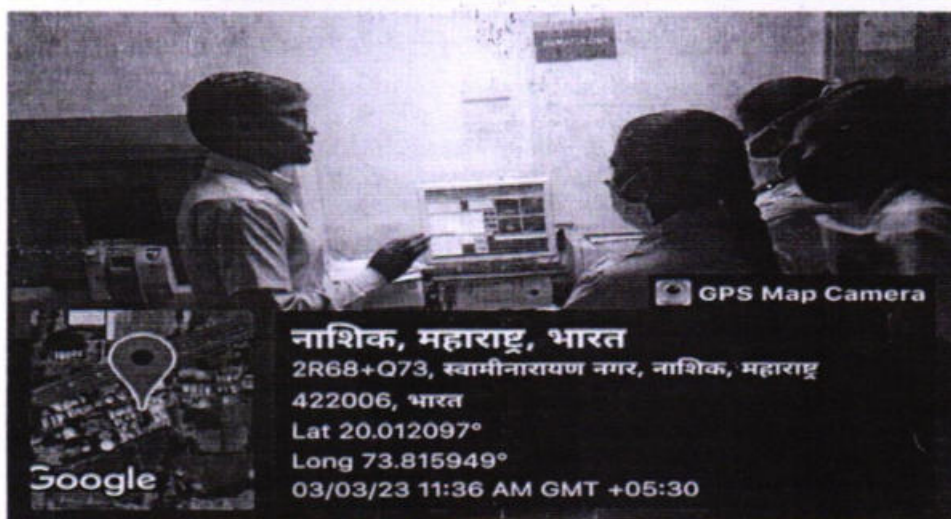
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9.Event Photo



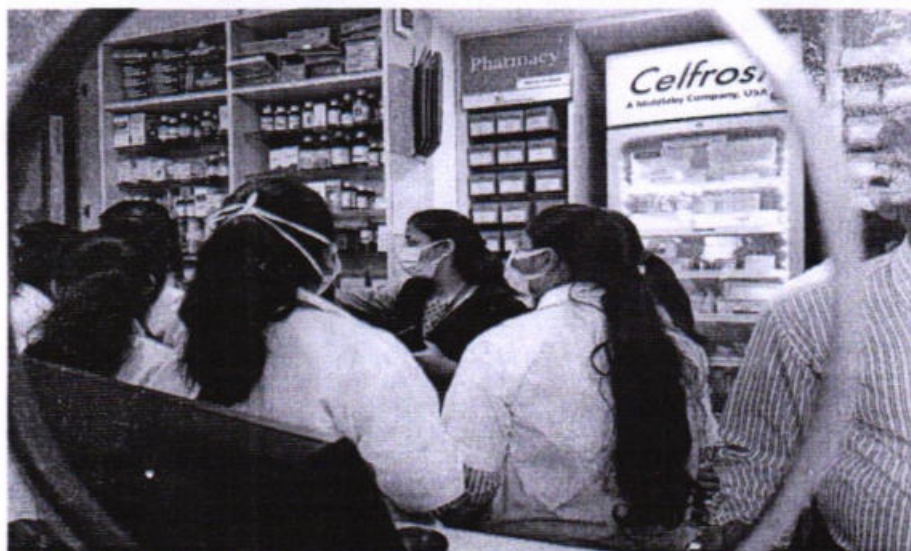


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Shinde
8/03/2023
M. M. Shinde
(Visit Coordinator)

R.A. Patil
08/03/2023
Dr. R. A. Patil
(HOD)

D.D. Patil
08/03/2023
Dr. D. D. Patil
(Principal)





Title of the book/chapters published- Artificial Intelligence and Machine Learning-Based Manufacturing and Drug Product Marketing

Name of the faculty- Kajal Baviskar, Anjali Bedse, Shilpa Raut, Narayana Darapaneni

Name of the publisher- Scrivener Publishing LLC, Wiley Online Library

Wiley Online Library

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Chapter 10

Artificial Intelligence and Machine Learning-Based Manufacturing and Drug Product Marketing

Kajal Baviskar, Anjali Bedse, Shilpa Raut, Narayana Darapaneni

Book Editor(s): Vivek Chavda, Krishnan Anand, Vasso Apostolopoulos

First published: 07 February 2023 | <https://doi.org/10.1002/9781119865728.ch10>

PDF TOOLS SHARE

Summary

Artificial Intelligence (AI) and Machine Learning (ML) are the new drivers for the industry 4.0 revolution. Its use is becoming widespread across society. The dawn of AI and ML can also be witnessed in the pharmaceutical industry. The manufacturing sector has been significantly impacted by AI-ML. The ability of ML strategies to predict future events has allowed for the deciphering of complicated patterns in manufacturing patterns. This has opened the avenues for an intelligent decision support system in different manufacturing tasks like intuitive and continual inspection, fault detection, quality enhancement,

onlinelibrary.wiley.com/doi/10.1002/9781119865728.ch10#pane-pcw-details of supply chain, and much more. ML approaches

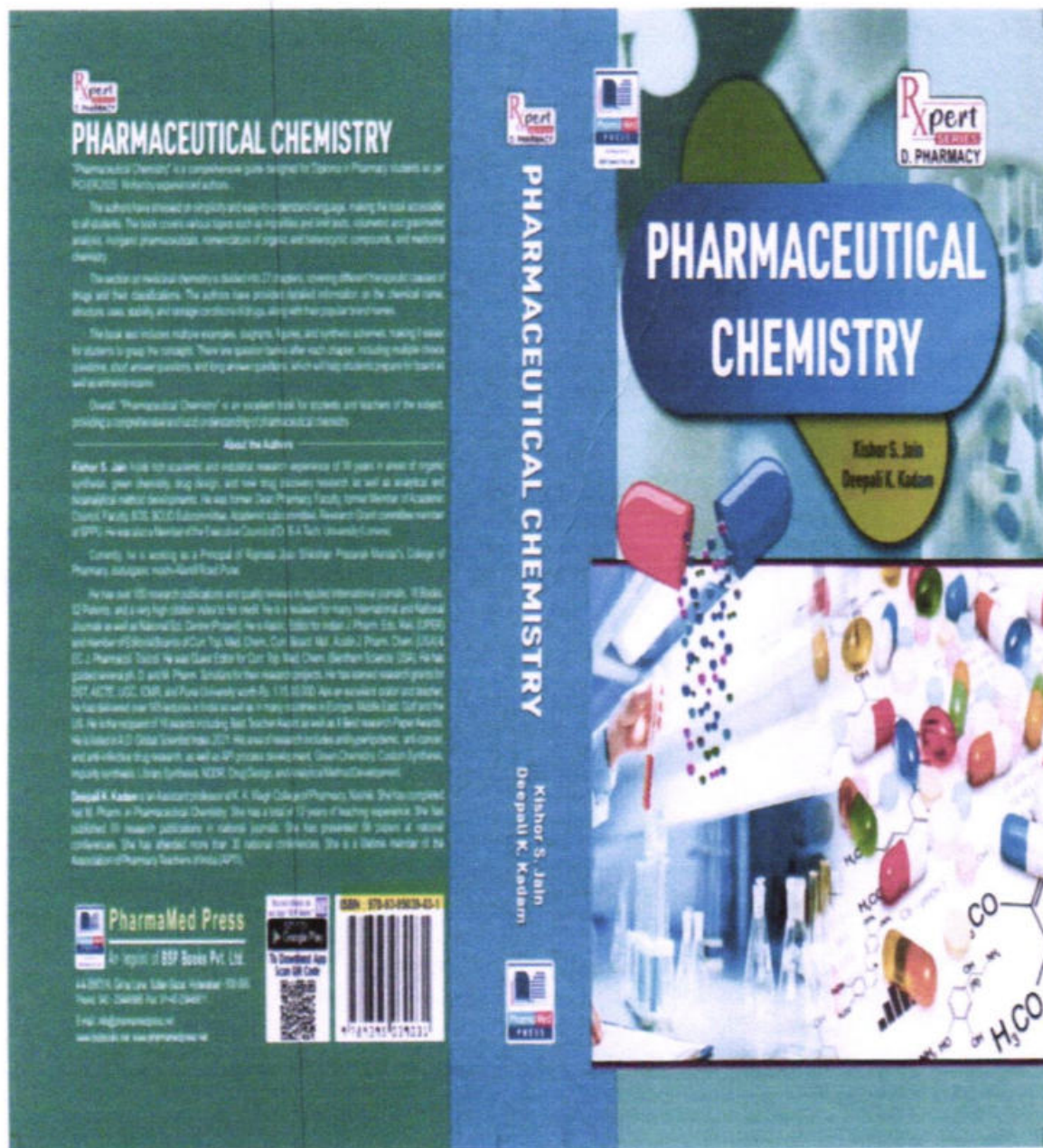




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K. K. Wagh College of Pharmacy
Panchavati, Nashik-422 003

Title of the book/chapters published- Pharmaceutical Chemistry

Name of the faculty- Dr. K. S. Jain, Ms. D. K. Kadam

Name of the publisher- BSP-Books Pvt. Ltd




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Pharmaceutical Chemistry

As per Latest ER 20-12T D. Pharm Syllabus First Year

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M.Pharm., Ph.D., FIC.

Principal

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Deepali K Kadam

M.Pharm.

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Hirabai Haridas Vidyanagari, Amrut Dham, Panchavati

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REVIEW ARTICLE

Hot Melt Extrusion: A Paradigm-Changing Technology

Vaibhav G. Bhamare^{1,*} and Ravindra K. Kamble²¹Department of Pharmaceutics, K. K. Wagh College of Pharmacy, Maharashtra, India; ²Department of Pharmaceutics, Bhupal Nobles' College of Pharmacy, Udaipur, Rajasthan, India

ARTICLE HISTORY

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Abstract: Over the last few decades, hot melt extrusion (HME) has found extensive adaptability and utility as a viable drug delivery option in the pharmaceutical industry. HME has already been validated as a robust, novel technique mainly used for the correction of solubility and bioavailability of poorly soluble drugs. In line with the scope of the current issue, this review appraises the value of HME as a means of solubility enhancement of BCS class II drugs and presents an influential tool for the manufacturing or production of drugs or chemicals. The drug development process can be shortened with the use of hot melt extrusion technology, and the application of this process to analytical technology can ease the manufacturing process. This review focuses on the tooling, utility, and manufacturing aspects associated with hot melt extrusion technology.

Keywords: Hot melt extrusion, amorphous solid, crystalline solid, glass transition temperature, extruder, drugs.

1. INTRODUCTION

The development of drug delivery methods has impacted society for many decades, and the sole reason is the poor solubility of active pharmaceutical ingredients. Many researchers have proposed various strategies to overcome the poor aqueous solubility issues associated with BCS Class II (e.g., flurbiprofen, ketoprofen, rifampicin, carbamazepine, fenofibrate, etodolac, etc.) or Class IV (e.g., amphotericin B, furosemide, acetazolamide, ritonavir, paclitaxel, etc.) drugs [1-3].

Drug innovation and drug discovery through molecular modeling have emerged as high-throughput sciences, resulting in the development of new chemical entities with potential activities or capacities as therapeutic agents. However, the development and commercialization of these drugs have been challenged by solubility, bioavailability, and toxicity issues, and the enhancement of oral bioavailability of BCS class II drugs remains a matter of concern [4].

Out of the different strategies mentioned in the literature, hot melt extrusion (HME) has marked its utility in enhancing the solubility of poorly soluble drugs [5-8]. HME was embraced by the industry, but it was also reformed and tailored for multiple applications, like the development of solid dispersions, flexibility in sustained, modified, and targeted delivery of the drug, and physical and chemical stabilization of the dosage form [9, 10].

HME is widely recognized as an optimal green technology, as the technique used processes highly viscous materials without any solvent [11, 12].

Solubility modification in the HME occurs through the dispersion of an investigational moiety in a polymeric (or lipid) carrier matrix, principally forming a solid dispersion [13]. Similarly, the dissolution of high melting point drugs like carbamazepine, meloxicam, tadalafil etc., can be improved with solid crystal suspension, where rapid recrystallization of the carrier phase grounds the dissolution of the drug [14].

The promotion of the formation of salt co-crystal species is the result of contact between chemical molecules without deploying any solvent. The distributive and dispersive mixing aids this process at high frequencies and establishes it as highly efficient [15]. An invention illustrating the formation of controlled crystalline solid dispersion of a drug from its supercooled state has revealed the application of HME in the bottom-up manufacturing process [16, 17].

Crystalline solid dispersions, amorphous solid dispersions, and solid solutions are the different categories of hot melt extrusion [18, 19]. HME application for solubility enhancement aims at generating amorphous solid dispersions [20, 21]. Cooling of melt-extruded drug polymer can facilitate the formation of amorphous solid dispersions, but precautions should be taken not to allow recrystallization of the drug, and it should remain immiscible with the carrier. This can be accomplished by monitoring and controlling the rate and temperature of cooling. The kinetic entrapment of the drug in its amorphous state exhibits increased dissolution [22, 23].

For amorphous solid dispersions to reach their full pharmaceutical potential, we need to know a lot about their physical properties, chemical properties, strengths and weaknesses, and how they act *in vivo* [24-26]. The results from the comparative assessment of amorphous solid dispersions are classified as; (i) amorphous dispersions with

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f.

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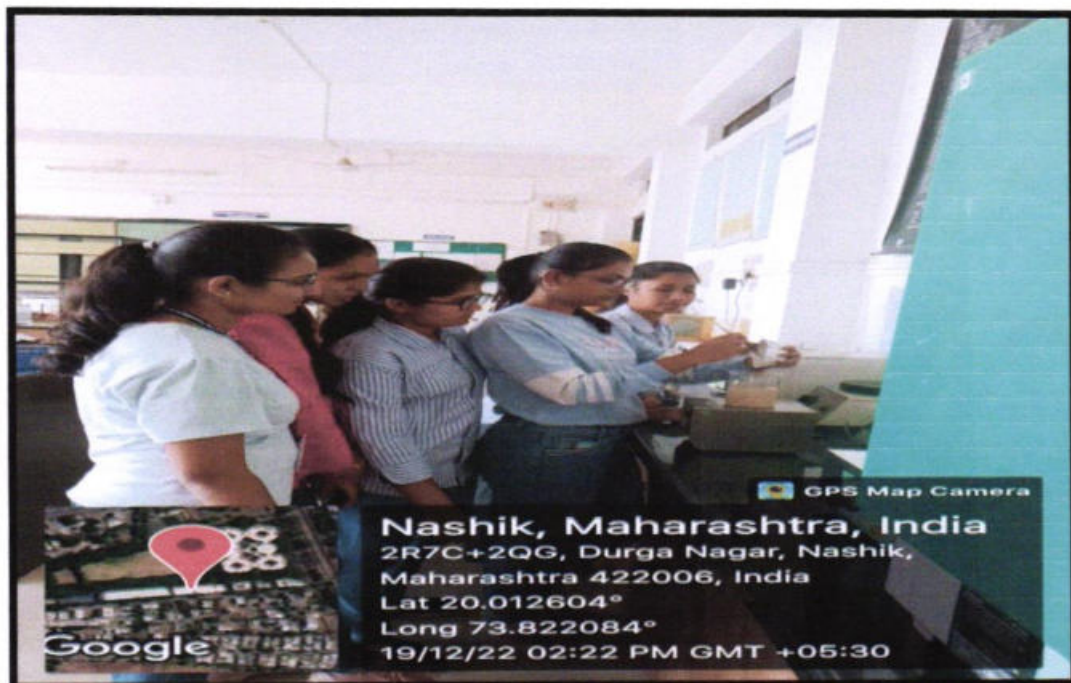
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Research Work with students of Department of Civil Engineering K. K. Wagh Engineering and education and research Nasik




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EFFECT OF BLACK GRAPE JUICE ON TIZANIDINE PHARMACOKINETICS IN RATS

Dipika S. Sherkar¹, Dr. Vaibhav G. Bhamre^{*, 2}, Dr. Minal R. Narkhede, Jitesh H. Shet³

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3. Department of Pharmaceutics, SMBT College of Pharmacy, Dhamangaon, Nashik, Maharashtra, India.
4. Department of Pharmacology, MGV's Pharmacy College, Panchavati, Nashik, Maharashtra, India.

E-mail: vaibhav.bhamre@gmail.com

Abstract: Objective of this work was to study the effect of black grape juice (BGJ) on bioavailability and other pharmacokinetic parameters of tizanidine in rats. A single dose parallel design was used with 36 animals randomly divided in reference group and test group. All the rats received 7 mg tizanidine orally and in test group 10 mL-20 mL freshly prepared BGJ was co-administered with tizanidine. Nine blood samples were collected from each animal over a 24-hour period. Plasma tizanidine concentrations were determined by HPTLC using UV detection, and pharmacokinetic parameters were determined by non-compartmental method. The mean value of the peak plasma concentration (C_{max}) of tizanidine increased significantly (31.51%, P value <0.001 ; 90% CI, 131.35% -131.71%) in animals who had given the drug with BGJ (C_{max} , 45.32 ± 0.12 $\mu\text{g/mL}$) than those who had given the drug with water (C_{max} , 34.46 ± 0.07 $\mu\text{g/mL}$). The area under the plasma concentration time curve from $t=0$ to time of the last measureable concentration (AUC_{0-t}) was also increased significantly (104.65%, P value <0.001 ; 90% CI, 204.47% -204.78%). Similarly, the value of area under the concentration-time curve from $t=0$ to infinity ($AUC_{0-\infty}$) value was increased significantly (78.28%, P value <0.001 ; 90% CI, 177.13% -179.68%); these changes were not within the 90% CI range of 80.000 - 125.000 % which is the acceptable range of bioequivalence. T_{max} , $T_{1/2}$, terminal elimination rate constant (λ_z), CL/F value, V_d/F value, $AUMC_{0-t}$ and $AUMC_{0-\infty}$ values, MRT_{0-t} and $MRT_{0-\infty}$ values and % relative bioavailability (F_r) value for test group were also determined and compared with





h.

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Report on

**K. K. Wagh College of Pharmacy in Collaboration with K. K. Wagh Institute of Engineering
Education & Research, Nashik-03**

Date: 19/12/2022 to 24/12/2022

Time: 10.00 am to 05.00 pm

Venue: KKWIEER AICTE IDEA-Lab.

Skilling Program Topics

- Introduction to Advanced Manufacturing Systems
- Hands-on training on 3-D printer, Laser cutting M/c, 3-D Scanner, Wood Router, Drone Assembly.

Outcomes:

- Make graduates more imaginative and creative
- Train students on 21st Century skills
- Train teachers in teaching-learning processes, research and projects
- Transform engineering education
- Encourage students to get involved in projects and internships

Total number of students participated: 47 S Y B Pharmacy (2022-23)



Vision: To develop the institute as a global brand, imparting quality education in the pharmacy field, thereby, creating competent and expert pharmacists ready to serve the healthcare industry and society.

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K. K. Wagh Institute of Engineering Education and Research


Amrutdham, Panchavati, Nashik -422003

KKWIEER AICTE-IDEA Lab

**Schedule of the Six Days Skilling Program on
"Advanced Manufacturing Systems"**

Venue: AICTE-IDEA Lab, K.K.W.I.E.E.&R., Nashik

Date	Time	Activity	Resource Person
19/12/22	1.00 pm-1.30pm	Inauguration function	Dr. R. K. Munje
	1.30pm -2.00pm	Idea Lab Introduction	Dr. R. K. Munje
	2.00pm-4.00pm	Hands-on training /Demonstration on 3D Printing	Prof. S. V. Kadbhane
20/12/22	1.00 pm-3.30pm	Hands-on training /Demonstration on 3D Printing	Prof. S. V. Kadbhane
21/12/22	1.00 pm-3.30pm	Hands-on training -/Demonstration on Laser Cutting	Prof. R. V .Bhaskar
22/12/22	1.00 pm-3.30pm	Hands-on training -/Demonstration on CNC Wood Router	Prof. M. S. Gangurde
23/12/22	1.00 pm-3.30pm	Hands on Drone Assembly	Prof. P. R. Beldar
24/12/22	1.00 pm-3.00pm	Hands-on training /Demonstration on 3D Scanner	Prof. R. D.Rakhade
	3.00 pm-3.30pm	Valedictory Function	--


P. K. Kavale /S.V.Kadbhane

Event Coordinator


Dr. R. K. Munje/ Dr. P. J. Pawar

AICTE-IDEA lab Coordinator





**K. K. Wagh Institute of Engineering
Education & Research, Nashik-03**



Under AICTE-IDEA LAB

A six days Skilling Program

on

"Advanced Manufacturing Systems"

From 19/12/2022, Monday

To

24/12/2022, Saturday



Prof. P. K. Kavale
Coordinator

Prof. S. V. Kadbhane
Co-Coordinator

Dr. R. K. Munje/Dr. P. J. Pawar
AICTE-IDEA lab Co-ordinator

Dr. K. N. Nandurkar
Director





**Under AICTE-IDEA LAB
A Six Days Skilling Program
on**

**Advanced Manufacturing Systems
a multi-disciplinary approach**

(19th Dec to 24th Dec 2022)



Under

"AICTE IDEA LAB"

**K.K. Wagh Institute of Engineering
Education & Research Nashik
(9 Programs NBA Accredited,
NAAC "A" Grade)**

About The Institute

The institute was established in the year 1984 at Bhausaheb Nagar (Tal. Niphad, Dist. Nashik) and shifted to Nashik City in September 1986.

The institute is approved by All India Council of Technical Education (AICTE), New Delhi and Government of Maharashtra, permanently affiliated to Savitribai Phule Pune University and has recognition under section 2(F) and 12(B) of (UGC ACT 1956). The institute is adjudged as Grade 'A' by Government of Maharashtra. The institute is Accredited by National Assessment & Accreditation Council (NAAC) with 'A' Grade, Accredited by HIACT International. It is only institute in Nashik to be grouped thrice under "Platinum Category" by AICTE-CII Survey of Industry Linked Institutes and according to NIRF ranking survey 2016 ranked 85th amongst all engineering institutes in India.

About AICTE IDEA LAB

Based on this interaction, 49 institutions are selected for the award of AICTE-IDEA Lab across India in June 2021 for 2020-21. K. K. Wagh Institute of Engineering Education and Research (KKWIEER) is one of them. KKWIEER is the only institute from Savitribai Phule Pune University, Pune to be selected for the AICTE-IDEA lab scheme. The lab is named as KKWIEER-IDEA Lab.

The purpose of a KKWIEER-IDEA lab is to provide all facilities under one roof for the conversion of an idea into a prototype. With this facility on the campus students and faculty members will be encouraged to take creative work and in the progress, get training on critical thinking problem-solving, collaboration, etc. which conventional labs are not able to. The focus will be on training students so that they become imaginative and creative. The whole idea is to transfer engineering education with such a lab in all colleges. All the students will be exposed to the KKWIEER-IDEA lab by organizing training sessions for interested students as well as supporting projects and by providing online learning.

Teachers will also be trained in these labs to know their scope and opportunities in teaching-learning processes as well as research and development projects. Students will also be encouraged to work with faculties on R&D projects and internships which involve the utilization of KKWIEER-IDEA lab facilities.

Vision of the KKWIEER IDEA LAB

Empowering students to generate, develop and commercialize innovative ideas

KKWIEER-IDEA Lab Mission

- Discover innovative technological solutions for industries
- Solve societal and agricultural problems
- Promote creative thinking and problem-solving approach
- Encourage start-ups and attain self-sufficiency

KKWIEER-IDEA Lab Objectives

- Make graduates more imaginative and creative
- Train students on 21st Century skills
- Train teachers in teaching-learning processes, research and projects
- Transform engineering education
- Encourage students to get involved in projects and internships



About The Program

This Six Days Skilling Program on "Advanced Manufacturing System - a multi-disciplinary approach" under AICTE Idea Lab, is intended to provide participants with hands on practice on advanced manufacturing systems. Also, it provides opportunity to participants to work in team, build integrity and work in multidisciplinary fields. This Skilling Program throw light on successful implementation of Advanced Manufacturing systems by use of technology and problem solving skills such as Design Thinking. Using advanced machines participants will prepare prototype.

Skilling Program Topics

- Introduction to Advanced Manufacturing Systems
- Hands-on training on 3-D printer, Laser cutting M/c, 3-D Scanner, Wood Router, Drone Assembly.

Participants:

The students, of the AICTE approved institutions, Research scholars, PG Scholars.

Registration:

Registration should be done using below link :

<https://forms.gle/zVktbNmZaLEaUjH9>

or



Scan QR Code for registration

Last Date of registration: 18/12/2022

Instructions:

1. All registered participants are required to fill a consent form for confirmation of their participation in the skilling program. The registration will be approved by the organizer only after receipt of the consent form.
2. Attendance in all sessions is mandatory with minimum of 80%.
3. A test will be conducted by the coordinator at the end of the program.
4. After registration participants should join what's app group of Skilling Program.

Link to join what's app group:

<https://chat.whatsapp.com/17Ktq8aKVb3Gj0PSaTXXS>

CHIEF PATRON

Hon. Shri. Sameer B. Wagh,
President, K. K. Wagh Education Society,
Nasik

PATRON

Dr. K. N. Nandurkar,
Director, K.K.W.I.E.E.R. Nasik

CONVENOR

Dr. R. K. Munje,
Cordinator AICTE-IDEA LAB, I/c Head
Department of Electrical Engineering

Dr. P. J. Pawar,
Co-Cordinator AICTE-IDEA LAB, Head
Department of Robotics & Automation

COORDINATOR

Prof. P. K. Kavale,
Assistant Professor, Mechanical Engineering
Department, **Technical Guru, AICTE-IDEA
LAB K.K.W.I.E.E.R. Nasik**

CO-COORDINATOR

Prof. S. V. Kadbhane
Assistant Professor, Mechanical Engineering
Department, **Technical Guru, AICTE-IDEA
LAB K.K.W.I.E.E.R. Nasik**
Contact Number:95275 39336
svkadbhane@kkwagh.edu.in





K. K. Wagh Education Society's
K. K. WAGH COLLEGE OF PHARMACY
(B. Pharmacy and D. Pharmacy)

Hirabai Haridas Vidynagari, Amrutdham, Panchavati, Nashik - 422
003.

(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approve by PCT, New
Delhi)

Hypertension seminar and health checkup camp Report

- **Date:** 6/7/2022
- **Time:** 10.00 am to 5.30 pm
- **Venue :** Seminar Hall, K. K. Wagh College of Pharmacy, Nashik
- **Beneficiary:** Total 110 students and Staff were benefitted from the camp
- **Resource Person-** Dr. Dinesh Deore and Dr. Meena Sonone and Shree Yash Hospital Team
- **Objective of the seminar-** The objective of seminar was students and staff should get knowledge about hypertension and prevalence as well as how to prevent hypertension related complications.
- **Outline Programme-** Students and faculties of K.K. Wagh Education Society attended this program in the seminar hall. The program was started with an introduction about the content of the seminar which was delivered by Dr. S. M. Kamble. Welcome speech delivered by Dr. R. D. Amrutkar and felicitation of guest done by Dr. R. D. Amrutkar and Dr. S.M. Kamble. Introduction of guest delivered by final year students Shreya.
- **Outcome of seminar-** Students as well as faculties of K.K. Wagh Education Society attended this seminar. The participants of the seminar got elaborate information regarding hypertension, its prevalence and preventive measures for hypertension. It was found that 5% prevalence was there in youngsters.
- **Number of participants-** 110 and staff


Event coordinators

Dr. S. M. Kamble; A. C. Deshmukh & A. R. Wadkar




Principal

Dr. R.D. Amrutkar



OUR INSPIRATION



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KAKASAHEB WAGH**



**LATE SHRI. BALASAHEB
WAGH (BHAU)**

ORGANIZED BY



KKWCOOP Vision

To develop the Institute as a global brand, imparting quality education in the pharmacy field, thereby, creating competent and expert pharmacists ready to serve the healthcare industry and society.

A Seminar and Health Checkup Camp on **AWARENESS ABOUT HYPERTENSION AND ITS PREVENTION**

EMINENT SPEAKERS



Dr. Meena P. Sonawane,
M.B.B.S., D.T.C.D., I.D.C.C.M., F.I.D
Chief Physician, Diabetologist &
Intensivist



Dr. Dinesh R. Desai, B.A.M.S.
Dip. In Yoga Edu.
Lifestyle Disorder Consultant
Shree Yash Hospitals



Dr. Mukesh Sawasane
Director,
BAHS, General Medicine
Shree Yash Hospitals



Mr. Omkar Yadav,
Director,
MBA Hospital Management
Shree Yash Hospitals

Date & Venue: 6/7/2022 at 10:00 am, Seminar Hall

PATRON

Prof. K. S. Bandi
Secretary,
K. K. Wagh Education Society

CONVENER

Dr. R. D. Amrutkar
I/C Principal,
K. K. Wagh COP Nashik

CO-ORDINATORS

Dr. S. M. Kamble
Associate Professor
(Pharmacology)

A. R. Wadkar
Assistant Professor
(Pharmacology)

A. C. Deshmukh
Assistant Professor
(Pharmacology)

VOLUNTEERS

**S. Chauhan, K. Chavan, P. Chavan,
V. Chavan, A. Chavanke, S. Darekar,
& S. Daruwala**





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(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

Hypertension seminar and health checkup camp

Date: 06/07/2022

Sr. No.	Name of student	Sr. No.	Name of student
1.	Tribhuvan Ashwini Balsahab	2.	PawarJagrutiHari
3.	Mishra Kanchan Mahendrakumar	4.	Chaudhari Vaishnavi Gajanan
5.	Anshu Kumari	6.	Shaikh Muskan Najeer
7.	Khalkar Akshay Shivaji	8.	Shaikh Arshad Akil
9.	Bagul Priyanka Prabhakar	10.	Dange Sakshi Popat
11.	Gavit Sulochana Sonya	12.	Gaikwad Ashvini Anil
13.	Pagar Sanket Balasaheb	14.	Borse Snehal Sanjay
15.	Bhagwat Sakshi Vilas	16.	Sangale Hitesh Sharadrao
17.	Patil Amogh Gopal	18.	RaksheVaibhav Bhaskar
19.	Dahifale Mahesh Shrimant	20.	Lohakare Manisha Arun
21.	Satbhai Bhavesh Babanrao	22.	Sayyed Aaman Shahid
23.	Jadhav Prachi Sanjay	24.	Pawar Sakshi Vishwasrao
25.	Shinde Atharva Sanjay	26.	Jadhav Shrinivas Somnath
27.	Wadhavane Kiran Bhausaheb	28.	Durgude Rutuja Pralhad
29.	Wavikar Samruddha Rahul	30.	Wable Aarti Narayan
31.	Rasal Mehul Arun	32.	Kureshi Nazmeen Iqbal
33.	Patil Gitesh Gopichand	34.	Sonawane Harshada Pandurang
35.	Nishtha Gopal Marathe	36.	Pagar Samiksha Suresh
37.	Vasaikar Vaishnavi Tulshiram	38.	Shinde Sayali Sharad
39.	Pawar Anket Chhotu	40.	Rokade Shweta Bapusaheb
41.	Raut Anjali Kantilal	42.	Jangale Manish Ulhas
43.	Bhalsane Karuna Samadhan	44.	Khilosiya Ronak Ashish
45.	Agarwal Pankesh Bhurmal	46.	Patil Sakshi Anil
47.	Kusalkar Shradha Ashok	48.	Wadje Tejas Dilip
49.	Ahire Akash Kailas	50.	Thube Gayatri Ashok
51.	Samindre Pooja Yadav	52.	Shaikh Zohra Avesh
53.	Patel Kashaf Erphan	54.	Borase Prasad Pitambar
55.	Jagtap Krishna Santosh	56.	Singh DeepaUgrasen
57.	Bahirat Aniket Sanjay	58.	Dargude Akanksha Vilas
59.	Pratima Sagar	60.	Kulkarni Utkarsha Suhas
61.	Pagare Prajwal Sunil	62.	Bhamare Shruti Nanaji
63.	Nimse Monika Appasaheb	64.	Aher Aishwarya Chandrabhan
65.	Joshi Isha Dinesh	66.	Buchakul Manisha Dnyaneshwar
67.	Pawar Sakshi Anil	68.	Chavan Rohit Shridhar
69.	Jagtap Mayuri Dipak	70.	Daunde Akash Babasaheb
71.	Yadav Manish Brijbhan	72.	Deore Akshay Sanjay
73.	Divekar Rushikesh Arvind	74.	Dhumal Mayuri Rajendra
75.	Saurav Vilas Karanjkar	76.	Gaikwad Sayali Babasaheb
77.	Ayush Jain	78.	Gaike Abhishek Eknath
79.	KadamVaishnavi Keshavrao	80.	GaikwadShubham Prakash
81.	Soni Riddhi Sunil	82.	Galdhar Mahesh Namdev
83.	Shingade Disha Chhabu	84.	Gavit Vishal Dinkar





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85.	Aher Gita Sanjay	86.	Jadhav Arati Bhagwan
87.	Bavaskar Akash Anil	88.	Jadhav Kiran Yenunath
89.	Shelke Rohan Bhausaheb	90.	Jadhav Niraj Kailas
91.	Gujarathi Hindavi Gautam	92.	Jadhav Saloni Rajkumar
93.	Chaudhari Tejas Ramesh	94.	Jain Nikita Milind
95.	Jadhav Amar Anil	96.	Jamdhade Madhuri Dipak
97.	Thakur Bhikan Kamlakar	98.	Kadam Pravin Bhausaheb
99.	Kathe Pooja Balkrushna	100.	Kardak Pratiksha Narendra
101.	Patil Mitali Suhas	102.	Kedar Priyanka Balasaheb
103.	PatilKhushi Dinesh	104.	Kohokade Vrushi Santosh
105.	Gaikwad Aniket Parashram	106.	Kokate Rutuja
107.	Lone Shruti Kiran	108.	Korde Shrutika Rajendra
109.	Pawar Vismay Vijay	110.	Shinde Vaibhavi Ganpat






32 HOURS ONLINE COURSE ON

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Title of course: Basic Spoken English and Business Communication

Duration: 2021-22 [20/06/2022 to 30/07/2022 (32 hours (online mode))]

Course Coordinator: Laxmi Sharma (Talent Management Zone Nashik) and Prof. S. S. Raut

SYLLABUS

- Language Introduction
- Parts of Speech:- Noun, Pronoun, Verb, Adverb, Adjective, Preposition, Conjunction and Interjections
- Tenses:- Past, Present and Future with their sub types Simple, Perfect, Continuous and Perfect continuous
- Sentence formation with correct grammatical order
- Phonetics & Pronunciation of words.
- Reading Skills: Techniques of reading
- Vocabulary building via Root words
- Effective business communication skills
- Active listening by both speaker and listener
- Choosing communication methods
- Qualities of Good written communication
- Composing emails/ messages
- Telephone etiquettes

COURSE OUTCOMES

The course mainly focuses on

- basic language understanding
- learning, speaking, reading, writing skills
- pronunciation, grammar, and sentence formation
- communication skills



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List of students

Basic Spoken English and Business Communication

Sr. No.	Name of Students
1	Pravin Karwar
2	Patil Mayuri Sudhir
3	Medhane Priyanka Ravindra
4	Patil Vaishnavi Shriram
5	Pagar Ashish Dnyaneshwar
6	Shivale Sakshi Rajendra
7	Kanchan Bandu Megha
8	Mahajan Pritesh Anil
9	Vadje Priyanka Yuvraj
10	Khairnar Priyanka Sanjay
11	Chaudhari Ashwini Bhaskar
12	Sonar Harshali Shashikant
13	Pawar Dinesh Bhausaheb
14	Mandlik Yuvraj Balasaheb
15	Omkar Sandip Bhagwat
16	Chavan Sonali Sanjay
17	Malpure Pratiksha Ravindra
18	Tile Prasad Bhaskar
19	Deore Manjusha Gokul
20	Pathade Aashutosh Bapu
21	Ambhore Priyanka Sunil
22	Ugale Darshana Kiran
23	Gorane Yash Ramesh
24	Khapare Sejal Sanjay
25	Gaikwad Akshada Balasaheb
26	Lakde Balaji Ramchandra
27	Patil Sujata Madhukar
28	Chavan Rushikesh Hiranman
29	Chavan Prajwal Satish
30	Ugale Kamodi Anil
31	Jogdand Rutika Devidas
32	Jadhav Pritam Sudam
33	Shirsath Samiksha Babasaheb
34	Hardik Hemant Patil
35	Chavhanke Shraddha Shivaji

Sr. No.	Name of Students
36	Chavan Mayank Pradip
37	Shaikh Saleena Mehmood
38	Gangurde Siddhi Kiran
39	Pawar Dhruva Sanjay
40	Patil Pratiksha Anil
41	Salunke Ankita Eknath
42	Pagare Suraj Prabhakar
43	Bhavar Priyanka Shantaram
44	Acharya Sakshi Deepak
45	Pinjari Ujama Akthar
46	Tele Ritesh Ukhardu
47	Rayate Komal Vijay
48	Vaishnavi Ashok Patil
49	Tupe Shradha Sanjay
50	Kathe Shraddha Vilas
51	Jadhav Nachiket Prashant
52	Girase Sanjyot Chhotusing
53	Sonawane Dipti Vilas
54	Pawar Nikita Gorakhnath
55	Pawar Prachi Sudam
56	Darade Sarthak Ramesh
57	Dani Arnav Hemant
58	Darade Govind Vitthal
59	Aniket Samadhan Gaikwad
60	Bade Anagha Milind
61	Bargal Sakshi Dilip
62	Dhole Shraddha Nana
63	Garje Om Devidas
64	Deshpande Bhargavi Krushanant
65	Kumbhar Chirag Ukha
66	Malve Bhakti Sachin
67	More Avantika Pradip
68	Patil Kapil Dipak
69	Naik Saurabh Ajay
70	Shewale Rohit Sunil





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Course A - List of students

(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

List of students

Basic Spoken English and Business Communication

Sr. No.	Name of Students
71	Jagtap Anushka Santosh
72	Wagh Ganesh Ishwar
73	Mahale Ruchita Vasudeo
74	Anvay Satish More
75	Chewale Kunali Pandurang
76	Landge Charushila Jibhau
77	Darak Yashwant Navneet
78	Vaishnavi Tushar Mahajan
79	Nagpure Atharv Mukund
80	Pingale Sayali Vilas
81	Ranmale Omkar Sanjay
82	Bodke Vedika Shivaji
83	Kadam Vaishnavi Shashikant
84	Sabale Varsha Ramesh
85	Manore Sakshi Hemant
86	More Chinmayi Rajendra
87	Kothule Sakshi Kailas
88	Gavali Saloni Shrinivas
89	Kumat Kashish Prashant
90	Chaudhari Aditya Chhotu
91	Holgir Sonali Dattu
92	Avishkar Jadhav
93	Yeole Sakshi Jagannath
94	Ostwal Sakshi Ravindra
95	Wagh Abhishek Vitthal
96	Wavdhane Survadnya Pravin
97	Kalokhe Mansi Dnyaneshwar
98	Khadangale Pratik Pramod
99	Ghogari Palan Narottan
100	Khare Shruti Deepak
101	Amle Prathamesh Anil
102	Vyavahare Aditi Prashant
103	Shirode Saket Vilas
104	Paradhi Pandurangnath Ananda
105	Chawhan Humayu Yousuf



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K. K. Wagh College of Pharmacy, Nashik

<https://pharmacy.kkwagh.edu.in/>

Talent Management Zone, Nashik

<https://talentmanagementzone.com/>

CERTIFICATE

This is to certify that Mr. Pravin Karwar
has successfully completed certificate course on the topic "Basic
spoken English and Business Communication".

Duration of course : 32 hours (June - July 2022)

The course mainly focuses on

- basic language understanding
- learning, speaking, reading, writing skills
- pronunciation, grammar, and sentence formation
- communication skills

We highly appreciate his/her efforts and dedication

S. S. Raut
Course Coordinator
K. K. Wagh College of Pharmacy Nashik



Ms. Laxmi Sharma
Course Coordinator
Talent Management Zone Nashik



K. K. Wagh College of Pharmacy, Nashik

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<https://talentmanagementzone.com/>

CERTIFICATE

This is to certify that Ms. Medhane Priyanka Ravindra
has successfully completed certificate course on the topic "Basic
spoken English and Business Communication".

Duration of course : 32 hours (June - July 2022)

The course mainly focuses on

- basic language understanding
- learning, speaking, reading, writing skills
- pronunciation, grammar, and sentence formation
- communication skills

We highly appreciate his/her efforts and dedication

S. S. Raut
Course Coordinator
K. K. Wagh College of Pharmacy Nashik



Ms. Laxmi Sharma
Course Coordinator
Talent Management Zone Nashik

K. K. Wagh College of Pharmacy, Nashik

<https://pharmacy.kkwagh.edu.in/>

Talent Management Zone, Nashik

<https://talentmanagementzone.com/>

CERTIFICATE

This is to certify that Ms. Pahl Mayuri Sudhir
has successfully completed certificate course on the topic "Basic
spoken English and Business Communication".

Duration of course : 32 hours (June - July 2022)

The course mainly focuses on

- basic language understanding
- learning, speaking, reading, writing skills
- pronunciation, grammar, and sentence formation
- communication skills

We highly appreciate his/her efforts and dedication

S. S. Raut
Course Coordinator
K. K. Wagh College of Pharmacy Nashik



Ms. Laxmi Sharma
Course Coordinator
Talent Management Zone Nashik

K. K. Wagh College of Pharmacy, Nashik

<https://pharmacy.kkwagh.edu.in/>

Talent Management Zone, Nashik

<https://talentmanagementzone.com/>

CERTIFICATE

This is to certify that Ms. Pahl Vaishnavi Shriram
has successfully completed certificate course on the topic "Basic
spoken English and Business Communication".

Duration of course : 32 hours (June - July 2022)

The course mainly focuses on

- basic language understanding
- learning, speaking, reading, writing skills
- pronunciation, grammar, and sentence formation
- communication skills

We highly appreciate his/her efforts and dedication

S. S. Raut
Course Coordinator
K. K. Wagh College of Pharmacy Nashik



Ms. Laxmi Sharma
Course Coordinator
Talent Management Zone Nashik

PRINCIPAL

K. K. Wagh College of Pharmacy
Nashik-422 003

Short Communication

Development of Polyherbal Formulation: Impact of Antioxidants on *In Vivo* Antidepressant Activity in Animal Models

A. R. SURANA*, M. R. KUMBHARE¹ AND H. I. NARKHEDE¹

Department of Pharmacognosy, K. K. Wagh College of Pharmacy, ¹Department of Pharmaceutical Chemistry, S.M.B.T. College of Pharmacy, Nashik, Maharashtra 422403, India

Surana *et al.*: Impact of Antioxidants on Antidepressant Activity

In Ayurveda, single or multiple herbs are used as medication for various ailments. Depression is often manifesting with various symptoms at the behavioral, psychological and physiological levels. Therefore, the investigation for therapeutic alternative is important. Oxidative stress has shown important biochemical aspects in the depression. This study evaluated effect of natural antioxidant on antidepressant activity of polyherbal formulation on the performance of male mice. Mice were given orally polyherbal formulation without antioxidant and with antioxidant daily for 7 d and then subjected to forced swim test and tail suspension test. After 1 w treatment, both polyherbal formulation significantly reduced immobility time in forced swim test and tail suspension test compared with vehicle treated control group. The immobility time in tail suspension test of polyherbal formulation without antioxidant and with antioxidant was found to be 151.17 ± 4.46 s and 116.33 ± 8.84 s respectively. The immobility time in tail suspension test of polyherbal formulation without antioxidant and with antioxidant was found to be 137.17 ± 5.93 s, 113.50 ± 5.40 s respectively. These results indicate that the antidepressant when given along with antioxidant in mice it gives significant antidepressant effect. The experimental results suggest that the intake of antioxidant may help in reducing the symptoms of depression, *via* supplementation of antioxidant.

Keywords: Antidepressant activity, antioxidant activity, forced swimming test, polyherbal formulation, tail suspension test

Polyherbal formulation has been employed all around the globe owing to its wide range of medicinal and therapeutic value. Drug combinations often give rise to a promising effect in treatment of diseases over a single drug^[1]. The idea of drug combination has long been accepted in Western medicine, and it had a lot of impact over the years. Drug combination treatments of cancer and infectious diseases have given patients new hope in current years^[2]. Single or several herbs (polyherbal) are used in Ayurveda for therapy. Single or polyherbal are used in Ayurveda for medication. The concept of polyherbalism was illustrated in the Ayurvedic texts Sarangdhar Samhita to achieve greater therapeutic effectiveness^[3]. It is more evident that good therapeutic property can be achieved with a formulation of a single multi-constituent formulation. In polyherbal medicine, medicinal plants with lower doses are strongly recommended to prevent side

effects and achieve the necessary pharmacological activity^[4]. Polyherbal formulations often eliminate the need to consume several formulations at the same time. Many of these benefits of polyherbal formulation benefited from these positive effects^[5]. Many medicinal plants have been directly used as the raw drug and these medicinal plants possess various therapeutic values. These medicinal plants are rich source of unique chemical substances with potent therapeutic effect. Individual active phytoconstituents of medicinal plants are insufficient to achieve the desired therapeutic results. When several herbs are

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