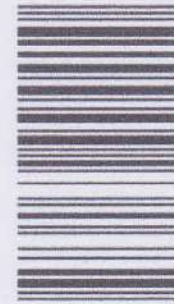


Sustained release systems are designed to release the drug in-vivo with prediction so as to prolong the release in order to increase its efficacy and bioavailability of drugs. Floating drug delivery systems (FDDS) is one of the approaches which is expected to remain buoyant in a lasting way upon the gastric contents. The various buoyant preparations include microparticles, hollow microspheres, powders, granules, tablets, capsules, pills and laminated films. Floating microparticles are gastro-retentive floating drug delivery systems based on non-effervescent approach. Floating microparticles are especially fast attention due to their wide applicability in the targeting of drug to the stomach. These floating microparticles have the advantage that they remain buoyant and distributed uniformly over the gastric fluid to avoid the vagaries of gastric emptying and release the drug for prolonged period of time. A sustained release system with extended residence time in the stomach can be of great practical importance for drugs with an absorption window in the upper small intestine. Multiparticulate low-density particulate particles can successfully prolong the gastric retention time of drug.



Prachee K. Dusane, Assistant professor in Quality Assurance, P. S. G. V. P. M. S. College of Pharmacy, Shahada, affiliated to NMU, Jalgaon, MH, India. My academic experience is 2.10 years. I had completed B. Pharm 2013 & M. Pharm in QA 2015, from NMU, Jalgaon. I had been published review & research papers in various journals. Under My guidance 07 students completed B. Pharm. project.



978-613-9-99441-0



# Floating Microparticulate System: An Approach For Gastroretention Drug

Prachee Dusane

**PRINCIPAL**  
P.S.G.V.P. Mandal's, College of Pharmacy  
SHAHADA - 425409, Dist. NANDURBAR



**LAMBERT**  
Academic Publishing

PRINCIPAL  
P.S.G.V.P. Mandal's, College of Pharmacy  
SHAHADA - 425409, Dist. NANDURBAR

VECTOR  
BACKGROUND



ISBN 9781543343267



**S. VIKAS AND COMPANY (MEDICAL PUBLISHERS)**

100/1, 1st Floor, Main Market, Allamdaspet, Chennai - 600 028 (Tamil Nadu)  
100/1, 1st Floor, Main Market, Allamdaspet, Chennai - 600 028 (Tamil Nadu)  
100/1, 1st Floor, Main Market, Allamdaspet, Chennai - 600 028 (Tamil Nadu)  
100/1, 1st Floor, Main Market, Allamdaspet, Chennai - 600 028 (Tamil Nadu)  
100/1, 1st Floor, Main Market, Allamdaspet, Chennai - 600 028 (Tamil Nadu)  
100/1, 1st Floor, Main Market, Allamdaspet, Chennai - 600 028 (Tamil Nadu)



DRUG STORE AND BUSINESS MANAGEMENT

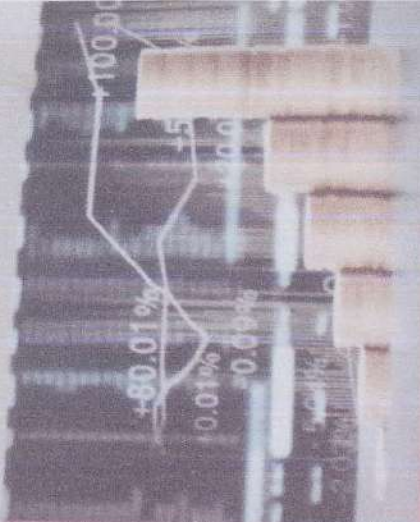


*A Text Book of*

# DRUG STORE AND BUSINESS MANAGEMENT

*Strictly As Per Syllabus Prescribed for D. Pharmacy,  
Second Year by Pharmacy Council of India, New Delhi.*

Dr. Sunila T. Patil  
Dr. Md. Rageeb Md. Usman  
Adv. Vivek D. Chaudhari



Pee Vee (Regd.)

PRINCIPAL

P.S.G.V.P. Mandal's, College of Pharmacy  
SHAHADA - 425 409, Dist. NANDURBAR

Nirved is not only collection of pages or words, it us path through whicheck we improve modern lifestyle with Indian spices. We know that India is land of spices. Walk into kitchen of typical house hold you will find that string of container that are filled with different types of spices. These spices not only use in kitchen but they have very many medicinal property. From ancient many spices are cure to diseases.



Ritik S. Jain  
Paresh A. Patil  
Azam Z. Shaikh

## Nirved

Path to change or improve modern lifestyle with Indian spices

Mr. Azam Z. Shaikh working as Assistant professor at Ahinsa Institute of Pharmacy, Dondaicha. He published 10 article in national journals.  
Mr. P. A. Patil working as Assitant professor at Ahinsa Institute of Pharmacy, Dondaicha. He published 18 articles in national journals.  
Mr. R. S. Jain pursuing degree course from Ahinsa Institute of pharmacy, Dondaicha.


FOR AUTHOR USE

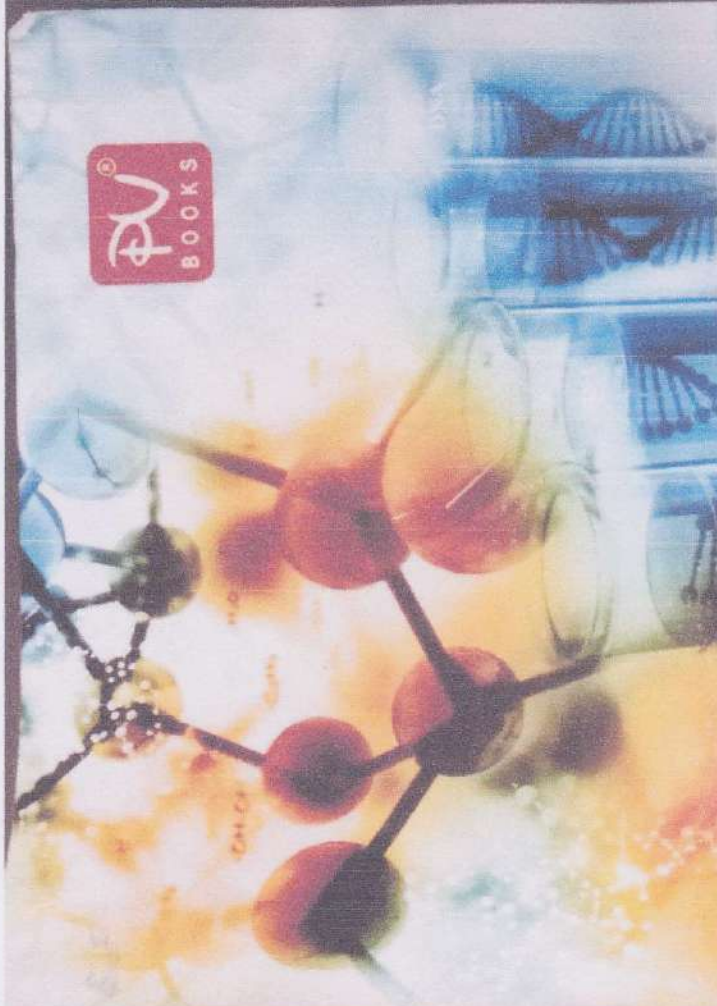
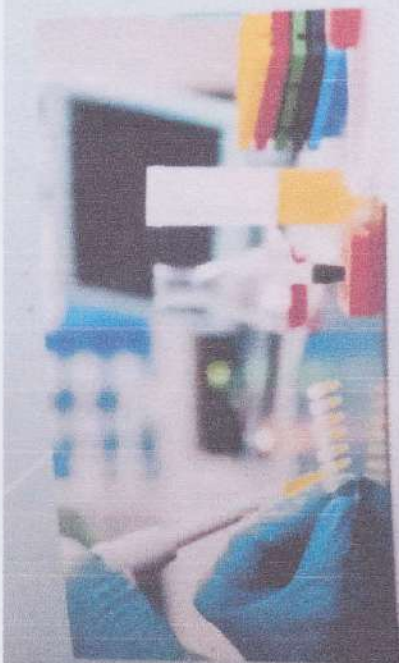


978-620-2-68154-4

LAP LAMBERT  
Academic Publishing



  
PRINCIPAL  
P.S.G.V.P. Mendal's, College of Pharmacy  
SHAHADA - 425409 DIST. NANDHARRAR



**PV** A Text Book of **BIOCHEMISTRY AND CLINICAL PATHOLOGY**

A Text Book of

# **BIOCHEMISTRY AND CLINICAL PATHOLOGY**

*Strictly As Per Syllabus Prescribed for B. Pharmacy,  
First Year by Pharmacy Council of India, New Delhi*



Rahul B. Lovhare  
Dr. Md. Rageeb Md. Usman  
Dr. Sunil P. Pawar

*(Signature)*  
**PRINCIPAL**

Pee Vee (Regd.)

P.S.G.V.P. Mendal's, College of Pharmacy  
SHAHADA - 425609, Dist. NANURDAR

ISBN 9781543343496



## **S. VIKAS AND COMPANY (MEDICAL PUBLISHERS)**

ADMIN : ND-106, BIKRAMPURA, JALANDHAR CITY-144 008 (PUNJAB), INDIA  
SALES : ND-227, TANDA ROAD, JALANDHAR CITY-144 008 (PUNJAB), INDIA  
PRODUCTION : ND-226, TANDA ROAD, JALANDHAR CITY-144 008 (PUNJAB)  
PHONE : 094786-64645

CUSTOMER CARE : For any queries, please contact - 094786-14148  
EMAIL : pv\_books@yahoo.com  
Online Shop : www.pvbooks.in



## ABOUT THE AUTHORS



**Dr. HEMANT P. SURYAWANSHI** is presently working as an Assistant Professor at Department of Pharmacology, P. S. G. V. P. M'S, College of Pharmacy Shahada (MS). He did B. Pharm. from North Maharashtra University, Jalgaon, M. Pharm. in subject Pharmacology from Annamalai University, Tamilnadu and Ph.D. from JIIT University, Rajasthan. He has more than 12 years of teaching experience. He has published more than 35 papers in various national and international journals also attended 20 national and international conferences and seminars. He has published three books. He is a life member of several national bodies like APTI, IJPT etc. Dr. Suryawanshi has an excellent track record in academic and actively engaged in teaching, research and administration.



**Dr. MUKESH R. PATEL** is presently working as an Assistant Registrar at Shri. Govind Guru University, Govt Polytechnic Campus, Gadukpur, Godhra, Gujarat. Before that he served as in-charge principal at Shri B. M. Shah CPER, Modasa, Gujarat. He did B. Pharm. from North Maharashtra University, Jalgaon, M. Pharm. from R. G. U. H. S. Karnataka and Ph.D. from HNG University, Patan. Under his guidance 34 students completed their M. Pharm. and 8 students their Ph.D. He has more than 15 years of teaching experience. He has published more than 60 research papers in various national and international journals. He has also participated and attended 30 national and international conferences and seminars. He has published two books.



**Prof. Dr. S. P. PAWAR** is presently working as Principal, P. S. G. V. P. M'S, College of Pharmacy Shahada (MS). Dr. Pawar has more than 21 years of research and teaching experience at both U.G. and P.G. level. He is a leading scientist and well known academician of international repute. He did his Ph.D. at Dept. of Pharmaceutical Science, Nagpur University. Under his guidance 15 students completed their M. Pharm. and 10 students their Ph.D. He has published more than 65 research papers in various national and international journals. He has also participated and attended 40 national and international conferences and seminars. He has published ten books.

**NIRALI**  
PRAKASHAN  
ADVANCEMENT OF KNOWLEDGE

1312, Shivaji Nagar, 'Abhyudaya Pragati'  
Off. J. M. Road, Pune 411005

Tel: (+91-020) 2551 2336/7/9 • Fax: (+91-020) 2551 1379

Email : [niralipune@pragationline.com](mailto:niralipune@pragationline.com)

Website : [www.pragatonline.com](http://www.pragatonline.com)

Also find us on [www.facebook.com/niralibooks](http://www.facebook.com/niralibooks)

@nirali.prakashan



ISBN 9788190413992



ISBN 9788190413992



AS PER PCI  
REGULATIONS  
THIRD YEAR  
B. PHARM.  
SEMESTER-V

# A PRACTICAL BOOK OF PHARMACOLOGY-II

**Dr. HEMANT P. SURYAWANSHI**

**Dr. MUKESH R. PATEL**

**Dr. SUNIL P. PAWAR**

**PRINCIPAL**

P.S.G.V.P. Mandal's, College of Pharmacy  
SHAHADA - 425409, Dist. NANDURBAR

**NIRALI**  
PRAKASHAN  
ADVANCEMENT OF KNOWLEDGE

Rahul B. Loyhare  
Akash Jain  
Dr. Md. Rageeb Md. Usman  
Dr. Sunil P. Pawar



# A Text Book of PHARMACEUTICS-I

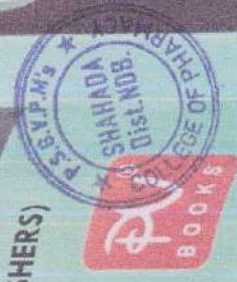
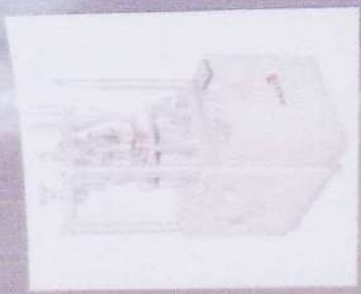
Strictly As Per Syllabus Prescribed for D. Pharmacy,  
First Year by Pharmacy Council of India, New Delhi



PRINCIPAL  
P.S.C.V.P. Mandal's, College of Pharmacy  
SHAHADA - 425409, Dist. NANUDGAR

Pee Vee (Regd.)

PV® A Text Book of PHARMACEUTICS-I



## S. VIKAS AND COMPANY (MEDICAL PUBLISHERS)

ADMIN: ND-106, BIKRAMPURA, JALANDHAR CITY-144 008 (PUNJAB), INDIA  
SALES: ND-227, TANDA ROAD, JALANDHAR CITY-144 008 (PUNJAB), INDIA  
PRODUCTION: ND-226, TANDA ROAD, JALANDHAR CITY-144 008 (PUNJAB), INDIA  
PHONE: 094786-64645  
CUSTOMER CARE: For any queries, please contact - 094786-14148  
EMAIL: pv\_books@yahoo.com  
Online Shop: www.pvbooks.in

# PHARMACOGNOSY & PHYTOCHEMISTRY-1

As Per PCI Syllabus

4th SEMESTER B Pharm



- Dr. R.A. Ahirrao
- Mr. R.B. Lohare
- Mr. R.D. Ahire
- Dr. H.P. Suryawanshi

# PHARMACOGNOSY & PHYTOCHEMISTRY-1

This Book involves the fundamentals of Pharmacognosy like scope, classification of crude drugs, their identification and evaluation, phytochemicals present in them and their medicinal properties. The main objective of written "Pharmacognosy and Phytochemistry-1" book is that upon reading this book, the student shall be able to know the techniques in the cultivation and production of crude drugs, to know the crude drugs, their uses and chemical nature, know the evaluation techniques for the herbal drugs and to carry out the microscopic and morphological evaluation of crude drugs.

### Salient Features:

- Written in a simple, concise and easy to understand language
- Each Topic has been covered in a very systematic & comprehensive manner.
- This book is the scientific and systematic study of Crude drugs along with their cultivation and collection.
- Revision Exercises at the end of each chapter for self-evaluation.
- Detailed Index at the end of the book for easy reference and cross-reference.

**Birla**  
PUBLICATIONS  
PVT LTD

Ph : 011-22323254, 22323622 © 9990024447  
email : birla\_publications@gmail.com  
website : www.birlapublications.com  
An ISO 9001:2015 Certified Co.



**PRINCIPAL**

P.S.G.V.P.Mendal's, College of Pharmacy  
SHAHADA-425409, Dist. NANARGHAR