**IQAC & SAVANT Club of** 

# YASHWANTRAO BHONSALE

# **COLLEGE OF PHARMACY**

In Collaboration With

The Indian Pharmaceutical Association- Maharashtra State Branch (The IPA-MSB)

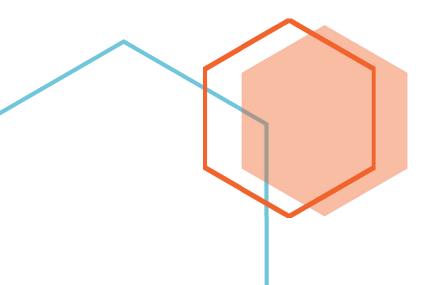
Organized

4<sup>th</sup> One Day National Symposium



Saturday, 05th March 2022

Systematic investigation and comprehensive analysis of approved drugs could provide valuable insights into trends in the discovery and may contribute to further discovery of newer drugs systematically. Food and drug administration (FDA's) Center for Drug Evaluation and Research (CDER) every year summarizes novel drugs, some of which are truly innovative and help in advancing clinical care.



Bhonsale Knowledge City
Building no. 2, Vazarwadi,
Charathe,
Sawantwadi – 416510,
Tal – Sawantwadi,
Dist - Sindhudurg,
Maharashtra, India.
(+91 2363) 272233, 272299
ybpharmacy@gmail.com

# YBCPs' Souvenir-2022 "Novel Trends in Pharmaceutical Research"

• • •

# YBCPs' Souvenir-2022 "Novel Trends in Pharmaceutical Research"

# **About Society**

Shri Yashwantrao Bhonsale Education Society (SYBES) is a premier educational organization in Sindhudurg district established in 2002 with the only aim to make rapid progress of the students through high quality, diversified and multi-disciplinary education which will help the young ones to meet the challenges of 21st century and to capitalize their skills ahead

# **About Institute**

Yashwantrao Bhonsale College of Pharmacy (YBCP) is the first ever Pharmacy College in Sindhudurg district introducing pinnacle of excellence in pharma education and research. The commitment for total quality management (TQM) and discipline is prime slogan and motto of our college. To cater the need of technical & professional education in Konkan region especially in Sindhudurg district, YBCP commenced from 2015 with a state of art ultra-modern infrastructure offering M. Pharm (Pharmaceutics), B. Pharm and D. Pharm course. It has taken a huge stride towards providing the advance technical education to each & every rural student of the Konkan region.

# **About The IPA-MSB**

The IPA-MSB is a state branch of the IPA initiated in 1941 immediately after the foundation of IPA in 1939. The IPA-MSB runs an educational institute, Bombay College of Pharmacy (BCP), The Amrut Mody Research Fund (AMRF), The Research Society of Bombay College of Pharmacy (RSBCP), Dr. M.K. Rangnekar Memorial Testing Laboratory (MKR), Academy for Clinical Excellence (ACE), IPA-SF-MSB are other ventures which are governed by The IPA-MSB. The IPAMSB is the only state branch of IPA, that has the distinction of getting the BEST BRANCH Award constituted by IPA six times i.e 2004, 2005, 201, 2012, 2016 and 2017. It has till date 3248 plus Life members and has active local branches at Pune, Nashik, Aurangabad, Solapur, Nagpur, Kolhapur, Amravati, Dhule and Raigad.

# About IPA

The Indian Pharmaceutical Association (IPA) is the premier professional association of pharmacist in India founded on 23rd Dec 1939, with a member base of over 15000 spreads across the length and breadth of the Nation. IPA operates in India through 21 state branches and more than 46 local branches. The members represent various facets of pharmaceutical profession viz. industry, regulatory, community pharmacy, hospital pharmacy and education. IPA is also actively associated in managina several academic programs. As member of the Drug Technical Advisory Board, India, IPA is actively involved in advising the Government on matters of professional importance. IPA is affiliated to international pharma associations like FIP, FAPA, CPA, AAPS, AAiPS, IPSF & WHO for carrying out various collaborative professional activities which include organizing training program for professionals from industry, academics, regulatory and practice, making representations to the authorities on matters of professional interest and working towards constantly upgrading the standards of professional services offered by the pharmacists.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

Executive Chairman Message

Achyut K. Sawant-Bhonsale Executive Chairman, Shri. Yashwantrao Bhonsale Education Society

I am glad to know that Yashwantrao Bhonsale College of Pharmacy, is organizing the National Symposium for the fourth time in continuity within 6 years of its inception. It is my great pleasure to welcome the renowned guest speakers and the academicians, researcher scholars, delegates and students from all over India attending this National Symposium on "Novel Trends in Pharmaceutical Research" organized by Yashwantrao Bhonsale College of Pharmacy, Sawantwadi.

It is a moment of satisfaction and pleasure to say that this national conference is organized with a view of providing a platform to Researchers and Students in the field of Pharmacy to gain knowledge and showcase their talent in the field of Study. I am sure the Scientific topics of Research to be discussed in this symposium will promote the knowledge of the attendees. I hope this conference will facilitate exploration of scientific data on Novel Trends in Pharmaceutical Research.

I appreciate the Principal together with the staff in different organizing committees for their sincere and sustained efforts for bringing together this Conference as success.

Once again, I am delighted to welcome you all and wish this event a grand success!







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

Chairperson Message

Mrs. ASSITA A SANASTERIOGRAF

Adv. Asmita A. Sawant-Bhonsale
Chairperson
Shri. Yashwantrao Bhonsale Education Society

It is of great pride and honour for me to know about the One Day National Symposium organized by the entire team of Yashwantrao Bhonsale College of Pharmacy. I believe that our venue guarantees a successful event amid the culture and beautiful scenery of Konkan.

The symposium with the theme of "Novel Trends in Pharmaceutical Research" is highly relevant to recent discoveries and developments in the field of Pharmacy. This symposium is surely a big opportunity for all the participants to learn through scientific and professional interaction and update their knowledge and experiences.

We are fortunate to serve a national level event in form of Symposium and am thankful to the college for being part of this initiative. The vision, knowledge and experience of organizing the national level symposium will help us pave the way into the future of Pharmacy professionals into the scientific research.

I wish a all success for this major event of Yashwantrao Bhonsale College of Pharmacy.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

Secretary Message



Sanjeev I. Desai Secretary Shri. Yashwantrao Bhonsale Education Society

I feel delighted to welcome all the delegates to attend One Day National Symposium on Novel Trends in Pharmaceutical Research on behalf of the organizing team of Yashwantrao Bhonsale College of Pharmacy, Sawantwadi.

It is the wholesome efforts of the Principal and entire organizing team of the college in arranging such a big event with eminent lectures of highly renowned speakers who would throw light on research and innovation related information that will shape the pharmacy future. I hope that maximum number of participants will take this opportunity and attend the symposium to exchange ideas, discover novel trends and broaden their knowledge related to Pharmaceutical Research.

I wholeheartedly wish for the success to the entire organizing team!

**ESTD.2015** 







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### NOVEL TRENDS IN PHARMACEUTICAL RESEARCH

Saturday, 05th March 2022

# With Best Compliments From



Mr. Nitin Maniar

Hon. Secretary

ical Association-Maharash

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

**ESTD.2015** 







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

Chairperson IPA-MSB Message



Principal, Tatyasaheb Kore College of Pharmacy, Warananagar Chairperson, The IPA-MSB, Education Division, Member, BOS Pharmacy, Shivaji University, Kolhapur

I am very much delighted for being associated with the organisation of one-day National Symposium on "Novel Trends in Pharmaceutical Research" organised by Yashwantrao Bhonsale College of Pharmacy on 05th March 2022 in the authority of official of Indian Pharmaceutical Association Maharashtra State Branch. I congratulate the Management, Principal, Staff, Students and all the stakeholders of the college for your commitments towards consistent professional upliftment.

Discoveries made in the biomedical field within the last several years are transformative and will probably lead to major industry disruptions in the near future, attracting radical change in R&D focus.

I am sure the symposium will address these issues through brainstorming, networking and making meaningful connections. It will radiate young researcher minds towards advanced research too.

Heartfelt gratitude to the Organizing Committee and all Faculty of Management Department for their contribution in successfully organising and managing this event.

Kudos to the student/ staff delegates as their participation could make the symposium meaningful.

Thanks and Regards







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

Principal Message



Dr. Vijay A. Jagtap

Principal, Yashwantrao Bhonsale College of Pharmacy, Sawantwadi Coordinator, The IPA-MSB, Education Division, Sindhudurg District Convener – One day National Symposium

I feel privileged to welcome to all the delegates and participants for the one-day National Symposium on the subject "Novel Trends in Pharmaceutical Research" on behalf of Yashwantrao Bhonsale College of Pharmacy, and congratulate my entire team for this big arrangement of the grand event.

YBCP has been arranging the national level symposium from last three years, this being our fourth year of hosting this event. The vision behind this National level Symposium arranged at the Konkan Region is to provide an opportunity to the National as well as regional students to grow and broaden their horizon of knowledge by indulging into diverse spheres of learning.

In our endeavour to raise the standards of discourse, we continue to remain aware in order to meet with the changing needs of our stakeholders. The symposium aims to bring different ideologies under one roof and provide opportunities to exchange ideas face to face, to establish research relations and to find partners for future collaboration. The themes for this conference is indicative of relevant research areas to give the prospective authors innovative prepositions about the ambit of discussion.

The discovery and advent in the Research prospects of Pharmacy is accelerating the whole process of drug development. Recently, the development of new technologies has revolutionized the concept of pharmaceutical research. The current Symposium will give an update on recent advances, trends, technologies and developments in the field of drug research in Pharmacy.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

We wish to thank our eminent speakers of technical session and welcome then wholeheartedly for this Symposium. The guest of honour being Dr. John D'souza, Principal, Tatyasaheb Kore College of Pharmacy, Shivaji University, Kolhapur and the resource persons being Dr. Rajendra P. Marathe, Principal, Government College of Pharmacy, Ratnagiri and Dr. Rajesh B. Nawale, Professor, Government College of Pharmacy, Ratnagiri. It's my indeed pleasure to say thank the Indian Pharmaceutical Association along with Maharashtra State Branch Hon. President Dr. T. V. Narayana, Hon. Secretary Mr. Nitin Maniar and Hon. Divisional Chapter Head — Education Dr. John D'souza for collaborating the symposium.

We would like to thank Current Trends in Pharmacy and Pharmaceutical Chemistry Journal for providing us with the platform for online publication.

I also express my lot of thanks to all our Patrons Hon. Executive Chairman Mr. Achyut Sawantbhonsale, Hon. Chairman Adv. Mrs. Asmita Sawantbhonsale, Hon. Secretary Mr. Sanjeev Desai and Hon. Admn. Coordinator Mrs. Sunetra Phatak for their support and constant encouragement to organize this symposium.

Last but not the least; I would also like to thank the staff, the teachers, the committee members, students and the coordinator for their contribution in successfully organising and managing this event. This event wouldn't have been possible without their enthusiasm and constant support.

We welcome you all to YBCP and hope that this symposium will serve as a medium for all of us to upgrade our knowledge regarding the research prospects in our field of study.

Thank you!

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

Coordinator Message



Mr. Vinod S. Mule
Organizing Secretary
Asst. Prof., Yashwantrao Bhonsale College of Pharmacy, Sawantwadi

I would like to thanks to organizing institute Yashwantrao Bhonsale College of Pharmacy, Sawantwadi for conducting one day national level symposium on "NOVEL TRENDS IN PHARMACEUTICAL RESEARCH" on 05<sup>th</sup> March, 2022 at Sawantwadi & offering such a marvellous opportunity to work as Organizing Secretary of symposium. During my work I had observed this grand symposium with all corners.

This one day national symposium has enlighten the bright minds of the delegates & also aspires them for research oriented thinking. This symposium basically aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences on all aspects of recent trends in drug design. Theme for the symposium have revolved around the linkages between students, researchers & academicians. All the delegates had taken the efforts to present their research work, review work through poster presentation. This souvenir is the result of all vital movements that we all had witnessed during this symposium.

Wishing you all a bright future.

Thanking you.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

## **CHIEF PATRONS**



Hon. Shri. Achyut Sawantbhonsale Executive Chairman



Hon. Adv. Smt. Asmita Sawantbhonsale Chairperson



Hon. Shri. Sanjeev Desai Secretary



Hon. Smt. Sunetra Phatak
Admn. Coordinator

**Shri Yashwantrao Bhonsale Education Society** 







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

## **RESOURCE PERSONS**



# Dr. Rajendra P. Marathe

Principal

Government College of Pharmacy, Ratnagiri, Maharashtra, India

**Topic: Spectroscopy methods importance in research** 



# Dr. Rajesh B. Nawale

Professor,

Government College of Pharmacy, Ratnagiri, Maharashtra, India

Topic: Novel trends in pharmaceutical research:
A historical perspective







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

## **CONVENER**



Dr. Vijay A. Jagtap
Principal and Head
Dept. of Pharmaceutical Chemistry,
Sindhudurg District Coordinator, The IPA-MSB Education Division

### COORDINATOR



Mr. Vinod S. Mule
Asst Professor
HoD., Dept Pharmacology



Dr. Rohan K. Barse Asso. Professor HoD., Dept of Pharmaceutics



Mr. Satyajit P. Sathe Principal, Yashwantrao Bhonsale College of D. Pharmacy







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

# **REGISTRATION COMMITTEE**



Dr. Rohan K. Barse
Asso. Professor
HoD., Dept of Pharmaceutics (PG)



Ms. Namita G. Narvekar
Asst Professor
Dept of Quality Assurance







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

# **SCIENTIFIC COMMITTEE**



Mr. Tushar G. Rukari
Asst Professor
HoD., Dept of Pharmaceutics (UG)



Ms. Sparsha S. Bandekar Asst Professor HoD., Dept of Pharmacognosy







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

# TRANSPORTATION AND ACCOMMODATION COMMITTEE



Mr. Omkar M. Pendse HoD., Integrated Diploma in Pharmacy



Ms. Harshada A. Sail Lecturer Integrated Diploma in Pharmacy







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

REFRESHMENT COMMITTEE



Ms. Rashmi H. Mahabal
Asst Professor
HoD., Dept of Pharmaceutical Chemistry



**ESTD.2015** 



Ms. Sneha J. Sawant Lecturer Integrated Diploma in Pharmacy Ms. Sneha S. Mahajan Lecturer Diploma in Pharmacy







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

# **STAGE & BACKSTAGE COMMITTEE**



Ms. Gauri U. Bhivshet
Asst Professor
Dept of Quality Assurance



Mr. Mayuresh R. Redkar
Asst Professor
Dept of Pharmaceutics



Ms. Namita S. Bhosale
Asst Professor
Dept of Pharmaceutics



Ms. Aishwarya A. Parab Asst Professor Dept of Pharmaceutics



Mrs. Advika A. Arolkar Lecturer Diploma in Pharmacy



Mr. Roshan V. Ahire Lecturer Diploma in Pharmacy







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

# **HOSPITALITY COMMITTEE**



Mr. Sanket M. Gandhi Asst Professor, Dept of Pharmaceutics

# RANGOLI COMMITTEE







Ms. Supriya B. Rawool Lecturer Integrated Diploma in Pharmacy Ms. Rashmi D. Naik Lecturer Diploma in Pharmacy Ms. Prajakta N. Desai Lecturer Diploma in Pharmacy







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

**A SPECIAL THANKS TO** 



Mr. Prasad Mahale Registrar Bhonsale Knowledge City



Mr. Nitin V. Sandye PRO Bhonsale Knowledge City

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते । ESTD.2015







&

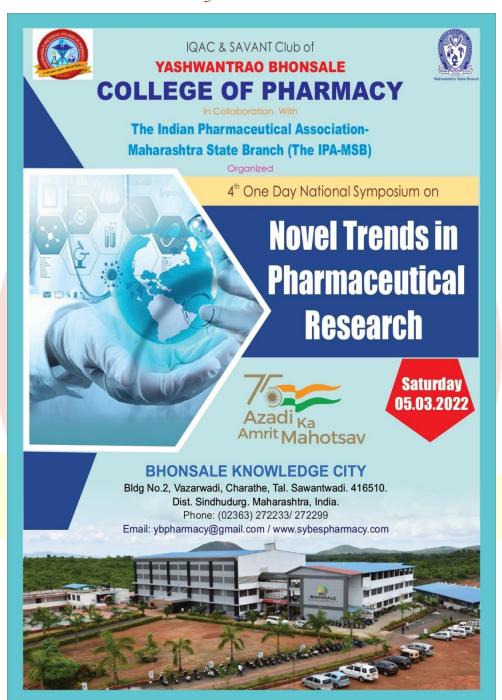
The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022









The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

# Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022









The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

# Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022



# 4th One Day National Symposium on

# **Novel Trends in Pharmaceutical Research**

### Dear Delegates,

It gives us immense pleasure to invite you for your participation in one day National Symposium on "Novel Trends in Pharmaceutical Research" organised by Yashwantrao Bhonsale College of Pharmacy on 05th March 2022. We welcome you to participate in this symposium.

### **About Society**

Shri Yashwantrao Bhonsale Education Society (SYBES) is a premier educational organization in Sindhudurg district established in 2002 with the only aim to make rapid progress of the students through high quality, diversified and multi-disciplinary education which will help the young ones to meet the challenges of 21st century and to capitalize their skills ahead.

### About Institute

Yashwantrao Bhonsale College of Pharmacy (YBCP) is the first ever Pharmacy College in Sindhudurg district introducing pinnacle of excellence in pharma education and research. The commitment for total quality management (TQM) and discipline is prime slogan and motto of our college. To cater the need of technical & professional education in Konkan region especially in Sindhudurg district, YBCP commenced from 2015 with a state of art ultra-modern infrastructure offering M. Pharm (Pharmaceutics), B. Pharm and D. Pharm course. It has taken a huge stride towards providing the advance technical education to each & every rural student of the

### Symposium Schedule

Time	Session	
09.00 am to 09.45 am	Registration, Breakfast & Tea	
09.45 am to 10.15 am	Inaugural and Welcome Address	
10.15 am to 10.30 am	Keynote Address	
10.30 am to 11.30 am	Technical Session I	
11.30 am to 12.30 pm	Technical Session II	
12.30 pm to 01.30 pm	Lunch Break	
01.30 pm to 03.15 pm	Poster Presentation	
03.15 pm to 03.30 pm	High Tea	
03.30 pm to 04.15 pm	Valedictory	

Provide pharmacy education to our rural students that optimizes the health & wellness of individuals & communities.

- models through effective infrastructure & learning
- Foster a culture of inclusivity that attracts and retains a diverse students, faculty & staff
- To enrich social values by being a torch-bearer of

The Indian Pharmaceutical Association (IPA) is the premier professional association of pharmacist in India founded on 23rd Dec 1939, with a member base of over 15000 spread across the length and breadth of the Nation. IPA operates in India through 21 state branches and more than 46 local branches. The members represent various facets of pharmaceutical profession viz. industry, regulatory, community pharmacy, hospital pharmacy and education. IPA is also actively associated in managing several academic programs. As member of the Drug Technical Advisory Board, India, IPA is actively involved in advising the Government on matters of professional importance. IPA is affiliated to International pharma associations like FIP, FAPA, CPA, AAPS, AAiPS, IPSF & WHO for carrying out various collaborative professional activities which include organizing training program for professionals from industry, academics, regulatory and practice, making representations to the authorities on matters of professional interest and working towards constantly upgrading the standards of  $professional\,services\,offered\,by\,the\,pharmacists.$ 

### About The IPA-MSB

The IPA-MSB is a state branch of the IPA initiated in 1941 immediately after the foundation of IPA in 1939. The IPA-MSB runs an educational institute, Bombay College of Pharmacy (BCP), The Amrut Mody Research Fund (AMRF), The Research Society of Bombay College of Pharmacy (RSBCP), Dr. M.K. Rangnekar Memorial Testing Laboratory (MKR), Academy for Clinical Excellence (ACE), IPA-SF-MSB are other ventures which are governed by The IPA-MSB. The IPA-MSB is the only state branch of IPA, that has the distinction of getting the BEST BRANCH Award constituted by IPA six times i.e 2004, 2005, 2011, 2012, 2016 and 2017. It has till date 3248 plus Life members and has active local branches at Pune, Nashik, Aurangabad, Solapur, Nagpur, Kolhapur, Amravati, Dhule and Raigad







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

# Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022



4<sup>th</sup> One Day National Symposium on

# **Novel Trends in Pharmaceutical Research**

### **Symposium Registration:**

- 1. All Diploma, UG, PG Pharmacy students, research scholars, persons from industry and teachers of any discipline.
- 2. Registration fees of Rs. 500/- per participant that includes workshop kit, certificate, souvenir, tea & working lunch. Free transportation will be available from bus stand to venue.
- 3. Receipt of payment can be attached in google registration form.
- Registered Participants can present poster & only presenting author will get presentation certificate.
- 5. Last date for registration & poster abstract submission along with registration fees on or before  $28^{\rm th}$  February, 2022.

### **Guidelines for Poster Presentation:**

- 1. A review, research or survey for poster presentations are invited on topic relevant to the title of symposium or any topic related to pharmaceutical sciences.
- 2. Registration for symposium is mandatory for poster presentation & no extra fees required to pay for poster presentation.
- 3. All Diploma, UG, PG Pharmacy students, research scholar, persons from industry and teachers of any discipline are encouraged to present paper.
- ${\bf 4.\,Only\,\,presenting\,\,author\,\,will\,\,get\,\,presentation\,\,certificate.}$
- 5. Poster should be in flex printed format with poster size 1 meter  $\times$  1 meter
- Last date for registration & abstract submission along with registration fees on or before 28<sup>th</sup> February, 2022.
- 7. Your registration for poster presentation will be confirmed after receipt of payment.
- 8. Download abstract template to submit during registration: <a href="https://tinyurl.com/2p94n2c3">https://tinyurl.com/2p94n2c3</a>
- 9. First three outstanding presentations will be awarded with certificate and trophy

### **Bank Details for Registration Fees**

Name of Bank: Bank of India

A/C Name: Mr. Anant Shrikrishna Arolkar

A/C No: 141010110007851 Brach: Sawantwadi IFSC Code: BKID0001410

Google Pay/ PhonePay No: 9404940169

Mr. Prashant Arolkar

The objective the symposium is to gather the researchers & participants from different research areas to share their knowledge. The expert speakers during the symposium will allow the delegates to gain the updates about recent & novel trends in pharmaceutical research.

**Objectives of Symposium** 

This symposium can also give a platform for budding researchers & students to present their research as poster.



### Google form link for registration:

Click on the link below for registration:

https://forms.gle/b9EdYPnC81q8d7jEA







R

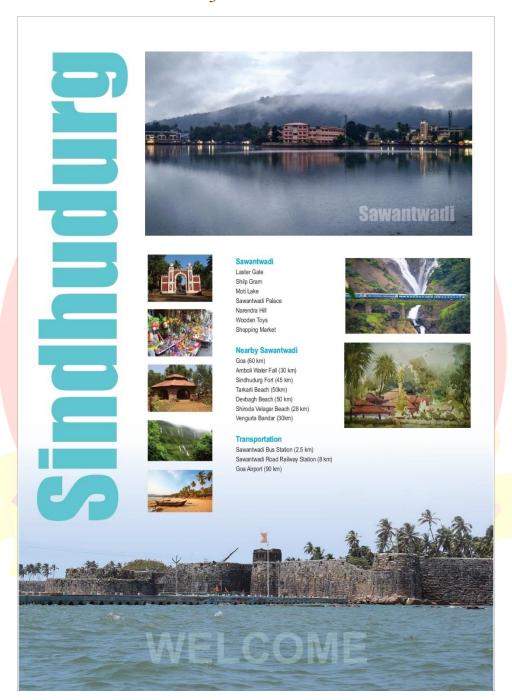
The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022









R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

# Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

### INDEX

Suno	Sections	Number of	Page
Sr no	Sections	Abstracts	number
01	Pharmaceutics (PH)	39	26-64
02	Pharmaceutical Chemistry	12 65-76	
	(PCHEM)		
03	Pharmacology (PCOL)	11	77-87
04	Pharmacognosy (PCOG)	14	88-101
05	Others (OTH)	09	102-110

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते ।। ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0101

# DEVELOPMENT AND VALIDATION OF UV SPECTEROSCOPIC METHOD FOR DETERMINATION OF EMPAGLIFLOZIN IN BULK AND PHARMACEUTICAL DOSAGE FORMS

Dhara N Vashi\*

Shree Dhanvantary Pharmacy College, Kim (Gujrat)

vashidhara9516@gmail.com

### **Abstract:**

Empagliflozin is an anti-diabetic drug which involves the blockage of SGLT2 receptor for treating type 2 diabetes. In the present study a simple, rapid, precise and accurate spectroscopic method is been developed for the estimation of empagliflozin in the bulk and as a pharmaceutical formulation and also solvent was selected based on its solubility in the suitable solvent. The drug follows beer lamberts law and the absorption maxima was found to be at 225nm with in a concentration range of 10 to 15 μg/ mL. The method developed and validated as per the values of linearity, precision, accuracy, ruggedness, robustness, limit of detection and limit of quantification. Thus, this method developed is accurate and can be performed even at lab scale along with its possibilities for industrial application for both bulk and solid dosage form. This method was validated as per international council on harmonisation (ICH) Q2(R1) guidelines

**Keywords:** empagliflozin, tablets, UV spectrometry, method development and validation.

।। नहि ज्ञानेन सदृशम् पाव ESTD.2015







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0102

### OVERVIEW OF BEE VENOM AND ITS THERAPEUTIC EFFECTS

Phalke Pallavi L\*, Patel Dipti H

Parul Institute of Pharmacy and Research, Parul University, Limda, Waghodiya. Vadodara 391760, Gujarat, India.

falkepallavi@gmail.com

### **Abstract:**

The main aim of the review is to study details of the bee venom. In this review, the bee stings, and bee venom's history, structure, and properties are studied. Though the human bee interaction is unproblematic as a defense mechanism, bee barbed her sting in the human body to release bee venom. This bee venom contains various chemical components, which include various groups such as peptides, polypeptides, volatile oils, etc. The major component of the bee venom is Mellitin, which is responsible for the pharmacological activities of the bee venom. Bee venom shows various pharmacological activities which include Rheumatoid Arthritis, Anti-Inflammatory, Atopic Dermatitis, Acne, Anti-Microbial Activity, etc.

**Keywords:** Bee venom, Apis Mellifera, Mellitin, Apamin, Bee Sting.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0103

# DESIGN AND CHARACTERIZATION OF MANNOSE ANCHORED NANOLIPID PARTICLES FOR HEPATOCY

Gupta M.<sup>1</sup>, Sansare V. A.<sup>2\*</sup>, Shrivastava B. <sup>1</sup>, Jadhav S. G. <sup>3</sup>, Katata L.<sup>4</sup>

- 1. School of Pharmaceutical Sciences, Jaipur National University, Jaipur, India.
- 2. Department of Pharmaceutics, Indira Institute of Pharmacy, Sadavali, India.
- 3. Department of Pharmaceutical Chemistry, SVPM'S College of Pharmacy, Malegaon, India.
  - 4. Department of Chemistry, North-West University, Mahikeng, South Africa. avipulsansare@gmail.com

### **Abstract:**

Curcumin and sesamol are well-recognized antioxidant phytoactive isolated from the rhizomes of *Curcuma longa*. Numerous potential studies have proved the liver protective activities of curcumin and sesamol against free radicals. However poor solubility and hurdles like unfavourable physicochemical properties minimize use of these well recognized active herbal constituents. Thus, present scientific investigation was initiated with aim to formulate lipid based nanosized particles for hepatic targeted delivery of curcumin and sesamol. Both active constituents loaded mannosylated lipid nanoparticles were formulated separately and assessed for various properties. The liver protective potential of nano sized particles was assessed using CCl4 induced hepatotoxic Wistar rat model. Mannosylated nanosized particles revealed acceptable particle size and minimum hemolytic toxicity. In addition to this, The mannose anchored nanoparticles showed significantly better (p < 0.05) reduction of serum liver injury markers and proinflammatory cytokine compared to conventional nanoparticles. Thus, synthesized mannose anchored stearylamine could be novel targeting ligand having hepatocyte targeting potential.

Keywords: Liver targeting, Curcumin, Sesamol, Nanoparticles, Hepatoprotective potential assessment







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0104

### NOVEL TRENDS IN VACCINE DELIVERY SYSTEM

Gawas S.S.\*, Kubal R.G., Parab A.A., Mr. Gandhi S.M., Dr. Rohan K. Barse, Dr. Vijay A Jagtap Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

swapnaligawas06022000@gmail.com

### **Abstract:**

Vaccination is a critically important tool in preventing infectious disease. Vaccines are the preparations given to patients to evoke immune responses leading to the production of antibodies (humoral) or cell-mediated responses that will combat infectious agents or non-infectious conditions such as malignancies. The pandemics of unpredictable, highly contagious viruses increase the ever-high social need for rapid vaccine development. Efforts are being made to deliver vaccines through carriers, so resulting in their sustained liberation and targeting. Needle- free immunogen delivery may aid in these mass vaccinations, by increasing ease and speed of delivery, and by giving improved safety and compliance, decreasing prices, and reducing pain related to vaccinations, microneedle vaccination provide a superior immunological response at the same dose, delivery of vaccine via mucosal route can allow antigen to interact with the mucosa associated lymphoid tissue to induce both mucosal and systemic immunity. The transporter systems such as liposomes, dendrimers, micellar systems, microspheres, nanoparticles, Immuno Stimulatory Complexes (ISCOMs), plant-derived viruses, that are currently being investigated and developed as immunogen delivery systems are reviewed. This poster summarizes the principle behind the advances of vaccination techniques.

**Keywords:** Vaccine, Immunogen, Microneedle, Microspheres, Nanoparticle, Vaccination techniques.

**ESTD.2015** 







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0105

# EXTENSIVE EVALUATION OF POLYHERBAL TOPICAL FORMULATIONS FOR VARIOUS SKIN RELATED DISORDERS

Mr. Sujit K Nagare<sup>1\*</sup>, Dr. Birendra Shrivastava1, Dr. Amol Khade,

Mr. Vipul Sansare<sup>2</sup>, Mr. Prashant Gurav<sup>2</sup>, Mrs. Ketaki Dhane<sup>2</sup>.

- 1. School of Pharmaceutical Sciences, JNU Jaipur.
- 2. Indira Institute of Pharmacy, Sadavali, Ratnagiri-415804

nagaresk@gmail.com

### Abstract:

Skin disease is a common ailment and it affects all ages from the neonate to the elderly and causes harm in number of ways. There are more than a thousand conditions that may affect the skin but most skin diseases can be categorized rashes, viral infections, Bacterial infections, Fungal infections, and Parasitic infections, Pigmentation disorders, Tumors and skin cancers and Psoriasis.

The present research focus on the formulation Polyherbal formulation of Manjishta, Guduchi, Aloe vera and Neem. The authentic phytochemical constituents of individual plants Manjistha, Guduchi, Aloe Vera, Neem Oil and Moringa Oil with different ratio used to prepare Polyherbal formulations to achieve the desirable antifungal effects. Optimized formulation evaluated for antimicrobial and anti-inflammatory activity against various methods like measurement of pro-inflammatory and anti-inflammatory cytokines (TNF- $\alpha$ , IL-1  $\alpha$  and IL-10) production. Formulations with good antimicrobial activities were tested against MDR microorganism. Polyherbal formulations are tested for Multi drug resistant organisms such as Candida albicans fungi found effective and also against various Multidrug resistant bacterial strains too. Conclusion of this research work that mainly emphasizing importance of the polyherbalism and its significant use in skin disorders.

**Keywords:** Psoriasis, TNF-alpha, Polyherbalism, Antimicrobial.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0106

# PREPARATION OF POLYHERBAL FORMULATION AND ITS COMPARATIVE STANDARDIZATION WITH MARKETED FORMULATION

Khade M. A.\*1, Gupta M. K.1, Hyam S. R.2

<sup>1</sup>School of Pharmaceutical Sciences, Jaipur National University, Jagatpura, Jaipur-302025, Rajasthan, India

<sup>2</sup>Vijayrao Naik College of Pharmacy, Kankavali-416602, Maharashtra, India.

medha1400@gmail.com

### Abstract:

A polyherbal formulation is the combination of more than one herb with several advantages like synergistic effects, better patient compliance, and reduction in dose of individual drugs without any compromise in the therapeutic actions. The present study extraction of *Andrographis paniculate, Aegle marmelos* unripe fruit, *Holarrhena antidysenterica*, *Zingiber officinalis* and *Glycyrrhiza glabra* was carried out by Soxhlet extraction technique using 70% ethanol. The concentrated extracts were formulated into capsules in proportion according to the label claim of the marketed formulation AV Gastro. The prepared formulation and marketed formulation were subjected to preliminary pharmacognostic evaluation and investigated for various phytoconstituents by the HPTLC fingerprint. The preliminary phytochemical test revealed the presence of various bioactive constituents such as alkaloids, flavonoids, saponins, and cardiac glycosides. The development by HPTLC confirmed the presence of these phytoconstituents in the extracts with comparable Rf values to that of standards.

**Keywords:** Extraction, HPTLC, Polyherbal formulation, Standardization.

**ESTD.2015** 







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0107

### DRUG REPURPOSING APPROACH TO FIGHT COVID-19

Walave A.R\*

Pravara Rural College of Pharmacy, Pravaranagar

ashwiniwalve12@gmail.com

### **Abstract:**

Since December 2019, severe acute respiratory syndrome coronavirus 2 has been found to be the culprit in the coronavirus disease 2019 (COVID-19), causing a global pandemic. Despite the existence of many vaccine programs, the number of confirmed cases and fatalities due to COVID-19 is still increasing. Furthermore, a number of variants have been reported. Because of the absence of approved anticoronavirus drugs, the treatment and management of COVID-19 has become a global challenge. Under these circumstances, drug repurposing is an effective method to identify candidate drugs with a shorter cycle of clinical trials.

Drug repurposing involves the identification of new applications for existing drugs at a lower cost and in a shorter time. There are different computational drug-repurposing strategies and some of these approaches have been applied to the coronavirus disease 2019 (COVID-19) pandemic s, the exorbitant costs, high attrition rate and extensive periods of time from research to market approval are the primary contributing factors to the lag in recent traditional drug developmental activities. Due to these reasons, drug developers are starting to consider drug repurposing (or repositioning) as a viable alternative to the more traditional drug development process. Repositioning existing drugs such as Hydroxychloroquine, Remdesivir, Ivermectin and Baricitinib shows good potential for COVID-19 treatment. This can crucially aid in resolving outbreaks in urgent times of need. Computational approaches make use of machine learning and algorithms to model disease and drug interaction. This review would discuss in detail various ongoing drug repurposing strategies and approaches to combat the current COVID-19 pandemic, along with the advantages and the potential challenges.

**Keywords:** Drug repurposing, COVID-19, Computational drug-repurposing, Machine learning, Remdesivir.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0108

# BLACK PEPPER, ALOE-VERA AND TURMERIC: A POLYHERBAL ANTI-ACNE REMEDY

Ms. Londhe R.A.\*

Vishal Institute of Pharmaceutical Education And Research, Ale.

reshmalondhe23@gmail.com

### **Abstract:**

In the present research work ethanolic extracts of Black pepper (*Piper nigrum*), Turmeric (*Curcuma longa*) obtained by maceration and Aloevera gel (*Aloe barbadensis*) are mixed with a base to formulate a homogenized polyherbal cream formulation as a remedy against Acne would follow by the evaluation for its physical parameters like Colour and Odour, Consistency, Homogeneity Washability, PH, Stability, Irritancy test etc.

Keywords: Maceration, Antibacterial, Antiacne.









&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

# **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0109

# FLOATING DRUG DELIVERY SYSTEM OF RANITIDINE HYDROCHLORIDE USING KARAYA GUM AND HPMC

Roshan Vilas Ahire\*, Prajakta Navso Desai, Ms. Gauri U. Bhivshet, Dr. Rohan K. Barse, Dr. Vijay A. Jagtap

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

roshanahire343@gmail.com

### **Abstract:**

The main purpose of this investigation was to develop a controlled release floating drug delivery system (tablet) of ranitidine hydrochloride. Floating tablets of ranitidine hydrochloride were engineering to extend gastric residence time and hence to enhance its bioavailability. The floating matrix tablets were prepared by direct compression technique using a combination of hydroxyl propyl methyl cellulose (HPMC) and karaya gum as polymers and sodium bicarbonate as generating agent. The prepared floating tablets were evaluated for weight variation test, hardness, thickness, swelling index, in vitro floating capabilities, floating lag time, compatibility studies, and in vitro drug release. This swellable hydrophilic natural karaya gum was used to control the release of drug. The results showed that the optimized formulation F8 containing 23.3% of karaya gum (70mg) and 13.3% of HPMC (40mg) had good floating capability, shorter floating lag time, and sustained drug release for the period of 8h.

**Keywords:** Ranitidine hydrochloride; Karaya gum; HPMC; Floating tablet; Release kinetics.

**ESTD.2015** 







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0110

# A NOVEL APPROACH: HYDROTROPIC SOLUBILIZATION FOR SOLUBILITY ENHANCEMENT

Maseera Kazi\*

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

maseerakazi25@gmail.com

### Abstract:

The field of drug discovery and development plays a vital role in the world and serves humanity. The great challenge in screening studies furthermore formulation of new chemical entities is the solubilization of poorly soluble drugs. In order to improve the solubility of poorly water-soluble drugs, a number of methodologies can be adapted. Hydrotropes are a novel molecular phenomenon, that possess the ability to increase the solubility of sparingly soluble and poorly soluble drugs in water. It can be defined as adding a second solute to the primary one. There are numerous benefits that make the solubilization technique superior are high selectivity, non-inflammability, environmentally friendly, easy availability and cost effectiveness. This technique may have some disadvantages like price, toxicity and environmental hazards. This can be overcome by using less costly hydrotropic agents. Nowadays hydrotropic agents are used to develop dosage forms in various forms like a solid dispersion, mouth dissolving tablets, injections. These are for improving the therapeutic effectiveness and bioavailability of poorly water-soluble drugs.

**Keywords:** Hydrotropy, Solubility enhancement, Hydrotropic agent, Poorly water-soluble drugs.

**ESTD.2015** 







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0111

### NANOSPONGES - NOVEL EMERGING DRUG DELIVERY SYSTEM

Choudhari V. A.\*

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

vaibhavic98@gmail.com

#### **Abstract:**

The advent of nanotechnology lead to invention of many dosage forms. Effective targeted drug delivery systems have been a dream for a long time, due to several major drawbacks, a practical approach has been developed for the formation of discrete functionalized particles, which have been termed as 'Nanosponge'. The development of new colloidal carrier called Nanosponges has the potential to solve these problems. Nanosponge is a novel and emerging technology it can precisely control the release rates of controlled drug delivery for topical use. Nanosponges production is necessary step in overcoming difficulties which are present during targeting a drug at specific site using drug delivery system. They overcome toxicity, less bioavailability, protein degradation and improve drug release as carry both hydrophilic and hydrophobic drugs. They have tiny, porous structure and entraps drug in it with desire release. They bind to surface of target site and release drug in predictable and controlled manner. They increase solubility of drug, so formulated as oral, topical, inhalational and parenteral dosage forms. These are formulated by crosslinking of Cyclodextrin with carbonyl or di-carboxylate. Because the drug can be released at the specific target site instead of circulating throughout the body it will be more effective for a particular given dosage. Another important character of these sponges is their aqueous solubility; this allows the use of these systems effectively for drugs with poor solubility.

**Keywords:** Nanosponge, Topical drug delivery, Controlled Release, Poor solubility, Biodegradable Polymers, Targeted delivery, Cross- linkers, Cyclodextrin, Bioavailability.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0112

# PERSNALISED MEDICINES – NOVEL APPROACH IN PHARMACEUTICAL RESEARCH

Supriya B. Rawool\*, Ms. Gauri Bhivshet, Mr. Rohan Barse, Dr. Vijay Jagtap Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

rsupriya199303@gmail.com

#### **Abstract:**

Most medical treatments are designed for the "average patient" as "one-size-fits-all-approach," that is successful for some patients but not for others. Precision medicine, sometimes known as "personalized medicine" is an innovative approach to disease prevention and treatment that takes into account differences in people's genes, environments and lifestyles. Pharmacogenomics (PGx), the study of variations of DNA and RNA characteristics as related to drug response, is one of the most exciting areas of personalized medicine today. The field arises from the convergence of advances in pharmacology (the science of drugs) and genomics (the study of genes and their functions. PGx seeks to understand how differences in genes and their expression affect the body's response to medications. Advances in PGx have opened new possibilities in drug discovery and development. PGx has allowed for more tailored treatment of a wide range of health problems, including cardiovascular disease, cancer, and HIV/AIDS. FDA's Centre for Drug Evaluation and Research (CDER) has supported pharmacogenomics for more than a decade by providing regulatory advice, reviewing applications, and developing policies and processes cantered on genomics and individualized therapeutics.

**Keywords:** Pharmacogenomics, Personalised medicine, DNA microarray technology, Biomarkers.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0113

# BIOCOMPATIBLE VESICULAR PHOSPHOLIPID SYSTEM IN TRANSDERMAL DRUG DELIVERY FOR VARIOUS SKIN DISEASES

Varsha Rane\*, Sanket Gandhi, Rohan Barse, Vijay Jagtap.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

varshagrane@gmail.com

#### **Abstract:**

The outer layer of the skin, the stratum corneum, represents the most resistible barrier to drug penetration across the skin, which limits the transdermal bioavailability of drugs. The conventional anti-infectives have short residence time at the site of application and poor bioavailability, which leads to incomplete elimination of organisms causing reoccurrence and tolerance. Lipid-based drug delivery has been highly explored in the past couple of decades for the efficient delivery of therapeutic agents with different physicochemical properties into deep skin layers and across the skin. Vesicular phospholipid nanoparticles open new challenges and opportunities for the development of novel improved therapies.

Keywords: Vesicular phospholipid, Transdermal drug delivery, Skin diseases, Nanoparticles.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते । ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0114

# DEVELOPMENT AND CHARACTERIZATION OF OSMOTICALLY CONTROLLED SELF PORE FORMING TABLET DOSAGE FORM

R.T. Wagh\*, R.K.Jani

Department of Pharmaceutics, Parul University, Vadodara, Gujarat, India

rakeshwagh786@gmail.com

#### **Abstract:**

Oral drug delivery is the most preferred and convenient choice as the oral route provides maximum active surface area among all drug delivery system for administration of various drugs Oral controlled release formulations can provide continuous delivery of drugs at predictable and reproducible kinetics throughout the GI tract. In these systems, drug dose and dosing intervals are optimized to maintain the drug concentration within the therapeutic range, thus ensuring efficacy with minimum toxic effects. Novel Drug Delivery System can be a major advance for solving the problems related towards the release of the drug at specific site with specific rate. Osmotic drug delivery system (ODDS) is one of the most advanced drug delivery systems that utilize osmotic pressure as a driving force for controlled delivery of drugs. The release of drug from osmotic system is independent of presence and absence of food, pH of gastrointestinal (GI) tract, GI motility and hydrodynamic conditions of body due to rate controlling semi permeable membrane. Controlled Porosity osmotic pump method of preparation is very costly, Retrieval therapy is not controllable in case of unexpected adverse effects. There is a chance of dose dumping if the coating process is not well controlled. There is a chance for the development of drug tolerance.

**Keywords:** Oral controlled release formulations, Novel Drug Delivery System, Osmotically controlled self pore forming tablet.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05th March 2022

PH-0215

#### MEDICATED LIPSTICK FOR THE TREATMENT OF COLD SORE

Kudatarkar A.Y.\*, Khan I.K., Khanolkar S.H., Korgaonkar S.G., Lingwat A.B., Barse R.K.,

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

anushrikudatarkar2000@gmail.com

#### **Abstract:**

The greatest thing about herbal cosmetics is that they are entirely composed of herbs and shrubs and so have no adverse effect on the human body instead provides the body with nutrients and other successful minerals. HSV 1 is a virus that produces viral infections in the majority of humans. More than 50% of people aged 14-49 carry the HSV-1 Virus. Literature review that Aloe Vera is effectively used for the treatment of HSV-1. The current study focused to development of Novel medicated aloe vera lipstick. The study confirmed that developed and evaluated Novel medicated lipstick provided not only HSV-1 treatment but also cosmetic values.

Keywords: Herbal, Cosmetics, HSV-1, Lipstick.

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यत







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0216

### A SURVEY BASED STUDY ON PRESCRIPTION NON-ADHERENCE, SELF-MEDICATION AND USE OF ANTIBIOTICS AND ITS EFFECT ON MEDICAL TREATMENT

Tanvi Bandekar\*, Krutika Andhari, Sharwari Awate, Ankush Chavan, Sambhaji Barate

Mr. Mayuresh Redkar

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

tanvibandekar75@gmail.com

#### Abstract:

Adherence to therapies is a primary determinant of treatment success. Failure to adherence is a serious problem which not only affect the patient but also healthcare system. The prescription non-adherence, self-medication leads to antibiotics resistance, substantial worsening of disease and increased healthcare cost. The survey was conducted to slow down antibiotics' resistance, to increase the awareness about prescription non-adherence. Health care professionals such as physicians and pharmacist have significant role in their daily practice improve the patient medication adherence. A survey-based study was conducted amongst the general public in January 2022. The overall rate of prescription non-adherence, self-medication and use of antibiotics was estimated at 9.3% of physicians, 16.37% of pharmacist and 84.60% of patients. Self-medication is increased due to lack of time and poor counselling by Physicians and Pharmacist. Prescription non-adherence as well as self-medication is a measure medical problem. Due to poor counselling and lack of time rate of prescription non-adherence have been increased. Dispensing modes in needs to be improved through proper education, strict regulatory and managerial strategies to make health care easily accessible and cost effective. Health professionals have to spend some extra time and arrange some campaign in educating patients.

**Keywords:** Antibiotics resistance, self-medication, prescription non-adherence, counselling.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0217

#### PULMONARY DRUG DELIVERY OF INSULIN

Omkar Patil\*, Akshata Patil, Swapnali Parab, Vaishnavi Rathod, Falguni Prabhu Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

pomkar2347@gmail.com

#### **Abstract:**

Insulin hormone maintain body sugar level. Amongst all insulin dependent diabetic patients, 31 % patients taking insulin by subcutaneous and pulmonary route Thai is Humulin and velosulin. The many attempts have been made to develop new ways of delivering insulin, without need of subcutaneous injection which may help to increase adoption of insulin treatment by diabetic patients. Due to limitations associated with conventional treatment of various chronic diseases growing attention has been given to development of targeted drug delivery systems. Injectable insulin causes local site pain and morbidity. Targeted organ(lungs) on account of that large surface area it is an ideal target for drug delivery which represents one of the most promising alternatives to injection. Several pharma companies of are working on insulin inhalers than any other insulin delivery option. Insulin inhaler works like asthma inhaler. The production categorized into two groups that are dry powder formulation and solution which deliver through different patented inhaler system. The gathered data concluded that promising and commercial use of pulmonary way is needed to minimize current reported limitations of insulin use.

**Keywords:** Insulin, Pulmonary, Inhaler, market statistics, Novel technology.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0218

# ARTIFICIAL INTELLIGENCE FOR DIABETES MANAGEMENT: A SYSTEMATIC REVIEW

Thavare RB\*, Kokare PP, Kudalkar GS, Parab PP, Rane CK, Parab AA

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

ranjeetthavare777@gmail.com

#### **Abstract:**

Management of diabetes in the past decade has been transformed by insulin pump data and inclusion of constant glucose monitoring. Newly, a broad variety of functions and physiologic variables, such as, number of steps walked, heart rate, time of sleep and movement, have been accessible through smart watches or wristbands. Current data, hydration, barometric pressure, geolocation, will be included in the upcoming time. These all parameters, when studied, can be useful for physicians as well as patients. Similarly, there has been on high attractiveness in the application and development of the techniques of artificial intelligence (AI) to finding assist and knowledge asset. Artificial intelligence methods in combination with the latest technologies, including medical devices, mobile computing and sensor technologies, have the potential to enable the creation and delivery of better management services to deal with chronic diseases like diabetes.

In this review, we discuss the recent effects to use artificial intelligence techniques to assist in the management of diabetes, along with associated challenges and the possible ways that AI can improve the efficiency of the drug development process.

**Keywords:** Diabetes management; Artificial Intelligence; Medical Devices; Mobile Computing.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0219

### REVIEW OF GOLDEN NANOPARTICLES: APPLICATION IN DRUG DELIVERY

D'Souza A.M.\*, Desai S.B., Dhuri K.S., Dandekar S.S., Chavan K.D., Ms. Mahabal R.H.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

dsouzaalistor@gmail.com

#### **Abstract:**

Therapeutic use of gold nanoparticles appears in Indian literature which is known as "Swarna Bhasma" as early as 3000 years, and is still widely cited. Gold nanoparticles are currently playing a significant role for human welfare in the field of a human diagnosis. It treating of disease such as a targeted chemotherapy and is pharmaceutical drug delivery due to their multifunctionality and unique characteristics. Among nanoparticles, Gold nanoparticles demonstrate special advantage in biomedical field due to their unique properties. This review is focused on the application of gold nanoparticles conjugates to biomedical diagnostic and analytics, photo thermal and photodynamic therapy and delivery of target molecules. Gold nanoparticles as a drug delivery system receive more attention from researcher due to their higher uptake by cells, biocompatibility, hydrophilicity, non-immunogenicity and lower toxicity.

Keywords: Gold nanoparticles, Swarna Bhasma, Biocompatibility.

11 निह ज्ञानेन सदृशम् पवित्र इह ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05th March 2022

PH-0220

#### REVIEW ON MRSA -SUPERBUG

Ghadigaonkar N. A.\*, Gad S.S., Gad S.N., Gosavi S.S., Jadhav P. V. Mr. Rukari T. G.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

nehaghadigaonkar2018@gmail.com

#### **Abstract:**

MRSA (Methicillin –resistant *Staphylococcus aureus*) is a major nosocomial pathogen that causes severe morbidity and mortality worldwide. There has been some debate about disease invoking potential of Staphylococcus aureus strains and whether invasive disease is associated with particularly virulent genotype or SUPERBUG. MRSA strain are endemic in many American and European hospital and account for 29-35% of all clinical isolates. MRSA commonly major human pathogen and historically emergent zoonotic pathogen. MRSA causes severe infection disease, including food poisoning pyrogenic endocarditis, otitis media, toxic shock syndrome, deep tissue infection. In numerous animal MRSA cause infection like botryomycosis, localized pyrogenic infection etc. The traditional antibiotic therapy for MRSA is a Glycopeptides and they are the backbone antibiotics for the treatment of MRSA infections and also new antibiotics have been released that add to the ARMAMENTARIUM for therapy against MRSA.

Keywords: MRSA, Superbug, Antibiotic, Staphylococcus aureus.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यार ESTD 2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0221

#### ANTIMICROBIAL RESISTANCE AND GLOBAL THREAT

Girap K. N.\*, Gaonkar P. S., Gavkar V. V., Gaonkar D. G., Gawade P. D., Bhosale N. S. Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

kalpeshgirap@gmail.com

#### **Abstract:**

Antimicrobials – including antibiotics, antifungals, antivirals and antiparasitics – are medicines used to prevent and treat infections in humans, animals and plants. Antimicrobial Resistance (AMR) occurs when bacteria, fungi, viruses and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. It is difficult to predict the future, especially for evolutionary processes that are influenced by numerous unknown factors. Here, we describe the global situation of antimicrobial resistance, its major causes and consequences, and identify key areas in which action is urgently needed.

**Keywords:** Antimicrobials, Resistance, Antibiotics, Antifungals, Antivirals, Antiparasitic.

।। नहि ज्ञानेन सदृशम् पवित्र इह वि ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0222

# NOVEL EMERGING APPROACHES TO ENHANCE BIOAVAILABILITY OF SOLID DOSAGE FORMS

Sawant S. S.\*, Sawant M. S., Shankardas S. K., Shirvalkar P. P., Tawade M. T., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

sanketsawant2018@yahoo.com

#### **Abstract:**

Low water solubility is a critical issue in the formulation creation of novel chemical entities as well as generic development. Physical and chemical alterations of pharmaceuticals, as well as other approaches such as particle size reduction, crystal engineering, salt creation, solid dispersion, usage of surfactant, complexation, and so on, are utilized to improve the solubility of poorly soluble medications as technology advances. The approach used to improve solubility is determined by the drug's properties, the location of absorption, and the needed dosage form features. Solid dispersion, marinization, and salt creation are some of the critical procedures frequently used to improve the solubility of poorly soluble pharmaceuticals, but each has its own set of restrictions and benefits. Novel approaches like as nano-suspension, supercritical processing, and cryogenic technologies may open up new avenues for the administration of poorly soluble medicines. The current study focuses on comparison of different old and innovative strategies for improving drug solubility in order to lower the percentage of poorly soluble therapeutic candidates that are excluded from development.

**Keywords:** Bioavailability, Marinization, Salt creation, Nanotechnology, Solid dispersion, Phytosome.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PH-0223

# ETHNO BOTANICAL STUDY OF POTENTIAL HERBAL MEDICINES TRADITIONALLY USED IN SHIRODA REGION OF SINDHUDURG DISTRICT

Nagesh Kalshetti\*, Shivram Jadhav, Mitesh Janvalkar, Purushottam Kaloji, Rucha Kambli,

Mr. Sanket M. Gandhi

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

nageshkalshetti@yahoo.com

#### **Abstract:**

India has diverse flora and fauna. Medicinal plants occurrence varying by region to region. The Vaidya and some regional people have information regarding use of medicinal plant and its uses in different treatments, but it is not well documented.

Ethno botanical study including collection of traditional knowledge of various medicinal plants was conducted from the region of Shiroda-Sawantwadi. Detail taxonomical study was carried out. This survey included parameters like parts of plants used, method of preparation and their uses.

In Shiroda region, an interview of several Vaidya was taken and information of total 40 medicinal plants was collected. It helps us to understand their approach in the treatment of diseases. The objective behind this study is to compile the knowledge of traditional remedies using local medicinal plants. This study will help us to provide documented knowledge about plant used in Shiroda-Sawantwadi region.

Keywords: Local Medicinal Plants, Documentation, Shiroda, Sindhudurg, Traditional remedies, Vaidya.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0224

### NOVEL TECHNOLOGIES IN PHARMACEUTICAL FORMULATIONS FROM RECYCLED CAFFEINE

Dhanashree Dhuri\*, Shruti Gaichor, Sampada Ganpule, Milan Desai, Harshadeep Desai, Dr.

Rohan Barse

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

dhanashreedhuri97@gmail.com

#### **Abstract:**

Caffeine (3,4- dihydro- 1,3,7- trimethyl- 1H- purine- 2,6- Dione) is white crystalline xanthine alkaloid with CNS stimulant activity. Extraction of caffeine was done by used tea and coffee powder. The survey was concluded by using the annual consumption of tea and coffee and the treatment of waste. The study focused whether we can Extract a significant amount of caffeine by referring and performing different procedures with used tea or coffee powder. The study divulged that fresh caffeine and extracted caffeine has the same effectivity in developed novel pharmaceutical products. The extracted caffeine was used to develop novel formulations like caffeine transdermal patches, caffeine wrist band, caffeine diapers. The review considers the physicochemical and permeation properties of caffeine with reference to its delivery to and through the skin. Hence this review intends to highlight nutritional and health benefits of caffeine through novel pharmaceutical formulations.

**Keywords:** Caffeine, Alkaloid, CNS stimulant, Transdermal, Permeation, Caffeine wrist band, Caffeine diapers.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0225

### A SURVEY BASED STUDY ON PRESCRIPTION NON-ADHERENCE, SELF-MEDICATION AND USE OF ANTIBIOTICS AND ITS EFFECT ON MEDICAL TREATMENT

Krutika Andhari\*, Tanvi Bandekar, Sharwari Awate, Ankush Chavan, Sambhaji Barate

Mr. Mayuresh Redkar

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

krutikaandhari1125@gmail.com

#### **Abstract:**

Adherence to therapies is a primary determinant of treatment success. Failure to adherence is a serious problem which not only affect the patient but also healthcare system. The prescription non-adherence, self-medication leads to antibiotics resistance, substantial worsening of disease and increased healthcare cost. The survey was conducted to slow down antibiotics' resistance, to increase the awareness about prescription non-adherence. Health care professionals such as physicians and pharmacist have significant role in their daily practice improve the patient medication adherence. A survey-based study was conducted amongst the general public in January 2022. The overall rate of prescription non-adherence, self-medication and use of antibiotics was estimated at 9.3% of physicians, 16.37% of pharmacist and 84.60% of patients. Self-medication is increased due to lack of time and poor counselling by Physicians and Pharmacist. Prescription non-adherence as well as self-medication is a measure medical problem. Due to poor counselling and lack of time rate of prescription non-adherence have been increased. Dispensing modes in needs to be improved through proper education, strict regulatory and managerial strategies to make health care easily accessible and cost effective. Health professionals have to spend some extra time and arrange some campaign in educating patients.

**Keywords:** Antibiotics resistance, self-medication, prescription non-adherence, Counselling.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0226

#### RECENT ADVANCES IN COMPLEMENTARY AND ALTERNATIVE MEDICINE

Baig A. P.\*, Adapa S. D, Bhoir S. H., Bhopale S. S., Chavan D. R. Dr. Barse R. K.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

aafiyab2018@gmail.com

#### **Abstract:**

Renal calculi (kidney stones) is an increasing urological disorder of human health, affecting about 12% of world's population. In 12% of total population about 50% are severely affected by renal damage which even leads to loss of kidneys. Literature survey revealed that cowrie shell (7%) and lemon juice (7%) useful for the kidney stone treatment. Cowrie shells and lemon's juice kept overnight in triplicates and treated on calcium oxalate crystals by in vitro method for three consecutive days. The above study is promising development of novel complementary and alternative medicines. The in vivo and clinical study is necessary to confirm the commercialization and future scope of developed novel product.

**Keywords:** Cowrie, Renal calculi, alternative medicine, kidney stone, calcium oxalate.



।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0227

# PHYTOCHEMICAL AND IN-VITRO ANTIDIABETIC SCREENING OF Spermadicyton Suaveolens

Mulani A. L.\*

Genesis Institute of Pharmacy, Radhanagari-416212, Maharashtra, India

arbajmulani5757@gmail.com

#### **Abstract:**

The discovery of alternative medications in diabetes management is of huge importance to achieve better safety and efficacy. The natural antioxidant and carbohydrate hydrolysing enzyme inhibitors are gaining too much importance in the management of diabetes. Lack of scientific data is available on antioxidant and antidiabetic activities on root extract of *Spermadicyton suaveolens*. Therefore, we aimed to investigate the in vitro antioxidant and  $\alpha$ - amylase potential of *Spermadicyton suaveolens*. The extracts were evaluated for the presence of chemical constituents. Besides, the extracts were assessed for their antioxidant potential using a DPPH assay and  $\alpha$ - amylase assay by the DNSA method. Phytochemical analysis acknowledged the presence of secondary metabolites alkaloid, phenol, saponins, steroids respectively. All the extracts showed moderate to high antioxidant and enzyme inhibition potential. Amongst all extracts, ethanolic extract showed the highest free radical scavenging potential (IC $_{50}$ = 324 mg/mL). Moreover, the ethanolic extract also showed better  $\alpha$ - amylase enzyme inhibition action (IC $_{50}$ = 602 mg/mL). The finding from the study confirmed the traditional application of *Spermadicyton suaveolens* as an antidiabetic agent, which is obvious through inhibition of enzyme action involved in carbohydrate metabolism and triggering antioxidant mechanism.

**Keywords:** Spermadicyton suaveolens, Phytochemical, Antioxidant, α- amylase, Diabetes mellitus.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0228

# DEVELOPMENT AND EVALUATION OF ORALLY DISINTEGRATING TABLET OF ARIPIPRAZOLE CO-CRYSTALS

Mulani I. J.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

irfanmulani7866@gmail.com

#### **Abstract:**

The objective of the present study was to enhance the solubility and dissolution rate of Aripiprazole (APZ) and to prepare orally disintegrating tablet of aripiprazole co-crystals. Various formulations were prepared by direct compression using different concentrations of superdisintegranting agent croscarmellose sodium and sodium starch glycolate. Croscarmellose sodium show good swelling index. Precompression parameters of formulation batches have good flow property. The tablets prepared by direct compression using different concentration of croscarmellose sodium and sodium starch glycolate and croscarmellose sodium show less DT i.e. 22±5 s as compared to sodium starch glycolate. It was found that in-vitro disintegration time decrease with increasing superdisintegrant i.e. Croscarmellose sodium and Sodium Starch Glycolate. Wetting time, Water absorption ratio, % CDR found to be satisfactory. An optimization result shows great impact of compression pressure and superdisintegrant on orally disintegrating tablet. Croscarmellose sodium showed good disintegrant property than Sodium Starch Glycolate in formulating the orally disintegrating tablet. Disintegrated property is depending on compression pressure and concentration of superdisintegrant.

**Keywords:** Co-crystal, Superdisintegrant, Water absorption ratio, swelling index.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0329

### CUBOSOMES: THE NEXT GENERATIONS OF DRUG DELIVERY IN NANOPARTICLES FORM

Ranavre S. S.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

shravaniranavare2003@gmail.com

#### **Abstract:**

Self- assembled lipid liquid crystalline nanoparticles, known as cubosomes. Cubosomes are thermodynamically stable and they have a 'honey combed' like appearance. Cubosomes are nanoparticles with proper water-to-microstructure ratios of certain surfactants that have excellent properties. With various drug loading techniques, they show distinct internal cubic structure and composition. They have a greater inner surface area than other carriers, thereby providing the affected cells with more drug molecules and retaining the cubic process, but they have lower viscosity at the same time, thus promoting drug transport. A novel process has been developed for the development of cubic liquid crystalline nanoparticles. Cubosomes have a wide variety of uses in different fields and can be defined by different criteria of assessment. Cubosomes therefore gain more valuable consideration from the pharmaceutical production sector. While no commercial product based on cubosomes is known, most of the research into cubosomes is driven by potential application in drug delivery and material synthesis.

Keywords: Cubosomes, Cubic phase, Nanoparticles, Lipid, Drug delivery, Self-assembly.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0330

### ROLE OF COMMUNITY PHARMACIST IN MODERN HEALTHCARE SYSTEM IN INDIA

Divya Vijay Parit\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

divyaparit97@gmail.com

#### **Abstract:**

During the last few years the pharmacy profession has expand significantly in term of professional services delivery and now has been recognize as an important profession of health care. Pharmacist are integral part of our modern health care system. They extend their knowledge and skills in prescription, dispensing, medicines, monitoring drug interaction and drug therapy. The pharmacist is the first person to health care system by playing various roles like academic Pharmacist, Industrial Pharmacist, community pharmacist etc. Community pharmacist is the back bone that strengthens the health care system. The professional role of community pharmacy has been largely concerned with preparing and dispensing, Prescription. Community Pharmacist were involved in the disease prevention of disease management of asthma, arthritis, cardiovascular disease, diabetics, depression, hypertension, etc.

Keywords: Community Pharmacist, Modern Health Care System, Backbone.

।। निह ज्ञानेन सदृशम् पवित्र इह ESTD 2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0331

# INSIGHTS OF NANOCOCHLEATES IN CONVENTIONAL DRUG DELIVERY SYSTEM

Bhosale S. S.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

shreyabhosale2809@gmail.com

#### **Abstract:**

Nanocochleates are a novel drug delivery device in which different charged drug molecules are orally delivered into a multi-layered structure comprising a solid-lipid bilayer in the shape of a spiral-rolled sheet. The nanocochleate structure offers protection from the harsh world around it. All the preparation process involves using the charge ratio to monitor the particle size between the bridging agents and lipids. This nanocochleate was formed by the interaction between negatively charged lipids and drugs or peptides acting as inter-bi-layer bridges instead of multicationic metal ions, capable of microencapsulating water-soluble cationic drugs or peptides into its inter-lipid bilayer space. A process known as "hydrogel co-chleation" or simply by increasing the proportion of multivalent cationic peptides over negatively charged liposomes can be generated in submicron size cochleates. Nanocochleates have very less limitations and dosage types than other lipid drug delivery systems; it is thus generally applicable and more likely to be a drug delivery system.

**Keywords:** Cochleates, peptides, encapsulate, liposomes.

।। नहि ज्ञानेन सदृशम् पाव ESTD 2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0332

# PHARMACIST ROLE IN NOVEL CORONA VIRUS (COVID-19) PANDEMIC DISEASE

Lokare S. D.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

sakshilokare1706@gmail.com

#### **Abstract:**

The Coronavirus pandemic or COVID-19 pandemic is a disease which is ongoing worldwide, caused by severe acute respiratory syndrome coronavirus 2(SARS-CoV-2). A sudden occurrence of disease was found in Wuhan the capital city of Hubei province in China. The World Health Organization (WHO) declared the outbreak a Public Health Emergency of International Concern on 30 January 2020 and a Pandemic on 11 March 2020. Common symptoms of this disease include pyrexia, breathlessness, cough, and fatigue. Severe complications may include pneumonia as well as acute respiratory distress syndrome a condition in which fluid collects in the air sacs of the lungs, depriving organs of oxygen. The time required for onset of symptoms, after exposure to the virus is typically around five days, but may range from two to fourteen days. As the lockdown is being observed all over the globe pharmacists serves as a frontline warriors & are the integral members of health community.

**Keywords:** Covid-19 Pandemic, Corona virus, Pharmacist, Health community.

।। नहि ज्ञानेन सदृशम् पाव ESTD.2015







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0333

#### ROLE OF CLINICALYHARMACIST IN PROVISION OF CONTRACEPTION

Mr. Ruhan Balavant Bhandigare\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

rohanbhandigare4546@gmail.com

#### **Abstract:**

Pharmacist roles in provision of family planning products are expanding in the India. Contraception is method for device used to prevent pregnancies. Birth control has been used since ancient times, birth effective and safe methods of contraception only become available in 20<sup>th</sup> century. This include helping patient develop reproductive life plans: dispensing, prescription, contraceptives products and counselling patients, assisting and educating patients with non-prescription contraceptives products including emergencies contraceptives, participating in collaborative practice agreements, administrating contraception products and making referrals and developing partnership. There are many important responsibilities for pharmacists when aiding patients with contraception. Whether performing traditional or emerging roles, pharmacists should ensure patients have the best method for them and understand how to accurately and consistently use the method. The provision of contraception in India is dynamic and pharmacist should continue to be aware of changes that will impact them professionally. As approximately 45% of pregnancies in India are unintended through these roles pharmacist can impact an important public health priority.

Keywords: Birth control, Reproductive plans, Contraception.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0334

#### INNOVATION IN PACKAGING OF MEDICINES

Ms. Akanksha Ramesh Kamble\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

kambleakanksha423@gmail.com

#### **Abstract:**

Packaging is both art and science of enclosing or protecting the products. The main role of pharmacist in a pharmaceutical packaging is to maintain quality of pharmaceutical products during storage, transportation, delivery, sale and use. These products should be designed in such a way that it gives a soothing impact to the users; also the medicine itself has healing effect, so its packaging should complement its features as well. As with most other packaged goods, pharmaceuticals need reliable and speedy packaging solutions that deliver a combination of product protection, quality, tamper evidence, patient comfort and security needs. The recent pharmaceutical packaging trends that are impacting packaging industry, and offers some predictions for the future.

Keywords: Pharmaceutical packaging, Compliance, Recent advancement.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते FSTD 2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0335

# ORALLY DISINTEGRATING TABLET: AS A NEW POTENTIAL APPROACHES FOR DRUG DELIVERY SYSTEM

Shinde A. A.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

akshayas.genesis20@gmail.com

#### **Abstract:**

In the current scenario, orally disintegrating tablet are gaining more prominence as a novel potential drug delivery system & emerges as one of the popular & widely accepted dosage forms, especially for pediatric due to its troubleshoots the problem of dysphagia and geriatric patients suffering from Parkinson's disorder or hand tremors. An orally disintegrating tablet is a drug dosage form available for imitated amount of the over the counter (OTC) and prescription medication. Over the past three decades, orally disintegrating tablets (ODTs) have gained substantial popularity as a preferable alternative to traditional tablets and capsules due to improved patient compliance. ODTs are solid dosage forms containing medicinal substances which disintegrate rapidly, typically in a matter of seconds, when placed on the tongue. It has been developed for oral administration, also called as fast-melt, rapid-melt, porous tablet or fast disintegrating tablet (FDTs).

**Keywords:** Over the counter, direct compression, super-disintegrates, Mechanism of disintegration, Formulation Challenges.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0336

# ARTIFICIAL INTELLIGENCE IN PHARMACEUTICALS PRODUCT FORMULATION

Palkar P. V.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

palkarpravin88@gmail.com

#### **Abstract:**

The use of artificial intelligence in pharmaceutical technology has increased over the years, and the use of technology can save time and money while providing a better understanding of the relationships between different formulation and process parameters. The properties of a formulation are determined not only by the ratios in which the ingredients are combined but also by the processing conditions. In the past, formulators tended to use statistical techniques to model their formulations, relying on response surfaces to provide a mechanism for optimization. However, the optimization by such a method can be misleading, especially if the formulation is comple. Due to their capacity to learn, recognize patterns, and generalize, AI is a great tool in data analysis and modeling. More recently, advances in mathematics and computer science have led to the development of alternative modeling and data mining techniques which work with a wider range of data sources: neural networks, genetic algorithms, and fuzzy logic. The challenges, benefits and future possibilities of neural computing will be discussed in this presentation.

**Keywords:** Artificial intelligence, Artificial neural network, Genetic algorithms, Fuzzy logic, Optimization.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PH-0337

#### FLOATING MICROSPHERE: A NOVEL DRUG DELIVERY SYSTEM

Kendre S. A.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

sudhirkendre20000@gmail.com

#### **Abstract:**

Gastric emptying is a complex process, one that is highly variable and that makes in vivo performance of drug delivery systems uncertain. A controlled drug delivery system with prolonged residence time in the stomach can be of great practical importance for drugs with an absorption window in the upper small intestine. The main limitations are attributed to the inter-and intrasubject variability of gastrointestinal (GI) transit time and to the non-uniformity of drug absorption throughout the alimentary canal. Floating or hydrodynamically controlled drug delivery systems are useful in such applications. Various gastroretentive dosage forms are available, including tablets, capsules, pills, laminated films, floating microspheres, granules and powders. Floating microspheres have been gaining attention due to the uniform distribution of these multiple-unit dosage forms in the stomach, which results in more reproducible drug absorption and reduced risk of local irritation.

Keywords: floating microspheres, Gastric residence time (GRT), Buoyancy.

।। निह ज्ञानेन सदृशम् पिवत्र इह FSTD 2015







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0338

#### PHARMACEUTICAL WASTE MANEGEMENT

Kamble Yash Akaram\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

yash907590@gmail.com

#### **Abstract:**

Increasing environmental pollution coupled with the increasing amount of uncontrollable pharmaceutical waste entering the eco-system, has attracted the attention of policy makers to focus on the research to mitigate harmful emissions and also spearhead management of pharmaceutical waste. Pharmaceutical waste is a form of medical waste that includes pharmaceuticals and personal care products (PPCPS), exhibiting harmful effect to human and environmental health. As the pharmaceutical waste contains drugs, they are very reactive and cannot be disposed off like conventional waste and require special handling, whether it comes from a hospital, clinic, pharmacy or private household. In past few years, it has been observed that several of pharmaceutical compounds like antidepressants: antibiotics, steroids, hormones, analgesics, antihypertensive, contraceptive etc. have been analyzed in water samples. Humans, animals and aquatic life are highly affected by these pharmaceutical compounds though these are present in very small quantity but bear a highly toxic effect. Pharmacist has the potential to be on forefront and should educate patients about safe drug disposal. Proper patient counseling on safe medication disposal can make as significant difference to public health and environment. The knowledge of method of disposal of unused medicines is equally important as that of consumption medicines.

**Keywords:** Pharmaceutical waste management, Medication Disposal, Human and environmental health, Pharmaceutical and Personal Care Products (PPCPs).







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PH-0339

#### SOLUBILITY ENHANCEMENT OF BCS CLASS II DRUGS

Mustakim Aamdani\*, Prithviraj Chavan, Ms. Prajakta Desai

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

amdanimustakim@gmail.com

#### **Abstract:**

The drugs are classified in BCS (Biopharmaceutical Classification System) on the basis of solubility, permeability, and dissolution. BCS categories: Class I: high solubility, high permeability: generally very well-absorbed compounds. Class II: low solubility, high permeability: exhibits dissolution rate-limited absorption. Most pharmaceutical proteins and peptides are considered to be BCS Class III drugs, thus having a good solubility but poor permeability, which leads to an overall poor bioavailability. According to the biopharmaceutical classification system (BCS) class II drugs are classified as drugs having low solubility and high permeability, therefore the barrier to their absorption is dissolution and solubility of the drug. Example: glibenclamide, bicalutamide, ezetimibe, aceclofenac. According to our studies we found that, size reduction through ball mill is the promising tool which can help to increase the solubility of the drug. A ball mill is grinder equipment used in the pharmacy to reduce the particle size of active and excipient materials. Ball mill works on the principle of impact and attrition. As these drugs have low solubility and high permeability, increase in the solubility of such drugs can probably improve the onset of action of the drug. In our project we have selected a drug belonging from BCS class 2 namely Ibuprofen and tried to enhance the solubility by ball mill technique.

Keywords: BCS Drugs, Ball Mill, High Solubility, Ibuprofen.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

**PCHEM-0101** 

#### "AMRUTHOTHARAM" KASHAYAM A NOVEL POLYHERBAL FORMULATION

Dhane K. S.\*

Department of Pharmaceutical Chemistry, PSPS Indira Institute of Pharmacy Sadavali 415804,
Maharashtra, India.

archupharma21@gmail.com

#### **Abstract:**

Metabolic syndrome is constellation of disturbances including glucose intolerance, central obesity, hypertension and dyslipidaemia. Thus several explanations have been proposed to explain the origin of the metabolic syndrome; an initial insulin resistant state progressing to the other components, obesity is the main initiator of the syndrome. Thus, it can be understood that metabolic syndrome is multi related and the basic cause is inflammation. Thus, while treating the metabolic syndrome the root cause needs to be targeted and for this the Ayurvedic science is the best solution. Amruthotharam is one of such preparation which takes care of metabolic syndrome through inflammation. There are so many herbal and traditional compounds being screened worldwide to validate their use as drug to treat metabolic syndrome. "Amruthotharam" Kashayam is the concoction that has been prepared from three major herbs that have had their worth proven in many cases of indigestion and other stomach related problems. The concoction is prepared by mixing *Tinospora Cordifolia*, *Terminalia Chebula*, *Zingiber officinale* in a ratio 4:2:1 in a ratio respectively. The active phytochemical constituents of individual plants are insufficient to achieve the desirable therapeutic effects. The present review encompasses all the significant features of Amruthotharam a polyherbal formulation.

**Keywords:** Metabolic syndrome, Ayurveda, Amruthotharam.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PCHEM-0102

# SYNTHESIS OF NEW PYRAZOLE DERIVATIVE AS ENOYL ACP REDUCTASE INHIBITORS

Monika Kakadiya\*1, Jofrin Saleh<sup>1</sup>, Malleshappa Noolvi<sup>1</sup>, Uttam A. More<sup>1</sup>, Yunus Pasha<sup>2</sup>

- 1. Shree Dhanvantary Pharmacy College, Kim, Surat, Gujarat, India.
- 2. Shri Adichunchanagiri College of Pharmacy Adichunchanagiri University, B G Nagara Karnataka 571448, India

monika.kakadiya@gmail.com

#### **Abstract:**

With the increasing popularity of multidrug resistance strains of mycobacterium tuberculosis is the main donating factors in unfavourable outcomes in the treatment of tuberculosis. From the studies with various literatures we found that direct inhibitors of InhA, an enoyl ACP reductase, might process hopeful clinical candidates that can be formed into new anti-tubercular drugs. In the present study we reported synthesis of new pyrazole derivatives as anti-tubercular agents which selectivity towards InhA inhibition. The synthesis of design molecules started with synthesis of 1-(3-(2-chlorophenyl)-5-(p-tolyl)-4,5-dihydro-1H-pyrazol-1-yl)-2-(naphthalen-1-yl-methoxy) than-1-one(5a), 1-(5-(4-bromophenyl)-3-(o-tolyl)-4,5-dihydro-1H-pyrazol-1-yl)-2(naphthalen-1-ylmethoxy)-ethan-1-one (5b), 2(naphthalen-1-ylmethoxy)-1-(3-(o-tolyl)-5-(p-tolyl)-4,5-dihydro-1H-pyrazol-1-yl)-ethan-1-one (5c). Furthermore synthesized compound where characterized by IR spectroscopy. Based upon in-vitro screening using the MABA method we concluded that the compound 5b and 5c with highest MIC value 50 μg/mL can act as anti-tubercular agents.

Keywords: Pyrazole, Enoyl ACP reductase, Anti-tubercular activity.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

**PCHEM-0203** 

#### SIGNIFICANCE OF PHYTOCHEMICAL CONSTITUENTS: GUAVA

Naik J. P.\*, More S. S., Naik A. A., Nanche O. N., Parab P. P., Ms. Narvekar N. N.

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

naiksjui55@gmail.com

#### **Abstract:**

Guava (*Psidium guajava*) is well known tropical tree for its good food and nutrition value throughout the world. Guava tree has history of using for medicinal purpose but irony is that in recent generation it doesn't get expected value. So thats why we choose this topic. Main aim of this is to highlight about phytochemical constituent and traditional as well as commercial uses of this plant for human kind. So it is important to focus such kind of medicinal plant.

Keywords: Psidium guajava, Medicinal purpose, Phytochemical constituents.









The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PCHEM-0204

#### NOVEL TRENDS IN COMPUTATIONAL APPROACHES IN DRUG DISCOVERY: A COMPARATIVE STUDY

Upralkar S. S.\*, Sawant S. N., Nerurkar S. B., Salgaonkar P.L., Patkar R. S., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

snehalupralkar086@gmail.com

#### **Abstract:**

Computer-aided drug discovery (CADD) technologies can utilized to automate and speed up these processes while also lowering R&D costs. CADD is becoming a necessary tool in medication development. Bioinformatics research has made a large number of data sources available, such as biological structures, ligand databases, and numerous computational tools that employed at various stages of the drug discovery and development process. This study provides an overview of the computational tools that employed at various phases of drug development. Target identification and validation, lead identification and optimization, preclinical pharmacology, and toxicology are all part of the drug research and development process. This study provides an overview and comparison of computational approaches utilized at various phases of drug development. Both structure-based and ligand-based drug discovery strategies are explored in this study.

**Keywords:** CADD, Docking, Computational tools. ।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCHEM-0205

### NANOMEDICINE-BASED CANCER IMMUNOTHERAPY: RECENT TRENDS AND CHALLENGES AND NEW HORIZONS

Baig A.S.\*, Mujawar I.M., Darwajkar A.S., Bhalekar A.S., Takke V., Paradkar O.O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

alfiyasbaig@gmail.com

#### **Abstract:**

Cancer immunotherapy combined with effective functionalized nano systems has emerged as a good therapeutic method, and its use is quickly increasing. The functions of stimuli-responsive nano systems and nanomedicine-based cancer immunotherapy, a subfield of immunology, are critical. The utilization of nanomedicine as a platform for studying innovative therapeutic applications and current intelligent healthcare management systems is advancing rapidly in the modern era. The advancement of cancer nanomedicine has expedited the progression of immunotherapy results to the next step in the contemporary era of medical research. This review focuses on key findings regarding the efficacy and applications of nanomedicine-based cancer immunotherapies, including I immune checkpoint inhibitors and nanomedicine, ii) CRISPR-Cas nanoparticles (NPs) in cancer immunotherapy, iii) combination cancer immunotherapy with coreshell nanoparticles, iv) biomimetic NPs for cancer immunotherapy, and v) CAR-T cells and cancer nanomedicine. Various features of the suggested nano-enabled therapeutic techniques have been examined in this study by reviewing and analyzing literature available by taking into account the obstacles involved.

Keywords: Immunotherapy, Nanomedicine, Cancer.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCHEM-0206

#### PERSONALIZED MEDICINE A NOVEL APPROACH IN CANCER THERAPY

Gawade. S. V.\*, Sawant D.N., Manjarekar S.M., Rane R. C., Shirke P.P., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

gawadeshraddha53@gmail.com

#### **Abstract:**

One of the most significant advancements in modern oncology has been the shift from an organcentric philosophy guiding therapy choice to thorough molecular analysis driving a tailored strategy. Several technologies, including next generation sequencing and RNA sequencing, have considerably increased the ability to detect predictive and prognostic molecular changes. The discovery of gene mutations, amplifications, and fusions has thereby changed the direction of various illnesses, both locally and metastatically. This shift in perspective, in which emphasis is placed on the tumor's individual molecular abnormalities, has paved the way for tailored treatment. The heterogeneity of cancer cells enriched with simultaneous molecular changes makes finding the trigger difficult and may be responsible for the failure of efficacy when targeted medicines are used. As a result, there is increased interest in the function of multidisciplinary committees or molecular tumor boards in attempting to improve selection. Cancer's intrinsic diversity lends itself to the expanding discipline of precision and personalized medicine (PPM). PPM cancer therapies are clearly beneficial to patients, and corporations and regulatory bodies have begun to realize this. The purpose of this study is to objectively examine the progress of cancer therapy toward a precision approach, highlighting recent achievements and unanticipated setbacks. However, if PPM is to become a normal feature of cancer therapy, larger reforms to the healthcare and insurance systems must be made.

**Keywords:** Cancer, Precision medicine, Personalized medicine, Translational oncology.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

**PCHEM-0207** 

# A COMPARATIVE ASSESSMENT OF NEW TRENDS IN PROTEIN PEPTIDE DOCKING: OPPORTUNITIES, CONSTRAINTS AND THE PROSPECTIVE

Mayekar N.T.\*, Madeshwar K.D, Morajkar T.S, Mayekar S.N, Monde C.P, Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

mayekarneha25@gmail.com

#### **Abstract:**

The interest in peptide therapeutics triggered the rapid development of new techniques dedicated to protein—peptide docking which are being increasingly incorporated into the drug discovery and design process. Peptides have recently received a lot of interest as potential therapeutic options. The structural characterization of the underlying protein—peptide interaction is typically required for rational design of peptide-derived therapies. Owing to the difficulty of experimental characterization, dependable computational techniques are required. A number of techniques have been developed in recent years for 'protein—peptide docking, a that is, predicting the structure of the protein—peptide complex given the protein structure and peptide sequence, with varying degrees of knowledge regarding the peptide binding site and/or conformation. We present an overview and comparison of protein—peptide docking approaches and discuss their strengths, limits, and applications in structure-based drug design in this review. Core challenges are also explored, such as modelling of large-scale conformational changes during binding, scoring of predicted models, and the effective incorporation of various forms of experimental data and theoretical predictions into an integrated modelling process.

**Keywords:** Protein—peptide docking, Computational techniques, structural characterization, integrated modelling.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PCHEM-0208

#### POLYMERS AS A NOVEL APPROACH IN PHARMACEUTICAL DRUG DELIVERY SYSTEM – A COMPARATIVE STUDY

Natlekar V. V.\*, Redkar N. P., Gawade S. S., Sawant U. A., Modak S. C., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

vaishnavinatlekar2002@gmail.com

#### **Abstract:**

Polymers have contributed in the evolution of drug delivery technology by providing for the controlled release of therapeutic agents in constant dosages over long periods of time, cyclic dosing, and adjustable release of both hydrophilic and hydrophobic medicines. Polymers are the backbone of a pharmaceutical drug delivery system as they control the release of the drug from the device. Biodegradable polymers attract the attention of its use as they can be degraded to non-toxic monomers and most important, a constant rate of drug release can be achieved from a biodegradable polymer based controlled release device. The area has developed considerably from its modest origins using off-the-shelf materials. Modern drug delivery developments are now based on the rational design of polymers that are suited for specific payloads and made to perform diverse biological activities. The current comparative study is based on the essential drug delivery methods and their mathematical basis. In this study we have explored the physiological barriers to drug delivery. The origins and uses of stimuli-responsive polymer systems and polymer therapies such as polymer protein and polymer-drug conjugates are discussed.

**Keywords:** Responsive polymers, Recognitive polymers, Polymer therapeutics, Synthetic polymer, Natural polymer.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### NOVEL TRENDS IN PHARMACEUTICAL RESEARCH

Saturday, 05th March 2022

**PCHEM-0209** 

# IONIC LIQUIDS: A NOVEL TREND IN DRUG SYNTHESIS USING GREEN CHEMISTRY AND IN DRUG DELIVERY SYSTEMS -INSIGHTS AND FUTURE PERSPECTIVES

Arolkar P. D.\*, Chavan K.E., Painaik S.S., Walawalkar M. M., Ghadigaonkar A.U., Paradkar O. O. Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

arolkarpranil1200@gmail.com

#### **Abstract:**

Concerns with solubility, bioavailability, permeability, polymorphism, and stability in solid-state pharmaceuticals demand appropriate solutions. Ionic liquids (ILs) have been studied as solvents, reagents, and anti-solvents in the synthesis and crystallisation of active pharmaceutical ingredients (APIs), as solvents, co-solvents, and emulsifiers in drug formulations, as pharmaceuticals (API-ILs) aiming liquid therapeutics, and in the development and/or improvement of drug-delivery-based systems to overcome some of these drawbacks. The current study focuses on the use of ILs in the pharmaceutical area, with applications ranging from pharmaceutical manufacturing through medication delivery. The most recent relevant research is given and discussed, as well as a critical examination of the most important IL-based techniques for improving the effectiveness of therapies and drug delivery systems. These Ionic liquids may replace the organic solvents which are hazardous, toxic and non-environmentally friendly used in the synthesis of chemical compounds.

**Keywords:** Ionic liquids, drug delivery systems; green synthesis.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### NOVEL TRENDS IN PHARMACEUTICAL RESEARCH

Saturday, 05th March 2022

PCHEM-0210

### APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN NOVEL OCULAR DRUG DELIVERY SYSTEM: INSIGHTS AND FUTURE PERSPECTIVE

Rodge A.R.\*, Rege S.S., Rawool L.A., Sawant M. A., Sawant N.V., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

aditirodge231@gmail.com

#### **Abstract:**

Artificial Intelligence is the development of computer system that are capable of performing task that normally require human intelligence such as decision making, object detection, solving complex problems and so on. AI and Target fishing methods in association with human expertise may indeed revolutionize the current theragnostic strategies, meanwhile validation approaches are necessary to overcome the potential challenges and ensure higher accuracies. AI techniques enable prediction of pharmacokinetics responses including quantitative structural activity relationships, in vivo responses. So, the incorporation of AI technologies into the ophthalmic sector may be a ray of hope for the ocular drug delivery system. Ocular microrobots have the potential to change the way in which we treat a variety of diseases at the anterior and posterior segments of the eye. Wireless manipulation and positioning of drug delivery magnetic millimeter and submillimeter platforms into the eye constitute a potential route for minimal invasive target therapy. The minimally invasive micro robotic approach as an alternative method and report. In the current study we give the overview of the applications of the AI in Novel Ocular Drug Delivery System, its insights and future perspectives.

**Keywords:** Artificial Intelligence, Target Fishing, Ocular microrobots.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

**PCHEM-0211** 

## NOVEL AND EMERGING TRENDS IN TYPE II DIABETES MELLITUS THERAPEUTIC APPROACHES

Gosavi M. M.\*, Gurav S. J., Joshilkar K. A., Kavitkar M. P., Kerkar N. R., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

gosavimajusha24@gmail.com

#### **Abstract:**

Type 2 diabetes mellitus is a metabolic condition characterized by abnormal lipid, protein, and carbohydrate metabolism, culminating in hyperglycemia due to insulin resistance and insufficient insulin production. Although a large range of diabetic medicines are available, their usage is severely limited due to low effectiveness, unpleasant effects, expense, contraindications, renal dose changes, inflexible dosing regimens, and weight gain. As a result, new and upcoming diabetic medications with various mechanisms of action are hoped to address some of these limitations in order to better the patient with type 2 diabetes. The sodium-glucose cotransporter-2 inhibitors, 11-hydroxysteroid dehydrogenase type 1 inhibitors, glycogen phosphorylase inhibitors, protein tyrosine phosphatase 1B inhibitors, G Protein-Coupled receptor agonists, and glucokinase activators are all discussed in this article. These new diabetic therapies have the potential to benefit from glucose lowering, weight loss, minimal hypoglycemia risk, improved insulin sensitivity, pancreatic cell preservation, and oral formulation availability. However, further research is needed to identify their function in type 2 diabetes care, including their safety profile, cardiovascular consequences, and effectiveness durability.

**Keywords:** Type 2 diabetes mellitus, Sodium dependent glucose co-transporter 2 inhibitors, Protein tyrosine phosphatase 1B inhibitors, G protein-coupled receptor agonists.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### NOVEL TRENDS IN PHARMACEUTICAL RESEARCH

Saturday, 05th March 2022

**PCHEM-0212** 

### PRODRUG - AS A NOVEL APPROACH AND SUCCESSFUL TOOL FOR OF DRUG DELIVERY SYSTEM

Parulekar L. L.\*, Shaikh M. M., Thakur V. S., Kadam M. M., Kalangutkar P.P., Paradkar O. O.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

latika.parulekar01@gmail.com

#### **Abstract:**

Prodrugs are bio reversible drug compounds that undergo in *vivo* enzymatic and/or chemical modifications to release the active parent drug, which can subsequently exert the desired pharmacological action. Prodrug design is a method for addressing several of the issues that impact drug discovery and development, including as stability, toxicity, solubility, permeability, and drug targeting. Prodrug design is an effective method for drug targeting that involves altering the physiochemical, biopharmaceutical, or pharmacokinetic aspects of pharmaceuticals. Prodrugs account for 10-14 percent of all drugs authorized worldwide. The current study examines the categorization, applications and limitations and comparative study of prodrug design in many domains of drug research, as well as the key operational categories that are accessible to prodrug design.

**Keywords:** Prodrugs, Novel drug delivery system, Drug discovery.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

**PCOL-0101** 

#### DEVELOPMENT SPENDING AND OUTPUT OF NEW DRUGS

Miss. Prajakta Dhanaji Sawant\*

BLDEA's SSM College of Pharmacy and Research Centre Vijaypur 586103, Karnataka, India.

prajaktasawant7898@gmail.com

#### **Abstract:**

The past 60 years have seen huge advances in many of the scientific, technological and managerial factors that should tend to raise the efficiency of commercial drug research and development (R&D). R&D efficiency, measured simply in terms of the number of new drugs brought to market by the global biotechnology and pharmaceutical industries per billion US dollars of R&D spending, has declined fairly steadily. Quantitatively, a McKinsey study reveals that in the past 25 years, the industry has created more than \$1 trillion of shareholder value, but destroyed around \$550 billion of value, primarily via poor strategic decisions, from 2000 to 2020. During the same period, R&D spending rates increased by over 60% from 10 to 16 percent of total sales. We found that a growing number of biologics in the pipeline of pharma companies with successful products already in the market though, small molecular entities have primarily dominated drug innovation. This study presents basic facts about the pharmaceutical industry's spending on research and development and about the types and numbers of new drugs that result from it. The study also analyzes several major issues related to pharmaceutical R&D.

**Keywords:** Pharmaceutical industry, R&D, New Drugs.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### NOVEL TRENDS IN PHARMACEUTICAL RESEARCH

Saturday, 05<sup>th</sup> March 2022

**PCOL-0202** 

#### SURVEY AND COMPARATIVE STUDY OF TREATMENT ON PEPTIC ULCER

Khokale SR\*, Kocharekar AP, Kondvilkar TB, Lade AA, Manchekar AR, Mule VS Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

sangitakhokale12@gmail.com

#### **Abstract:**

Peptic ulcer is chronic disease affecting up to 5-10% of world's population. The formulations of peptic ulcer depend on the presence of gastric juice pH, decrease in mucosal defenses, non-steroidal anti-inflammatory drug (NSAID's) and Helicobacter pylori (H. pylori). Approximately 2-3<sup>rd</sup> of patients found to have peptic ulcer disease as asymptomatic and symptomatic patients. The most common presenting symptoms of peptic ulcer disease is epigastric pain, which may associated with bloating, abdominal fullness, nausea, vomiting and chest burn. We studied various articles on peptic ulcer and we found that there are different methods for treatment of peptic ulcer. So, in present study we performed a survey on comparative study of different treatment options for peptic ulcer. The comparative study was performed through the patient's survey based on questionaries. The physician's survey was performed through standard questionaries as well as through physician's personal interview. The results of the survey revels that for the treatment of peptic ulcer which is most commonly found in females of 18 to 45 years age group 90.3% of the patients are preferring Ayurvedic treatment.

**Keywords:** Peptic ulcer, Ayurveda, treatment, comparative study







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

**PCOL-0203** 

#### A SURVEY AND COMPARATIVE SUTDY ON TREATMENT OF JAUNDICE

Pawar R. B.\*, Prajapati R.S., Rawool P. K., Rawool T.L., Sangelkar N.N.,

Ms. Joshi P.V.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

rugvedp954@gmail.com

#### **Abstract:**

Jaundice is hemolytic disorder which has affected almost in 60% of mature neonates, up to 80% of premature neonates and in adults also. Jaundice is a term use for the conditions in which yellow coloration of skin and sclera occurs and is caused by a raised level of bilirubin. The main purpose of this work is to comparatively study various anti-jaundice drugs for their therapeutic dose, potency and their side effects, so that it will help in correct choice of medication to treat it. It will also provide most of the data related to Allopathy, Ayurvedic and Homeopathy treatment in the collaborated form. Also we conducted a literature survey along with survey of patients as well as doctor asking them various questions about jaundice and tried to understand the current scenario. With the help of survey and guidance of doctors we have predict suitable treatment for jaundice. The survey result showed that most patients prefer Ayurvedic treatment over Homeopathy and Allopathy.

Keywords: Jaundice, Neonates, Treatment, Ayurvedic, Literature, Survey.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

**PCOL-0204** 

#### PHARMACOLOGIC TREATMENTS FOR COVID-19 IN INDIA

Ujma R Mulla\*, Purva .G.Naik, Rashmi H Mahabal

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

ujmamulla1099@gmail.com

#### **Abstract:**

Apart from prevention measures like wearing a mask and using sanitizer, Drugs play a crucial role in controlling the spread of COVID-19 infection. Vaccination is yet another effective way against the spread. Medicines have helped people to fight against such a highly contagious disease. In Our Review Poster we will be discussing the drug treatments presently available for COVID-19 with their MOA, to the dose prescribed and their manufacturers, from the start of the pandemic till date the medicines that were in use. Furthermore, about the indigenous Vaccines that India has developed for its citizens. Moreover, regarding the new oral treatment for COVID-19 that has been formulated. We would conclude our poster with the difference between the most effective treatments versus others.

**Keywords:** COVID-19, Drugs, Vaccines, Medicines, Oral treatments.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

**PCOL-0205** 

# SURVEY AND STUDY ON NUTRACEUTICAL AS ALTERNATIVE FOR PHARMACEUTICAL IN SINDHUDURG DISTRICT

Takkar JM\*, Pirankar SG, Dhargalkar SS, Gaonkar SS, Malgaonkar CC, Tulaskar MS, Mule VS

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

juitakkar18@gmail.com

#### **Abstract:**

Nutraceuticals is the hybrid of "nutrition" and "pharmaceuticals". Nutraceuticals are the food or a part of it that have some health beneficials effects with or without nutritional values. For past several decades these nutraceuticals have been gaining importance as alternatives to pharmaceuticals for prevention and treatment of wide range of diseases. These nutraceuticals have been an attractive option over the conventional therapies due to their less and no side effect and nutritional values. Also, new molecules are difficult to discover and more expensive and riskier so many pharmaceutical companies are now trying to manufacture nutraceuticals. So undoubtedly there is a very huge growing market for nutraceuticals. In present study we are going to evaluate use of nutraceuticals over conventional pharmaceuticals with different aspects through the survey. The perspective of users was studied by standard questionnaire prepared through google forms. The perspective of the pharmacist and physicians was also studied through the survey. In present study total 104 responses were collected from consumers which revels 53% are preferring to use nutraceuticals but use may be limited as 39% are saying it's not affordable considering cost. The result revels that that nutraceutical can be considered as alternative for pharmaceuticals considering consumer, pharmacist and physician perspective

**Keywords:** Nutraceuticals, Pharmaceuticals.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05th March 2022

**PCOL-0306** 

#### THE TOTAL ARTIFICIAL HEART AS A CARDIAC REPLACEMENT

Prerana Pravin Ranavare\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

preranaranavre@gmail.com

#### **Abstract:**

The Heart is a muscular organ which pumps blood through blood vessels to organs of body. Without this organ, life is unimaginable. So scientists developed the "Total Artificial Heart " a temporary machine for a person who has a disease of heart and their survival without transplant is impossible. An increase in number of peoples succumb to the heart disease each year but the number of hearts available for transplantation are in very small amount. Total artificial heart mimicked the pumping action of native heart. These positive displacement pump could provide the adequate haemodynamic effect and maintain the human circulation for short period of time but sometimes the large size and limited durability adversely affect the recepients quality of life. These is a temporary device which can provide enough time for patients until a donar heart is available. The pumping mechanism of Artificial Heart that duplicate the heart rate, output and Blood pressure of natural heart.

Keywords: Heart, Total Artificial Heart, Temporary Device, Displacement Pump.

।। निह ज्ञानेन सदृशम् पवित्र इह ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

**PCOL-0307** 

#### ANTIBIOTIC RESISTANCE

Akanksha Rajaram Patil\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

akshp.2002@gmail.com

#### **Abstract:**

Antibiotic are the medicines used to prevent and treat bacterial infections. Antibiotic resistance occur when bacteria change in response to the use of these medicines. Antibiotic resistance leads to higher medical cost, prolonged hospital stats and increase mortality. The world urgently need to change the way it prescribed and uses antibiotics. Antibiotic resistance is a global health challenge involving the transfer of bacteria & genes between humans, animals and environment. The Antibiotic Resistance mechanism counter the drug along its path from entry through accumulation and target binding to downstream toxicity. Antibiotic resistance is accelerated by misuse and overuse of antibiotics, as well as poor infection prevention and control so the emergence of Antibiotic Resistant pathogenic bacteria poses a serious public health challenges worldwide.

Keywords: Antibiotics, Antibiotic Resistance, Antibiotic Resistant pathogenic bacteria.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

**PCOL-0308** 

#### ROLE OF PHARMACIST IN VACCINE AND DRUG DEVELOPMENT

Prachi Vinod Sutar\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

prachisutar901@gmail.com

#### **Abstract:**

Pharmacists as well as existing proponents, educators and professional vaccine and development have an essential part to play in encouraging and maintaining the vaccine development. Vaccine prevent an estimated 2.5 million deaths worldwide each year and are amongst the most cost effective preventive measure against infectious disease. Drug and vaccine development which requires effective strategies to tackle. Overcoming the barriers will increase the role of pharmacists as vaccine developers and the vaccinators that ultimate increases public access to vaccination and accurate and reliable information about vaccines. Challenges and barriers to pharmacist vaccination are multifactorial which needs effective strategies to address. Despite effectiveness and availability of vaccines in many parts of world vaccination in rate and survive uptake remains suboptimal among both healthcare providers and public. Pharmacist as well as qualified providers of vaccination have a significant role to play in promoting and supporting the uptake vaccination. Pharmacists have wide scope in drug development. Without pharmacist synthesis of drug, production of batches validation of drugs and its dosage form can not possible. So, pharmacist is the crucial person in drug and vaccine development.

Keywords: Pharmacists, Vaccine and Drug Development, Drug delivery cycle.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOL-0309

#### **CRISPR (Cas-9) GENE EDITING THERAPY**

Teli Tukaram Yashawant\*, Mr. Roshan Ahire

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

telitukaram1042@gmail.com

#### **Abstract:**

CRISPR is a powerful tool for editing genomes, meaning it allows researchers to easily alter DNA sequences and modify gene function. It has many potential applications, including correcting genetic defects, treating and preventing the spread of diseases, and improving the growth and resilience of crops. However, despite its promise, the technology also raises ethical concerns. Crispr gene editing therapy is technique which is considered highly significant in biotechnology and medicine as it allows for the genomes to be edited in vivo with extremely high precision, cheaply, and with ease. It can be used in the creation of new medicines, agricultural products, and genetically modified organisms, or as a means of controlling pathogens and pests. It also has possibilities in the treatment of inherited genetic diseases as well as diseases arising from somatic mutations such as cancer. However, its use in human germline genetic modification is. highly controversial.CRISPR-Cas9-based "RNA-guided nucleases" can be used to target virulence factors, genes encoding antibiotic resistance, and other medically relevant sequences of interest. This technology thus represents a novel form of Crisalkarte Bisex, sh terminate hanteri LERRY Sises, especially those with a genetic cause. Its ability to modify specific DNA sequences makes it a tool with potential to fix disease-causing mutations. Early research in animal models suggest that therapies based on CRISPR technology have potential to treat a wide range of diseases, including cancer, progeria, beta-thalassemia, sickle cell disease, haemophilia, cystic fibrosis, Duchenne's muscular dystrophy, Huntington's.

**Keywords:** CAS-9 nuclease enzyme, Guide RNA, Genome editing, Acquired procaryotic immune system.







The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05th March 2022

**PCOL-0310** 

AZD7442 (Evusheld)

Sandesh Suresh Chede\*, Mr.Roshan Ahire

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

sandeshchede1977@gmail.com

#### **Abstract:**

AZD7442, it is a similar class of the drug cocktail. It is a combination of two long-acting monoclonal antibodies (LAABs). AstraZeneca developed it using its proprietary technology with the aim of preventing COVID-19 infection for long duration of one year. LAABs mimic natural antibodies and a combination of LAABs could be complementary to vaccines as a prophylactic agent, according to AstraZeneca. This means it could either be used on people for whom a vaccine may not be appropriate or it could be given as added protection for those at high-risk, it said. The two monoclonal antibodies is Tixagevimab (AZD8895) & Cilgavimab (AZD1061) targeted against the surface spike protein of SARS-CoV-2 used to prevent COVID -19. It is co-packaged and given as separate consecutive intramuscular injection (one injection pre monoclonal antibody, given in immediate succession).

**Keywords:** Drug cocktail, Monoclonal antibodies, Mimic natural antibodies, LAABs' prevents COVID-19. ।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते







The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

**PCOL-0311** 

#### INNOVATIVE APPROACHES FOR CANCER TREATMENT

Someshwar V. Barve\*, Yash A. Gosavi, Ms. Rashmi Naik

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

someshwarbarve449@gmail.com

#### **Abstract:**

As India strides into the 21st century, the spectrum of disease has changed from mainly infectious diseases to more chronic disease (such as heart disease & diabetes), while cancer has assumed epidemic-like proportions. This is due partly to lack of awareness of health promotion & disease prevention as well as lack of amenities for early diagnosis and treatment.

Every year, cancer is responsible for millions of deaths worldwide and, even though much progress has been achieved in medicine, there are still many issues that must be addressed in order to improve cancer therapy. For this reason, oncological research is putting a lot of effort towards finding new and efficient therapies which can alleviate critical side effects caused by conventional treatments. Different technologies are currently under evaluation in clinical trials or have been already introduced into clinical practice.

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते Keywords: Cancer, Occurrence, Prevention, Treatment.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0101

### ANALYTICAL METHOD DEVELOPMENT OF TRIDAX PROCUMBNES LEAF EXTRACT BY SPECTROSCOPIC METHOD AND FTIR

Landge M. M.\*1, Sunil S. Jalalpure<sup>1</sup>, Supriya S. Chimgave<sup>2</sup>

Department of Pharmacognosy, KLE College of pharmacy, Belagavi-590010, Karnataka, India.

madhuribawage24@gmail.com

#### **Abstract:**

Wound has been defined as the disruption of anatomical or functional continuity of living tissue due to physical, chemical, microbial or electrical insult.  $Tridax\ procumbens\ (L.)$  leaves have long been utilized by indigenous people to treat wounds. The mature leaves are crushed into a paste and applied to the wound's surface. The aim of the present investigation was to evaluate aqueous extract of  $Tridax\ procumbens\ (L.)$  of flavonoids are used for the wound healing activity. Phytochemical analysis was carried out for aqueous extract as per the standard methods. The spectrophotometric detection and FTIR analysis developed method was validated as per ICH guidelines. The phytochemical screening of the plant showed that its leaves contain various carbohydrates, tannins, saponins, flavonoids etc. The spectrophotometric detection  $\lambda$  max of the extract was found to be 268 nm. In FTIR analysis functional groups like phenols, alkanes, carboxylic acid, nitrile, aromatics, alcohol, aliphatic amines, alkyl halides and alkynes were identified. Flavonoids and tannin were accountable for wound healing. The findings confirmed the ethnomedicinal claim of  $Tridax\ procumbens\ (L.)$  in wound healing. From this work, it can be concluded that the species contain effective phytochemical compounds, needs further research on toxicological aspects to develop a safe drug.

**Keywords:** Wound healing, plant extract, UV, FTIR.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PCOG-0102

# DEVELOPMENT OF SIMPLE, RAPID AND ECONOMIC METHOD FOR EXTRACTION AND ISOLATION OF 3-O-Acetyl-11-Keto-β-Boswellic Acid FROM THE RESINS OF Boswellia Serrata

Vishal Gokul Beldar\*, Dr Manojkumar Jadhao, Prof. Kirti S Laddha

Department of Pharmaceutical Sciences and Technology, Institute of Chemical Technology Mumbai, Marathwada Campus, Jalna.

vishalbeldar1994@gmail.com

#### **Abstract:**

Boswellia serrata is an important species from the Boswellia genus, which contains the variety of significant phytoconstituents. Among all boswellic acids, 3-O-acetyl-11-keto-β-boswellic acid (AKBA) phytoconstituent was found to be more potent for various medicinal applications. The traditionally, column chromatography is used to isolate the AKBA from the raw material as well as from extracts which is mostly time consuming and laborious as well. Hence this research work epitomizes the development of new method for the isolation of AKBA from the resin extract of B. serrata which is simple, rapid and reproducible. The method of extraction and isolation of AKBA involved extraction of resins using hydro-alcoholic solution followed by treatment of alkali and acids to get crude precipitate of AKBA. The obtained crude AKBA was subjected to the dry column vacuum chromatography to separate and yield the high purity of the AKBA. The purity of the isolated AKBA established by TLC & UHPLC. Spectral characterization of the isolated compound was performed by employing IR, MS, and NMR. The proposed method found to be economically viable as well as can be used for isolation of AKBA from resin extract of B. serrata at industrial scale. The isolated AKBA also studied for the protein interactions. We studied the effect of AKBA on Hen Egg White Lysozyme (HEWL) protein by using steady state florescence spectroscopy method. The results show, AKBA inhibits the protein aggregation. This study helps for further development of lead molecule on protein aggregation related discoveries (amyloidogenic proteins).

**Keywords:** *Boswellia serrata*, Boswellic acids, AKBA, Extraction and Isolation, Hen Egg White Lysozyme, protein aggregation







The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05th March 2022

PCOG-0103

#### SCREENING OF ANTIULCER POTENTIAL OF SELECTED MEDICINAL PLANT

S. V. Datkhile\*, M. G. Patel

Department of Pharmacognosy, Parul University, Vadodara, Gujarat, India

sachindatkhile121@gmail.com

#### **Abstract:**

A peptic ulceration is erosion in a section of the gastro enteric tissue layer. It may generally within the abdomen (gastric ulcer) or initial few centimeters of small intestine (duodenal ulcer) that penetrates through the muscularis mucosae. Contrary to common belief, ulceration isn't only caused by spicy food but additionally most ordinarily due to an infection of Helicobacter Pylori and long run use of medicines. Normal treatment may be a combination of medicine together with antibiotics and a proton pump inhibitors. Literature suggests that range of artificial medicine are employed in the management of peptic ulcers but elicit many adverse effects. There are several herbs, nutrients, and plant product that are found to play a role in protective or helping to heal stomach and peptic ulcers. Few human trials are offered, however several have shown smart potential in animal or in vitro studies. And also the present study was aimed to gather info on numerous *Malvaceae* family herbs that are employed in treating ulceration in numerous parts of the world, relying upon the data's provided by numerous researchers.

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यत **Keywords:** A peptic ulcer, Herbs, Nutrients, *Malvaceae*.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

PCOG-0204

NATURAL POLYMERS: APPLICATIONS AS PHARMACEUTICAL EXCIPIENTS, MODIFICATIONS AND IMPACT ON DRUG DELIVERY SYSTEMS AND SURVEY OF MARKET FORMULATION LABEL CLAIMS

Kavitkar GP\*, Karangutkar DR, Karpe AS, Kashalikar RS, Khan RJ, Bandekar SS

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

gauravkavitkar247@gmail.com

#### **Abstract:**

Natural polymers are classified mainly into polysaccharides, polypeptides & polynucleotides. They exhibit advantage of high biocompatibility, biodegradability, accessibility, stability, lack of toxicity, and have low cost. Various polymers are used in pharmaceutical formulations like tablets, capsules, creams, lotions, hydrogels and advanced drug delivery systems.

Scientific research articles were reviewed to check the use of various natural polymers in different pharmaceutical formulations. The impact of polymers on pharmacokinetic properties of formulations was identified from the scientific data. Modifications of natural polymers were reviewed and the impact of such modification was identified. Types of modifications and methods adopted for imparting the modification in natural polymers were reviewed from the scientific literature. Marketed formulations were surveyed from the pharmacies to check for label claims mentioning the name of polymer in the formula of the polymers.

The review and survey provided an outline of the natural polymers used in pharmaceutical industry and current position of research in natural polymers, its modifications and applications as excipients. As per the survey though a number of companies did not disclose the formula. It was evident from the survey data that Natural Polymers have a considerable application in the marketed formulations as like the synthetic polymers.

**Keywords:** Natural Polymers, Modification, Marketed formulations, Drug Delivery Systems.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0205

### SURVEY ON NUTRACEUTICAL PRODUCTS: LABELLING CLAIMS AND MARKET TRENDS

Mathew Steven\*, Mhaddalkar Aarti, Mardolkar Sanjana, Mande Shubham, Mali Suraj, Bandekar Sparsha S.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

stevenmathew999@gmail.com

#### **Abstract:**

Nutraceutical products in the modern world have gained immense importance and value with regards to its production, development, import and export, etc. Nutraceuticals have manifested into products of great importance and is marketed widely in countries such as India, Japan, Europe and USA due to their therapeutic and efficacious properties.

Considering the growth of nutraceutical products in the market, a survey was performed to check the Labelling Claims and Market Trends of various Nutraceutical products. Data was collected from retail pharmacies, online pharmacies, online shopping apps and private company brochures. The collected data was correlated to compare the manufacturer's data, nutraceutical content, dose, claim and special indications and guidelines for the product.

The survey provided an outline of various nutraceutical classes available at market, the pharmacological indication claimed, special indications and guidelines, nutraceutical dosage forms available and the extent of growth of nutraceutical industry in terms of numbers of manufacturing companies in market and a correlation therein. It is observed, that there is an increasing demand for nutraceuticals, consistently throughout the years giving it an exponential growth factor and guaranteed utility considering its future prospects.

**Keywords:** Nutraceutical products, Labelling Claims, Market Trends, Nutraceutical Dosage Forms.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PCOG-0306

#### PHYTOSOMES USED IN COVID - 19

Siddhivinayak S. Patil\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

sidhivinayakp1803@gmail.com

#### **Abstract:**

Novel corona virus created very harmful and hazardous health problems worldwide. Medical research network around the world is trying to find out treatment against the novel corona virus infection. In this situation, there is a need for herbal remedies to boost the immunity to fight against the corona virus. Herbal drug system have described several herbal drugs which are used as different home remedies and are assumed to be effective against corona and effective in boosting health immunity. Home remedies can play a vital role as immunity modulator. In view of the worldwide disease pandemic situation caused by novel corona virus disease, that's why necessary to need make review on the herbal home remedies to help in the pandemic situation to fight against corona virus.

Keywords: Phytochemicals, Antiviral agents, Immunity, Medicinal plants, COVID-19









R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0307

#### NUTRACEUTICALS

Mr. Harsh Bjairao Chavan\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

harshchavan9907@gmail.com

#### **Abstract:**

Nutraceuticals have received considerable interested because of their speculate safety. Nutraceuticals are used to describe a medicinal and nutritional component that include a food, Plant or naturally occurring material. Nutraceutical is the hybrid of "nutrition" and "pharmaceutical". Nutraceuticals; in broad, are food or part of food playing a significant role in modifying and maintaining normal physiological function that maintains healthy human beings. The food products used as nutraceuticals can be categorized as dietary fiber, prebiotics, probiotics, polyunsaturated fatty acids, antioxidants and other different types of herbal natural foods. These nutraceuticals used in various diseases such as obesity, cardiovascular diseases, cancer, osteoporosis, arthritis, diabetes, cholesterol etc. In whole, "nutraceutical" has lead to the new era of medicine and health, in which the food industry has become a research-oriented sector. This topic helps to understand the mechanism of action of Nutraceuticals and their possible efficiency. Even if a specific and effective cure for COVID-19 still has some way to go, selected nutraceuticals could be helpful, in addition to pharmacological therapy, preventing some COVID-19-related complications in infected patients.

Keywords: Dietary Fiber, Prebiotics, Probiotics, Polyunsaturated Fatty Acids, Antioxidants.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0308

#### HERBAL DRUG AS AN IMMUNITY BOOSTER

Mr. Khorate Akash A.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

khorateakash131@gmail.com

#### **Abstract:**

Prevention is always better than cure. The whole world is facing the COVID-19 pandemic these virus attacks on people with low immune system. So there has been lot of interest in ways to boosting our immune system. The medicinal plants and herbs playing a critical role to boosting our immunity during the COVID-19 pandemic. It is important to suggest that people should use some supplement to boost their immune system. The best way is to strengthen our immunity naturally with the help of medicinal plants or herbs they are nontoxic and without any side effect comprehensive scientific studies required to make medicinal plants available as robust our immune system therefore the medicinal plant and herbs playing a critical role to boosting our immunity during the COVID-19 pandemic. It is also very important to consume supplements in the form of immune nutrients such as vitamin A, B, C, D complex, Zinc and copper that will support your body to fight against the pathogens.

Keywords: Medicinal Plant, COVID 19, Medicinal herb, Immunity booster.

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0309

### ENHANCED EXTRACTION OF AN ANTICANCER DRUG VINBLASTINE FROM Catharathus Roseus

Shifa Imtiyaz Bangi\*, Madhura Hemant Khanolkar, Ms. Prajakta N. Desai

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

shifabangi660@gmail.com

#### **Abstract:**

Catharanthus roseus in which Vinblastine is an important anticancer alkaloid. An efficient method for its extraction from plant material can lower its cost internationally. Quantitative estimation of vinblastine was done with the help of HPLC Microwave assisted extraction of leaves of Croseus produced a maximum extract per gram of plant material while using lesser time of extraction with a very little amount of solvent is used, extraction of power level 700 Why using HPLC. Hence microwave assisted extraction is an efficient tool for of vinblastine from *C. Roseus*.

**Keywords:** Microwave assisted extraction, Soxhlet extraction.



96

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यार







The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05th March 2022

PCOG-0310

Terminalia Arjuna IN CORONARY ARTERY DSEASE: REVIEW ARTICLE

Ms. Arati Sarodea\*, Mr. Satyajit Satheb

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

aartisarode1102@gmail.com

#### **Abstract:**

Terminalia Arjuna commonly known as arjuna bark belongs to the family of Combretaceae which is one of most popular and beneficial medicinal plants in indigenous system of medicine for treatment of cardiovascular diseases. This poster provides latest update on traditional use, phytochemistry, pharmacological and toxicological data, clinical efficiency and safety of Terminalia Arjuna. It also helps maintain normal blood pressure and heart rate. This is due to its Hrdya (cardiac tonic) property.

Arjuna is an amazing heart tonic and cardio protective herb. It is potent in strengthening the cardiac muscles, improving the circulation of coronary artery blood flow and prevents the heart muscle from ischemic damage. Its bark decoction is being used in the Indian subcontinent for anginal pain, hypertension, congestive heart failure, and dyslipidemia.

Keywords: Coronary artery disease, Terminalia Arjuna Cardio-protective, Antioxidant, Antiinflammatory Anti-atherogenic. ।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0311

#### IMPORTANCE OF NOVEL DRUG DELIVERY SYSTEMS IN HERBAL MEDICINE

Yashodeep Shinde\*, Pranali Karande, Shrawani Alwe, Mrs. Sneha Madgaonkar

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

shideyash2610@gmail.com

#### **Abstract:**

Novel drug delivery system is advantageous in delivering the herbal drug at the site of action which minimize the toxic effects with the increase of bioavailability. Herbal drugs are becoming more popular in the modern world for their application to cure variety of disease with less toxic effects and better therapeutic effect. Various drug delivery and drug targeting system are currently under development. Novel drug delivery is a new approach to drug delivery. It helps the drug to act longer and more effectively. This system is used to minimize drug degradation and loss, to prevent harmful side-effects and increase bioavailability.

**Keywords:** Liposomes, Phytosome, Ethosomes, Implants.



98

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यत







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PCOG-0312

#### **IMMUNITY BOOSTER HERBAL PLANTS DURING COVID:19**

Sejal Mestry\*, Kashiram Kudtarkar, Nikata Malkar, Mrs. Sneha Madgaonkar

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

mestrysejal2629@gmail.com

#### **Abstract:**

Novel corona virus created a very harmful and hazardous health problems worldwide. Medical research network around the world is trying to find out treatment against the novel corona virus infection. In this situation, there is a need for herbal remedies to boost the immunity to fight against the corona virus. Herbal drug system have described several herbal drugs which are used as different home remedies and are assumed to be effective against corona and effective in boosting health immunity. Home remedies can be played a vital role as immunity modulator. That's way in this present study, an challenge is made to review such herbal remedies and identify its immunomodulator effect against corona virus in a pandemic situation. The subject to references were searched on the internet to find out the scientific data remedies Available on home remedies.

Keywords: Immunomodulants, SARS-COV.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यार ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

PCOG-0313

#### ANTIMICROBIAL ACTIVITY OF GUAVA LEAVES USED FOR TOOTHPASTE

Nutan A. Gaonkar\*, Suman .S. Gondhali, Shreshta. S. Chavan, Vaishnavi Keluskar, Mrs. Advika A. Arolkar

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

nutang020@gmail.com

#### **Abstract:**

Guava is considered as poor man's apple rich in phytochemicals with medicinal value and hence it is highly con-sumed. Gas chromatography—mass spectroscopy (GC—MS) analysis of guava leaf extract revealed the presence of various bioactive compounds with antimicrobial, antioxidant, anticancer, and antitumor properties. Hence, it is used in tooth paste formulations along with other ingredients such as Acacia arabica gum powder, stevia herb powder, sea salt, extra virgin coconut oil, peppermint oil in the present study. Three formulations have been made by varying the concentration of these ingredients and the prepared formulations were studied for their antimicrobial activity and physico-chemical parameters. Among these, F3 showed significant antioxidant and antimicrobial properties, minimal cytotoxicity, maximum spread-ability and very high cleaning ability. This study surmises that the herbal toothpaste formulation is greener, rich in medicinal values and imparts oral hygiene.

**Keywords:** Antimicrobial activity, Cleansing ability, Formulation, Guava, Herbal toothpaste.

।। निह ज्ञानेन सदृशम् पवि ESTD 2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

PCOG-0314

PHYTOSOME: A NOVEL DRUG DELIVERY SYSTEM FOR HERBAL MEDICINE

Kolte S. V\*., Mr. Bodake O. S., Ms. Sawant S. J.

Yashwantrao Bhonsale College of Pharmacy [Integrated Diploma] Sawantwadi- 416510, Maharashtra, India.

shubhamkolte50404@gmail.com

#### **Abstract:**

The term "phyto" means plant while "some" means cell-like Most of the bioactive constituents of phytomedicines are water-soluble compounds like flavonoids, glycosides; terpenoids. The Phytosomes are made up of lipid as outer layer this increase absorption of herbal extract. Phytosomes exhibit better pharmacokinetics and pharmacodynamics profit than conventional herbal extract. This delivery platform could benefit pharmaceutical companies regarding encapsulation of sufficient amounts of active phyto-ingredients for producing new supplements. Technology has been effectively used to enhance the bioavailability of many popular herbal extracts including milk thistle, ginkgo biloba, grape seed, green tea etc.

Keywords: Phytosomes, Flavonoids, Phospholipids, Bioavailability.

।। निह ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

POTH-0201

#### **BLOCKCHAIN-EVOLUTION IN PHARMACEUTICAL INDUSTRY**

Rutuja Shinde\*, Aseem Shaikh, Sagun Tandel, Prajakta Tamanekar, Pooja Sawant, Mr. Tushar Rukari

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

aasimahiis@gmail.com

#### **Abstract:**

Blockchain is a technology design to manage electronic data that has potential to support transparency & accountability. A blockchain is a ledger of transaction where an identical copy is visible to all members of computer network. Blockchain was originally developed for cryptocurrencies—to eliminate need for intermediates such as bank and their frauds. In health sector like pharmaceuticals there are transactions where transparent and immutable record keeping is important such as purchasing and shipping transactions for medical equipment's and pharmaceuticals. It has also given tracking permissions and access of personnel to facilities, medical records or other health data. In a blockchain data such as sales transaction record or medical record, integrity of these transactions' records is stored in blocks. When data is entered in a block it simultaneously gets add to blockchain and block gets ready for next data entry. Blok chains are decentralized and can have unlimited number of participants in a network such as global network of vendors and purchasers of medical equipment. All participants in a block chain have a full copy of blockchain which is continuously get updated.

**Keywords:** Block chain, Transparency, Pharmaceuticals, Crypto currency, Health sectors, Medical record.







The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05th March 2022

POTH-0202

#### CROSS SECTIONAL SURVEY ON POST COVID-19 IMPACT

Narkar S.D.\*, Naik R. H., Nerurkar Y. P., Ms. Mahabal R.H.

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

shubhamnarkar12@gmail.com

#### Abstract:

We assessed self-reporting public perceptions related to COVID-19 including beliefs. Primary objective is to explore the impact of COVID-19 pandemic in different age groups related with social, psychological, financial & educational factors, to understand perspectives in and around us.

We administered an online survey aiming to obtain responses of minimum 1000 peoples of different age groups in and around us with the Google form. Respondent sampling was stratified by age and job profile. Survey questions focus on family information, social problems, psychological symptoms, educational discomfort, financial and health impacts.

We used descriptive statics to summarize responses and categories them in logistics regression.

Keywords: COVID-19 Pandemic, Social problems, Psychological symptoms, Educational discomfort, Financial impact, Health impacts. ।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते ।।







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### NOVEL TRENDS IN PHARMACEUTICAL RESEARCH

Saturday, 05th March 2022

POTH-0203

#### OVERVIEW ON NOVEL TREND IN PHARMACEUTICAL PACKAGING

Prajyod Haryan\*, Ramchandra Rane, Kunal Dikwalkar, Rishi Ramesan, Akshay Rane, Gandhi Sanket

Yashwantrao Bhonsale College of Pharmacy, Sawantwadi-416510, Maharashtra, India.

prajyodharyan7@gmail.com

#### **Abstract:**

In recent decades many changes are seen in terms of pharmaceutical packaging. There is progressive modification in packs of pharmaceutical products since 1950 to present.

Key role of the packaging is to provide Product information, protection, containment and convenience while use of drug product. External image also helps in better advertising of the products. In order of betterment of all aspects taken into consideration, time to time innovations are necessary.

In the era of globalization and high-tech security in upcoming years packaging industry would witness the opening of global channel and it is mandatory to upgrade the security and quality of packaging. Changes in pharmaceutical industry research and manufacturing technologies has driven significant development in packaging and delivery systems.

In this review study of current trends in packaging are carried out including Counterfeit, Child Resistant Packaging, Temper Evident Packaging and other types of novel packaging systems. Pharmaceutical packaging is one of the most prominent areas across the globe which is advancing at constant pace.

**Keywords:** Pharmaceutical packaging, Novel Trends, Compliance, Advancements.







&

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

POTH-0304

#### ROLE OF PHARMACIST IN HEALTH CARE

Anil B. Chavan\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

anilchavan55233@gmail.com

#### **Abstract:**

Pharmacy profession is an integral part of healthcare industry worldwide. Pharmacies with well organized practice can go a long way to ensure quality health care for patients. In the past, pharmacists were only responsible for supplying and dispensing medicines. In present day, they are actively involved in the health care team in serving direct care to patients, especially the new generation pharmacists. They also play a major role in providing healthcare services by means of community pharmacy services in rural areas where physicians are not available or where physician services are too costly for meeting the healthcare necessities. Bed side patient care is now implemented in various hospitals, where pharmacists strive and enact their skills in order to achieve the best therapeutic outcomes of the care plan. There are different healthcare schemes initiated and funded by the Indian Government in which pharmacists also have a greater contribution. To patients. In conclusion, pharmacists have an increased role in interdisciplinary patient care, patient care management, educational interventions and counseling for patients, and provision of information to other healthcare professionals.

Keywords: Global health, Pharmacist, Disease, Community pharmacist.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

POTH-0305

#### ROLE OF PHARMACIST IN TRANSFORMING GLOBAL HEALTH

Kumbhar T.D.\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

kumbhartushar02@gmail.com

#### **Abstract:**

Emergence of various global health problems has widened the pharmacist's job scope. An accessible resource for health and medication information as the pharmacist strengthens the existing public health system. Pharmacists are transforming global health by empowering patients and other health care providers through counselling, drug information and motivation for rational use of medicines. Pharmacists strive to eliminate medication errors and ensure strict patient compliance to achieve desired therapeutic outcomes. Pharmacists produce quality medicines and assure quality of medicines until expiry date by proper storage and preservation. While dispensing the prescription, Pharmacist enhances efficacy and safety of medication by motivating patients for compliance of dosage regimen. Actually it is patient compliance which is important for optimum therapeutic outcome. In the gigantic task of transforming health, pharmacist's role and priorities are discussed at length. The efforts of pharmacist drastically reduces health care cost, disease burden and crowd in health system on the one hand and improves therapeutic outcomes, quality of life and happiness to patient on the other. The faith of the public in pharmacists on vaccination proves that they accept the involvement of pharmacists in healthcare provision. However, the public awareness towards pharmacist's role should be improved.

Keywords: Global health, Pharmacist, Patient counselling, Drug information.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

POTH-0306

#### HYPERTENSION AND RELATED DISEASE IN THE ERA OF COVID - 19

Patil Swapnagandha Satappa\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

patilswapnagandha2003@gmail.com

#### **Abstract:**

Coronavirus disease - 2019 (Covid-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS- COV-2), has impacted over seven million people worldwide, resulting in 0.4 million deaths as of June 2020. The fact that the virus uses angiotensin converting enzyme (ACE)-2 as the cell entry receptor and that hypertension as well as cardio-vascular disorders frequently co-exist with Covid-19 have generated considerable discussion on the management of patient with hypertension. In addition, the Covid-19 pandemic necessitates the development of and adaptation to a "New Normal" way of life, which will have a significant impact not only on communicable disease but also on non-communicable disease, including hypertension. Summarizing what is known and what requires further investigation in this field may help to address the challenges we face. In the present review, we critically evaluate the existing evidence for the epidemiological association between Covid-19 and hypertension. We also summarize the current knowledge regarding the pathophysiology of SARS COV-2 infect with an emphasis on ACE 2 cardiovascular system and the kidney. Finally we review evidence on the use of antihypertensive medication, namely ACE inhibitors and angiotensin receptor blockers, in patients with Covid-19.

**Keywords:** Severe acute respiratory syndrome, Coronavirus 2, Hypertension, Cardiovascular disease, Angiotensin converting enzyme 2.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

POTH-0307

#### EFFECT OF COVID -19 ON DAILY LIFE

Dhanashri Sunil Chougule\*

Genesis Institute of Pharmacy, Radhanagari 416212 Dist – Kolhapur State – Maharashtra

0880digya@gmail.com

#### **Abstract:**

The COVID-19 pandemic left no aspect of human life without affecting it negatively. Large corporations took advantage of the supply shortages of many consumer goods and manufacturing components to raise prices and make huge profits. The most of 'experts' expect the economic, employment, healthcare, and education aspects of life will recover and go back to normal in a year or two, nothing is guaranteed; new strains of the virus could emerge and delay recovery for years. However, nothing will go back to normal. As for the social impact of the pandemic, I believe it is deeper than most people think: therefore, our social relations, attitudes, and habits will not go back to normal; we should prepare ourselves for a new normal we never had before.

**Keywords:** COVID-19, Healthcare, Social Life, Education.

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यत







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

#### **NOVEL TRENDS IN PHARMACEUTICAL RESEARCH**

Saturday, 05<sup>th</sup> March 2022

POTH-0308

#### ARTIFICIAL INTELLIGENCE IN PHARMACEUTICAL RESEARCH

Dinesh Behera\*, Harshal Suryawanshi, Mr. Roshan Ahire

Yashwantrao Bhonsale College of D. Pharmacy, Sawantwadi-416510, Maharashtra, India.

dineshb2602@gmail.com

#### **Abstract:**

Artificial intelligence includes methods, tools and systems devoted to simulate human brain. The brain activity comprises of logical-cum-inductive knowledge acquisition and reasoning for solving problems. The future seems to be closely tied to research programs in artificial intelligence. The theory of neural network operation and potential applications of neural network based artificial intelligence in pharmaceutical sciences are reviewed in the present article. It began to be realized that a computer program could display intelligent behaviour if the domain it deals with is sufficiently narrowed. The transformation from logic oriented to knowledge-based approach is new transformation in field of artificial intelligence. ANN is biologically inspired system designed to simulate neurological processing ability to human brain. Human brain is most highly organized matter universe. Human brain consists of about 100 billion neurons and about 100,000 times. The neural networks can recognize patterns from a complex analytical data. Spectrum of unknown is super position of known spectra ANNs have been employed to determine the composition of unknown sample. Initial step in development drug delivery system design of pilot plant experiments that involve extensive experimentation.

**Keywords:** Artificial intelligence, Artificial neural networks, Pharmaceutical science, Analytical science, Drug delivery system, Pharmaceutical research.







R

The Indian Pharmaceutical Association-Maharashtra State Branch (The IPA-MSB)

Organized

One day national symposium on

**NOVEL TRENDS IN PHARMACEUTICAL RESEARCH** 

Saturday, 05<sup>th</sup> March 2022

POTH-0309

#### **NOVEL TRENDS IN BIOPRINTING**

Malap M. J.\*, Manyar C. V., Rawool S. B.

Yashwantrao Bhonsale College of Pharmacy [Integrated Diploma] Sawantwadi- 416510, Maharashtra, India

mansimalap74@gmail.com

#### **Abstract:**

Bioprinting is an emerging technology with various applications in making functional tissues construct to replace injured or diseased tissues. It is a relatively new approach that provides high reproducibility and precise control over the fabricated constructs in an automated manner, potentially enabling high throughput production. Three-dimensional (3D) printing is a manufacturing method in which objects are made by fusing or depositing materials in layers to produce a 3D object. "3D printing is probably the most innovative idea in the pharmaceutical industry since decades," says Scheffler. It could reduce or completely eliminate the organ transplant shortage, giving everyone an equal second chance. Through this poster we provide 4 currently employed bioprinting and lay down future perspectives in their further development.

**Keywords:** Inkjet printing, Personalised medicine, Zip dose, Thermal Inkjet printing.

।। नहि ज्ञानेन सदृशम् पवित्र इह विद्यते ESTD.2015