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National Conference on Future Prospects of Pharmacy Professionals in National Economic Growth

FEB 23, 2020

FUTURE INSTITUTE OF PHARMACY

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FACULTY OF PHARMACY, FIMS, BAREILLY
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Ph: 9012313333; Visit Us: futureinstitutions.org

Mr. Mukesh Gupta,

Chairman

Message

Future group of institutions is one of the pioneer institutions which has created a unique space for itself on the education map of India by its high level of academic excellence.

We all are well aware that Indian culture has among the most ancient science of Pharmacy in form of Ayurveda and health has a prime importance in human life as well as the wellness of psychological balance and social life.

It gives me immense pleasure to write a message for the National Conference on "Future Prospects of Pharmacy Professionals in National Economic Growth. "Organizing at Future of Institutions by Department of Pharmacy.

The topic chosen for the conference is very timely and relevant. I am sure that the resource persons specialized in the area of Pharmacy will enlightened the participants with their vast knowledge and experience.

I hope that this conference will surely trigger sharing and exchange of innovative idea through deliberations and discussions.

I take this opportunity to wish the conference a grand success.

Mr. Deep Gupta,

Managing Director

Message

It is moment of pride and pleasure that Future Institute of Pharmacy, in association with faculty of Pharmacy, Future Institute of medical sciences, is organizing a National Conference on "Future Prospects of Pharmacy Professionals in National Economic Growth" on February 23, 2020.

I am sanguine that the theme selected for the conference is quite pertinent to the present –day scenario. Furthermore, this conference not only generate wakefulness among the participants but also helpful to accrue the awareness in the concerned area.

I am confident that conference would serve as an excellent platform for leading scientists, academicians and young minds in the field on National Economic Growth.

I am assure that the ideas emanating in the conference will serve to set new frontiers of knowledge together with memorable experience and will be cherished by everyone forever.

I wish organizers as well as participants of this prestigious National Conference a great success.

My best wishes for the entire team for their meticulous endeavours.

Convener,

Director, Future Institute of Pharmacy, Bareilly

Message

It is matter of great pride that Future Institute of Pharmacy and Faculty of pharmacy, Future Institute of medical Sciences is organizing national conference. We are grateful to future group management for their continuous support for organization and conduction of conference.

It is need of hour for the pharmacy professionals to enhance their functioning vicinity. Indian economy is heading towards $5 trillion economy we have to focus on the major employment sector.

I am sure that National conference on Future prospects of pharmacy professionals in national economic growth will serve its important role in giving common platforms for new generation to interact and share ideas with eminent scientist and academician. I welcome all the delegates to Future Group and thank you for making this conference a great success.

Dr. Rajesh Kumar

Director, Faculty of Pharmacy, Future Institute of Medical Sciences

It gives me immense pleasure that Future Institute of Pharmacy & Faculty of Pharmacy Future Institute of Medical Sciences jointly organizing a conference on topic "Future Prospects of Pharmacy Professionals in National Economic Growth" scheduled to be held on 23 Feb, 2020. The purposes of present conference to provide a platform for a academia, researchers, students and industry people from Pharmacy background to share their innovative ideas for the development of pharmacy field. Pharmacy is a very fast growing, expending and exciting field. To the upcoming conference very renowned speakers from the different part of India will be coming. They will through light on the various aspects of Pharmacy, present scenario and future perspective.

We on the behalf of Future Group of Institutions, wish all the success to conference.

KING GEORGE'S MEDICAL UNIVERSITY, U.P. LUCKNOW
Department of Pharmacology & Therapeutics

Dr. Rakesh Kumar Dixit, M.D. (Pharmacology)

Professor, Department of Pharmacology & Therapeutics
King George's Medical University Lucknow

MESSAGE

Warm greetings to the organizers and participants of the conference.It give me great pleasure to know that Future Institute of Pharmacy is organizing a National Conference on the **"Future Prospects of Pharmacy Professionals in National Economic Growth" on 23rd February**.

In current scenario the pharmaceutical industry is undergoing a great transition and its contribution to the national economic growth is immense. Great scientists/academicians are prerequisite for any industry to grow and find a place in this world of competition. Conferences with the academic feast are must to sharpen the knowledge and skills. The present conference is one great attempt in this field. I am confident that this conference will provide an ideal platform for the pharmacists and scientists, academicians; researchers and health care professionals to share their valuable insights and experiences. This will pave the way for the sharing of ideas and giving the shape to these ideas.

It is also a matter of great pride to know that distinguished speakers covering the entire country will be sharing their expertise encompassing all the aspects of National Economic Growth and betterment of pharmacy professionals.

I congratulate all the organizers for their effort in bringing together this conference and extend a warm welcome to all the speakers and the participants of the conference.

National Conference

on

Future Prospects of Pharmacy Professional in National Economic Growth

23rd Feb 2020

Organized by

Future Institute of Pharmacy & Faculty of Pharmacy, Future Institute of Medical Sciences.

Bareilly

Time	Program	Venue
9:15 – 10:00 h	Registration Welcome of Dignitaries and Participants	FIMT, Reception
9:30-10:00 h	Tea	VIP-Conference hall Delegates-FIMT, dining area
10:00 –10:10 h	Preamble, Felicitation of Guests, Lighting of Lamp	FIMT Auditorium
10:10-10:15 h	Welcome Address by **Prof. (Dr.) Rahul Shukla** Convener, Director, Future Institute of Pharmacy, Bareilly	FIMT Auditorium
10.15-10:20h	Address by **Mr. Deep Gupta**, Managing Director	FIMT Auditorium
10.20-10.30 h	Key note address by Chief guest **Prof (Dr) Rakesh Kumar Dixit**, Professor, Department of Pharmacology & Therapeutics, King George's Medical University Lucknow	FIMT Auditorium
10.30-11.15 h	Inaugural Address by **Prof. (Dr.) RK Maheshwari,** SGSITS, Indore	FIMT Auditorium
11.15-11.30 h	Invited talk **by Dr.Zeenat Iqbal,** Associate Professor Department of Pharmaceutics, School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi.	FIMT Auditorium
11:30-12:15 h	Scientific Lecture by **Dr. Mridul Kumar Shukla,** Incharge outreach Programme, CSIR- NBRI, Lucknow	FIMT Auditorium
12:15-13:00 h	Invited talk by **Prof Amit Kumar Verma,** Professional Director, Alobhin Herbal Pharmaceuticals Pvt LTD, MJPU, Bareilly	FIMT Auditorium
13:00-13:30 h	Lunch	VIP-Conference hall Delegates-FIMT, dining area
13:30 -14:15 h	Invited talk by **Dr. N.P Yadav** Principal Scientist CSIR-CIMAP, Lucknow	FIMT Auditorium
14:15:15:00 h	Invited talk by **Dr. Amit Kumar Chaturvedi,** J. S. University, Shikohabad, U.P.	FIMT Auditorium
15:00 -15:30 h	Poster/ Oral Presentation Competition	FIMT, FIP
15:30:16:15h	Valedictory Function	FIMT Auditorium
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16.30: 17:00h	Refreshment	FIP

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Invited talk

Prof. (Dr.) RK Maheshwari, SGSITS, Indore

ABSTRACT

ECO-FRIENDLY PHARMACEUTICAL APPLICATIONS OF ----

1 – HYDROTROPIC SOLUBILIZATION

2 – MIXED HYDROTROPIC SOLUBILIZATION, AND

3 – MIXED SOLVENCY CONCEPT

Various organic solvents like ethanol, methanol, dimethylformamide, acetonitrile ethylacetate, toluene, chloroform, benzene, dichloromethane, carbon tetrachloride, acetone, hexane etc. have been employed for spectrophotometric estimations of poorly water-soluble drugs. Similarly, various organic solvents like ethanol, methanol, dimethylformamide etc have been employed for titrimetric estimations of poorly water-soluble drugs. Drawbacks of organic solvents include higher cost, toxicity and pollution. Organic solvents have innumerous adverse effects caused by single exposure like dermatitis, headache, drowsiness, nausea, eye irritation and long term exposure causes serious effects such as neurological disorders, chronic renal failure, liver damage, necrosis, mutagenesis disorder. They should be replaced by other eco-friendly alternative sources.

Pharmacopoeial (Indian/British) titrimetric analytical methods for bulk drugs of ibuprofen, frusemide, aceclofenac, salicylic acid, ketoprofen, chlorpropamide, phenyl butazone etc involve the use of organic solvents (ethanol, methanol, dimethyl formamide etc). Hydrotropic aqueous solutions of sodium benzoate, sodium acetate, sodium citrate, sodium salicylate, urea, dimethyl urea, niacinamide etc (as well as aqueous solutions of mixed blends of hydrotropic agents) could be employed for such titrimetric analyses precluding the use of organic solvents.

Pharmacopoeial (Indian/British) spectrophotometric analytical methods for tablets of tinidazole, atenolol and diclofenac sodium involve the use of a toxic organic solvent, methanol. However, hydrotropic aqueous solutions of sodium benzoate and urea could be used for spectrophotometric analysis of tablets of these poorly water soluble drugs precluding the use of methanol. Tablets/Capsules of a large number of poorly water soluble drugs such as naproxen, famotidine, frusemide, metronidazole, nalidixic acid, hydrochlorothiazide, gatifloxacin, aceclofenac, paracetamol, ofloxacin, norfloxacin, atenolol, diclofenac sodium, piroxicam, tinidazole, ketoprofen etc have been

estimated spectrophotometrically using hydrotropic aqueous solutions of sodium benzoate, sodium acetate, sodium citrate, urea, dimethyl urea, niacinamide etc (as well as using aqueous solutions of mixed blends of hydrotropic agents) precluding the use of organic solvents.

Maheshwari has proposed the mixed-solvency concept. The mixed solvency concept states that all substances whether liquid, gas or solid possess solubilizing power. Solids play very important role in improving the solubilities of drugs in different solvents. A weaker solvent may act as strong solvent for a particular solute in the presence of other solid (in solution form). For example the solubility of frusemide in ethanol is improved in presence of niacinamide (three times enhancement in solubility in presence of 15% w/v niacinamide in ethanol). In order to improve aqueous solubility of a poorly water-soluble drug, the concentrated aqueous solution containing various dissolved excipients (liquids and solids both) can give successful results in solubility enhancrment. In one of the study by Maheshwari[1,] it was found that additive and synergistic solvent action on the solubility of salicylic acid could be obtained by using aqueous solutions containing different excipients (liquids and solids both). Mixed-solvency concept shall be helpful to formulate various dosage forms of insoluble drugs utilizing safe concentrations of excipients for solubilization.

Similarly TLC of several poorly water soluble drugs could be performed using hydrotropic solutions precluding the use of organic solvents.

sHydrotropy, mixed hydrotropy and mixed-solvency can give alternate methods in following fields precluding the use of organic solvents-

a) Herbal extractions
b) Herbal formulations
c) Cosmetic preparations
d) Chemical synthesis
e) Purification processes
f) HPLC analysis
g) Dyeing industry
h) Chemical technologies involving solutions of insoluble substances
i) Ink industry
j) Paint industry etc
k) Pharmaceutical dosage forms including NDDS (microspheres, SEDDS, multiple emulsions, transdermal gels, nasal gels etc)

Dr. Mridul Kumar Shukla, Incharge outreach Programme,
CSIR- NBRI, Lucknow

Role of Plant in natural conservation and human health

Mridul Kumar Shukla[1]*, Dr SK Tewari, Dr Shanker Verma and Sk Barik*

The Ganga River is the largest and most sacred river basin of India. Declared as National River by government of India, river Ganga has many spiritual values. With the increased industrial revolution, the pollution level of Ganga has reached to an alarming proportion. A number of initiative and conventional technologies were started time to time to clean river water pollution but could not meet the required level. In this context, plant based constructed wetland (CW) could be a sustainable, and low cost technology for onsite river water pollution treatment.

A constructed wetland is an artificial marsh or swamp, created for treatment of various types of pollutants such as waste water storm water runoff or sewage treatment. Wetland act as a biofilter, removing sediments and pollutants such as heavy metal from water, and constructed wetland is designed to emulate these featureas. In order to rehabilitate river water ecosystem, a CW has been developed at Shantikunj, Haridwar using different aquatic macrophytes to treat sewage before discharge into the river Ganga. Results demonstrated that fully established CW reduced approx. 90%, 75% and 70% of BOD, COD and TSS along with metals viz., Cu, Cr, Pb, Zn, Mn etc after 6 month of treatments. Thus plant based CW could be a better onsite waste water treatment technology to restore river water quality. Detailed outcome of the research paper will be presented during the conference .one of the other Popular and Scientific Lecture Will be present by First outher.

Dr. N. P. Yadav

Principal Scientist,

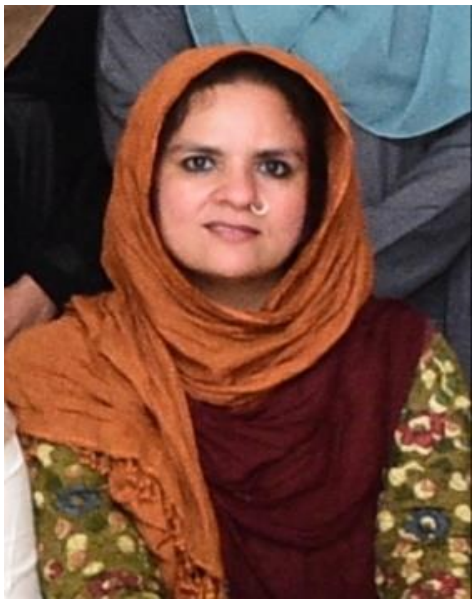
CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow

Drug discovery from plants: opportunities and challenges

Mother Nature has been a major source of therapeutic agents for thousands of years, and an impressive number of modern drugs have been derived from natural sources, many based on their use in traditional medicine. Historical experiences with plants as therapeutic agents have helped to discover single chemical entities with therapeutic value in modern medicine. Quinine from *Cinchona* bark, morphine and codeine from the latex of the opium poppy, digoxin from *Digitalis* leaves, atropine from *Atropa belladonna* are the classical examples of drugs continue to be in clinical use. According to a survey by National Cancer Institute of US, 61% of the 877 new chemical entities introduced as drugs worldwide were inspired by natural products. After the development of relatively easier, time saving and safer evaluation techniques to screen extracts or pure molecules in the recent past, a large number of plants and their isolates have been extensively screened against a number of diseases and/or disorders. A good number of extracts and pure compounds obtained from plants, microorganisms, and marine organisms have exhibited potent activity.

Rediscovery of the connection between plants and health is responsible for launching a new generation of botanical therapeutics that include plant-derived pharmaceuticals, multicomponent botanical drugs, dietary supplements, functional foods and plant-produced recombinant proteins. Many of these products will soon complement conventional pharmaceuticals in the treatment, prevention and diagnosis of diseases, while at the same time adding value to agriculture.

Only a small fraction of the world's biodiversity has been explored for drug discovery to date. There are at least 250,000 species of higher plants that exist on this planet, but merely a 5–10% of these terrestrial plants have ever been investigated. In addition, reinvestigation of previously investigated plants has continued to produce new bioactive compounds that have drug potential.



Dr. Zeenat Iqbal, Associate Professor,
Department of Pharmaceutics,
School of Pharmaceutical Education
and Research, Jamia Hamdard, New Delhi

Enhancing the national economy through Research and Development: Perspectives in Advanced Drug Delivery Research

The research in Pharmaceutical Sciences has witnessed a sea-change over the last few decades. Nanopharmaceutical research in particular has brought in a newer perspective of therapeutics which is leading to formulations which are closer to the "magic bullet" concept of Paul Ehrlich. The formulations are variously designed to cater to systemic as well as local diseases like cancer, infections and vaginal candidiasis. The armamentarium of nanotools is vast and can be optimized to treat the various forms of diseases as mentioned. The talk will focus on the progress pathway of these systems and highlight their salient features. India has its own traditional medicine set up which could be well amalgamated to yield sustainable and affordable treatment approaches. The major intention of the talk would be introducing the youngsters to the domain of nanoscience and how its integration into the pharmaceutical sciences along with traditional medicine could eventually lead to better therapeutic outcomes.

Amit Kumar Verma

Professional Director

Alobhin Herbal Pharmaceuticals Pvt LTD

Business Opportunities in Pharmacy

If you want to start a pharmaceuticals business, you must chalk out a clear plan of action. Irrespective of the size of your business, you must be ready to deal with your competitors. At the same time, you must fulfill all the legal obligations mandated by the law in your country.

"Medicine is the science of uncertainty and the art of possibility"

While fashion tastes change, old technology replaces new, fads come and go, medicines and pharmacies with the undeniable necessity that they hold in our lives, are here to stay. India is now gaining one of the top spots in health tourism, as people from Western countries find the best of health services matching international standards at more affordable rates. Whether you plan on starting a pharmaceuticals company or aim of an individual chemist store, It is important to know how to begin your own pharmacy business in India.

The Invited talk thus help Student to Know about business challenges, opportunities in Pharmaceuticals.

Dr. Amit K.Chaturvedi
Associate Professor,
J.S.University, Shikohabad, Firozabad, U. P. India.

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Message

I am extremely happy to know that the **Future Institute of Pharmacy , Bareilly , Uttar Pradesh** for organizing the National Conference on **"Future Prospects of Pharmacy Professionals in National Economic Growth"** on Feb. 23rd 2020. The conference will provide a platform for interaction between scientists, academicians, industrialists, researchers and UG & DIPLOMA students to exchange the knowledge of latest information regarding plant species for their therapeutic significance.

I wish & congratulate to Convenor Dr. Rahul Shukla , Director , Future Institute of Pharmacy, Bareilly for organizing this national conference .

Isolation and Synthetic Modifications of Biologically Potent Natural Products.

Structurally diverse Natural products displayed plethora of important applications such as pharmaceuticals, agrochemicals and also has been employed as a useful synthons for the generation of structurally diverse biologically potent scaffolds.[1]Many of them have been approved as drugs, prodrugs and drug candidates.

A large number of natural products with diverse chemical structure has been isolated and it has been found that approximately over half of the pharmaceuticals in clinical use are derived from natural products.[2].Most of the drugs and Pharmacophores (anticancer,antibiotics, antimalarials,antidiabetic, immunosuppressant, blood- pressure and cholesterol lowering and the central nervous system drugs) were discovered from natural products(microbes and medicinal plants) [3] .

Discovery of most of the magic bullets such as morphine, ephedrine, reserpine, quinine, camptothecin, vincristine, taxol, aspirin, artemisinin, colchicines, podophyllotoxin and many more the root of discovery invariably leads to a traditional system of medicine. Synthetic modifications of Natural Product substances provide the opportunity to generate novel composition of matter and associated intellectual property. Semisynthetic modifications led to compounds with increased potency.[4]

In the present talk, I would like to emphasize isolation and synthetic modifications of biologically potent natural products discovered by our group.

Oral Presentation

OP201

AN INSIGHT OF NATURAL PRODUCT BIOACTIVES AND THEIR FORMULATIONS REPORTED FOR THE TREATMENT OF NEPHROLITHIASIS

Muhammad Arif[1*] and Pradeep Singh
Faculty of Pharmacy, Integral University, Kursi Road, Lucknow, INDIA.

Abstract

Nephrolithiasis is a phenomenon of crystal concretion formed usually within the kidneys. It is an increasing urological disorder of human health, affecting about 12% of the world population and has been invariably associated with an increased risk of end-stage renal failure. The etiologies of nephrolithiasis are multifactorial. It involves a complex process which results from varied physicochemical events including supersaturation, nucleation, aggregation followed by retention of urinary stone constituents within tubules. The overuse of synthetic drugs for the treatment of nephrolithiasis results in higher prevalence of adverse drug reactions which has provoked humans to come back to nature for risk-free therapy. There are many marketed formulations in Ayurveda, Unani and Homeopathic medicine system which are having lithotryptic effects, and have been widely used clinically to dissolve calculi in the kidney. At present, in allopathic system of medicine, there is no satisfactory treatment to cure or prevent kidney stone recurrences. In this paper, we have review the pathogenesis, risk factors and management of nephrolithiasis with numerous herbals bioactive with Ayurvedic, Unani and Homeopathic drug formulations and review the different kinds of herbal bioactive present in formulations which are responsible for management of nephrolithiasis.

OP202

COMPUTATIONAL DRUG REPURPOSING

Kuldeep Singh[*], Arun Kumar, Shomprakash Kushwaha
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Abstract:

Drug repurposing is the process of discovering new uses and indications for existing or failed drugs which on the contrary to experimental drug discovery, which is a costly, time-consuming, and risky process, is cost-effective and reliable; thus, a plethora of computational methodologies have been propounded to repurpose drugs in a large-scale manner by utilizing available high throughput data. Drug repurposing is a vital function in pharmaceutical fields that has gained popularity in recent years. The available literature, however, lacks a contemporary and comprehensive analysis of the current computational drug repurposing methodologies. In this presentation, we suggested a systematic analysis of computational drug repurposing which

consists of three main components: at the first segment, we categorize the computational drug repurposing methods based on their technical approach and artificial intelligence perspective and discuss the strength and weakness of various ways. Second, some general criteria are recommended to analyse our proposed categorization. In the third and final section, a qualitative comparison between each approach which is a guide to understanding their preference to one another demonstrated. Also, this systematic analysis can help in the efficient selection and improvements of drug repurposing techniques based on the nature of computational methods implemented on biological resources.

Key words: Drug Repurposing, computational, Artificial intelligence

OP203

MOLECULAR DOCKING: A NOVEL TOOL FOR DRUG DISCOVERY

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Abstract:
Computational techniques have been applied in the drug discovery pipeline since last two decades. In recent years, since the molecular docking technique can greatly improve the efficiency and reduce the research cost, it has become an important key tool in computer-assisted drug design to predict the binding affinity and analyze the interactive mode. The explosion of structural informatics, genomics and proteomic plays a major role in leading the efforts towards modern era drug discovery and development. Enormous research from last two decades has been pursued to study various docking algorithms and predicting the active site of the molecule. Several docking programs were developed to visualize the 3D structure of the molecule and docking score can also be analyzed with the aid of different computational methods. Molecular Docking is a structure-based virtual screening that is used to place the computer-generated three-dimensional Structures of small molecules into a target structure in a variety of positions, conformations and orientations. Protein-ligand docking is a new concept with a variety of applications. It acts as a vivacious explore domain because of its significance to structure-based drug design, Lead Optimization, Evaluation of Biochemical pathways, in *de-novo* drug design. Through Molecular Docking the Binding mode and affinity of the complex so formed is estimated and thus helps in the Molecular Recognition Process docking towards discovery of new drug leads.

OP204

HERBAL TOXICITY: A REVIEW

Rajneesh Kumar Singh, FOP, FIMS, Bareilly

The medicinal plants are used as traditional medication worldwide. Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products. . Herbal medicines come from all traditions including Chinese, Indian, north and south American, African and European systems. Herbal remedies act on the body, either by blocking their action or increasing their potency. Most herbal products on the market today have not been subjected to drug approval process to demonstrate their safety and effectiveness. Some may contain mercury, lead, arsenic and corticosteroids and poisonous organic substances in harmful amount. The education of health-care professionals,herbal medicines suppliers and patients is vital for the prevention of

potentially serious risks from misuse of herbal medicines. The review underlines the importance of rational use of herbal drugs with awareness of its potential toxicities.

OP205

FORMULATION DEVELOPMENT

Surabhi Pal, Assistant Professor Future Institute Of Pharmacy Bareilly

Formulation development includes various stages in the process of development of a new drug. It includes many steps weather it is extraction of chemical entity from the animal or plant sources or selection of the components of final formulation to clinical trials. *Outsourcing drug development* is growing trends nowadays which play important role in growth of pharmaceutical and biotechnology industries by speeding the process of formulation development. It includes the involvement of third party into the business. Some pharmaceutical industries have their own departments such as R&D, F&D and biochemistry laboratories but all industries doesn't have all due to the circumstances such as climatic condition, particular subjects fir study etc. Formulation development starts with pre-formulation studies which include analytical development and characterization, excipient screening to stabilize and enhancing the solubility and stability of the dosage form development, weather it includes conventional dosage form such as tablets, capsules liquid and aerosols or unconventional dosage form such as nanoparticle, liposomes, niosomes, carbon nanotube, nanoemulsion etc. Pre-formulation study contains various tests on API and excipients such as solubility studies, micromeritic properties. Component selection and ratio of components is selected by DOE software, which cut down the effort and time and speeding the formulation process. On the basis of results after applying DOE optimized dosage form selected and go for the further investigation and evaluation which includes characterization, toxicity level, therapeutic effect and stability testing of dosage form. Therapeutic effect and toxicity studies are conduct on the animal models and cell line studies respectively. This stage is referred as preclinical stage followed to the clinical trials where potency and efficacy of dosage form assures.

Keywords: API (Active Pharmaceutical Ingredient), Design Of Experiments (DOE), Research and Development (R&D), Outsourcing drug development

OP206

MEDICINAL VALUE & HEALTH BENEFITS OF PALASH (*Butea monosperma)*

PRIYA THAPA

Lecturer at Future Institute of Pharmacy (Priyathapa201555@gmail.com)

Nature provides us a wide range of resources weather it would be plants animal rocks etc which help us to live a life with better convenience. There is a plant known as *palas* has many health benefits. ***Butea monosperma*** has many synonyms such as Palash, Dhak, Palah, *Flame of the Forest*, *Bastard Teak*, and Parrot Tree. It is a species of Butea native to tropical and sub-tropical parts of the Indian Subcontinent and Southeast Asia. As per Ayurveda, the tree balances Vata and Pitta. It has been used extensively in Ayurvedic, Unani and Homeopathic medicine. Extracts of various parts of the tree, as well as the whole parts possess antimicrobial, antibacterial, antifungal, hypoglycemic, anti-inflammatory, astringent, tonic, aphrodisiac and diuretic properties. The leaves to have astringent, carminative, anthelmentic, aphrodisiacal, tonic, anti-inflammatory, anti- diabetic, wound healing properties. Due to giving soothing effect, leaves are

used to treat sore eyes. They also have strong chemoprotective effect.The seeds have anthelmentic activity along with the property of treating diarrhoea and in many skin diseases.
Keywords- Hypoglycemic, Aphrodisiacs, Hepatoprotective, gonorrhoeal

OP207

DEVELOPMENT AND CHARACTERIZATION OF FLURBIPROFEN LOADED NIOSOMALIN-SITU GEL FOR OPHTHALMIC DRUG DELIVERY SYSTEM.

HimaniGururani
FOP, FIMS, Bareilly

ABSTRACT

Niosomeare non-ionic surfactant based liposomes, obtained in the hydration of artificial non- ionic surfactants,without or with addition of cholesterol or additional lipids. The intention of the current study was to organize and evaluate the in-situ niosomal gel loaded with flurbeprofen a non steroidal anti infalmmatory,Analgesic and Antipyretic activities.

Flurbeprofen loaded Niosomesinvestigate the connection among the non-ionic drug / surfactant ratio with tha adding of cholesterol was successfully organized with the thin film hydration way and compare the result of different grade of span used (20,40 & 60) with the different ratio of cholesterol .Niosomes have been identified by drug entrapment efficiency , drug content,particle size and in-vitro diffusion study.

OP208

DESIGN AND EVALUATION OF TRANSDERMAL THERAPEUTIC SYSTEM OF ASPIRIN

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ABSTRACT

Background: Recent studies reported that preparation and evaluation of transdermal patches by incorporating different polymers such as hydroxyl propyl methyl cellulose (HPMC), polyethylene glycol (PEG) and poly vinyl alcohol.**Aim:**The present study was aimed on the preparation of matrix type transdermal system of Aspirin employing blends of different polymers. **Materials and Methods:**Polymers were used such as Poly Vinyl Alcohol, Sodium Carboxy Methyl Cellulose, Chitosan were used. Glycerin was incorporated as plasticizer films to impart flexibility to the polymeric films. The prepared transdermal patches were evaluated for their physicochemical chemical properties like thickness, weight variation, flatness, folding endurance, drug content, surface pH and partition coefficient. The in vitro release, study of patches was done through dialysis membrane employing Franz Diffusion Cell. **Results and Discussion:** This study indicates that formulation F-1 showed maximum release of 82.78% and minimum release of 63.72% was obtained for formulation F-3 in 8 hour. **Conclusion:** It concludes that use of Aspirin transdermal patches to overcome the challenges posed by the oral administration of the drug.

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Keywords: Transdermal system, Poly Vinyl Alcohol, Sodium Carboxy Methyl Cellulos, Chitosan

OP209

EVALUATION OF ANXIOLYTIC AND ANTIDEPRESSANT POTENTIAL OF HYDROALCOHOLIC LEAVES EXTRACT OF *AZADIRACHTA INDICA* IN ALBINO RATS

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ABSTRACT

Background: In previous studies, anxiolytic and anti-depressant activities through short term treatment of Neem (A. indica) leaves extract have been studied. **Aim:** The aim of this study was screening of anxiolytic & antidepressant potential of hydro-alcoholic leaves extract of *Azadirachta indica* (Neem) in albino rats. The fresh leaves of Neem were collected from Amethi region; identified and authenticated by botanist at MJP Rohilkhand University, Bareilly. **Materials and Methods:** The hydro-alcoholic extract was obtained by maceration in 1:1. The rats were administered *p. o.* the hydro-alcoholic leaves extract of *A. indica* in 100mg/kg and 200mg/kg, once daily for 15 days. The Elevated Zero Maze, Light/Dark Arena Test, Forced swimming test and Locomoter activity (Actophotometer) models were used for the screening of anxiolytic and antidepressant potential. **Results and Discussion:** Neem *(A. indica)* leaves at the both doses (100 & 200 mg/kg) exhibited statistically significant anxiolytic & antidepressant effect in all the parameters observed when compared with control and standard (fluoxetine hydrochloride) group. **Conclusion:** This research concludes that small dose has more significant potential and safety than higher dose. This research further suggests isolation and purification of active moiety and mechanism of action by which these pharmacological potentials are exhibited.

Keywords
Azadirachta indica; Neem Seed Oil & Selective Serotonin Reuptake Inhibitors

Running title: ***An Herbal Cure to Mental Problems***

OP210

WOUND HEALING: A REVIEW

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ABSTRACT

Background: In Ayurvedic sciences to accelerate the healing, various indigenous roots and other plant products are described. Plants have been used in traditional medicine to treat a variety of disorders. **Wound:** A wound can be defined as the disruption of the cellular and the anatomic continuity of tissue surface. **Wound healing:** Wound healing is the process of reconstruction of the break or discontinuation of skin surface[2.] Process of healing includes various events like introduction of inflammatory responses, regulation of paranchymal cells, and synthesis of matrix, protein, remodeling and collagenition. **Wound Healing Process:** A complete wound healing process involved following phases: **Vascular and inflammatory phase:** Immediately after the tissue injury, blood vessels and

lymphatic system are disrupted vascular and inflammatory response produces. Initial 5-10 minutes. **Re-epithelization:** The initial event in epithelization is migration of undamaged epidermal cell from the wound margin and from the epithelium of hair follicles and other structures. **Granulation tissue formation and angiogenesis:** Granulation tissue consists of inflammatory cells, fibroblast and new vasculature in a hydrated matrix of glycoprotiens. Collagen and glycosaminoglycans. **Fibroplasia and matrix formation:** Fibres are layed down on a framework of fibronectin and re-existing of fibronecting may be critical for subsequent collagen deposition. **Wound contraction:** It may be defined as centripetal movement of edges of full thickness wound in order to facilitate closure of the defect. **Matrix and collagen remodeling:** The events in re modeling are responsible for the increase in tensile strength, decrease in erythema and scar tissue bulk. **Acquisition of wound strength:** Open treatment of wounds permits necrotic fragment, infecting agents, and foreign debris to exit the wound. **Drugs that impair wound healing:** Corticosteroids, Cytotoxic drugs, Nicotine, Antiplatelet drug/NSAIDS, Antibiotics, Colchicine, Anticoagulant, Vasoconstricting drugs, Immunosuppressents. **Drugs that improve healing:** Example of drugs that improve wound healing includes. Haemorrheologics, Methyl xanthenes, Sex hormones, Retinoids, Phenytoin, Prostaglandins vitamin A and C, Zinc, Growth factor etc.

Poster Presentation

PP301

ANTIEPILEPTIC ACTIVITY OF RUBIADIN ISOLATED FROM THE ROOTS OF *RUBIA CORDIFOLIA LINN.* AND STANDARDIZATION OF ITS FORMULATION

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Abstract

Introduction-Herbs have a vital role in the prevention and treatment of convulsion. The phytochemical exploration of these herbs has contributed to some extent in this race for the discovery of new antiepileptic drugs (AED). In recent years owing to the fear of side effects people prefer more and more use of natural plant products for convulsions.

Methodology- In the present research Rubiadin was isolated using column chromatography from roots of *Rubia cordifolia.Rubiadin was* also analysed by spectroscopic methods like UV, IR, NMR and Mass. For antieipileptic effect the isolated Rubiadin suspension as well as whole extract of *Rubia cordifolia* was studied for Pentylene tetrazole (PTZ) & Maximal electro shock (MES) model in Albino mice. Epileptic seizure were induced in mice of either sex and the challenged animals treated with Whole *Rubia cordifolia* root extract & isolated Rubiadin suspension at two doses 100 mg and 250 mg respectively.

Result-Rubiadin suspension 250 mg was able to delay PTZ- induced seizures and it is probable that it may be interfering with GABAergic mechanism to exert its effect. In the present work the results show minimal alteration in the level of GABA .The isolated Rubiadin suspension at 250 mg dose showed significant reduction in MES and PTZ induced epileptic seizure which is compared with whole-plant extract in mice.

Key words:Rubia cordifolia,Rubiadin,epilepsy,antiepileptic activity

PP302

FORMULATION DEVELOPMENT & IN-VITRO EVALUATION OF TRANSDERMAL PATCH OF ATENOLOL

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ABSTRACT

Introduction: Transdermal drug delivery frameworks are topically regulated medicaments as patches that convey drugs for foundational impacts at a predetermined and controlled rate. These gadgets consider pharmaceuticals to be conveyed across the skin barrier. **Aim:** The formulation development & in-vitro evaluation of transdermal patch of atenolol. **Methodology:** The human skin is a promptly open surface for drug delivery. It is an option in contrast to oral delivery and hypodermic injection. Moreover, transdermal frameworks are non-invasive and can act naturally regulated. Atenolol is powerful against genuine or dangerous fundamental fungal disease however not to treat less genuine fungal contamination of mouth, throat or vagina. It is soluble in water and having high permeability through stomach. **Result:** The result of the outcomes is poor bioavailability after oral administration. In this way transdermal fix containing Atenolol was defined to build its solubility, bioavailability and patient consistence. Solvent casting technique was utilized to plan transdermal fix. PEG was chosen as the permeation enhancer and Glycerin was chosen as plasticizer for the detailing and blended with various concentration of polymeric casting arrangement which contains HPMC (polymer at various proportions) and Chloroform: Methanol at 1:1 proportion utilized as solvent.

Keywords: Atenolol, Transdermal Patch, HPMC, chloroform, methanol

PP303

IN VITRO ASSESSMENT OF ANTIMICROBIAL ACTIVITY OF VARIOUS EXTRACTS OF HAMELIA PATENS (BARK)

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GLOCAL SCHOOL OF PHARMACY, GLOCAL UNIVERSITY, SAHARANPUR, U.P, INDIA

ABSTRACT

Introduction: An alarming increase in bacterial strains resistant to existing antimicrobial agents demands a renewed effort to seek agents effective against pathogenic bacteria resistant to current antimicrobials. **Aim:** This study was aimed at investigating the antimicrobial property of Hamelia patens. **Methodology:** Hamelia patens extracts was studied for antibacterial and antifungal activity against various clinical isolates of the bacteria and fungi, in varying concentration by Agar well diffusion method and serial dilutions. **Results:** The extracts showed pronounced concentration dependent antibacterial activity against Gram positive and Gram negative bacteria and also antifungal activity. Various extracts of Hamelia patens(BARK) inhibited the growth of Staphylococcus aureus, Bacillus subtilis, Pseudomonas flurescens, Escherichia coliand Aspergillus niger, Penicillium chrysogenum, Alternaria alternata.

KEY WORDS: Hamelia patens, Antibacterial and Antifungal activity, Antibiotic resistance, Antioxidant activity

PP304

ROLE OF BIOENHANCERS IN DRUG DISCOVERY

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Bioenhancers are such agents, which by themselves are not therapeutic entities but when combined with an active drug lead to the potentiation of the pharmacologic effect of the drug.

They act through several mechanisms which may affect mainly drug metabolism, absorption process, or action on drug target. The need for bioenhancers arises due to drugs which are poorly available, administered for long periods, toxic and expensive. Bioenhancers can be herbal and animal origin. Herbal bioenhancers have been shown to enhance bio-availability and bio-efficiency of different class of drugs such as anti-tubercular drugs, antibiotics, antiviral, antifungal and anticancer drugs. The various bioenhancers available are piperine, garlic, *Carum carvi*, *Cuminum cynimum*, lysergol, naringin, quercetin, niaziridin, glycyrrhizin, stevia, cow urine distillate ginger. Out of these, *Cuminum cynimum* and niaziridin are the potential bioenhancers of future. Therefore, the need of the hour is to carry out extensive research on these bioenhancers so that they could be utilised in the drug formulations.

Key Words: Bioenhancers, Bioavailability, Drug Formulations

PP305

ANTIBACTERIAL PROPERTIES OF HONEY

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***BIU COLLEGE OF PHARMACY**
BAREILLY INTERNATIONAL UNIVERSITY, BAREILLY, UP

ABSTRACT

The use of traditional and herbal medicine to treat infections was practiced since the origin of mankind, and it was the only option to treat before the ear of antibiotics. A variety of plants and their extracts have been used for the treatment requiring antimicrobial activity, and one of the popular natural antimicrobial substance describe in the ancient medicine in honey.

Honey is the one of the oldest medicine known; it recorded use going back more than 4 millennia. It was use to treat wounds and ulcers, sunburn, and infection of eyes, throat and gut. These uses have continued into present day folk medicine and are increasingly becoming part of modern professional medicine. Good results have been reported in modern medical literature on the use of honey in ophthalmology and gastroenterology. The use of honey as a wound dressing has always been part of professional medicine, but it was displaced from common usage by the advent of antibiotics. Now that antibiotic resistance in bacteria is becoming a major worldwide problem there is a rapidly increasing move towards using honey to clear infection in wounds with no adverse effects on wound tissues. Additional to using honey's antibacterial activity, advantage is taken of its other medically beneficial bioactivities: a rapid deriding action, a stimulatory effect on growth of tissues for wound repair, an antioxidant activity and an anti inflammatory action, which minimizes scarring.

Key- Honey, Antibacterial, antibiotics, bioactivity.

PP306

ANTIANXIETY AND ANTIDEPRESSANT ACTIVITY OF CITRUS PARADISI LEAVES IN WISTAR ALBINO RATS

*Yogendra Singh, Sunny Patel[1], Pushpendra Kannojia[1], Pankaj Mishra[1], Neha Pathak[1]
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Abstract-

Citrus paradisi commonly known as grapefruit, is considered valuable for its medicinal properties by various traditional systems of medicine and aromatherapy but no significant work

has been conducted on its anxiolytic and antidepressant effects.Extracts of leaves of Citrus paradisi have been evaluated for their CNS activities. Citrus paradisi has been used traditionally to reduce stress and anxiety. Citrus paradisi has been used to evaluate the antianxiety and antidepressant activity of the ethanolic and aqueous extracts of Citrus paradisi leaves in rodents. The findings presented here are relevant as they contribute to validate the traditional medicinal uses of this plant. Hence, Citrus paradisi could be developed as potential anxiolytic and antidepressant agent and may prove as a good alternative in management of psychiatric illnesses.

Key Words: Antianxiety, Antidepressants, Psychiatric illness

PP307

PHYSICO-CHEMICAL STUDIES OF PALM OIL & SOYABEAN OIL WITH THEIR OXIDATIVE STABILITY

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***Invertis institute of biotechnology**
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ABSTRACT

Palm oil and soybean oil are the two most widely used cooking oils in the world. These oils contain saturated and unsaturated fatty Acids. Some types of palm oil contains beta-carotene which is the precursor of Vitamin A due to which these oils might have antioxidant effects. Soybean oil is produced from the seeds of the soybean plant, this oil have high quantity of unsaturated fatty Acids (Mainly Linoleic fatty Acid). This Study shows the analytical tests carried out which includes Rancidity, Peroxide value, Iodine value, Free fatty acid, Oxidative stability. Peroxide value, Iodine value, Free fatty acid are performed as per Indian standards (IS:548 Part 1) From the test analysis, the results show that the oxidative stability of palm oil (Code 1)- 10 month at 30^{o}C and palm oil (Code 2)- 10.4 month at 30^{o}C and the oxidative stability of soybean oil (Code 3) is 4.9 month at 30^{o} C and that of soybean oil (Code 4)- 4.8 month at 30^{o}C, which implies that the oxidative stability of palm oil is more than that of soybean oil. In the present work, to enhance the oxidative stability as well as the physico-chemical characteristics of the oils these oils are blended in different quantities. The oxidative stability of palm oil is more because it contains high amount of saturated fats (Palmitic Acid approx 45%) with few amounts of unsaturated fats. These two oils are blended because of their unique properties. The presence of vitamin E acts as an effective natural antioxidant and Soybean oil is composed of approximately 16% saturated fatty acids (palmitic and stearic), 24% monounsaturated fatty acids (oleic), and 60% polyunsaturated fatty acids (linoleic and linolenic). The high percentage of these polyunsaturated fatty acids that soybeans are considered to be unstable in the presence of oxygen. The blend of Soyabean and Palm oil turned out to be excellent oil because of its better fatty acid composition with more stable compounds.

PP308

NANOROBOTS- A MEDICAL DEFENCE

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ABSTRACT

Nanorobot is the finest nanotechnology that has the capability to act as a medical armour for fighting against dreadful diseases like cancer. It is able to deal at molecular level with precision at nanoscale measurement. They are often known by the name nanomedicines, which can deliver the payload (drug) at the site of action. They offer number of advantages over present methods of drug delivery like improved bioavailability, targeting the site of action, fewer surgeon mistakes and capable of reaching out devious areas of body. Nanorobots are manufactured with the complete integration of onboard sensors, power supplies, motors, manipulators and molecular computers. Their generation was originated by the idea of carbon nanotubes, which has brought up a new era in the field of nanotechnology. So, nanorobots are emerging as a beneficial tool for treatment of various human diseases and are bringing improvement in the human biological system.

Keywords: Nanorobots, Carbon nanotubes, Nanorobot Control Design (NCD), Nanomedicine

PP309

ROLE OF EUDRAGIT IN TRANSDERMAL DRUG DELIVERY SYSTEMS

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ABSTRACT

Transdermal drug delivery system is proficient of conveying the drug through Stratum corneum into the systemic blood circulation at predetermined rate. Eudragit is a polymer derived from esters of acrylic and methacrylic acid, and is accessible in a wide variety of different physical forms. Eudragit is a good polymer candidate in preparing transparent and self-adhesive transdermal films. Though, its mechanical properties should be enhanced by adding a plasticizer. Eudragit delivers unrivalled versatility and reliability to help protect API, boost drug product effectiveness and reduce formulation risk. Eudragit incorporated transdermal films possess various properties such as elasticity, wrinkle-free transparent films with good adhesion to skin, protection from external influences (moisture) or to increase patient compliance. The range of Eudragit provides full flexibility for your targeted drug release profiles by offering best performance for enteric, protective and also options for immediate, delayed and sustained release are available with enhanced solubility, bioavailability and permeability. Release kinetics from transdermal therapeutic system occurs due to erosion of Eudragit polymer within 20-30 minutes. Furthermore, Eudragit are also intended for skin application as emollient or protective and for local action or transdermal penetration of medicament for systemic action. The transparency is an important feature of this polymeric system which significantly influences the patient acceptance. While more research is needed to identify the potential of Eudragit to expand their use in transdermal delivery to a wide array of therapeutics. In the current discussion, we review about the current state of Eudragit effectiveness that are described as a promising choice specifically for topical and transdermal drug delivery.

PP310

PREPARATION AND EVALUATION OF OCUSERTS FOR INCREASING THE BIOAVAILABILITY OF AN ANTIFUNGAL DRUG

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Abstract:
The main aim of the present study is to formulate an effective ocular insert of Clotrimazole (an antifungal drug), which can produce a better ocular therapy against ocular fungal infections by increased bioavailability through increased drug-eye contact time and controlling the trans-corneal permeation of drug. We intend to optimize the formulation to show constant release of drug for maintenance of dose over a prolonged period of time. For the purpose we prepared ocular insert formulations of Clotrimazole. Various formulations were prepared by use of different polymers, HPMC, EC and combination of both in different proportions 2%, 3% and 4%. The prepared formulations were evaluated for various physical and analytical parameter related to appearance, durability, uniformity of drug contents, in-vitro and in-vivo release of drug and for stability. Ocuserts of Clotrimazole were prepared by solvent casting method followed by preparing the drug reservoir film and rate controlling membrane separately. Evaluation of ocular inserts for weight and thickness variation were carried out and analyzed by ANOVA. The % drug release from the selected formulation containing HPMC, were found to be 91.78 ± 2.436 at the end of 360 minutes. From current study we can conclude that by using different polymer in rate controlling membrane of an ocusert, release rate of drug from ocusert can be controlled or altered.

Key words: Ocuserts, Clotrimazole, *in-vitro* release pattern, physico-chemical evaluation

PP311

CURCUMIN LOADED GEL USED IN THETREATMENT OF PSORIASIS

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Abstract

A novel formulation of Curcumin loaded gel improved the bioavability of curcumin which is monopolized with gel for the treatment of psoriatic arthritis, which is a form of arthritis that affects some people who already have psoriasis, it a condition that features red patches of skin topped with silvery scales. Curcumin is a lipophilic molecule with an active ingredient in the herbal remedy and dietary spice turmeric. It is used for the treatment of many diseases such as rheumatoid arthritis, osteoarthritis, inflammation, infection, cancer and many more. Recent studies have showed low bioavailability of curcumin because of poor absorption, rapid metabolism and systemic elimination. Drug particles in the nanometer size range have unique characteristics that can lead to enhanced performance in a variety of dosage forms. Particles in this size range are resistant to settling and can have higher solubility, rapid dissolution, High therapeutic action and improved bioavailability. Several types of nanoparticles have been found to be suitable for the encapsulation or loading of curcumin to improve its therapeutic effects in different diseases. Curcumin loaded topical gel would be a safe and effective alternative to conventional vehicles for treatment of Psoriatic arthritis.

Keywords: - Curcumin, Bioavailability, Psoriasis, Topical Gel

PP312

PREPARATION AND EVALUATION OF EDIBLE TOOTHPASTE

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ABSTRACT

The first edible tooth paste was developed by the National Aeronautics and Space Administration (NASA) in1987 for astronauts so that they could brush their teeth without spitting since there is zero gravity in space. The principal characteristic of an edible tooth paste is that it must be harmless to consumers if swallowed; eliminate the formation of air bubbles and, therefore, can be used in bed-bound patients .Other important characteristic of these toothpastes includes: Must be able to prevent malodour for more than 5 hrs, prevent and treat tartar, able to remove stained plaque, relieve dentin hypersensitivity stimulate salivary secretion especially for people with dry mouth. The toothpaste can be used for alleviating periodontitis and preventing decayed teeth, and can be swallowed to supply nutrition and benefit health without toxic or side effect. The toothpaste is suitable for children, pregnant women, patients incapable of rinsing mouth and disabled people, is simple in formula and simple to implement, and is suitable for daily use of people.

PP313

Interpenetrating polymer network matrices of sodium alginate, locust bean gum and Gelucire for controlled drug delivery of propranolol HCL

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ABSTRACT

Interpenetrating polymer network (IPN) has gained a lot of interest in drug delivery system due to its ease of modification during its synthesis and development stage, which evolved novel physicochemical and mechanical properties within the formulation. In this work, a detailed research is carried out which includes its methods of Preparation and Characterization.

Objective: The aim of this study was to optimize the formulation of Sodium alginate-Locust bean Gum and Gelucire 39/01 (SAL-LBG-GL) beads containing Propranolol (PRL) employing 3^2 Factorial design.

Significance: Factorial Design enabled identification of the interaction between the studied factors**,** deep understanding of PRL release pattern and acceleration of the optimization process.

Methods: A two-factor, three-level face centered design was employed. The effects of Sodium alginate (X1), polymer ratio (LBG-GL ratio, X2)**,** and their interaction on incorporation efficiency (IE) and release rate were studied. The optimized formulation was prepared using numerical optimization and evaluated by DSC, FT-IR, SEM and release rate studies.

Results and Conclusion: The selected factors and their levels studied in the optimization design were useful for tailoring the anticipated formulation characteristics and PRL release pattern.

Keywords: IPN, Factorial Design, Multiparticulate delivery systems, Scanning electron microscope, Differential scanning Calorimetry, Fourier Transform Infra-Red.

PP314

ROLE OF NATURAL HERBS IN THE TREATMENT OF HYPERTENSION

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ABSTRACT

Hypertension (HTN) is the medical term for high blood pressure. It is unsafe because it makes the heart work too tough and contributes to atherosclerosis (hardening of arteries), besides increasing the risk of heart disease and stroke. Hypertension can also lead to other conditions such as congestive heart failure, kidney disease, and blindness. Conventional antihypertensive are usually associated with many side effects. About 75 to 80% of the world population use herbal medicines, mainly in developing countries, for primary health care because of their better suitability with human body and lesser side effects. The hypotensive and antihypertensive effects of some of these medicinal plants have been validated and others disproved. However, ayurvedic knowledge needs to be attached with modern medicine and more scientific research needs to be done to verify the effectiveness, and explicate the safety profile of such herbal remedies for their antihypertensive potential.

Keywords: Antihypertensive, herbs, hypotensive, hypertension, medicinal plants

PP315

PHARMACOLOGICAL EFFECT OF COMBINATION OF ANTIOXIDENT AND ANTIPARKINSON DRUG ON RESERPINE INDUCED PARKINSON MODLE

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ABSTRACT

Parkinson disease is a neurodegenerative issue depicted by the cardinal appearances of strength, resting tremor, steadiness (bradykinesia) and abatement of advancement (hypokinesia). It is a developing masses and regardless of the way that there have been a couple significant jumps forward similar to the treatment of this devastating sickness, for instance, drugs levodopa,

dopamine [DA] agonists, anticholinergic and medicinal methodology. Parkinson's sickness is a wearisome, dynamic, neurodegenerative disarray with a normal inescapability of 31 to 328 per100, 000 people far and wide. It is assessed that more than 1 percent of the people over age 65 are troubled with Parkinson's disease, event and inescapability increase with age. So the purpose of the examination to evaluate the effect of daidzein on parkinson disorder actuated by reserpine model in rodents. Reserpine is the antihypertensive expert, instigates utilization of central catecholamines stores. Implantation of reserpine in rodents causes hypokinesia, unyielding nature, tremors, and inaction. Cell fortifications expect a basic activity in the shirking or treatment of Parkinson contamination, Daidzein is a malignancy aversion operator that quenches the free radicals. Parkinson was evaluated by social tests, for instance, rota road test. Estimation of mental incapacitation was done by various biochemical estimations to be explicit Lipid peroxides (in cerebrum), Protein estimation using Folin's reagent and Brain diminished glutathione estimation. All of the results were then appeared differently in relation to the standard prescription carbidopa+Levodopa (30mg/kg).

Key words: Daidzein, Reserpine, Carbidopa+Levodopa, Parkinson

PP316

A RECENT REVIEW ON CLINICAL FEATURES OF PATIENTS INFECTED WITH 2019 NOVEL CORONA VIRUS IN WORLD

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ABSTRACT

A recent group of pneumonia cases in world was caused by a novel corona virus, the 2019 novel corona virus (2019-nCoV).

The 2019-nCoV infection caused clusters of severe respiratory illness similar to severe acute respiratory syndrome corona virus and was associated with ICU admission and high mortality. Major gaps in our knowledge of the origin, epidemiology, duration of human transmission, and clinical spectrum of disease need. Middle East Respiratory Syndrome Corona virus (MERS-CoV) is an emerging Zoonotic virus considered as one of the major public threat with a total number of 52767 laboratory-confirmed cases and 1370 associated deaths reported by World Health Organization as of 13 February 2020. Although, there has been substantial MERS-CoV research since 2020, significant knowledge gaps persist. Uncertainties remain about the Zoonotic origin, clinical characteristics, and risk factors for infection, asymptomatic transmission, effective therapeutics, and vaccine candidates. These areas merit urgent attention by the global community to better understand, detect, and control MERS-CoV using a unified One Health approach. The review on data of death, comparison with other virus and all over world cases suffered with novel corona virus in world.

Keywords:- Corona virus, Zoonotic, MERS-CoV

PP317

EVALUATION OF ANTIULCER POTENTIAL OF EXTRACT OF *SESAMUM INDICUM & CLEODENDRUM INFORTUNATUM*

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ABSTRACT

Gastric ulcer is an illness that affects a considerable number of people worldwide (Crawford et at., 2003). It is among the most serious diseases in the world. It arises when the normal mucosal defensive factors such as mucus, mucosal blood flow, formation of bicarbonate ions and prostaglandin E2 are impaired or over powered. Also by the aggressive factor includes acid, pepsin, NSAIDs and Helicobacter pylori (Srinivas and Celestin 2011). Over the past decade, herbal and ayurvedic drugs have become a subject of world importance, with both medicinal and economic implications. A regular and widespread use of herbs throughout the world has increased serious concerns over their quality, safety and efficacy.

Hence the present study was planned to evaluate antiulcer & antioxidant activity of extracts of *Sesamum indicum* Linn. & *Clerodendrum infortunatum* Linn. (Verbanaceae) in ulcer model in experimental animals. *Clerodendrum infortunatum* Linn. (Verbanaceae) Bhat in Hindi (terrestrial shrub) is common throughout the plains of India (Kirtikar & Basu 1996), (Nadkarni & Nadkarni, 2000) found along roadsides in North India and elsewhere, and, flowering during February-May (Haines, 1925). *Clerodendrum infortunatum* leaves on preliminary chemical analysis are found to contain saponin, clerodin (a bitter diterpene) and some enzymes. Leaves also contain a fixed oil which consists of glycerides of lenoleic, oleic, stearic and lignoceric acid (Sai et al., 2002). *Clerodendron infortunatum* is an important and widely used medicinal plant, reported to contain active bitter substance like clerodin, has been widely used in Ayurveda, Unani system of medicine and Homeopathy. Clerodin (C13H18O3) is supposed to be the main active compound that may interact with some target molecules of the human system (Barton et. al.

Background: Gastroprotective effect of 70% ethanolic extract of *Sesamum indicum* L. (Black sesame) *(Pedaliaceae)* seeds and aerial parts have been assessed in different acute and chronic gastric ulcer models in rats. Methods: Extract was administered orally (100, 200 and 400 mg/kg body weight rats), twice daily for 5 days for prevention from ethanol and 10 days for prevention of acetic acid induced ulcers. Results: Extract showed dose dependent inhibition of ulcer index in ethanol and acetic acid – induced ulcers. Extract prevents the oxidative damage of gastric mucosa by blocking lipid peroxidation and by significant decrease in superoxide dismutase, and increase in catalase activity. Conclusions: Results showed that *Sesamum indicum* possesses significant gastroprotective activity which might be due to gastric defence factors.

Clerodendron infortunatum Linn. (Verbenaceae) is an important and widely used medicinal plant, reported to contain active bitter substance like clerodin, has been widely used as tonic and anthelmintic agent in the country sides of North India. Though, variously used in Ayurveda, Unani system of medicine and Homeopathy in case of ailments like diarrhoea, skin disorders, venereal and scrofulous complaints, wounds, post-natal complications, as vermifuge, laxative and cholagogue, for the removal of ascarids in anus, as external applications on tumours, etc.,

Background: The present study reports the antiulcer properties of 50% ethanolic extract of *Clerodendron infortunatum* Linn. (Verbenaceae) leaves have assessed in different acute and chronic gastric ulcer models in rats.

Methods: EECI (100, 200 and 400 mg/kg body weight) was administered orally, twice daily for 5 days for prevention from ethanol (EtOH), Cold-restraint stress (CRS), Pylorus-ligation (PL) and 10 days for prevention of acetic acid induced ulcers.

Results: The EECI showed significant gastric ulcer protective effect in doses of 400 mg/kg, when given twice daily for 5 days against gastric ulcers induced by ethanol (EtOH), cold restraint stress (CRS) and pyloric ligation (PL). EECI showed dose dependent decrease in ulcer index (UI) against ulcers induced by: (i) Ethanol (control UI: 29.52±2.4 mm2/rat, EECI decrease 21.12±2.3 – 5.3±1.0 (ii) Cold restraint stress (CRS) (control UI: 32.13±2.1, EECI decrease 24.02±2.2 – 4.7±1.1 (iii) pylorus ligation (control UI: 29.25±2.4 mm2/rat, EECI decrease 22.32±2.7 – 5.3±1.0, EECI 400 mg/kg significantly healed ulcers induced by 50% acetic acid after 5 (control UI: 32.30 ± 2.9, EECI decrease 26.27±1.9 – 8.56±0.98 and after 10 days treatment (control UI: 29.02 ± 2.6, healing 21.28±2.1 – 5.78±1.2. EECI prevents the oxidative damage of gastric mucosa by blocking lipid peroxidation and by significant decrease in superoxide dismutase, and increase in catalase activity.
Conclusions: Our results show that *Clerodendron infortunatum* Linn. (Verbenaceae) possess significant gastro-protective activity which might be due to gastric defence factors and clerodin might be the main constituents responsible for this activity.

Keywords: *Sesamum indicum* L; Anti-ulcer; Antioxidant; Gastroprotective; Lipid peroxidation (LPO); *Clerodendron infortunatum* L; *Superoxide dismutase (SOD)*

PP318

PHYTOSOME: A NOVEL APPROACH TO DRUG DELIVERY SYSTEM

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ABSTRACT

Plants through the world have been used in the treatment of various diseases since antiquity and every civilization have their own traditional system of medicine. Various pharmacological activities the plants possess due to phytoconstitutents presents in them. However, most of these biologically active constituents of plants show poor bioavailability owing to their large molecular size, comprising of multiple rings, which cannot be absorbed by passive diffusion, or due to their poor lipid solubility; severely limiting the ability to pass across the lipid-rich biological membranes. To overcome this preparation of phytosome is a novel approaches to deliver the drugs. Phytosome increases absorption of both conventional herbal extracts" or isolated active principles both topically as well as orally. Phytosome the patented technology first developed by Indena, an Italian pharmaceutical and nutraceutical by the complexation of plant extracts containing water-soluble constituents with phospholipids to improve their bioavailability. The term "phyto" means plant and "some" means cell like. In phytosome phospholipid and phytoconstitutents there is a formation of hydrogen bonding that show better physical stability, enhancing absorption of hydrophilic polar phytoconstituents resulting in enhanced bioavailability and greater therapeutic benefits. Various techniques can be used for preparation of Phytosomes like solvent evaporation method, salting out method, freeze drying or lyophilisation etc. Different solvents were used as solvent medium such as tetrahydrofuran, Dichloromethane used n-hexane as the precipitation medium.
Key Words: Phytoconstitutents, Phytosome, Bioavailability, Phospholipids

PP319

SYNTHESIS AND BIOLOGICAL ACTIVITY OF SOME ACETAMIDE DERIVATIVES

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ABSTRACT

The thesis describes the synthesis and biological activity of some acetamide derivatives. The target compounds were prepared form sulfanilamide as starting material. In first step the target compounds were prepared by chloroacetylation of sulphanilamide followed by condensation with substituted anilines and phenols. All the reactions were monitored by TLC. The final products were purified by recrystallization and characterized by spectroscopic methods. Skeletal muscle relaxant activity was evaluated in rat for the target compounds. The target compounds (3a) exhibited potential activity and showed CNS agents like profile.

Key words: *Sulfanilamide, Aniline, Phenols, Skeletal Muscle Relaxant activity, CNS agents.*

PP320

PREPARATION AND EVALUATION OF EDIBLE TOOTHPASTE

Swati Gautam[1], Anurag Verma[2]
School of Pharmaceutical Sciences, IFTM University, Moradabad, U.P.

ABSTRACT

The first edible tooth paste was developed by the National Aeronautics and Space Administration (NASA) in1987 for astronauts so that they could brush their teeth without spitting since there is zero gravity in space. The principal characteristic of an edible tooth paste is that it must be harmless to consumers if swallowed; eliminate the formation of air bubbles and, therefore, can be used in bed-bound patients .Other important characteristic of these toothpastes includes: Must be able to prevent malodour for more than 5 hrs, prevent and treat tartar, able to remove stained plaque, relieve dentin hypersensitivity stimulate salivary secretion especially for people with dry mouth. The toothpaste can be used for alleviating periodontitis and preventing decayed teeth, and can be swallowed to supply nutrition and benefit health without toxic or side effect. The toothpaste is suitable for children, pregnant women, patients incapable of rinsing mouth and disabled people, is simple in formula and simple to implement, and is suitable for daily use of people.

PP321

RECENT ADVANCES IN DIABETES MELLITUS

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Abstract

Diabetes mellitus is a group of common metabolic disorders in which a person has high blood glucose either because the body does not produce enough insulin or because cells do not respond to the insulin. The implications for perioperative management of new oral antihyperglycemic medications and new insulin treatment technologies are reviewed. The preoperative period represents an opportunity to optimize glycemic control and potentially to reduce adverse outcomes. There is now general consensus that the optimal blood glucose target for hospitalized patients is approximately 106-180mg/dl96-10mmol/l). Sodium-glucose cotransporter 2 inhibitors (SGLT2i) are associated with higher rate of ketoacidosis especially in acutely unwell and postsurgical patients. Improved hospital care delivery standards, quality assurance, process improvements, consistently in clinical practice, and coordinated multidisciplinary teamwork should be a major focus for improving outcomes of preoperative patients with diabetes. Sulfonylureas and SGLT2i should be ceased before moderate or major surgery. other oral antihyperglycemic therapies may be continued or ceased. Complex patients and/or new therapies require specialized multidisciplinary management.

PP322

NOVEL TRENDS OF DRUG DISCOVERY

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Abstract

Today new biological trends, methodologies and advanced computing have improved modern drug discovery. The medicinal chemistry related approaches and methodologies in drug discovery increase productivity and decrease attrition. The practice of drug discovery has been revolutionized with the involvement of some newer techniques. The current trends of drug discovery are the process in which a disease target is identified, validated and a chemical compound is developed to interact with target. Various advanced technique and modern research discipline such as genomics, proteomics, metabolomics, chemogenomic and other improve the quality of the drug discovery process. In more recent times important developments in theory have led to a different type of modelling becoming possible, the so-called de-novo or automated design algorithms. In this new method the programs perform much of the chemists thinking, in finding appropriately sized chemical groups to fits into a target site. The main objective of drug discovery is to highlight the step trends followed in drug discovery process and also to understand the mechanism for searching the ailment of disease.

PP323

ANTIDIABETIC SCREENING OF THIAZOLIDINEDIONES REQUESTS SUPPLEMENTATION

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People suffering from diabetes are not able to produce enough insulin and/or properly use it in the body, thus they have a high level of blood glucose. It is linked with decreased insulin secretion, increased peripheral insulin resistance. About 80% of diabetic patients die from macrovascular complications due to the disease and even then treatment of type II diabetes is generally dedicated on the control of hyperglycemia. Thiazolidinediones are believed to mediate their effects via a variety of targets: peroxisome proliferator activated receptor, protein tyrosine phosphate 1B, mitochondria. The correlation of the antidiabetic potency of thiazolidinedione to

the PPARγ transcriptional activity is highly context specific as it can function as full agonist, partial agonist or antagonist. Diabetic complications take years to develop and it is of incredibly valuable to develop and use representative animal models, intercession is assessed in much shorter time spans. The gene structures as well as the sequence of the encoded protein are well conserved between human and mice. This promotes the rodent models to form the major chunk for assessing antidiabetic profile of the thiazolidinediones. Few examples includes Wistar rat model of insulin resistance, KK mouse, Alloxan induced diabetic model. Thiazolidinedione have a variety of biological activities which may be due to synergistic/additive action on different targets. Restoration of normoglycemia should of primary concern and in addition, effect on inflammatory, free radicals, obesity and diet induced insulin resistance should be also considered.

PP324

GREEN CHEMISTRY FOR ENVIRONMENTAL SUSTAINABILITY

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Abstract:

The hazardous wastes were released to the air, land, water and land by industries every hour of every day. The chemical industries are biggest source of such waste. Green chemistry is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substance. The term green chemistry coined in 1990, to bring focus on an increasing interest in developing more eco-friendly chemical processes and products. Green chemistry offers enhanced chemical process economics, concomitant with reduces environmental burden. In this term the green chemistry represents the most concrete answer of the scientific community to the pressing environmental needs and sustainability. There is a pool of clean technology that are becoming widely studied or used between them catalysis is a well stablished one, well proven at the largest volume end of the chemical industry. Nature is biggest chemical laboratory in the world and produces, every days tonnes of chemical absolutely eco-friendly and sustainable way. The secret of natural chemistry are the enzyme, why don't take inspiration from them to setup new green chemical processes.

PP325

PHARMACOVIGILANCE: A REVIEW

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Abstract:-

Pharmacovigilance is the science and activities relating to the detection, understanding & prevention of adverse effects or any other possible drug-related problems. Strength of pharmacovigilance is its international nature. There are currently 79 national centers networking in internationalprogrammers. The largest database of ADR reports in the world (over 3.5 million case reports) for the study on the safety of medicines. The need of pharmacovigilance is been getting mandatory in the coming era of medication , because as the potency of bacteria & viruses are getting potent since last decades , so as to intensify the quantity & quality of drug, so healing potencies of drug must to be recorded but the pharmacovigilance is just dealing on its superficial level yet . So, for the benefit of human-kind the data must to broaden & the pharmacovigilance branch must be established in large scale .The ultimate conclusion for reducing the potency of drug reaction is to establish a Pharmacovigilance-lab in every multi-specialty hospital , to

reduce the burden of work over a specific place this is the ultimate conclusion. It won't require much space , all it requires is just a laptop/desktop pc & a pharmacist/IT-Technician & also to establish a pharmacovigilance lab that must be governed under state government where all hospitals had to send their data this accuracy will help the pharmaceutical labs to prepare a required amount of drug for a selective area only where it shows its intensified effects & will be beneficial for people to heal /get cured very soon due to the exact drug been dispensed as per prescription. This new network will be a milestone change in the field of Medical Sciences & for pharmaceutical lab it will be beneficial in terms of intensifying the drug potency as per requirement & making formulation for those areas only where the drug showed its best result & also this change will reduce the wastage of drugs /resources and too protect several lives & for the doctors this change will help in terms of prescribing the desired medicine only for the area where he is practicing. This change will be a stepping-stone towards the Economy & Health Sector.

PP326

SYNTHESIS AND BIOCHEMICAL INVESTIGATION OF SOME NEW 2,5 DISUBSTITUTED 1, 3, 4,-THIADIAZOLE ANALOGUES

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Abstract

The 1,3,4-thiadiazole nucleus is one of the most important and well-known heterocyclic nuclei, which is a common and integral feature of a variety of natural products and medicinal agents. Thiadiazole nucleus is present as a core structural component in an array of drug categories such as antimicrobial, anti-inflammatory, analgesic, antiepileptic, antiviral. 1,3,4-thiadazoles have become an important class of heterocycles and a great interest of researches because of their broad types of biological activity.Thiadiazole is a 5-membered ring system containing hydrogen-binding domain, sulfur atom, and two-electron donor nitrogen system that exhibit a wide variety of biological activity. They occur in four isomeric forms in the nature 1,2,3-thiadiazole; 1,2,5-thiadiazole; 1,2,4-thiadiazole; and 1,3,4-thiadiazole.The objectives of present research work was design, synthesize and evaluate pharmacological activity of some new 1,3,4-thiadiazoles derivatives by using two step synthesis and for its effect as anti inflammatory and antibacterial activity by using carrageenan induced paw edema and disc diffusion method respectively.

A series of 2,5-disubstituted derivatives [(2-amino-5-phenyl-1,3,4-thiadiazole(IIa),2-amino-5-(4-methoxyphenyl)1,3,4-thiadiazole(IIb), 2-amino-5-(5-nitrophenyl)-1,3,4-thiadiazole(IIc), 2-amino (6-hydroxyphenyl-1,3,4-thiadiazole(IId)] were synthesized from aromatic aldehyde andthiosemicarbazides by condensation and cyclization processes. The structures of the synthesized compounds were confirmed by their spectral data of Infra red (IR), ^{1}H-NMR and Mass Spectral analysis. As a result yield of the title compounds was found to be good yield in short time and showed significant anti-inflammatory, antibacterial activity. In conclusion, present research work introduced the simple and convenient methods for synthesis of the new substituted 1, 3, 4-thiadiazole derivatives and produced significant biological activity which attracted much attention in the field of medicines.

Key words: Antibacterial activity, Anti-inflammatory activity, 1, 3, 4-thiadiazole.

PP327

RUTIN TRIHYDRATE LOADED LIPOSOMAL GEL FORMULATION AND CHARACTERIZATION

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Abstract
In the present study, liposomes were formulated as drug carriers for enhancing the delivery of an antioxidant Rutin trihydrate for topical administration. Formulations of liposomes were done using 3^2 factorial design by thin film hydration method and then *were characterized for their physiochemical properties (particle size, polydispersity index, zeta potential, and morphology).* Optimization was achieved by varying the lipid to cholesterol ratio and keeping the amount of drug constant. The formulation and process parameters were optimized to attain multilamellar liposomes with homogeneous size and good entrapment. The optimized batch gave entrapment efficiency of 90%. Liposomal Gels were prepared by using Carbopol 940 as the gelling agent. The *in vitro* and *ex vivo* release profile of liposomal gels was compared with conventional gel formulations. The liposomal gel showed prolonged drug release upto 11h. The safety of liposomal gels was ensured by conducting skin irritation studies on albino Wistar rats.

Keywords: Rutin trihydrate, Liposomes, Gels.

PP328

REVIEW ON POLYELECTROLYTE COMPLEX FOR DRUG DELIVERY SYSTEM

Samara, SRMS, Bareilly

The electrolyte interaction between two opposite charged polymer (i. e. Polycations and polyanions) make polyelectrolytes.The occurrence of the drug in this system is strongly affected. These polyelectrolytes are made of non-toxic, biopolymers. Various polyelectrolytes have biocompatibility, biodegradable and the ability to process many unique physicochemical properties that cause sustained drug release.The formation of polyelectrolytes is a spontaneous process after mixing both polycations and polyanions solution without any cross linking agent.The formulation and stability of polyelectrolyte are controlled by some kinetic and thermodynamic factors such as pH, ionic strength, molecular weight charge density, temperature, mixture ratio of polymer.Polyelectrolytes reduce the potential loss of drug during formation.It produces high yield and pharmaceutical ingredients.The polyelectrolyte complex is an emerging system for transporting drugs to target sites, maintaining a sustained and controlled release rate of the drug by acting as a carrier and prolonging drug therapeutic action. Therefore this review focuses solely on the method of polyelectrolyte complexes and their preparation.

PP329

POLYELECTROLYTE COMPLEX FOR DRUG DELIVERY SYSTEM & ITS BENEFIT

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Abstract
The objective of thisworkis to provide information on the role of polyelectrolyte complexes in the drug delivery system for sustaining the drug release. The drug delivery refers to approaches, formulations, technologies and system for transporting a pharmaceutical compound into the systemic circulation for eliciting the therapeutic response.It is always difficult to formulate single

unit sustained-release (SR) oral dosage forms for drugs that are administered at a high dose, having a low molecular weight, and high solubility (>10 mg/ml) in gastric fluids. So,Polyelectrolyte complexes (PEC) can be a solution for these problems. PEC is a polymeric carrier formed due to the electrostatic interaction between the two or more oppositely charged polymers (i.epolycations and polyanions). As thesePECare made up of nontoxic biopolymers, they are expected to possess several unique physicochemical properties of different polyelectrolyte with advantages of retainingbiocompatibility, biodegradable and sustained drug releasing properties.

PP330

EVALUATION OF TOXICITY AND ANALGESIC ACTIVITIES OF NEERI TABLETS (AYURVEDIC FORMULATION) ON RATS

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ABSTRACT:

Aim: Recent research work is planned to screen Ayurvedic formulation of Neeri tablet for toxicological profile by taking acute oral toxicity, sub chronic oral toxicity and analgesic activity.

Method: The acute oral toxicity, sub-chronic oral toxicity was conducted up to the dose level of 150 and 300 mg/kg by following OECD guideline no. 423 and 408. The hematological and biochemical parameters along with histopathology of various organs like heart, liver, kidney, spleen and lung were observed for any gross findings. LD50 dose tested were selected for the present study. Toxicity and analgesic study was performed on four models: (a) acute oral toxicity study (b) sub-chronic toxicity study (c) Eddy's hot plate method (d) tail immersion method taking Dispirin as a standard (15mg/kg, p.o.) and by using oral low dose (150 mg/kg) and high dose (300mg/kg) of Neeri tablet.

Result: During the study of Neeri tablet no mortality was observed in any animals up to the dose level of 150 & 300 mg/kg but indicating their practically toxic in nature. All the hematological (RBCS, WBCS , Platelets, MCH, MCHC, MCV, PCV, etc.) and biochemical (serum electrolytes, urea, creatinine, uric acid, total protein, SGOT, SGPT, ALP etc.) were found to have a marginal variation compared to normal. The low and high dose of Neeri tablet (150 & 300 mg/kg, p.o.) were found less significant toxic effect in haemoglobin and biochemical level against different models of analgesic activity in rats.

PP331

A REVIEW ON PREGNANCY AND IT'S COMPLICATIONS

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Abstract:

Giving a birth to a child is not easy, there are several complications which a women goes through in her pregnancy time period.

Gestational diabetes mellitus the most frequent medical complication of pregnancy, affects 5 to 6 percent of women. Although prevention of obesity and prediabetes in offspring by pregnancy treatment of gestational diabetes has not been demonstrated till date. Still the current study highlights that gestational diabetes mellitus is associated with some adverse pregnancy outcomes including accelerated fetal growth also in twin pregnancies.

The population of female heart transplant recipients of reproductive age, and counseling regarding reproductive decisions is important The largest reported series of pregnancies in heart transplant recipients demonstrates that only two third of pregnancies reported are successful.

Acute fatty liver of pregnancy is rare but serious complications in the last trimester of pregnancy or postpartum period. One in five women reported having had recurrent acute fatty liver of pregnancy, with most cases being milder, possibly because of earlier gestational age at delivery. During pregnancy women are vulnerable to mood and anxiety disorder due to significant physical and emotional changes that occur during this period. For some women, pregnancy can also present as immense body dissatisfaction due to substantial changes in body shape and size.

KEY WORDS: Pregnancy; Diabetes mellitus; Heart Transplant; Immunosuppression; Abdominal pain; Acute fatty liver of pregnancy; Body dissatisfaction; Eating disorders

PP332

BLOOD CANCER, ON REVIEWS

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Abstract:-
Approximately 10 % all diagnosed cases of cancer every year are of blood cancer more than 1.2 million people have either active blood cancer.
Although the specific cause of blood cancer is unknown various factor (Aging, family history, weak immune system) Symptoms of blood cancer is weakness, short breathing, bleeding gum,weight loss. Treatment of blood cancer is advanced diagnostictechnic, Stem cell therapies, leading edges, blood cancer treatment. Best way of prevention is to avoid exposure to radiation chemical such as pesticides or benzene smoking or tobacco in any form.

PP333

NATURAL PRODUCTS. A REVIEW

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Abstract
In ancient civilizations, fungi and plants were used to treat infections. In the 17th century, the bark of quinine was widely used to treat malaria, a protozoan parasite of the pathogen Plasmodium Separation of drugs proved to be milestones in the development of antibiotics. There are basically antibiotics called antibiosis that work against bacteria. The word antibiosismeans "against life" and the French bacteriologist villemin started these drugs Along with the advancement of medicinal chemistry, most antibiotics are now synthetic, chemically modified from basic compounds found in nature, and such as beta lactam including penicillin's produced by the fungi of penicillium, cephalosporin, and carbopenems). Some antibiotics are still produced by living organisms such as aminoglycosides. Comparative studies identifying compounds that safely cured bacterial infections were difficult to identify in the treatment of fungal and viral infections.Antibiotic research led to considerable progress in the field of knowledge of biochemistry and this led to major differences between the cellular and molecular physiology of the bacterial cell.

PP334

NEW ADVANCEMENT IN VACCINE

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ABSTRACT
A vaccine typically contains an agent that resembles a disease causing microorganisms & is often made from weakened or killed forms of the microorganisms.
Importance of vaccine is that it protects children from serious illness & complications of vaccines are preventable diseases which can include aputation of an arm or leg paralysis of limbs, hearing loss, brain damage & death. Rotavirus Vaccine & Hepatitis A is most commonly used vaccine in scenario.
The benefits of vaccination extend beyond prevention of specific disease in individual, vaccination makes food economic sense& meets the need to care for the weakest members of society.
Vaccines Creates New Opportunities for a New Society.

PP335

HUNTINGTON DISEASE: AN OVERVIEW

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ABSTRACT:
An inherited disease associated with the motor and non-motor abilities of a person is known as the Huntington disease. It is a progressive neurodegenerative disease caused by the progressive breakdown (degeneration) of nerve cells present in the brain. Huntington disease usually affects the functional abilities of an individual and results in movement, thinking (cognitive) and psychiatric disorders with a wide spectrum of signs and symptoms.
Signs and symptoms of Huntington disease are generally shown in the 30s and 40s in most of the people. Symptoms of this disease may become visible in earlier or later in life. The emergence of Huntington disease before the age of 20 is called the Juvenile Huntington disease. Signs and symptoms are variable according to the time of the emergence of this disease. Earlier emergence of Huntington disease may result in the faster progression of the disease. A person with the disease usually dies within 25 years after the symptoms develop. Signs and symptoms are increasing gradually. Mania, bipolar disorder and obsessive-compulsive disorder would also occur along with the motor, cognitive and psychiatric disorder, and ultimately results in death. There is no proper treatment and cure found but several medications are available in the market to reduce some symptoms like movement, speech, and some other motor functions. Current treatments of Huntington disease are unable to physical, mental and behavioral decline associated with the disease. This article summarizes a brief introduction and current treatment approaches to Huntington disease.
KEYWORDS: Juvenile Huntington disease, Neurodegenerative disorders

PP336

A ROBUSTIC METHOD FOR QUANTIFYING IRINOTECAN IN API AND IN PHARMACEUTICAL DOSAGE FORM USING REVERSED PHASE HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

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Irinotecan ia a semisynthetic derrivatve of camptothecain having ggod anticancer activity both in-vivo and in-vitro against various tumor experimental models.chemically it is 7-ethyl-10-[4-(1-piperidino)-1-piperidino]-carbonyloxy-camptothecin. It shows its action by inhibiting the enzyme mammalian DNA topoisomerase I during DNA replication, transcription and repair. The drug is found to be active against a vriety of sloid tumors in clinical trails, including colorectal cancer, gynecologic cancers, non-small cell and small cell lungs cancers and refrctory cervical cancer.

A simple, precise and robustic assay and rapid stability indicating method has been developed and subsequently validated explaining the application of reversed phase high performance liquid chromatographic (RP-HPLC) in quantifying Irinotecan in API and in Pharmaceutical dosage form.

Proposed method is based on identification of drug Irinotecan in reversed phase mode using water's C18 column maintained at an ambient temperature. The optimum mobile phase consist of mixture of Acetonitrile: Mixed phosphate buffer (potassium dihydrogen phosphate (0.01mm) with 1.0ml triethylamine) (30:70, v/v) and pH was adjusted to 2.5 with O-Phosphoric acid (1:100,v/v). The flow rate was maintained at 1.0 ml/min. The injection volume was 20ml and detected at the wavelength of 297 nm. The method was validated according to ICH guideline. The method was found to be accurate, reproducible and linear. The drug was exposed to thermal, photolytic, hydrolytic and oxidative stressed sample were analyzed by proposed method. There were no interfering peaks from excipients, impurities or degradative products due to variable stress conditions. Thus the proposed method is specific for the quantitative estimation of Irinotecan and can be successfully applied in the quality control and stability sample of API and pharmaceutical dosage form.

PP337

THE DIVERSE BIOLOGICAL SIGNIFICANCE OF QUINAZOLINONE DERIVATIVES: A REVIEW

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ABSTRACT

The heterocyclic compounds have a huge value in medicinal chemistry and stand for the central part of structure of a lot of biologically active marketed drugs.Quinazolinone is a main type of heterocyclic multiparts with a keto group.Quinazolinone and their derivatives describe an important class of compounds having a broad variety of biological activities such as antimicrobial, anti-inflammatory, anticancer, anti-diabetic, antiviral activities. The main aim of this presentation is to highlight the chemistry and biological characteristics of diverse derivatives of Quinazolinone and their biological activities to bear the outlook discovery of further important derivatives with least toxicity.

Keywords: Quinazolinone, Anti-microbial activity, Anti-inflammatory activity, Anticanceractivity, Anti-diabetic activity

PP338

FORMULATION & EVALUATION OF ANTIDIBETICPOLYHERBAL CAPSULE

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Abstract
Generally , herbal products are known for their inherent property like they are free from side effects, adverse effects and are cost effective , which may be beneficial for the people in many countries.Observing their lesser side effects ,effectiveness of cost , we select the herbal plants. According to ayurveda and other tradional studies it was observed that the plants we selected were used in the treatment of diabetes. The objective of the study was to develop and evaluate capsule formulation of ethanolic extract of different herbal plants. Many challenges faced by herbal formulations during their evaluation but as we know that evaluation is the most inportatnt part to ensure the quality and purity of the herbal products. Hence bys using various parameters like weight varriation, disintigration, drug content, dissolution profile capsule containing poly herbal ethanolic extracts were evaluated.
KEYWORDS: Ethanolic extract, herbal medicinal plants,, In- vitro release, antidiabetic activity.

PP339

ENVIRONMENT &DON'T USE PLASTIC,POLYTHENE

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Abstract:

Plastic products are everywhere. We use them every day in our homes,schools, offices and during our travels in between places. Our modern world has become so dependent on the convenience of mass- product, readily available plastic product –like it disposable bags, bottle and cups –that it's surprising to consider that the world was once plastic free.

In just a single generation (roughly from 1940 to the present) our overwhelming reliance on plastics has created environmental problem such as crowded landfills groundwater contamination, and ocean debris that future generation will still be cleaning up. Plastic bag can take between 400 to 1000 years to break down in the environment. Plastic bags cause over 100,000 sea turtle and other marine animal deaths every year.

PP340

ONCOLOGY PHARMACY COMPETENCIES AND CLINICAL TRIAL IN ONCOLOGY

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Abstract:

The primary object of the study was to assess factors that predict pursuit of oncology. Additional objective include exploring opportunities for pharma to increase students interest in the oncology field. Further curriculum that impact the level of student preparedness, and which elements encourage a student pharmacist to seek further training in the oncology field. Student confidence to perform oncology pharmacy competencies before and after completing oncology didactic instruction using a flipped classroom approach.

Persistent efforts have been made to promote clinical trial transparency, which included encouraging trial registration and prospective registration and protocol disclosure in oncology clinical trials and their changing trends. Although the rate of registration, prospective registration, and protocol disclosure of oncology trials have significantly increased over the years, there is still room for improvement. Some of the study shows that across oncology, there is growing interest in the use of medical marijuana.

KEY WORDS:
Oncologists; Oncology in Pharma curriculum; Oncology Pharmacy competencies; clinical trial transparency; clinical trial of marijuana

PP341

EVALUATION OF TOXICITY AND ANALGESIC ACTIVITIES OF NEERI TABLETS (AYURVEDIC FORMULATION) ON RATS

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School of Pharmaceutical Science, IFTM University, Moradabad,

ABSTRACT:
Aim: Recent research work is planned to screen Ayurvedic formulation of Neeri tablet for toxicological profile by taking acute oral toxicity, sub chronic oral toxicity and analgesic activity.
Method: The acute oral toxicity, sub-chronic oral toxicity was conducted up to the dose level of 150 and 300 mg/kg by following OECD guideline no. 423 and 408. The hematological and biochemical parameters along with histopathology of various organs like heart, liver, kidney, spleen and lung were observed for any gross findings. LD50 dose tested were selected for the present study. Toxicity and analgesic study was performed on four models: (a) acute oral toxicity study (b) sub-chronic toxicity study (c) Eddy's hot plate method (d) tail immersion method taking Dispirin as a standard (15mg/kg, p.o.) and by using oral low dose (150 mg/kg) and high dose (300mg/kg) of Neeri tablet.
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PP342

A REVIEW ON CAPSULE

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Abstract
Capsules are made up of gelatin shell. There are two types of capsules:- 1. Hard gelatin capsules 2. Soft gelatin capsules. Capsules are easier to swallow and used by manufactures when the drug can not be compacted in to a solid tablet. They are also useful when the drug needs to be mixed with oil or other liquid to aid absorption in the body. Hard gelatin capsules are two piece capsulesconsists of body and cap.Whereas soft gelatin capsules are one piece gelatin preparation.Hard gelatincapsules are the solid unit dosage forms in which the powder or granulesof any pharmacologically active substance can be filled. And liquid or semi solid preparations can be incorporated in soft gelatin capsules.Capsules are not usually used for the administration of extremely soluble material such as potassium chloride, potassium bromide or ammonium chloride since the sudden release of such components in the stomach could result in irritating concentration. Very hygroscopic substances are not filled in capsules shell as they may absorb moisture of gelatin shell are make the shell brittle.

PP343

ROLE OF COMPLEMENTARY AND ALTERNATIVE MEDICATIONS IN THE HEALTHCARE MARKET

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Abstract- At current scenario, the field of healthcare and medications has changed the approach of the healthcare professionals to cure the diseases. The complementary and alternative medication (CAM) is one of the loom that is totally different form the conventional medications. The role of yoga, medications, ayurveda, homeopathy, chiropahty, acupuncture techniques etc. has changed the mindset of patients in curing the acute and chronic diseases. Many studies showed that about 80% of the individuals rely on the alternative techniques commonly called as CAM because they are safe and also helps to change the lifestyle towards positive health. CAM is one of the supplements and not the first option as it takes bit time as compared to allopathic treatment but it is much safer. Another very different medication that has come up as a whole-person centered- medication system is the Korean system of medication including "four constitutions" and acupuncture as the actual Korean methodologies of treatment and prevention. Large number of studies has shown its demand in the healthcare market and definitely has proven its place in the future.

Keywords- CAM, allopathy, ayurveda, homeopathy, chiropathy, acupuncture

PP 344

IMPACT OF PREDIABETES

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ABSTRACT

Prediabetes is a condition in which blood glucose level found elevated but not much to be considered as diabetes. It is also referred as impaired glucose tolerance (GT). Some patients do

not feel any symptoms. In some cases, the symptoms are manifested similar to diabetes. Approx. 33% general population has been noted to be suffering from prediabetes but not being identified. It can be avoided by a healthy diet- a colorful vegetables, fruits, a variety of grains and fibers; mixing exercise on regular basis. If left uncured, converts into diabetes with severe complications such as kidney damage, retinopathy (vision loss), and gangrene- amputations, heart attack/stroke.

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