



Geethanjali

Phone : +91 9959390412  
Fax : +91-40-24220320  
Website : www.geethanjaliinstitutions.com

## Geethanjali College of Pharmacy

Approved By AICTE, PCI New Delhi, Permanently Affiliated to JNTUH & Accredited by NBA (B. Pharmacy)  
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, by DSIR-SIRO & HI/BI of MSME Certified by ISO 9001:2015  
Cheeryal (V), Keesara (M), Medchal-Malkajgiri District, Telangana State - 501 301.

**File Name: Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher**

S. No	Title of the paper	Year of Publication	Name of the conference
1	Formulation and evaluation of Empagliflozin nano particles	2020	Global Burden of the Disease and Pharmacist role
2	Molecular docking study in anticancer phytochemicals	2020	Global Burden of the Disease and Pharmacist role
3	Phyto nano medicines for the prevention of diabetes mellitus	2020	Global Burden of the Disease and Pharmacist role
4	Anti-diabetic potential of Phyto nanoparticles comparison with hormonal therapy and medicinal plants	2020	Global Burden of the Disease and Pharmacist role
5	Structure and function relationships of inhibition of human cytochromes P450 3A4 CYP 2C9/ flavone derivatives	2020	Interface of Allied Science Technology on Life Science Research
6	A review on animal models in Diabetes Miletus	2020	4th International Conference on Innovation in Pharmacy industry, Education and Research
7	Extraction of Bio active compounds from cassia auriculata and its chromatographic studies	2020	4th International Conference on Innovation in Pharmacy industry, Education and Research
8	A new Trigonometrical Method for solving Non-Linear Transcendental Equations - Asian journal of pharmaceutical sciences with ISBN numbers	2020	International Conference on advances in Science, Engineering and Mathematics



*Signature*  
**PRINCIPAL**

**PRINCIPAL**  
Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.

Sponsored by : **TEJA EDUCATIONAL SOCIETY, HYDERABAD.**

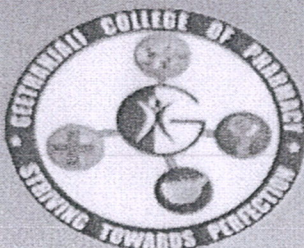
Office : Sy. No. 33 & 34, Cheeryal (V), Keesara (M), Medchal-Malkajgiri (District), Telangana State - 501 301.

Mobile : 9866308259

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.PHARMACY)

APPROVED BY AICTE, PCT NEW DELHI. PERMANENTLY AFFILIATED TO JNTUH AND  
RECOGNIZED BY DSIR-SIRO, UNDER SECTION 2(D), 12 (B) OF UGC ACT, 1956  
CHEERYAL (V), KEESARA (M), MEDCHAL DIST, TELANGANA, 501301



## DRAVYAKA'2020

11<sup>th</sup> National Level Virtual Conference On

*"Global Burden of the Disease & Pharmacist's Role"*

11<sup>th</sup> & 12<sup>th</sup> December, 2020

## SOUVENIR

*Sponsored by*

**TEJA EDUCATIONAL SOCIETY**

IN ASSOCIATION WITH



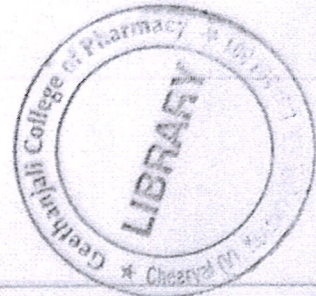
14

Pharmaceutical Teachers of India,  
Telangana State Branch

*Signature*

PRINCIPAL

Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.



## GEETHANJALI COLLEGE OF PHARMACY

### VISION

To be a Premier Pharmaceutical Education and Research Institution.

### MISSION

**Mission 1:** Provide state of the art laboratories, information centre and learning environment for holistic education.

**Mission 2:** Adopt and implement best practices for learning and research.

**Mission 3:** Collaborate with industry and society to identify problems, provide Sustainable solutions and align curriculum.

Reddy			
Muga Sowmya*, Anuradha bai Sandala, Saritha Jyostna Tangeda, V.Jyothi	Sarojini Naidu Vanitha Pharmacy Maha Vidhyalaya Tarnaka, Hyderabad	SWISS ADME, PKCSM, Predictions of Phenothiazine Derivatives	CP-116
T. Shivathmika, K.S ai Vamshi, Jithendhar	Geethanjali College of Pharmacy, Hyderabad	Recent Advances In Novel Drug Delivery System And Molecular Imprinting Technology	CP-117
Shankaraiah Pulipaka <sup>1*</sup> , Ashish Suttee <sup>1</sup> , M. Ravi Kumar <sup>2</sup>	Geethanjali College of Pharmacy, Hyderabad	Phyto Nano Medicines For The Prevention of Diabetes Mellitus	CP-118
Pulipaka Shankaraiah*, N. Deepika, Dara Divya, Chethala Nikitha	Geethanjali College of Pharmacy, Hyderabad	Green Synthesis of Silver Nanoparticles	CP-119
K. Pradeep, Dr. P. Neeraja	Geethanjali College of Pharmacy, Hyderabad	Formulation And Evaluation of Empagliflozin Nanoparticles	CP-120
Y. Pravarsha* Sharadh R, K. Abbulu	CMR College of Pharmacy, Kandlakoya, Hyderabad	Information about pharmaceutical analysis and quality assurance	CP-121
Voodem Akhila*, Pulipaka Shankaraiah Gurrala Alekhya, C. Sree Pravalika	Geethanjali College Of Pharmacy, Hyderabad	Nanocarriers For Respiratory Diseases Treatment	CP-122
P. Angel Sharon*, Pulipaka Shankaraiah, Moola Likitha, C.M.N. Vikhyathi	Geethanjali College Of Pharmacy, Hyderabad	Nano-Delivery Systems Of Pesticides Active Agents For Agriculture Applications	CP-123
Poounima Patil, <sup>*1</sup>	Bharati Vidyapeeth College Of	Colon Available	CP-124

the motivation in comparison to other synthesis techniques where harmful reductive organic species produce hazardous by-products. This environment-friendly aspect has now become a major social issue and is instrumental in combatting environmental pollution through reduction or elimination of hazardous materials. This research on green synthesis of silver metal nanoparticles and the influence of the method on their size and morphology.

CP-120

### Formulation And Evaluation of Empagliflozin Nanoparticles

K. Pradeep, Dr.P.Neeraja

Geethanjali College of Pharmacy, Hyderabad

Email id: neerajapodichety@gmail.com

Empagliflozin is an inhibitor of sodium-glucose co-transporter-2 (SGLT2). It is used clinically as an adjunct the management of type 2 diabetes mellitus. In this work, it was attempted to prepare nano particles of Empagliflozin using Eudragit and HPMC as polymers by solvent evaporation technique. For the various measured parameters of nanoparticles, out of six, formulations F1 (Eudragit) and F4 (HPMC) showed the best results. Drug loading and encapsulation efficiency of drug- polymer containing nanoparticles in various ratios was found to be between 13.20 to 19.96 percent and 68.38 to 95.82 percent, which decreased with the increase in polymer quantity. For 10 hours, in vitro dissolution was carried out and the drug release percentage for all formulations was in the range between 97.93 percent and 89.75 percent.

In vitro studies have concluded that Eudragit based nanoparticles are better for Empagliflozin delivery than HPMC based nanoparticles. By studying all the experimental results nanoparticles encapsulated with Empagliflozin can be successfully formulated by Emulsification Solvent evaporation method. All the formulations showed optimum results of which formulation containing higher concentration showed the best results in all the evaluated parameters. Thus F1 can be concluded as the ideal batch of formulation.

### CP-121 Information about pharmaceutical analysis and quality assurance

Y. Pravarsha\* Sharadh R, K. Abbulu

CMR College of Pharmacy, Kandlakoya, Hyderabad.

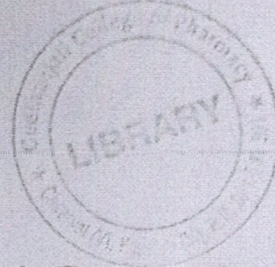
Email id: pravarsha962@gmail.com

Preservatives are some synthetic or natural antimicrobial chemicals incorporated in pharmaceutical formulations to prevent the proliferation of microorganisms that may

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.PHARMACY)

APPROVED BY AICTE, PCI NEW DELHI, PERMANENTLY AFFILIATED TO JNTUH AND  
RECOGNIZED by DSIR-SIRO, UNDER SECTION 2(F), 12 (B) of UGC Act, 1956  
CHEERYAL (V), KEESARA (M), MEDCHAL DIST, TELANGANA, 501301



## DRAVYAKA'2020

11<sup>th</sup> National Level Virtual Conference On

*“Global Burden of the Disease & Pharmacist’s Role”*

11<sup>th</sup> & 12<sup>th</sup> December, 2020

## SOUVENIR

*Sponsored by*

**TEJA EDUCATIONAL SOCIETY**

IN ASSOCIATION WITH



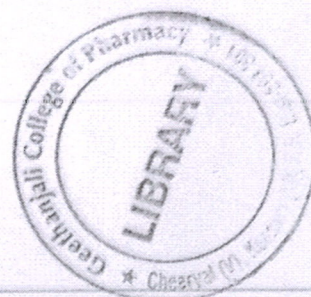
Pharmaceutical Teachers of India,  
Telangana State Branch

PRINCIPAL

Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.

14





## GEETHANJALI COLLEGE OF PHARMACY

### VISION

To be a Premier Pharmaceutical Education and Research Institution.

### MISSION

**Mission 1:** Provide state of the art laboratories, information centre and learning environment for holistic education.

**Mission 2:** Adopt and implement best practices for learning and research.

**Mission 3:** Collaborate with industry and society to identify problems, provide Sustainable solutions and align curriculum.

23.	Ms. khathoon*, Sofia Shreen, Dr.Maryam, Hafeeza sultana, Noorunissa Begum	Deccan School of Pharmacy	peptides Study on serum CGRP levels in migraine patients and its co-relation with the treatment outcome	CO-123
24.	D.Firumala	Vels Institute of Science, Technology and Advanced Studies - VISTAS	Molecular docking study in anticancer Phytochemicals	CO-124
25.	Muga Sowmya*, Anuradha bai Sandala, Saritha Jyostna Tangeda, V.Jyothi	S.N.Vanita Pharmacy Mahavidyalaya, Tarnaka, Hyderabad	Swiss ADME, pkCSM, Predictions of phenothiazine derivatives	CO-125
26.	Anuradha bai Sandala* Muga Sowmya, Saritha Jyostna Tangeda, V.Jyothi	S.N.Vanita Pharmacy Mahavidyalaya, Tarnaka, Hyderabad	Synthesis, Swiss ADME, pkCSM, Predictions and evaluation Antibacterial activity Of 5-((1H-benzo[d]imidazol-1-yl) methyl)-substituted thiadiazoles/ triazoles/ oxadiazoles	CO-126
27.	Deshpande Shruti and Dr. T. Saritha Jyostna Tangeda	S.N.Vanita Pharmacy Mahavidyalaya, Tarnaka, Hyderabad	Design of New Therapeutic Agents Targeting PIM1 Kinase using In Silico ADMET and Molecular Docking Approach	CO-127
28.	Lalit Kumar*, Puja K Gangurde, Navya Ajitkumar B	Manipal College of Pharmaceutical Sciences, Manipal	A novel formulation to enhance the Lamotrigine bioavailability and drug concentration in brain	CO-128
29.	Y. Pravasha*, Sharadh R, K. Abbulu	CMR College of Pharmacy	Information about pharmaceutical analysis & Quality Assurance	CO-129
30.	Zeba Samreen	Deccan School of Pharmacy	Erythroderma secondary to contact dermatitis	CO-130
31.	Shevva kavya	Geethanjali College of Pharmacy	Action of drugs	CO-131
32.	Shariya Firdose	Geethanjali College of Pharmacy	Biosensors	CO-132
33.	Sindhura Kompella	Geethanjali College of Pharmacy		CO-133
34.	Maruthi Srinivas	Geethanjali College of Pharmacy	Formulation technologies and advances for oral delivery of novel nitro imidazoles and antimicrobial peptides	CO-134
35.	R. K. Sreelakshmi	Geethanjali College of Pharmacy	the human white blood cell membranes are used to carry two	CO-135



characteristics like throbbing type of pain, stress and inadequate sleep, but not with the treatment outcome as the calculated P value was ( $p=0.13$ ). Hence, the CGRP levels correlation with treatment outcome cannot be justified, but the CGRP levels estimation can be used as an diagnostic tool for migraine.

**Keywords:** Migraine, CGRP, Neuralgia, ICHD, Photophobia, Phonophobia.

CO-124

### **Molecular docking study in anticancer Phytochemicals**

**D.Tirumala**

Vels Institute of Science, Technology and Advanced Studies - VISTAS

Research Scholar

Mail Id: tirumalaradhi@gmail.com

A variety of compounds from plant sources have been reported to possess substantial anticancer properties; however, their modes of action have not been clearly defined. Selected plant-derived compounds that exhibit anticancer activity were subjected to docking simulations using AutoDock 3.0.5. To preliminarily investigate the potential molecular targets and to confirm the experimental activity testing for these anticancer compounds, the docking was performed using different enzymes and receptor proteins involved with cell cycle, cell growth, and DNA replication, i.e., cyclin-dependent protein kinase 2 (CDK-2), CDK-6, DNA topoisomerases I and II, B-cell lymphoma 2 (Bcl-2), vascular endothelial growth factor receptor 2 (VEGFR-2), and the telomere: G-quadruplexes. The docking results revealed that lupeol exhibited better binding interaction to CDK-2 and Bcl-2 than the known CDK-2 and Bcl-2 inhibitors. Epigallocatechin gallate (EGCG) was found to bind to CDK-6 with tighter interaction than several reported CDK-6 inhibitors. Flavopiridol, a synthetic flavonoid, was best bound to DNA topoisomerase.

**Keywords:** Anticancer, docking simulations, CDK, EGCG

CO-125

### **Swiss ADME, pkCSM, Predictions of phenothiazine derivatives**

**Muga Sowmya\***, Anuradha bai Sandala, Saritha Jyostna Tangeda, V.Jyothi

S.N.Vanita Pharmacy Mahavidyalaya, Tarnaka, Hyderabad-500007, Telangana, India.

Isowmya1muga11996@gmail.com

Experimental evaluation of small-molecule ADMET properties is both time-consuming and expensive. To be successful as a drug, a potent molecule must get to its target in the body in adequate concentration, and stay there in a bioactive form long enough for the expected biologic events to occur. For early evaluation of potency, selectivity of lead molecules, and

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.PHARMACY)

APPROVED BY AICTE, PCT NEW DELHI. PERMANENTLY AFFILIATED TO JNTUH AND  
RECOGNIZED BY DSIR-SIRO, UNDER SECTION 2(D), 12 (B) OF UGC ACT, 1956  
CHEERYAL (V), KEESARA (M), MEDICAL DIST, TELANGANA, 501301



## DRAVYAKA'2020

11<sup>th</sup> National Level Virtual Conference On

*“Global Burden of the Disease & Pharmacist's Role”*

11<sup>th</sup> & 12<sup>th</sup> December, 2020

## SOUVENIR

*Sponsored by*

**TEJA EDUCATIONAL SOCIETY**

IN ASSOCIATION WITH

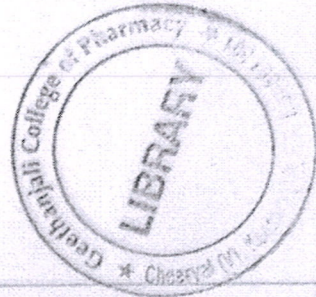


Pharmaceutical Teachers of India,  
Telangana State Branch

*Signature*  
PRINCIPAL

Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medical Dist, T.S.-501301.

14



## GEETHANJALI COLLEGE OF PHARMACY

### VISION

To be a Premier Pharmaceutical Education and Research Institution.

### MISSION

**Mission 1:** Provide state of the art laboratories, information centre and learning environment for holistic education.

**Mission 2:** Adopt and implement best practices for learning and research.

**Mission 3:** Collaborate with industry and society to identify problems, provide Sustainable solutions and align curriculum.

Reddy				
Muga Sowmya*, Anuradha bai Sandala, Saritha Jyostna Tangeda, V.Jyothi	Sarojini Naidu Vanitha Pharmacy Maha Vidhyalaya Tarnaka, Hyderabad		SWISS ADME, PKCSM, Predictions of Phenothiazine Derivatives	CP-116
T. Shivathmika, K.S ai Vamshi, Jithendhar	Geethanjali College of Pharmacy, Hyderabad		Recent Advances In Novel Drug Delivery System And Molecular Imprinting Technology	CP-117
Shankaraiah Pulipaka <sup>1*</sup> , Ashish Suttee <sup>1</sup> , M. Ravi Kumar <sup>2</sup>	Geethanjali College of Pharmacy, Hyderabad		Phyto Nano Medicines For The Prevention of Diabetes Mellitus	CP-118
Pulipaka Shankaraiah*, N. Deepika, Dara Divya, Chethala Nikitha	Geethanjali College of Pharmacy, Hyderabad		Green Synthesis of Silver Nanoparticles	CP-119
K. Pradeep, Dr. P. Neeraja	Geethanjali College of Pharmacy, Hyderabad		Formulation And Evaluation of Empagliflozin Nanoparticles	CP-120
Y. Pravarsha* Sharadh R, K. Abbulu	CMR College of Pharmacy, Kandlakoya, Hyderabad		Information about pharmaceutical analysis and quality assurance	CP-121
Voodem Akhila*, Pulipaka Shankaraiah, Gurrala Alekhya, C. Sree Pravalika	Geethanjali College Of Pharmacy, Hyderabad		Nanocarriers For Respiratory Diseases Treatment	CP-122
P. Angel Sharon*, Pulipaka Shankaraiah, Moola Likitha, C.M.N. Vikhyathi	Geethanjali College Of Pharmacy, Hyderabad		Nano-Delivery Systems Of Pesticides Active Agents For Agriculture Applications	CP-123
Poounima Patil, <sup>*1</sup>	Bharati Vidyapeeth College Of	Colon	Available	CP-124

CP-118

**Phyto Nano Medicines for the Prevention of Diabetes Mellitus**Shankaraiah Pulipaka<sup>1\*</sup>, Ashish Suttee<sup>1</sup>, M. Ravi Kumar<sup>2</sup><sup>1</sup>School of Pharmaceutical Sciences, Lovely Professional University, Punjab, India<sup>2</sup>Department of Pharmaceutics, Geethanjali College of Pharmacy, Hyderabad

E-mail id: shankar.pulipaka@gmail.com

Metabolic syndrome includes a series of metabolic abnormalities that leads to diabetes mellitus. Plant extracts, due to their unique advantages like anti-inflammatory, antioxidant, and insulin sensitizing properties, are interesting therapeutic options to manage diabetes mellitus; however, the poor solubility and low bioavailability of lipophilic bioactive components in the herbal extracts are two critical challenges. Nano-scale delivery systems are suitable to improve delivery of herbal extracts. This work, focuses on nano formulations of herbal extracts in diabetes mellitus and related complications. Included studies showed that several forms of nano drug delivery systems such as nano emulsions, solid lipid nanoparticles, nanobiocomposites, and green-synthesized silver, gold, and zinc oxide nanoparticles are developed using herbal extracts. It is shown that the method of preparation and related parameters such as temperature and type of polymer are important factors affecting physicochemical stability and therapeutic activity of the final product. Many of these formulations could successfully decrease the lipid profile, inflammation, oxidative damage, and insulin resistance in in vitro and in vivo models of diabetes mellitus -related complications.

CP-119

**Green Synthesis of Silver Nanoparticles**

Pulipaka Shankaraiah\*, N. Deepika, Dara Divya, Chethala Nikitha

Geethanjali College of Pharmacy, Hyderabad

Email id: shankar.pulipaka@gmail.com

Silver has been recognized as a nontoxic, safe inorganic antibacterial/antifungal agent used for centuries. Silver demonstrates a very high potential in a wide range of biological applications, more particularly in the form of nanoparticles. Environmentally friendly synthesis methods are becoming more and more popular in chemistry and chemical technologies and the need for ecological methods of synthesis is increasing; the aim is to reduce polluting reaction by-products. Another important advantage of green synthesis method lies in its cost-effectiveness and in the abundance of raw materials. During the last nine years, many efforts were put into developing new greener and cheaper methods for the synthesis of nanoparticles. The cost decrease and less harmful synthesis methods have been

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.PHARMACY)

APPROVED BY AICTE, PCI NEW DELHI, PERMANENTLY AFFILIATED TO JNTUH AND  
RECOGNIZED by DSIR-SIRO, UNDER SECTION 2(F), 12 (B) of UGC Act, 1956  
CHEERYAL (V), KEESARA (M), MEDCHAL DIST, TELANGANA, 501301



## DRAVYAKA'2020

11<sup>th</sup> National Level Virtual Conference On

*“Global Burden of the Disease & Pharmacist's Role”*

11<sup>th</sup> & 12<sup>th</sup> December, 2020

### SOUVENIR

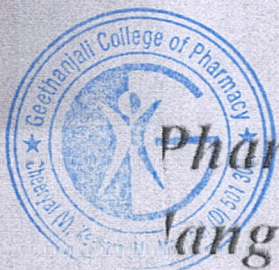
*Sponsored by*

**TEJA EDUCATIONAL SOCIETY**

IN ASSOCIATION WITH



14

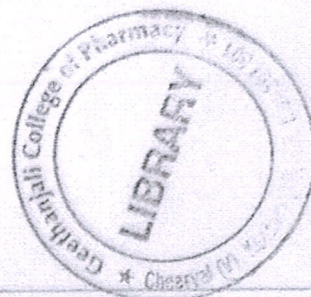


Pharmaceutical Teachers of India,  
Telangana State Branch

*Handwritten signature*

PRINCIPAL

Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.



## GEETHANJALI COLLEGE OF PHARMACY

### VISION

To be a Premier Pharmaceutical Education and Research Institution.

### MISSION

**Mission 1:** Provide state of the art laboratories, information centre and learning environment for holistic education.

**Mission 2:** Adopt and implement best practices for learning and research.

**Mission 3:** Collaborate with industry and society to identify problems, provide Sustainable solutions and align curriculum.

Bhavanam, Shaik Abdul Rahaman		characterization of Donepezil Hydrochloride Fast Dissolving Films	
Asra Begum , Hameeda Azmath	hadan womens college of pharmacy	Estimation of Crude Fiber Content in Naturally Occuring Fruits and Evaluation of its Laxative Activity on Albino Rats	CP-108
Sangeetha Mugdivari, Dr. Gandhimathi	Vels University, Chennai	Various Pharmacological Activities of Schiff's Base Metal Complexes From Sulpha Drugs: A Brief Review	CP-109
Baba Alam Shah K Laskar	Geethanjali College of Pharmacy, Hyderabad	Role of Pharmacist in Disease Prevention	CP-110
Patel.N, *Kayande.K	<sup>1</sup> Department of Pharmaceutics, Sinhgad Institute of Pharmacy, Narhe, Pune <sup>2</sup> Elixir Institute of pharmacy, Warvadi, Pune	Bioadhesive Xanthan Gum Based Patch For Sustained Drug Delivery	CP-111
Kankanala Raghu*, Pulipaka Shankaraiah, Nythari Pradeep Kumar, Bagili Harshith Reddy	Geethanjali College of Pharmacy, Hyderabad	Anti-Diabetic Potential of Phyto-Nanoparticles Comparison With Hormonal Therapy And Medicinal Plants	CP-112
Vanapallisindhu*, Kankanalaraghu, Mandalaparthiakhi lesh, Yellulakshmi Narasimha Reddy	Geethanjali College of Pharmacy, Hyderabad	Dengue Fever Treatment With Carica Papaya Leave's Extract's	CP-113
S.G.Meghana, M.Navya Sree	Geethanjali College of Pharmacy, Hyderabad	Drug Addiction	CP-114
Chinthala Vikasini Reddy, Sahithya	Geethanjali College of Pharmacy, Hyderabad	Antioxidant from natural source	CP-115



PVP K90, 0.1% Polycarbophil with 40% PG as plasticizer and 5% DMSO as penetration enhancer.

#### Conclusion:

Thus, to conclude, xanthan gum mucoadhesive patches encases the permeability and bioavailability of the drug. It is believed that the current work can act as a roadmap in selection of proper excipients while developing formulations which would help for pharmacological activity of poorly permeable drug molecules at lower dose.

#### CP-112 **Anti-Diabetic Potential of Phyto-Nanoparticles Comparison With Hormonal Therapy And Medicinal Plants**

Kankanala Raghu\*, Pulipaka Shankaraiah, Nythari Pradeep Kumar, Bagili Harshith Reddy  
Geethanjali College of Pharmacy, Hyderabad.

Email id: raghukankanala22@gmail.com

In the last few years, there has been exponential growth in the field of herbal medicine in both developing and developed countries because of their natural base without side effects. A comprehensive review was conducted to collect data about how to combine medicinal plants with nanotechnology for the treatment of diabetes mellitus instead of hormonal treatments. Diabetes mellitus (DM) is a metabolic disorder, currently associated with morbidity, mortality and many long-term complications in diabetic patients. Hyperglycemia is due to the insulin resistance or insufficient secretion of insulin. In India, the percentage of diabetes mellitus cases is rapidly increasing and at present, more than 40 million people have been affected i.e. it accounts for almost 20% of the total diabetic population worldwide. Treatment of the DM patients was achieved by the use of oral hypoglycemic /antihypoglycemic agents and insulin. However, all these treatments have limited efficacy and have been reported with side effects. In order to overcome this problem, the researchers have been shifted to the use of other alternative medicines. Folkal or traditional medicines and extracts from different parts of medicinal plants have been extensively used as alternative medicines to control and manage diabetes mellitus. Nanotechnology can be defined as the science and engineering involved in the synthesis, design, characterization, monitoring, repairing, construction and control of the human biological system at the molecular level. Nanomedicine is the integration of nanotechnology in medicine for better human health care. Nanomaterials have unique physicochemical properties, such as high surface to mass ratio, ultra-small size, and high reactivity. These properties can be used to overcome the limitations of traditional DM treatments and diagnosis.



# కృష్ణా విశ్వవిద్యాలయం KRISHNA UNIVERSITY

MACHILIPATNAM - 521 001, Krishna District, Andhra Pradesh

మచిలీపట్నం - 521 001. కృష్ణాజిల్లా ఆంధ్రప్రదేశ్

డా|| కె. కృష్ణారెడ్డి, M.Sc., Ph.D., FIETE., FAPAsc., FTAS.,

ఆచార్య - భౌతిక శాస్త్రం, కులసచివులు

Dr. K. Krishna Reddy, M.Sc., Ph.D., FIETE., FAPAsc., FTAS.,  
Professor of Physics, Registrar

Ph: 08672 - 225963

Fax : 08672 - 225963

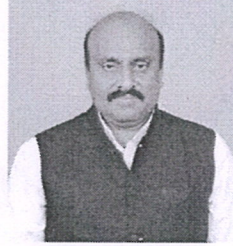
Cell : +91 9966220933, +91 9542487999

E-mail : registrarku@gmail.com

krishna.kkreddy@gmail.com

February 26, 2020

## Message



It gives me immense pleasure to write a message on the two day National Seminar on “**Interface of Allied Science Technology on Life Science Research (IASTLSR-2020)**” organized by the Department of Biosciences and Biotechnology in Krishna University, Machilipatnam during 28<sup>th</sup> and 29<sup>th</sup> February 2020. As Physics faculty, I understood the importance of Allied Science Technology and its impact on pursuing research in Life Science and multi-disciplinary research related issues. As the seminar theme “Interface” reflects the importance of technologies developed/being developed in Allied Sciences. I can strongly believe that without the technology advancement there is no scope for steady progress of present day research.

I have gone through the scientific program and could see its rich quantitative academic and research content. I envisage its great potential to discuss and learn the art and science of technology of allied sciences. It is important to develop an attitude towards research and evidence building in every scientific sphere and this seminar would be a major step towards this goal in the field of technology development.

I wish the seminar a great success. I am sure the seminar be a grand scientific extravaganza.



*K. Krishna Reddy*

PRINCIPAL

Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S. - 501301.

*K. Krishna Reddy*  
(K.KRISHNA REDDY)

NATIONAL SEMINAR

## Structure-function relationships of inhibition of human cytochromes P450 3A4, CYP2C9 by 97 flavones derivatives

Sunil Junapudi

Department of Pharmaceutical Chemistry, Geethanjali College of Pharmacy, Cherryal, Keesara, Ranga Reddy District, Telangana, India- 501301

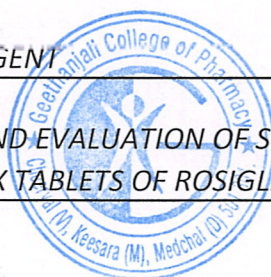
### Abstract

In this study, we examined and compared the structure-function relationships of the inhibition of human P450s 3A4, CYP2C9, CYP2C9 in complex with an inhibitor with a total of 97 flavonoids by measuring HEM for the former three enzymes and Protoporphyrin IX containing FE, HEME-C respectively, for the latter two enzymes. The flavonoids used were flavone, nine hydroxylated flavones, four methoxylated flavones, eight methoxylated hydroxyflavones, flavanone, 4',5,7-trihydroxyflavanone and its glycoside, 4',5,7-trihydroxyisoflavone, and 4'-methoxy-5,7-dihydroxyflavone. During this work we tend to study the interaction of ninety seven flavones derivatives against P450s 3A4, CYP2C9, CYP2C9 for hepatoprotective activity discovery using molecular docking simulation. Docking simulation for every compound was continual molegro virtual docker MVD 2013.6.0 for windows was used to predict the degree of each P450s 3A4, CYP2C9, CYP2C9 binding pockets. In this study was conclusion that structurally diverse flavonoid derivatives inhibit human P450 CYP2C9, 3A4 and CYP2C9 in complex to different degrees, depending on the enzymes and inhibitors, and that there are different mechanisms of inhibition of these P450s by flavonoids. The presents of bi-phenolic (bi-flavones: unix-26, 29, 61) groups was found to surpriselly increase inhibition potency toward these P450 enzymes. Some of a 5, 7-dihydroxyl group in the A ring of flavone was found to increase the inhibition potency toward these P450 enzymes (unix-4, 80). Molecular docking studies suggest that there are different orientations in the interaction of the six flavonoids with the five P450 enzymes examined and that two or more mechanisms are possible to explain how various flavonoids inhibit individual P450 enzymes differently.

**Key words:** Molegro Virtual Docker, flavones, human cytochromes P450.

**4<sup>th</sup> International Conference on  
“Innovations in Pharma Industry, Education and  
Research” (IPIER) 2020  
27<sup>th</sup> & 28<sup>th</sup> Feb 2020**

S.No	ABSTRACT CODE	Title	Authors
14	PP-025	Nano Technology” Current Status In Pharmaceutical Science	Ummehani*, Krishna Reddy, Asia Begum, KNV Rao, RajeshwarDutt.
15	PP-026	Layered Nanomaterial Amplified Chemiluminisence Systems And Their Analytical Applications	Ummehani*, Asia Begum, KNV Rao, RajeshwarDutt.
16	PP-027	A Review On Animal Models In Diabetes Mellitus	ShankaraiahPulipaka* and Ashish Suttee
17	PP-028	Phytochemical Screening And Antioxidant Activity Of Tecoma Stans	R. Dorcas DivyaJyothi, Vasudha Bakshi, S.Harikishan Prasad, Dibyalochan Mohanty, Madhu Babu, Anand Kumar.
18	PP-029	OCCULAR DRUG DELIVERY	CH. Pranathi, Vasudha bakshi, Madhu Babu, Dibyalochan Mohanty, Anand kumar
19	PP-030	SCREENING OF ALBIZIA LEBBECK FLOWER METHANOLIC EXTRACT FOR ANTI-INFLAMMATORY AND ANTI-ANALGESIC ACTIVITIES	Y. Harika, Vasudha bakshi, Dibya lochan Mohanty, Madhu Babu, Anand kumar
20	PP-031	DESIGN CHARACTERIZATION AND OPTIMIZATION OF INDOMETHACIN ETHOSOMAL GELL BY USING 3 <sup>2</sup> FACTORIAL DESIGN	B.Bhargavi, Vasudha bakshi, Dibalchohan Mohanty, Madhu Babu, Anand kumar
21	PP-032	NEW INSIGHT INTO THE FABRICATION OF SMART MUCOADHESIVE BUCCAL PATCHES AS A NOVEL CONTROLLED-DRUG DELIVERY SYSTEM	Dibya lochan Mohanty, Vasudha Bakshi, Kachupally Anusha, KasturiJahnavi, Jeevan Reedy, M.A Nashwaan
22	PP-033	ANTIDIABETIC AGENTS	M.Shirisha, Vasudha bakshi, Dibya lochan Mohanty, Madhu Babu, Anandkumar
23	PP-034	ANTIMALARIAL AGENT	B. Sudheshna, Vasudha Bakshi, Dibalchohan Mohanty, Madhu Babu, Anand Kumar
24	PP-035	FORMULATION AND EVALUATION OF SUSTAINED RELEASE FLOATING MATRIX TABLETS OF ROSIGLITAZONE	.Sravani, Vasudha Bakshi, Madhu Babu, Dibyalochan Mohanty, Anand Kumar



**PRINCIPAL**  
Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.

essence and so on. The formulated herbal lipstick was evaluated and various parameters such as color, melting point, breaking point, force of application, surface anomalies, pH, skin irritation test and aging stability were determined and reported herewith.

**PP-025**

**NANO TECHNOLOGY" CURRENT STATUS IN PHARMACEUTICAL SCIENCE**

Ummehani\*, Krishna Reddy, Asia Begum, KNV Rao, RajeshwarDutt.

Nalanda College of Pharmacy, Cherlapally, Nalgonda  
Email Id: rayeesma999@gmail.com

Size reduction is one of most fundamental unit operation which is of prime importance in pharmacy. It helps in improving stability and bioavailability, reducing toxicity, enhancing release and providing better formulation opportunities for drug. In the recent trends, the drugs in nanometer size range have found to increase the performance in variety of dosage forms. The word 'nano' is a latin word, which means 'dwarf'. Nano size refers to 10<sup>-9</sup> of a particular unit thus nanometer is 10<sup>-9</sup> of a meter. nano technology is a science that deals with processes that occurs at molecular level and of nano length scale size. Nanotechnology has shown tremendous progress in physics, electronics and engineering but biomedical and pharmaceutical fields are yet to be explored, although, it has powerful impact in various medical fields such as biophysics, molecular biology, bioengineering, cardiology, oncology, ophthalmology, endocrinology immunology etc. nanotechnology provides intelligent system, devices and materials for better pharmaceutical applications. The current status of nanotechnology in pharmaceutical field includes development of nano medicine, tissue engineering, nanorobots, biosensors, biomarkers etc. Pharmaceutical nanotechnology provides opportunities to improve materials, medical devices and help to develop new technology where existing and more conventional technologies may be reaching their limits. Thus in the coming years advancements in this fields will led to the improved form of drug delivery as well as other prospects of medicine and pharmacy.

**PP-026**

**LAYERED NANOMATERIAL AMPLIFIED CHEMILUMINISENCE SYSTEMS AND THEIR ANALYTICAL APPLICATIONS**

Ummehani\*, Asia Begum, KNV Rao, RajeshwarDutt.

Nalanda College of Pharmacy, Cherlapall, Nalgonda  
Email Id: rayeesma999@gmail.com

Layered nano materials have become a popular hierarchical material for applying Chemiluminisence in recent years, mainly because of its ease of preparation and modification, large specific surface area and high catalytic activity. The present discussion is on layered nano material amplified Chemiluminisence system based on Graphene and its derivatives, layered double hydroxide and clay. Graphene is considered to be the most promising materials in the twenty-first century. Graphene and its derivatives, including Graphene oxide (GO) and reduced GO (rGO), exhibit many special properties suitable for numerous applications in different fields, such as catalysis, optoelectronics, and lithium ion batteries including the removal and degradation of organic pollutants. Detection mechanisms and strategies of layered nano material amplified systems show the basic concept of designing sensitive and selective sensing systems. Strategies for expanding the applications of layered nano material amplified CL systems by combination with surfactant, quantum dots, organic dyes and nano material are introduced for analysis of various analytes in

the real samples. With use of layered nanomaterials as catalysts, some CL systems have been exploited to detect analytes at a concentration two orders of magnitude lower than the legislative limits. As this modern analytical technique is not only novel but also trend setting, this has the tremendous potential for future in pharmaceutical, food, environmental as well as disease diagnosis applications, hence an attempt to review the challenges and future trends of these layered nano material amplified Chemiluminisence has been envisaged by the author

**PP-027**

**A REVIEW ON ANIMAL MODELS IN DIABETES MELLITUS**

Shankaraiah Pulipaka\* and Ashish Sutte

Lovely Professional University Department of Pharmacy,  
Phagwara, Punjab, India-144411

Email Id: shankar.pulipaka@gmail.com

Diabetes mellitus is defined as a state in which homeostasis of carbohydrate and lipid metabolism is improperly regulated by insulin. This results primarily in elevated fasting and postprandial blood glucose levels. If this imbalanced homeostasis dose not returns to normalcy and continues for a protracted period of time, it leads to hyperglycaemia, which in due course turns into a syndrome called diabetes mellitus. Several animal models have been developed for studying diabetes mellitus or testing anti-diabetic agents. These models include chemical, surgical (pancreatectomy) and genetic manipulations in several animal species to induce diabetes mellitus. The diabetogenic drugs used include: Alloxan monohydrate, Streptozotocin with or without nicotinamide, Ferric nitrilotriacetate, Dithizone and Anti-insulin serum. The selection of these models to use for investigating the antidiabetic properties of a new compound may be a very difficult task especially for young researchers. The aim of the present review is giving a brief idea about various experimental models developed for studying diabetes mellitus, assess the merits and demerits of each model and highlight the precautions needed to avoid erroneous results during the applications of these models.

**PP-028**

**PHYTOCHEMICAL SCREENING AND ANTIOXIDANT ACTIVITY OF TECOMA STANS**

R. Dorcas DivyaJyothi, Vasudha Bakshi, S.Harikishan Prasad, DibyaloChan Mohanty, Madhu Babu, Anand Kumar.

Department of Industrial Pharmacy, School of Pharmacy,  
Anurag Group of institutions, Hyderabad, Pin-500088, INDIA  
Email Id: divyajessy56@gmail.com

The objective of present study was aimed to evaluate phytochemical screening and DPPH free radical scavenging activity of aerial parts of *Tecoma stans* is a tree belongs to the family Bignoniaceae. It is widely spread in tropical and sub-tropical region. The free radical scavenging activity of extracts was evaluated by using DPPH assay method. The anti-oxidant properties and total phenolic content of fruit extracts of n-Hexane, Ethanol and Aqueous solvent extracts were analyzed. The present study states that the fruit-pod ethanol extract of tecoma stans of concentration (50, 100, 150,200) shows high antioxidant activity and total phenolic content properties. Ethanolic extract exhibited highest flavonoids of 8.04µg/ml followed by aqueous extracts with 6.35µg/ml quercetin equivalents. Ethanolic extract exhibited highest total phenolic contents of 164.94µg/ml GAE (Gallic acid equivalence) followed by aqueous extract with 134.73µg/ml GAE. Least phenolic content of 112.7277µg/ml GAE was analyzed in n-hexane extract. The percentage inhibition of standard ascorbic acid was found to be 94.02%

**4<sup>th</sup> International Conference on  
“Innovations in Pharma Industry, Education and  
Research” (IPIER) 2020  
27<sup>th</sup> & 28<sup>th</sup> Feb 2020**

S.No	ABSTRACT CODE	Title	Authors
280	PP-381	NOVEL CARRIERS FOR CONTROLLED AND TARGETTED DRUG DELIVERY	K.Umesh Chandra
281	PP-382	ANTI-MALIGNANT ACTIVITY OF MACROTYLOMA UNIFLORUM MEDIATED GREEN SYNTHESIZED MO METAL-LIGAND NANO COMPLEXES	Fawaz Shareef
282	PP-383	REVIEW ON RARE DISEASE-WILSONS DISEASE	P.Satwika, Ch.Preethi, P.Prathyusha, P.Naveen, B.Vasudha
283	PP-384	PROBIOTICS- THE LIFE PROMOTERS	Sushma Swaraj
284	PP-386	CURRENT PERSPECTIVES AND TREATMENT OPTIONS OF OBESITY	Amrutha Mounica, Namburu Sree Lakshmi, M. Ganga Raju
285	PP-387	NANOROBOTICS IN ADVANCES IN PHARMACEUTICAL SCIENCES	Sameeha ,Akash, kailash ,phani raja
286	PP-389	A STUDY ON GENE XPRT MTB/RIF ASSAY IN TUBERCULAR PLEURAL EFFUSION	Bharath B*, Muazzam Almamun Barbhuiya, Ram Reddy M, Mohsin Baig Md, Sireesha A, Suresh R, Shyam Sunder
287	PP-390	CONFIRMATORY TEST FOR CORONA VIRUS	K.MOKSHITHA
288	PP-391	CHIMERIC ANTIGEN RECEPTOR T-CELL THERAPY	Bhavana K*, Durga T, Mamatha M, Anusha N, Krishna Prasad D
289	PP-393	AN OBSERVATIONAL PILOT STUDY ON THE PCOS & NON-PCOS SUBJECTS	Dwaraka B*, Maheshwari G, Shubham L, Shyam Sunder A
290	PP-394	ISOLATION OF STARCH FROM UNRIPE PAPAYA AND USED AS DISINTEGRATE IN FORMULATION AND EVALUATION OF NAPROXEN TABLETS	V. Srivani
291	PP-395	EXTRACTION OF BIO ACTIVE COMPOUNDS FROM CASSIA AURICULATA AND ITS CHROMATOGRAPHIC STUDIES	M . Pravalika
292	PP-396	ANTI-CANCER DRUGS	Chandana Avidi
293	PP-397	REGULATORY COMPLIANCES IN DEVELOPMENT OF COMMERCIAL SCALE PROCESS OF NEWER FORMULATIONS	Daka Nagarjuna Reddy*, Daka Nagarjuna Reddy*Dr Mahaveer Singh, Prof. Birendra ShrivastavaDr Konda Ravi Kumar

*Signature*

**PRINCIPAL**  
Geethanjali College of Pharmacy  
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.



Techniques, viz. Gold Standard Test, Solid Culture Test (which takes about 24 days) and Liquid Culture Test (which takes about 21 days). So, the prolonged duration of its diagnosis further worsens the patients condition. The Xpert MTB/RIF Assay is used for the rapid diagnosis of Mycobacterium Tuberculosis Complex (MTBC) and resistance to Rifampicin, yielding results within 2 hours. Out of 80 cases, the right sided pleural effusion is 61%, while the left sided pleural effusion is 30% and bilateral effusion is 8.75%, based upon chest radiology. The results showed RIF (Rifampicin) sensitivity in 14 (22.58%) cases, out of which males were 9 (64.28%) and females were 5 (44.4%); Rifampicin resistance in 4 (5%) patients (2 males and 2 females). We also found a low sensitivity (18%) and a high specificity (96%) of Xpert MTB/RIF Assay on pleural fluid. It is furthermore recommended to scale up this advance technology in the near future, which will help in reducing not only the disease chaoticity but also the cost of diagnosis, mortality and morbidity.

**PP- 390**

**CONFIRMATORY TEST FOR CORONA VIRUS**

K. Mokshita

Department of Biotechnology

Anurag group of institutions, Venkatapur, Ghatkesar,  
MedchalDist, Telangana.

Email Id: [kakimokshitha@gmail.com](mailto:kakimokshitha@gmail.com)

Coronavirus (CoV) are a large family of viruses that cause illness ranging from common cold to Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome (SARS-CoV). They are transmitted to humans through animals. First Line Screening Assay for Corona Virus is E gene Assay and the Confirmatory test for Corona Virus is RdRp gene Assay.

**PP- 391**

**CHIMERIC ANTIGEN RECEPTOR T-CELL THERAPY**

Bhavana K\*, Durga T, Mamatha M, Anusha N, Krishna Prasad D

Department of Pharmacology, School of Pharmacy, Anurag  
Group of Institutions,  
Hyderabad 500088, Telangana, India.

Chimeric Antigen Receptor T-cell Therapy (CAR) expressing T-cells have demonstrated potent clinical efficiency in patients with B-cell malignancies and it is approved by FDA as a standard treatment replaced B-cell malignancies. However use of CAR T-cell therapy targeting other cancer has in part limited induction of antigen specific toxicities targeting normal tissues expressing target antigen and extreme potency of CAR T-cell treatments resulting in life threatening cytokine's release syndrome's here in, we discuss toxicity associated with CAR T-cell therapy in clinical trials. This advanced therapy has accentuated scientific, clinical and commercial interest in adapting this existing technology for treatment of cancer. Where it is widely recognized the challenges of overcome hostile tumor micro environment this is achieved by using genetic engineering to redirect autologous T-cell requirement for antigen processing, MHC-dependent antigen presentation and co-stimulation. Here, we argue that CAR T-cell technology may counter somebody immune deficiency against infections and treatment of cancer and provide beachhead for furthering our eventual therapeutic aims of restoring effective antitumor immunity. We discuss recently published studies, which feature significant differences in target antigen CAR T-cell phenotype, route of administration and tumor responses, different therapy and stem cell transplantation and blood cell transfusions. Further we discuss potential clinical interventions to ameliorate these toxicities and application of clinical model to predict the clinical utility of CAR T-cell therapy.

**PP- 393**

**AN OBSERVATIONAL PILOT STUDY ON THE PCOS & NON-PCOS SUBJECTS**

Dwaraka B\*, Maheshwari G, Shubham L, Shyam Sunder A  
Department of Pharmacy Practice, Balaji Institute of  
Pharmaceutical Sciences, Laknepally, Narsampet, Warangal  
Rural-506331, Telangana State  
Email Id: [dwark9859@gmail.com](mailto:dwark9859@gmail.com)

The polycystic ovary syndrome (PCOS) is the most common endocrine disorder in women of reproductive age. Most women with PCOS are also overweight or obese, excess bodily hair further enhancing androgen secretion while impairing metabolism, reproductive functions and possibly favoring the development of the PCOS phenotype. This study aimed to determine the prevalence of PCOS in women of reproductive age, to find the impact of PCOS on their physical and physiological conditions. This is an observational pilot study, conducted among the students of an organization in Warangal of Telangana State. The study included 100 subjects between the ages 18-23 years. The factors such as age, Body Mass Index (BMI), Waist Hip Ratio (WHR), excess facial hair, Irregular menses and Hypothyroidism were taken into consideration and their association with PCOS was analyzed statistically using Student T-Test and Chi-Square Test of MS-Office 2007. Out of 100 subjects included, 94 were not the candidates with PCOS and only 6 were suffering from PCOS. The BMI and WHR were significantly different ( $p < 0.05$ ). The symptoms such as excess facial hair, Irregular menses and Hypothyroidism found to be the indicators for the PCOS and found statistically significant. The physical and physiological conditions were most affected by PCOS in women of reproductive age. Awareness and risk mitigation measures for PCOS help to overcome the PCOS and related complications.

**PP- 394**

**ISOLATION OF STARCH FROM UNRIPE PAPAYA AND USED AS DISINTEGRATE IN FORMULATION AND EVALUATION OF NAPROXEN TABLETS**

V. Srivani

Geethanjali College of pharmacy  
Email Id: [Vangasrivani6@gmail.com](mailto:Vangasrivani6@gmail.com)

The main objective of this research is to introduce and evaluate the disintegrate property of natural excipient like starch from unripe fruits of Papaya which is used in tablet formulation. Pharmaceutical excipients developed from natural sources are economical. The unripe fruit of Papaya has high level of starch content and hence used as a raw material for starch isolation. Starch is isolated from green unripe papaya fruits using 0.5 N NaOH as Lye solution. Isolated starch is evaluated and used as a disintegrant in formulation of tablet using Naproxen as model drug by wet granulation method. Studies indicates that starch which will be obtained is qualitatively and quantitative comparable to corn starch. The disintegration time of formulated tablet will be evaluated as per Indian Pharmacopoeia and will be compared with marketed tablets.

**PP- 395**

**EXTRACTION OF BIO ACTIVE COMPOUNDS FROM CASSIA AURICULATA AND ITS CHROMATOGRAPHIC STUDIES**

M. Pravalika

Geethanjali College of pharmacy  
Email Id: [pravalikamethuku@gmail.com](mailto:pravalikamethuku@gmail.com)

The main objective of the study is to determine and characterize the chemical constituents of leaves of Cassia auriculata. Hence

it has antimicrobial, antioxidant, anti-inflammatory properties and the present study of n-hexane, ethyl acetate and methanol extracts will be used to identify the medicinal properties of *Cassia auriculata*. C-18 silica gel-based column chromatography will be used to purify the above extracts. These fractions will be identified by thin layer chromatography. GC-MS and FT-IR techniques are used to characterize the lead fraction.

**PP- 396**

#### ANTI-CANCER DRUGS

Chandana Avidi  
Teegala Krishna Reddy College of Pharmacy  
Email Id: [chandanaavid@gmail.com](mailto:chandanaavid@gmail.com)

Cancer: A disease in which abnormal cells divide uncontrollably and destroy body tissue.

Anticancer: The drugs which are used to treat cancer.

Types of Cancers:

Breast cancer: A cancer that forms in the cells of the breasts.

Prostate cancer: A cancer in a man's prostate, a small walnut-sized gland that produces seminal fluid.

Basal cell cancer: A type of skin cancer that begins in the basal cells.

Skin cancer(melanoma): The most serious type of skin cancer.

Colon cancer: A cancer of the colon or rectum, locate at the digestive tract's lower end.

Lung cancer: A cancer that begins in the lungs and most often occurs in people who smoke.

Leukemia: A cancer of blood-forming tissues, hindering the body's ability to fight infection.

The treatment of cancer is complicated in that the drugs used target human cells, albeit cells that have undergone genetic changes and dividing at a fast uncontrolled rate. However, certain anticancer drugs can differentiate to some degree between normal tissue cells and cancer cells, and the rate at which cancer cells proliferate may in fact play a role in the apparent selectivity of agents.

The specificity of anticancer drugs plays an important role in reducing the severity of side effects associated with the drug's use. Indeed, because cancer cells are similar to normal human cells, anticancer agents are generally toxic to normal cells and can cause numerous side effects, some of which are life-threatening. Another method to treat cancer is Chemotherapy.

**PP- 397**

#### REGULATORY COMPLIANCES IN DEVELOPMENT OF COMMERCIAL SCALE PROCESS OF NEWER FORMULATIONS

Daka Nagarjuna Reddy\*, Daka Nagarjuna Reddy\*  
Mahaveer Singh, Birendra Shrivastava  
Konda Ravi Kumar

Birendra Shrivastava, Konda Ravi Kumar  
School of Pharmaceutical Sciences, Jaipur National University,  
Jaipur.

School of Pharmaceutical Sciences, Jaipur National University,  
Jaipur.

School of Pharmaceutical Sciences, Jaipur National University,  
Jaipur.

Professor, Hindu College of Pharmacy, Guntur.

This study was designed to explore the regulatory environments that govern the pharmaceutical industry. The Indian pharmaceutical industry is impacted by regulations promulgated by various regulatory agencies such as the USFDA, the EMA the Evaluation of Medical Products and Indian Pharmacopoeial Commission. In order to understand the impact of regulation, a

questionnaire, as a perception survey. This will give information regarding the regulatory agencies & their mandates, Harmonization efforts, Perceptions about regulation at development stage & Regulations for entry and product promotion.

**PP- 398**

#### ANTI HYPERTENSIVE RESULT EVALUATION AND TREATMENT OUTCOME

Shaik Faizan Ali\*, ShaikFaizan Ali\*, Mahaveer Singh,  
Birendra Shrivastava, Konda Ravi Kumar

Ph.D Scholar, School of Pharmaceutical Sciences, Jaipur  
National University, Jaipur.

Associate Professor, School of Pharmaceutical Sciences,  
Jaipur National University, Jaipur.

Director & Professor, School of Pharmaceutical Sciences,  
Jaipur National University, Jaipur.

Professor, Hindu College of Pharmacy, Guntur.

The objective of this study is to evaluate the blood pressure control by reviewing the literature available from January 2010 to December 2018. By comparing the compliance across therapeutic classes and their correlation with clinical outcomes. The blood pressure control and antihypertensive treatment regimen outcomes were analysed according to JNC-7 & JNC-8 guidelines available at that period of time as the studies discussed here were having a range of blood pressure goals according to their inclusion criteria. How well the medication helped in lowering the BP levels to its target was analyzed and whether the prescribed antihypertensives were efficient in reducing the cardiovascular outcomes was observed. We have also observed that adherence to regimen has a positive effect on clinical outcomes and management of hypertension.

**PP- 399**

#### PEDIATRIC DERMATOLOGY

S. Pavani, V. Bhavya Sri  
BojjamNarasimhulu Pharmacy College For Women

Pediatric is the branch of medicine that involves the medical care of infants, children, and adolescents. The American Academy of Pediatrics recommends people is under pediatric care up to the age of 21. A medical doctor who specializes in this area is known as a pediatrician, or pediatricians. The word *pediatrics* and its cognates mean "healer of children. Pediatricians work both in hospitals, particularly those working in its subspecialties such as neonatology, and as outpatient primary care physicians. A pediatric dermatologist is a dermatologist who specializes in diagnosing and treating children, including newborns and infants. This medical doctor first becomes a dermatologist. Extra study and training are needed to become a pediatric dermatologist.

**PP- 400**

#### PEDIATRIC OPHTHALMOLOGY

P. Bhavya, T. Navya  
BojjamNarasimhulu Pharmacy College for Women

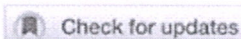
Pediatric ophthalmology is the branch of medical science which deals with vision development and care in children. Pediatric vision care needs are highly specific and need to be attended with special care and attention. Pediatric ophthalmologists handle the eye diseases in children of various ages with specialized care and attention. Major Paediatric eye diseases involve strabismus, amblyopia, paediatric glaucoma etc.







## A new trigonometrical method for solving non-linear transcendental equations



K. Venkateshwarlu<sup>a</sup>, V. S. Triveni<sup>a</sup>, G. Mahesh<sup>a,\*</sup>, G. Swapna<sup>b</sup>

<sup>a</sup>Department of Freshman Engineering, Geethanjali College of Engineering and Technology, Cheeryal(V), Keesara(M), Medchal Dist. Telangana, India.

<sup>b</sup>Department of Humanities and Sciences, Geethanjali College of Pharmacy, Cheeryal(V), Keesara(M), Medchal Dist. Telangana India.

### Abstract

This paper presents a new algorithm to find a non-zero positive real root of the transcendental equations. The proposed method is based on the combination of the inverse  $\tan(x)$  function and the Newton-Raphson method. Implementation of the proposed method in MATLAB is applied to different problems to ensure the method's applicability. The proposed method is tested on number of numerical examples and results indicate that our methods are better and more effective as compared to well-known methods. Error calculation has been done for available existing methods and the new proposed method. The errors have been reduced rapidly and obtained the real root in less number of iterations as compared to renowned methods. Certain numerical examples are presented in this paper to show the effectiveness of the proposed method. The Convergence of the proposed method is discussed and shown that the method reduces to Newton-Raphson method that is quadratic convergent. This approach will also help to produce a non-zero real root of a given non-linear equations (transcendental, algebraic, and exponential) in the commercial package.

**Keywords:** Nonlinear equation, iteration method, transcendental equations.

2020 MSC: 65H04, 65H05.

©2022 All rights reserved.

### 1. Introduction

Root finding methods have enormous applications in many fields such as Finding Methods Applied to Digital Maximum Power Point tracking of sustainable photovoltaic energy generation, computation of gradient retention times in liquid chromatography, for solving non-linear differential equations, in circuit analysis, analysis of state equations for a real gas, mechanical motions/oscillations, weather forecasting, in optimization and many other fields of engineering designing processes. Root finding methods can also be applied in the discrete stochastic arithmetic (DSA) to validate the class of multi-step iterative methods and find the optimal numerical solution of non-linear equations.

In [5], Gemechu used derivative estimations up to the third-order (in root finding, some new initiatives) are applied in Taylor's approximation of a non-linear function/equation to achieve efficient iterative

\*Corresponding author

Email address: [gattumahesh.fe@gcet.edu.in](mailto:gattumahesh.fe@gcet.edu.in) (G. Mahesh)

doi: 10.22436/jmcs.025.02.06

Received: 2021-02-16 Revised: 2021-04-10 Accepted: 2021-05-01