

भैषज संदेश
**BHAISHAJ
 SANDESH**



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NBA Accredited UG Programme (B. Pharm.)
 CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals
 DST-FIST, GOI sponsored PG Programme

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Message from Editor's Desk

Welcome to all the readers.....

We are very happy to introduce volume I of 9th edition of our bimonthly news letter. As we all know, a newsletter mirrors a college- its vision and mission. It also highlights the event, activities, academic progress and achievements of students. Contribution of teachers and other crucial information related to Pharmacy field are also incorporated in it. In this edition, we have tried to capture the last two months activities. I do hope that the newsletter encourages many more including students to use it as a platform to express their creativity. Please feel free to offer any suggestion for improvement.

Sincerely

Dr. Ravindra Pandey

Editorial Board

1. Dr. Ravindra Pandey
Professor, CIP, Raipur
2. Disha Kesharwani
Assistant Professor, CIP, Raipur
3. Shreya Jain
B. Pharm 8th Sem

Columbia Institute of Pharmacy, Raipur

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Columbia Institute of Pharmacy

It's a great pleasure to introduce Columbia Institute of Pharmacy, which is Synonymous to ultimate in Pharmacy education in the state of Chhattisgarh. Columbia Institute of Pharmacy, Raipur is run and managed by Jan Pragati Education Society (JPES), established in the year 2003. Innovation excellence & quality are the driving forces on the vision of Columbia Institute of Pharmacy which has a rich proud heritage of academic excellence. The campus is lavishly spread over acres of lush green land and situated 14 km away from the hustle bustle of the city and just 4 km away from Chhattisgarh state assembly setting unabated efforts to add value in Pharma, Engineering and Management education.



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ACHIEVEMENTS

Paper Publication

1. **Dr. Beena Gidwani**, published a paper titled "**Indian spices: past, present and future challenges as the engine for bio-enhancement of drugs: impact of COVID-19**" in Journal of the Science of Food and Agriculture, along with **Dr. Ravindra Pandey, Dr. Shivshankar Shukla and Ms. Ruchi Bhhattacharya**.
2. **Ms. Pragya Baghel** published a paper titled "**Formulation of Self- Emulsifying Drug Delivery Systems of Paclitaxel utilizing Factorial Design**" in International Journal of Pharmaceutical Sciences and Nanotechnology" along with **Prof. Amit Roy, Dr. Shekhar Verma, Dr. Trilochan Satapathy and Dr. Sanjib Bahadur**.
3. **Dr. Shivshankar Shukla** published a paper titled "**Surveillance of Stability under Different Stress Conditions in Desloratadine and Study of Degradation Kinetics**" in Journal of AOAC International, along with **Dr. Ravindra Pandey, Ms. Swati Pandey**.

Other Achievements

1. **Prof. Amit Roy** participated in **National Seminar** organized by Rungta Institute of Pharmaceutical Sciences, Bhilai, **on National Science Day as Resource Person on 23rd – 24th Feb 2022**.
2. **Dr. Beena Gidwani** participated in **National Seminar** organized by Rungta Institute of Pharmaceutical Sciences, Bhilai, **on National Science Day as Resource Person on 23rd – 24th Feb 2022**.

Republic Day Celebration

Columbia Institute of Pharmacy celebrated 73rd Republic Day in Columbia campus. According to the tradition of college the university toppers of the year Ms. Anamika Dutta, B. Pharm 2nd semester hoisted the national flag on the day. After Flag hoisting, sweets were distributed.



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Basant Panchami Celebration

Columbia Institute of Pharmacy celebrated Basant Panchami on 05th February 2022 in Maa Saraswati Temple of Columbia campus. All the members of Columbia actively participated in Sarswati Pooja and Prasad preparation on this auspicious occasion according to the tradition of the college. After pooja and hawan khichadi prasadam was distributed.



Causerie

Current trend in drug design

Drug design is an integrated developing discipline which portends an era of tailored drug. It involves the study of effects of biologically active compounds on the basis of molecular interactions in terms of molecular structures or its physico-chemical properties involved. Studies processes by which the drugs produce their effects, how they react with the protoplasm to elicit a particular pharmacological effect or response, how they are modified or detoxified, metabolized or eliminated by the organism. Traditionally, drugs were discovered by synthesizing compounds in a time-consuming multi-step processes against a battery of in vivo biological screens and further investigating the promising candidates for their pharmacokinetic properties, metabolism and potential toxicity. Such a development process has resulted in high attrition rates with failures attributed to poor pharmacokinetics (39%), lack of efficacy (30%), animal toxicity (11%), adverse effects in humans (10%) and various commercial and miscellaneous factors. The current trend in drug design is to develop new clinically effective agents through the structural modifications of a lead nucleus. The lead is a prototype compound that has the desired biological or pharmacological activity but may have many undesirable characteristics, like high toxicity other biological activity, insolubility or metabolism problems. Such organic leads once identified, are easy to exploit. This process is rather straightforward. The real test resides with the identification of such lead compounds and the optimum bioactive positions on the basic skeleton of such leads. Today, the process of drug discovery has been revolutionized with the advent of genomics, proteomics, bioinformatics and efficient technologies like, combinatorial chemistry, high throughput screening (HTS), virtual screening, de novo design, in vitro, in silico ADMET screening and structure-based drug design.

Renuka Verma, Assistant Professor, CIP, Raipur

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Installation of New Instrument- “HPLC”

A new instrument **HPLC (High Performance Liquid Chromatography)** is installed in central instrumentation lab of Columbia Institute of Pharmacy on 11/02/2022. The instrument was purchased from Shimadzu Corporation, Japan, under the project “**DST FIST**”, sanctioned to Dr. Ravindra Pandey in 2021. The model number of the instrument is “**i series LC- 2050 C 30**”. This is the most advanced model with 3 detectors including PDA, RF and RID detector. The machine is based on automatic sampling system. It can detect 216 samples at a time. It provides accurate and precise results with high resolution.



Azaadi ka Amrit Mahotsav

National Science Day was celebrated on 24th - 25th Feb 2022, as “**Azadi ka Amrit Mahotsav- Training of Pharmaceutical Sophisticated Instruments for Science Popularization among School Students**”. Under this program the school students were given training about the Pharmaceutical Sophisticated Instruments. The principal investigator of the program was Dr. Ravindra Pandey.



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GPAT Quiz- 13

1. Metoclopramide is generally used for
 - a) Prophylaxis of vomiting
 - b) Preventing motion sickness
 - c) Treating irritable bowel syndrome
 - d) Treatment of pancreatic insufficiency
2. HIV infection can be clinically controlled with
 - a) Cytarabine
 - b) Acyclovir
 - c) Zidovudine
 - d) Amantadine
3. The Schedule in D & C Act that deals with the standards for disinfectant fluids is-
 - a) Schedule B
 - b) Schedule F
 - c) Schedule O
 - d) Schedule M
4. The rate of a chemical reaction doubles for every 10°C rise of temperature. If the temperature is raised by 50°C, the rate of the reaction increases by about
 - a) 64
 - b) 10
 - c) 24
 - d) 32
5. Which of these changes with time for a first-order reaction
 - a) Rate of reaction
 - b) Rate constant
 - c) Half life
 - d) None of the above
6. The example of Newtonian fluid is
 - a) Tragacanth in water
 - b) Sodium alginate in water
 - c) Glycerin
 - d) Suspension of zinc oxide
7. An Oxygen containing organic compound upon oxidation forms a carboxylic acid as the only organic product with its molecular mass higher by 14 units. The organic compound is _____.
 - a) A ketone
 - b) An aldehyde
 - c) A primary alcohol
 - d) A secondary alcohol
8. Anisole can be prepared by the action of methyl iodide on sodium phenate. The reaction is called
 - a) Fitting's reaction
 - b) Willimson's reaction
 - c) Wurt's reaction
 - d) Etard's reaction
9. If Carr's index of a powder is 10 % then the type of powder flow is
 - a) Poor
 - b) Excellent
 - c) very poor
 - d) good
10. In tablet coating process, inadequate spreading of the coating solution before drying causes
 - a) Orange peel effect
 - b) Sticking effect
 - c) Blistering effect
 - d) Picking effect

Answer of Quiz 12: 1.(a) 2. (d) 3.(c) 4.(d) 5.(c) 6.(b) 7.(c) 8.(c) 9.(a) 10.(c)

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Students' Thought

Remember to forget

Don't remember to forget
What made you sad,
Also, the things that made you mad.
Many things may be bad,
But don't forget to remember
Thing that made you glad.
Don't forget to remember
The forests and the open blue,
Well, you must have got a clue.
Was it the water or the sky?
Don't forget to remember the view
Because you may never be able to review
Don't remember to forget
The people who were untrue,
Because there's nothing you can undo.
Just remember to forget all that was hurtful
And never forget to remember that
Life is beautiful!"

Yash Govindani,
B. Pharm, 8th Sem

*Education is the passport to the
future for tomorrow belongs to
those who prepare it for
today.....*

Rise

*I will rise
After every fall.
I will rise
And stand tall.*

*I will rise
Over the wall.
I will rise
Above them all.*

*Like the sun,
Which never dies.
Though sets every night,
Every day it does rise.*

*Like the ocean
Whose tides
Many times they are down,
But invariably they rise.*

*Like the trees,
From seeds they arise,
And heights great
They rise and rise.*

*After falling once,
Twice and thrice,
Again and again
I will rise and rise.*

*I will rise
After every fall.
After every fall
I will rise.*

Kriti Naurange,
B. Pharm 8th Sem

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Less Known Facts about Traditional Food

Lapsi

Lapsi Recipe is a Gujarati sweet dish made from broken wheat has an age-old significance of being auspicious. Dalia is often known as ‘broken wheat’. Dalia is a texture that represents any kind of grain that has been broken. Different parts of the country refer to dalia as fada, samba rava, or godhuma rava. wheat dalia has essential vitamins, minerals, and fibres. It aids in weight loss and offers other numerous long-lasting health benefits in case of Diabetes, Heart health, Constipation, Gut health.

Recipe: Dissolve the jaggery in 2 cups of hot water, strain to remove any residue and set aside. Heat one tablespoon of ghee in a pan on medium heat; add the cashew nuts and roast until the color changes to light golden. Turn off the heat and keep the roasted cashew nuts aside. Heat another tablespoon of ghee in a wide pan on medium heat; stir in the broken wheat and roast the wheat until it gets a roasted aroma and the color changes to golden orange. Pour in the jaggery mixture and cardamom powder stirring continuously until well combined. Reduce the heat to low and cover the pan with a lid and simmer for 10 minutes; stirring occasionally until the wheat is cooked to tender. When done the grains should be separate and not mushy and sticking together. Allow the Lapsi to rest covered for five minutes. Stir in the cashew nuts and the raisins to the above mixture and serve. Serve the Lapsi warm as a Dessert or a sweet for special occasions.

Nutritional value:

Nutrients	Per serving (100 gm)
Energy(Ecals)	152 k cal
Sugar(gm)	0.97
Protein(gm)	5.03
Fat(gm)	3.41
Fibre(gm)	1.4
Carbohydrates(gm)	27.7

New Drug Approved in 2022

Quviviq

Company: Idorsia Ltd

Approval Status: Approved 7/01/2022

Specific Treatments: To treat insomnia

Quviviq (daridorexant) is an orexin receptor antagonist indicated for the treatment of adult patients with insomnia characterized by difficulties with sleep onset and/or sleep maintenance. It is available in tablet dosage form 25mg and 50 mg.

Mechanism of Action

Orexin receptor antagonist

Side Effects

Hypersensitivity, hepatotoxicity, depressive disorder etc.

Contraindication

QUVIVIQ is contraindicated in patients with narcolepsy.

Plants with Health Benefit

Bacopa monnieri

Synonym: Waterhyssop, brahmi, thyme-leafed gratiola, herb of grace, and Indian pennywor.



Family:	Plantaginaceae
Kingdom:	Plantae
Order:	lamiales
Genus:	Bacopa

Nutritional value per 100 g (3.5 oz)

Total Calories	335
Total Fat	2.47
Cholestrol	Nil
Total Carbohydrate	Traces
Protein	12.22
Vitamin A	1.73
Vitamin c	45.5
Calcium	968.05

Morphology:

Bacopa monnieri is a non-aromatic herb. The leaves of this plant are succulent, oblong, and 4–6 mm (0.16–0.24 in) thick. Leaves are oblanceolate and are arranged oppositely on the stem. The flowers are small, actinomorphic and white, with four to five petals. It can even grow in slightly brackish conditions. Propagation is often achieved through cuttings.

Chemical Composition :

The best characterized phytochemicals in Bacopa monnieri are dammarane-type triterpenoid saponins known as bacosides, with jujubogenin or pseudo-jujubogenin moieties as aglycone units. Bacosides comprise a family of 12 known analogs. Other saponins called bacopasides I–XII were identified. The alkaloids brahmine, nicotine, and herpestine have been catalogued, along with D-mannitol, apigenin, hersaponin, monnierasides I–III, cucurbitacin and plantainoside B.

Uses: Brahmi is used for Alzheimer's disease, improving memory, anxiety, attention deficit-hyperactivity disorder (ADHD), allergic conditions, irritable bowel syndrome, and as a general tonic to fight stress.

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Upcoming **EVEN**T**S**

1. Annual sports
2. Colors

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