

भैषज संदेश

**BHAISHAJ
SANDESH**

Newsletter Published By Columbia Institute of Pharmacy, Raipur, (C.G.), India

NBA Accredited UG Programme (B. Pharm.)

CPCSEA (New Delhi) approved lab for breeding & experimentation of small animals

DST-FIST, GOI sponsored PG Programme

CONTENTS

- *Message from Editor's Desk*
- *Columbia Institute of Pharmacy*
- *Guest Lecture*
- *National Pharmacy Week Celebration*
- *Foundation Day Celebration*
- *Campus News*
- *Guest Lecture*
- *Details of funding agencies open for projects and seminars*
- *Causerie*
- *Achievements*
- *New drug approval 2023*
- *Inspiring Quotes*
- *GPAT Quiz*
- *Students' Thought*
- *Plants with Health Benefits*
- *Less Known Facts about Traditional Food*
- *Upcoming Event*

Message from Editor's Desk

Welcome to all the readers.....

We are very happy to introduce volume VI of 10th 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
Principal, CIP, Raipur
2. Ms. Disha Kesharwani
Assistant Professor, CIP
3. Mr. Gunjan Kalyani
Assistant Professor, CIP
4. Ms. Ruchi Bhattacharya
Assistant Professor, CIP
5. Ms. Suman Sen
B. Pharm, 3rd Sem

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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Guest Lecture

Columbia Institute of Pharmacy, Raipur organized a guest lecture on 04/11/2023. The guest was Dr. Peeyush Jaiswal, Director, GPAT discussion centre pvt ltd. from Indore. He delivered a talk on “Empowering Students for Pharma Competitive Exams and Development of Soft Skills”. He encouraged the students for being focused for their career. Students also interacted with him for solving their queries. The management members, Principal and all the faculty members were present during the program.

National Pharmacy Week 2023

Columbia Institute of Pharmacy celebrated 62nd National Pharmacy Week (NPW) 2023 From 19 November to 25 November and theme of NPW was “Join Pharmacists to ensure patient safety” in which all the students of our institute took part enthusiastically. Institute organized various events for students including poster making, power point presentation, rangoli, anchoring, song, painting, mehendi, dance, nukkad natak and extempore competitions. Also a health cam and blood donation camp was organized by the NSS unit of the college. The chief guest for the inaugural function was Dr. Deependra Singh, Chairman, ERC, PCI, New Delhi, India. In his speech he motivated students for being focused and work hard for themselves and achieve milestones. He also discussed about National Education Policy 2020, coming updated syllabus and about the use of Artificial Intelligence. The chief guest was felicitated with Shawl, Shreefal and Memento. During the event Shri Harjeet Singh Hura, Secretary Janpragati Education Society and Prof. Ravindra Kumar Pandey, Principal, Columbia Institute of Pharmacy along with all faculty members were present.



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Foundation Day Celebration

Columbia group of institutions celebrated its 19th foundation day on 19 November 2023. The dignitaries present were Shri Kishore Jadwani, Chairman, JPES, Shri Vijay Jadwani, and Shri Ravinder Hura, Treasurer, JPES, Principals, faculty members, and nonteaching staff of all departments. Management members congratulated all the members for being the part of their successful journey of Columbia group of institutions. They shared their dreams and tasks for the future. Every year on foundation day excellence award is provided to teaching and non-teaching faculty. **Ms. Monika Bhairam** was felicitated by the “Excellence Award for Teaching 2023” and in non-teaching section **Mr. Santosh Verma** received the award for Best Performance 2023”. On this occasion all the staff participated in different activities along with management members. Various games were organized for all the members of Columbia. The winners were appreciated by prizes. The program ended with lunch.



Campus News

Campus interviews by various Pharmaceutical Industries were organized by placement cell of Columbia Institute of Pharmacy for the students of B. Pharm final year. Two of our student Mr. Praveen Bhatt and Shivam Thakur were selected as Medical representatives in Zuventus Healthcare Ltd, and Systopic Laboratories Pvt Ltd respectively. We congratulate our students for their success.

Guest Lecture

Columbia Institute of Pharmacy, Raipur organized a guest lecture on 11/12/2023. The guest was Shri Anant Gandhi, former Pharmacist, USA. He discussed about “Pharma Education and Career in Pharmacy in Abroad”. He explained about the path towards foreign countries. He discussed in detail about the exams through which students can enter the foreign countries for their post graduation and jobs. He also explained about the difference between the role of pharmacist in India and USA. He motivated students for continuous and focused efforts for their studies. The management members, Principal and all the faculty members were

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Details of funding agencies open for Projects and Conferences

S.No	Funded by	Scheme	Amount	Deadline	Source of information
1	CSIR-CDRI Lucknow	Pharmaceutical Product Development and Quality Control (Certificate Program)	10000 Rs. (Couse fee)	31/01/ 2024	www.cdri.res.in
2	ICMR, New Delhi	Investigator-Initiated Research Proposals For Intermediate Extramural Grants	2 Crore	29/02/2024	www.icmr.nic.in
3	Science and Engineering Research Board	WISE-SCOPE Fellowship	55000 Rs. Fellowship per month 2 Lakh Research grant	8/8/2024	www.dst.gov.in
4	Science and Engineering Research Board	SERB-Power Grant	30 Lakh	31/01/2024	www.serbonline.in
5	Department of Biotechnology, New Delhi	Biotechnology Based Programme for Societal Development in Rural Areas and Aspirational Districts	60 Lakh	25/01/2024	www.dbtindia.gov.in
6	Chhattisgarh council of science & technology, Raipur (C.G.)	National Seminar/International Seminar	50000 Rs. /100000 Rs	Round the year	cgcost.nic.in

Causerie NIPAH VIRUS

Members of the family Paramyxoviridae (genus Henipavirus) known as the Nipah virus (NiV) can infect humans, horses, and pigs and cause encephalitis and severe respiratory disease. The Nipah virus (NiV) is a zoonotic (animal to human) virus that can potentially spread through tainted food or directly between individuals. It can cause a variety of ailments in infected individuals, including asymptomatic (subclinical) infection, acute respiratory sickness, and deadly encephalitis. Additionally, the virus can cause serious illness in pigs and other animals, costing producers a great deal of money. People who have been infected with the Nipah virus initially have symptoms like fever, headaches, myalgia (muscle pain), vomiting, and sore throat. This may be followed by neurological symptoms such as neurological signs of acute encephalitis, altered awareness, and dizziness. Additionally, some persons may have acute respiratory distress and serious respiratory issues such as atypical pneumonia. Severe cases might include encephalitis, convulsions, and coma within 24 to 48 hours. When the illness is acute or convalescent, nipah virus infection can be identified by a clinical history. Creating an animal health/wildlife surveillance system is necessary since fruit bats and/or pigs have been engaged in Nipah virus outbreaks. The only approach to lessen or prevent infection in humans in the absence of a vaccine is to increase public knowledge of the risk factors and inform people of the steps they may take to limit their exposure to the Nipah virus. Healthcare professionals should always follow the recommended infection control precautions while caring for patients who have an infection that has been suspected or confirmed or when handling specimens from those patients.

Manisha Verma, Assistant Professor, CIP, Raipur

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ACHIEVEMENTS

Paper Publication

1. **Dr. Trilochan Satapathy** published a paper titled “**Novel Targets and Drug Delivery System in the Treatment of Postoperative Pain: Recent Studies and Clinical Advancement**” in “**Current Drug Targets**”, 2023 Nov 30. along with Dr. Ravindra Kumar Pandey, Dr. Shiv Shankar Shukla, Dr. Bina Gidwani, Mr. Shiv Kumar Bhardwaj and Mr. G. Singh.
2. **Dr. Shiv Shankar Shukla** published a paper titled “**Chemistry, Synthesis, Biological Properties and Analytical Methods for the estimation of Tolbutamide: an updated review**”, in “**Current molecular medicine**”, along with Dr. Ravindra Kumar Pandey, Dr. Bina Gidwani, and Ms. Manisha Verma.
3. **Dr. Shiv Shankar Shukla** published a paper titled “**Analytical Review on Ayurvedic Polyherbal Formulations: Churnas**”, in “**Journal of Xi'an University of Architecture & Technology**”, 2023, XV (11), 86-104 along with, Dr. Ravindra Kumar Pandey, Dr. Bina Gidwani, Dr. Neha Dubey, and Mr. Vikash Sharma.
4. **Dr. S.P. Rao** published a paper titled “**Evaluation of Herbal Extracts of *Momordica Charantia* and Fenugreek Seeds for Management of Diabetes**” in **Journal of Advanced Zoology**. Vol. 44, Issue, S-3, October 2023, along with Prasanthi Samathoti, Suresh V. Chinni, V. Kishor Kumar, Mr. V. Venkateswaran, Ramenani Hari Babu, Anant S. Deshpande, and Ramenani Hari Babu.
5. **Dr. Bina Gidwani** published a paper titled “**Optimization of variables and assessment of *in-vitro* and *in-vivo* antihyperlipidemic activity of Eudragit RS nanoparticles containing Simvastatin**” in journal “**Particology**”, December 2023, along with Dr. Vishal Jain, , Dr. Ravindra Kumar Pandey , Dr. Shiv Shankar Shukla, Dr. Amber Vyas, and Ms. Veenu Joshi.
6. **Dr. Bina Gidwani** published a paper titled “**An overview on molecular biology and herbal treatment for leptospirosis**” in “**Journal for Basic Sciences**”, October 2023, 23(11), 195-209, along with Dr. Ravindra Kumar Pandey, Dr. Shiv Shankar Shukla, Dr. Neha Dubey, Mr. Sagar Sahu, Mr. Rahul Goswami, Mr. Mahendra Sahu and Ms. Vedika Vaishnav.
7. **Dr. Bina Gidwani** published a paper titled “**Monkeypox: Emergence of newer menace implicating global health**”, in “**Journal for Basic Sciences**” Volume 23, Issue 11, 2023 along with, Dr. Deependra Singh, Dr. Manju Rawat Singh, Dr. Nagendra Singh Chauhan, Madhulika Pradhan. and Krishna Yadav.
8. **Dr. Rajnikant Panik** published a paper titled “**Formulation and optimization of Retapamulin loaded PLGA nanoparticles for burn wounds**”, in “**Journal of Advanced Zoology**”, 2023, 44 (2), 373- 402 along with, Dr. Deependra Singh, Dr. Manju Rawat Singh, Dr. Sunil Kumar Kadiri, Dr. Prashant Tiwari, Dr. Jitendra Yadav, Dr. Prabhat Kumar, V. Anitha Kumari, N. Silpa, R. Venu Priya, and P. Bharat Ratna Kumar.

Patent Publication

1. **Dr. Ravindra Kumar Pandey** has received, UK Design grant, with number: 6324481 on 17 November 2023, entitled “Extraction device for bioactives” along with Dr. Shiv Shankar Shukla, Dr. Beena Gidwani and Dr. Neha Dubey.
2. **Dr. S. P. Rao** has received, Indian Patent grant, with number: 393247-001 on 21 August 2023, entitled “Device for detection of active constituents from medicinal plants” along with Dr. Munesh Mani, Shailju Gulshan Gurnani, Dr. Gulshan Ashok Gurnani, Dr. Kapil Agrawal, Dr. Atul Baravkar, Dr. Surada Prakash Rao, Avinash Tupe, Sharad Kumar Tripathi, Dr. Nitin Narayan Hire and Ganesh Ramchandra Phadtare.
3. **Dr. S. P. Rao** have received, Indian Patent grant, with number: 390544-001 on 18 July 2023, entitled “Autoclave for ultra-clean sterilization in pharmaceutical laboratories” along with Dr. Shaveta Ahalwat, Dr. Surada Prakash Rao, Dr. Manchineni Prasada Rao, Dr. Attuluri Venkata Badarinath, Dr. Ashish Majumdar, Dr. Sanjaykumar, Shankarlal Patel, Mr. Yash Vishnubhai Patel, Vaishali Madhukar Vaidya, Ms. Apexaben Minesh Shah, Minakshi and Abhishek Singh.
4. **Mr. Rahul Goswami** have received, UK Design Patent grant, with Design number: 6302569 on 30 August 2023, entitled “Automated Z-Maze Apparatus For Detecting Rodent Behaviors” along with Dr. Achal Mishra, Dr. Alok Singh Thakur, Dr. Dhansay Dewangan, Dr. Rakesh Tirkey, Dr. Suman Shrivastava, Dr. Saurabh Shrivastava, Ms. Swapnil Deshmukh, Ms. Anju Daharia and **Mr. Mahendra Kumar Sahu**.
5. **Ms. Neha Dubey** have received, Indian Design Patent, entitled “Formulation of Poly herbal Lozenges for Mouth Ulcers and Method of Preparation Thereof” with design number: 202321028794 A on 02 May 2023, along with Dr. Sanjay Kumar Gupta, Astha Verma, Dr. Nikita Verma, Bhushan Muley, and Vinita Goti.

Award

- **Ms. Monika Bhairam** was awarded with **Doctor of Philosophy (Ph. D)**. The title of her research work was “**Development of Nanocarrier Mediated Delivery System to Enhance Solubility of Some Poorly Soluble Drugs**”.

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New Drug Approved in 2023

Fruzaqla

Company:	Takeda Pharmaceutical Company Limited.
Approval Status:	Approved 08/11/2023
Specific Treatments:	To treat refractory, metastatic colorectal cancer
Dosage Form:	Capsule

FRUZAQLA is basically fruquintinib, a kinase inhibitor.

Mechanism of Action

Fruzaqla (fruquintinib) is a small molecule kinase inhibitor of vascular endothelial growth factor receptors (VEGFR)-1, -2, and -3 with IC50 values of 33, 35, and 0.5 nM, respectively. It is used for the treatment of adult patients with metastatic colorectal cancer (mCRC) who have been previously treated with fluoropyrimidine-, oxaliplatin-, and irinotecan-based chemotherapy, an anti-VEGF therapy, and, if RAS wild-type and medically appropriate, an anti-EGFR therapy

Side Effects

Hypertension, palmar-plantar erythrodysesthesia, proteinuria, dysphonia, abdominal pain, diarrhea, and asthenia

Inspiring Quotes

- *Look at the sky. We are not alone. The whole universe is friendly to us and conspires only to give the best to those who dream and work."*
- *If you want to shine like a sun, first burn like a sun.*
- *To succeed in your mission, you must have single-minded devotion to your goal.*
- *If four things are followed - having a great aim, acquiring knowledge, hard work, and perseverance - then anything can be achieved.*
- *Climbing to the top demands strength, whether it is to the top of Mount Everest or to the top of your career.*
- *Don't take rest after your first victory because if you fail in second, more lips are waiting to say that your first victory was just luck.*
- *To become 'unique,' the challenge is to fight the hardest battle which anyone can imagine until you reach your destination.*
- *Never stop fighting until you arrive at your destined place - the unique you. Have an aim in life, continuously acquire knowledge, work hard, and have perseverance to realise the great life.*

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GPAT Quiz- 24

1. Precursor of Insulin called Proinsulin contain.....amino acid
 - a. 68
 - b. 86
 - c. 79
 - d. 97
2. Oily injection are sterilized by
 - a. Dry heat sterilization
 - b. Tyndallisation
 - c. Autoclaving
 - d. U.V. radiation
3. What quantities of 95 % v/v and 45 % v/v alcohols are to be mixed to make 800 mL of 65 % v/v alcohol?
 - a. 480 ml of 95 % and 320 ml of 45 % alcohol
 - b. 320 ml of 95 % and 480 ml of 45 % alcohol
 - c. 440 ml of 95 % and 360 ml of 45 % alcohol
 - d. 360 ml of 95 % and 440 ml of 45 % alcohol
4. What is the concentration of NaCl required to make 1% solution of cocaine HCl isotonic with blood plasma? Freezing point of 1% w/v solution of NaCl is -0.576°C and freezing point of 1% w/v cocaine HCl is -0.09°C
 - a. 0.746% w/v
 - b. 0.9% w/v
 - c. 0.5% w/v
 - d. 0.373% w/v
5. Thermocouple and thermopile detector used in IR are made up of-
 - a. Bismuth
 - b. Antimony
 - c. A & B both
 - d. None of them
6. The greater the thixotropy, the _____ is the physical stability of suspension-
 - a. Higher
 - b. Lower
 - c. Equal
 - d. No change
7. The Ames test is employed to find out if chemical is ---
 - a. Therapeutic
 - b. Carcinogenic
 - c. Antigenic
 - d. Teratogenic
8. Sterility test for surgical suture require incubation for-
 - a. 3 days
 - b. 21 days
 - c. 10 days
 - d. 14 days
9. Indicate D2 receptor agonist with antiparkinsonian activity:
 - a. Sinemet
 - b. Levodopa
 - c. Bromocriptine
 - d. Selegiline
10. A ganglioblocking drug for hypertension treatment is:
 - a. Hydralazine
 - b. Tubocurarine
 - c. Trimethaphan
 - d. Metoprolol

Answer key Quiz 23: 1.(a) 2. (b) 3.(c) 4.(c) 5.(a) 6.(c) 7.(b) 8.(c) 9.(a) 10.(c)

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Students' Thought



Power of Education

Knowledge is power

Education is the future key

Though you don't get paid by the hour

You give children what they need

So many uneducated children

Turn out to be thugs

Drop out of school then

Wind up on bad drugs

Teachers are more prevalent than parents

In these young lives today

Parents go to work to pay the rent

Teachers teach their children all day

Ms. Suman

B. Pharm 3rd Sem

Thinking Out of the Box

Once upon a time, a merchant named Sam owed a huge sum of money to Tom, a money lender. The time came when the merchant ran out of the last chance given to him to give the money back. Sam had a beautiful daughter who was very affectionate with her father. Tom asked the merchant to give all the money back failing which he will marry his beautiful daughter. Tom was not at all good looking and ill minded and so the merchant was in dilemma. Tom proposed a new condition. There was a mix of black and white pebbles on the ground where they were standing. He will take two pebbles on both hands, one will be white and the other will be black. If the daughter correctly chooses the white pebble, then Tom will write off all the debt and leave the marriage proposal too. But if she chooses the black pebble, he will write off the debt but will marry the daughter. Tom bent down to pick the pebbles from the ground and the daughter noticed that he took black pebbles on both hands. The girl had three choices- to notify the same to her father which may provoke Tom, take the black pebble and sacrifice her life or simply refuse to take the pebble which might land her father into trouble. But what she did totally surprise Tom. She took the pebble from his hand and 'accidentally' the pebble fell off from her hand to ground. She then asked Tom to see which color pebble was left in his hand to identify the color she picked. Tom had no other choice but to show the black color pebble in his hand and set both of them free.

Moral: Sometimes, life offers you situations which not only demands hard work and perseverance but some creative thinking which saves the situation.

Ms. Prachi Jaiswal,
B. Pharm 3rd Sem

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Plants with Health Benefits Oregano(*Origanum vulgare*)

Synonyms: marjoram, wild marjoram, winter sweet.

Oregano is a species of flowering plant in the mint family Lamiaceae.

	
Scientific classification	
Kingdom	<u>Plantae</u>
Order	<u>Lamiales</u>
Family	<u>Lamiaceae</u>
Genus	<u>Origanum</u>
Species	<u>O. vulgare</u>
NUTRITION FACTS PER 100GM	
Energy	371Kcal
Protein	10.42gm
Total fats	7.68g
Carbohydrates	64.99gm
Vitamin A	340IU
Vitamin C	36mg

Morphology: It has purple flowers and spade-shaped, olive-green leaves. It is a perennial, although it is grown as an annual in colder climates, as it often does not survive the winter. Oregano is planted in early spring, the plants being spaced 30 cm (12 in) apart in fairly dry soil, with full sun. It will grow in a pH range between 6.0 (mildly acidic) and 9.0 (strongly alkaline), with a preferred range between 6.0 and 8.0. It prefers a hot, relatively dry climate, but does well in other environments.

Chemical composition: the chemical compounds contributing to the flavour are carvacrol, thymol, limonene, pinene, ocimene, and caryophyllene.

Uses: oregano for centuries in herbal medicine to treat many ailments, including: skins sores, aching muscles, asthma, cramping, diarrhea, indigestion, colds to boost overall health.

Less Known Facts About Traditional Food

Beetroot Raita

Beetroot is of exceptional nutritional value; especially the greens, which are rich in calcium, iron and vitamins A and C. Beet roots, are an excellent source of folic acid and a very good source of fiber, manganese and potassium. Beet root raita is high in fiber, which helps to maintain blood sugar levels. Apart from this, Beetroot is high in potassium, which counteracts the negative effects of salt and also maintains healthy blood pressure levels. It helps control cholesterol, contains no fat and loaded with iron, copper and magnesium as well. It is a treasure of essential vitamins and antioxidants too. Since it is replete with Vitamin C, beetroot can be a valuable addition to your diet for good skin and immunity.

Recipe

To begin making the Beetroot Raita Recipe, first get all the ingredients ready and finely grate the beetroot and keep aside. In a large mixing bowl, add the yogurt, salt, cumin powder, green chillies and grated beetroot. Whisk well to combine. Check the salt and spice levels and adjust to suit your taste. Transfer the raita to a serving bowl. The final step is to make the seasoning. Heat oil in a tadka pan; add the mustard seeds, urad dal and allow it to crackle and the dal to turn golden brown and crisp. Finally stir in the curry leaves and turn off the heat. Pour the seasoning onto the Beetroot Raita and serve.

Nutritional facts (per 100g)	
Energy	349.92kcal
carbohydrates	80.82g
Protein	6.66g
Sodium	19.75mg
Calcium	186.6mg
Iron	13.67
Dietary fibre	3.98g



1. Saturday Activities
2. Republic day celebration
3. Basant Panchami celebration

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