

# “The First Step” Magazine

*an initiative of*  
**Faculty of Pharmacy**



**KALINGA  
UNIVERSITY**  
[www.kalingauniversity.ac.in](http://www.kalingauniversity.ac.in)

**June 2018**

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# Know The University

Kalinga University (KU) is a well reputed State Private University established under State Legislative Act [Chhattisgarh Private University (Establishment and Operation) Act] 2005, Government of Chhattisgarh and recognized by the UGC under section 2(f) of UGC Act 1956, having a campus spread over more than 35 acres of land with world class infrastructure. The University offers Diploma, Under Graduate, Post-Graduate and Research Programs under the Faculty of Engineering and Technology, Pharmacy, Commerce & Management, Computer Sciences, Law, Education, Arts & Humanities, Fashion & Interior Design, Library Science, Journalism & Mass Communication and Bio-Technology.



## **“An Elite academic experience at KU that pushes the boundaries of Knowledge.”**

KU is equipped with lots of modern laboratories with unique and sophisticated instruments. The primary purpose of Kalinga University is to provide a learning environment in which faculty, staff and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will ensure the survival of future generations and improve the quality of life for all. More than 5000 National and 250 students from foreign Countries: Afghanistan, Bangladesh, Guinea, Nepal, Nigeria, South Korea, and Uganda are studying and residing in the Campus.



# Know The University Authorities



Dr. Rajiv Kumar  
Chairman - Sponsoring Body



Dr. Sandeep Arora  
Chancellor



Dr. S. Chandrappa  
Vice Chancellor



Dr. Sandeep Gandhi  
Registrar



Mr. Rahul Mishra  
Incharge Academic Affairs

# Know The Prime Faculties

Pharmacy department in Kalinga University started in the session 2016-17. Dr. Anand Mahalwar is the Head of the Department. He has more than 13 years of teaching and academic experience. Many more experienced faculty members are associated with the department.



Dr. Anand Mahalwar  
M. Pharm, Ph.D.  
Professor & Principal



Dr. Bibekananda Meher  
M. Pharm, Ph.D.  
Associate Professor



Dr. Shilpi Srivastava  
M.Sc., Ph.D.  
(Chemistry) Professor



Dr. Asha Ambhaikar  
M.Tech., Ph.D. (CSE)  
Professor



Dr. M. S. Mishra  
M.A., Ph.D. (English)  
Professor



Mr. Dinesh Kumar Sharma  
M. Pharm (Pharm.Tech.)  
Assistant Professor



Ms. Shilpa Vaishnava  
M. Pharm, (P'cognosy)  
Assistant Professor



Mr. Hitesh Kumar  
M. Pharm (Pharm. Chem.)  
Assistant Professor



Mr. Ajay Singh Sarthi  
M. Pharm (Pharm. Chem.)  
Assistant Professor



Ms. Hemlata Dewangan  
M. Pharm (P'cology)  
Assistant Professor



Ms. Priyanka Gupta  
M.Sc., (Chemistry)  
Assistant Professor



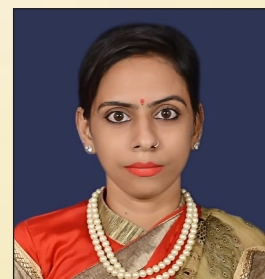
Ms. Priyanka Sahu  
M.Sc. (Mathematics)  
Assistant Professor



Ms. Priyanka Singh  
M.Sc. (Mathematics)  
Assistant Professor



Mr. Bhojraj Rajput  
M.Sc. (Mathematics)  
Assistant Professor



Ms. Sandhya Verma  
M.Sc. (Zoology)  
Assistant Professor



Mr. Rahul Chawda  
M.Sc., Ph.D. (Pers)  
Assistant Professor



Mr. Mithlesh Prajapati  
M.C.A., M. Phil (CSE)  
Assistant Professor



Ms. Sana Tak  
M. Tech (CSE)  
Assistant Professor



Mr. Manish Verma  
M.A., M. Phil (English)  
Assistant Professor



Mr. Arindam Patra  
M.A., M. Phil (English)  
Assistant Professor

# Know The Prime Faculties

## Dr. Anand Mahalwar

Dr. Anand Mahalwar is presently working as Professor & Principal in Kalinga University- Faculty of Pharmacy. Dr. Mahalwar has more than 13 years of teaching and research experience. He did his M. Pharmacy (Pharmaceutics) From Dr. H. S. Gour (Central) University, Sagar (M.P.) in 2010 and Ph.D. from Suresh Gyan Vihar University, Jaipur, India in 2013. His research specialization is "Develop and Compare the Targeting Potential of Different Ligands Present in Nanoparticles for Targeting Solid Tumor." He is actively involved in various science oriented events. Dr. Mahalwar has 7 research articles in reputed National and International Journals.

### Selected Articles:

1. "Evaluation of effect of ligand on cellular internalization: A comparative study of Nanoparticles & Multifunctional Nanoparticles on MDA-MB-231 cells." Published in Current Nano science, Volume 8 Issue 3, Page No- 432-440 (1.87 Impact index).
2. "Evaluation of receptor mediated endocytosis on cellular internalization: A comparative study of Pegylated Nano particles and folate anchored pegylated Nanoparticles on MDA-MB- 231 cells". International Journal of Biological & Pharmaceutical Research (Pharma Intelligence Publisher) 2012; 3 (3): 431-443.

## Ms. Shilpa Vaishnava

Ms. Shilpa Vaishnava has more than 4 years research experience from renowned institutions. Ms. Vaishnava did her Post Graduation (M. Pharm- Pharmacognosy) from JSS University, Mysore, India in 2011. She is perusing her Doctoral degree (Ph.D.) from the Guru Ghasidas Central University, Bilaspur, India. She joined Kalinga University on 12<sup>th</sup> September 2017. Her specialization is in "Isolation and standardization of herbal drugs for Anti-sickling activity". She did Phytochemicals with diverse biological activity viz. antioxidants activity using goat mitochondria and sickled Red blood cells, antisickling activity study using Haemolysis, Emmle test and osmotic fragility test. Isolation and characterization of bioactive natural products using HPLC, NMR and Mass spectroscopy. Natural compounds were separated by using flash chromatography and compounds purity was checked by spectroscopy methods. Structure elucidation of the isolated compounds was also done by modern spectroscopic techniques which include <sup>1</sup>H NMR and <sup>13</sup>C-NMR, LCMS and IR.

### Selected Articles:

- 1 . Nishant Manglani, Shilpa Vaishnava, 2012. Journal of Pharm science and Innovation1 (1): 35-40.

# Know The Prime Faculties

## Mr. Hitesh Kumar

Mr. Hitesh Kumar did his M. Pharm (Pharmaceutical Chemistry) in 2017 from Central University of Rajasthan, Ajmer, India. He has expertise on Bruker 500MHz NMR, High performance liquid chromatography (HPLC), Perkins Elmer FT- Infrared Spectroscopy (IR), Carry series 100 UV-Visible Spectroscopy evaporation (R-215 Buchi) instruments. He has 4 international Publications (SCI indexed) in his record.

Selected Publication:

1. "Intranasal Drug Delivery: A Non-Invasive Approach for the Better Delivery of Neurotherapeutics." Pharm Nanotechnol. 2017.
2. "Galactose Anchored Gelatin Nanoparticles for Primaquine Delivery and Improved Pharmacokinetics: A Biodegradable and Safe Approach for Effective Anti-plasmodial Activity against P. falciparum 3D7 and in vivo Hepatocytes Targeting." Mol Pharm. 14(10). 2017.

Paper Presented:

Participated in International Conference "Frontiers in Pharmaceutical Science & Research with theme "Advances in Development, Delivery Systems and Clinical Monitoring of Drugs" organized by Columbia Institute of Pharmacy, Raipur on 23-24<sup>th</sup> September 2017.

## Ms. Hemlata Dewangan

Ms. Hemlata Dewangan did her M.Pharm (Pharmacology) in the year 2017 from Chhattisgarh Swami Vivekananda Technical University, Bhilai, India. She has been well trained in Animal handling during her PG studies. The area of interest of Ms. Dewangan is "Drug delivery, Pharmacokinetics and Clinical Research." Apart from this she is also an expert in Human Anatomy and Physiology, Pharmacology, Pharmaceutics, Pharmaceutical Analysis and Pharmacognosy subjects.

Paper Presented:

Poster presented in two days National Conference sponsored by Indian Council of Medical Research (ICMR, New Delhi) "On topic Respects and Avenues for in Vivo Studies on Animal Models and Human Volunteers for Treatment of Oral Cancer "Organized by Shri Rawatpura Sarkar Institute of Pharmacy, held on 5-6th April, 2017. Participated in Workshop on "Analytical Techniques for Phyto-chemicals" Organized by Columbia Institute of pharmacy Raipur, held on 9<sup>th</sup> April 2015

# Know The Prime Faculties

## Mr. Ajay Singh Sarthi

Mr. Ajay Singh Sarthi has completed his M. Pharm (Pharmaceutical Chemistry) in the year 2017 from Guru Ghasidas Central University, Bilaspur, India. He is well experienced to handle UV Spectrophotometer (Double beam), HPLC, HPTLC, FTIR, Disintegrating Apparatus (programmable), Probe Sonicator, Double Distillation apparatus, Ostwald Viscometer, Colorimeter and Dissolution apparatus. He has actively participated in various events and presentation during his PG studies.

Paper Presented:

1. Participated in the National seminar on 'Advances and Avenues in Novel Drug Delivery System for Therapeutically Effective Plant Actives" sponsored by AICTE at University Institute of Pharmacy, Raipur.
2. Participated in the National seminar on 'Prospects and Avenues for in-vivo Studies on Animal Models and Human Volunteers for Treatment of Oral Cancer" sponsored by ICMR at Shri Rawatpura Sarkar Institute of Pharmacy, Raipur on 5-6th April, 2017.

## Mr. Dinesh Kumar

Mr. Dinesh Kumar Sharma has done his M. Pharm (Pharmaceutical Technology) in the year 2012 from Jeypore College of Pharmacy, Jeypore, India. He has completed his industrial training during his graduation studies and post-graduation studies. He has also worked as Trainee Research Associate in Nectar Life sciences Ltd, Chandigarh, Punjab. Mr. Sharma has 4.5 years of total research experience from industries and from National Centre for Natural Resources (NCNR), PRSU, Raipur. He is well experienced with the sophisticated instruments used in pharmacy field like HPLC, FTIR, UV Spectroscopy, etc.

Selected Publication:

1. "Taste Masking Techniques: An Updated Review", Indian Journal of Novel Drug Delivery, 4(3), Jul-Sep, 2012, 202-209, ISSN 0975-5500.
2. A Review on "Drug Designing, Methods, Its Applications and Prospects", International Journal of Pharmaceutical Research and Development (IJPRD), Vol 5(05); July-2013 (015-030)

# Events Conducted by Department

## 1. Celebrated "PHARMACIST DAY" and started new innovative counter "Know Your Medicine".

Kalinga University's Pharmacy Department, organized two days free health camp on 25<sup>th</sup> & 26<sup>th</sup> September, 2016. On 25<sup>th</sup> September health camp was organized under the flagship of "PHARMACIST DAY" in Manas Bhavan, Bajrang Chowk, Riko village. Guest of Honour Dr. Shailendra Saraf, Director, Institute of Pharmacy, Pt. Ravi Shanker Shukla University, Raipur & Chief Guest Dr. Sandeep Gandhi, Registrar, Kalinga University, inaugurated the camp. Dr. Shailendra Saraf and specially invited doctors, Dr. Gouri Shanker Mahalwar (Retired CAMO Dantewada) & Dr. Shubham Thakur (BAMS) were welcomed by presenting mementos, shawl & shreefal by Dr. Sandeep Gandhi & Dr. Anand Mahalwar (Principal, Pharmacy Department, Kalinga University). Invited doctors rendered their services at the camp where more than 100 patients with different ailments were registered. All the consulted patients were distributed free medicines related to their disease. Medicines were sponsored by different renowned Pharmaceutical companies like, Dr. Reddy's Laboratories, Glenmark Pharmaceuticals, Indoco Remedies, RPG life science etc. The camp was concluded by giving thanks to the villagers of Riko by Dr. Anand Mahalwar.

On 26<sup>th</sup> September another health camp followed by patient counselling centre was organized by Pharmacy Department in Community Health Centre –Rajim (Gariyabandh). The theme of the camp was "Know Your Medicine". Dr. Virendra Hirodiya (Block Medical Officer - Community Health Centre, Rajim, Gariyabandh) inaugurated the program. Dr. Anand Mahalwar presented a memento as a token of respect to Dr. Virendra Hirodiya. More than 80 patients were



consulted with the pharmacists regarding their disease and medicines. Detailed knowledge about dosage forms, side effects, administrative procedures, special precautions were explained by the budding pharmacists of KU students to the patients. During the session free medicines were also distributed to the concerned patients. A general awareness regarding prevention of diseases has been discussed by Dr. Anand Mahalwar. Students of Pharmacy department, acquired different clinical knowledge like, Patient counselling techniques, conduction of awareness programs and, Patient's history taking procedures by attending the camp.

# Events Conducted by Department

## 2. National Pharmacy Week

Pharmacy Department, celebrated National Pharmacy Week (NPW) from 20-26<sup>th</sup> Nov. 2016. On first day of National Pharmacy Week, Department invited Dr. Azajuddin and Dr. Achal Mishra as special guest, for delivering the guest lectures to the students. Dr. Azajuddin, Vice-Principal, Rungta College of Pharmaceutical Science and Research, Bhilai & Dr. Achal Mishra, Associate Professor, Shankaracharya College of Pharmacy, Bhilai delivered their lectures to the students. Dr. Anand Mahalwar also explained about "Novel Drug Delivery System & Their Effect on Human Life".

In continuation of NPW celebration, third guest lecture was delivered by Dr. Dipendra Singh, Assistant Professor, Pandit Ravishankar Shukla University, Raipur. He delivered his presentation on "Biotechnology & Its Utility in Life". All the students of Pharmacy department as well Biotechnology department got apprised about the latest techniques which are presently in practice. They also discussed how biotechnology can simplify the need of the human beings, with latest technologies.



## 3. World Diabetes Day

Pharmacy Department of Kalinga University, organized free health check-up and blood glucose level check-up camp on the occasion of World Diabetes Day on 12<sup>th</sup> December 2016 at Khalsa School, Raipur. The blood glucose check-up was sponsored by the Dr. Lal's Pathology Lab; Raipur. Around 300 people were examined for blood glucose level by glucometer. This camp was organised in collaboration with Lions Club Raipur. Routine tests were also performed by Doctors/technician who came from Dr. Lal's Pathology lab, Raipur.



## Events Conducted by Department

### 4. Meeting with Vice-President of PCI, Prof. Shailendra Saraf



Dr. Sandeep Gandhi (Registrar, Kalinga University) and Dr. Anand Mahalwar (Principal, Pharmacy Department, Kalinga University) presented bouquet as a token of love to the newly elected Vice-President of Pharmacy Council of India, New Delhi, Professor, Shailendra Saraf. Dr. Gandhi congratulated Prof. Saraf on behalf of Kalinga University. Prof. Saraf quoted that now the views of Chhattisgarh State will be recognised in National level. Chhattisgarh state will now play a major role in policy making and its implementation point.

### 5. Induction of New Students 2017

Faculty of Pharmacy, Kalinga University organized an induction program for the new students of B. Pharmacy & D. Pharmacy course for session 2017-18. Few senior students of B. Pharmacy were also invited to welcome their juniors with love & friendship. 54 new students were present in Induction program. The program started with briefing about University by Dr. Sandeep Gandhi (Registrar, Kalinga University), discussion about the course, curriculum, norms & regulations were discussed by Dr. Anand Mahalwar (Principal, Faculty of Pharmacy, Kalinga University). Informative speech was also delivered by Dr. R. Shridhar (HOD, Commerce & Management), and Dr. Shilpi Srivastava (HOD, Department of Applied Sciences). Students enjoyed the event and gave thanks to the University for organizing such events.

## Events Conducted by Department

### 6. World Pharmacist Day 2017

Department of Pharmacy, Kalinga University celebrated World Pharmacy Day on 25<sup>th</sup> September 2017 by organizing different programs. Program started with the plantation of medicinal plants in the University campus. More than 100 medicinal plants were planted by students and faculties. After that an interactive session was conducted by invited Chief Guest Dr. Sunil Kumar Dubey (Associate Professor, BITS Pilani Campus, Rajasthan) in seminar hall on topic “Future Challenges in Pharmacy”. Dr Dubey explained different difficulties and their solutions in Research and in Academic area too. In the same sequence Dr. Anand Mahalwar, also shared his experience in the related field. The execution of session was handled by Ms. Shilpa Vaishnaw & Mr. Ajay Kumar Sarthi (Assistant Professor, Pharmacy Department, Kalinga University). In the last event of celebration one Free Health Camp was organized by Pharmacy Department in Uparwara Village. More than 50 patients were consulted in this camp and availed free distribution of medicines. Distribution of free medicines was sponsored by various pharmaceutical companies like, Ranbaxy Laboratories, Glenmark Laboratories, RPG Life Sciences, and Indoco Remedies.



# Events Conducted by Department

## 7. National Pharmacy Week 2017

Kalinga University's Pharmacy Department celebrated "National Pharmacy Week" from 20<sup>th</sup> and 21<sup>st</sup> November 2017. The celebration was a part of 56<sup>th</sup> National Pharmacy week celebration. The theme selected for this year was "Know Your Medicines: Ask Your Pharmacist". The main objective of Pharmacy week celebration was to create awareness among the public, other healthcare providers and the authorities about the theme and role of pharmacist in general. All the students actively participated in the celebrations. On the first day an inauguration ceremony was started by Dr. Shailendra Saraf, Vice President of Pharmacy Council of India (PCI), New Delhi, followed by his speech. He focussed "Responsibilities of Pharmacist in India and Abroad" specially during his speech.

After that few guest lectures were also conducted, in which Dr. Chanchal Deep Kaur, Principal, Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari presented a lecture on the topic "Novel Targeted Drug Delivery System". She also discussed the importance of targeted drug delivery system based research for the betterment of human beings. In continuation of this Dr. Trilochan Satpathy, HOD of Pharmacology Department, Columbia Institute of Pharmacy, Raipur, has presented a practical demonstration of different animals for their use in preclinical studies and for selection of route of drug administration in animals. Different other activities were also performed during the Pharmacy week like labelling competition and poster presentations. On the valedictory day of National Pharmacy Week, Pharmacy Department of Kalinga University organized free health camp at two different places. 1<sup>st</sup> camp was organized in Parsada Village, it was inaugurated jointly by the Sarpanch of the village Mrs. Shilendra Jogadhe and Dr. Anand Mahalwar. More than 100 patients were consulted and availed free medicines in the camp. The camp is sponsored by different companies' like, Indoco Remedies Pvt Ltd, GSK Formulations, Glanmark Pharmaceuticals, RPG Life Science, and Dr. Reddy Laboratories.



2<sup>nd</sup> camp was organized in Mahatma Vidhya Peeth Purva Madhyamik School, Palaud Village. Camp was started by the Principal of the School Mr. Laxmi Narayan Sinha and Mr. Ajay Singh Sarthi Assist. Professor of Pharmacy Department. Approximately 250 students of different age group were consulted and their Body Mass Index was determined. The students which were found obese were advised for diet therapy and the students which were found malnourished were advised for healthy diet. One specially prepared diet chart was provided free to each student.

# Events Conducted by Department

## 8. National Seminar 2018

**Kalinga University-Faculty of Pharmacy has organized two-days National Seminar sponsored by Chhattisgarh Council of Science and Technology (CCOST) on the topic "Pharmaceutical Industry in Chhattisgarh: Needs and Opportunities".**

The inauguration of seminar was done with Lamp lighting and Saraswati Vandana followed by the Greetings of Chief Guest Prof. (Dr.) Shailendra Saraf, Vice President, Pharmacy Council of India, New Delhi and the Guest of Honour Dr. K. Subramaniam, Director General of Chhattisgarh Council of Science and Technology (CCOST), Raipur with bouquet. In his inaugural speech, Dr. Saraf welcomed all delegates and said that the drug industries are playing significant contribution in the economic development of country. Dr. Saraf highlighted the resources available in Chhattisgarh and their National level discussion (session) plays a vital role in the development of state. Dr. Subramaniam emphasized on the coverage of all aspects so that everyone can become Entrepreneur. In his speech he also discussed about industrialization and biodiversity. He specially pointed that Industrialization should not destroy natural resources, Dr. Anand Mahalwar, Convener & Principal, Faculty of Pharmacy and Dr. Sandeep Gandhi, Registrar, Kalinga University also addressed the delegates and started the technical session of National seminar.



**In the first technical session,** Mr. Saurabh Gupta, General Manager, Medley Pharmaceutical Limited, Mumbai delivered his lecture on a topic "Pharmaceutical Industry in Chhattisgarh: Needs and Opportunities". He shared the comparative facts and facilities given by Chhattisgarh and other states. He reiterated various possibilities/ facilities like free land availability, free electricity for the setup of pharmaceutical industries in Chhattisgarh state. He also discussed working culture of industries and their importance for entrepreneurship development. He focused different mandatory parameters required for the establishment of pharmaceutical industry.

**In the second technical session,** Dr. Vikas Chandrakar, Managing Director, KV Clinical Research Services, Raipur delivered his lecture on a rising issue of “Clinical Research”. Dr. Chandrakar shared the comparison of different facilities given by Chhattisgarh versus other states. He said, “India has been recognized as a hub for Clinical Research, but till date Chhattisgarh is far behind to promote it”. Dr. Chandrakar discussed various economic earning sources of state through Clinical Research. As per Dr. Chandrakar, Clinical Research can also help the state to become more competent with other state in the field of medical sciences.

**Third technical session** was carried out by Dr. Devendra Dewangan, Plant Head, Cipla Pharmaceutical Limited, Indore. In which he described the usefulness of “Good Manufacturing Practices and its Importance”.

Dr. Dewangan elaborated role of quality control and quality assurance deeply. He also said that each industry is dependent on quality assurance only, if quality assurance fails then the existence of brand will also be affected. Dr. Dewangan emphasized on inclusion of more contents on quality control and quality assurance in the syllabus of Pharmacy course.

**In the fourth technical session,** Mr. D. L. Sharma, Managing Director, Omatek Laboratories Pvt. Ltd. Bhopal shared his life experience with his presentation “Industrial Journey of Omatek Laboratories”. In this he shared how he established Omatek Laboratories.

**The fifth technical session** was delivered by Dr. Amit Roy, Principal, Columbia Institute of Pharmacy, Raipur on topic “Value Addition of Herbal Products for Entrepreneurship”. Dr. Roy addressed in his speech that by the use of herbal formulation one can easily become entrepreneur. Today lots of competent chemical constituents are being isolated from indigenous drugs which are potent for different fatal disease like, Cancer, AIDS, etc. Presently the direction of research is centralized in Phytochemicals, but still India is far behind from present scenario. The availability of unrecorded medicinal plants is numerous in Chhattisgarh, it only needs attraction of researcher. The tribal areas of Chhattisgarh are still using the handmade formulation of herbs and it is noted that their formulation are much more effective than marketed products. So their outcome is a matter of research for researchers.



**In the sixth technical session,** Dr. D.K. Tripathi, Principal, Rungta College of Pharmaceutical Sciences and Research, Bhilai, delivered his lecture on “Academic and Industrial Parameters”. He shared his personal experiences and said that both the industrial criteria and the academic criteria are different and the students should emphasize on study according to the industrial criteria. Dr. Tripathi said that the absence of the pharmaceutical industries in Chhattisgarh is an obstacle for the industrial exposure to the students of Chhattisgarh. He emphasized the formation of Industry-Institute interaction cell for updating of knowledge of faculty and students.

**At the end of first day program** vote of thanks was given by Dr. Chanchal Deep Kaur, Principal, Shri Rawatpura Sarkar Institution of Pharmacy, Kumhari. She said that, everybody should need to update themselves regularly to remain in competitive environment. At the conclusion of the first day, the Principal, Vice-Principal, Faculty and students of various Institutes were present. On successful completion of the first day seminar. The Chairman, Dr. Rajiv Kumar, Chancellor, Dr. Sandeep Arora and Registrar, Dr. Sandeep Gandhi appreciated the efforts of pharmacy department and given their best wishes for 2<sup>nd</sup> day's event.

**On the second day, first technical session** was started with, Dr. R. Shridhar, Professor, Commerce and Management Department; Kalinga University on topic “Marketing and Branding of Pharmaceutical Products”. Dr. Sridhar explained in a simple way that how Products can be promoted effectively. Dr. Sridhar discussed the rules and criteria required for registration of trade mark also.

**In the Second technical session,** Dr. A. K. Kulshrestha, Deputy Director, Directorate of Ayush, Raipur delivered his lecture on Rules and Criteria for Establishment of AYUSH Industry in Chhattisgarh. Dr. Kulshrestha said that herbal formulations are now in lead role all over the world, but in spite of herbal state we don't have any Pharmaceutical Industries till date. Dr. Kulshrestha discussed different norms & regulatory requirements available in state for opening of AYUSH Industries. Dr, Kulshrestha also discussed quality assurance parameters of Ayush drugs in detail.

**In third technical session,** Dr. Nagendra Singh, Scientific Officer of AYUSH Department, Raipur delivered his lecture on “Regulatory Aspects of Phytopharmaceutical”. Herbs are attractive area in which research is being focused all over the world. Due to the adverse effects of allopathic drugs, today the world is increasing dependence on herbal formulation. According to Dr. Singh, every medicinal plant has innumerable potent constitutions which are effective against multiple diseases. If these constituents are isolated separately then we can get multiple effective medicines from single plant. If treatment based on Phytopharmaceutical started then the existing treatment cost will become 60% lesser, said by Dr. Singh.

**In the next part of the seminar,** oral and poster presentations were made by participants, in which the total 40 participants took part, the session was judged by Dr. Ram Sahu, Asst. Professor, Columbia Institute of Pharmacy, Raipur, Dr. Nagendra Singh, Dr. R. Shridhar, Dr. Anil Sahu, Assistant Professor, Royal College of Pharmacy, Raipur. Miss Manisha Tandiya B.Pharm students from Rungta College of Pharmaceutical Science & Technology, Bhilai won the first Prize for Best Oral Presentation award for her topic; “Pharmaceutical Industry: Need and Opportunity in Chhattisgarh”. Second Prize was bagged by Dr. Amzad Ali Ansari, who had given the presentation on “Concept of Good Manufacturing in Ayurvedic Pharmaceuticals”. Third prize was given to Mr. Krishna Kumar B.Pharm 2nd sem student, Kalinga University and his topic of presentation was “Problems in Setup of Pharmaceutical Industry in Chhattisgarh”. In the same sequence first prize for best poster presentation was given to Mrs. Ruchita Jaswani, Asst. Professor, Chouksey College of Pharmacy, Bilaspur for topic “A Review on Indian Pharmaceutical Industry: Past, Present and Future”. Second prize was secured by Mr. Krishna Kumar B.Pharm 2nd sem student of Kalinga University for his topic “Opportunities in Clinical Research”. Third Prize was given to Ms. Pooja Pandey B.Pharm 7nd sem student of Royal College of Pharmacy, Raipur. Her poster presentation topic was “Nanophytosomes as an Antioxidant; A Review”. After that the National Seminar ended with Valedictory ceremony done by Dr. Sandeep Gandhi, Registrar of Kalinga University.



After successful completion of two days National seminar, Chairman Dr. Rajiv Kumar, Chancellor Dr. Sandeep Arora and Registrar Dr. Sandeep Gandhi appreciated the efforts of Faculty of Pharmacy for successful completion of National Seminar and advised for continuation of similar activities for betterment of the Country and State. Overall seminar was nicely finished with co-operation of all team members. Every member did their work with perfection and time.

# Events Conducted by Department

## 9. Workshop Attended by the students on “Animal Handling & In-silica Techniques for Research Activities” - Bilaspur

Students of Kalinga University, Faculty of Pharmacy attended one day's workshop on “Animal Handling & In-Silica Techniques for Research Activities: Current scenario at Siddhi Vinayak Institute of Technology & Science, Bilaspur on 14<sup>th</sup> April 2018. In this workshop, the students came to know about Animal experiments. They also got answers of common questions which were always in mind like how to perform animal experiments? How the animals should be handled during the experiments etc.



Dr. Vijay Pal Singh, Deputy Director, Food Safety & Standards Authority of India, New Delhi explained the behaviour pattern of animals (like rabbit, rats etc.) so, as per the behavioural nature of concerned animal, we can design our studies to get best result. In the end of workshop, the participants collected their certificates with warm experiences of workshop. All students and teacher, Mr. Hitesh Kumar expressed their sincere thanks to the management for giving them opportunities to attend the workshop.

# Events Conducted by Department

## 10. 69<sup>th</sup> Indian Pharmaceutical Congress, Chandigarh

Kalinga University, Faculty of Pharmacy always supports the development of skills & knowledge of the students. In continuation of this, Kalinga University sponsored the visit expenses of the B. Pharm 3<sup>rd</sup> Semester students interested to join 69<sup>th</sup> Indian Pharmacy Congress (IPC) held in Chitkara University, Chandigarh on 22-24<sup>th</sup> December 2017.



Indian Pharmaceutical Congress Association (IPCA) is a federation of five National Pharmaceuticals Associations (IPA, IHPA, APTI, IPGA and AIDCOC) and is the apex body of more than 25000 pharmacy professional members representing Pharmaceutical Industry, Quality Control, Quality Assurance, Marketing, Research & Development, Regulatory, Academia and Hospital & Community Pharmacy. The IPCA Organizes IPC every year at various places throughout the country in which professional and academic representatives get together to discuss matters relating to Pharmacy with an aim to project the image of a pharmacist as a health care professional and to create awareness about pharmacy and pharmacy profession amongst the public.

Students of B. Pharmacy 3<sup>rd</sup> semester were benefited to attend the IPC at Chandigarh & understood the contribution of Indian Pharmaceutical Congress Association in the field of development of pharmacy in India. After completion of IPC, Students went to visit the pharmaceutical manufacturing hub, Baddi. They also visited Shimla and Amritsar. In Shimla, students enjoyed the nature and captured the beauty of hills on their cameras as well as in their memories. In Amritsar students visited the famous Golden Temple and India-Pak Wagah Border. Students also expressed their sincere thanks to management for sponsoring this entire tour.



# Events Conducted by Department

## SOME MEMORIES OF THE IPC TRIP, AMRITSAR, 22 - 24<sup>th</sup> DECEMBER 2017



## SOME MEMORIES OF THE IPC TRIP, AMRITSAR, 22 - 24<sup>th</sup> DECEMBER 2017

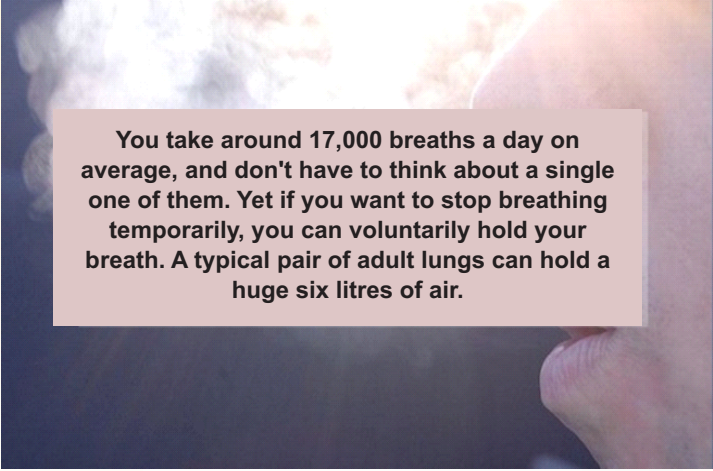


# Article By Faculties

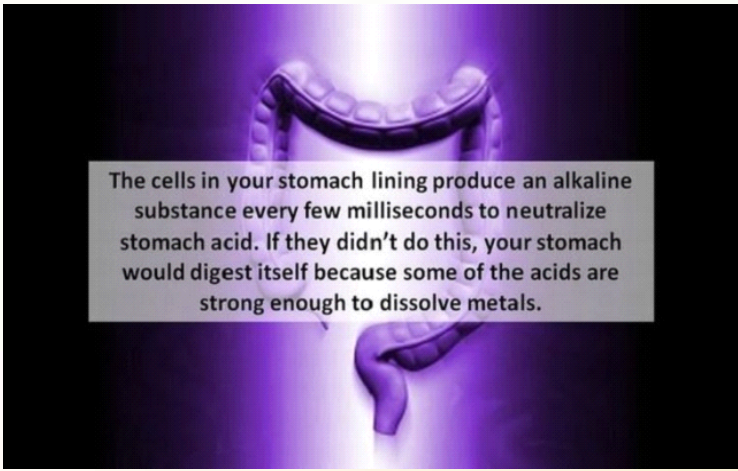


## The Miracle of the Human Body

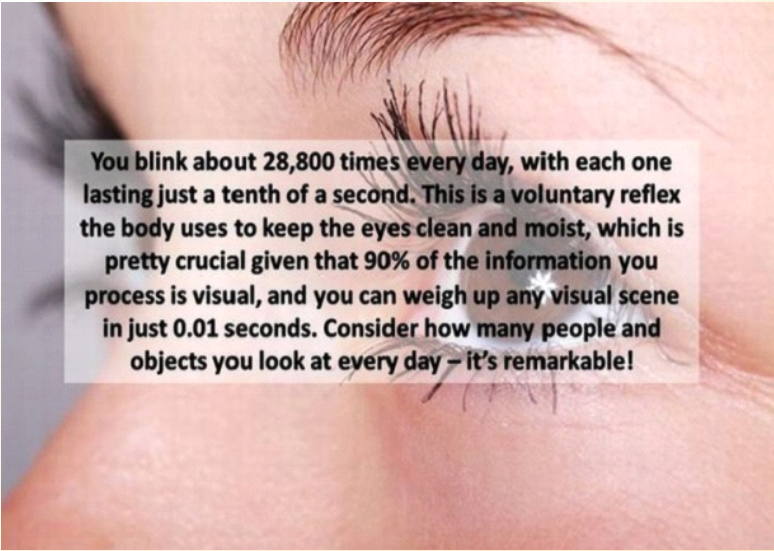
Article by: Dr. Anand Mahalwar



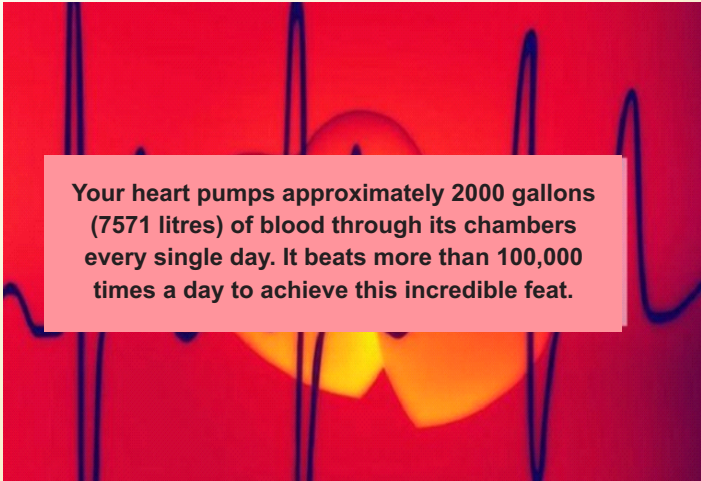
You take around 17,000 breaths a day on average, and don't have to think about a single one of them. Yet if you want to stop breathing temporarily, you can voluntarily hold your breath. A typical pair of adult lungs can hold a huge six litres of air.



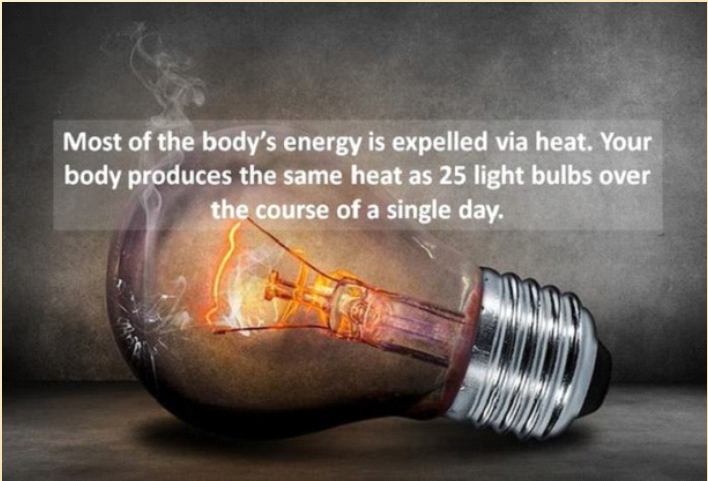
The cells in your stomach lining produce an alkaline substance every few milliseconds to neutralize stomach acid. If they didn't do this, your stomach would digest itself because some of the acids are strong enough to dissolve metals.



You blink about 28,800 times every day, with each one lasting just a tenth of a second. This is a voluntary reflex the body uses to keep the eyes clean and moist, which is pretty crucial given that 90% of the information you process is visual, and you can weigh up any visual scene in just 0.01 seconds. Consider how many people and objects you look at every day – it's remarkable!

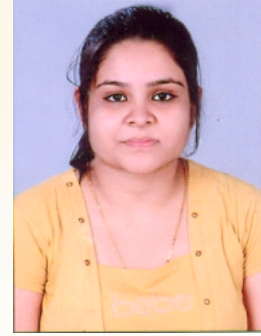


Your heart pumps approximately 2000 gallons (7571 litres) of blood through its chambers every single day. It beats more than 100,000 times a day to achieve this incredible feat.



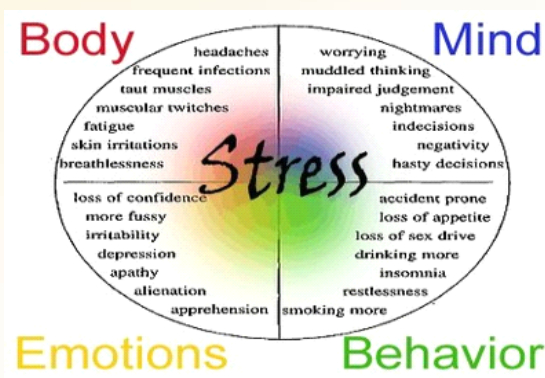
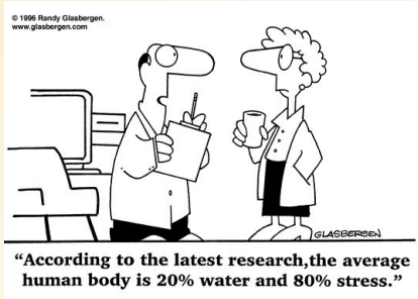
Most of the body's energy is expelled via heat. Your body produces the same heat as 25 light bulbs over the course of a single day.

# Article By Faculties



## Stress Management

Article by: Ms. Shilpa Vaishnava



### What happens when you are stressed?

Stress:- Stress is what you feel when you have to handle more than you are used to. When you are stressed, your body responds as you are in danger. It makes hormones that speed up your heart, make you breathe faster, and give you a burst of energy. This is called the fight-or-flight stress response.

### What can you do about stress?

The good news is that you can learn ways to manage stress. To get stress under control:

1. Find out what is causing stress in your life.
2. Look for ways to reduce the amount of stress in your life.

Learn healthy ways to relieve stress and reduce its harmful effects.

### How can you avoid stress?

Stress is a fact of life for most people. You may not be able to get rid of stress, but you can look for ways to lower it.

You may try some of these ideas:

1. Learn better ways to manage your time. You may reduce stress if you make a schedule. Think about which things are most important, and do them first.
2. Find better ways to cope. Look at how you have been dealing with stress. Be honest about what works and what does not. Think about other things that might work better.
3. Take good care of yourself. Get plenty of rest. Eat well. Don't smoke. Avoid alcohol.

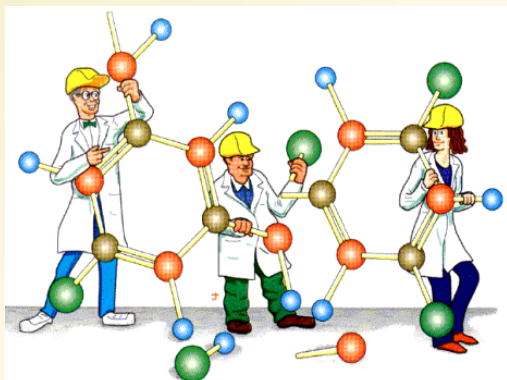
### How can you relieve stress?

The best ways to relieve stress are different for each person. Try some of these ideas to see which one works.



1. Exercise:- Regular exercise is one of the best ways to manage stress. Walking is a great way to get started.
2. Write:- It can help to write about the things that are bothering.
3. Let your feelings out:- Talk, laugh, cry, and express anger when you need to with someone you trust.
4. Do something you enjoy:- A hobby can help you relax. Volunteer work or work that helps others can be a great stress reliever.

## Article By Faculties



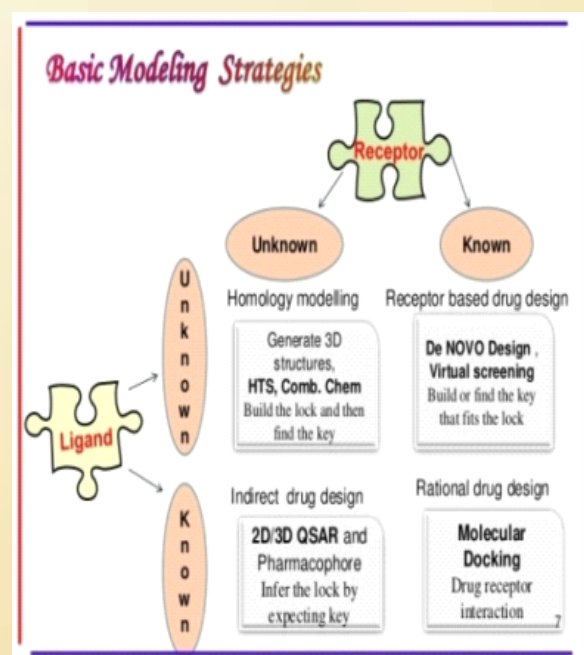
### Molecular Modelling

Article by: Hitesh Kumar

Molecular modelling encompasses all methods, theoretical and computational, used to model or mimic the behaviour of molecules. The methods are used in the fields of computational chemistry, drug design, computational biology and materials science to study molecular systems ranging from small chemical systems to large biological molecules and material assemblies. The simplest calculations can be performed by hand, but inevitably computers are required to perform molecular modelling of any reasonably sized system. The common feature of molecular modelling methods is the atomistic level description of the molecular systems. This may include treating atoms as the smallest individual unit (a molecular mechanics approach), or explicitly modelling electrons of each atom (a quantum chemistry approach). Molecular models typically describe atoms (nucleus and electrons collectively) as point charges with an associated mass. The interactions between neighbouring atoms are described by spring-like interactions (representing chemical bonds) and Van der Waals forces. The Lennard-Jones potential is commonly used to describe the latter. The electrostatic interactions are computed based on Coulomb's law. Atoms are assigned coordinates in Cartesian space or in internal coordinates, and can also be assigned velocities in dynamical simulations. The atomic velocities are related to the temperature of the system, a macroscopic quantity. The collective mathematical expression is termed a potential function and is related to the system internal energy, a thermodynamic quantity equal to the sum of potential and kinetic energies. Methods which minimize the potential energy are termed energy minimization methods (e.g., steepest descent and conjugate gradient), while methods that model the behaviour of the system with propagation of time are termed molecular dynamics.

#### Applications:

Molecular modelling methods are now used routinely to investigate the structure, dynamics, surface properties, and thermodynamics of inorganic, biological, and polymeric systems. The types of biological activity that have been investigated using molecular modelling include protein folding, enzyme catalysis, protein stability, conformational changes associated with biomolecular functions.

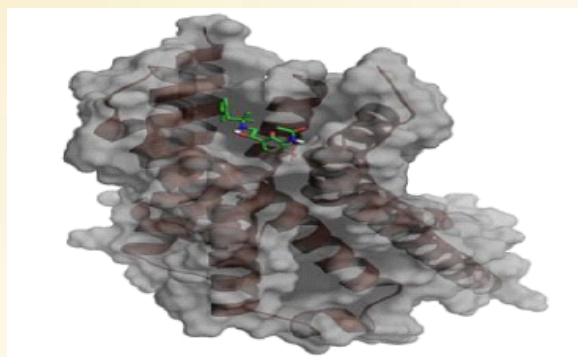


# Article By Faculties



## Molecular Docking

Article by: Mr. Ajay Singh Sarthi



Molecular docking is one of the most frequently used methods in structure-based drug design, due to its ability to predict the binding-conformation of small molecule ligands to the appropriate target binding site. Characterization of the binding behaviour plays an important role in rational design of drugs as well as to elucidate fundamental biochemical processes.

### Docking approaches

Two approaches are particularly popular within the molecular docking community. One approach uses a matching technique that describes the protein and the ligand as complementary surfaces. The second approach simulates the actual docking process in which the ligand-protein pairwise interaction energies are calculated. Both approaches have significant advantages as well as some limitations

### Mechanics of docking

To perform a docking screen, the first requirement is a structure of the protein of interest. Usually the structure has been determined using a biophysical technique such as X-ray crystallography or NMR spectroscopy, but can also derive from homology modelling construction. This protein structure and a database of potential ligands serve as inputs to a docking program. The success of a docking program depends on two components: the search algorithm and the scoring function.

### Shape complementarity

Geometric matching/ shape complementarity methods describe the protein and ligand as a set of features that make them dockable. These features may include molecular surface / complementary surface descriptors. In this case, the receptor's molecular surface is described in terms of its solvent-accessible surface area and the ligand's molecular surface is described in terms of its matching surface description. The complementarity between the two surfaces amounts to the shape matching description that may help finding the complementary pose of docking the target and the ligand molecules. Another approach is to describe the hydrophobic features of the protein using turns in the main chain atoms. Yet another approach is to use a Fourier shape descriptor technique. Whereas the shape complementarity based approaches are typically fast and robust, they cannot usually model the movements or dynamic changes in the ligand/ protein conformations accurately, although recent developments allow these methods to investigate ligand flexibility. Shape complementarity methods can quickly scan through several thousand ligands in a matter of seconds and actually figure out whether they can bind at the protein's active site, and are usually scalable to even protein-protein interactions. They are also much more amenable to pharmacophore based approaches, since they use geometric descriptions of the ligands to find optimal binding.

# Article By Faculties

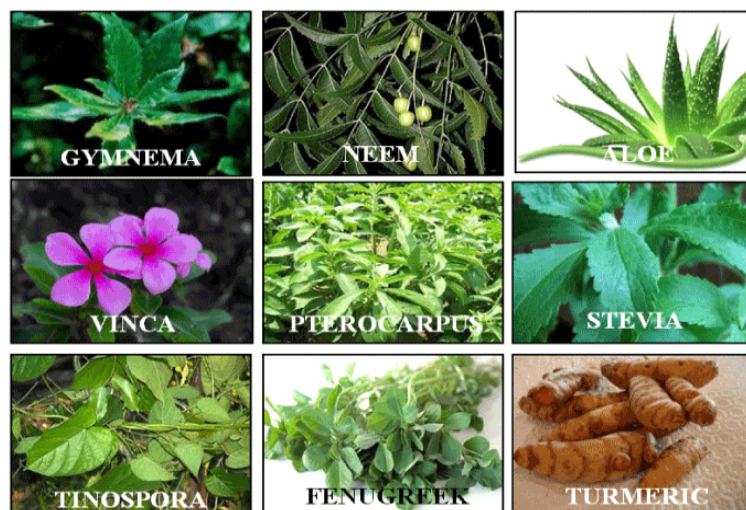
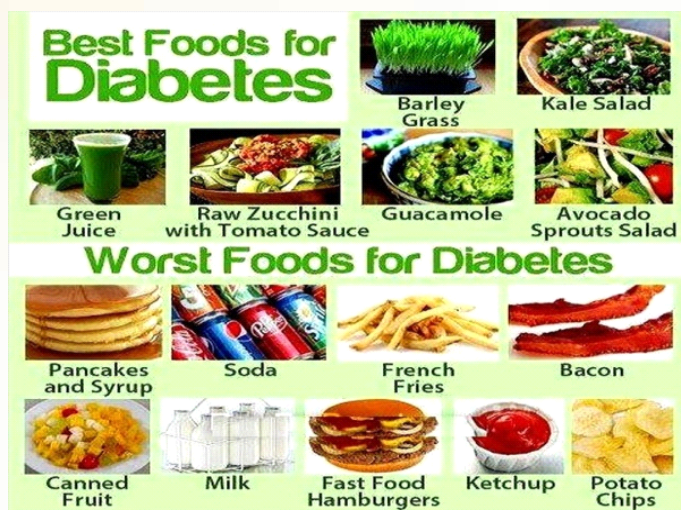


## Diabetes Mellitus

Article by: Ms. Hemlata Dewangan

Diabetes mellitus is a common disease where there is too much sugar (glucose) floating around in blood. This occurs because either the pancreas can't produce enough insulin or the cells in body have become resistant to insulin.

### Best Food and Worst Food in diabetes



### Plants possessing hypoglycemic activity

Many plants known to possess anti-diabetic properties. Some of them are Gymnema (Gymnema Sylvester), Neem (Azadirachta Indica), Aloe (Aloe Vera), Karela (Momordica Charantia), Vinca (Vinca Rosea), Indian Kino Tree (Pterocarpus Marsupium), Guduchi (Tinospora Cordifolia), Fenugreek (Trigonella Foenum), Sweet Leaf (Stevia Rebaudiana), Turmeric (Curcuma Longa) etc.

"The natural healing force within each one of us is the greatest force in getting well. Our food should be our medicine. Our medicine should be our food."

- Hippocrates

# Article By Students

## Cancer

Article by: Apeksha Singh  
B. Pharm 1<sup>st</sup> Semester

Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. These contrast with benign tumors, which do not spread to other parts of the body. Possible signs and symptoms include a lump, abnormal bleeding, prolonged cough, unexplained weight loss. While these symptoms may indicate cancer, they may have other causes. Over 100 types of cancers affect humans. Tobacco use is the cause of about 22% of cancer deaths. Another 10% are due to obesity, poor diet, lack of physical activity, and excessive drinking of alcohol and smoking. Other factors include certain infections, exposure to ionizing radiation and environmental pollutants. In the developing world nearly 20% of cancers are due to infections such as hepatitis B, hepatitis C and human papilloma virus infection. These factors act, by changing the genes of a cell. Typically many genetic changes are required before cancer develops. Approximately 5–10% of cancers are due to inherited genetic defects from a person & parents. All tumor cells share six common traits. These characteristics are required to produce a malignant or tumor cells.

The traits:

1. Cancer cell stimulate their own growth.
2. They resist inhibitory signals that might otherwise stop their growth.
3. They resist their programmed cell death.
4. They can multiply indefinitely.
5. They stimulate the growth of blood vessels to supply nutrients to tumors.
6. They invade local tissue and spread to distant sites.

### Signs and symptoms

Symptoms of cancer metastasis depend on the location of the tumor. When cancer begins, it produces no symptoms. Local symptoms may occur due to the mass of the tumor. Ulceration can cause bleeding that, if it occurs in the lung, will lead to coughing up blood, in the bowels to anemia, in the bladder to blood in the urine and in the uterus to vaginal bleeding. Although localized pain may occur in advanced cancer, the initial swelling is usually painless. General symptoms occur due to effects that are not related to direct or metastatic spread. These may include: unintentional weight loss, fever, excessive fatigue and changes to the skin. Hodgkin disease, leukemia and cancers of the liver or kidney can cause a persistent fever.

### Metastasis

Cancer can spread from its original site by local spread, lymphatic spread to regional lymph nodes, known as metastasis. Cancer usually spreads all over the body. The symptoms of metastatic cancers depend on the tumor location and can include enlarged lymph nodes (which can be felt or sometimes seen under the skin and are typically hard), enlarged liver or enlarged spleen, which can be felt in the abdomen, pain or fracture of affected bones.

### Causes

The majority of cancers, some 90–95% of cases, are due to genetic mutations from environmental factors. The remaining 5–10% are due to inherited genetics. Common environmental factors that contribute to cancer death include tobacco (25–30%), diet and obesity (30–35%), infections (15–20%), radiation (both ionizing and non-ionizing, up to 10%), stress, lack of physical activity and pollution.

# Article By Students

## Heart

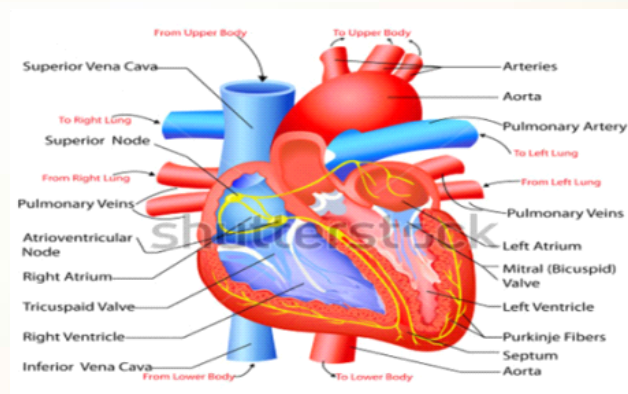
Article by: Narayan Prashad  
B. Pharm 1<sup>st</sup> Semester



The heart is a muscular organ present in most animals, which pumps blood through the blood vessels of the circulatory system. Blood provides the body with oxygen and nutrients, as well as assists in the removal of metabolic wastes. In humans, the heart is located between the lungs, in the middle compartment of the chest.

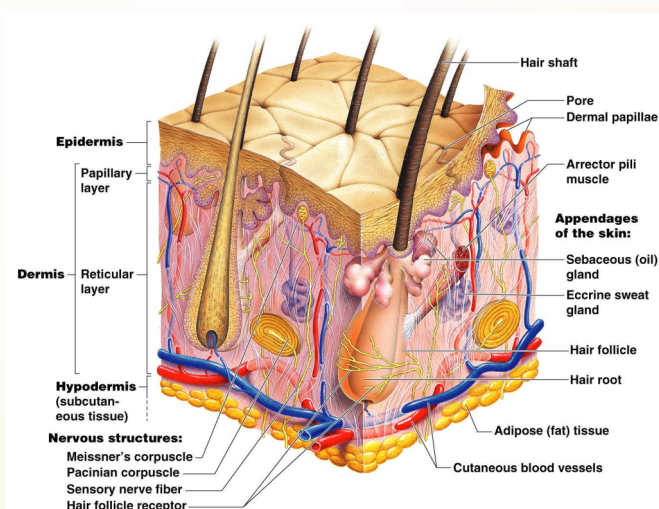
### Heart Functions

The right side of the heart maintains pulmonary circulation to the nearby lungs while the left side of the heart pumps blood all the way to the extremities of the body in the systemic circulatory loop. The heart functions by pumping blood both to the lungs and to the systems of the body.



## Human Skin

Article by: Yogendra Sahu  
B. Pharm 4th Semester



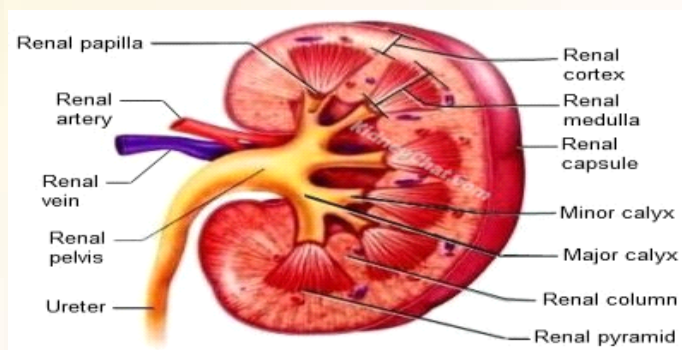
The human skin is the outer covering of the body. In humans, it is the largest organ of the integumentary system. The skin has up to seven layers of ectodermal tissue and guards the underlying muscles, bones, ligaments and internal organs. Human skin is similar to that of most other mammals. Though nearly all human skin is covered with hair follicles, it can appear hairless. There are two general types of skin, hairy and glabrous skin (hairless). The adjective coetaneous literally means of the skin. Because it interfaces with the environment, skin plays an important immunity role in protecting the body against pathogens and excessive water loss. Its other function is insulation, temperature regulation, sensation, synthesis of vitamin D and the protection of vitamin B folate. Severely damaged skin will try to heal by forming scar tissue. This is often discoloured and de-pigmented. In human, skin pigmentation varies among populations, and skin type can range from dry to oily. Such skin variety provides a rich and diverse habitat for bacteria that number roughly 1000 species from 19 phyla, present on the human skin.

The skin is the largest organ in the body. For the average adult human, the skin has a surface area of between 1.5-2.0 square meters.

# Article By Students

## Kidneys

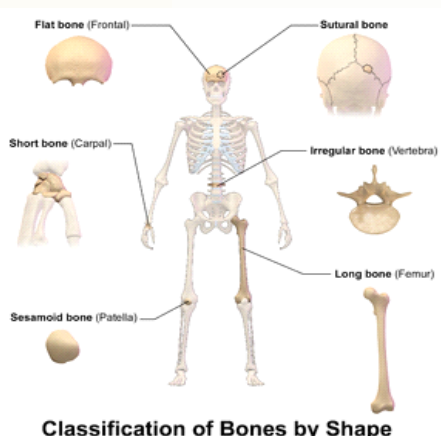
Article by: Avinash Niramal  
D. Pharm 1<sup>st</sup> Year



Kidneys are two bean shaped excretory organs located on Posterior abdominal wall, one on each side of the lumbar part of the vertebral column. The left kidney is slightly at a higher level of the right kidney.

### Position of the kidneys

The kidneys extend from the level of the third lumbar vertebra. Each kidney has two poles (upper and lower) Two borders (medial and lateral) and two surfaces (anterior and posterior). Each kidneys measure about 10 -12 cm in length, 4-5 cm in breadth and 2.5 cm in thickness. Each kidney weight about 130-150 gm. The right kidney lies deep to the right robe of the liver. Left kidney is convex. The medial border is concave. "Hilum" is situated on the medial border of the Kidney. The renal blood vessels and ureter pass through this hilum structure of kidneys.

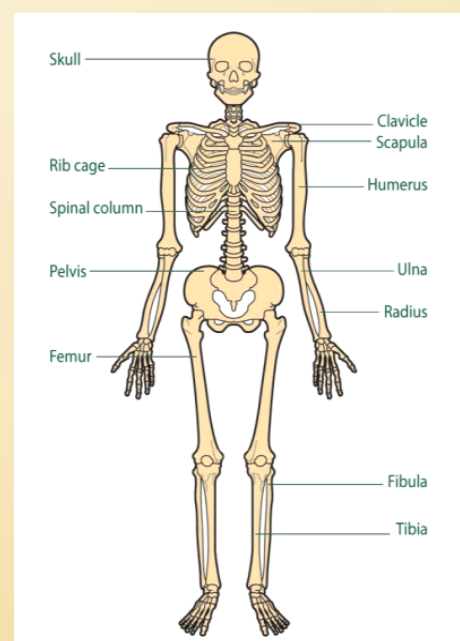


## Bones

Article by: Mohanadar Singh  
B. Pharm 1<sup>st</sup> Semester

A bone is a rigid organ that constitutes different parts of the vertebrate skeleton. Bones support and protect the various organs of the body, produce red and white blood cells, store minerals, provide structure and support for the body, and enable mobility. Bones come in a variety of shapes and sizes and have a complex internal and external structure.

They are lightweight yet strong and hard, and serve multiple functions. There are a total of 206 bones in the adult human body. They range in size from the tiniest found in the middle ear, to the largest that forms our thigh. The human body has an amazing array of different bones, many of which you can find on yourself or on a skeleton. Knowledge of the skeletal structure of the human body is essential to know before any anatomy exam, especially in clinical situations where accurate descriptions of bony trauma will be required.



# Way Ahead

The Faculty of Pharmacy has initiated new plans for holistic development of department and students. Some key points are highlighted as following:

## **1. Central Instrumentation Lab:**

Kalinga University's Pharmacy department has planned for the setup of Central Instrumentation Lab, where all the sophisticated instruments like UV Spectrophotometer (Double Beam), HPLC, HPTLC, FTIR Disintegration Apparatus (programmable), Probe sonicator, Double Distillation apparatus, Colorimeter and Dissolution Apparatus will be installed for smooth conduction of various research protocols under one roof.

## **2. Animal Experimental Lab:**

Faculty of Pharmacy is trying to take permission from CPCSEA committee for starting an animal experimental lab. Objective of the starting of this lab is for conducting in-vivo/in-vitro correlation and animal exposure to the students.

## **3. Placement & Carrier Guidance Cell:**

Training and Placement Cell, Kalinga University regularly organizes Placement camps, & Job fair for the benefit of students. Department of Pharmacy is in way to establish one separate cell specially designed for Placement & Guidance to pharmacy students only. The University and Faculty of Pharmacy both are trying to conduct a job and placement event every year for the last semester students, so, they will get job easily through the Placement cell of the department.

## **4. Bio-Safety Zone Creation:**

The purpose of formation is to set biological safety polices for the Faculty of Pharmacy labs. The Biosafety lab will provide safety of personnel and the environment from biologically hazardous materials.

## **5. Molecular Modelling Lab Formation:**

The purpose of this lab is to construct molecules from Lewis structures, and correlate molecular shapes with orbital

## **6. Genetic Engineering Lab:**

This Laboratory will provide some basic tools of molecular biology to gain an understating of principle and techniques of genetic engineering.

## **7. Formation of Entrepreneur Cell**

The Entrepreneur cell of the department aims to spread the spirit of entrepreneurship among students, faculty members through lectures, events and workshops. This cell creates a platform to realize their potential and promoting student Start-ups in pursuit of improved regional wealth and job creation.

## **8. Industry Institute Partnership Cell**

The Industry Institute Partnership Cell is to be opened by department with an aim to strengthen the linkage with the industry and academics of Kalinga University. This cell will be helpful in recognizing the industrial expectation and promote institutional preparation for meeting industrial needs by facilitating sponsored R&D projects, seminars, workshops and various other industrial training programs. It will also promote participation of industry personnel in the development of students knowledge & high quality student projects. The cell will facilitate B. Pharm and M. Pharm projects/dissertation work in industries under joint guidance of the faculties and experts from industry, so that overall development of students can be possible.

## **9. Clinical Oriented Study Curriculum**

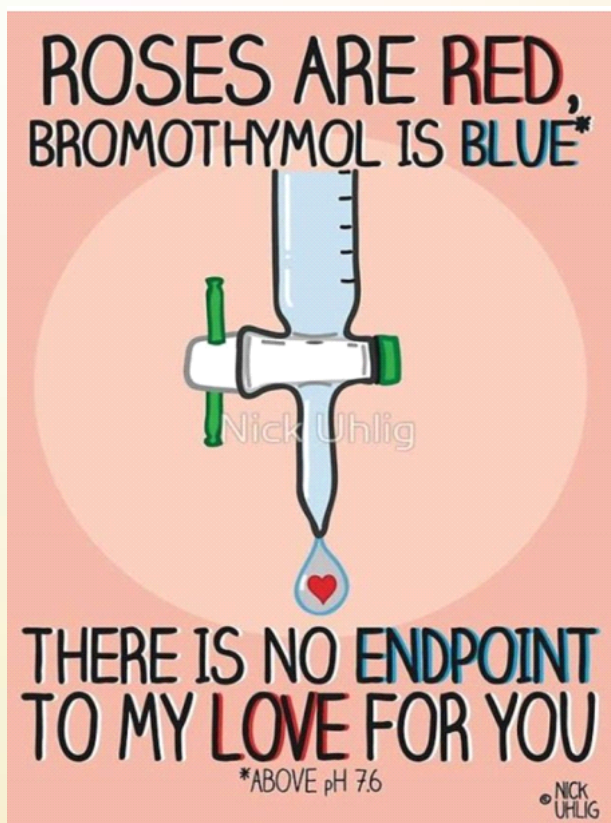
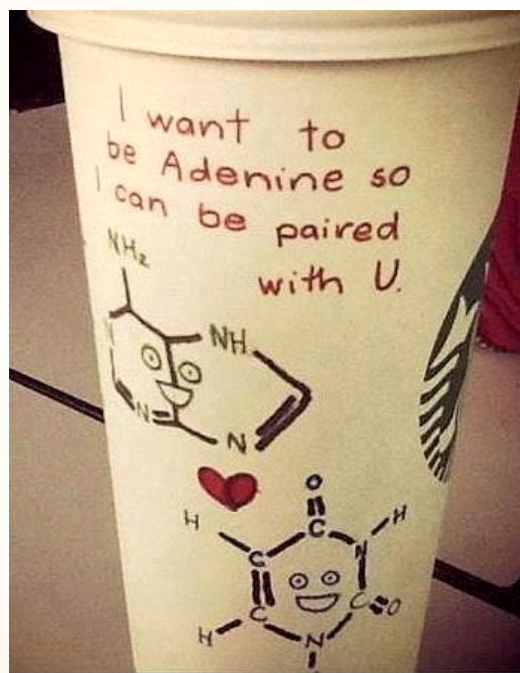
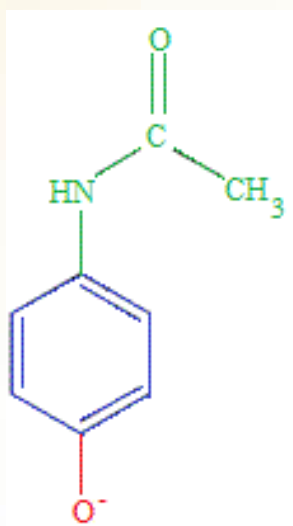
For the better understanding of drugs effect in the human body, special clinical oriented study curriculum is designed for better correlation of theoretical knowledge with practicals. Different hospital visits, internship programs are already going on as an initiation of this program. Through this program students will get knowledge about- Patient care, History taking, line of treatment selection, route of drug administration selection, adverse effect monitoring, toxicity monitoring, prescription handling etc.



**Eye catching pics.**

## Some Scientific Jokes & Quotes

The ideas behind the pharma sector date back to the apothecaries of the middle ages. A naturally progressive industry, pharma has drawn together some great thinker and speakers



When religion was strong and science weak, men mistook magic for medicine; now, when science is strong and religion weak, men mistake medicine for magic.

“Medicines is not only a science; it is also an art. It does not consist of compounding pills and plasters; it deals with the very process of life which must before they may be guided.” - Paracelsus

**Pharmacist Week celebrated at Kalinga University**



A doctor checking a minor in Palaud village on Saturday.

PHARMACY Department of Kalinga University, Raipur celebrated 'Pharmacist Week' from November 20 to 26. A day-long free health camp was also conducted at Palaud village. As scheduled, the Pharmacist week cel-

Free health camp was also conducted at Palaud village

practise. They also discussed the importance of Multi-disciplinary research for the betterment of human beings.

Later, Vice-Principal of Hingna College of Pharmaceutical Sciences and Research, Bhilai Dr Ajazuddin also delivered his talk on 'Role of medicines in human life'. He explained about the Novel Drug Delivery Systems - Nano particles, Liposomes, Resealed Erythrocytes etc. He also broadly discussed the benefits due to use of Novel Drug Delivery Systems and common Draw backs of conventional dosage forms. The final lecture in 'Acid, base and buffer: their role in life' was by Assistant Professor Dr Achal Mishra from Shri Shankaracharya College of Pharmacy. Several other activities including extempore competition, group discussion and slogan competition was also organised.

On the valedictory day on Saturday, Pharmacy Department organized a day-long free health camp in Palau Mukund Sarnach of the local village Bal Mukund Chandrahar, HoD of Pharmacy Department Dr Anand Mahawar inaugurated the camp. It was jointly sponsored by different pharmaceutical companies. More than 100 Patients were consulted in the camp and free medicines were also distributed.

celebration started with a series of guest lectures. Assistant Professor of Institute of Pharmacy, Pt Ravishankar University Dr Deependra Singh gave a presentation on the topic 'Biotechnology and its utility in life'. All students of Pharmacy Department as well Biotechnology Department got apprised about the latest which are presently in

**कलिंगा विवि ने लगाया स्वास्थ्य शिविर**

रायपुर। कलिंगा विश्वविद्यालय के फार्मसी विभाग द्वारा ग्राम रोकनों में निचले विटो निलुलक स्वास्थ्य परीक्षण के दवा वितरण कार्यक्रम किया गया। शिविर का उद्घाटन पुनिवासी इंस्टीट्यूट ऑफ फार्मसी के डायरेक्टर रमेश कुमार ने किया। इस अवसर पर विवि के कुलसचिव डॉ. संदीप गांधी भी उपस्थित थे। इस शिविर में मुख्य रूप से लसी, खासी, बुखार, ज्वर, रोग, त्वचा संबंधी रोग आदि मुख्य रूप से पाए गए। शिविर में 100 से ज्यादा लोगों ने भाग लिया। यहां नि-युलक दवाइयां दी गईं। इसके साथ ही फार्मसी विभाग में अध्ययनरत छात्र-छात्राओं ने दवाइयों के बारे में, बीमारियों के बारे में जानकारी भी दी। इसी क्रम में सोमवार को भी फार्मसी विभाग द्वारा एक दिवसीय स्वास्थ्य परीक्षण शिविर का आयोजन सामुदायिक स्वास्थ्य केंद्र रांजियम में किया गया। यहां भी लगभग 80 लोगों ने शिविर का फायदा उठाया।

## फार्मेसिस्ट-डे मनाया

रायपुर। कतिमा विश्वविद्यालय के कार्मनी विभाग द्वारा फार्मसिस्ट-डे मनाया गया। जिसमें अंतर्गत रीको गांव के 100 से अधिक लोगों का निःशुल्क स्वास्थ्य परीक्षण के साथ-साथ सामान्य बीमारियों की दवाइयों का वितरण किया गया। इस अवसर पर विश्वविद्यालय के डायरेक्टर डॉ. रौलेन्द्र सराफ, कुलसचिव डॉ. संदीप नाथी सहित विभाग के प्रोफेसर व डॉक्टर की उपस्थिति में गांव के नगरियों को स्वास्थ्य के प्रति जागरूक रहने व दवाइयों की सही जानकारी भी प्रदान की गई।

## Chanchal throws light on novel targeted drug delivery system

[illegible]

is credit awareness among the general public, which helps them to identify and avoid problems, public sector banks and financial institutions are providing the nation with the best services and solutions for them, and select banks are in general able to take up the challenges and participate in the development of the country.

**सिटी प्लस**

कलिंगा विश्वविद्यालय में निशुल्क स्वास्थ्य शिविर



रायपुर । कलिंता विश्वविद्यालय में फार्मेसी सप्ताह के समापन पर निशुल्क स्वास्थ्य शिविर का आयोजन किया गया। शिविर का शुभारंभ ग्राम के सरपंच बालू मकंद

चंद्राकर और विश्वविद्यालय के फार्मसी विभाग के विभागाध्यक्ष डॉ. आनंद महलवार ने किया। स्वास्थ्य शिविर में 100 से अधिक लोगों ने भाग लिया और स्वास्थ्य परीक्षण कराया। उन्हें निशुल्क दवाइयों भी दी गईं। कार्यक्रम के दौरान डॉ. आनंद महलवार ने छात्रों को साफ-सफाई अपनाने और उसके फायदे के बारे में बताया।



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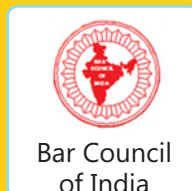
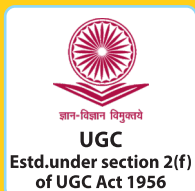


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