Pharmaware

A quarterly e-News Letter

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VISION

To be recognized as a foremost institution imparting quality pharmacy education to aspiring pharmacists with right competencies, attitude, skills and knowledge, for the greater benefit of mankind.

MISSION

To produce highly qualified and motivated graduates possessing fundamental knowledge and soft skills, who can provide sustainable solutions to health care problems.

To develop partnerships with industries, eminent institutes and government agencies in the field of pharmaceutical sciences.

To serve the community, at local, national and international levels, with a deep awareness of our ethical responsibilities towards profession and society.

PROGRAM EDUCATIONAL OBJECTIVES

OUR GRADUATES SHOULD HAVE:-

1. Have quality theoretical knowledge and practical skills on all core and allied fields of pharmaceutical sciences, so that they can face the challenges of the globalized scenario and contribute to the progress of the nation.

2. Enjoy successful careers in all settings of Pharma sector, by engaging themselves in professional development through leadership, communication, skills, teamwork and entrepreneurship.

3. Function ethically and lawfully in professional environment and exhibit good competency in their work culture.

4. Act as a link between healthcare system and community, so as to serve the society by the transmitting their knowledge, with a sense of social responsibility.

5. Participate in l
continuing education

ALL INDIA 29TH RANK IN NIRF-2016

AKTU APROVED PHD RESEARCH CENTRE

NBA ACCREDITED (B.PHARM)

DRUG INFORMATION

A COMBINATION OF SILVER NANOPARTICLES AND ANTIBIOTICS

A new study found that small amounts of silver nanoparticles combined with a low dose of a common antibiotic inhibited the growth of resistant bacteria.The researchers hope to turn this discovery into viable treatment for some types of antibiotic-resistant infections. Antibiotic-resistant infections kill more than a million people globally each year. For centuries, silver has been known to have antimicrobial properties. However, silver nanoparticles -- microscopic spheres of silver small enough to operate at the cellular level -- represent a new frontier in using the precious metal to fight bacteria. In this study, the research team tested whether commercially available silver nanoparticles boost the power of antibiotics and enable these drugs to counter the very bacteria that have evolved to withstand them. When combined with a small amount of silver nanoparticles, the amount of antibiotic needed to inhibit the bacteria decreased 22-fold, which tells us that the nanoparticles make the drug much more potent," he explained. "In addition, aminoglycosides can have negative side effects, so using silver nanoparticles could allow for a lower dose of antibiotic, reducing those side effects."

https://www.sciencedaily.com/releases

NEW DRUG APPROVALS

The following drugs have recently been approved in January, 2023 by the FDA.

- **Jesduvroq (daprodustat)** for the treatment of patients with anemia of chronic kidney disease (CKD)..
- **Jaypirca (pirtobrutinib) Tablets**- for the treatment of adult patients with relapsed or refractory mantle cell lymphoma (MCL).
- **Orserdu (elacestrant) Tablets**-for the treatment of postmenopausal women or adult men with ER-positive, metastatic breast cancer
- **Brenzavvy (bexagliflozin) Tablets**- to improve glycemic control in adults with type 2 diabetes mellitus
- **Rykindo (risperidone) for Extended-Release Injectable Suspension**-for the treatment of schizophrenia and bipolar I disorder in adults.
- **Airsupra (albuterol and budesonide) Inhalation Aerosol**- for as-needed use to reduce the risk of asthma exacerbations.
- **Leqembi (lecanemab-irmb) Injection**- for the treatment of Alzheimer's disease.

Reference: https://www.drugs.com/newdrugs.html

HERBAL INFORMATION

WOODLAND ANGELICA

Botanical name: ***Angelica sylvestris***

Family: ***Apiaceae***

Kingdom: **Plantae**

Angelica sylvestris or wild angelica is a species of flowering plant, native to Europe and central Asia. An annual or short-lived perennial growing to a maximum of 2.5 metres, it has erect purplish stems and rounded umbels of minuscule white or pale pink flowers in late summer

Health Benefits

- Use as Anti-inflammatory
- Act as Diuretic
- As Expectorant and diaphoretic
- In the treatment of Chronic bronchitis
- In the treatment of Hepatitis
- Use in Typhoid, headaches
- In the treatment of various Fungal infections
- Also act in Rhumatism

ANGELICA PREPARATIONS

- 1X mother tincture
- Capsules
- Alcohol free extract

https://www.webmd.com/vitamins/ai/ingredientmono-281

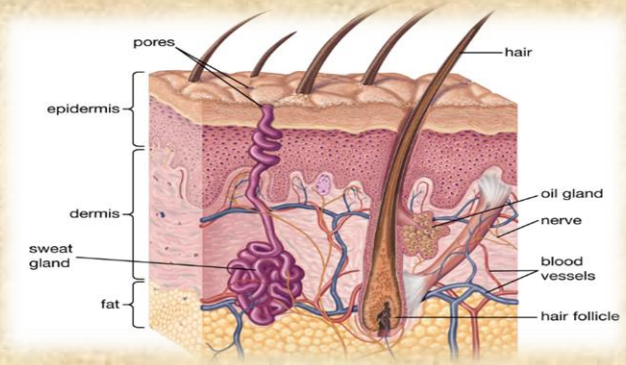
STUDENT CORNER

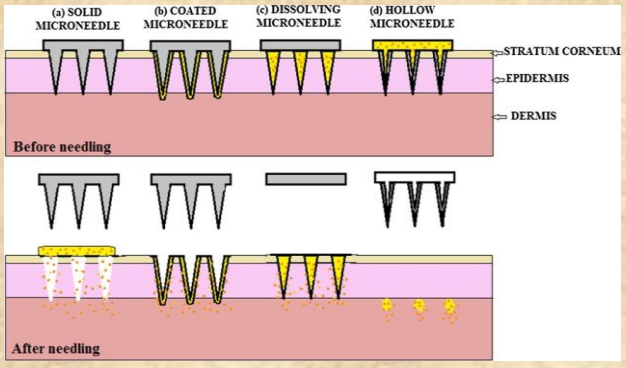
Advance Transdermal Drug Delivery System: Microneedles

Transdermal drug delivery (TDD) is known to offer many advantages over the oral and injectable routes for systemic drug delivery. Transdermal drug delivery systems (TDDSs) is a non-invasive and painless delivery system when compared to intravenous and intramuscular routes of drug administration. It is well known for increasing the bioavailability of the poorly soluble and low permeable drugs (BCS & IV) usually come under the lipophilic category. Self-administration can easily be done for TDDS by the patients offering a great deal of patient compliance. Microneedle device is made of by arranging micron-sized needles (usually 150-1500 µm in length, 50-250 µm in width, and 1-25 µm in the tip) on a tiny patch. Due to this pre-defined size and shape, microneedles can cross the barrier of stratum corneum, which is about 10-20 µm in thickness. As compared to the conventional hypodermic needles, use of microneedles is painless because they can not reach to dermis layer containing. Thus, microneedle permits high molecular weight hydrophilic molecules to enter the stratum corneum, ensuring enough drug molecules to penetrate the skin.

Type of Microneedle

Different types of microneedles fabricated and investigated for their application in drug delivery are solid, coated, dissolving, hollow, and hydrogel microneedles. Different types of microneedles with their unique properties are displayed in Fig. Each type of microneedle has its own way of delivering the drug into the epidermis. Some are used just to create pores in stratum corneum, some are precoated with the drug solution on their surface, some are dissolvable and some are prefilled with the drug solution.





Applications: Oligonucleotide delivery, Vaccine therapy, Peptide delivery, Hormone therapy, Cosmetics,

Pain therapy, Ocular delivery and Cancer therapy.

Shivam Tyagi, Adnan Ali, Saurabh Singhal, Chirag Tyagi

(M.Pharm First year)

References

- *Motia Azmana, Syed Mahmood etal."transdermal drug delivery system through polymeric microneedle: A recent update", 1(2020), 1-15.*
- *Tejashree waghule, 'Gautam singhvi , etal. "microneedle: a smart approach and increasing potential for transdermal drug delivery system" Biomedicine & pharmacotherapy, 109 (2019), 1249-1258.*
- *Nora Y.K. Chew, Nina F. Wilkins, Barrie C. Finnin, Transdermal delivery: Anatomical site influence, Encyclopedia of pharmaceutical technology.*

NEWS AT A GLANCE

Industrial Visit

An Industrial visit to Yakult India Pvt Ltd. was organized for D.Pharm 1st and 2nd year students on 6th December, 2022. Students got insight about the Operations and Production at Yakult. They were enabled with the real feel of the current industrial scenario. They were also made aware of first-hand information regarding the functioning of the company. Students were made to learn the corporate culture and mannerism. It was a great learning experience for students.

An Industrial visit for M.Pharm students organized on 25th April to SriRam institute of industrial research New Delhi. Team of SRI welcomed RKGIT students and faculty in the institutional auditorium; Prof. (Dr) Munendra Mohan Varshney (Dean SW), Mr Pankaj Sharma (Associate Professor), Ms Geetika Mehta (Associate Professor), Ms Rashmi Tripathi (Assistant Professor), Mr Surya Goel, (Assistant Professor), Ms Farha Sultana (Assistant Professor) facilitated the SRI team including the Director, SRI with sapling. Followed By, all students visited distinguished laboratories including Microbiology, toxicology and instrumentation labs. All students and faculty were also invited for the conference held in Hindu college auditorium which is adjacent to SRI on the occasion of 57th SRI foundation day. Sri S.Somnath, chairman ISRO was the chief Guest over there. Director SRI also mentioned RKGIT Collaboration in his speech. The lecture was very informative in the area of space research technology.

Talk

RKGIT (Pharmacy) organized a talk on "Awareness on Pharmacovigilance Program of India" by Dr. Jai Prakash (Sr. Scientific Officer) from Indian Pharmacopoeia Commission" on 22, December, 2022 in pharmacy seminar hall.

Career Talks

RKGIT (Pharmacy) organized a talk on "Career in Pharmaceutical Marketing" by Mr. Purushottam Nagpal and Mr. Ashok Zalpuri from "2ndinnings: Explores the unexplored potential" on 16th, December, 2022 in pharmacy seminar hall.

RKGIT (Pharmacy) organized a talk on "Get success in GPAT and other Pharma competitive exam" by Mr Utsav Verma (Assistant Professor, GPAT Discussion Centre pvt ltd on 11th Nov 2022.

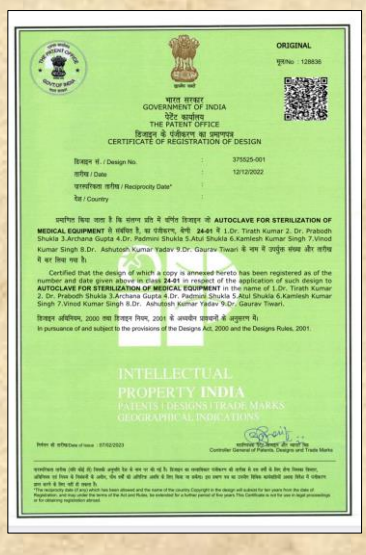
"ARISE, AWAKE AND STOP UNTILL THE GOAL IS ACHIEVED"-

SWAMI VEVEKANADA

Design Patent Granted

Congratulations to Ms. Archana Gupta, Assistant Professor, RKGIT (Pharmacy) for design patent granted on

1. Autoclave for sterilization of medical equipment, design no. 375525-001, (Indian patent)
2. Device for blood sample analysis, design no. 375984-001, (Indian patent)


ORIGINAL

भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
डिजाइन के रजिस्ट्रीकरण का प्रमाणपत्र
CERTIFICATE OF REGISTRATION OF DESIGN

डिजाइन सं. / Design No. : 375525-001
तारीख / Date : 12/12/2022
पारस्परिकता तारीख / Reciprocity Date* :
देश / Country :

उपरोक्त विवरण यह प्रमाणित करता है कि संलग्न प्रति में वर्णित डिजाइन जो **AUTOCLAVE FOR STERILIZATION OF MEDICAL EQUIPMENT** से संबंधित है, का पंजीकरण, वर्ग **24-01** में 1.Dr. Tirath Kumar 2. Dr. Prabodh Shukla 3.Archana Gupta 4.Dr. Padmini Shukla 5.Atul Shukla 6.Kamlesh Kumar Singh 7.Vinod Kumar Singh 8.Dr. Ashutosh Kumar Yadav 9.Dr. Gaurav Tiwari के नाम से उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class **24-01** in respect of the application of such design to **AUTOCLAVE FOR STERILIZATION OF MEDICAL EQUIPMENT** in the name of 1.Dr. Tirath Kumar 2. Dr. Prabodh Shukla 3.Archana Gupta 4.Dr. Padmini Shukla 5.Atul Shukla 6.Kamlesh Kumar Singh 7.Vinod Kumar Singh 8.Dr. Ashutosh Kumar Yadav 9.Dr. Gaurav Tiwari.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन कार्यवाही के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

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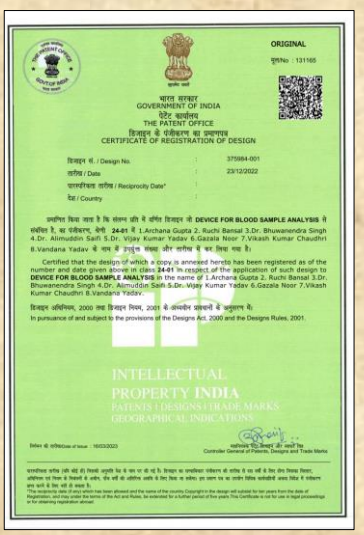
ORIGINAL

भारत सरकार
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THE PATENT OFFICE
डिजाइन के रजिस्ट्रीकरण का प्रमाणपत्र
CERTIFICATE OF REGISTRATION OF DESIGN

डिजाइन सं. / Design No. : 375984-001
तारीख / Date : 23/12/2022
पारस्परिकता तारीख / Reciprocity Date* :
देश / Country :

उपरोक्त विवरण यह प्रमाणित करता है कि संलग्न प्रति में वर्णित डिजाइन जो **DEVICE FOR BLOOD SAMPLE ANALYSIS** से संबंधित है, का पंजीकरण, वर्ग **24-01** में 1.Archana Gupta 2. Ruchi Bansal 3.Dr. Bhuwanendra Singh 4.Dr. Alimuddin Saifi 5.Dr. Vijay Kumar Yadav 6.Gazala Noor 7.Vikash Kumar Chaudhri 8.Vandana Yadav के नाम से उपर्युक्त संख्या और तारीख में कर लिया गया है।

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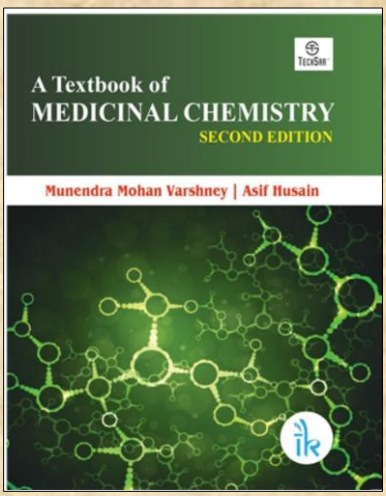
Second Edition Book Published

A text book of medicinal chemistry 2nd Edition for B.Pharm 5th and 6th Sem under I. K. International, New Delhi, published in the authorship of Prof. (Dr) Munendra Mohan Varshney.



CONGRATULATIONS TO ACHEIVERS

अखिल भारतीय अंतर संस्थान प्रतियोगिता स्पिरिट में अव्वल आए विद्यार्थी। संवाद

छात्रों ने स्पिरिट-2023 में किया शानदार प्रदर्शन

गाजियाबाद। मेरठ रोड स्थित आरकेजीआईटी के फार्मेसी विभाग के छात्रों ने आईआईटी बीएचयू में आयोजित अखिल भारतीय अंतर संस्थान प्रतियोगिता स्पिरिट 2023 में शानदार प्रदर्शन किया। संस्थान से प्रशांत सारस्वत, ऋषभ भारद्वाज, प्रशांत मलिक, आयुष गोयल और विशाल गुप्ता ने वर्किंग मॉडल प्रतियोगिता में प्रथम स्थान प्राप्त किया। अमन, याचना, यशिका, त्रुपति आदि ने पोस्टर प्रतियोगिता में द्वितीय स्थान प्राप्त किया। संस्थान के चेयरमैन दिनेश गोयल, वाइस चेयरमैन अक्षत गोयल ने छात्रों व शिक्षकों की प्रशंसा की। संवाद

REGARDS

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