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[An Official News Magazine of Society of Pharmaceutical Education & Research™]

**Inaugural
Issue**



Dedicated to our Founder President
[Society of Pharmaceutical Education & Research™]



Mrs. Sudha Nagaich

[15th February 1960-17th January 2013]



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A Pharma Magazine Conjoining Corporate with Academia

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JAPTR is registered with Registrar of Newspapers for India (RNI).

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Scope of the Journal

This Journal publishes original research work, reviews, short communications, case report, ethics forum, education forum and letter to editor that contribute significantly to further the scientific knowledge related to the field of Pharmacy i.e. Pharmaceuticals, Pharmacology, Pharmacognosy, Pharmaceutical Chemistry.

Journal of Advanced Pharmaceutical Technology & Research (JAPTR) hopes that Researchers, Research scholars, Academician, Industrialists etc. would make use of this journal publication for the development in the field of Pharmaceutical science and advanced technology related to Pharmacy profession.

Regulars

Editorial	- 5
SPER News	- 6
Article	- 9
Researcher Corner	- 17
News Dosage	- 18
SPER Committee	- 21

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Editorial



Dear Readers,

Society of Pharmaceutical Education and Research™ (SPER) is proud to embark on a new endeavor in 2013, The "**SPER Times**". SPER Times is an official news magazine of Society of Pharmaceutical Education and Research™ (SPER) which is available in both print and online (electronic) edition with a focus on important topics in the profession of pharmacy and other allied sciences. SPER already has its own official research publication "**Journal of Advanced Pharmaceutical Technology & Research**" (**JAPTR**) published by Medknow Publications and Media Pvt. Ltd. Mumbai, India (A product of Wolters Kluwer Health, Philadelphia, USA).

I am extremely pleased to write this inaugural editorial for the first issue of SPER Times. The commencement of this project occurred just after 2nd Annual conference of SPER, held at Jamia Hamdard, New Delhi 2013 which brought together eminent personalities in pharmacy profession. The excitement generated in these scientific sessions accentuated me that our field was in the midst of an unparalleled explosion of research productivity. SPER Times will broadly cover novel researches and updates from pharmaceutical industry as well. It will benefit many throughout our community and further demonstrate pharmacy's ever expanding roles. SPER Times is fortunate to have an editorial board of highly recognized and reputed personalities of pharmacy field who will direct us in a progressive and positive manner.

We request you to subscribe this magazine in your organization to get maximum benefits and updates about pharmacy profession. We also invite you to advertise in our magazine which will be available to approximately each and every organization related to pharmacy and health sector. The advertisement will provide your business or organization with exposure to our SPER Times readers.

I am extremely proud to be a part of this exciting new endeavor and I am confident that it will become a highly respected and trusted resource of leading knowledge in pharmacy research. We trust that the information presented in this publication will serve to make further advances in pharmaceutical sciences and eagerly looking forward to seeing your research in our pages.

Yours

A handwritten signature in blue ink, reading 'Upendra Nagaich'.

Dr. Upendra Nagaich
[Editor-in-Chief]

Proceedings of SPER 2nd Annual Conference

SPER 2nd Annual Conference on "NexGen Health Care Scenario: Innovative Research Endeavour in Pharmaceutical Sciences for Better Patient Compliance"

The Society of Pharmaceutical Education & Research™ (SPER) organized its 2nd Annual conference at Convention Centre, Jamia Hamdard, Hamdard University, New Delhi, India on 09th March 2013.

The function was inaugurated by Mrs. Archana Mudgal, Registrar-cum-secretary, Pharmacy Council of India (PCI), India as Chief Guest, Prof. (Dr.) S. H. Ansari, Professor, Jamia Hamdard, New Delhi, as Chairman Organizing Committee, Prof. (Dr.) V. K. Dixit, Former Professor, Dr. H. S. Gour (Central) University, Sagar & National President, Society of Pharmacognosy, India, Prof. (Dr.) Roop K Khar, Former Professor & Head, Jamia Hamdard, New Delhi, Prof. (Dr.) Brahmeshwar Mishra, Professor & Head, India Institute of Technology (IIT), Banaras Hindu University (BHU), Varanasi, Dr. Rakesh Kumar Sharma, Scientist 'G',

Additional Director & Head, CBRN Defence, INMASS, DRDO, New Delhi, Prof. (Dr.) Satish Sardana, Prof. & Principal, Hindu College of Pharmacy, Sonapat & President, APTI



(Haryana), Dr. Javed Ali, Jamia Hamdard, New Delhi as Guest of Honor and Dr. Upendra Nagaich, Secretary, Society of Pharmaceutical Education & Research™ (SPER), Gwalior and Editor, Journal of Advanced Pharmaceutical Technology & Research (JAPTR) as Organizing Secretary of the conference and released the conference proceedings. Before the inauguration ceremony "verses of holy kuran" was recited by Mohd. Jameel.

On this occasion organizing secretary, Dr. Upendra Nagaich, delivered welcome note and presented the annual report of SPER and highlighted the various activities organized in the previous years by the society along with the announcement of "Mrs. Sudha Nagaich Memorial Award" constituted in the memory of Late Mrs. Sudha Nagaich, Honorary Founder President of SPER.



Dr. Upendra Nagaich also highlighted the progress of Journal of Advanced Pharmaceutical Technology & Research (JAPTR) [The official publication of Society of Pharmaceutical Education

& Research™ (SPER)]. The journal is indexed with CAB Abstracts, Caspur, Chemical Abstracts, CNKI (China National Knowledge Infrastructure), DOAJ, EBSCO Publishing's Electronic Databases, Expanded Academic ASAP, Genamics Journal Seek, Global Health Google Scholar, Health & Wellness Research Center, Health Reference Center Academic, Hinari, Index Copernicus, Indian Science Abstracts, National Science Library, OpenJ Gate, Primo Central, Pro Quest, PubMed, Pubmed Central, Scimago Journal Ranking, SCOLAR, SCOPUS, SIIC databases, Summon by Serial Solutions, Ulrich's International Periodical Directory. As per the information received from the publisher, Journal of Advanced Pharmaceutical Technology & Research (JAPTR) has received the projected impact factor of 0.688 and 1.093 for the year 2012 and 2011 respectively. The information was available on the official website of Medknow Publications, Mumbai as well.

Dr. Nagaich discussed in detail regarding the benefits extended for the life members of Society of Pharmaceutical Education & Research™ (SPER) in the article processing charges (APC) for publication in Journal of Advanced Pharmaceutical Technology & Research (JAPTR).

Mrs. Archana Mudgal highlighted the current scenario of pharmaceutical sector along with the importance of patient compliance in the health care system and the strategies of Pharmacy Council of India (PCI) for the development of profession in detail.

The conference was in collaboration with IFTM University, Moradabad (U.P.) & Journal of Advanced Pharmaceutical Technology & Research (JAPTR) [The official Publication of

of Pharmacy Sonipat, Rajiv Academy for Pharmacy, Mathura, IPS Academy, Indore and Arogyashala & RNVP Pharmaceutical Consultant, New Delhi.

Overwhelming response was received for the conference and more than 470 delegates from around 62 colleges (from 15 states) across the country and more than 10 delegates from Bangladesh, Iran, Iraq, Nigeria, Pakistan were participated in the event with their innovative oral and poster presentations. More than 250 participants have presented posters of their research work in different tracks. All posters were judged by learned judges invited from various academic organizations and Pharmaceutical Industries.



This conference is devoted to the exploration of the cross-roads of pharmacy, medicine and health. Emphasis was

placed on novel innovations that have an imminent impression on human health and disease.

The conference offered the common platform for interaction with the eminent academicians, research persons, and industry leaders. It provided an open forum for the professionals of pharmaceutical research and academicians to enrich their knowledge in the field of pharmaceutical education & research.

Various scientific lecture sessions were delivered by eminent personalities from academics as well as research. The key speakers for this conference were Prof. (Dr.) Brahmeshwar Mishra, Professor & Head, India Institute of Technology (IIT), Banaras Hindu University (BHU), Varanasi, Dr. Rakesh Kumar Sharma, Scientist 'G', Additional Director & Head, CBRN Defence, INMASS, DRDO, New Delhi and Dr. Javed Ali, Jamia Hamdard, New Delhi.

During the conference, Prof. (Dr.) S. H. Ansari was honored with 'Mrs. Sudha Nagaich Memorial Award' for his immense contributions towards the upliftment of pharmacy profession & given by Mrs. Archana Mudgal.



Four eminent academicians, researcher and pharmacists were honored with SPER Fellowship Award for their contribution to the profession including Prof. (Dr.) V. K. Dixit, Dr. Rakesh Kumar Sharma, Dr. Sunil Kumar Jain, Chief Pharmacists, AIIMS, New Delhi & Mr. Tarsem Jain, Editor, Pharma Paramarsh, Rohtak by Mrs. Archana Mudgal.

SPER Principal of the year Award was conferred upon Prof. (Dr.) Satish Sardana, Professor & Principal, Hindu College of Pharmacy, Sonipat and Prof. (Dr.) Devender Pathak, Professor & Director, Rajiv Academy for Pharmacy, Mathura for the outstanding contribution in the field of Pharmacy & towards uplifting the standards of pharmaceutical education and given by Mrs. Archana Mudgal.



The valedictory function was inaugurated by eminent personalities of Pharmacy in India Dr. G. N. Singh, Drug Controller General of India (DCGI), New Delhi and Secretary-cum-Scientific Director, Indian Pharmacopoeia Commission (IPC), Ghaziabad, Ministry of Health & Family Welfare, Govt. of India as chief guest and Dr. A. Ramkishan, Deputy Drugs Controller (I), Central Drug Standards Control Organization (CDSCO), Ahmedabad, Gujarat and Dr. V. G. Somani, Deputy Drugs Controller (I), Central Drug Standards Control Organization (CDSCO), West Zone, Mumbai, Maharashtra as guest of honour.

Dr. G. N. Singh highlighted the role of pharmacists and their contribution for the development of pharmaceutical society and the current scenario of health care system.

SPER Eminent Teacher Award was conferred upon Prof. (Dr.) Brahmeshwar Mishra, Professor & Head, India Institute of Technology (IIT), Banaras Hindu University (BHU), Varanasi for the outstanding contribution in the field of pharmaceutical education and given by Dr. G. N. Singh.

SPER Young Teacher Award was conferred upon Dr. Tanveer Naved, Principal, Amity Institute of Pharmacy, Amity University, Noida and Mr. Vinay Pandit, Al-Ameen College of

Pharmacy, Bangalore and given by Dr. G. N. Singh.

SPER Innovative Researcher Awards were conferred upon Dr. A. Rajendran, Scientist Phytotechnology Project, Technical Advisor, Tamil Nadu, Ayurvedic, Siddha, & Unani Manufacturer Association & Proprietor -Life Care Phyto Remedies, Chennai and Mr. Rakesh Pahwa, Assistant Prof., Kurukshetra University, Kurukshetra and given by Dr. G. N. Singh.



SPER Young Scientist Awards were conferred upon Dr. Neeraj Sethiya, The MS University of Baroda, Vadodara and Dr. Zeenat Iqbal, Assistant Prof. Jamia Hamdard, New Delhi and given by Dr. G. N. Singh.

SPER Young Talent Awards were conferred upon Prof. (Dr.) Hayat Mohd. Mukhtar, Prof. & Director, SBS College of Pharmacy, Patti, Amritsar and Mr. Neetesh Jain, Assistant Prof., Oriental University, Indore and given by Dr. G. N. Singh.

SPER Best Student Awards (Ph.D., PG, and UG) were conferred upon Mr. Abuzer Ali, Mr. Gurinder Singh, Ms. Abha Diwedi, Ms. Heena Kashyap and Ms. Yamuna Dhami and given by Dr. G. N. Singh, Prof. (Dr.) S. H. Ansari, Dr. V. G. Somani and Dr. A. Ramkishan respectively.

SPER Best Oral Presentation Awards were conferred upon Dr. Ginpreet Kaur, Assistant Professor, SOP & Tech. Mgt., SVKM's, NMIMS, Mumbai and Dr. Mohd. Amir, Associate Prof., Jamia Hamdard, New Delhi and given by Dr. G. N. Singh.

To encourage and motivate the students 05 Best Poster Presentation Awards were given in each discipline by



Dr. G. N. Singh, Prof. (Dr.) S. H. Ansari, Dr. A. Ramkishan, Dr. V. G. Somani and Dr. Upendra Nagalch respectively.

Prof. (Dr.) S. H. Ansari, Chairman organizing committee of the conference presented the vote of thanks.



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Current Education System and Future Prospects in the Field of Pharmaceutical Sciences in Nigeria

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Introduction

Rapid changes are being witnessed today all over the globe in the pharmaceutical science education and it is a reflection of the direction and needs of the society which are continually better understood and evolving. Reports from Canada, Middle East, France and a host of others show a wave of change in the training and practice of pharmacy across the globe in the last one to two decades. The professional role of the pharmacist in hospitals and community pharmacies is changing from a focus on preparation, dispensing and sale of medications to one in which pharmacists assist the public to get the best possible results from medications through patient education, physician consultation, and patient monitoring and pharmacy educational institutions across the continents are responding to these new and increasing roles of the pharmacists by reviewing their curricula to offer training required for these roles.

The story is the same in Nigeria and pharmacy education has been dynamic since the establishments of Schools of Pharmacy in the early 1900's. The curricula of pharmacy schools are continually reviewed to reflect the societal needs and the changing roles of the pharmacists. The minimum qualification for registration as a pharmacist has also been made superior with each curricula review and the country has moved from certificate to diploma, B.Sc. Pharmacy, B. Pharmacy (classified) and B. Pharmacy (declassified) and it is expected that in the next five to ten years the minimum qualification for registration as a pharmacist would be Pharm. D program, which is expected to give the pharmacists more competency for bedside pharmacy practice. There are currently nineteen Universities offering pharmacy in Nigeria, located in the six geo-political zones of the country and thirteen of these institutions have the accreditation of the national regulatory body while the remaining six are at one level or the other in getting accredited.

Pharmacists in Nigeria can practice in a wide array of fields which include community, hospital and administration, academia, industry and military.

The prospects of the pharmacy profession are intrinsically linked with the education and training of pharmacists. Curricula of professional colleges are constantly being reviewed because social needs change, new knowledge provides a basis of new understanding of man's problems and how to deal with them, and new methods of practice and professional services are devised. There is no doubt that pharmacy education has shifted from product focused to patient focused and it has been realized that the only way to be relevant to the patient and properly contribute in the healthcare delivery is to move toward the Pharm. D program and Nigerian schools of pharmacy are on that part right now to developing the pharmacists competency that would enable optimum service delivery to 160 million population.

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International Conference on Harmonisation (ICH) E6 defines clinical trials as "Any investigation in human subjects intended to discover or verify the clinical, pharmacological and/or other pharmacodynamic effects of an investigational product(s), and/or to identify any adverse reactions to an investigational product(s), and/or to study absorption, distribution, metabolism, and excretion of an investigational product(s) with the object of ascertaining its safety and/or efficacy". The history of drug discovery and its clinical trials is often fascinating to newer development in medicine and related area. Most of them have been discovered that are used in daily life by chance or by serendipity.

In the area of research and development clinical research serves as a stronger tool in advances in medical research, drug delivery, drug development, technology development and better improved healthcare in patients. In 1990, India was not choice of destination for the globalization in pharmaceutical companies, even some of them conducting clinical trials in their *clinical research organization* (CRO). However from the last 10 years, there has been steep rise in graph in the global demand for world class clinical trial management capacity and productivity. In 2002, In Economic Times, McKinsey report said that the Indian clinical research industry would more than 1 \$ billion by 2010. McKinsey report was probably based on science, on the advantages India offered for this industry, and on other factors favoring India. But clinical industry was managed to reach hardly at about 250 million by 2010. It was ridden by controversies, allegations of negligence and corruption, and stunned by litigations in the Supreme Court. The projections associated with clinical studies have remained largely on paper. Data shows growth rate is continuously dipping because of legal issues. And, many multinational companies (MNCs) prefer other emerging destinations in Southeast Asia such as China, Korea and Singapore etc.

In 2013, The New Indian express, official health ministry data shows that in January only six trials have been approved and 12 approvals was granted in April by Drug Controller General of India (DCGI). This was the sharp downfall in the number of global clinical trials (GCB) approved for India was in hundreds. DCGI admitted that there has been a fall in global clinical trials of drugs and told to PTI, "The safety and well being of Indian subjects

participating in clinical trials is the foremost in our minds".

Recession, regulatory issues, lack of laws, concerns on data protection, skill sets, infrastructure and delay in approvals are among the many reasons given by sector experts for the decline. For the zero order graphs, if a trial is approved in the US within a month, it takes six to eight weeks for the apex drug regulator, Drug Controller General of India, to respond. Normally 12-16 weeks are needed to get approval for a trial, they said. "Countries like China, Korea or Singapore have plenty of government-certified and trained trial sites. In India, the government is yet to start certifying trial sites.

Not only the trial sites: quality and infrastructure of CROs are another area of concern. At present, trials are based on guidelines brought out by the Indian Council of Medical Research and the office of DCGI. India had amended Schedule Y of the Drugs and Cosmetics Act in 2005 to create a conducive environment for doing trials in India, but specific laws are yet to be in place to effectively regulate trials in the country. Since 2011, after a reported spike in deaths during trials led to a court case, all kinds of clinical trials slowed down considerably. But the industry, doctors and observers are optimistic of a positive outcome this year. Draft rules pertaining to the registration of CROs, compensation to study subjects, by sponsors of trials, in case of clinical trials related injury or death and consequences of non-compliance, registration of the Ethics Committees with the licensing authority prior to approving clinical trials, format of Informed Consent Document and guidelines for determining quantum of compensation to trial subjects are the important regulatory developments connected with clinical trials in the past couple of years.

Part of their confidence comes from the series of measures the government has taken, notwithstanding the new compensation rules. The several sub-committees that are involved in approving clinical trials applications now meet regularly and give approvals more rapidly than before. Further, the government has set up a committee to draw up policy guidelines for clinical trials and new drug approvals. The Indian and global Pharma companies hope that the controversy would end when these recommendations are implemented, and that Indian industry would recover some of the lost ground during the last few years.



Glimpse of Activities of SPER







Herbs Vs synthetic drug interactions: A boon or a curse?

ARTICLE

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The use of medicinal herbs and supplements as a complementary system of medicine has progressed along the years. There is prevailing notion among the people now-a-days of accepting Nutraceuticals i.e. the "organic" world as a complementary medicine. Nutraceuticals consisting of perplexing constituents offer a holistic approach to treatment of various diseases and disorders and also demonstrate the ability to treat them.

In spite of the enormous and rapid development in the field of allopathy since the last decade, medicinal plants still remain one of the major sources of drugs in the modern as well as traditional system of medicine globally, mainly as the complementary system. It has been projected that 80% of world population still use traditional medicine for their primary health care needs. According to the statistics given by WHO in 2008, around 80% of the population in developing countries relies on traditional plant drugs^[1]. Such traditional medicines make around 25% market share of the entire pharmaceutical cache. WHO defines herbal medicines as "finished, labeled medicinal products that contain active ingredients from aerial or underground parts of plants, or other plant material, or combinations thereof, whether crude state or as other preparations".

Nutraceuticals consists of natural health-promoting components which help in maintaining the normal physiological functions of the individuals^[2]. Thus, the attainment of maximum state of nutrition and health has become the ultimate goal using Nutraceuticals. Thus, there has been resurgence in the consumption and demand for medicinal plants in a complementary system of healthcare in the prevention and management of chronic lifestyle-related non-communicable diseases. Nutraceuticals are gaining popularity as people are relying on them for safeguarding their health and avoiding side effects associated with drugs as well. Nutraceuticals are destined to play important role in future therapeutic developments and will continue to appeal the consumers owing to better patient tolerance & decreased healthcare costs compared with conventional pharmaceuticals.

Most consumers consider herbal therapy as accessible and affordable alternative medicine to conventional drug therapy. With patients are becoming more aware of the benefits of herbs and supplements from various sources are increasingly seeking herbal remedies against their ailments. Thus, the patients tend to self-treat

the medical conditions. Due to their natural origin, the patients often believe that the herbal medicines are always safe and do not report the use of such remedies to the clinicians. This has led to a situation where the concomitant administration of herbal medicines and conventional drugs has become inevitable. A consequence of such a concurrent use of herbal medicines and synthetic drugs is the possibility of interactions. With the enormous number of over-the-counter products, active pharmaceutical products and herbal products available the risks of drug-herb interactions are countless. Drug interactions are defined as pharmacodynamic, pharmacokinetics or clinical responses that result from the administration of two or several drugs, which differ from the known effect of each of these drugs taken separately. The pharmacological effects of these interactions can be antagonistic, synergistic, additive which could lead to an increase or decrease in the therapeutic effect or to toxic effects. The drug-herb interactions are classified into two types depending on their mechanism i.e. pharmacokinetic interactions (altering the absorption, distribution, metabolism and excretion of the drug) and pharmacodynamic interactions (altering the combined pharmacological effects of the drug)^[3]. Hence it is imperative to identify such drug-herb interactions and to promote research on the safety and efficacy of combined herb-drug treatment.

Some drug herb interactions can be harmful with adverse effects on the body^[4]. This can be evident from the interaction between black willow which displaces the protein-bound drug such as Warfarin thereby increasing the toxic effects of the drug. Also, garlic has found to decrease the plasma concentration of Saquinavir while licorice increases the plasma concentration of prednisolone. Coriander (*Coriandrum sativum*) enhances effects of hypoglycaemics. Cucumber (*Cucumis sativus*) which has a diuretic activity may potentiate the effect of other diuretics if administered concomitantly. Garlic (*Allium sativum*) has shown to increase the effects of anticoagulants and anti-platelet drugs. Grapefruit juice inhibits the metabolizing enzymes (cytochrome P450) leading to altered drug concentration and clearance. Similar actions were observed on concomitant administration of grapefruit juice with Amlodipine leading to decreased metabolism of Amlodipine causing drug accumulation.

On the other hand, drug herb interactions can prove to be extremely beneficial. Studies performed by us have shown that the alcoholic extract of *Murraya koenigii* when administered

along with Diclofenac as a combination to Carrageenan induced rats; showed significant reduction in the paw volume than the extract alone as compared to the control group owing to the synergistic pharmacodynamic interaction between the two. Similar other studies have demonstrated that the combination therapy of herbs with synthetic drugs can be a very promising complementary system of medicine to treat a variety of ailments. The interaction between extract of *Trigonella foenum-graecum* seeds with Glibenclamide in streptozotocin induced diabetic rats demonstrated a synergistic effect of the combination resulting in the hypoglycemic effect¹⁹. A combined therapy of garlic with Propranolol in moderate doses could result in beneficial effect in the treatment of hypertension as garlic was found to increase the bioavailability of propranolol¹⁹. Such interactions can prove to be useful as they can provide an opportunity for the reduction of dose which can in turn, minimize the adverse effects of the synthetic drug and simultaneously achieve enhanced therapeutic effect.

To conclude with, the drug-herb interactions pose a serious threat to public and require immense research for their identification and investigation. However, such interactions can prove to be very helpful in treating ailments and in maintaining the normal health of the individuals. It is difficult to differentiate about the pharmacokinetics of the herbal preparations. Hence it is the need of the hour to be aware of and to adopt proper strategies to minimize toxic herb drug interactions. Early identification of such interactions and the mechanism involved therein could be an effective way to avoid the consequences of interactions and to focus on their beneficial effects such as dose reduction of synthetic drug in a way to reduce its side effects; provided this identification stage is incorporated early into stages of development of synthetic drugs and herbal medicines. When a combination therapy is used, factors such as a safe drug

combination and dose adjustment should be considered by the physician. Special precautions must be taken while concomitantly administering herbs with the drugs with narrow therapeutic indices.

Thus there is a need to investigate the potential drug-herb interactions and the research must go beyond not only focusing on pharmacological efficacy of botanicals but also in studies that improve their effectiveness in order for humanity to fully benefit from their inherent therapeutic potentials. It depends solely on us, on how to make the best use of the drug-herb interactions thereby making it a boon and avoiding their harmful or toxic effects that can culminate into a curse!

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Rahul Taneja

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World Intellectual Property Right day is celebrated every year on 26 April by the World Intellectual Property Organization (WIPO), Geneva, Switzerland. This year this day was celebrated with the theme ***Creativity: the next generation***. The basic objective of this day is to create awareness about the Intellectual Property Rights to all over the world and to motivate the Industries, Universities, Scientist, Research Scholar and Industrialist to protect their creativity. World Intellectual Property Organization facilitates the entire world for the protection of creativity. Intellectual Property is the Property, which has been created by exercise of Intellectual Faculty. It is the result of persons Intellectual Activities. Thus Intellectual Property refers to creation of mind such as inventions, designs for industrial articles, literary, artistic work, symbols which are ultimately used in commerce. Intellectual Property rights allow the creators or owners to have the benefits from their works when these are exploited commercially. These rights are statutory rights governed in accordance with the provisions of corresponding legislations. According to Trade Related Aspects of Intellectual Property Rights, the intellectual property is classified into seven categories i.e. Patent, Industrial Design, Trade Marks, Copyright, Geographical Indications, Lay out designs of integrated circuits and Protection of undisclosed information/Trade Secret. A Patent is a statutory right for an invention granted for a limited period of time to the patentee by the Government, in exchange of full disclosure of his invention for excluding others, from making, using, selling, importing the patented product or process for producing that product for those purposes without his consent. Patent protection is territorial right and therefore it is effective only within the territory of India. Trademarks are an important tool for communicating the value of a product or service to the market. Trade mark protection is the cornerstone of a variety of brand strategies based on product differentiation and market segmentation,

which are very important when managing competition, creating customer demand, and securing market share. In light of that, it is clear that trademarks are crucial to your industry. Industrial designs refer to creative activity which result in the ornamental or formal appearance of a product and design right refers to a novel or original design that is accorded to the proprietor of a validly registered design.



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Courtesy:

Department of Science & Technology, New Delhi

Paper presented in international conference at South Korea

Mr. Inderbir Singh Bakshi, Associate Professor & HOD (Pharm.Tech.) Chitkara College of Pharmacy, Chitkara University, Punjab presented his work titled "Application of natural materials as superdisintegrants in fast disintegrating tablets" as an oral presentation (12-OP-B6) at POLYCHAR 21, World Forum on Advanced Materials, an International Conference held at Kim Daejung Convention Centre, Gwangju, South Korea from 11-15 March 2013. The topics covered in key note and plenary lectures during the conference ranged from ionic liquids, nanocomposites to smart materials. From the perspectives of pharmaceutical applications of polymers, natural materials, hydrogels, block copolymers, nanoparticles, nanotubes were discussed largely for sustained or controlled drug delivery. The conference was attended by participants



from 40 countries. The conference provided a platform for the researchers to discuss latest innovations in the field of polymer science and technology. The presentation on pharmaceutical application of natural polymers was appreciated by the audience. Dr. Sandeep Arora Director, Chitkara College of Pharmacy, Chitkara University, Punjab congratulated Mr. Inderbir Singh for representing Chitkara University at international forum of Polymer Sciences. The author kindly acknowledged the travel support received from Department of Science and Technology, India (SR/ITS/4845/2012-2013) and institutional and other facilities extended by Chitkara University, Punjab. Mr. Inderbir Singh Bakshi is a life member SPER and SPER State Representative (Punjab). He is actively involved in various activities of SPER.

Award Conferred Upon Mohd. Rageeb Mohd. Usman

Mr. Mohammed Rageeb Mohammed Usman, Asst. Prof., Dept. of Pharmacognosy, Smt. S. S. Patil College of Pharmacy, Chopda, Maharashtra conferred with "APP Young Performer Award 2013" during Annual Convention held on 17th March 2013 at SSDJ College of Pharmacy, Chandwad, Nashik, Maharashtra. He has also presented a research article in poster session during the Convention.



He won "Appreciation Award" for his presentation on "Pharmacognostic Study and Evaluation of Anti-inflammatory Activity of *Ficus Racemosa* Linn. Extract by using Albino Rats" during poster session.

Dr. P. D. Sethi Certificate of Merit Award

8th Dr. P. D. Sethi Certificate of Merit Award conferred upon Dr. Neeraj Sethiya, The MS University of Baroda, Vadodara for a research paper "Comparative pharmacognostical investigation on four



ethanobotanicals traditionally used as Shankpushpi in India" published in JAPTR. Dr. Neeraj Sethiya is a life member of SPER and SPER State Representative (Gujarat). He is actively involved in various activities of SPER.



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Annual General Meeting of Society of Pharmaceutical Education & Research™ will be held on Sunday, 28th July 2013 at 10:30 AM at its registered office.

Hon. Secretary

International conference held at Chitkara University

Two days international conference on Advances in Pharmacological & Pharmaceutical approaches to Drug Discovery and Clinical Development (APPADDCD-2013) were organized by Chitkara College of Pharmacy, Chitkara University, Punjab on 15-16 March 2013. The key speakers for the conference were Dr. Oliver Grundmann, Dept. of Medicinal Chemistry, College of Pharmacy, University of Florida, Prof Oluwatoyin A. Odeku (Mrs.), Professor & Head, Department of Pharmaceutics, University of Ibadan, Ibadan, Nigeria, Dr. Sudhir K. Sharma, GM, R&D, Panacea Biotech, Mohali, Sh. Sandeep Sharma, Manager, R & D, Jubilant Organosys Ltd., New Delhi, Sh. Sreedhar Singamala, Director, Clinfox International, Hyderabad, Sh. SVK Prasad, Exec. Director, CITO Healthcare, Hyderabad, Dr. Prafull Mathur,



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First US Patent for Vaccine Treatment of Dog and Cat Obesity is awarded to Braasch Biotech LLC

Braasch Biotech LLC, a biopharmaceutical company pioneering a new field of anti-somatostatin vaccines, today announced the company was assigned US Patent 8,425,914 for vaccination methods in the treatment of obesity in dogs and cats.

The patent issued on April 23rd 2013 for Methods for enhanced somatostatin immunogenicity in the treatment of obesity, is the first patent issued by the United States Patent and Trademark Office (USPTO) for treatment of phenotypic obesity by vaccination.

According to the Association of Pet Obesity Prevention (APOP), U.S. pet obesity rates continued to increase in 2012 with the number of overweight cats reaching an all-time high. The 2012 APOP survey found 52.5% of dogs and 58.3% of cats to be overweight or obese by their veterinarians. These results indicate that approximately 80 million U.S. dogs and cats are at increased risk for weight-related disorders such as diabetes, osteoarthritis, hypertension and many cancers.

"Like human obesity, obesity in dogs and cats is at epidemic proportions. Although prevention is always the best option, once an animal reaches the obese state, owner intervention is necessary for the pet's continued quality of life and longevity," stated Jeralyn Kay Haffer, CEO and Chairman of Braasch. "We are now pleased the USPTO has recognised our vaccine's novelty and commercial utility in the fight against dog and cat obesity." Additional patent applications for the company's obesity technologies are issued or pending in a number of other regions including Europe, Mexico, South Africa, Brazil, Canada and Japan.

Braasch's intellectual property portfolio includes multiple patent families with issued or pending claims directed to utility of anti-somatostatin vaccine technologies, Somatovac for multiple metabolic challenges.

Courtesy: Pharma News Letter



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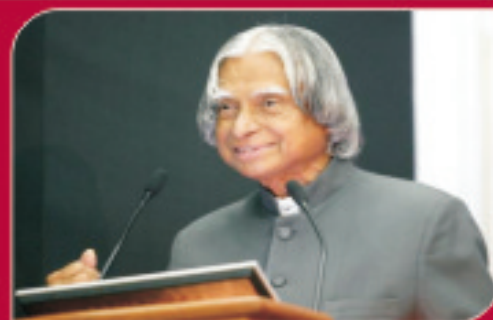
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