

**AICTE
SPONSORED
QUALITY IMPROVEMENT PROGRAMME
(QIP)**

ON

BIOEQUIVALENCE & CLINICAL RESEARCH
(Division of Pharmaceutics & Clinical Pharmacology)
May 9 – 22, 2008

RECENT TRENDS IN DRUG DISCOVERY & DEVELOPMENT
(Division of Pharmaceutical Chemistry)
May 23 - June 5, 2008

**HERBAL DRUG DEVELOPMENT -
TRENDS & FUTURE PROSPECTS**
(Division of Pharmacognosy)
June 6 – 19, 2008

ORGANISED

BY



**DEPARTMENT OF PHARMACEUTICAL SCIENCES
BIRLA INSTITUTE OF TECHNOLOGY,
MESRA-835215, RANCHI (JHARKHAND)**

The Birla Institute of Technology was established in the year 1955 at Mesra, Ranchi, Jharkhand by the Philanthropist – Industrialist Mr. B.M. Birla with a vision to establish a world – class institution to cater Engineering, Technology, Pharmaceutical, Management and other allied sciences needs of one of the most under develop region of the country. We have just concluded the *Golden Jubilee Celebrations* of the Institute. The institute over last decade ranked well within first ten places of the best technical Institute of the country. The institute offers Undergraduate, Postgraduate as well as Doctoral Programmes in Engineering & Technology, Applied Sciences, Pharmaceutical Sciences, Biomedical Instrumentation, Biotechnology, Business Management, Hotel Management & Catering Technology etc.

Birla Institute has produced over 15,000 degree holders in Engineering & Technology and other allied branches and over 2000 Postgraduates and number of PhDs. in various areas.

The Institute has been active in International ventures and tie-ups - It has collaboration with Industry, R&D organizations and Universities in U.S.A., U.K., China, Canada, France, etc.

Department of Pharmaceutical Sciences:

The Department of Pharmaceutical Sciences, Birla Institute of Technology established in 1972 is playing a leading role in imparting Pharmaceutical education in the country. It caters for the need of B. Pharm, M. Pharm & Ph.D. programmes recognized by P.C.I., A.I.C.T.E., U.G.C., D.S.T. The department over last five years has been the recognized center for AICTE run QIP programme. The department has in house facilities for analysis of medicines with sophisticated instruments such as HPLC, HPTLC, UV, IR, CHN, GC etc. It has a medicinal plants garden of 10 acres land and well equipped animal house accredited by CPCSEA. The area of research includes research on Synthetic Compounds, Peptides, Phytochemical Formulation Development, drug delivery studies in area such as analgesics, Anti-inflammatory Agents, Antidiabetics, Antihypertensive Wound healing Cardio active drugs. Tripos Suite of software Computer aided drug design is supported by computers & Tripos Sybyl base, Flexidock, COMFA COMSIA BIOPOLYMER softwares Alchemy, Autodock, Chemoffice and other related softwares. It is also supported by PARAM 10,000 supercomputer stationed in the institute.

1. DIVISION OF PHARMACEUTICS & CLINICAL PHARMACOLOGY

PROGRAMME THEME: BIOEQUIVALENCE & CLINICAL RESEARCH

OBJECTIVES:

It is a well known fact that Bioequivalence studies for both new and existing drugs are very essential according to the law of the country. The studies with respect to bio analytical, statistical and pharmacokinetic parameters are therefore required to be carried out in accordance with the International Bioequivalence testing standards, for which it is essential to follow the regulatory guidelines.

Clinical Research is one of the major steps in the development of new drug. India is expected to emerge as the hub of Clinical Research because of the New Patents Act and the Nation's strength in terms of skilled manpower and resource based availability.

In this Q.I.P, experts from clinical research centers, industries, regulatory department and physicians will be invited to share their experience and knowledge. This will enable the participants to meet the experts and learn the practical aspects along with regulatory requirements both national and international in the field of bioequivalence and clinical research. Handling of various sophisticated instruments will be taken up during the workshop.

Course content:

- Good clinical and Laboratory Practice
- Pharmacokinetics
- Bioequivalence
- Clinical Research – Design, Conduct, Planning, Monitoring, Management, Ethics, ICH guidelines
- Data Management, Data Entry & Validation
- Scientific Writing, Clinical trial reporting
- Instrumentation in Bioanalysis.

COURSE CONTENT:

- Good Clinical and Laboratory Practice
- Pharmacokinetics
- Bioequivalence
- Clinical Research – Design, Conduct, Planning, Monitoring, Management, Ethics ICH Guidelines
- Data Management, Data Entry & Validation
- Scientific Writing, Clinical Trial Reporting
- Instrumentation in Bioanalysis

2. DIVISION OF PHARMACEUTICAL CHEMISTRY

PROGRAMME THEME:

RECENT TRENDS IN DRUG DISCOVERY & DEVELOPMENT

OBJECTIVES:

The keys to successful drug discovery are the adequate supply of wide range of test compounds of natural / synthetic origin and the appropriate choice of potential therapeutic targets. Basically three types of approaches are available for the drug discovery program of natural/synthetic compounds, viz. (i) rational drug design, (ii) screening and (iii) probing mammalian/human biochemistry and physiology. Techniques in chemistry and chemo-informatics are also used to generate multiple lead compounds which are analyzed using modern analytical techniques and tested against the targets using high throughput screening. Knowledge on IPR issues and the process of bringing the molecule from laboratory to market is becoming important in post GATT era. The objective of this program is to provide a broad coverage of the techniques and tools used in modern drug discovery and development.

COURSE CONTENT:

The short term course will include lectures, experiments and on hand training on use of sophisticated analytical instruments, softwares and pharmacological/toxicological devices employed in drug discovery and development.

- Natural products in drug discovery.
- Receptor and drug receptor theories
- Drug design – Basic concepts
- Herbal Drug Formulation
- In-vitro and Pharmacological screening of synthetic/natural leads
- Animal testing and CPCSEA
- Preformulation studies
- Overview of GLP and GMP
- Regulatory affairs in Pharmaceutical industry
- Modern analytical tools (UV/IR/NMR/MS/HPLC/HPTLC)

3. DIVISION OF PHARMACOGNOSY

PROGRAMME THEME:

HERBAL DRUG DEVELOPMENT TRENDS & FUTURE PROSPECTS

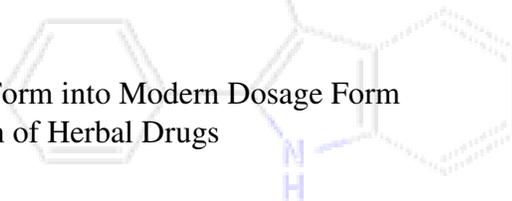
OBJECTIVES:

Herbal medicines, which are the drug products derived from plant sources, are highly popular since long in many developing countries because their uses are firmly embedded within wider belief systems of treatments prevailing in those countries. Many practitioners of traditional system of medicine (TM) including Complementary and Alternate Medicine (CAM) providers expect continued / increase in the recognition and support for their fields of therapy. The increase in the demand for these medicines in developed countries has given boost to industrial production of such medicines on large scale. At the same time, many allopathic- medicine professionals, including those in the countries with a strong history of TM, express strong reservations and often frank disbelief for the purported benefits of TM/CAM. While, regulators wrestle with questions of safety and efficacy of traditional herbal medicines, many industrial groups and consumers resist any health policy development that could limit the access to TM/CAM therapies. The current problems relate to: the framing of regulatory affairs with respect to mainly policy, safety, efficacy, quality, access and rational use of TM/CAM medicines.

Looking into the prevailing situation, quantitative research to ascertain levels of existing access (both financial and geographic), and qualitative research to clarify constraints to extending such access, are need of the hour to take full benefits of plant source medicines and their economy. The current programme therefore is aimed at focusing on the possible solutions to many aspects hindering the growth of herbal medicines in light of the present scenario of scientific developments.

COURSE CONTENT:

- Herbal Drug Development
- Conversion of Traditional Dosage Form into Modern Dosage Form
- Quality Control and Standardization of Herbal Drugs
- Nutraceuticals
- Conservation of Medicinal Plants
- Cosmeceuticals using herbal drugs
- Novel Drug Delivery System using herbal drugs



REGISTRATION FORM
(Photocopies may be used)

Name: _____
(in capital letters)

Designation: _____

Qualification: _____

Age: _____ Sex: _____

Official Address: _____

Phone (Off): _____

Mobile: _____

E-mail: _____

Accommodation required: Yes/No

Registration fee Rs. 500/- to be paid in the form of DD* in favour of
"Birla Institute of Technology" payable at Ranchi for each programme.

DD no. _____ Date of issue _____ Issuing Bank _____
(* DD is refundable subjected to attending the course.)

Interested to Register & Participant in _____

Division _____ Date: _____

Signature of the participant:

Date:

Forwarded by Principal / Head
(Signature with seal)

WHO MAY ATTEND?

Teachers from Degree & Diploma Institutes in Pharmacy approved by AICTE / PCI

Travel & Accommodation:

To & fro, sleeper class railway fare through shortest route will be given. Accommodation will be arranged with prior intimation.

Important dates:	Last Date of Registration	Programme Starts on
1. Pharmaceutics & Pharmacology Division	2 nd May 2008	9 th May 2008
2. Pharmaceutical Chemistry	16 th May 2008	23 rd May 2008
3. Pharmacognosy	30 th May 2008	6 th June 2008

(Limited to 30 participants)

Mail your Registration Form duly filled to:

Dr. D. Sasmal
Professor & Head
Department of Pharmaceutical Sciences
Birla Institute of Technology,
Mesra, Ranchi (Jharkhand)
Tel. No. 0651-2276247
Fax No. 0651-2275401
dsamal@bitmesra.ac.in

Dr. G.M. Panpalia
Chief Coordinator
Q.I.P Programme
Department of Pharmaceutical Sciences
Birla Institute of Technology,
Mesra, Ranchi (Jharkhand)
gmpanpalia@bitmesra.ac.in

For Further information, respective coordinators may please be contacted.

Pharmaceutics & Pharmacology Division
Programme Coordinators
Prof. (Mrs.) S.G. Panpalia /
Dr. (Mrs.) P.Mitra. Mazumder
sgpanpalia@bitmesra.ac.in
papiya_mm@rediffmail.com

Pharm. Chemistry Division
Programme Coordinators
Dr. B.N. Sinha /
Prof. Manik
bnsinha@bitmesra.ac.in
manik@bitmesra.ac.in

Pharmacognosy Division
Programme Coordinator
Dr. K. Jayaram Kumar
jayaram_res@yahoo.com