Biennial Report 2011-13

HYDERABAD

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, (नाईपर)
हैदराबाद

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (NIPER),
HYDERABAD

Patron
Dr. Ahmed Kamal
Project Director, NIPER Hyderabad

Compilation
Dr. Wahid Khan

HYDERABAD

Message from
The Project Director, NIPER Hyderabad

I am very happy that National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad is releasing its Biennial Report for the academic years 2011-13. Within a short period of six years NIPER Hyderabad has progressed well on both academic as well as research fronts.

In this period, the institute has consolidated its academic requirements in four disciplines in M.S.(Pharm.) with a total strength of over 150 students and about 20 faculty members. Ph.D programme in this institute has commenced from the academic year 2011, apart from MBA (Pharm.) programme that started from 2012 academic year. The institute also planned to start M.S.(Pharm.) in Regulatory Toxicology and M.Tech.(Pharm.) in Process Chemistry from academic year 2013-14. The 2nd Convocation for NIPER Hyderabad was held on 11th July, 2012 and degrees were awarded to 75 students. Dr Vishwa Mohan Katoch, Director General, Indian Council of Medial Research (ICMR) was the Chief Guest for the convocation. NIPER-H students have achieved nearly 80% of placements in reputed Industries/Institutions.

The young faculty is very enthusiastic about teaching as well as research. Besides regular academics and research NIPER has conducted number of conferences/workshops like Bioinformatics@BioAsia 2011, International Symposium on 2nd PharmsSci@India: AAPS – 2011 and National Conference on “Scope & Relevance of Ancient Indian Sciences”. Several research articles/reviews have been published in reputed journals. Some of the faculty members have also bagged the Organisation of Pharmaceutical Producers of India (OPPI) Young Scientist Awards, for 2011 and 2012, IDMA Young Pharmaceutical Analyst Award etc. Over and above, with the support of the Mentor Institute, and its Directors (Dr. Yadav and Dr. Lakshmi Kantam), NIPER Hyderabad has flourished and will maintain its pace of progress for the fulfillment of its motto.

Dr. Ahmed Kamal
Project Director
NIPER-Hyderabad

HYDERABAD

Message from
The Registrar, NIPER Hyderabad

I am happy to note that NIPER-Hyderabad has brought out a Biennial Report for the academic years 2011-12 and 2012-13. I compliment the faculty and staff.

Quality education is a continuous and conscious process aiming at academic excellence. The hallmark of NIPER-Hyderabad is to provide quality education, which has traversed a long way in a short span of time by setting up its own bench mark in the field of research and education. It can be ensured through quality assessment that the institution is doing what it claims to have been doing.

The National Institute of Pharmaceutical Education and Research, Hyderabad offers courses in M.S.(Pharm.), M.Tech.(Pharm.) and MBA(Pharm.) Knowledge is imparted in these courses through a structured syllabi with well qualified faculty. Now we have about 20 faculty and 200 students. Ph.D programme was initiated from 2011-12 academic year. MBA(Pharm.) Pharmaceutical Management was added from the academic year 2012-13. We have also planned to commence two more programmes M.S.(Pharm.) Regulatory Toxicology and M.Tech.(Pharm.) Process Chemistry from the academic year 2013-14, as they are in great demand.

Institute organised a good number of seminars, symposiums, and conferences by involving Industry, academia, students and faculty from NIPER and other institutes. The Institute developed state of the art laboratories, library and student amenities like hostels and playground. Emphasis is given to improve skills of learning and wholesome personality development. The students of this Institute have excelled in academics, sports and cultural activities.

NIPER-Hyderabad provides counseling, training and value addition for facilitating the students to obtain placements in Industry and Research Organizations.

Prof. N. Satyanarayana
Registrar
NIPER-Hyderabad

TABLE OF CONTENTS

About NIPER Hyderabad

National Institute of Pharmaceutical Education and Research (NIPER) is an autonomous body established under the aegis of Department of Pharmaceuticals (DoP), Ministry of Chemicals & Fertilizers as a Centre of Excellence for higher education, research and development in pharmaceutical sciences. The institute has been declared as an "Institute of National Importance" by Government of India through an Act of Parliament. In pursuance of the decision of the Government of India, NIPER-Hyderabad (NIPER-H) started functioning as one of the six new NIPERs in September 2007, in the premises of IDPL, R&D centre, Balanagar, Hyderabad. In terms of the MOU between the DoP and CSIR (Council for Scientific and Industrial Research), Indian Institute of Chemical Technology, Hyderabad, a reputed R&D institute under CSIR, was bestowed with the responsibility of Mentorship of NIPER-H. The institute has been functioning with the mission of developing human resource with excellence through conducting 2 year Post Graduate course M.S.(Pharm.) for the students enrolled based on the Joint Entrance Examination for all the NIPERs every year. NIPER-H is conducting the courses in four disciplines i.e., Medicinal Chemistry, Pharmaceutical Analysis, Pharmacology & Toxicology and Pharmaceutics based on semester system. The students have to undertake the course work during 1st & 2nd semesters followed by the dissertation work in NIPER-H or in reputed industry/R&D institutes like IICT, NIN, ILS and at the R&D centres of a number of Pharma Industries during 3rd & 4th semesters by getting exposed to the best R&D practices. Some of the dissertation studies have been published as peer reviewed papers and a number of students have been placed through campus placement. Ph.D programme has also been initiated in Medicinal Chemistry, Pharmacology & Toxicology and Pharmaceutics in 2011, and in Pharmaceutical Analysis in 2012. Apart from this, NIPER-H has also started a two-year full-time MBA program in Pharmaceutical Management from 2012 onwards. As the program has set high standards of management education in the pharmaceutical management sector, it has attained the status of a premier program in the country. Our students undergo training and secure placements in large number of pharmaceutical organizations.

The Institute has well experienced faculty; with spacious, ventilated and well-furnished class rooms and modern laboratories; an excellent auditorium for seminar/conferences; and a large library within the campus. Furnished hostel accommodation is provided to the students. The ratio of Faculty to Student is approx. 1:10. In addition, lectures by eminent guest faculty on specialized subjects in the concerned discipline, and various invited lectures by experts from the academia, research establishments and the industry are arranged for the benefit of students. A number of conferences/workshops have been organized to provide best exposure to the advances in the field of pharmaceutical sciences to NIPER students and faculty. Participation of students in the seminars organized by professional bodies is encouraged for interaction with persons in the field of their specialization.

Objectives of NIPER Hyderabad

- Enhancing creativity, motivation and drive for inculcating professionalism
- Bringing synergy between academia, R&D, technology and industry through training and exposure for such environment
- Bridging collaborations between pharma, biotechnology, and information technologies, and preparing for meeting global challenges
- Preparing professionals to suit the requirement of the pharmaceutical industry
- Developing and practicing e-learning for the professionals and training for teachers, researchers, and regulators in the respective fields
- Creating a world class institute of teaching and research in the field of pharmaceutical sciences
- Expand research activities in new avenues and emerging segments
- Explore national and international collaborations in pharmaceutical sciences

Activities of NIPER Hyderabad 2011-2012

The NIPER-Hyderabad's fifth academic year 2011-12 started with a grand orientation program held on 1st August, 2011 with the arrival of students admitted through a centralized counseling held at Mohali. In the orientation program, students were briefed about NIPER-H, faculty and the facilities. Also, several experts from academia and industries interacted with students during the program. NIPER-H faculty have participated with great enthusiasm and conducted the courses which were not only confined to syllabus, but also trained for communication, personality development skills and physical fitness. The 3rd semester students resumed their research projects at NIPER Hyderabad and various premier research organizations like IICT, NIN, USP, NIMS Hyderabad and in some leading pharmaceutical industries from August 2011. Examination cell of NIPER-H conducted all the examinations for M.S.(Pharm.) 1st semester and 3rd semester (Mid-Term and End-Semester examinations) and results were announced in a systematic way as per the academic calendar.

Second and fourth semesters were commenced after a short vacation from 3rd January 2012. Mid-Term project appraisal of 4th semester students was conducted in January 2012 and mid-Term examination for 2nd semester was conducted in March 2012. End-Term examination of 2nd semester was held in the month of May 2012. The 4th semester student's thesis and presentations were evaluated by expert committees and the entire process finished in June 2012. All the results for M.S.(Pharm.) degree were announced in June 2012.

During the academic year 2011-12 NIPER-H effectively organized several workshops and certificate programs and got an enormous response from various academic and industries from all over the country. On 3rd & 4th Sep. 2011, International Symposium titled "2nd PharmsSci@India - AAPS – 2011" was conducted as a joint meeting of National University of Singapore (NUS) and NIPER-H. Guest lectures such as Scope & Relevance of Ancient Indian Sciences on 12th Nov. 2011, Interaction of Magnesium with Nucleic Acid: From RNA bases to the Ribosome by Dr. Sanyasi Sitha, University of the Witwatersrand, Johannesburg, S.A. on 22nd Nov. 2011; Therapeutic Targets Based on Cell Signaling-Focus on Cancer delivered by Dr. V. Lakshmipathi, Professor, Kakatiya University on 2nd Dec. 2011; CANCER Awareness by Dr. Sadashivudu, Dept. of Pharmacology, NIMS, Hyderabad on 19th April 2012; Maternal Undernutrition and Pharmacokinetics in Adult Offspring by Dr Ganesh Cherala, Assistant Professor, Oregon State University, USA on 10th April 2012; Challenges & Opportunities in Pharma Industry by Dr. J.B. Gupta, Vice President, GVK Biosciences on 10th April 2012; New Trends in Chiral Separations by Dr Ch. Lakshmi Narayana, Vice President, Daicel Chiral Technologies, India on 29th March 2012; Lipids as Potential Anticancer Drug by Prof U. N. Das, Editor in Chief, Lipids in Health & Diseases, USA on 19th March 2012 and other related programs were very much useful to the students. There was also an inauguration ceremony of 50th National Pharmacy Week, which was organized at NIPER Hyderabad on 20th Nov. 2011.

A workshop on Bioinformatics@BioAsia 2012 was organized by NIPER-Hyderabad and Bio Asia 2012 in association with Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Govt. of India and Schrödinger on 09th February 2012 at NIPER– Hyderabad campus. The objective of this workshop was to bring together students, researchers and practitioners interested in the field of bioinformatics and to demonstrate recent developments, in bioinformatics and highlight its role in Health Care sector. This enabled the participants for developing new ideas on software experiences and best practices to maximize productivity in their own research activities.

Several international conferences and symposia were organized jointly with RSC London, CRSI India, IICT Hyderabad during 2011-12. The faculty and the students were encouraged in scientific publications as well as presentations. Many faculty members and students were provided the opportunity to attend conferences such as IPC, IPS BioAsia and many other national and international conferences.

NIPER Hyderabad also moved forward to strengthen its laboratory as well as library facilities and large number of instruments have been procured and installed. A number of books are being obtained year after year for the library. Reaxys factility is being provided for efficient and effective literature search. In addition to providing quality education as its priority, NIPER Hyderabad has organized campus recruitments for the placement of students. Well established industries including Perrigo, Novartis, Suven, Data Monitor, Biocon, Pharmexcil, AMRI, SAPL, DMV, etc, came forward to visit NIPER Hyderabad and selected students for employment in their companies.

NIPER-H has organized some student welfare programmes like eye camps and sport events including cultural programmes during 2011-12. Apart from the academic and scientific programmes, NIPER-H students, faculty and staff have participated in social activities like blood donation, food and clothes donation, visit to old age homes and plantation programmes to help towards the protection of the environment. Extracurricular activities like celebration of Teachers Day, Freshers Day, and Farewell Day were arranged by the students.

Activities of NIPER Hyderabad 2012-2013

After the grand success in terms of placement activity (nearly 80% of the students were placed in various reputed pharma hubs as well as research program), NIPER-H started its new session of academic year 2012-13 with the inauguration of the first batch of pharmaceutical management, the aim of which was to prepare participants for professional career and the establish a good relation between NIPER and pharmaceutical industries.

In this year also, the course works for M.S.(Pharm.) and MBA(Pharm.) were started in the month of August with a great spirit of acquiring advanced knowledge and research oriented vision. While, at the same time excellent opportunities were provided to project student in terms of place of work (like IICT, NIN, USP, NIMS and various reputed pharmaceutical industries), to carry out their projects and valuable guidance by highly experienced faculty members in order to develop them as a future generation scientist.

Many seminars and workshops were conducted for the benefit of the students relating to the newly developing technologies in the field of pharmaceutical sciences. Drug Development (D2@C2 - 2012) Workshop was conducted as a joint effort of Novartis and NIPER-H for the second time in NIPER-H campus. This workshop invited lectures by eminent Scientists/Professors from both Industry and Academia in the field of drug discovery, development and commercialization. Lecture sessions were accompanied by hands-on experience on drug discovery programmes and demonstration of special techniques/experiments in the relevant topics. This workshop comprised of three modules and each module of three days duration, over a period of three months. The main goal of the workshop was to build and enhance the knowledge as well as the skills of the students and interested professionals working or intending to work in the areas of drug discovery, development and commercialization.

Guest lectures were also organized to upgrade the knowledge of students like Importance of IPR in Pharmaceutical Industry by Dr. S. Padmaja, Managing Director Intellectual Property, Hyderabad on 25th August 2012; Preparation of Project Proposals - Issues to be Considered by Prof. V. Lakshmipathi, Former Professor, Kakatiya University on 25th August 2012; Opening up Biology for the Creation of New Therapeutics by Prof. Andrew D. Miller, Professor at King's College, London and Executive Officer and CSO at GlobalAcorn (Advanced Therapeutics) on 8th August 2012.

Pharmaceutical management course which was introduced for the first time in NIPER-H in this academic year has organized a seminar on Export business opportunities for pharma products in Africa on 6th May 2013. Apart from student oriented activities, this year NIPER-H also put its effort to build up the knowledge of its faculty by conducting a faculty program on instructional design and delivery systems (IDDS). Also experienced guest faculties were invited to deliver series of lectures for subjects like

biostatistics (Dr. Prasanna Krishna, Former Professor, NIN Hyderabad) and XRD technique for characterization of solids (Dr. Y.V.N Swamy, IICT, Hyderabad)

NIPER Hyderabad not only established itself as a research institute but also showed its promising efforts to provide its students a versatile personality. In this series Inter NIPER sports were conducted in the month of February (18-22th) which gave a nice platform to the students to show their extracurricular activities and also strengthen the unity among various NIPER's all over India. New Year Celebrations, teacher's day Celebrations, fresher's party and farewell party were other cultural activities held in this year. Also Personality Development Program and Communication Program were conducted for the students.

Helping hearts which is a student driven nonprofit group and dedicated for betterment for poor and needy population, organized its meeting and provided the collected fund for the treatment of a child suffering from brain tumor. The academic year 2012-13 was closed with the submission of thesis work of 4th semester project students and exams of 2nd semester students of all four branches. Nearly, 70% students were placed in various pharmaceutical companies as Novartis, DMV, Mylan, Biocon, GVK Bio Sciences etc. NIPER Hyderabad is determined to continue its journey of success and touch new dimensions in academics as well as research in future.

Academic Calendar 2011-2012

Activity	Dates
Semester I & III (July to December, 2011)	
Commencement of 3rd semester	1st July 2011
Commencement of 1st semester	1st Aug 2011
Orientation and Departmental Introduction session of Faculty, Staff and Students	2nd Aug 2011
Review of the project work of 3rd semester students	12th – 16th Sep 2011
Comprehensive Examination for Ph.D.	26th – 27th Sep 2011
Submission of Semester Attendance of Students from 1st Aug to 23rd Sep 2011	27th Sep 2011
Mid-Term Examination	29th Sep to 5th Oct 2011
Foundation Day Celebrations	19th Oct 2011
Presentation of Seminars (1st Semester students)	1st – 25th Nov 2011
Faculty Assessment by Students	1st – 2nd Dec 2011
Submission of Semester Attendance of Students (1st Aug to 2nd Dec.)	6th Dec 2011
Submission of Mid-Term Report on Thesis Work {3rd semester M.S.(Pharm.)}	6th – 7th Dec 2011
Mid-term Presentation of Thesis Work {3rd Semester M.S.(Pharm.)}	12th – 23rd Dec 2011
End-Semester Examination	10th – 23rd Dec 2011
Provisional Registration for January to June 2012 Semester	20th – 23rd Dec 2011
Semester Break. The Students shall have the option to opt for Educational / Industrial Tour in place of Semester Break	26th Dec 2011 – 2nd Jan 2012
Winter Break for Faculty only (one week)	26th Dec 2011 – 2nd Jan 2012
Submission of Marks by Examiners (1st, 3rd Semester Masters & Ph.D.)	Upto End of 2nd week of Jan 2012
Declaration of Result (1st, 3rd Semester Masters & Ph.D.)	Upto 23rd Jan 2012

Activity	Dates
Semester II & IV (January to June, 2012)	
Commencement of 2nd & 4th Semester	3rd Jan 2012
Assignment of 2nd Semester Masters Students to Advisors	2nd week of Jan 2012
Submission of Semester Attendance of Students (3rd Jan to 29th Feb)	1st Mar 2012
Mid-Term Examination	5th – 9th Mar 2012
Comprehensive Examination for Ph.D.	19th – 22nd Mar 2012
Constitution of SRCs for 2nd Semester Students & Ph.D. Scholars	2nd Week of Apr 2012
Presentation of Seminar (2nd Semester students)	April 2012
Faculty assessment by the Students	7th – 8th May 2012
Provisional Registration July to December 2012 Semester	28th May – 1st June 2012
Submission of Semester Attendance of Students (3rd Jan to 7th May 2012)	8th May 2012
End-Semester Examination	14th – 31st May 2012
Summer Recess for Faculty	2nd July – 20th July 2012
Submission of Marks by the examiners (End Semester exam)	Upto 11th June 2012
Submission of Unbound Copy of Thesis {4th Semester M.S.(Pharm.)}	Upto 1st June 2012
Defence of Thesis {4th Semester M.S.(Pharm.)}	Upto 15th June 2012
Declaration of Result of End-Semester examination (2nd Semester)	Upto 22nd June 2012
Submission of Bound Copies of the Thesis {4th Semester M.S.(Pharm.)}	Upto 22nd June 2012
Declaration of Results {4th Semester Exams}	On or before 29th June 2012

Academic Calendar 2012-2013

Activity	Dates
Semester I & III (July to December, 2012)	
Commencement of 3rd semester	02nd July 2012
Commencement of 1st semester	6th August, 2012
Orientation and Departmental Introduction session of Faculty, Staff and Students	6th August, 2012
Mid-Term Examination (Dates can be extended due to holidays etc.)	8th – 12th October 2012
Foundation Day Celebrations	19th October 2012
Comprehensive Examination for Ph.D.	4th week of October 2012
Presentation of Seminars [GE 511] (1st Semester students)	1st – 25th November 2012
Faculty Assessment by Students	05th December 2012
Submission of Semester Attendance of Students (06th Aug to 07th Dec 2012)	10th December 2012
End-Semester Examination (Dates can be extended due to holidays etc.)	14th – 28th December 2012
Submission of Mid-Term Report on Thesis Work [3rd semester M.S.(Pharm.)]	21st December 2012
Mid-Term Presentation of Thesis Work [3rd Semester M.S.(Pharm.)]	01st – 05th January 2013
Provisional Registration for January to June 2013 Semester	01st – 04th January 2013
Semester Break. The Students shall have the option to opt for Educational / Industrial Tour in place of Semester Break	07th – 11th January 2013
Winter Break for Faculty only (one week)	07th – 11th January 2013
Submission of Marks by Examiners (End Semester Exams)	Up to 10th January 2013
Declaration of Result (1st & 3rd Semester Masters & Ph.D.)	Up to 25th January 2013

Activity	Dates
Semester II & IV (January to June, 2013)	
Commencement of 2nd & 4th Semester	14th January 2013
Assignment of 2nd Semester Masters Students to Advisors	4th week of January 2013
Annual Sports Day / (First Saturday of February)	2nd February 2013
Mid-Term Examination (Dates can be extended due to holidays etc.)	11th – 15th March 2013
Comprehensive Examination for Ph.D.	3rd week of March 2013
Presentation of Seminar (2nd Semester students)	15th – 30th April 2013
Constitution of SRCs for 2nd Semester Students & Ph.D. Scholars	20th April – 10th May 2013
Faculty assessment by the Students	10th May 2013
Submission of Semester Attendance of Students (15th Jan to 17th May 2013)	21st May 2013
End-Semester Examination (Dates can be extended due to holidays etc.)	24th May – 7th June 2013
Submission of Soft bound Copy of Thesis [4th Semester M.S.(Pharm.)]	31st May 2013
Provisional Registration July to December 2013 Semester	10th – 14th June 2013
Defence of Thesis [4th Semester M.S.(Pharm.)]	10th – 18th June 2013
Summer Training for 2nd Semester MBA (07 weeks) 2013	10th June – 26th July
Submission of Marks by the examiners (End Semester Exams)	Up to 21st June 2013
Submission of Bound Copies of the Thesis [4th Semester M.S.(Pharm.)]	On or before 26th June 2013
Declaration of Results (2nd & 4th Semester Masters & Ph.D.)	Up to 28th June 2013
Summer Recess for Faculty only (any three weeks)	1st July – 26th July 2013

Head, Course Coordinators and Faculties (2011-2012)

NAME	DESIGNATION
Dr. Ahmed Kamal	Project Director
Prof. N. Satyanarayana	Registrar
DEPARTMENT OF MEDICINAL CHEMISTRY	
Dr. A. Krishnam Raju	Course Coordinator
Prof. V. Peesapati	Professor
Dr. B. Nagendra Babu	Assistant Professor
Dr. N. Shankaraiah	Assistant Professor
Dr. Kolupula Srinivas	Assistant Professor
DEPARTMENT OF PHARMACEUTICAL ANALYSIS	
Dr. R. Srinivas	Course Coordinator
Dr. S. Gananadhamu	Assistant Professor
Dr. M.V. Narendra Kumar Talluri	Lecturer
Dr. N. Satheesh Kumar	Lecturer
DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY	
Dr. S. Ramakrishna	Course Coordinator
Dr. VGM Naidu	Assistant Professor
Mr. Venu Talla	Lecturer
DEPARTMENT OF PHARMACEUTICS	
Dr. S. Ramakrishna	Course Coordinator
Dr. Nalini Shastri	Associate Professor
Dr. S. Sunitha	Lecturer
Mr. Naveen Chella	Lecturer

Head, Course Coordinators and Faculties (2012-2013)

NAME	DESIGNATION
Dr. Ahmed Kamal	Project Director
Prof. N. Satyanarayana	Registrar
Dr. YVD. Nageshwar	Coordinator for research programmes
DEPARTMENT OF MEDICINAL CHEMISTRY	
Dr. N. Shankaraiah	Course Coordinator
Prof. V. Peesapati	Professor
Dr. B. Nagendra Babu	Assistant Professor
Dr. A. Krishnam Raju	Assistant Professor
Dr. Mohammed Arifuddin	Assistant Professor
Ms. M. Mallika	Lecturer
DEPARTMENT OF PHARMACEUTICAL ANALYSIS	
Dr. R. Srinivas	Course Coordinator
Dr. M.V. Narendra Kumar Talluri	Assistant Professor
Dr. S. Gananadhamu	Assistant Professor
Dr. N. Satheesh Kumar	Assistant Professor
DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY	
Dr. S. Ramakrishna	Course Coordinator
Dr. VGM Naidu	Assistant Professor
Dr. D. Sujatha	Assistant Professor
Dr. Ashutosh Kumar	Assistant Professor
Mr. Venu Talla	Lecturer
DEPARTMENT OF PHARMACEUTICS	
Dr. S. Ramakrishna	Course Coordinator
Dr. Nalini Shastri	Associate Professor
Dr. S. Sunitha	Assistant Professor
Dr. Wahid Khan	Assistant Professor
Mr. Naveen Chella	Lecturer
DEPARTMENT OF PHARMACEUTICAL MANAGEMENT	
Dr. A. Krishnam Raju	Course Coordinator
Dr. E. Murali Darshan	Professor and Consultant
Mr. P. Sujendra Swami	Teaching Assistant
Mr. N. Rajesh Kumar	Teaching Assistant

Guest Faculties (2011-2013)

NAME	DESIGNATION
Dr. Krishna Rao	Principal, Wesley College, Secunderabad
Prof. Prakasham	Director, Wesley College, Secunderabad
Mr. Venkat Ramana	Sr.Consultant, Wipro Information Technologies, Hyderabad
Mr. Vijay Kumar	Founder & CEO, I-Win IP Services, Hyderabad
Dr. A.K.S. Bhujanga Rao	President, Natco Research Centre, Hyderabad
Prof. V. Laxmipathi	Retd. Professor, Kakatiya University
Prof. M. Sridhar Acharyulu	MHRD -IP Chair Professor & Co-ordinator, NALSAR Proximate Education, Hyderabad
Dr. Sanjay Banerjee	Ramalingaswamy Fellow, IICT, Hyderabad
Dr. P. Aravinda Babu	Consultant to Pharma Industry in Clinical Research & Medico Marketing
Prof. P.S.N. Reddy	Retd. Professor, Osmania University
Dr. Amit Khanna	Group Head-Global Regulatory Chemistry Manufacturing & Controls, Novartis
Dr. Radha Rangarajan	Scientist, Dr. Reddy's Labs, Hyderabad
Dr. G. Narahari Sastry	Molecular Modeling Group, IICT, Hyderabad
Dr. S. Harinarayana Rao	Research Director, Reliance Clinical Research, Navy Mumbai
Dr. Sharmistha Banerjee	Asst. Professor, Dept. of Biochem, HCU, Hyderabad
Dr. T. Prasanna Krishna	Former Deputy Director, NIN, Hyderabad
Dr. V. Sita	Dean (MBA), Hyderabad Central University
Mr. Pramod Reddy	International Lawyer, Alumni of Harward University
Mr. Vijay Kumar	Founder and CEO, I-win IP Services, Hyderabad
Dr. J. Prasad	AGM,TATA Chemicals, Hyderabad
Mr. A. Jagannatha Reddy	VP (SCM) , Mylan Laboratories, Hyderabad
Mr. B. K. Karna	CEO, CPRI, Hyderabad
Mr. A. Anil Kumar	IIM (Alumni), IIT-M, Advisor for Bank, City Group, Mumbai
Mr. P.V. Rao	V R Research Executive Search Pvt Ltd, Hyderabad

Administrative and Technical Staff (2011-2013)

NAME	DESIGNATION
	ADMINISTRATIVE STAFF
Shri. M. S. N. Murthy	Coordinator (Admn.)
Shri. C.B. S. Charyulu	Coordinator (Stores & Purchase)
Mrs. M. Swapna Devi	Secretarial Assistant
Mr. M. Monohara	Assistant (Administration)
Mr. Rajesh Kumar Jha	Assistant (Administration)
Mrs. T. Sunitha	Assistant (Administration)
Mrs. A. Kalpana	Assistant (Administration)
Mrs. Sujatha Rao Srigiri	Office Assistant
Mrs. Sai Vishali	Office Assistant
Mrs. A. Anupa	Office Assistant
Mr. Mahesh	Office Assistant
Mrs. P. Ramadevi	Assistant (Administration)
Mr. K. Venugopal Rao	Security & Housekeeping Assistant
Mr. T. Praveen	Stores & Purchase Incharge
Mrs. B. Radhika	Hostel women caretaker
	TECHNICAL STAFF
Mr. G. Venkateswarlu	System Adminstrator
Mr. Y. Narsaiah	Project Assistant
Mr. D. Krishna Kishore	Project Assistant
Mrs. U. Jayalakshmi	Project Assistant
Mr. G. Chandrakanth	Project Assistant
Mr. G. C. Brahma Reddy	Project Assistant
Mr. Ch. Veerrabhadra Swamy	Project Assistant
Ms. B. Naga Priya	Project Assistant
Ms. N. Haritha	Project Assistant
Mr. K. Rama Prasad Reddy	Project Assistant
Mr. N. Yella Goud	Project Assistant
Mr. Shankar	Computer Lab Assistant
Mr. N. Natraj	Laboratory Assistant
Mr. Syed Mudabbir Feroze	Laboratory Assistant
Mr. Prabhakar Singh Yadav	Machine Operator
Mr. MD. Moizudin	Electrical Attendant
Mr. V. Mallesh Sagar	Lab Attendant
Mr. Lalit Kumar Paswan	Lab Attendant
Mr. B. Ramesh	Lab Attendant
Mr. Ch. Balaraj	Lab Attendant
Mr. N. Yakaraju	Lab Attendant
Mr. P. Raghavender Goud	Lab Attendant

Students Admitted to NIPER-H (2011-2013)

Discipline	Admitted in the Academic Year		Proposed in the Academic Year
	2011-12	2012-13	2013-14
M.S.(Pharm.)			110
Medicinal Chemistry	28	30	
Pharmaceutical Analysis	15	15	
Pharmacology & Toxicology	15	16	
Pharmaceutics	15	15	
Regulatory Toxicology	-	-	
MBA(Pharm.)			
Pharmaceutical Management	-	21	
M.Tech.(Pharm.)			
Pharmaceutical Technology (Process Chemistry)	-	-	
Ph.D			
Medicinal Chemistry	03	05	11
Pharmaceutical Analysis	-	03	
Pharmacology & Toxicology	03	02	
Pharmaceutics	03	02	

Placements

A number of students after completion of their Master's program are enrolled in various Research Institutes/Universities to pursue Ph.D program, both in India and abroad. Interestingly, more than seventy percent of the passed out students were placed in various Pharma Industries, major include- U.S. Pharmacopeia, Hyderabad; Biocon Limited, Bangalore; Novartis Healthcare Ltd, Hyderabad; DMV, Hyderabad; AMRI, Hyderabad; Torrent, Ahmedabad; GVK Biosciences, Hyderabad; Jubilant, Noida, Daichi-Sankyo, Delhi; Pharmexcil, Hyderabad; Vivimed Labs, Hyderabad; Natco, Hyderabad; DE Shaw, Hyderabad; Olefia BioPharma, Mumbai; Lutuis Pharma, Hyderabad; Emergo, Hyderabad; Indegene, Bangalore.

Ph.D Students Admitted in 2011

S.No.	NAME	DEPARTMENT
1	Santosh Kumar Prajapti	Medicinal Chemistry
2	Kishna Ram Senwar	Medicinal Chemistry
3	Bagul Chandrakanth Deoram	Medicinal Chemistry
4	Shweta	Pharmacology & Toxicology
5	Manish Kumar Jeengar	Pharmacology & Toxicology
6	K. Prashanth Kumar	Pharmacology & Toxicology
7	Indu Singh	Pharmaceutics
8	Rajan	Pharmaceutics
9	Dinesh Kumar	Pharmaceutics

Ph.D Students Admitted in 2012

1	Chander Singh Digwal	Medicinal Chemistry
2	Nagarsenkar Atulya Ajit	Medicinal Chemistry
3	Pankaj Sharma	Medicinal Chemistry
4	Shalini Nekkanti	Medicinal Chemistry
5	Yadav Upasana Rameshbhai	Medicinal Chemistry
6	Kalariya Pradipbhai Durlabhagi	Pharmaceutical Analysis
7	Patel Prinesh Nanubhai	Pharmaceutical Analysis
8	S. Santhi Kumar	Pharmaceutical Analysis
9	Dinesh Thummuri	Pharmacology & Toxicology
10	Yerra Veera Ganesh	Pharmacology & Toxicology
11	Munti Madugu Eameema	Pharmaceutics
12	Thipparaboina Rajesh	Pharmaceutics

Ph.D programme was initiated in Medicinal Chemistry, Pharmacology & Toxicology and Pharmaceutics in the year 2011 and Pharmaceutical Analysis in the year 2012.

Second Convocation 2012

Total No. of M.S.(Pharm.) Degrees Awarded in the Second Convocation 131

For the Batch 2009-2011

- Medicinal Chemistry 28
- Pharmaceutical Analysis 14
- Pharmacology & Toxicology 14

For the Batch 2010-2012

- Medicinal chemistry 30
- Pharmaceutical Analysis 14
- Pharmacology&Toxicology 15
- Pharmaceutics 16

Second Convocation (2012)

Second Convocation 2012

Second Convocation 2012

Second Convocation 2012

Second Convocation 2012

Gold Medal Award for the Batch 2009-2011

S.No.	NAME	DEPARTMENT
1.	Libi Anandi Viswanathan	Medicinal Chemistry
2.	Patel Prashant Kumar P.	Pharmaceutical Analysis
3.	Dhommati Lalitha	Pharmacology & Toxicology

Gold Medal Award for the Batch 2010-2012

1.	Takkallapally Srujana	Medicinal Chemistry
2.	Ch. Divya	Pharmaceutical Analysis
3.	Anantaraju Hasithashilpa	Pharmacology & Toxicology
4.	Nishantkumar Jain	Pharmaceutics

Book Prize Award for the Batch 2009-2011

1.	Libi Anandi Viswanathan	Medicinal Chemistry
2.	Patel Prashant Kumar P.	Pharmaceutical Analysis
3.	Dhommati Lalitha	Pharmacology & Toxicology
4.	Madishetti Shravani	Medicinal Chemistry
5.	Sruthi Gandepalli	Pharmacology & Toxicology

Book Prize Award for the Batch 2010-2012

1.	Takkallapally Srujana	Medicinal Chemistry
2.	Ch. Divya	Pharmaceutical Analysis
3.	Anantaraju Hasithashilpa	Pharmacology & Toxicology
4.	Nishantkumar Jain	Pharmaceutics
5.	H. Murtuza Shabbirali	Medicinal Chemistry

Master Students Graduated (Medicinal Chemistry)

NAME	TITLE OF THE PROJECT
JUNE 2012	
Sravani Kancharla	In Silico approaches to identity lead compounds against Dvl-Axin Binding in WNT Signaling Pathway as Cancer target
Divya Gudupudi	Regioselectivity and Reactivity in Supramolecular Hosts: A Computational Study
Chaitanyakumar Jaladanki	Identification of n→π* Interactions in Protein-Ligand complexes using structural and computational studies
Dhopathi Swetha	Computational Understanding of the features for dual inhibition of EGFR and IGF-1R Kinases
Shalini Nekkanti	In-silico Design of Aromatic Oligoamide Foldamers and Investigation of their Potential as Molecular Drug Delivery Systems
Takkallapally Srujana	Design, synthesis molecular modeling and biological evaluation of chiral unusual amino acid analogues of glyx-13
Gangasani Jagadeesh Kumar	Design, Synthesis, Docking studies and Biological evaluation of Novel s-Triazine derivatives as PI3K inhibitors
Talagadadeevi Vasavi	Exploration of Natural Product Libraries of Identify Novel Selective Scaffolds for HDAC8 Inhibition: A Virutal Screening Approach
Manjubala Choubey	Design, Synthesis and Molecular Docking Studies of Pioglitazone Derivatives and Design of Novel Thiazolidinedione Derivatives by Virtual Screening
Ajay Kumar Gupta	Design, Synthesis and Biological Evaluation of Novel Bicyclic Dihydroisoxazole Derivatives as Anticancer agent
Satyavathi Lingala	11β-HSD1, A Target in Type 2 Diabetes and Obestiy: Cloning, Expression, Purification of 11β-HSD (the Human Type-I) and synthesis of β substituted Ɣ-Amino acids
Vikas Jain	Synthesis of Novel Tool Compound for Bacterial NAD+ Dependent DNA-Ligase-A and 5'-Methylthiaodenosine Nucleosidase Inhibitor and Scaffolds for Library Generation
Sahishna M P	Novel Potent Dual Inhibitors of COX-2 and sEH: Design, Synthesis and Evaluation of Urea Derived Pyrazoles
Hadianawala Murtuza Shabbirali	Design, Synthesis and Evaluation of Novel Conjugates of Urea and Pyrazoles as Potent Dual Inhibitors of COX-2 and sEH
Vura K Pallayya Guptha	Design and Synthesis of Cyclodepsipeptide Dolastatatin 16 analogues & its screening against Cancer Cell

Master Students Graduated (Medicinal Chemistry)

NAME	TITLE OF THE PROJECT
JUNE 2012	
Suresh Babu Amula	Synthesis and Anticancer Activity of Novel Podophyllotoxin-Thiourea Congeners
Mounica Koneru	Synthesis of some Thiazole derivatives as Anti-Inflammatory Agents
Srinivas Pedapati	Design, Synthesis and Biological Evaluation of C3-Linked β-Carboline-pyridine Derivatives as Novel Anticancer Agents
Vijaykumar Dayaram Nimbarte	Insilico Design, Synthesis and Screening of Novel N-Acyl Piperidine Derived Pyrazoles as Potent Dual Inhibitors of COX-2 and sEH
Naveena Vavilala	A Novel Multi-Component Reaction for the Synthesis of 1,4-Benzodiazepines and Evaluation of their Anxiolytic Activity
Navya Thati	Design and Synthesis of New Aromatic Oligoamides as DNA Minor Groove Binders
Mayank Rai	Sythesis of Aminoacid Derived Adenosine & Deoxyadenosine and their Mechanistic Study Against Aminoacyl t-RNA Synthetase
Myadaraboina Sridevi	Synthesis and Bio-evaluation of Novel Analogues of Bortezomib as Anticancer Agents
Divya Nandamuri	Manipulation of Glucocorticoid receptor for the delivery of Anticancer Drug
Uday Kumar Kale	Isolation of Dibenzocyclooctadiene Lignans from Fruits of Schisandra Chinensis
Kapure Jeevak Sopanrao Shashikala	Sythesis and Characterization of benezenesulfonamide Derivatives and their biological activity
Gurram Ranjit	Design, Synthesis and Evaluation of Bauhiniastatins and their analogues as Cancer cell growth inhibitors
Sawale Kunal Mahendrakumar	Synthesis and Biological Evaluation of Some Novel Quinoline Based Heterocyclic Compounds [2-Azetidinone and 2-Thiazolidinones]
Banothu Ravi	Design, Synthesis and Biological Evaluation of Oxadiazolo-Phenanthrene Conjugates as Anticancer Agents
Megavath Srinivas	Synthesis of AZA-Analogues of Aspergillides

Master Students Graduated (Medicinal Chemistry)

NAME	TITLE OF THE PROJECT
JUNE 2013	
Bulusu Sai Gayatri	Design, Structure Activity Relationship and Synthesis of a New Class of 1,2,3-Triazolo based Naphthalimide Conjugates as Anti-Cancer Agents
Prasanthi Malapati	In Silico Study, Synthesis and Biological Evaluation of Novel Coumarin-Dihydroisoxazole/Triazole Hybrids as Potential Anti-Cancer Agents
Sucharita Gangula	Recombinant Expression and Purification of Human Dihydrofolate Reductase and Inhibitor Screening for Anti-Cancer Activity
Pawar Ankush Ashokrao	Synthesis of Heterocyclic Compounds as Anti-Inflammation Inhibitors
Jadala Chetna	Diversity Oriented Synthesis of C-3 Linked β-Carboline 1,2,3 Triazole Scaffolds as DNA Intercalators
Singampalli Anuradha	Design, Synthesis and Evaluation of 3-Alkenyl 5-Substituted Oxindole Derivatives as Anti Cancer Agents
Venkatageervani Korada	A Computational Analysis on the Polypharmacological Targets in Mycobacterium Tuberculosis
Sravanthi Devi Guggilapu	Dolastatin-16 Based Cyclic Peptides as Potential Anti-Cancer Agents: In Silico Design, Synthesis and Biological Study of Strained unusual Amino Acid Containing Peptides
Bhima Sri Devi	Synthesis and Biological Evaluation of Novel Indolo[2,1-b] Quinazoline Analogues as Cytotoxic Agents
Ainapure Varun Vikasbhai	Synthesis and In Vitro Activity of 1,2,4-Triazolo [4,3-a] Pyrimidine Oxazolidinone Antibacterial Agents
Posa Venkata Sriramya	Design, Synthesis, Molecular Modeling Studies and Biological Evaluation of New Azetidinone Derivatives
More Kalyan Babasaheb	In Silico Design, Synthesis and Biological Evaluation of Novel Conjugates of Urea and Pyrazole as Potent Dual Inhibitors of COX-2 and she
Boddu Ramakrishna	Design and Synthesis of New C3-Linked 1, 3, 4 - Oxadiazolo-β-Carboline Derivatives as Anti Cancer Agents
Poojari Venkatesh	Design, Molecular Modelling, Synthesis and Biological Evaluation of Analogues of GSK-3β Inhibitor Palinurin
Y. Vishnu Bhargav	Click Chemistry Based Synthesis and Evaluation of New Triazole Fused Benzodiazepine Derivatives
Sumithradevi Aitha	Prediction of Antigenic Epitopes By Characterizing Binding Sites using Site Points and Contour Maps

Master Students Graduated (Medicinal Chemistry)

NAME	TITLE OF THE PROJECT
JUNE 2013	
Donthiboina Kavitha	Design, Synthesis and Evaluation of Thiol Functionalized Dopamine Derivatives for the Cancer Therapy
M. Lakshmi Sucharitha	In Silico Design of Novel Thiazole Derivatives as Dual COX-2 & sEH Inhibitors and towards Stereoselective Total Synthesis of (+)-Epiquinamide
D. Shravani	Progesterone Receptor-Mediated Catonic Liposomal Gene Delivery System as a New Anti Cancer Therapeutics
Namballa Hari Krishna	Synthesis of Aspergllide Analogues as Anti Cancer Agents
Praveen Kumar N.	Synthesis of C9-Tethered 1, 2, 3 - Triazole-Phenanthrene Hybrids by Employing Cu-(1) catalyzed Cycloaddition Reaction
Padma Bhavani Borra	Design, Synthesis and Biological Evaluation of Indolino Quinoline Compounds as Anti Cancer Agents
Ravikumar Akunuri	Rational Design, Synthesis and Screening of Novel Dihydroisoxazole Derivatives via Cycloaddition of Norbornadiene with Chiral Oximes
Sirisha M.	Design and Synthesis of Novel 3-heteroaryl substituted 4,5-dihydroisoxazolyl Derivatives via (2+3) Cycloaddition & their Screening as Antimicrobial Agents
Shilpa Nanaji Kudekar	Molecular modelling study and Synthesis of Tetrasubstituted Cyclopentane Derivatives as Potential Anti-Cancer Agents
Boragalla Shiva	Synthesis and Bio-Evaluation of New 1,2,3-Triazole Derivatives as COX - Inhibitor
Badru Eslavath	Synthesis and Characterization of Novel Quinoline Based 2-Azetidinones and 4-Thiazolidinones as Potential Therapeutic Agents
Jarapala Baloji Naik	Synthesis and Biological Evaluation of Novel 7-Aryl-1,2,4-Triazolo(1,5-a) Pyrimidine Derivatives

Master Students Graduated (Pharmaceutical Analysis)

NAME	TITLE OF THE PROJECT
JUNE 2012	
Sindhu Kumari	Stability-Indicating Assay Method Development and Validation for Estimation of Ondansetron in Ondansetron Hydrochloride Injection by RP-UPLC
Laxmikanth Vaddepelly	Development and Validation of Bioanalytical Method for Simultaneous Estimation of Sitagliptin and Pioglitazone in Rat Plasma by LC-MS/MS & its Application to Pharmacokinetic Study
Y Krishnaveni	Development of validated Chemometrics - assisted Spectrophotometric method and Stability Indicating RP-HPLC method for simultaneous estimation of Doxophylline and Terbutaline in Bulk and its Formulation as well as characterization of degradants by LC-MS technique & Development of Stability-Indicating HPTLC method for estimation of Quercetin in commerical Herbal Formulations
CH. Divya	Separation, Identification and Characterization of Stress Degradants and Related impurities of Bortezomib using Mass Spectrometric Studies
Santhi Kumar Saladi	Development of Validated Stability Indicating Assay Methods for the estimation and characterization of Sitagliptin and its combinations by various Analytical techniques
Mounika Pulikonda	A Selective and Precise mehtod development and validation for the separation of related substances of Pantoprazole Magnesium by UPLC and Forced degradation studies
Vudataneni Spandana	Validated Stability Indicating RP-HPLC Assay Method for Naftopidil and UV Spectrophotometric Assay Method for Ambrisentan in Bulk Drug as well as Marketed Formulation
Rahul Kumar Yadav	Stability Indicating Assay Method of Dapoxetine by RP-HPLC: Simultaneous Estimation of Tadalafil and Sildenafil in presence of Dapoxetine and its Degradant
Ramineni Karthik	Stability-Indicating method development and validation for quantification of impurities present in Timolol gel forming Ophthalmic solution by RP-UPLC
Mahajan Kushal Chandrakant	Development and Validation of Stability Indicating UPLC method for various Prostaglandins and Timolol Containing Ophthalmic Formulations. Removal of Interference of Benzalkonium Chloride from Various Ophthalmic Formulations during the Assay of Active Pharmaceutical Ingredient

Master Students Graduated (Pharmaceutical Analysis)

NAME	TITLE OF THE PROJECT
JUNE 2012	
Modh Sudipkumar Chandrakantbhai	A Selective and Precise Method Development and Validation for the Determination of Related Substances in Esomeprazole Magnesium by UPLC
Dharmeshkumar S Parmar	Development of Stability Indicating RP-HPLC assay method for determination Dronedarone HCl in bulk and dosage forms and Characterization of degradants by LC-MS/MS
Vishalkumar Vasudev Shrigod	Development of stability indicating assay method for Thiocolchicoside and Aceclofenac Reverse phase - High Performance Liquid Chromatography in API and tablet Dosage form and Chemometric assisted Spectrophotometric method for Thicolchicoside and Aceclofenac in API and tablet dosage form
Jainishkumar Ranjeetbhai Chaudhari	Development of stability indicating RP-HPLC Assay and Spectrophotometric Method for Darifenacin hydrobromide in Pure and Tablet dosage Form
JUNE 2013	
Lubna Khatoon	Development and Validation of Stability Indicating RP-HPLC Assay Method and UV Spectrophotometric Method of Fidarestat
Chintalapudi Lavanya	Development and Validation of Stability Indicating Analytical Method for Estimation of Levofloxacin in Levofloxacin Injection by UPLC
Achiladi Anoosha Bhat	Development of Validated Stability Indicating HPLC and HPTLC Assay Methods for the Simultaneous Estimation of Ambroxol and Olopatadine
Krishna Priya Magam	Development and Validation of Stability Indicating RP-HPLC Assay Method for Rabeprazole in Tablet Dosage Form
Anandgaonkar Vaibhav Anil	Development and Validation of UPLS-MS compatible Stability Indicating Assay Method for Tenofovir Disoproxil Fumarate and Characterization of two of its Degradation Products
Nair Sreekala Balachandaran	A Novel and Validated Stability Indicating HPLC Method for Determination of Epalrestat in Bulk and Dosage Form and The Kinetic Study of Epalrestat Degradation Under Oxidative Conditions
S. Umarani	LC and LC-MS Study on Establishment of Degradation Pathway of Levosulpiride Under Forced Decomposition Conditions
Naveenkumar G.	Development and Validation of a Stability Indicating LC method for the Assay of Ambrisentan, an Endothelin-Receptor Antagonist

Master Students Graduated (Pharmaceutical Analysis)

NAME	TITLE OF THE PROJECT
JUNE 2013	
Pradeep Kumar Mathangi	Development of Validated Stability Indicating Assay Method for Simultaneous Estimation of Metformin HCl and Vildagliptin by RP-HPLC
Ajay Prakash Dubey	Development and Validation of a high-throughput mass spectrometric method for determination of Bendamustine hydrochloride in rat plasma and urine: overcoming matrix related stability issues and its bioanalytical application to Pharmacokinetic study
Chiguru Vishnuvardhan	Development of a Novel HPLC Method for Simultaneous Estimation of Some Anti-Hypertensive Drugs in Pharmaceutical Formulations
Akula Virija	Development and Validation of Stability Indicating Assay Method for Estimation of Losartan Potassium, Amlodipine and Hydrochlorothiazide in Finished Dosage Form by RP-HPLC
Ganeshwari Eedunuri	Development and Validation of LC-MS compatible UPLC-RS Method for Dulozetine HCl using QbD & Impurity Profiling of Milnacipran HCl by ICP-MS
Sudhakar B.	Stability Indicating UPLC Method for Assay of Moxifloxacin in Bulk and Pharmaceutical Formulations
D. Rajesh Kumar	Development of a Validated Stability Indicating HPLC Method for the Determination of Tolvaptan in Bulk Drug and Tablets

Master Students Graduated (Pharmacology and Toxicology)

NAME	TITLE OF THE PROJECT
JUNE 2012	
K. Eshvendar Reddy	Development of functional assays to identify Anti-Inflammatory receptor Agonists for Inflammation
Rahul Jain	The role of serine threonine kineses in inflammatory responses
Sudhir Kumar Tiwari	Screening of Benzothiazole Derivatives for its Anticancer Activity by Using In-Vitro Methods
A.V.S. Ramaraju	Effect of Flax seed oil consumption on neurological and proinflammatory changes in wistar rats fed with high fat diet and correlation with Gut microbiota associated with high fat diet consumption
Venkata Sai Sandeep I	Regulation of NK Cell receptor Ligands and their role in Inflammation
L. Narendra Bodduluru	Ridaifen-B induces apoptosis in estrogen receptor negative lung carcinoma cell line via mitochondrial mediated mechanism
Anantaraju Hasithashilpa	Targeting intrinsic pathway of Apoptosis by Piperlongumine, A Natural compound for Anticancer therapy
Alugonda Shashidhar	Anti Colorectal Cancer effect of Quercetin & Fluorouracil in combination against DMH induced Carcinogenesis & Quercetin protective effect against 5 Fluorouracil induced adverse effect
B Pradeep Kumar	Evaluation of Anti-Hyperlipidemic/Anti-Atherosclerotic activity of NIN coded formulation in Obese Rats
Renuka Prasad G	Evaluation of MAP3 kinases in the TNF-α signaling pathway as drug targets for Rheumatoid Arthritis
Vishnumurthy Chunchu	Mechanisms mediating Mis-Regulation of Proteosome in Prostate Cancer : Effective Anticancer Strategies
Uday Kishore P	Role of Oxidative Stress in Chronic obstructive Pulmonary disease
Anand kumar M	Understanding the role of Eicosanoids in Airway diseases
Satheesh Chitla	Docosahexaenoic acid modulates breast cancer progression through interplay between mediators involved in fat metabolism and inflammation
Parvathi Bai Khatravath	Effect of Rutin on Tamoxifen induced Hepatotoxicity and its Anti-tumor Activity in DMBA induced mammary carcinoma in experimental rats

Master Students Graduated (Pharmacology and Toxicology)

NAME	TITLE OF THE PROJECT
JUNE 2013	
Areti Aparna	Boswellia Ovalifoliolata abrogates Ros mediated NF-κB activation causes Apoptosis and Chemosensitization in Triple Negative Breast Cancer Cells
Kumudini Tota	Assessment of the Utiligy and Validation of Indigenous Therapies in the Management of Diabetes in Hyderabad District of Andhra Pradesh, India
Sujatha K.	Evaluating the Role of Glucose Transporters in Isoproterenol Induced Cardiac Hypertrophy in Rats
Niharika G.	Role of Sirtuins in Chronic Unpredictable Mild Stress [CUMS] Induce Neuroplastic Changes in Hippocampus: is there Hormonal Mediation?
Anudeep Kota	Screening and Biological Evaluation of Novel Thiazolidine Derivatives as Potential Anti-Cancer Agents
S. Chenna Keshava Reddy	Evaluation of Therapeutic Effect of Soluble Curcumin and Soluble Lutein against Diabetic Complications
Veerakasireddy Nakka	Enzymatic Comparision of Kinase Orthologs Involved in Inflammation from Different Species for Drug Discovery
T. Srujana	Effect of Naringin against Gentamicin Induced Acute Renal Injury in Rats: A Biochemical and Historachitectural Evaluation
Yamjala Samyuktha	In Vitro and In Vivo Protective Effects of Ethyl Acetate Extract from Leaves of Memecylon Sisparense Gamble agaist Oxidative Stress Induced Organ Toxicity
Surendra Singh	Molecular Expression and Pharmacological Characterization of GPCR for Drug Discovery
Durgaprasad Laveti	Effect of Curcumin, Celecoxib and Vallartan on Inflammatory Markers in HT-29 and COLO-205 Cells
Sachin Patel	Development of Mechanistic Assays for Understanding the Signaling Pathway in Inflammation
Chilka D.R. Kumari	Effect of Simvastatin on Doxorubicin-Induced Anti Profilerative Activities: A Combinatorial Approach for Increased Anti Cancer Efficacy
B. Sree Harsha	Expression, Purification and Biochemical Characterization of Therapeutic Proteins
Ramesh Kethavath	Effect of Quercetin and its Combination with Docetaxel in the Treatment of Gastric Cancer Induced by N-Methyl N-Nitrosourea and Saturated Sodium Chloride in Rats

Master Students Graduated (Pharmaceutics)

NAME	TITLE OF THE PROJECT
JUNE 2012	
Nishantkumar Jain	The development of β-Hydroxy Butyric Acid - PAMAM Dendrimer conjugate for targeted delivery of anti-cancer drug to Brain
Jhansi Reddy Kareddy	Formulation and Evaluation of Antidiabetic and Antihyperlipidimic drugs Combination
C. Hanumath Srikanth	Correlation of Plasma Protein binding using IN-VITRO and IN-VIVO Technique
Sharad Kumar Jain	Development and Characterization of Novel Carrier Based Formulations for Paclitaxel Delivery
S.V. Sailaja Chirravuri	Study of Mesoporous Silica based drug delievery system for poorly soluble drugs
Ashok Chattu	Prediction of Hepatic clearance from In-Vitro metabolic studies using liver microsomes from animals and human
V Ravi	Skin Pampa: Screening of chemical penetration enhancers for Rasagiline Mesylate, preparation and characterization of transdermal patch
M Kumar Vakacharla	The development of Folic acid - Stearic acid conjugated solid lipid nanoparticles for targeted delivery of Anti-Arthritic drug
Thipparaboina Rajesh	Development and In-Vitro Evaluation of Extended release pellets using Powder layering technique in a Rotary Centrifugal Granulator
Alkesh Yadav	Microencapsulation of Lamotrigine - A Comparative Study
Nehate Chetan Narayan	Development and Characterization of Novel Carriers Based Formulations for Tamoxifen Delivery
Jitendra Namdeorao Wankar	Transdermal Drug Delivery of Itraconazole and Minoxidil
Ramesh Gonuguntla	Formulation and Evaluation of Erlotinib HCl and Nanoparticles by using various techniques and study drug targeting at NSCLC Lines
Ashish Ashok Khandizod	Formulation and Development of Novel Stabilized Solid Oral Immediate Release Dosage Form
Ashok Zakkula	Sulfobutyl Ether7 β-Cyclodextrin, Olmesartan Medoxomil complex: Preparation, Characterization, and In-Vitro Evaluation
G K. Gowtham	Study of Alcohol dose dumping and mathematical model fitting in extended release dosage forms

Master Students Graduated (Pharmaceutics)

NAME	TITLE OF THE PROJECT
JUNE 2013	
Amancha Rakesh	Formulation and Evaluation of Polymeric Nanoparticles for Anti-Retro Viral Drug
Hemalatha Bala	Formulation and Evaluation of Injectable Suspension of an Anti-Inflammatory Drug
Kollamaram Gayathri	Quantification of Burst Effect in Swellable Matrix Systems using Statistical Tools
Anjali Jain	Development of Taste Masked Directly Compressible Formulation of Water Soluble Drugs
Rakesh Choudary Navuluru	Formulation of Stable Liquid Drug Concentrates as an Alternative to Freeze Dried Products
Doppalapudi Sindhu	Characterization of Interactions Between Glass Surface and Various Parenteral Formulations
Rompicharla S. V. Kiran	Formulation and Evaluation of Curcumin Loaded Topical Nanoemulsions for Enhanced Anti-Inflammatory Acitivity
Gollala Mahesh Kumar	Formulation and Evaluation of Sustained Release Microparticles of Ambroxol Hydrochloride
Mounika N.	Formulation and Evaluation of Solid Lipid Nanoparticles Loaded with Olmesartan Medoxomil
Rajesh Kumar Gurram	Design and Optimization of a Novel Non Aqueous Extrusion Process for Stability Improvement by QbD
M. Laxminarayana	Formulation and Evaluation of Self-Nanoemulsifying Drug Delivery System for Valsartan
Umamahesh Perumalla	Studies on Particulate Drug Delivery Systems of Anti Cancer Drug
Janga Anusha	Formulation and Evaluation of Ocular In Situgel of Lomefloxacin Hydrochloride
Ambedkar Pattpenjara	Studies on Poorly Water Soluble, Antifungal Drug for Improved Dissolution Rate using Mesoporous Silica as a Carrier
Vijaya Kumar Y.	Development and Optimization of Anti Cancer Drug Loaded Self Nano Emulsifying Drug Delivery System Using Desgin of Experiments

MEDICINAL CHEMISTRY

Identification of New Chemical Entities (NCEs) in Drug Discovery

Protein kinases catalyze the transfer of phosphate of ATP to specific hydroxyl group of serine, threonine, or tyrosine residue of cellular substrates including transcription factors, enzymes, etc. The human genomic study reveals that ~2% of total genome constitutes for protein kinases, further sequencing the genome has at least 518 distinct kinases and have been grouped in to ~20 families. The process of phosphorylation is normal in physiological condition however under the pathological conditions the protein kinases can be down regulated, leading to alterations in the phosphorylation and resulting in uncontrolled cell division, inhibition of apoptosis and other abnormalities leading to disease. A number of diseases including diabetes, inflammation, and cancer have been linked to unregulated protein kinase mediated signaling pathways.

The use of small-molecule inhibitors of protein function is one of the most efficient ways to treat human disease including malignancy. Kinases have become important molecular targets in cancer therapy and other diseases and they are considered as attractive targets for drug discovery next to G protein coupled receptors. The existing drug molecules such as Gleevec, Iressa and Tarceva have demonstrated prolific effects in controlling cancer with maximum safety. Kinases such as Abl, EGFR, VEGFR, PDGF, Src, B-raf, Aurora, etc, have become attractive targets for medicinal chemists in the discovery of novel drug molecules in cancer treatment. Most of the kinase inhibitors interact with kinase at the conserved ATP binding region (ATP competitive kinase inhibitors). This structural conservation in particular kinases is grouped into families which share similar structural features and folding and is often responsible for the untoward effect which may be due to cross interactions leading to fatalities.

Promiscuous inhibitors are those which suffer from side effects. An anticancer drug imatinib (STI571) with activity profile against five kinases (Abl, C-Kit, Lck, PDGFR, and CSFIR) has been found to exhibit potential cardiac toxicity. Similar kind of cardiovascular toxicities have been demonstrated by promiscuous kinase inhibitors such as SU11248 and Sorafenib (Bay 43-9006). The new kinase inhibitors may potentially enable the selective regulation of specific protein kinase associated with a particular disease without affecting other protein kinase involved in normal physiology.

Various analogues containing urea group have been synthesized and evaluated for p38 kinase inhibitory activity. Some of the inhibitors have also exhibited potent in vivo anti-inflammatory activity. Molecular docking studies of urea derivatives have indicated similar binding interaction profile as depicted by the clinical candidate possessing p38 kinase inhibitory activity. The urea derivatives have been further modified to keto amides and the activities are awaited.

The common strategy of anticancer drug discovery has been to unravel the biological pathway by which an effective anticancer agent modulates and use this knowledge in the mechanism based drug discovery program. This has been achieved both through the natural product screening and chemical synthesis. The development of new therapeutic agents, as well as the identification of molecular probes for the study of the chemical/biological interfaces, is one of the major goals in biomedical research. In this context, the availability of large libraries of small organic molecules, covering as much chemical space as possible, is seen as the only means which guarantees potential modulation of many biological targets that are ultimately being unveiled by genomics.

Podophyllotoxin as new anticancer agents

The renewed interest on podophyllotoxin as an anticancer drug started in 1950s and much work has been done by Sandoz Laboratories Basel, Switzerland. Three semi-synthetic derivatives of podophyllotoxin, etoposide (VP-16), teniposide (VM-26) and etopophos, are widely used as anticancer drugs and show good clinical effects against several types of neoplasms including testicular and small-cell lung cancers, lymphoma, leukaemia, Kaposi's sarcoma, etc. However, several limitations such as myelosuppression, development of drug resistance and cytotoxicity towards normal cells, still exist. To a greater or lesser extent, this general profile applies to cytotoxic agents from a wide range of mechanistic classes e.g., alkylating agents, DNA intercalators, antifoliates, tubulin binders, topoisomerase inhibitors, this includes many of the best known and most widely used anticancer drugs, such as etoposide, doxorubicin, methotrexate and cisplatin etc.

Metabolic studies of podophyllotoxin have given some insights into its mechanism of action. VP-16 has been found to undergo O-demethylation by rat and mouse liver microsomes and purified rat liver cytochrome P-450 to produce the O-dihydroxy or catechol of VP-16. The metabolism of VP-16 in isolated perfused rat liver has been studied, this finds the presence of glucoronides in the bile of VP-16 perfused liver indicating that VP-16 undergoes conjugation with glucoronic acid and the formation of the microisomer of VP-16 in the liver has also been observed. The N-demethyl compound is the major metabolite of dimethylamino etoposide (NK 611). Top-53 glucoronide is found to be the major metabolite of TOP-53, a new podophyllotoxin derivative.

Most of the lignans inhibit the polymerization of tubulin and DNA topoisomerase II enzyme. Studies on Structure-Activity Relationship (SAR) have shown that podophyllotoxin like compounds

preferentially inhibit tubulin polymerization, which leads to arrest of the cell cycle in the metaphase. However, etoposide like compounds are potent irreversible inhibitors of DNA topoisomerase II and their action is based on the formation of nucleic acid-drug-enzyme complex, which induces single- and double-stranded DNA breaks, as the initial step in a series of biochemical transformations that eventually lead to cell death.

In continuation of above findings, the new 4β-anilino substituted podophyllotoxin congeners have been synthesized and are evaluating for their anticancer potential. These new compounds might inhibit better tubulin polymerization.

Computer Aided Drug Design

Drug design is an iterative process which begins when a chemist identifies a compound that displays an interesting biological profile and ends when both the activity profile and the chemical synthesis of the new chemical entity are optimized. Traditional approaches to drug discovery rely on a step-wise synthesis and screening program for large numbers of compounds to optimize activity profiles. Over the past ten to twenty years, scientists have used computer models of new chemical entities to help define activity profiles, geometries and reactivities.

One of the basic tenets of medicinal chemistry is that biological activity is dependent on the three-dimensional placement of specific functional groups (the pharmacophore). Over the past few years, advances in the development of new mathematical models which describe chemical phenomena and development of more intuitive program interfaces coupled with the availability of faster, smaller and affordable computer hardware have provided experimental scientists with a new set of computational tools. These tools are being successfully used, in conjunction with traditional research techniques, to examine the structural properties of existing compounds, develop and quantify a hypothesis which relates these properties to observed activity and utilize these "rules" to predict properties and activities for new chemical entities. The development of molecular modeling programs and their application in pharmaceutical research has been formalized as a field of study known as computer assisted drug design (CADD) or computer assisted molecular design (CAMD).

Identifying a protein's shape, or structure, is key to understanding its biological function and its role in health and disease. Illuminating a protein's structure also paves the way for the development of new agents and devices to treat a disease. Yet solving the structure of a protein is no easy feat. It often takes scientists working in the laboratory months, sometimes years, to experimentally determine a single structure. Therefore, scientists have begun to turn toward computers to help predict the structure of a protein based on its sequence. The challenge lies in developing methods for accurately and reliably understanding this intricate relationship.

Scientists know that the critical feature of a protein is its ability to adopt the right shape for carrying out a particular function. But sometimes a protein twists into the wrong shape or has a missing part, preventing it from doing its job. Many diseases, such as Alzheimer's and "mad cow", are now known to result from proteins that have adopted an incorrect structure. These issues some extent can be addressed with the aid of molecular modeling software.

Computer simulations or molecular dynamics can be carried out in the hope of understanding the properties of assemblies of molecules in terms of their structure and the microscopic interactions between them. This serves as a complement to conventional experiments, enabling us to learn something new, something that cannot be found out in other ways. Computer simulations act as a bridge between microscopic length and time scales and the macroscopic world of the laboratory: we provide a guess at the interactions between molecules, and obtain `exact' predictions of bulk properties. The predictions are `exact' in the sense that they can be made as accurate as we like, subject to the limitations imposed by our computer budget. At the same time, the hidden detail behind bulk measurements can be revealed. Research activities include identification of small molecule inhibitors with the aid of molecular modeling software, understanding of electronic states and mechanistic study of reactivity of organic molecules.

The prion protein (PrP) is responsible for a group of neurodegenerative diseases called the transmissible spongiform encephalopathies. To study the intrinsic structural properties of three human prion protein (PrP) α-helixes and to analyze their stability, application of molecular dynamics simulations are in progress. Identification of small molecule inhibitors for prion protein with the help of molecular modeling tools are in progress.

PHARMACEUTICAL ANALYSIS

The Department was created in 2007 to provide a focus for pharmaceutical analysis at NIPER-H. The principal remit of the department is the discovery, development and application of analytical methods and techniques relevant to pharmaceutical and biomedical sciences. The department specializes in training pharmacists and chemists in developing their knowledge and problem solving skills in pharmaceutical analysis.

Research projects are currently under way in a range of general and specific analytical problems utilizing a variety of instrumental techniques. Chromatographic techniques are widely used with high-performance/Ultra performance liquid chromatography and gas chromatography being strongly to the fore and LC-MS/MS and GC-MS studies of drugs and drug metabolites. Chemometric methods of analysis are used to give a deeper perspective to the results and to allow data to be compared more easily.

Drug impurity profiling

Drug impurity profiling, i.e. identification, structure elucidation and quantitative determination of impurities and degradation products in bulk drug materials and pharmaceutical formulations is one of the most important fields of activities in modern pharmaceutical analysis. The reason for the increased importance of this area is that unidentified, potentially toxic impurities are health hazards and in order to increase the safety of drug therapy, impurities should be identified and determined by selective methods.

The main focused research areas of the department are separation and determination of impurities off-line and on-line chromatographic - spectroscopic methods for the structure elucidation of impurities and degradation products as well as some analytical aspects of enantiomeric purity of chiral drugs.

Stability studies

Stability indicating methods are quantitative test methods that can detect changes with time of drug substances and drug products. Information of type and amount of degradation products over time is important for safety of drugs. The use of such methods is appropriate when there is an intention to document drug substance or drug product stability. It is immaterial if such documentation is generated to support a regulatory submission such as an Investigational New Drug Application (IND), Drug Master File (DMF) or an (A)NDA or generated to satisfy cGMP requirements for a non-application drug substance or drug product.

Analysis and standardization of herbal drugs

When herbal medicines are concerned, there are always hundreds of components and many of them are in minute quantities. On the other hand, there usually exists variability within the different and even the same herbal materials. Consequently, to obtain reliable chromatographic fingerprints that represent pharmacologically active and chemically characteristic components is not a trivial task. The performance

of a chromatographic fingerprint obtained is closely dependent on the chromatographic separation degrees and concentration distribution of all chemical components in the herbal medicine investigated. Furthermore, the recent approaches of applying hyphenated chromatography and spectroscopy such as high performance liquid chromatography-diode array detection (HPLC-DAD), gas chromatography-mass spectroscopy (GC-MS), HPLC-MS etc could provide the additional spectral information, which will be very useful for the qualitative analysis and even for the on-line structural elucidation.

Drug metabolism studies

Metabolite identification studies provide critical information on drug candidates, these studies have typically been reserved for compounds late in the development phase. These studies are not amenable to high throughput as each compound will give a different metabolic profile, and evaluation of the data can be a lengthy and labor-intensive process. Traditional studies require radio labelled compounds, synthetic standards of potential metabolites, and sophisticated analytical instrumentation. However, with the recent advances in analytical technology and software programs, metabolite identification studies are now playing a pivotal role in the discovery phase of new drug entities. Early identification of metabolic “hot spots” in a particular structural series provides valuable information to the medicinal chemists and can drive the progression of chemical structures in a particular therapeutic program. In addition, early characterization of potentially active or toxic metabolites can direct a program to more potent and safe recommendation candidates. Analytical techniques, available in the discovery phase, are described for the early characterization of metabolites, focusing on the use of liquid chromatography-tandem mass spectrometry (LC-MS/MS), and the advances in software programs to aid the analyst in critically and rapidly evaluating the data produced. The focus is on small molecule applications.

Bioanalytical method development

The development of sound bioanalytical methods is of paramount importance during the process of drug discovery and development culminating in a marketing approval. Bioanalysis, employed for the quantitative determination of drugs and their metabolites in biological fluids, plays a significant role in the evaluation and interpretation of bioequivalence, pharmacokinetic and toxicokinetic studies. Selective and sensitive analytical methods for quantitative evaluation of drugs and their metabolites are critical for the successful conduct of pre-clinical and/or biopharmaceutics and clinical pharmacology studies. The determination of drug concentrations in biological fluids yields the data used to understand the time course of drug action, or pharmacokinetics, in animals and human and is an essential component of the drug discovery and development process.

PHARMACOLOGY AND TOXICOLOGY

The main focus of this department is to offer extensive training in pharmacology and toxicology to both post graduate and Ph.D students. Our program features close working relationships between individual students and their faculty mentor, rich and diverse research opportunities, and individualized programs of study based on the needs of the students. The research program is founded on a strong Ph.D graduate program in Pharmacology & Toxicology. Current areas of research investigation in the department are neuropharmacology especially in peripheral neuropathies, effects of diabetes and chemotherpay on the nervous system, Chronic inflammatory diseases such as rheumatoid arthritis, psoriasis, gout, cancer and inflammation/cancer induced bone loss.

Diabetes and Diabetic complications

Our department has a general interest in the in vivo role of free radicals - reactive oxygen and nitrogen species, PARP overactivation and neuroinflammation - with emphasis on the developing stage of diabetes, and its complications mainly diabetic neuropathy. We are also studying pathogenetic mechanisms and potential drug targets directed at cellular transduction of damage signals (neurotrophic deficits, oxidative stress, glucose stress, mitochondrial dysfunction) and failure of cellular protective mechanisms. The neuropathic pain related to peripheral nerve damage is one of the areas which have been explored extensively at department of pharmacology and toxicology, NIPER-Hyderabad. We are trying to investigate agents which can targets mechanisms involved in pain generation in addition to symptomatic pain relief. We are also working on defining the effect of hyperglycemia and chemotherapy related alteration in peripheral neuropathies in relation to mitochondrial function. This project uses both biochemical assessments of mitochondrial function and state of the art quantitative proteomic analyses to identify how hyperglycemia and associated signalling intersect at the level of superoxide generation to affect the mitochondrial proteome and mitochondrial function.

Cancer

Breast cancer is the second leading cause of cancer death among women, having the highest incidence rate, affecting one in eight women during their lives. Prognosis and survival rates for breast cancer vary greatly depending on the cancer type, stage, treatment, and geographical location of the patient. Our area of interest is to highlight TNBC, a rare and most aggressive breast cancer type in occurrence especially in American-African population. TNBC accounts for about 15% to 20% of newly diagnosed breast cancer cases and is associated with specific features like aggressive nature of the tumor, unfavorable prognosis, early relapses and lack of present targeted therapies. The current targets for TNBC may include platinum compounds, poly ADP ribose polymerase (PARP) inhibitors, EGFR inhibitors, angiogenesis inhibitors, androgen receptor targeted therapy either alone or in combination with

chemotherapy and the novel targets may be mTOR inhibitors, PI3K-AKT inhibitors and agents targeting MAP kinase cascade, glycolysis pathway and WNT signaling. Preclinical studies suggest that up regulated PI3k/Akt/mTOR and WNT signaling pathways confer a higher sensitivity to TNBC. Considering all these aspects, our area of focus is to identify lead molecules from either natural sources or synthetic compounds targeting the above mentioned pathways by performing both in vitro and in vivo pharmacological studies.

Cancer induced bone loss

Cancer is a chronic condition which is characterized by tumour initiation, promotion and finally ends up with metastasis. Bone is the majorly effected and 3rd most of metastatic organs. 70% of cancers deaths are due to metastasis. There is evidence that osteoclastic activity encourages tumour establishment and growth, in which RANK and RANKL plays a pivotal role in differentiation, activation and survival of osteoclasts. Apart from RANKL-RANK signaling pathways, PI3K, MAPK kinases and NFkB play a vital role in cancer cell induced bone loss. Considering all these aspects, our area of focus is also to identify lead molecules from either natural sources or synthetic compounds targeting the above mentioned pathways.

Rheumatoid arthritis and Psoriasis

A chronic inflammatory disease is a medical condition which is characterized by persistent inflammation. We are working with some of these diseases like diabetes, Rheumatoid arthritis and psoriasis. It is important for understanding current and potential future impact of the disease and their by it necessary to develop the most effective treatment strategies. Psoriasis is a common chronic, recurrent, immune mediated disease of the skin and joints having a significant negative impact on the physical, emotional, and psychological wellbeing of affected patients. To overcome the side effects of available treatment regimens, we are working with a natural topical formulation with diminished side effects and having improved efficacy.

Gout and Urolithosis

Gout, which is usually characterized by recurrent attacks of acute inflammatory arthritis- a red, tender, hot, swollen joint. Research is going to identify the various factors affecting pathophysiology of this diasease and to find out suitable treatment options. We are also trying to establish a new experimental model for screening anti-gout drugs which mimics the natural aetiology of disease and can be exploited to carry out the preliminary screening as well as to perform the mechanistic studies. Urolithiasis is the condition where urinary stones are formed or located anywhere in the urinary system. The formation of various stones is one of the research topics explored at our department and we are engaged in screening both in vitro and in vivo some of the natural compounds which can alleviate symptoms associated with urolithiasis.

PHARMACEUTICS

Research in this department encompasses basic, applied and clinical investigations in (i) Drug delivery (ii) Pharmacokinetics/Biopharmaceutics. Drug delivery is the major thrust area of Pharmaceutics department. Drug delivery is the method of administering an active pharmaceutical ingredient to achieve a therapeutic effect in humans or animals through various routes of administration. Drug delivery technologies modify drug release profile, absorption, distribution and elimination for the benefit of improving product efficacy and safety as well as patient convenience and compliance. The goal of drug formulation and delivery is to administer a drug at a therapeutic concentration to a particular site of action for a specified period of time. The design of the final formulated product for drug delivery is done by taking into consideration the physical, chemical and pharmacokinetic and dynamic properties of the drug substance, the route of administration, the processing method and the clinical use of the product. Current efforts in the area of drug delivery include the development of formulations such as immediate release dosage forms, modified release dosage forms, novel drug delivery systems, and targeted drug delivery systems.

Oral bioavailability enhancement of poorly soluble drugs

More than 40% of drugs released in recent years have very low aqueous solubilities and also low and/or varying bioavailability. Many are class II substances according to the Biopharmaceutical Classification System (BCS), meaning that they have a high permeability, and that the solubilization in the gastro-intestinal tract is the rate limiting step for their absorption. Solubilization in the GI tract depends on physicochemical properties of the drug substance (e.g. solubility and particle size) as well as physiological factors (e.g. composition, volume and hydrodynamics) of the GI fluids. The physical and chemical properties of the gastro-intestinal tract are complex and strongly dependent on nutritional status. Since the absorption of class II drugs is primarily limited by dissolution, a correlation between in vitro dissolution and in vivo absorption might be expected. Department of Pharmaceutics is working on the improvement of bioavailablity of BCS class II drugs with the aid of solubility enhancement methods like cosolvency, micellization, complexation, Lipid-based formulations and use of mesoporous silica for adsorption of these drugs.

Crystal engineering & solid state manipulation

One of the current thrust areas of research by the department include computer-aided crystal engineering, development of simulation models for the prediction of crystal habit, polymorphism and multi-component supramolecular systems. The team is also involved in development of novel crystalline form of drugs for improving process ability, engineering physico-chemical properties and stability enhancement using green technologies for solid form screening and designing multi-component supramolecular systems. Other areas include designing scalable technologies for the development of pH

independent drug delivery systems, taste masking by ternary complexation, fast disintegrating pellets, engineering physico-chemical and biopharmaceutical properties using novel mesoporous materials, development novel dosage forms for paediatric and geriatric applications. Application of principles of quality by design using DOE approach in building prediction models to study burst effect, impact of novel excipients on release kinetics, designing novel approaches for the development of zero-order release systems. Apart from research activities, department of pharmaceutics imparts GLP training to all the Ph.D scholars and MS students aiming to cater the demands and needs of global pharmaceutical industry.

SLN & NLC as drug delivery systems:

Solid lipid nanoparticles (SLN) and nanostructured lipid carriers (NLC) represent alternative carrier systems to traditional colloidal carriers, such as emulsions, liposomes and polymeric micro- and nanoparticles. SLN combine advantages of the traditional systems but avoid some of their major disadvantages. Nanostructured lipid carrier (NLC) is second generation smarter drug carrier system having solid matrix at room temperature. This carrier system is made up of physiological, biodegradable and biocompatible lipid materials and surfactants and is accepted by regulatory authorities for application in different drug delivery systems. These novel formulations are preferred over other nano formulations because of unique advantages such as enhanced drug loading capacity, prevention of drug expulsion, leads to more flexibility for modulation of drug release. These are safe and versatile vehicles for drug and active delivery, suitable for different administration routes like oral, topical, ocular etc. New technologies have been developed for SLN & NLC preparation and studies are currently underway in order to obtain the encapsulation of different drugs and to deliver the active molecule to the site of action. Department is involved in the formulations of SLNs for various category of drugs to sustain and improve their bioavailability.

Microspheres/microparticles for sustained drug delivery

The formulation and administration of drugs in the form of microspheres has received special attention because they avoid the problems of gastric emptying and different transit rates through GIT thereby release drugs more uniformly. Multiunit system spreads over a large area of absorbing mucosa and prevents exposure to a high drug concentration, when compared to single unit form on chronic dosing. This fact coupled with their ability to prolong the release of drugs has given importance to the development of oral microparticle systems for drug delivery. Controlled-release microspheres are in development for a number of interesting and important applications, especially for delivery of large, fragile drugs like proteins and nucleic acids.

Biodegradable polymers in drug delivery

Polymers are important and attractive biomaterials for researchers and clinical applications due to the ease of tailoring their chemical, physical and biological properties for target devices. Due to this versatility they are rapidly replacing other classes of biomaterials such as ceramics or metals. As a result, the demand for biomedical polymers has grown exponentially and supports a diverse and highly monetized research community. Work has been initiated in the department of Pharmaceutics on development of nanotechnology based formulations using biodegradable polymers for various potential drugs. Department is actively engaged in the optimization of nanoparticles using biodegradable polymers and surface conjugation of nanoparticles using appropriate biomarkers for targeting purpose. With this dual delivery of anti cancer drugs has been designed to improve the efficacy of drugs.

Targeted drug delivery to brain

The delivery of drugs to central nervous system (CNS) is a challenge in the treatment of neurological disorders. Drugs may be administered directly into the CNS or administered systematically (e.g., by intravenous injection) for targeted action in the CNS. The major challenge to CNS drug delivery is the blood-brain barrier (BBB), which limits the access of drugs to the brain substance. Advances in understanding of the cell biology of the BBB have opened new avenues and possibilities for improved drug delivery to the CNS. Several carrier or transport systems, enzymes, and receptors that control the penetration of molecules have been identified in the BBB endothelium. Novel formulations provide a number of advantages for delivery of poor water soluble, unstable, and cytotoxic drugs, to the brain. Also these nanoformulations with dual mode of targeting drug to brain are more effective than the existing ones.

Oral disintegrating extended release formulations for geriatrics and pediatrics

Oral disintegrating extended release formulation can reduce the adverse effect caused by the fluctuating plasma drug concentration and also increases the compliance of geriatric patients. Oral modified release multiparticulate systems offer better option in comparison to conventional or immediate single unit dosage form. The multiparticulate systems are usually filled into the capsules or compressed into tablets. The main problem with the capsule formulation is their low production rate and high cost, which make the tablet more promising system for multiparticulate system. However, the compression of coated particles is a challenging process and requires optimization of number of parameters like coating of cores, coating material and coating thickness, cushioning materials, etc. Other advantages of the multiparticulate systems are reduction in dose dumping, tamper proof and reduction in the GI irritation. Research work has been initiated in this area to formulated compressed rapid release multiparticulate systems for class I and class II drugs.

Ocular drug delivery systems

Development of ophthalmic drug delivery systems has always been challenging because of the drawbacks with ocular route like non productive absorption, drainage, induced lacrimation, tear turn over, impermeability of drugs to cornea. The main barrier of drug absorption into the eye is the corneal epithelium that is relatively impermeable. The transcellular or paracellular pathway is the main pathway to penetrate drug across the corneal epithelium. New novel approaches have been investigated for ocular drug delivery like noisome, liposomes, nanosuspension, microemulsion, insitu gels and collagen shields. These novel formulations provide advantages for delivery of drugs with poor solubility; low partition coefficient. These formulations also improve ocular bioavailability of drugs by prolonging their residence time.Department of pharmaceutics is working on the formulation and evaluation of ocular insitu gels of broad specrum antibacterials.

Transdermal drug delivery

Transdermal delivery of drugs through the skin to the systemic circulation provides a convenient route of administration for a variety of clinical indications. The greatest challenge for transdermal delivery is that only a limited number of drugs are amenable to administration by this route. With current delivery methods, successful transdermal drugs have molecular masses that are only up to a few hundred daltons, exhibit octanol-water partition coefficients that heavily favor lipids and require doses of milligrams per day or less. Another area of great interest is the delivery of vaccines. In addition to avoiding hypodermic needles, transdermal vaccine delivery could improve immune responses by targeting delivery. Transdermal drug delivery system (TDDS) provides sustain drug release for systemic as well as local treatment and reduces the side effects associated with its oral therapy.

PHARMACEUTICAL MANAGEMENT

The NIPER-H offers a two-year full-time MBA program in Pharmaceutical Management from 2012 onwards. It is a flagship educational program aiming at developing trained professionals with requisite skills in planning and operating management techniques; diagnosing and solving management problems; and acquiring consultancy skills, with a view to prepare them to manage pharmaceutical industries in the areas of Marketing, Finance, HR, International Marketing and IPR's.

As the program has set high standards of management education in the pharmaceutical management sector, it has attained the status of a premier program in the country. Our students undergo training and secure placement in a large number of pharmaceutical organizations.

At the second semester, students will undergo for a summer internship minor project and in the Fourth semester the major research project for a period of two months carried out in reputed Pharma companies like Dr.Reddy's, Sanzyem, Cadilla, German Remedies etc. to name a few.

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Awards and Honours

OPPI Young Scientist Award 2011
Dr. Kolupula Srinivas
Assistant Professor
NIPER-Hyderabad

Young Pharmaceutical Analyst Award 2011
Dr. M.V.N. Kumar Talluri
Assistant Professor,
Department of Pharmaceutical Analysis
NIPER--Hyderabad

OPPI Young Scientist Award 2012
Dr. B. Nagendra Babu
Assistant Professor
Department of Medicinal Chemistry
NIPER-Hyderabad

Lectures / Seminars / Events Conducted in NIPER Hyderabad During the Academic Year 2011-12

DATE	TITLE OF THE TALK	DELEGATE
19th April 2012	CANCER Awareness	Dr Sadashivudu Dept. of Pharmacology NIMS, Hyderabad
10th April 2012	Maternal Undernutrition and Pharmacokinetics in Adult Offspring	Dr Ganesh Cherala Assistant Professor Oregon State University, USA
10th April 2012	Challenges & Opportunities in Pharma Industry	Dr J.B. Gupta Vice President GVK Biosciences
3rd April 2012	Potential Utility of Material Studio Software in Pharmaceutical Field	Dr Nihant Sinha Scientist, Materials Modeling & Simulations Accelrys, India
30th March 2012	Emergence of Chiral Drugs	Dr V.Malla Reddy General Manager - R&D Divis Laboratories Limited
29th March 2012	New Trend in Chiral Separations	Dr Ch.Lakshmi Narayana Vice President Daicel Chiral Technologies, India
19th March 2012	Lipids as Potential Anti Cancer Drug	Prof. U.N. Das,MD FAMS FICP Editor in Chief Lipids in Health & Diseseas, USA
1st March 2012 & 21st, 28th February 2012	Applications of XRD, Crystallography & Structure Determination of Small & Biomacromolecules	Dr. Y.V.N Swamy IICT, Hyderabad
24th February 2012	Drug Discovery	Dr. Mandip Singh Sachdeva Editor in Chief CRC Critical Reviews in Therapeutic Drug Carrier Systems, Tallahassee
11th February 2012	Impurity Profiling in Pharmaceuticals	Dr. M.V. Surya Narayana Vice President, Mylan
9th February 2012	Workshop	Bioinformatics@BioAsia 2012

DATE	TITLE OF THE TALK	DELEGATE
7th February 2012	Creating Markets Across the Globe covering the Globalization, Global drivers technology, market barriers, culture open markets etc	Dr E. Murali Darshan, IIFT
3rd February 2012	Biology, Chemistry and Medicine	Dr CH. Mohan Rao, FNA, FASc; Director,CCMB
20th January 2012	The Drug Discovery Process	Dr Sunanda R Dastidar Director Biological, Daiichi Sankyo Life Science Research Centre (DMPK)
2nd Dec. 2011	Therapeutic Targets Based on Cell Signaling - Focus on Cancer	Dr. V. Lakshmipathi, Former Professor, Kakatiya University
22nd Nov. 2011	Interaction of Magnesium with Nucleic Acid:From RNA bases to the Ribosome	Dr.Sanyasi Sitha, School of Chemical & Metallurgical Engineering , University of the Witwatersrand, Johannesburg, S.A
20th Nov. 2011	50th National Pharmacy Week Celebrations	
12th Nov. 2011	National Conference	Scope & Relevance of Ancient Indian Sciences
21st Oct. 2011	Lightening	Dr Vidyadhar Peesapati, Knowledge Transfer Fellow, School of Electrical and Electronic Engineering, University of Manchester, U.K
12th Oct. 2011	Career Development in the Global Biotechnology Industry through The Professional Science Masters (PSM)	Prof. Graham B. Jones, Barnett Institute of Chemical & Biological Analysis at Northeastern, University in Boston
7th Sep. 2011	Clinical trials-Intro, Prospects, Procedures and a Real time Example	Dr. Mohi Iqbal Mohammed Abdul
3rd & 4th Sep. 2011	International symposium	2nd PharmsSci@India :: AAPS- 2011

Lectures / Seminars / Events Conducted in NIPER Hyderabad During the Academic Year 2012-13

TITLE	SPEAKER NAME	DATE
Lopid-based Nanoparticles : The Foundation for Advanced Therapeutics and Daignostics	Prof. Andrew D Miller Institute of Pharmaceuticals Sciences, King's College, London CEO & CSO of Global Acron Ltd.	9th May 2013
Seminar on Export Business Opportunites for Pharma Products in Africa	Dr. P. V. Appaji Dr. E. Murali Darshan Ms Alice AKU Otuteye Shri. Pramod Reddy Shri. B.K. Karna	6th May, 2013
Integrated Scientific & Regulatory Requiremnets for Cell based Therapy Products	Dr. D.G. Miller President & CEO Excorp Medical Inc., Minneapotes, USA	12th April, 2013
Dietary Restrictions in Therapeutics	Prof. V. Lakshmipathi Retd. Professor Kakatiya University	12th April, 2013
Get Inspired to Save Lives	Dr. K. Srinivas Rao Managing Director Indian Institute of Biotechnology Pvt. Ltd	9th February 2013
Probability of Success in Drug Development	Dr. Pravin Chaturvedi CEO, IndUS Pharmaceuticals Inc	18th January 2013
51st National Pharmacy Week Celebrations		26th November 2012
Enabling Technologies in Organic Chemistry from Minireactors to New Heating Techniques	Prof. Dr. Andreas Krischning Germany	26th November 2012
Towards Biocompatible Medical Devices & New Extra Cellular Matrices for Biocardiac Tissue Engineering	Prof. Dr. Gerald Drager Germany	26th November 2012
Management & Leadership	Dr. Amit Khanna Novartis, Hyderabad	23rd November 2012
Conception & Contraception	Dr. C. Ambuja M.D, DGO (Retd Professor) RSC - Deccan Section	20th November 2012

TITLE	SPEAKER NAME	DATE
Overview on Pharmaceutical Industry: Management	Dr. A.K.S Bhujanga Rao Vice President Natco Pharma, Hyderabad	20th November 2012
Identification of Drugs of Abuse using Trimethysilyl Derivatization method	Dr. M.A Majid Professor, Drug Analysis Laboratory University of Baltimore, MD, USA	14th November 2012
An Overview of Drug Life Cycle Processes in the Pharmaceutical Industry	International Society for Pharmaceutical Engineering (ISPE), India Affiliate Hyderabad Chapter	9th November 2012
Breast Cancer, symptoms, prevention methods, self examinations and treatments for Cancer	Dr. Sai Rajendra Surgical Oncologist, Basavatharakam Indo American Cancer Institute, Hyderabad	30th October 2012
Workshop	Drug Discovery (D2@C2) : Module - III	18th, 19th & 20th October 2012
Workshop	Drug Discovery (D2@C2) : Module - II	27th, 28th & 29th Sept. 2012
Hands on Workshop on "Recent Advances in Life Science Education & Research	ADINSTRUMENTS Meditech Equipment Co.	21st September 2012
Workshop	Drug Discovery (D2@C2) : Module - I	30th, 31st Aug. & 1st Sept. 2012
Preparation of Project Proposals - Issues to be considered	Prof. V. Lakshmipathi Former. Professor, Kakatiya University	25th August 2012
Importance of IPR in Pharmaceutical Industry	Dr S. Padmaja Managing Director, Intellectual Property, Hyderabad	25th August 2012
Opening up Biology for the Creation of New Therapeutics	Prof. Andrew D.Miller Executive Officer and CSO of Global acom Ltd., Kings College , London	8th August 2012

Guest Lectures

Dr. Andrew Millar

Dr. Vanga Malla Reddy

Dr. Ch. Lakshmi Narayana

Dr. Mandeep Singh

Dr. Sunanda

Dr. Ganesh Cherala

Dr. J. B. Gupta

Central Computer Facility

Ever since internet made its entry into the world of Information and Communication Technologies (ICT), the concept of good governance has assumed a whole new dimension coupled with an increased awareness and desire amongst citizens and other stake holders to have a much more enriching and convenient interaction with the rules, policies and their implementations by the Government. Taking advantage of the latest information technology enabled tools; Computer centre at NIPER-Hyderabad has taken sincere initiatives towards adoption of best practices and integrated delivery of useful information not only to improve administrative operations but also to enhance the efficiency of department.

LAN: A local Area Network (LAN) is functioning in the Department inter-connecting all the Windows and Linux based systems of faculty and administrative staff. All computers are equipped with the facility of Internet and easy accessibility of applications from the server. The Computer Department is equipped with latest 6 Servers (Web, Mail , Proxy, FTP etc.) and 150 Client machines with Windows and Linux enterprise environments for providing Internet and E-mail facilities for local and global connectivity. This centre is equipped with 10Mbps (1:1) leased line internet connectivity. These servers were installed with windows Server 2003 and Linux (Red hat) operating system.

Every computer lab facility is connected to the NIPER - Hyderabad network, and all the lab computers are equipped with the latest software titles for Windows and Linux platforms.

Designated laptop work areas are available for NIPER-Hyderabad's students allowing them to connect to the wireless network in premises of NIPER-Hyderabad. Students can bring their laptops and connect to the network and use the printing equipment. Both black and white and colour printers are available in the computer labs for student use. The centre is not only a workstation for the students to sharpen their computer skills, but also is a hub of guidance & support for the students taking up projects in their respective field.

MML: An IT based Computer Centre with Molecular Modleing Lab (MML) facility is operational in the MMF centre has procured license for commercial softwares like Schrodinger, BIO Solve Lead IT, Gaussian 09w, VLife MDS 3.5 Suite, Material studio to support faculty, Ph.D scholars and students for research/academic improvement. For high performance computing, two work stations are available and are used for free modelling software like AUTODOCK, NAMD etc. The centralized computer center provides sufficient computing facility for the students and staff of Departments. Students can utilize computers running on the latest hardware and Operating Systems

WEBSITE: As Website is an electronic medium to provide information and enhance government citizen interaction. The Website in English has been designed and maintained by the NIPER-Hyderabad (www.niperhyd.ac.in) to ensure maximum reach of information and services to the citizens. It provides details of organizational set up of the departments, its functions, subordinate offices, policies, publications, information on functional parameters. We are maintaining mail server (Send mail, Open webmail) on our own. Other computer related accessories including high speed data transfer and network laser printer (colour and black & white: 25nos) and scanners are also available.

Library and Information Centre

NIPER- Hyderabad library serves as a source of information centre for pharmaceutical industry and academic institutions. NIPER library has a rare collection of old chemical and biological abstracts from the year 1907 to 1993. NIPER-H library has 7348 copies of text books, 9846 copies of old research journals and 1972 copies of old Chemical and Biological abstracts. In addition to this, NIPER-H library has 19 national scientific journals, 10 magazines and 15 news papers. NIPER-H library provides the facilities such as books and journal borrowing, literature search, photocopying, news clipping service etc. The online database Reaxys facility is also available at NIPER-Hyderabad.

The following items were procured for NIPER Library during the academic year 2011-12.

S.No.	Title	Total No. of Copies
1	Text Books	176
2	Journals (Hard copy)	19
3	Magazines	10
4	News Papers	14
5	Employment News	1
	Total	**220**

The following items were procured for NIPER Library during the academic year 2012-13.

S.No.	Title	Total No. of Copies
1	Text Books	693
2	Lecture CD's for MBA (Pharma)	75
3	Science Direct online journals	94
4	Journals (hard copies)	47
5	Magazines (hard copies)	10
6	News Papers	14
7	Employment News	1
	Total	**934**

The details of books, periodicals, etc. in the academic year 2012-2013

S.No.	Title	Total No. of Copies
1	Text Books (old & new)	6655
2	Chemical and Biological Abstracts(old)	1972
3	Research Journals (old)	9846
4	Journals (hard copies)	19
5	Magazines (hard copies)	10
6	News Papers	14
7	Employment News	1
	Total	**18517**

NIPER Hostel

Location: The students of NIPER-H have been currently provided accommodation at NIPER hostel located at IDPL Township, about 2 kms away from NIPER campus situated in Balanagar, Hyderabad. Students are provided with bus transport facility between campus and hostel. Students live in pleasant surroundings of intellectually stimulating hostel. The layout of the hostel in general is appealing.

Accommodation: NIPER-H provides separate accommodation for both boys and girls. Currently the hostel block houses more than 180 students out of which 80 are girl students. Both the hostels have large, well ventilated rooms well furnished with cot, wardrobe, chair, study table which accommodate two students each. Each room also has an attached bathroom with facilities for hot and cold water. The hostels have a constant 24 hr. water and power supply. Hostel maintenance like cleaning, sweeping, pest control is outsourced. Electrical repairs and security services are available round the clock. All the rooms have been equipped with LAN connection for each occupant.

Facilities: The hostel provides the students with an atmosphere much like a home away from home. It provides them with all the necessary facilities which help them to acclimatize well with this new ambience

- It has its own mess which is managed and run by the students themselves. Keeping in view the different tastes of the students, the mess caters them with healthy and tasty food
- A number of recreational, sports, literary and social activities take place in the hostel during the academic year. TV rooms are equipped with 54' inch flat television and cable are provided in both girl's and boy's hostel
- Separate gym facility is provided for both girls and boys
- Sports grounds are situated at a close distance to encourage students to stay fit by regularly playing. Playground is of a very large size and there are courts for the games like Volleyball, Badminton, Cricket are constructed. Table tennis room with two playing boards is also available
- Bus service is there for pick up & return

Medical Support:

- NIPER-H tied up with a reputed local hospital at a close proximity from the hostel campus. Qualified visiting doctor is available to provide regular and intensive medical care to our students
- Proximity of other hospitals within 1 km from the campus
- Institute provides vehicles in case of emergency

Student Welfare Activities

Student's welfare officer was appointed as per the requirement of NIPERs. Regular meetings were scheduled to attend/solve student problems and grievances. One of the major accomplishments was successful transfer of NIPER managed mess to students managed mess. The students formed their own mess management committee to look after the administrative and financial requirements for independent functioning of the mess with the help of SWO. Counselling was provided to the students concerned when a case of squabbling was reported. The many activities like sports meet, debate, farewell party, were organized under the umbrella of welfare activities. Steps were initiated to start a student welfare fund. Further activities scheduled are installation of WiFi connection to students at the hostel, improving the accommodation facility at the hostel, organizing inter collegiate student festival.

- **Personality Development Programme**
  As a part of strengthening the content of education to the students of NIPER-H, it has taken up a programme of imparting to the students, a course on Personality Development skills by Russells, Hyderabad.
- **Communication Programme**
  Conducted Bridge course for students in communication skills in English while writing/speaking and in the seminar presentations. A Professor from the Department of English, The English and Foreign Languages University (CIEFL), Hyderabad was invited.
- **Fee Waiver**
  The institute is providing Central Scheme for Partial tuition fee waiver for students belonging to economically weaker sections of society in NIPERs at Masters Level. The committee has been constituted and will consider 20% of the total number of admitted students (excluding belonging to SC/ST). As per the student's merit rank in NIPER – JEE and income certificate produced by them, the fee waiver is given. Each student is paid Rs. 5,000/- per semester.
- **Eye Camp**
  Conducted Eye Camp on 4th August, 2011 by Dr Agarwal's Eye Hospital and Team. Faculty, Staff and Students have actively participated and undergone free eye checkup by the Team.
- **Blood Donation Camp**
  Conducted Blood Donation Camp on 30th March, 2011 by "Institute of Preventive Medicine" IPM, Narayanaguda. Dr Kalyani, Medical Officer has visited the institute.
- **Sports Events**
  Games/sports were conducted such as Carroms, Chess, Shuttle. Friendly Cricket was conducted among Students and Faculty/Staff.
- **Visit to Old Age Home**
  Faculty, Staff and Students of NIPER-H have visited Trinity Service Society (Old Age & Orphange Home) on 24th June, 2011 and distributed clothes etc.
- **New Year Celebrations**
  Cake cutting by Dr Ahmed Kamal, Project Director. Greetings and the gathering were addressed by Registrar and Course Coordinators to all students, faculty and staff.
- **Republic and Independence Day Celebrations**
- **Institute provides vehicles in case of emergency**

Major Instrument Facilities

- ECT Unit
- Plethysmo meter
- Rota Rod Apparatus
- BIOPAC with ECG and EEG
- Elevated plus maze
- Any-maze video tracking system
- Automatic Blood Analyzer
- UV-VIS Spectrometers
- High Speed Refrigerated Centrifuge
- Laser dopplers system with OXY measurement
- Tail flick analgesia meter
- Phase contrast microscope
- Spectramax M4 Multi mode Microplate Detection System
- Benchpro 4100 instrument card processing station
- Muse Cell Analyzer
- Veriti 96w Thermal Cycler
- Small Animal Anaesthesia System
- HPLC's
- ACQUITY UPLC H-Class Bio
- LC-MS/MS Q-tof 6540
- Gas Chromatography: GC-2014,
- Automatic Digital Polarimeter
- FT-IR Spectrophotometer
- Parallel synthesizer 12 reaction station
- Dissolution test apparatus
- Stability Chambers
- Spray Dryer/ Fluidized Bed Dryer /Freeze Dryer
- Tablet Punching and Coating Machine
- Dissolution/ Disintegration Test Apparatus
- Brook Field Viscometer
- Differential scanning calorimetry
- Zetasizer Nano ZS

Animal House - Inauguration

Faculty Professional Training

Certificate course “Instructional Design and Delivery systems” by National Institute of Technical Teachers Training and Research (NITTTR), Ministry of HRDG, Government of India, to all NIPER-Hyderabad faculties.

Alumni Meet (2012)

Workshop on Bioinformatics (February 2012)

Workshop on Drug Discovery-D2@C2 (July 2012)

Blood Donation Camp - 2012

Registrar Donating Blood

Students Donating Blood

Helping Hearts

1st Inter NIPER Sports Meet - 2013

Farewell and Festival Celebrations

Independence Day Celebration

Flag Hosting by Project Director

New Year Celebration

Industrial Tour

Vivimed visit by NIPER-H students