

Annual Report

2008-09



NIPER
RAEBARELI

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

Shree Bhawani Paper Mill Road, ITI compound, Raebareli, U.P.

Telephone: 0535-2001569; 2001570

Web: www.niperraebareli.org

Mentor Institute:

Central Drug Research Institute (CSIR), Lucknow

Web: www.cdriindia.org

EDITORIAL BOARD

Chairman	Dr. D.K.Dikshit
Executive Editor	Dr. R.C. Tripathi
Members	Mr. Md. Tahir Ansari Mr. Gurudutta Pattnaik Mr. Md. Sajid Ali Mr. Tanvir I. Siddiqui Mr. Arun Kumar
Design & Layout	Mr. Ali Kausar, CDRI
Secretarial Staff	Mrs. Deepa Bakshi Mr. Devki Nandan Pandey

Published by Dr. R.C. Tripathi, Placement Officer on behalf of Project Director, NIPER Raebareli
On 14th November 2009

Objectives

- Enhancement of creativity, motivation and inculcate professionalism.
- Bring synergy between academics, R&D technology and industry through training and exposure to such environment.
- Facilitate collaborations between pharmacy, biotechnology, information technology and prepare for meeting global challenges.
- Prepare professionals to suit the needs of pharmaceutical industry.
- Expose the students and scholars to high-tech areas such as drug design and molecular modeling.
- Harness of natural products, local skills and knowledge in health care.



अशोक कुमार
Ashok Kumar


सचिव
भारत सरकार
रसायन एवं उर्वरक मंत्रालय
औषध विभाग
Secretary
Government of India
Ministry of Chemicals & Fertilizers
Department of Pharmaceuticals



MESSAGE

I am pleased to know that NIPER, Rae Bareli is to celebrate the day it started its operation. The decision to create six NIPERs was a conscious decision of the Government taken to build upon the excellent role played by NIPER, SAS Nagar in its 15 year of existence. Last year, during my visit to NIPER, Rae Bareli, I had observed with great satisfaction the facilities & resources created in a record time. I hope that NIPER, Rae Bareli, situated in the Hindi heartland, will soon meet all the expectations and produce world class trained pharmaceutical manpower.

I send my felicitations and best wishes on the celebrations, which is an important milestone in the journey of NIPER, Rae Bareli.


(Ashok Kumar)

New Delhi
The 3rd November, 2009



R.C. Jha
Director
Tele.No. 2338 9866
Fax No. 2338 3392




भारत सरकार
रसायन और उर्वरक मंत्रालय
औषध विभाग
शास्त्री भवन, डॉ. राजेन्द्र प्रसाद रोड,
नई दिल्ली-110 115
Government of India
Ministry of Chemicals & Fertilizers
Department of Pharmaceuticals
Shastri Bhawan, Dr. Rajendra Prasad Road,
New Delhi-110 115

New Delhi, the 3rd November, 2009

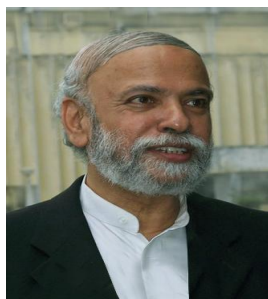
Message

I am pleased to know that NIPER Rae Bareli is going to celebrate its 1st Annual Day of operations. The six new NIPERs, including one at Rae Bareli, which started their functioning would help produce highly trained human resource required by Pharmaceutical Industry in the much demanding global scenario. It would strengthen the excellent role played by NIPER, SAS Nagar in its 15 years of existence. I have great satisfaction on the facilities, resources and enthusiasm created in such a short time. I hope that NIPER Rae Bareli, situated in the population heartland, will soon meet the expectations and produce world class trained pharmaceutical manpower.

I extend my felicitations and best wishes to the students and faculty on this occasion to celebrate an important milestone in the journey of NIPER Rae Bareli.


(R.C. Jha) 3.11.09

From the Mentor's Desk

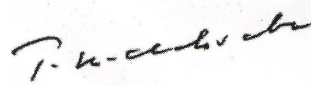


It gives me great pleasure to extend my warm wishes to all students and faculty members who are toiling hard to make the NIPER, Raebareli a giant stride towards excellence. From our modest beginning, we are very close to achieve the status of being one of the premier institutions for pharmaceutical education and research. Undoubtedly, the creation of a new Institute is indeed an onerous task needing support and execution at different levels. The year 2008-09 has been a significant milestone of the current plan of activities, offering an opportunity to review progress, alert against the set targets well in advance and overcome the shortcomings.

A little encouragement sparks off the creative talent in different directions. We must encourage our students for creativity and innovation and it will go a long way in making them original thinkers and keen sighted visionaries. They will act as torchbearers and take the country towards greater heights of achievement. We have to boost up our students for innovative thinking and creativity to utilize their knowledge and experience in building up their career and country as well.

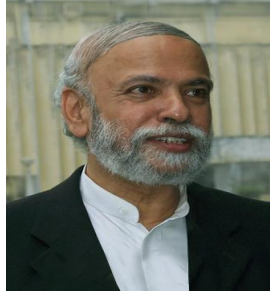
In my views, this Annual Magazine symbolizes not only the important milestone in the progressive march of this illustrious institution but also proves to be a real mouthpiece and manifestation of true education.

I congratulate the students who have contributed in the Annual Magazine and entreat others to express themselves in words, paints, speech, poetry, music or sports.



Tushar K. Chakraborty
Mentor

संरक्षक की कलम से



मैं उन सभी विद्यार्थियों एवं संकाय सदस्यों को अपनी हार्दिक शुभकामनाएं देते हुए अत्यन्त हर्ष का अनुभव कर रहा हूँ जो नाइपर, रायबरेली को उत्कृष्टता की ओर ले जाने वाले असाधारण प्रयास को सफल बनाने के लिये कठिन परिश्रम कर रहे हैं। हम अपनी साधारण शुरुवात से औषधि निर्माण शिक्षा एवं अनुसंधान हेतु अग्रणी संस्थानों में से एक होने की उपलब्धि के बहुत निकट हैं। निःसंदेह, नए संस्थान की निर्मिति वास्तव में एक दुर्बल कार्य है जिसमें विभिन्न स्तरों पर प्रोत्साहन और कार्यान्वयन की आवश्यकता होती है। वर्ष 2008-09 क्रिया-कलापों की वर्तमान योजना का महत्वपूर्ण मील का पत्थर रहा है, जिसने उन्नति की समीक्षा, निश्चित लक्ष्यों के प्रति सतर्कता और कमियों पर विजय प्राप्त करने का अवसर दिया।

विभिन्न दिशाओं में थोड़ा प्रोत्साहन रचनात्मक प्रतिभा को प्रज्ज्वलित करता है। हमें अपने विद्यार्थियों को रचनात्मकता और अभिनव परिवर्तन के लिये प्रोत्साहित करना चाहिये जो उन्हें मौलिक विचारक तथा पैनी दृष्टि वाले दूरदर्शी बनाने में बहुत दूर तक जायेगा। वे पथप्रदर्शक का कार्य करेंगे और अपने देश को उपलब्धियों की नव्युत्तम ऊँचाइयों तक ले जाएंगे। हमें अपने विद्यार्थियों के अभिनव चिन्तन और रचनात्मकता को बढ़ावा देना है जिससे वे अपने ज्ञान और अनुभव का उपयोग अपनी जीविका के साथ-साथ राष्ट्रनिर्माण के लिये भी कर सकें।

मेरे विचार में यह वार्षिक पत्रिका न केवल इस सुविख्यात संस्थान के प्रगतिशील अभियान में मील का पत्थर होने की प्रतीक है अपितु सच्ची शिक्षा की वास्तविक प्रतिध्वनि और अभिव्यक्ति भी है।

मैं उन विद्यार्थियों को बधाई देता हूँ जिन्होंने वार्षिक पत्रिका हेतु अपना योगदान दिया है और अन्य से शब्दों, चित्रकारी, भाषण, कविता, संगीत और खेलों द्वारा अभिव्यक्ति का आग्रह करता हूँ।

तुषार कान्ति चक्रवर्ती

तुषार कान्ति चक्रवर्ती
संरक्षक

From the Project Director's Desk



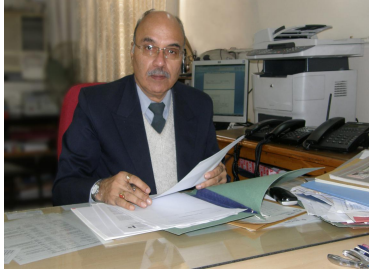
It is matter of deep sense of delight and pride for me to present before you the Annual Magazine which highlights the imaginative power and creativity of the students of NIPER Raebareli, our activities during the year and efforts to carve out a status of a premier institute in pharmaceutical research & education. We emphasize on overall development of outstanding talents by providing students a wide exposure and opportunity of interaction through participation in various conferences, seminars and visits to industry.

It was a pleasure to read the articles written by the students for this annual magazine. The basic aim of bringing out this magazine was to encourage and provide an opportunity to the students to expose their talents, ideas and original thoughts through various articles, poems, etc. and erase the hitch of expression from their mind. I congratulate the students who have contributed in this Annual Magazine brought on the eve of the first Annual Day of the NIPER, Raebareli.

I acknowledge with utmost appreciation the ongoing endeavors of our dedicated faculty. I am also thankful to the members of the editorial board for their unflinching efforts, team work and co-operation.

Dinesh K. Dikshit
Project Director

परियोजना निदेशक की कलम से



आपके समक्ष वार्षिक पत्रिका प्रस्तुत करते हुए मुझे अत्यंत हर्ष एवं गर्व का अनुभव हो रहा है जो नाइपर, रायबरेली के विद्यार्थियों की कल्पना शक्ति, रचनात्मकता, वर्ष के दौरान हमारे क्रिया-कलापों और औषधि निर्माण अनुसंधान और शिक्षा में अग्रणी संस्थान के प्रतिष्ठित स्थान को उत्कीर्ण करने के प्रयासों पर प्रकाश डालती है। हम विद्यार्थियों को विभिन्न सम्मेलनों, सेमिनार में भाग लेने, उद्योगों को देखने के माध्यम द्वारा अभिव्यक्ति के प्रदर्शन और पारस्परिक वार्तालाप का अवसर प्रदान करके उत्कृष्ट प्रतिभाओं के संपूर्ण विकास पर जोर देते हैं।

इस वार्षिक पत्रिका के लिये विद्यार्थियों द्वारा लिखे गए लेखों को पढ़ना एक आनन्द का विषय रहा है। इस पत्रिका को सामने लाने का मूल उद्देश्य विद्यार्थियों को विभिन्न लेखों एवं कविताओं आदि के माध्यम से अपनी प्रतिभाओं, विचारों और मौलिक सोच के प्रकटीकरण का अवसर प्रदान करना, उन्हें प्रोत्साहित करना और उनके मस्तिष्क से अभिव्यक्ति में आने वाली हिचकिचाहट को मिटाना है। मैं नाइपर, रायबरेली के प्रथम वार्षिक दिवस की पूर्व संध्या पर प्रकाशित इस वार्षिक पत्रिका में योगदान देने वाले विद्यार्थियों को बधाई देता हूँ। मैं अपने पूर्ण समर्पित फैकल्टी सदस्यों के प्रयासों की प्रशंसा करता हूँ। मैं संपादन मण्डल के सदस्यों को उनके बेहिकक प्रयासों, संयुक्त रूप से कार्य करने और सहयोग के लिये धन्यवाद देता हूँ।

दिनेश कुमार दीक्षित
परियोजना निदेशक

Progress Report

Progress Report

More than 15 years ago, Government of India recognizing the need to create a state-of-the-art teaching and research institute in pharmaceutical sciences to keep pace with the rapid strides being made by ever expanding Indian Pharma Industry, created the first “National Institute of Pharmaceutical Education & Research” at Mohali, Punjab. The institute was created by an act of the parliament under the aegis of Ministry of Chemicals and Fertilizers. Encouraged by the significant role played by NIPER, Mohali, in meeting the demands of Indian Pharma Industry, Government of India decided to create six new NIPERs at Ahmedabad, Hyderabad, Kolkata, Hazipur, Guwahati, and Raebareli to function as a centre of excellence for higher education, research and development in pharmaceutical sciences. Each of these newly created NIPERs were put under mentorship of an established proximal scientific institution.

The National Institute of Pharmaceutical Education and Research (NIPER), Rae Bareli started functioning from 14th November 2008 and was last to take roots under the mentorship of the Central Drug Research Institute, Lucknow. To begin with, 20 students were admitted through a joint entrance examination conducted by NIPER, Mohali. The Institute expanded its activities from here on and offered M.S. (Pharm.) courses in Medicinal Chemistry and Pharmaceutics from the academic year 2008-2009.

Pending creation of its own campus, the institute started from a leased campus of the Indian Telephone Industries Ltd. The disused MPD canteen was converted to the requirements of an emerging institute in a record time of three months. Functioning from this small but beautiful campus, NIPER, Raebareli is taking confident steps to achieve its objectives.

Though the first semester started quite late, teaching for first and second semester of the first batch was successfully completed on time due to the joint efforts of the students and the faculty comprising of full time lecturers and the guest faculty drawn from the scientific community of Lucknow. The entire guest faculty have given their whole hearted and immense

support without which it would have been difficult to run a national institute as it is situated nearly 80 kilometers away from its mentor institute, Central Drug Research Institute, Lucknow.

Pending creation of proper research facilities and permanent faculty, it was decided to run third and fourth semester courses involving research projects at CDRI, Lucknow. Currently, all the students of NIPER from both the disciplines are working under the supervision of CDRI scientists in the Divisions of Medicinal & Process Chemistry, Pharmaceutics and Pharmacokinetics & Metabolism for their project work. Regular weekly seminars of these students are being conducted where students are encouraged to present their work to improve their presentation skills.

With the recent induction of three new faculty members, our total faculty strength is now three faculty members for each discipline. In addition a Placement Cell has also been created by employing a Placement Officer and other support staff to make contacts with Pharma Industry for placement of the students. NIPER, Raebareli has a number of enthusiastic support staff to take care of various activities. The library has a total of 486 books on related topics and is being continually augmented to provide quality educational support to students. The upgradation and expansion of computer lab and creation of a new lab space, to accommodate various equipments that are being purchased, is under process. Horticultural activities including the development of a herbal garden, are also under way to beautify the campus.

To provide an intense academic exposure to the NIPER students, a symposium namely 1st CDRI-NIPER (RBL) Symposium on Medicinal Chemistry and Pharmaceutical Sciences was organized during 24-26 March, 2009 at Central Drug Research Institute, Lucknow. The inaugural lecture was delivered by Dr. J. M. Khanna, Executive Director - Science & Technology, Jubilant Organosys Ltd. and inaugural function was presided over by Dr. Nitya Anand, Former Director, Central Drug Research Institute, Lucknow. More than 300 delegates from other NIPERs and several pharmacy colleges of the country participated in the event and the symposium was a grand success.

During the year many extracurricular activities such as sports, quiz competition etc. were organized. Pharmacy Day celebration was also organized by NIPER Raebareli on 10th October, 2009. The responsibility of organization of various events was given to Mr. Tahir

Ansari, a faculty member. Apart from scientific lectures which were delivered by Dr. Jyoti Paliwal, Director, Pharmacokinetics & Metabolism, Ranbaxy Research Laboratories, and Dr. Madhu Dikshit, In-charge CVS unit, Central Drug Research Institute, Lucknow, a quiz competition, cultural program and a tug of war were also organized as a part of the Pharmacy Day celebrations.

The second batch of 28 students (14 each for Medicinal Chemistry and Pharmaceutics) joined NIPER, Raebareli on 24th of July 2009 and their mid-semester evaluations are completed.

To provide an industrial exposure to Pharma Industry a visit of students of third semester was organized during 3 – 5 November, 2009 to Ranbaxy India Pvt. Ltd. and visit by first semester students to IDPL, Lucknow has also been planned during 23- 27 November, 2009.

The global drug and pharmaceutical research scenario is fast changing and NIPER Raebareli has tried to cope up the challenges on all fronts. The institute needs regular upgradation of infrastructure, judicious utilization of resources, creation of appropriate facilities for expert manpower development and their replenishment. The major efforts and reforms concerning infrastructure development, creation of new disciplines, engagement of fresh blood in frontier disciplines and creation of new state-of-the-art facilities has been undertaken to make NIPER Raebareli a premier institute of pharmaceutical education and research of the country.



Dr. T. K. Chakraborty, Director, CDRI addressing the delegates during inaugural function of 1st CDRI-NIPER (RBL) Symposium on Medicinal Chemistry and Pharmaceutical Sciences . Dignitaries seated on the dias (L to R) are: Dr. Sanjay Batra; Dr. Nityanand, Former Director, CDRI; Dr. J.M. Khanna, former Director, Jubilant Organosys Ltd. and Dr. D. K. Dikshit, Project Director, NIPER, Raebareli.



Dr. Nityanand, Former Director, CDRI addressing the delegates during inauguration of 1st CDRI-NIPER (RBL) Symposium on Medicinal Chemistry and Pharmaceutical Sciences



Dr. T. K. Chakraborty, Director, CDRI presenting a Memento to Dr. Nityanand, Former Director, CDRI during 1st CDRI-NIPER (RBL) Symposium on Medicinal Chemistry and Pharmaceutical Sciences



A view of Poster Session during 1st CDRI-NIPER (RBL) Symposium on Medicinal Chemistry and Pharmaceutical Sciences

A Glimpse of Pharmacy Day Celebrations



Dr. Jyoti Paliwal, Director, Pharmacokinetics & Metabolism, Ranbaxy Research Laboratories, delivering his lecture



Group photograph with Dr. Jyoti Paliwal standing (L to R) are: Mr. Gurudutt Pattnaik, Md. Tahir Ansari, Mr. Vinay Tripathi, Dr. Madhu Dikshit, Dr. D.K. Dikshit, Dr. Jyoti Paliwal, Dr. Kawal Raj, Dr. A.K. Dwivedi, Dr. P.K. Shukla, Mr. Tanveer I. Siddiqui, Mr. Sajid Ali



Dr. Madhu Dikshit, Head, Cardiovascular Pharmacology Unit, CDRI, delivering her lecture



Cultural program by the students



A view of inauguration function seated on the dais (L to R) are: Md. Tahir Ansari, Dr. A.K. Dwivedi, Dr. Jyoti Paliwal, Dr. D.K. Dikshit & Dr. Madhu Dikshit



Group photograph of the students

Infrastructure and major facilities



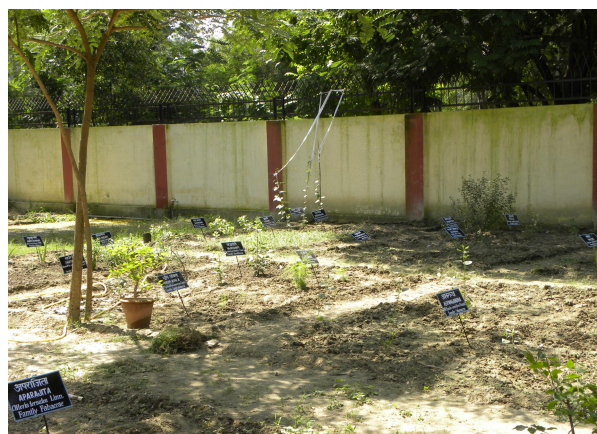
Chemistry Laboratory



Computer facilities



Library



Herbal Garden



Tableting Machine



Tablet Coating Machine

Committees, Faculty and Staff

Operational Committee

Mentor

Dr. T. K. Chakraborty
Director
Central Drug Research Institute
Lucknow

Project Director

Dr. D. K. Dikshit
Scientist- In- Charge
Sophisticated Analytical Instrument Facility
Central Drug Research Institute
Lucknow

Co- Project Director

Dr. P.K.Shukla
Scientist E-II
Division of Fermentation Technology
Central Drug Research Institute
Lucknow

Dean

Dr. A. K. Saxena
Scientist-In-Charge
Division of Medicinal & Process Chemistry
Central Drug Research Institute
Lucknow

Registrar & Controller of Examinations

Dr. A.K. Dwivedi
Scientist-In-Charge
Division of Pharmaceutics
Central Drug Research Institute
Lucknow

Course Co-ordinators

Dr. Bijoy Kundu
Scientist G
Division of Medicinal & Process Chemistry
Central Drug Research Institute
Lucknow

Dr. G.K. Jain
Scientist-In-Charge
Division of Pharmacokinetics & Metabolism
Central Drug Research Institute
Lucknow

State Level Co-ordination Committee

Chairman

Principal Secretary, Department of
Industries,
Govt. of Uttar Pradesh

Members

- Secretary (Technical Education),
Govt. of Uttar Pradesh
- Dr. T. K. Chakraborty,
Director, C.D.R.I.,
Lucknow
- Mr. R. C. Jha,
Director, Incharge of NIPER,
Deptt. Of Pharmaceuticals,
Govt. of India

- Two Representatives from Industries
(to be nominated)

Prof. P. P. Singh, NIPER, SAS Nagar, Mohali,
Nodal Officer

Member Secretary

Dr. D. K. Dikshit, C.D.R.I., Lucknow,
Project Director

Steering Committee

Chairman

Secretary, Department of
Pharmaceuticals, Govt. of India

Members

- Additional Secretary & Financial Adviser Ministry of Chemicals & Fertilizers, Department of Pharmaceuticals, Govt. of India
- Joint Secretary incharge of NIPERs, Department of Pharmaceuticals, Govt. of India
- Prof. P. Rama Rao
Director, NIPER, SAS Nagar, Mohali
- Principal Secretary/ Secretary (Industries) representing State Governments concerned (Gujarat, Bihar, Andhra Pradesh, West Bengal, Assam & Uttar Pradesh)

- Director (Mentor Institute)/ Project Director of each new NIPER (at Ahmedabad, Hajipur, Hyderabad, Kolkata, Guwahati & Raebareli)

- Dr. K.K.Bhutani, Professor, NIPER, SAS Nagar and Coordinator for new NIPERs

Convenor

Director/ Deputy Secretary Incharge of NIPERs in the Department of Pharmaceuticals, Govt. of India

Faculty

NIPER – RAEBARELI

Pharmaceutics

Mr. Md. Tahir Ansari
Mr. Gurudutta Pattnaik
Mr. Md. Sajid Ali

Medicinal Chemistry

Dr. D. P. Sahu
Mr. Tanvir I. Siddiqui
Mr. Arun Kumar

GUEST FACULTY

Central Drug Research Institute, Lucknow

Division of Medicinal & Process Chemistry

Dr. S. Batra
Dr R. P. Tripathi
Dr. K. Awasthi
Dr. Atul Kumar
Dr. A. K. Saxena
Dr. D. K. Dikshit
Dr. K. C. Agarwal
Dr. K. Raj
Dr. B. Kundu

Division of Parasitology

Dr. S. K. Puri
Dr. Shalja Bhattacharya
Dr. Anuradha Dubey

Division of Pharmacokinetics & Metabolism

Dr. R. S. Bhatta
Mr. S. P. Singh
Mr. Wahajuddin
Dr. G. K. Jain

Dr. Jawaharlal
Dr. S. K. Singh

Division of Pharmaceutics

Dr. A. K. Dwivedi
Dr. J. Madan
Dr. P. R. Mishra
Mr. Girish Kumar Gupta
Mr. Prashant Shukla
Dr. Surendra Reddy
Mr. Vivek Kumar
Mr. Deepak Singodia

Division of Pharmacology

Dr. Madhu Dixit
Dr. Rakesh Shukla
Dr. Manoj Barthwal
Dr. C. Nath

Division of Toxicology

Dr. R.K. Tripathi

Division of Microbiology

Dr. Ranjana Srivastava
Dr. Kishore Kumar Srivastava

Division of Biochemistry

Dr. Neena Goyal
Dr. Arvind Kumar Srivastava

Division of Biometric & Statistics

Dr. M. Abbas
Dr. Mukesh Srivastava

Division of Molecular & Structural Biology

Dr. Ashish Arora
Dr. M.I.Siddiqui
Mr. Ashutosh

Division of Drug Target Discovery & Development

Dr. Jayant Sankar

Division of Botany

Dr. R. K. Sharma

Division of Fermentation Technology

Dr. P.K. Shukla

Division of Technical Information Industrial Liaison & Planning

Mr. Vinay Tripathi

Mr. Sripathi Kulkarni

National Botanical Research Institute, Lucknow

Dr. C.V. Rao

Central Institute of Medicinal & Aromatic Plants, Lucknow

Dr. S. K. Agarwal

Lucknow University

Prof. S. Jain

Prof. V. K. Pandey

Prof. A. Vishnoi

Prof. P.C. Mishra

Northern India Engineering College, Lucknow

Prof. Shailendra Saraf

Babu Banarsi Das National Institute of Technology & Management, Lucknow

Mr. V. Chawla

Mr. Harinath Dwivedi

Mr. K. Mamman

Indian Institute of Technology, Kanpur

Prof. Nishanth Nair

Banaras Hindu University, Varanasi

Prof. Maya Shankar

Staff

IT Source Support

Mr. Manoj Mishra

Administration

Mr. Manoj Kesari

Mr. Vaibhav Gupta

Placement Cell

Mrs. Deepa Bakshi

Mr. Devki Nandan Pandey

Stores & Purchase

Ms. Richa Nigam

Ms. Indu

Mr. G.C. Dwivedi

Mr. Ravindra K Shukla

Recruitment

Mr. Neeraj Kumar

Accounts

Ms. Mona

Library

Mr. Somit Kumar

Electrician

Ramchandra

Budget for the Year 2008-09

S.No.	Heads	Amount (Rs.)
A. Recurring		
1	Salary	495422
2	Honorarium	745990
3	Stipend	350000
4	Car Rental	135203
5	Lab. Consumables	2246001
6	TA/DA	91643
7	Housekeeping, Maintenance & Security	199097
8	Printing/ Advt./ Stationary	546760
9	Repairs & Upgradation	4500000
10	Convocation & Examinations (merged in admin expenses)	0
11	Campus Rent	1734342
12	Electricity & Water	0
13	Office Expenditure/ Telephone	90095
14	Contingency/Misc.	92542
	Total-A	11227095
B. Non Recurring		
1	AC/ Computer/ Xerox	2067181
2	Furniture	3483002
3	Books and Journals	1614142
4	Equipments	1020133
	Total –B	8184458
	Grand Total (A+B)	19411553
(Rupees One Crore Ninety Four Lakh Eleven Thousand Five Hundred & Fifty Three Only)		