S. A. S. Nagar

वार्षिक प्रतिवेदन एवं लेखा विवरण 2018-19

Annual Report & Statement of Accounts 2018-19

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर) एस.ए.एस.नगर
National Institute of Pharmaceutical Education and Research (NIPER) S.A.S. Nagar

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एस.ए.एस. नगर

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National Institute of Pharmaceutical Education and Research (NIPER) S.A.S. Nagar

Annual Report 2018-19

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Director, NIPER S.A.S. Nagar

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Annual Report 2018-19

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Message from the Director's Desk.....

Since its establishment, the National Institute of Pharmaceutical Education and Research (NIPER) SAS Nagar has continued to raise the bars of excellence in different areas of the pharmaceutical sciences. In recent times, when the interdisciplinary science and science-driven entrepreneurship are both being valued as the future of development, the relevance of NIPER-SAS Nagar has become even more. There are few institutions in India that are ably delivering teaching, research and industrial scale-up prototypes all from one campus; it is indeed a pride for us that NIPER-SAS Nagar has been doing that for over two decades. The contemporary research themes, industrial training and the drive for innovation, which is directly linked to societal welfare, is something that nurtures our students and exposes them to challenging trends of current times. The presence of world-class research facilities, vigorous institute-industry collaborations, interdisciplinary research collaborations, and industrial training opportunities help the students of NIPER SAS Nagar to excel and be ahead in the competitive professional environment.

Last year, MoUs were signed with various reputed National/International Universities and pharmaceutical industries for research collaboration; which helped in the revenue generation for the institute. During the year 128 research papers were published in peer-reviewed high impact journals of national and international repute. Besides, 18 patents were granted while 3 were filed during this period. The Institute is among the top institutes within the country in terms of research indicators such as average Impact factor, H-Index and citations per faculty for research. I am sure it will keep on reminding us that we have to continue to tread the path of excellence, as we strive towards new levels of eminence in the coming future. At its 10th Convocation, held on October 13, 2018, the Institute awarded 272 degrees (including 28 PhD degrees along with the postgraduate degrees) to its students who have completed all their degree requirements during the current academic year.

NIPER SAS Nagar continuous work towards research and innovation in pharmaceuticals has resulted in securing the top position in the MHRD NIRF rankings in pharmacy category. However, the best part of this year's ranking was securing ~99 % points in the perception part of the ranking. This achievement shows how much faith the employers, academicians, industry and other stakeholders in the scientific fraternity have on us. It also encourages us to introspect and improve the areas where we scored less and regain the top position.

I have been a firm believer of the old saying that through dedication, devotion, and diligence nothing is beyond the reach of mankind. What we do today will make the future of the next

generation. Therefore, the onus is on us that whatever we do today should set a benchmark of excellence. We should take every deed in our life through the stringent measures of excellence so that no one could question it.

I also take this opportunity to thank the Ministry of Chemicals and Fertilizers (Department of Pharmaceuticals) for their continued support, various national and international funding agencies that have helped the Institute in moving ahead. Last but not the least; I will like to thank my colleagues, both among the scientific and administrative staff, and students for their cooperation. I promise that the Institute will reach even greater heights in the coming years.

S.J.S. Flora

OBJECTIVES AND MANDATE

- Provide leadership in pharmaceutical sciences
- Advanced research in new and emerging areas
- National/International collaborative research
- Human resource development
- Media and curriculum development
- Establishment of National centres
- Sponsored projects
- Promotion of community and institutional pharmacy
- Study of sociological aspects of drug use

MILESTONES

1991	Registered as a Society
1994	First Director joined
1996	Initiation of research activities
1998	Institute of National Importance: NIPER Act 1998
1998	Admission of first Batch of Masters' and Ph.D. students
1999	Graduation of 1st Batch of Masters' students
2000	Dedication of NIPER to the Nation
2001	First Convocation held
2002	Graduation of 1st Batch of Ph.D. students
2003	Statutes proclaimed by the Board of Governors with the prior approval of the Visitor Second Convocation held: HE Dr A.P.J. Abdul Kalam, President of India and Visitor as the Chief Guest
2004	Establishment of National Bioavailability Centre
2004	'A Decade of NIPER' celebrated
2005	Ordinance regulating the degrees of Masters' and Doctor of Philosophy
2007	Amendment of NIPER Act to establish six new NIPERs
2009	Establishment of SMPIC
2010	Amendment of Ordinance regulating the courses of study and procedures thereof Establishment of Patent Facilitation Cell (Pharmaexcil)
2014	Amendment of Ordinance regulating the courses of study and procedures thereof
2016	Silver Jubilee Year of establishment as a Society, Establishmnet of CPIE
2017	Ranked 2nd in NIRF 2017 (Category: Pharmacy), Green Window
2018	Ranked 1st in NIRF 2018 (Category: Pharmacy), Trainings at TDC, Dosage Form

ADMISSION OF STUDENTS IN 2018-19

The Institute admits postgraduate students [M. Pharm., M. S. (Pharm.), M. Tech. (Pharm.)] through all India NIPER Joint Entrance Examination (NIPER–JEE) held each year; students of MBA (Pharm.) are admitted through NIPER–JEE, group discussion and interview; students of Ph.D. are admitted through NIPER Ph.D. Joint Admission Test and interview. Candidates should have a minimum CGPA of 6.75 (or 60% marks) for General, 6.25 (or 55% marks) for SC/ST, 5.75 (or 50% marks) for physically handicapped candidates on a 10 point scale in the qualifying examination. All admitted students also have GPAT/GATE/NET qualification. 5% of total numbers of seats are available for officially sponsored candidates from Govt. Department/PSU/R&D organisations with minimum of 2 years experience with the sponsoring employer. Details of eligibility criteria are available at the Institute website.

Department	Admitted (2018-19)		Proposed admission (2019-20)
	Masters'	Ph.D.	
Medicinal Chemistry	26	2	The Institute proposes to admit 188 Masters' (Pharm.), 42 MBA (Pharm.) and 12 Ph.D. students in the next academic year.
Natural Products	12	2	
Traditional Medicine	4	-	
Pharmaceutical Analysis	8	-	
Pharmacology & Toxicology	18	3	
Regulatory Toxicology	8	-	
Pharmaceutics	18	1	
Biotechnology	32	5	
Pharmacoinformatics	20	2	
Pharmacy Practice	8	1	
Clinical Research	8	-	
Pharm. Tech. (Formulations)	6	-	
Pharm. Tech. (Process Chem.)	16	4	
Pharm. Tech. (Biotechnology)	8	2	
Pharmaceutical Management	42	-	
Total	234	22	

GRADUATION OF STUDENTS

209 Masters' students and 35 MBA (Pharm.) students graduated in the current academic year. 28 Ph.D. thesis were accepted for award of Ph.D. degree this year. All the MBA (Pharm.) students have been placed with reputed pharmaceutical companies. Among the graduating Masters' students, placement is divided equally between those who opted for employment in pharmaceutical industry and those who opted for higher studies (Ph.D.). Graduating Ph.D. students have either been absorbed by pharmaceutical companies or have found post-doctoral positions in academia in India as well as abroad.

MHRD, NATIONAL INSTITUTE RANKING FRAMEWORK (NIRF) – 2018

National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India for national ranking of the institutes / universities has adjudged, National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar (Mohali) Rank – I in 2018 in the country in pharmacy category

10th CONVOCATION

Degrees Awarded

M.S. (Pharm.) /M.Pharm./ M.Tech. (Pharm.)	M.B.A. (Pharm.)	Ph.D.	Total
209	35	28	272

10th Convocation was held on October 13, 2018. Prof. G. Padmanaban, Former Director of Indian Institute of Science (IISc) Bangalore and NASI Platinum Jubilee Senior Scientist was the Chief Guest

A student receiving Gold Medal during the 10th Convocation

LIST OF GOLD MEDALISTS

BATCH	COURSE	NAME
2016-18	Masters' Programme in Sciences (Pharm.)	Ms. Tanya Ralli
2016-18	Masters' Programme in Business Administration (Pharm.)	Ms. Misbah Ajaz Lone

Recipients of degrees during tenth Convocation

Ph.D. THESES APPROVED FOR AWARD OF DEGREE IN 2018-2019

Name of student	Discipline	Title of the Thesis
Bhimpuria Rohan Ajaybhai	Pharmaceutical Technology (Process Chemistry)	Palladium-catalyzed inter- and intra-molecular oxidative arylations and alkenylations of 7-azaindoles and pyrroles
Santosh Kumar Giri	Medicinal Chemistry	Design and synthesis of biologically important pseudo-/neo-di and oligosaccharides
Rajesh Gour	Medicinal Chemistry	Design and synthesis of novel artemisinin derivatives as potential anticancer agents
Mahesh Sharma	Pharmacoinformatics	Metabolic systems biology analysis of *Leishmania donovani* for novel target identification and drug discovery
Rajiv Ahlawat	Pharmacy Practice	A cross sectional study to evaluate direct cost of management, adherence to medication, prescribing pattern, prevalence of depression and health-related quality of life in chronic kidney disease out-patients at a public tertiary care hospital in north India
Dinesh Kumar Tanwar	Pharmaceutical Technology (Process Chemistry)	Novel synthesis of sulfonylureas and related compounds
Patel Kinjal Ashokbhai	Biotechnology	Amelioration of mutant huntingtin mediated cellular toxicity in a yeast model of huntington's disease
Dhameliya Tejas	Medicinal Chemistry	Heterocyclic carboxamides as novel anti-mycobacterial chemotypes: design, synthesis and biological evaluation
Shiv Gupta	Natural Products	Design and synthesis of anti-HIV natural product analogs
Rohani Prasad Barman	Pharmaceutical Technology (Process Chemistry)	Synthesis of natural products of biological relevance
Chander Parkash	Pharmaceutical Technology (Formulation)	Phospholipid complex based approach to improve the deliverability of anticancer drug(s)
Neeraj Singh Thakur	Pharmaceutical Technology (Biotechnology)	Development of nanoparticle based fluorescent probes for various biomedical applications
Shubhra Sharma	Pharmaceutical Technology (Process Chemistry)	Novel convergent approaches to the synthesis of heterocycles containing sulfonyl functionality
Gopal Patel	Pharmaceutical Technology (Biotechnology)	Optimization of process parameters for the growth and production of mycophe-

		nolic acid by *Penicillium brevicompactum* and its application through nanoformulation
Puneet Khurana	Natural Products	Design, synthesis and biological evalua-tion of heterocyclic compounds as potential microsomal prostaglandin E2 synthase-1 (mPGES-1) inhibitors
Surbhi Soni	Biotechnology	Harnessing the potential of lipase preparations for the synthesis of enantiopure drug intermediates
Patel Ketulbhai Vijaybhai	Pharmaceutical Technology (Process Chemistry)	Acylation and application of α-oxocarbo-xylic acids towards C-C and C-N bond formation reactions
Bharat Prasad Dwivedee	Pharmaceutical Technology (Biotechnology)	Development of *Pseudomonas fluorescens* lipase as a nanobiocatalyst for the synthesis of enantiopure drug intermediates
Ravi Kumar Mittal	Natural Products	Design, synthesis and *in silico* evaluation of substituted quinoline derivatives for anti-HIV activity
G Kapil	Pharmacy Practice	Chronic low back pain: An investigation into the classification using alternative methods and educational treatment
Vishnu Kumar Sharma	Pharmacoinformatics	Pharmacoinformatics studies in the design of inhibitors for the Iddhfr enzyme
Neha Patel	Medicinal Chemistry	Divalent N1 compounds: An electronic structure analysis, synthesis and biological activity evaluation
Vaja Maulik Kumar Dineshbhai	Medicinal Chemistry	Design, synthesis and biological evalua-tion of new oxazolidinone derivatives as potential anti-tubercular agents
Shah Purvi Ajay Kumar	Natural Products	Design, synthesis and biological evalua-tion of quinoline and 1,2,3,4-tetrahydroiso-quinoline derivatives as potential anti-HIV and anti-cancer agents
Isha Saraf	Natural Products	Phytochemical profiling of some Australian and Indian eucalyptus species
Katiyar Sameer Sarvesh	Pharmaceutics	Design and development of novel biosurfactant based intravenous sustained release drug delivery system of anticancer drug(s)
Sumit S Chourasiya	Medicinal Chemistry	Synthesis, structural analysis, computer aided drug design and biological evaluation of azines

CURRENTLY ENROLLED Ph.D. STUDENTS

Rajesh Gour	Hunjan Mandeepkaur Harbansingh	Chaudhari Dasharathbhai Ramsibhai
Puneet Khurana	Sharma Jagadish	Parmar Prashantkumar Khodabhai
Shiv Gupta	Shubhra Sharma	Sumit Mukesh
Mahesh Sharma	Bhimpuria Rohan Ajaybhai	Sivangula Srikanth
G Kapil	Dinesh Kumar Tanwar	Vaibhav Girishkumar Sheth
Rajiv Ahlawat	Patel Ketulbhai Vijaybhai	Gohel Vivek Jashvantbhai
Asim Kumar	Firdoos Ahmad Sofi	Prashant Gupta
Neha Patel	Tejender Singh	Zahid Rafiq
Nitin Bagra	Gautam Kumar	Sumathi Poleboina
Narender Yadav	Ambati Goutami Godavari	Chittaranjan Sahu
Sumit Sunil Chourasiya	Rohini Verma	Mir Mahmood Asrar
Santosh Kumar Giri	Ladumor Mayurbhai Kathadbhai	Rajesh Parmar
Shah Purvi Ajaykumar	Dilip Kumar Singh	Aabid Abdullah Wani
Isha Saraf	Pavan Thapak	Vajja Krishna Rao
Rakesh Dilip Nimbalkar	Durgesh Kumar Dwivedi	Kshitij Ishwarbhai Patel
Vishnu Kumar Sharma	Yadaigiri Ganesh	Shujauddin Ahmed
Sunil Kumar Surapaneni	Dinesh Kumar	Mohammad Ovais Dar
Bhanu Prakash Arakareddy	Kale Dnyaneshwar Prakashrao	Nirjhar Saha
Bharat Prasad Dwivedee	Poonam Singh Thakur	Divine P Daniel
Neeraj Singh Thakur	Yadav Jayprakash Amarpal	Gore Dattatraya Dinkar
Gopal Patel	Ikjot Sodhi	Soni Ranjana
Mahendra Singh	Sandeep Suresh Zode	Navneet Kumar
Anjana Barola	Sneha Sheokand	Ketan Ghosh
Dhameliya Tejas Manjibhai	Pallapati Anusha Rani	Nisha
Shweta Bhagat	Nimma Ramesh	Pratik Adhya
Deepika Kathuria	Katiyar Sameer Sarvesh	Rajat Pant
Shailendra Sisodiya	Eshita Das	Dobariya Prakashkumar Bavchandbhai
Vaja Maulik Kumar Dineshbhai	Preeti	Karmarkar Bhagyashree
Meenu Saini	G Siva Kumar	Zahid Gani
Sanjay Kumar	Boya Chandra Sekhar	Tushar Tukaram Dhumal
Shweta Tiwari	Ruchi Singhal	Swati Jain
Ravi Kumar Mittal	Snehal Sainath Jawalekar	Ajay Kumar

Shahbaz Eqbal	Panuganti Venkataharsha	Date Tushar Dilip
Sujit Ratnakar Tangadpalliwar	Komal Sharma	Ghadi Rohan Rajendra Raghunath
Vishnu Kumar Sharma	Gulshan Kumar	Chormale Jaydeep Haribhau
Kahkashan Resham	Gurudutt Dubey	Prachi Joshi
Umashanker	Shams Aaghaz	Nallamothu Bhargavi
Gujjari Lohitha	Wanjari Pravin Jaikrushna	Shamandeep Kaur
Piyush	Ritu Kalia	Ankit Balhara
Surbhi Soni	Thakore Samarth Dharmeshbhai	Nagita Devi
Seema Kirar	Amanpreet Kaur	Ishfaq Rashid Teali
Vinay Kumar	Katanguru Vishruth Reddy	Upma Gulati

MASTERS' STUDENTS GRADUATED IN JUNE 2018

Department	Name	Title of thesis
Medicinal Chemistry	Ajmer Singh	Design, synthesis and biological evaluation of cyclic monoenaminone as COX-2 inhibitors
Medicinal Chemistry	Amandeep Singh	Investigation on new methods toward synthesis of polyfunctionalized imidazopyridines
Medicinal Chemistry	Amol Bisen	Structural elucidation of carbohydrates from *Costus igneus* rhizomes
Medicinal Chemistry	Astha Zalpuri	"On water" benzazole directed ruthenium catalysed C2-Alkenylation of Indoles with alkynes and styrenes via C (sp^2)-H activation
Medicinal Chemistry	Bahot Ajay Dayachand	Investigation of the reaction of IN_3 with glycals
Medicinal Chemistry	Bhanushali Umang Ashok	Synthesis of poly-substituted pyrrole derivatives as potential tubulin plymerisation inhibitors
Medicinal Chemistry	Bhongade Mrunali Amrutrao	Synthesis of 5-aryl-6-methoxy primaquine derivatives as antimalarials
Medicinal Chemistry	Chandak Priyanka Ramprasadji	Synthesis of building blocks for sugar-fused triazolyl heterocycles via click reaction
Medicinal Chemistry	Chaudhary Hiteshkumar Thanaram	Synthesis of 5,11-dihydro-6*H*-benzo[b]carbazol-6-one derivatives as potential topoisomerase II inhibitors
Medicinal Chemistry	Chavan Namita Ananda	Synthesis of diaryl-2-aminoimidazoles as potential tubulin polymerization inhibitors
Medicinal Chemistry	Deshpande Umesh Ashok	Synthesis of O-/S-linked artemisinin derivatives as anticancer agents
Medicinal Chemistry	Dhote Akshay Narayan	Metal nanoparticles catalyzed synthesis of heterocyclic compounds via C–H activation with COX (cyclooxygenase) inhibitory potential
Medicinal Chemistry	Gade Ravi Shivaji	Synthesis of functionalized benz-fused imidazopyridines as potential topoisomerase II inhibitors
Medicinal Chemistry	Gode Sanket Suryakantji	Synthesis of quinoline-2-carboxamides derivatives as antileishmanial compounds
Medicinal Chemistry	Govinda Chourasia	Synthesis and reactivity of *N*-methyl pyridyl based enols and their derivatives
Medicinal Chemistry	Gupta Pankaj Trivenee Prasad	Design and synthesis of arylidinehydrazono-imidazolidineones as possible anti-cancer agents targeting human topoisomerase II alpha (HTopoIIa)
Medicinal Chemistry	Jadhav Sagar Prabhakar	Synthesis of 3-arylated derivatives of primaquine as potential ntimalarials
Medicinal Chemistry	Kush Kumar Singh	Exploring the divalent NI character in acridine and quinazolinone based $(L\rightarrow N\leftarrow L)^+$ system
Medicinal Chemistry	Mainak Chatterjee	Design and synthesis of benzoxazole-2-carboxamides as potential anti-tubercular agents
Medicinal Chemistry	Manoj Prajapati	Synthesis of deuterated quinolines
Medicinal Chemistry	Metha Yatin Rajendra	Synthesis of alkylated quinolines as anti-tuberculosis agents
Medicinal Chemistry	Moumita Halder	Synthesis of arylated quinolines as anti-tuberculosis agents
Medicinal Chemistry	Nagarale Nilkantha Bapu	Synthesis of aminonaphthoquinone derivatives as potential topoisomerase II inhibitors
Medicinal Chemistry	Naikele Shweta Kantilal	Synthesis and biological evaluation of indazolo[3,2b] quinazolinone as potential anti-tubercular agents
Medicinal Chemistry	Neena K J	Synthesis of ring-substituted quinoline derivatives as anti-tuberculosis agents

Medicinal Chemistry	Neha Sengar	Synthesis of substituted pyridopyrimidones as potential topoisomerase II inhibitors
Medicinal Chemistry	Pooja Israni	Synthesis of potential mPGES-I inhibitors
Medicinal Chemistry	Pradeep Singh Thakur	Studies on the carbohydrates extracted from *Costus speciosus* rhizome
Medicinal Chemistry	Preeti Rana	Design, synthesis and biological evaluation of quinoline hydrazone hybrids as potential trypanothione reductase inhibitors
Medicinal Chemistry	Rahat Khan	Synthesis of sugar derivatives for sugar-fused triazolooxazines
Medicinal Chemistry	Rathod Gajanan Khemraj	Synthesis of aryl nitroquinoline carbohydrazides as potential anti-tuberculosis agents
Medicinal Chemistry	Ravi Rawat	CADD and synthesis of imidazothiadiazoles as selective *Pf*DHODH inhibitors for anti-malarial activity
Medicinal Chemistry	Sakhare Ajay Shivdas	Quantum chemical design and analysis of novel divalent N^{I} compounds
Medicinal Chemistry	Satish Pathak	Design, synthesis and biological evaluation of 3N aryl quinqzolin-4(3*H*)-one derivatives as potential anti-leishmanial agents
Medicinal Chemistry	Shakuntala Dhurua	Synthesis of sugar-linked peptides corresponding to the mucin glycopeptides of pathogenic microorganism
Medicinal Chemistry	Shiv Shankar Gupta	Development of a new and efficient synthetic methodology for biquinolines as medicinally relevant scaffolds
Medicinal Chemistry	Sukheja Vishal Tikam	Synthesis of pyrano[2,3-d]pyrimidine-2,4,5-(1*H*, 3*H*)-trione derivatives as potential topoisomerase II inhibitors
Medicinal Chemistry	Sweety	Design and synthesis of quinoline tethered oxazolidinone as potential anti-tubercular agents
Medicinal Chemistry	Thorat Ashikesh Sudhakar	Synthesis of threonine-linked glycopeptides corresponding to *Trypanosome cruzi* mucin
Medicinal Chemistry	Vishal	Azo⇒Hydrazone ⇐Azine tautomerism: the quantum chemical study
Medicinal Chemistry	Warkad Balabhau Vaijinathrao	Design and synthesis of novel benzoxazoles as potential phosphodiesterase-IV inhibitors
Medicinal Chemistry	Yedate Narendra Venkatrao	Design and computational evaluation of novel mesoionic divalent N^{I} compound
Biotechnology	Bagde Ravi Pandurang	Optimization of physicochemical parameter for the growth of recombinant *Escherichia coli* (SE1) expressing interleukin (rhIL11) by response surface methodology
Biotechnology	Bhandari Namrata Ravi	*In vitro* refolding studies of recombinant carboxypeptidase G2 (rCPG2)
Biotechnology	Bhise Umesh Manikrao	Cloning and expression of *Mycobacterium tuberculosis* (M.tb) isocitrate lyase 2b (Rv 1916)
Biotechnology	Chakravarty Gourav Sujit	Optimization of growth conditions for soluble expression of p53 using *Pichia pastoris* as an expression host
Biotechnology	Chandaka Raju	Subcloning and expression of recombinant mouse adenosine deaminase in *E. coli* (SE1)
Biotechnology	Chaudhari Dipika Pravin	Generation of human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) lysine to leucine (K271L) mutant
Biotechnology	Chaudhari Pradip Rajendra	Chemical induced unfolding of recombinant glutamine synthetase of *Leishmania donovani*
Biotechnology	Doshi Mitesh Mahesh	To study the effect of chemical modification of subtilisin Carlsberg on its activity in non-aqueous media
Biotechnology	Gaikwad Anjali Ramesh	Cloning of 5' untranslated region and 3' untranslated region of PDXK in pXG-hygromycin vector

Biotechnology	Gajbhiye Sumedh Liladhar	Cloning of N- and C-terminal domains of *M.tb* GAPDH under regulation of mbt promoter
Biotechnology	Gajendra Singh	Cloning and expression of N-terminal domain of human GAPDH (1-151)
Biotechnology	Jadhav Amar Devidas	Generation of human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) lysine 334 to leucine (K334L) mutant
Biotechnology	Kawathe Priyanka Sugriv	*In vitro* refolding studies of recombinant urate oxidase (rUO)
Biotechnology	Krishna Kumar	Generation of single knockout (SKO) construct for gene deletion study of *Leishmaina donovani* pyridoxal kinase
Biotechnology	Laxmi Priya Sahoo	To study the refolding of thermally and chemically unfolded bovine carbonic anhydrase
Biotechnology	Lingayat Deshbhushan Adinath	To monitor the effect of additives on the stability of *Subtilisin carlsberg* in non-aqueous media
Biotechnology	Mahamune Vaibhavee Shamrao	Generation of human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) lysine to leucine (K227L) mutant
Biotechnology	Marella Deepika	Analysis of target specific inhibitors on recombinant trypanothione reductase from *Leishmania donovani*
Biotechnology	Naresh Kumar	Chemical induced unfolding of recombinant pyridoxal kinase of *Leishmania donovani*
Biotechnology	Narkhede Mayuri Ganesh	An attempt to refold bacterially produced recombinant human Interleukin-I receptor antagonist (rhIL-I RA)
Biotechnology	Nelam Kumar	Cloning and expression of *Mycobacterium tuberculosis* H37Rv lactate dehydrogenase (Rv1872c) under *bfrB* promotor
Biotechnology	Pathak Mayuri Vidyadhar	To study the effect of dietary restriction on the expression of proteins in heterologous hosts
Biotechnology	Pathak Smit Anantkumar	Subcloning and expression of recombinant human acetylcholinesterase (rhAChE) in *E. coli*
Biotechnology	Pawar Shubham Pandurang	Improvement of expression yield of human growth hormone in *Pichia pastoris* by optimizing growth conditions
Biotechnology	Rajanya Roy	To study the effect of 'crowders' on folding of RNA aptamers selected against N-terminal mutant huntingtin
Biotechnology	Rathod Bhavisha Dineshbhai	Cloning of calcium activated potassium channel from *Leishmania donovani*
Biotechnology	Shinde Shrikant Somnath	To monitor the effect of arginine on aggregation properties of ?-synuclein
Biotechnology	Sirsath Ganesh Ashok	Cloning and expression of C-terminal domain of human glyceraldehyde-3-phosphate dehydrogenase (152-335)
Biotechnology	Vishakha Sharma	Subcloning and expression of recombinant human butyrylcholinesterase in *E. coli*
Biotechnology	Walujkar Amol Subhash	Optimization of media composition for the growth of recombinant *Escherichia coli* cell (SE1) expressing human IL-1 receptor antagonist (rh-IL-1Ra) by response surface methodology
Pharmacy Practice	Bethi Shruthi	Comparative efficacy and safety of pharmacological intervention used for the management of diabetic neuropathy- An evidence from network meta-analysis of randomized clinical trials
Pharmacy Practice	Kinkiri Swathi	Pharmacoeconomic evaluation of antiepileptic drug therapy in paediatric population
Pharmacy Practice	Vidya Sagar	Assessment of prognostic value of neuropathic pain screening questionnaires in assessing patient reported treatment outcomes in chronic non-cancer neuropathic pain conditions

Pharmacy Practice	Rubina Dhaliwal	Antimicrobial utilisation in the wards of a private tertiary care hospital
Pharmacy Practice	Sahiba	Physicians' adherence to clinical practice guidelines in selected diseases at a private tertiary care hospital
Pharmacy Practice	Shikha Singh	Study and characterization of ADRs at a private tertiary care hospital
Pharmacy Practice	Arun Kumar	Study of medicine use in elderly inpatients in the wards of a private tertiary care hospital
Clinical Research	Ramani	Study on variations in the costs of selected diagnostic tests across different healthcare facilities
Clinical Research	Naveen	Study on time trends of various cancers in India: A retrospective study
Clinical Research	Khalda Devi	Study on price variations of selected cardiovascular drugs between 1997-2015
Clinical Research	Seema	Study on state of phase 3 clinical trials in India-Analysis from clinical trials registry India
Clinical Research	Chandan	A community study to assess the prevalence, knowledge and disability regarding chronic low back pain among North Indian population
Clinical Research	Deepak	Assessment of future risk of diabetes and level of motivation towards physical activity in healthy volunteers of north India
Clinical Research	Manisha	Evaluation of physical functioning, life style factors and body composition analysis in healthy volunteers-An observational study
Clinical Research	Shivay	Efficacy and safety of lenalidomide bortezomib and dexamethesone (VRd) regimen as the frontline therapy in multiple myeloma: An evidence based approach
Pharmacoinformatics	Abhishek Chourasiya	A computational drug repositioning and rescuing approach for PARP cancer target
Pharmacoinformatics	Ajeet Kumar Singh	Computer added drug design of quorum sensing inhibitor for *Pseudomnas aeruginosa* biofilm
Pharmacoinformatics	Anuj	*In silico* characterization of cyclic metabolites of anti-diabetic drug: Sitagliptin
Pharmacoinformatics	Donempudi Sunil Chand	Identification of a putative binding site for diospyrin on DNA Gyrase to explore its role in tuberculosis
Pharmacoinformatics	Hardeep	*In silico* modeling to predict drug-induced phospholipidosis by using machine learning approach
Pharmacoinformatics	Ishpreet Singh	Prediction of protein stability changes upon single site mutation using machine learning approach
Pharmacoinformatics	Jasbir	To study death receptor signaling: New development towards anticancer therapy
Pharmacoinformatics	Merugusattibabu	Design of dipeptidyl peptidase-4 (DPP-4) inhibitors of type2 diabetes based on 3D-QSAR studies
Pharmacoinformatics	Monica Singh	An *in silico* study to explore the allosteric sites in proteins
Pharmacoinformatics	Priyanshu Ganeshe	Repurposing non-cancer drug for cancers: An *in silico* approach for oncogenic tankyrase target
Pharmacoinformatics	Raj Karan Patel	*In silico* prediction of *Tetrahymena pyriformis* toxicity using machine learning approaches
Pharmacoinformatics	Ravi Kumar	An *in silico* study to explore the role of foldmers in PTP1B-EGFR protein-protein interactions
Pharmacoinformatics	Rimpa Paul	Development of knowledge-based system for the prediction of hepatotoxicity
Pharmacoinformatics	Sandeep	Design of anti CD47 molecules using *in silico* approaches

Pharmacoinformatics	Sarita Singh	Investigating the binding site of ubiquinone in PfDHODH
Pharmacoinformatics	Shiva Chourasiya	A computational approach for identifying candidate drugs for repositioning for cancer disease
Pharmacoinformatics	Sudhakar Deshmukh	Prediction of CYP2C8 inhibitors and substrate using machine learning methods
Pharmacoinformatics	Sulkonaluttam	Computational design of natural product anibaminemimitices as an anti-prostate cancer agent
Pharmaceutical Analysis	Iyer Jayant Chidambaran	Comparative stability behavior of various solid state forms of Indomethacin
Pharmaceutical Analysis	Pranita Kaniche	Quantitation of ezetimib, efavirenz, and emtricitabine by ^{19}F-NMR, ^{1}H-NMR and HPLC
Pharmaceutical Analysis	Hari Kangne	Impact of gut microbiota on the pharmacokinetics of CYP3A probe substrate- buspirone after antibiotics/probiotics administration
Pharmaceutical Analysis	Vijjapu Kameshwara Rao	Physiologically based pharmacokinetic models for prediction of disposition of drugs
Pharmaceutical Analysis	Jalvadi Preethi	Quantitation of artesunate sodium and ethambutol hydrochloride by ^{1}H-NMR, LC-UV or LC-CAD
Pharmaceutical Analysis	Ganesh Dighe	Forced degradation and drug-excipient interaction studies on ambroxol hydrochloride
Pharmaceutical Analysis	Praneetha Pammi	*In vitro* metabolism of piperine: Insight into reactive metabolite formation
Pharmaceutical Analysis	Redapangu David Levi	Development of a quantitative metabolomics approach to investigate serum metabolome in hyperlipidemia rat model in response to fluvastatin sodium
Pharmaceutical Analysis	Yashpal Kataria	Preparation and characterization of degradation product standards of selected drugs
Pharmaceutical Technology (Process Chemistry)	A Manoj Kumar	Benzylic C-H amination towards the synthesis of clozapine
Pharmaceutical Technology (Process Chemistry)	Divakar Singh	Facile synthesis of alogliptine and terlagliptine
Pharmaceutical Technology (Process Chemistry)	Krishan Verma	Design and synthesis of bioactive BIM (Bis-indolylmethane) derivative from marine actinomycetes *Rubrobacter radiotolerans*
Pharmaceutical Technology (Process Chemistry)	Jyoti Bhatti	Biomimetic synthesis of carpatamide-A : cytotoxic arylamine derivatives from marine derived *Streptomyces sp*
Pharmaceutical Technology (Process Chemistry)	M Gajanan Baburao	Oxidative S-arylation towards the synthesis of esomeprazole (Nexium)
Pharmaceutical Technology (Process Chemistry)	Sheetal	Decarboxylative acylation towards the synthesis of solifenacin (vesicare)
Pharmaceutical Technology (Process Chemistry)	Mukul Jain	Studies on the synthesis of diarylmethanes and azafluorenes
Pharmaceutical Technology (Process Chemistry)	Solanke Ganesh D	Intramolecular cyclization of arylpyridines to the synthesis of azafluorenes
Pharmaceutical Technology (Process Chemistry)	Vanya Vashisht	Acylation of tryptophan and intramolecular benzylation of arylpyridines
Pharmaceutical Technology (Process Chemistry)	Surabhi Panday	A Novel approach for the synthesis of diclofenac, epolamine and azafluorenes
Pharmaceutical Technology (Process Chemistry)	V Ravikumar S	Process for preparation of flibanserin
Pharmaceutical Technology (Process Chemistry)	Vishakha Dhiman	Synthesis of substituted hydantoin and antibaldness compound RU58841

Pharmaceutical Technology (Process Chemistry)	P Vaninikhitha	Aspartic acid based synthesis of anti-diabetic agents
Pharmaceutical Technology (Biotechnology)	C Satish Balkrushna	Chemoenzymatic synthesis of enantiopure drugs and drug intermediates
Pharmaceutical Technology (Biotechnology)	C Shubham Arunrao	Microbial production of laccase and its use as a nanobiocatalyst
Pharmaceutical Technology (Biotechnology)	Raskar Shrikant Sukhadeo	Microbial production of transaminase and its use in biocatalysis
Pharmaceutical Technology (Biotechnology)	Saptarshi Maity	BODIPY nanoencapsulates as photosensitizers for photodynamic therapy
Pharmaceutical Technology (Biotechnology)	Sharma Gaurav Sanjay	Microbial production of antitumor anthracydines from *Streptomyces peucetius sp.*
Pharmaceutical Technology (Biotechnology)	Deo Manoj Jagannath	Cloning, over-expression and study of *in vitro* anti-tumor potential of arginine deiminase (ADI) from *P. putida in E. coli* BL21(DE3)
Pharmaceutical Technology (Biotechnology)	Ghiya Pranay Dilip	Biocatalysis using various lipase preparations
Pharmaceutical Technology (Biotechnology)	Narattam Mandal	Development of lipid-polymer hybrid nanoparticles as medicinal and diagnostic agents
Pharmaceutical Technology (Biotechnology)	Kush Biswas	Fed batch cultivation of *Penicillium brevicompactum* for the production of mycophenolic acid
Pharmaceutical Technology (Biotechnology)	Shinde Ashok Sakharam	Optimization of process parameters for the growth and production of methioninase by *P. putida*
Pharmaceutical Technology (Formulations)	Deepali Pathak	Stabilization potential of mesoporous silica carrier(s) and polymer(s) for amorphous APIs
Pharmaceutical Technology (Formulations)	Goel Rajat Sanjay	Development of bioequivalent formulation using metastable polymorph
Pharmaceutical Technology (Formulations)	Bapat Pradnya Prakash	Lipid nanocapsules for improving stability and oral bioavailability of curcumin
Pharmaceutical Technology (Formulations)	Ishneet Kaur	Formulation of multiple emulsion containing permeation enhancer for enhancing oral bioavailability of insulin
Pharmaceutical Technology (Formulations)	Ravi Kumar Chakravarti	Preparation and characterization of matrix dispersion of simvastatin phospholipid complex to improve its oral bioavailability
Pharmaceutical Technology (Formulations)	Deepika Daksh	Establishing relationship between solid state to solution state supersaturation produced by fixed drug-polymer combination
Pharmaceutical Technology (Formulations)	Rahul Kumar	Amphiphilic polymeric micelles for oral delivery of docetaxel
Pharmacology & Toxicology	Aishika Datta	To investigate the renoprotective potential of sodium butyrate and acarbose in STZ induced diabetic nephropathy in SD rats
Pharmacology & Toxicology	Ajmal Nassar	Intervention study of fasting and vitamin C on thioacetamide induced Kidney damage in rats
Pharmacology & Toxicology	Archana Karole	Determination of the stand-alone and combined antimalarial effects of mefloquine and moxifloxacin in *Plasmodium berghei* – infected mice
Pharmacology & Toxicology	Bhupesh Vaidya	To investigate the effects of pharmacological intervention targeting transient receptor potential melastatin 2 (TRPM2) channel in animal model of parkinson's
Pharmacology & Toxicology	Evanka Chawla	To study the efficacy of gefitinib nanoparticles conjugated with azacytidine in cancer cells
Pharmacology & Toxicology	G Prathiba	Intervention of tert-butyl hydroquionone in STZ induced diabetic nephropathy

Pharmacology & Toxicology	Hem Chandra Joshi	To study the involvement of TRPM2 in *in vitro* model of parkinson's disease using pharmacological agent
Pharmacology & Toxicology	Indla Rajesh	Determination of the stand-alone and combined antimalarial effects of mefloquine and niacinamide in *Plasmodium berghei* – infected mice
Pharmacology & Toxicology	Jayshree Shinde	To evaluate the effect of 2- aminoethyl diphenyl borinate (2-APB), a TRPM antagonist in cerebral ischemia reperfusion injury
Pharmacology & Toxicology	Kajal Rawat	To investigate the effect of L-methionine on the pathogenesis of type-1 diabetes in rats
Pharmacology & Toxicology	Kamarajugadda Jyothi	Evaluation of large intestine damage by dextran sulphate sodium and dimethyl hydrazine expressed mice with intervention of fenugreek seed powder
Pharmacology & Toxicology	Mangaldeep Dey	To investigate the effects of niclosamide, a Wnt inhibitor in neuropathic pain models
Pharmacology & Toxicology	Mohammad Adeel Zafar	Determination of the stand - alone and combined antimalarial effects of artesunic acid (NP – 380) and quinacrine in *Plasmodium yoelii nigeriensis* – infected mice
Pharmacology & Toxicology	Pansare Pravinkumar Manik	Intervention study of fasting and vitamin C on thioacetamide induced liver damage in rats
Pharmacology & Toxicology	Prafull Shrivastava	To investigate the effect of tranilast, a TRPV2 antagonist, in animal model of myocardial damage
Pharmacology & Toxicology	Raghav Goyal	Evaluation of therapeutic and preventive role of novel azacitidine-gold nanoparticles conjugate in Type 1 DM induced cardiomyopathy
Pharmacology & Toxicology	Rahul Kumar	Determination of the stand - alone and combined antimalarial effects of pyronaridine and quinine in *Plasmodium yoelii nigeriensis* – infected mice
Pharmacology & Toxicology	Rhupunyi Krocha	Determination of the stand - alone and combined antimalarial effects of artesunic acid (NP – 380) and quinacrine in *Plasmodium berghei* – infected mice
Pharmacology & Toxicology	Shaheen Wasil Kabeer	To investigate the effect of *Lactobacillus rhamnosus* and its combination with prebiotic (lactulose) in type -2 diabetic rats
Pharmacology & Toxicology	Shivani	To investigate the effect of *Lactobacillus casei* and its combination with prebiotic (fructooligosaccharide) in type -2 diabetic rats
Pharmacology & Toxicology	Swagata Pal	To study the involvement of Wnt in myocardial damage using pharmacological approach
Pharmacology & Toxicology	Umre Pooja Manikrao	Evaluation of small intestine damage by dextran sulphate sodium and dimethyl hydrazine expressed mice with intervention of enugreek seed powder
Pharmacology & Toxicology	Vyawahare Akshay Raghu	Evaluation of gastro protective of jamun extract in ethanol and ibuprofen induced gastric ulcer model
Pharmacology & Toxicology	Aneesh Ali	Intervention study of crocin on cyclophosphamide induced testicular toxicity in rats
Pharmacology & Toxicology	Ayushi Teharia	Effects of oral administration of sodium acetate and sodium butyrate on gut microbiota of streptozotocin induced diabetic rats
Pharmacology & Toxicology	Bendre Sanjay Balasaheb	Intervention study of crocin on cyclophosphamide induced hepatotoxicity in rats
Pharmacology & Toxicology	Bhivgade Shital Nagorao	Evaluating the effect of monosodium glutamate and bisphenol A on male reproductive system and bone marrow by micronucleus assay in rats
Pharmacology &	Chauhan Manjit Balraj	To study the correlation between somatic tissue toxicity and germ

		of clarithromycin co-crystals
Pharmaceutics	Jyoti Garg	Effect of coformers on hygroscopic behaviour of co-crystals
Pharmaceutics	Katta Chantibabu	Generation and evaluation atorvastatin calcium solid dispersions by using *in vitro* supersaturation as a tool for screening of polymers
Pharmaceutics	Mahajan Srushti Suresh	Identification of critical material attributes of BCS Class II drug from different sources
Pharmaceutics	Mali Shiwani Sharad	Topical delivery of phospholipid complex of drug(s): an attempt to increase therapeutic efficacy in management of psoriasis
Pharmaceutics	Narinder Kumar	Development and evaluation of sildenafil loaded SNEDDS for improvement in oral bioavailability
Pharmaceutics	Pattewad Venkat Kerba	Development and evaluation of fluticasone propionate and babchi oil containing nanoemulsion based topical gel for management of psoriasis
Pharmaceutics	Rajdeep Ghanwary	Enhancing dissolution of soluble co-crystals of a-eprosartan by depressing precipitation with the help of common co-former effect
Pharmaceutics	Ritesh Gallian	To study effect of aging on moisture sorption behaviour of amorphous solid dispersions
Pharmaceutics	Savitri	Phospholipid-bile salt solid dispersion : formulation and *in vitro* characterization
Pharmaceutics	Snehashis Nandi	Generation of nanocrystalline solid dispersion of combination of drugs using NanoCrySP technology
Pharmaceutics	Tanya Ralli	To study crystallization tendency of ASDs and validate its correlation with isobaric fragility and stretch parameter
Pharmaceutics	Yogesh Kumar	Tumour delivery of plasmid DNA using pH sensitive liposomes
Pharmaceutical Management	Aman Namdev	To identify the service provided by the home healthcare
Pharmaceutical Management	Amit Kumar	Competitive analysis of product launch plan & research pipeline of Indian pharmaceutical company wrt International pharma company
Pharmaceutical Management	Anshul Jain	Impact of GST on pharmaceutical industry
Pharmaceutical Management	Bharathi Thendral	Analysis of pharmaceutical packaging market
Pharmaceutical Management	Bhawna Vaid	To analyse the Indian and Global biotechnology industry with special consideration to biosimilars
Pharmaceutical Management	Diwakar	A study to analyse the impact of pricing capping on various stakeholders in medical device sector
Pharmaceutical Management	G Naveen Kumar	Patient support programs by various pharmaceutical companies within cancer segment in India
Pharmaceutical Management	Gadge Hitesh	To study consumer perception towards brand in oral care with specific reference to toothpaste segment
Pharmaceutical Management	Ganga Arun Kumar	To study the perception of oncologist regarding use of drugs in treatment of breast cancer
Pharmaceutical Management	Himanshi Dilliwar	To assess the market access potential for plasma gelsolin preterm birth detection kit
Pharmaceutical Management	Himanshu Rathore	Health start ups
Pharmaceutical Management	Khemani Bhavesh M	Service quality management in pharmaceutical supply chain
Pharmaceutical Management	Komal Kanojia	A comparative study on diagnostic services: Public vs private

Toxicology		cell toxicity
Pharmacology & Toxicology	Chitalkar Kishor Dashrath	Intervention study of crocin on cyclophosphamide induced nephrotoxicity in rats
Pharmacology & Toxicology	Jaskirat Kaur	Evaluation of therapeutic and preventive role of novel azacitidine-gold nanoparticles conjugate in Type 1 DM induced nephropathy
Pharmacology & Toxicology	Maniyar Bhavesh Sunil	To investigate the effect of *Lactobacillus gasseri* and its combination with prebiotic (galactooligosaccharide) in type -2 diabetic rats
Pharmacology & Toxicology	Neha Tyagi	Investigating the effects of taurine and chromium picolinate in development and progression of type 1 diabetes in sprague dawley rats
Pharmacology & Toxicology	Radha Savner	28 days repeated oral and intraperitoneal toxicity study of silicon dioxide nanoparticles and chromium oxide nanoparticles.
Natural Products	Abhishekh Kr Pandey	Phytochemical investigation of *Ficus iyrat* (Warb)
Natural Products	Badugu Madhura Meenakshi	Synthesis of 2,3,4 tri substituted quinoline derivatives as an anti-tubercular agents
Natural Products	Jadhav Swati Appasaheb	Isolation of terpenoids from *Tinospora cordifolia*
Natural Products	Kamble Akshata Vinay	Phytochemical investigation of *Kaempferia galanga*
Natural Products	Musande Kalpesh Satish	Isolation and characterization of Flavonol glycosides from Sea Buckthorn *(Linn)*
Natural Products	Naik Gaurav Gopal	Isolation and characterization of flavanoids from berries of Sea Buckthorn *Linn*.
Natural Products	Pankaj Jinta	Development of self-microemulsifying drug delivery system (SMEDDS) of curcumin and evaluation of its anti-inflammatory activity
Natural Products	Priyanka Sharma	Design and synthesis of adiporon inspired imperatorin derivatives for obesity related disorders
Natural Products	Purnima Gupta	Isolation and characterization of alkaloids from *Tinospora cordifolia*
Natural Products	Rakshit Ranjan	Isolation of glycosides from *Tinospora cordifolia*
Natural Products	Ruchi Bajpai	Isolation of anthocyanins from *Punica granatum* peel
Natural Products	Shubhangi Singh	Synthesis of 2, 5- diaryloxadiazole derivatives as anti-tubercular agents
Tradition Medicine	Andleeb Kaur	Phytochemical investigation of *Ochna serrulata* (Hochst.) *Walp*
Tradition Medicine	Gaurav	Isolation and characterization of secondary metabolites from leaves of *Carica papaya*
Tradition Medicine	Danaboina Gnana Bhaskar	Phytochemical investigation of *Erythrina variegata*
Tradition Medicine	Narendra Singh Umath	Phytochemical investigation of *Nyctanthus arbortristis*
Tradition Medicine	Shubham Mehta	Isolation and characterization of carotenoids from berries of *Hippophae rhamnoides* (Linn)
Pharmaceutics	Aalhate Mayur Bapu	Solidification of SNEDDS containing different spectra of drugs : Different methods and carrier screening to assess *in vitro* and *in vivo* performance
Pharmaceutics	Aaruti Sood	Contribution of heterogeneous nucleation in generation of nanocrystalline solid dispersion
Pharmaceutics	Aranta Ekka	Excipient-mediated supersaturation stabilization of poorly soluble drug repaglinide
Pharmaceutics	Arvind Sirvi	Supersaturated SEDDS for improving drug loading and oral bioavailability of quercetin
Pharmaceutics	Gattagalla Pavani	Development, characterization and biopharmaceutical evaluation

Pharmaceutical Management	L Chandrakanth	Real data landscaping and analysis of gastric cancer
Pharmaceutical Management	M Shubham Prathad	Consumer behaviour towards hair care products with special reference to shampoo
Pharmaceutical Management	M Prasanna Lakshmi K	Regulatory procedure for marketing generics in BRICS countries
Pharmaceutical Management	Mehak Bajaj	To find the perception of foreign tourists towards medical tourism in Chandigarh
Pharmaceutical Management	Misbah Ajaz Lone	A comparative study to see the R&D inclination of domestic firms & MNC's in Indian pharmaceutical industry & in depth analysis of the R&D undertaken by the domestic firms
Pharmaceutical Management	Mithbavkar Kamlesh C	Security analysis (fundamental and technical analysis) of nifty pharma stocks: A comprehensive study
Pharmaceutical Management	Mula Shivani Reddy	Governance in healthcare segment
Pharmaceutical Management	Naina Arya	Analysis of e-pharmacy market
Pharmaceutical Management	Nallagatla Sravanthi	Consumer behaviour on the purchase of skin care cosmetics
Pharmaceutical Management	Nidhi Nagrath	To analyse the determinants of public health care expenditure
Pharmaceutical Management	Omesh Kumar Soni	Impact of CSR initiatives by pharma companies on its bottom line
Pharmaceutical Management	P Rekha	To analyse the prescription of generics medicine by doctors
Pharmaceutical Management	Pandhare Avinash S	To study buying behaviour of consumers in OTC segment with special reference to cough syrup in Latur
Pharmaceutical Management	Polaypally Vennela	Effective customer relationship management of health care
Pharmaceutical Management	Rajat Miglani	Customer lifetime value reshaping corporate strategies
Pharmaceutical Management	Sahil Arora	Identification of the best health insurance policy in current scenario wrt India
Pharmaceutical Management	Satha Aswini	Consumer perception towards anti lice products
Pharmaceutical Management	Shaloo	Uses of internet for medical information by patients: an analysis
Pharmaceutical Management	Swati Rawat	Pharmaceutical brand positioning
Pharmaceutical Management	Ved Prakash Singh	To evaluate the effect of sales training on sales force activity in pharmaceutical industry
Pharmaceutical Management	Wagh Gulab Roshan	Study on patient satisfaction and medical facilities provided by the multispecialty hospitals
Pharmaceutical Management	Yadav Varun Kumar	M health market: An assessment of the potential for growth with respect to HCP's customers & pharmaceutical companies
Pharmaceutical Management	Yashwant Raikwar	Prescribing behaviour of vaccines by specialities - A study on pharmacology demography & promotion impact on decision making

Foundation Day 2019

Foundation Day of the Institute was celebrated on February 15, 2019, Sh. Ajit Singh, Chairman and Founder, ACG Worldwide, (formerly the Associated Capsules Group), Mumbai was the chief guest and delivered a lecture on "An Overview of Pharmaceutical Industry and Science"

Guest of Honor, Dr. Anil Koul delivered a talk on "Innovation in Global Public Health Space"

Dignitaries on the stage during Foundation Day 2019 function

RESEARCH ACTIVITIES

MEDICINAL CHEMISTRY

Target-based design and synthesis of new chemical entities as inhibitors of various enzymes involved in the pathophysiology of different diseases:

A. Inflammation

a. Inhibitors of cyclooxygenase : Design, synthesis and biological evaluation of NCEs to generate novel leads

The nonsteriodal anti-inflammatory drugs (NSAIDs) have been the mainstay of therapy for rheumatoid arthritis manifested as inflammation and pain of the joints but are associated with side effects such as gastrointestinal and renal toxicity due to non-selective inhibition of cyclooxygenase (COX-1 and COX-2) isozymes that witnessed the upsurge of COX-2 selective agents such as rofecoxib, celecoxib, valdecoxib, lumiracoxib etc. in the past several years. However, rofecoxib and valdecoxib were withdrawn from the market due to increase in cardiovascular adverse effects and lumiracoxib due to hepatotoxicity. Due to the inadequacy of safe drugs and the recognition of new avenues for selective COX-2 inhibitors such as cancer, Alzheimer's disease, Parkinson's disease, schizophrenia, major depression, ischemic brain injury and diabetic peripheral nephropathy interest to develop more effective COX-2 selective agents has taken a fresh gear.

Total 56 compounds belonging to different chemotypes such as 2-(benzo[d]thiazol-2-yl) aniline, 2-(benzo[d]oxazole-2-yl)aniline, 2-(benzo [d] imidazole-2-yl)aniline, 3-((2-(benzo [d] thiazol-2-yl) phenyl)amino)cyclohex-2-enone, 3-((2-(benzo[d]imidazol-2-yl)phenyl)amino)cyclohex-2-enone, 3-((2-(benzo[d]imidazol-2-yl) phenyl) amino)cyclopent-2-enone, 3-(arylamino)cyclohex-2-enone, 3-(arylamino) cyclopent-2-enone, 3, 3'- (1, 3/4-phenylenebis (azanediyl)) dicyclopent-2-enone, 3,3'-(1,3/4-phenylenebis (azanediyl)) dicyclohex-2 - enone have been synthesized. Newer methodologies for the synthesis of COX inhibitors have been developed using water and 2,2,2-trifluoroethanol separately as green reaction media. The *in vitro* COX inhibitory assay studies are in progress.

A library of six benzothiazole-hybrid enaminones have been synthesized by intermolecular dehydrative condensation of substituted 2-amino benzothiazole with substituted 1, 3-cyclohexane-dione and 1,3-cyclopentanedione separately in presence of Magnesium perchlorate as cheap and efficient catalyst. The synthesized compounds belong to the chemotype, 3-(benzo[d]thiazol-2-ylamino) cycloalk-2-ene-1-ones. All these compounds will be tested for COX-2 inhibitory activity.

Total thirteen final compounds of different cyclic-enaminone chemotypes such as 3-(quinolin-6-ylamino) cyclohex-2-enone, 3-(quinolin-6-ylamino) cyclopent-2-enone and 3-((3H-indol-5-yl) amino)cyclohex-2-enone have been synthesized via condensation of substituted 1,3-cycloalkane-dione with variously substituted amino quinoline and amino indole in presence of 2,2,2-trifluoroethanol as greener solvent. All these compounds will be tested for COX-2 inhibitory activity.

b. Inhibitors of phosphodiesterase : Design, synthesis and biological evaluation of benzazole tethered heterocycles as novel PDE4 inhibitors

Recognition of a molecule with multiple pharmacophoric feature is associated with various complications hence strategies were set to design NCEs either by incorporating the identify pharmacophoric frameworks in one common structure or attaching them through a linker as it offers several pharmacokinetic and pharmacodynamic benefits. Anti-asthmatic activity and PDE-IV inhibitory potentials were selected as prime criteria and different pharmacophore were designed by hybridizing the structural features of anti-asthmatics and PDE-IV inhibitors.

A library of two target compounds possessing 2-(5-arylhetero-2-aryl)benzo[d]thiazole scaffold were synthesized. These target compounds have been synthesized via Suzuki-Miyaura cross coupling of heterocyclic halide intermediates. In addition to this four heterocyclic halide intermediates have been synthesized. All these intermediates and final compounds will be tested for PDE4B inhibitory activity.

B. Leishmaniasis : Generation of new anti-leishmanial chemotypes

Leishmaniasis are most wild spread clinical forms prevalent in many part of the world. Trypanothione Reductase (TR) has been considered as one of more relevant and novel target for leishmaniasis. TR is essential in all trypanosomatids and it has been reported that parasites with lowered TR activity display in increased sensitivity towards ROS.

a. Design and synthesis of benzazole-quinazolinone hybrids as leishmanial trypanothione reductase inhibitors

The objective of the research involved the synthesis of benzazole-quinazolinone hybrids. Total 8 compounds belonging to 3-(1H-benzo[d]azol-2-yl)-2-alkylquinazolin-4(3H)-one chemotype were synthesized and total 7 compounds belonging to 3-(1H-benzo[d]azol-2-yl)-2-styryl quinazolin-4(3H)-one chemotype were synthesised. The biological evaluation against leishmania of these compounds will be carried out in future.

b. Design, synthesis, and biological evaluation of benzazole tethered heterocycles as potential trypanothione reductase inhibitors

The objective of the research includes the synthesis of benzazole tethered heterocycles such as 2-(2-(alken-1-yl)-1H-indol-3-yl) benzo[d]oxazole, 2-(2-(alken-1-yl)-1H-indol-3-yl) benzo[d]thiazole, 2-(3-alken-1-yl) thiophene-2-yl) benzo[d]oxazole and 2-(3-alken-1-yl) thiophene-2-yl) benzo[d]thiazole derivatives. The two intermediates, [5-chloro-2-(thiophene-2-yl)benzo[d] oxazole and 2-(thiophene-2-yl)benzo[d]thiazole] were synthesized. The biological evaluation of these compounds is under progress.

c. Discovery of leishmanicidal agents: Specific target-interfering heterocyclic ligands

Kala-azar (Visceral Leishmaniasis, VL), a most fatal form of leishmaniasis and one of most neglected diseases, is endemic in rural and suburban areas of developing countries including India. Leishmanial topoisomerases I and II, and DNA (AT rich sequence of minor groves) have been recognized as important targets in the discovery of potential antileishmanial agents. With the aim of discovery of novel agents for VL, we focused on synthesis of rationally designed antileishmanial drugs/ agents–inspired heterocyclic compounds. We have developed diversity-feasible synthetic methodologies and synthesized several series of designed heterocyclic compounds. Some of them were found to exhibit potent antileishmanial activities and were significantly less cytotoxic. Further studies are going on.

C. Tuberculosis (TB)

TB is nowadays one of the biggest risks to the human health. The emergence of multi-drug resistant (MDR) and extensively drug-resistant (XDR) strains of *Mtb* insists the need for new therapies, which might have novel mechanism of action. Thus, the discovery and development of new anti-tubercular agents continues to be the perpetual interest to academia and pharma industry to control the TB pandemic.

a. Design and synthesis of novel heterocyclic scaffolds as potential anti-tubercular agents

Diversity oriented synthesis (DOS) of new agents targeting the tuberculosis is a well sought exercise to find new anti-TB molecules. Towards this endeavour, various small heterocyclic molecules were designed to target ATPPRTase (HisG) and FtsZ of the mycobacteria. Total 45 compounds from the series N,1-dibenzyl-1H-benzo[d]imidazole-2-carboxamide, quinoline 3-carboxamide, 2-benzo [d] imidazole-2-carboxamides and benzimidazoloquinazoline have been synthesized. The biological evaluation of these compounds will be per-

formed in future.

b. Design and synthesis of benzazole, quinazoli-none tethered oxazolidinone hybrids as anti-tubercular agents

The oxazolidinone scaffold containing molecules (e.g. Eperezolid and Linezolid) are in clinical trial for anti-tubercuar activity. Beside these, various heterocycles (e.g. quinazolinone and benzazole) have reported anti-tubercuar activity. So in search of better efficient molecule, benzazole-quinazolinone tethered oxazolidinone hybrids were designed. Total 10 intermediates of 5-((benzo[d]thiazol-2-ylamino)methyl)-3-(3-fluoro-4-morpholinophenyl) oxazolidin-2-one derivatives have been synthesized and 4 intermediates of 5-(chloromethyl)-3- (4-(4-oxoquinazolin-3(4H)-yl)phenyl) oxazolidin-2-one derivatives have been synthesized. The biological evaluation of these compounds is under progress.

D. Topoisomerase and tubulin–targeting anti-cancer agents

DNA topoisomerases and tubulin are important targets in anticancer drug discovery. About 50% of antitumoral treatment regimens rely on the use of at least one drug that inhibits topoisomerases. Recent studies and marketed tubulin-targeting anticancer drugs are the obvious evidence for tubulin as valuable target. With the aim of discovery of new and potent topoisomerase or tubulin–targeting anticancer agents, our research involves the rational design of target-specific natural product-based/inspired heterocyclic compounds, target-oriented synthesis, and *in vitro* bio-evaluation studies. In the targeted synthesis, diversity-feasible synthetic methodologies that favour the preparation of relevant diverse substituted/functionalized compounds required for SAR studies and lead identification are developed and utilized. Several of synthesized compounds have been found to be potent catalytic inhibitors of topoisomerase II and anticancer agents (*in vitro* cell line studies). They have shown higher topoisomerase II inhibitory and anticancer activities than a topoisomerase-targeting anticancer drug, etoposide and relatively lower cytotoxicity to normal cells. The study on these compounds for further development is underway. In the antitubulin study, combretastatin A-4 (CA-4, a NP clinical agent)–inspired compounds were found to be potent compared to CA-4 in tubulin polymerization inhibition and antiproliferative activities in various cancer cells. Further study is going on.

E. Organic Synthesis: Synthesis of many heterocyclic species was carried out towards anti-diabetes, anti-malarial and anti-leishmanial agent design.

Phase-transfer catalysts (PTCs), currently, are one of the most important tools of chemists for performing organic reactions. PTCs accelerate several types of reactions in biphasic systems, giving excellent yields of the desired product. Most of the PTCs belong to the general formula $NR_4^+X^-$. In the recent past, several compounds possessing a novel scaffold with the general formula $NL_4^+X^-$ have been reported as PTCs. In the NL_4^+ species, a nitrogen atom with a formal positive charge accepts electron density from electron-donating ligands. Electronic structure studies reported in the literature confirmed the possibility of L→N coordination (donor–acceptor) interactions in these species, and thus, this class of compounds are known as divalent NI compounds. These species are reported to exhibit better catalytic potential in comparison to the traditional NR_4^+ systems. Some of the NL_4^+ systems are found to be useful in asymmetric phase-transfer catalysis. Thus, these systems offer extensive opportunities for exploring the catalytic properties and novel mechanistic aspects associated with their unique electronic structure. In this paper, the synthesis, electronic, and structural properties and the applications in catalysis of the NL_4^+-based PTCs are reviewed with their bright future scope in catalytic organic chemistry.

The potentiality of the N-(acridin-9-yl) are nesulfonamide moiety as a hybrid pharmacophore due to the distinct pharmacological activities of acridines and aryl/heteroaryl sulfonamides prompts to synthesise N-(acridin-9-yl)arenesulfonamides and study their structural properties. Various N-(acridin-9-yl)arene/heteroarenesulfonamides were

obtained through the development of a new methodology adopting the $Pd_2(dba)_3$-catalyzed C–N bond formation strategy for the reaction of 9-chloloroacridine with arene/ heteroarene-sulfonamides. The ^1H and ^{13}C NMR spectra suggest these N-(acridin-9-yl)arene/ hetero are nesulfonamides to exist solely as the sulfonimide tautomer rather than anticipated sulphonamide form and was confirmed by the single crystal XRD analysis of one of the newly synthesized compounds. The quantum chemical studies rationalized this tautomeric preference revealing that the sulfonimidetautomers are more stable than the sulfonamide tautomers by -0.67 to -5.12 kcal/mol in the gas phase. In the solid state, the sulfonimide tautomer is stabilized by intermolecular hydrogen bond between N_H...O_S and π-π stacking between the acridine rings.

Treatment of 1,3-diaryl-propene-2-one with aminoguanidine under acidic conditions for a short reaction period (1 h) delivers - in accordance with a literature report - the corresponding guanylhydrazones. However, when the reaction time was increased to 12?h, formation of the ring annulated product 4,5-dihydro-1*H*-pyrazole-1-carboximidamide was observed. This is the first case of ring-chain isomerism in conjugated guanylhydrazones. The acyclic conjugated guanylhydrazone and the corresponding annulated product (4,5-dihydro-1*H*-pyrazole-1-carboximidamide) could be clearly distinguished by means of UV and NMR spectroscopy. The formation of the ring isomer was further confirmed by single crystal XRD analysis. The time-dependent ^1H NMR study indicated the gradual transformation of the open-chain compound into the cyclic one. The mechanistic insights into the formation of these two products were explored using quantum chemical methods which revealed that the ring isomer is thermodynamically more stable than the open-chain isomer by 6–11?kcal/mol and the barrier for cyclization was found to be 31.37?kcal/mol.

Remote N-heterocyclic carbenes (rNHCs), such as N-methyl-4-pyridylidene, are known to form coordination complexes with TMs. Herein, it is established that rNHCs can also coordinate to the N^+ centre. Synthesis of some novel divalent N^I complexes with the general formula (rNHC)→N^+←(NHC) and (rNHC)→N^-←(rNHC) was achieved, and X-ray diffraction studies supported the coordination bond character between the rNHCs and the N^- centre. Quantum chemical analysis established the presence of divalent N^I character at the central nitrogen in these systems.

PHARMACOINFORMATICS

a. Pharmacoinformatics study on translational factors of *Mycobacterium tuberculosis*

Translational factors like EF-Tu, EF-Ts and EF-G have been well explored in prokaryotes except *M. tuberculosis*. The aim of present study was to explore the translational factor proteins of *M. tuberculosis* as drug target. Different Pharmacoinformatics approaches were used to model 3D structure of these proteins, studying interaction between translational factors using protein-protein docking, hot spot identification using the computational alanine scanning and molecular dynamic simulation.

b. The molecular modeling study on next-generation precision-polyesters used in targeted drug delivery

One of the major challenge in drug delivery remains to enhance the transport of drugs across various biological barriers such as blood retinal barrier, blood ocular barrier, blood brain barrier etc. A xanthanoid, gambogic acid conjugated with precision polyesters, non-competitively binds to transferrin receptor that is present on various barriers. The non-competitive binding site of gambogic acid have been identified using the different binding site prediction tools, molecular docking and molecular dynamics simulations.

c. AI application in data analytics

The process of transforming a raw dataset into useful knowledge is known as data analytics. Various artificial intelligence/machine learning algorithms are being used to build predictive models

for biological activity prediction. The data preprocessing and relevant feature selection is being done for developing a reliable predictive model. The built models are cross validated.

d. Identification of foldamers as anti CD47 molecules in cancer research

CD47 is one of the least explored targets in the field of cancer. Protein-protein interaction between CD47 and SIRPa was studied. Important residues which are playing crucial role in CD47 binding were selected and 270 different types of foldamers were designed on the basis of those selected residues using homologation as well as sequence based approaches. Molecular dynamics of three designed molecules with top docking scores were performed to understand the stability of the interactions. The interactions were found to be stable in two out of three simulated CD47-foldamer complexes which can come out as suitable anti tumour candidates.

e. A step towards understanding fluoroquinolone resistance in M.tb DNA gyrase A

DNA gyrase is a validated target for treating MDR and other XDR forms of tuberculosis. One wild type, four single and one double point mutated structures were subjected to molecular docking studies with reported fluoroquinolone molecules to predict effect of mutations on the whole structure of the enzyme. Molecular dynamic simulations were carried out on the six structures for 100 ns run to investigate the role of each mutation on Protein-DNA-Inhibitor (PDI) complex stability through the inter molecular interactions in the dynamics state. The research findings from these mutational simulation studies have thrown light on the structural and functional aspects of important mutated residues that cause resistance.

f. Molecular dynamics studies on isocitrate dehydrogenases

Isocitrate dehydrogenases (IDH) are the enzymes, which facilitate the oxidative decarboxylation of isocitrate (ICT) to 2-ketoglutarate (2-KG) by reducing either of the two co-factors NAD^+/$NADP^+$ to NADH/NADPH based on the isoform in use. It is known that the shortage of NADPH due to mutant isocitrate dehydrogenases increases the oxidative stress thereby facilitates the tumorigenesis. Wild type open and close structures for IDH2 were submitted for long range simulations (~300 ns). MDS was performed using AMBER14. MD simulations were performed to get the open conformation model of wild and mutants of IDH2.

g. Identification of a putative binding site for Diosyprin on DNA gyrase to explore its role in tuberculosis

Biological studies propose that diospyrin may bind to a site alternate to that of ATP. To further explore this idea computationally, we peformed docking experiments using Diospyrin to explore the binding mode of Diosyprin at the predicted binding site on Gyrase B. Through these studies we could identify the most probable binding site for the molecules Diosyprin. This identified site is being explored for designing new molecules based on Diosyprin as the basic molecule.

Docking studies, SiteMap analysis, literature search and 2D ligand interaction diagram analysis provided a detailed illustration on identification of binding site for Diospyrin on DNA gyrase B. The binding affinity comparison between the diospyrin and other DNA gyrase inhibitors were also reveals that diospyrin has the good affinity towards the novel binding site-1. The results revealed that a high number of hydrogen bonding, one salt bridge, p-cation and p-p interactions occurred at the novel binding site. From this we concluded that Diospyrin was showing interactions to residues: Lys 108, Asn 52, Glu 56, Tyr 114, Val 125, Gly 107 which are present in the novel binding site between residues (48-372) on DNA gyrase B. This knowledge ultimately contributes to a greater understanding of a ligand binding pocket in DNA gyrase B.

h. An *in silico* study to explore the allosteric sites in proteins

This study was focused on collection, classification and analysis of allosteric sites. The purpose of the analysis of the recognized allosteric sites was to find

out the similarities present in them. Each protein was analyzed using SiteMap and visualized using Maestro. The data collected from the literature along with the properties generated after analysis for each protein can aid for the purpose of target selection as well as drug designing. A total of 46 targets were identified for the purpose of drug designing in 4 therapeutic areas, Diabetes, Influenza, Cancer and Tuberculosis. Abl kinase, which is an important protein in Chronic Myeloid Leukemia, was chosen for the purpose of drug designing. As a result, various ligands were identified as potential drug molecules; a further in vitro study can be conducted on them to see their inhibition potential.

i. Computer aided molecular design of quorum sensing inhibitors for *Pseudomonas aeruginosa* biofilm

Pseudomonas aeruginosa infection is the major cause of deaths in cystic fibrosis. The antibiotic resistance of *Pseudomonas aeruginosa* in the cystic fibrosis of lung is due to the formation of drug resistant biofilms. Biofilms employ a form of chemical communication called quorum sensing. This characteristic allows this network of cells to work collectively and coordinate various tasks such as cell growth, adhesion, and death. The objective was to design the quorum sensing inhibitors for *Pseudomonas aeruginosa* biofilm. LasR protein was selected as a target because LasR is the quorum sensing receptor protein. The information collected on inhibitors was used to develop a pharmacophore model using phase module. A total of 1000 molecules were virtually screened using the query. Based on the in silico work, it can be concluded that a few molecules have good potential to be developed as quorum sensing inhibitors. The ADME study was also performed on these molecules and it suggested that the oral absorption and bioavailability of these inhibitors are favourable.

NATURAL PRODUCTS

The department is involved in design and synthesis of natural product analogues to find potent antileishmanialand anti-HIV compounds. The isolation and characterisation of bioactive compounds from natural resources is also being carried out in the department. Major research activities include:

- Design and synthesis of pyrazole derivatives for evaluation of anti-HIV activity.
- Design and synthesis of indole and quinazolinone derivatives for anti-leishmanial and anti-microbial activity.
- Synthesis of AdipoRon and umbelliferone derivatives for anti-diabetic activity.
- Isolation of secondary metabolites from *Bacopa monnieri, Picrorhiza kurroa, Centella asiatica, Momordica cymbalaria* and *Hippophae rhamnoides.*
- Isolation of secondary metabolites from endophytic fungus *Lasiodiplodia pseudotheobromae* and *Schizophyllum commune.*

PHYTOCHEMICAL INVESTIGATION OF SELECTED MEDICINAL PLANTS FOR ANTI-INFLAMMATORY ACTIVITY

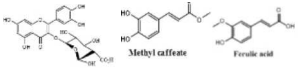
1. ***Solanum erianthum* D. Don (Leaves)**
   Compounds: 6 compunds were isolated and characterized as 3-O-β-D-glucopyranosyl stigmasterol, trans-Tiliroside, β-2 solamargine, quercetin, cinnamic acid, and genistein.
2. ***Gymnosporia montana (Roth) Benth.* (Leaves)**
3. Compounds were isolated and characterized as β-amyrin, Friedelin, and lupeol

   32 semi-synthetic derivatives of β-amyrin were prepared and evaluated for nitric oxide inhibitory activity in vitro.

ISOLATION OF VARIOUS PHYTO CONSTITUENTS

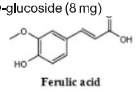
1. ***Clematis gouriana Roxb. ex DC.* (aerial parts)**

   4 compounds were isolated and characterized as quercetin-3-O-glucuronide, ferulic acid, methyl caffeate, quercetin.



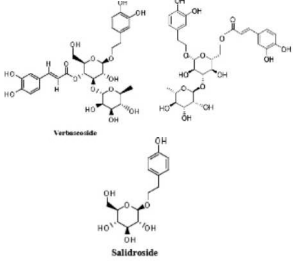
2. *Salix babylonica L.* (Leaves)

1 compound was isolated and characterized as luteolin-7-O-ß-D-glucoside (8 mg)



3. *Fernandoa adenophylla* (Wall ex. G. Don) Steenis (Leaves)

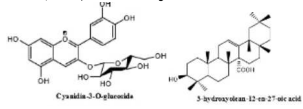
3 compounds were isolated and characterized as verbascoside (70 mg), isoverbascoside (30 mg), salidroside (8 mg)



4. *Carissa carandas Linn.* (Fruits)

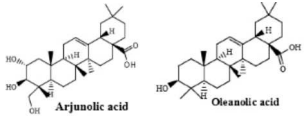
Anthocyanin-enriched fraction was prepared from C. carandas fruits. LC-MS analysis of this fraction revealed presence of cyaniding-3-O-glucoside as major compound.

Further 4 compounds were isolated and characterized as 3α-hydroxyolean-12-en-27-oic acid, lupeol, quercetin and gallic acid.



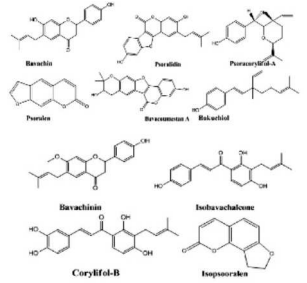
5. *Terminalia arjuna Wight and Arn* (Stem bark and Heart wood):

2 compounds were isolated and characterized as arjunolic acid and oleanolic acid



6. *Psoralea corylifolia L.* (Seeds)

10 Compounds were isolated and characterized viz. psoralen, isopsoralen, bakuchiol, bavachin, Corylifol B, psoracorylifol A, bavacoumestan A, psoralidin, bavachinin, isobavachalcone.



7. *Macrotyloma uniflorum* (Lam.) Verdc. (Seeds)

7 compounds viz. ferulic acid, caffeic acid, gallic acid, p-coumaric acid, quinic acid, kaempferol glycosides, and quercetin glycoside were identified by LC-MS analysis.

SYNTHETIC WORK

A total 19 semi-synthetic derivatives of active lead molecule, RP-1 were prepared as bacterial efflux pump inhibitors.

10 semi-synthetic derivatives of active lead molecule (RP-2) were synthesized.

DEVELOPMENT OF FORMULATIONS

- Development of phytosome formulation of *Psoralea corylifolia L.* seed extracts
- Development of Herbal formulation from Sea buckthorn *(Hippophae rhamnoides)* leaves
- Phytochemical investigation of extracts by HPLC, HPTLC and LC-MS
- Generation of libraries with phytoconstituents from 70% methanolic extract such as tiliroside, isorahmnetin-3-O-glucoside, quercetin-3-O-glucoside, ellagic acid.
- Total phenolic and total flavonoid content of 70% ethanolic extract was 14.78 mg/g of dry leaves and 6.65 mg/g of dry leaves followed by enrichment of flavonoids on Diaion HP-20 resin.

An Efflux Pump Inhibitor Mediated Combination Therapy to Tackle Bacterial Multi-drug Resistance: A Pre-clinical Development

Project for this study amounting about One Crore Rupees has been awarded by Department of Biotechnology, Govt. of India to Dr. Hemraj Nandanwar, IMTECH, Chandigarh and Prof. Sanjay Jachak, NIPER-SAS Nagar.

The main goal of this proposal is to develop suitable preclinical candidates as Efflux Pump Inhibitors (EPIs)(with enhanced therapeutic index) which can be used as an adjunctive therapy to restore the activities of current and future antibiotics. The outcome of the present study is a well characterized library of synthetic and semi-synthetic molecules capable of inhibiting prototype efflux pumps, Identification of novel chemical scaffolds responsible for efflux inhibition and societal benefits such as improvement of quality of life, affordable healthcare and livelihood generation.

PHARMACEUTICAL ANALYSIS

Stress studies on selected drugs and characteri-zation of their degradation products by using hyphenated techniques

As per the regulatory requirements, it is necessary to determine intrinsic stability of the drug substances and products. The degradation chemistry of a drug also needs to be elucidated, which in turn helps to design a stable product, and new drugs with improved stability profile. Many students have been assigned projects on generic drugs whose degradation behaviour is not reported in the literature. Degradation studies are being carried out under different stress conditions like hydrolytic, photo, oxidative and thermal. The formed degradation products are separated by HPLC and the method is transferred to LC-MS^n, LC-MS/TOF and LC-NMR for their characterization. The studies also involve isolation of degradation products using semi-preparative HPLC and their characterization with the help of 1D and 2D NMR data. The investigations are currently being carried out on tadalafil, colchicine, fosamprenavir, etoricoxib, zanamavir, bepotastine, valbenazine, and tazarotine.

Study of hepatic drug metabolism using hyphe-nated techniques

Drugs are metabolized in the body extensively by the liver, leading to the formation of both stable and reactive metabolites, the latter being responsible of specific and general toxicity. Liver microsomes of various species have been selected as the in vitro matrices for this project. The study uses modern hyphenated mass tools, such as LC-MS^n, Orbitrap, etc. to characterize stable and reactive metabolites of multiple drugs in mouse, rat and human models to establish inter-species differences.

Characterization of cyclodextrin complexes of drug a using FT-IR, DSC, XRD and NMR

Cyclodextrin complexes of multiple drugs are available in the market. The reasons to adopt this complexation method include improvement in solubility, dissolution, stability, taste acceptability, etc. It is necessary to characterize the drug-cyclodextrin complexes, for which multiple techniques are available for FT-IR, DSC and XRD and NMR for study on theophylline complexation with hydroxypropyl cyclodextrin and betacy-clodextrin.

Analysis of mass-spectrometry based data independent acquisition (DIA) proteomics data so to quantify the DMET proteins in various human tissues

DIA is an approach used in mass-spectrometry based proteomics studies, which provides unbiased data regarding the whole proteome of the given sample. Analysis of DIA data forms the bottleneck of DIA-based proteomics studies. Various human tissues such as eyes, liver, lung etc. are studied using bottom-up proteomics approach followed by analysis of resulting samples using DIA mode employing a mass-spectrometer. A multitude of software tools are used so to analyse this data to get quantitative information regarding the DMET proteins in various human tissues, so to study inter-individual and inter-tissue variability in the abundance of DMET proteins.

Ontogeny of hepatic sulfotransferases (SULTs) and prediction of age-dependent fractional contribution of sulfation in acetaminophen metabolism

The abundance of drug metabolising enzymes and transporters (DMET) shows age dependent variability, i.e., the abundance levels of DMET proteins varies among different age group populations. This project was undertaken to provide understanding on the ontogeny of hepatic sulfotransferases using mass spectrometry-based targeted proteomics approach. The quantitative information was incorporated into PBPK modeling so as to predict acetaminophen PK, as influenced by abundance of SULT enzymes in various age groups.

An open access repository of protein abundance data of drug metabolizing enzymes and transporters for applications in PBPK modeling

A compilation has been done of the reported quantitative protein, mRNA and activity data of drug metabolizing enzymes (DMEs), drug transporters (DTs) and nuclear receptors (NRs) in animal and human organs to create a comprehensive repository along with the statistical information on the abundance of DMET proteins, the information regarding the effects of co-variates such as age, sex, ethnicity, genotype, disease, smoker, alcohol consumption, and medication on the expression of the same was also compiled. These data are useful for developing PBPK models, permitting prediction of pharmacokinetics of xenobiotics in humans and other animal species.

PBPK modeling to study the effect of genetic polymorphism, age, diseased state and food on the pharmacokinetics of various drugs

There are various factors that can influence the pharmacokinetics of drugs among various populations and are responsible for inter-individual variability. Among them, age, genetic polymorphism and diseased states such as hepatic cirrhosis, renal impairment etc., affect the disposition (metabolism + excretion) of drugs, while food has effect on the absorption of orally administered drugs. Physiologically based pharmacokinetic (PBPK) modelling is a mechanistic framework which incorporates drug and system related parameters allowing a priori simulation of the pharmacokinetics of a drug. These models are very useful in studying the effects of afore-mentioned variables on the disposition of drugs. Drugs on which research is actively going on are: lamotriagine, valsartan, paroxetine, repagalanide, pravastatin, buspirone, rosuvastain, etc.

PHARMACOLOGY & TOXICOLOGY

Epigenomics in diabetes and its complications

Diabetes is associated with high risk of cardio-vascular complications, which in turn increases the susceptibility to various disorders like hypertension, atherosclerosis and aneurysms. Hyperglycaemia induces inflammation, hypertrophy and premature endothelial senescence, which are the main culprits for the emergence of diabetic cardiovascular complications. Diabetic nephropathy is becoming the world leading cause of chronic and end-stage renal disease. Hyperglycaemia/hyperinsulinemia is the leading cause for the induction type 2 diabetes and the role of post-translational histone modifications in deregulating the expression of genes has emerged as potential important contributor in the progression of disease. We also

investigated the role of metabolic memory in HFD induced renal dysfunction using metformin. Diet reversal could improve lipid profile but could not prevent renal complications induced by HFD. Interestingly, metformin along with diet reversal restored the levels of blood glucose, triglycerides, cholesterol, blood urea nitrogen and creatinine. In kidney, metformin increased the activation of AMPK, decreased inflammatory markers-COX-2, IL-1β and apoptotic markers-PARP, Caspase3. Metformin was effective in lowering the elevated basal blood pressure, acute change in mean arterial pressure (ΔMAP) in response to Ang II. It also attenuated the tubulointerstitial fibrosis and glomerulosclerosis induced by HFD-feeding in kidney. Here we report for the first time, that metformin treatment overcomes metabolic memory and prevents HFD-induced renal damage. In addition we have also investigated the effect of ACE2 activator (DIZE) on the progression of STZ induced type I diabetic nephropathy. Currently, we are investigating the effect of L-methionine on DNA methylation in type 2 Diabetes and NASH models.

Gut microbiome and metabolic disorders

Human gut microbiome consists of extremely diverse microbes which play very significant role in metabolic and immunity. Their role in gastrointestinal health is long been established, however, recent studies suggest their potential role in the metabolic disorders such as obesity, diabetes and NASH. Our lab is currently investigating the role of pre- and probiotic supplementation in insulin resistance, T2DM and NASH. Our study suggests that supplementation of *Lactobacillus rhmanosus, Lactobacillus casei* and *Lactobacillus gasseri* improves lipid profile and glycemia. Further, we aim to establish the link between epigenetic alterations and gut microbiome dysbiosis in metabolic disorders.

Cancer and epigenetics

We are mainly focused on breast and lung cancer research. We are actively involved in exploring various combination therapies which can potentiate the anticancer activity of chemotherapeutic agents and minimize their toxicity. The cytotoxicity and cell uptake of the gefitinib formulations were evaluated in A549 and H1975 cell lines. We provide evidence that gefitinib nanoparticles improved the efficacy and pharmacokinetic profile of gefitinib exhibiting enhanced potential in optimizing lung cancer therapy. We are currently investigating the effect of gold nanoparticles in breast cancer and triple negative breast cancer. In addition, we are also conjugating gold nanoparticles with anticancer drugs and miRNAs and thereby checking their effects *in vitro* and *in vivo*. We are also checking the effect of Zinc oxide nanoparticles in prostate cancer. MiRNAs involvement in the development and progression of cancer is well documented. We are currently investigating the role of particular miRNAs in triple negative breast cancer progression by using miRNA mimics and miRNA inhibitors. We investigated the effect of gold nanoparticles in breast cancer cells (MCF-7: non-invasive, hormone dependent, and MDA-MB-231: invasive, hormone independent) and provided the first evidence that epigenetic regulations were different with differentially charged gold nanoparticles. 5-Azacytidine (5-Azac), a DNA hypomethylating agent, significantly increased the expression of PTPN12 at low concentrations (1μM and 2.5μM) and decreased the expression of PTPN12 at 5μM in the MDA-MB-231 and BT-549 triple-negative breast cancer cell lines. Using this evidence, we are currently investigating the effect of DNA methylation in reverting gefitinib resistance in lung cancer cells.

PCOS and metabolic syndrome

Polycystic ovary syndrome (PCOS), a common endocrine ailment in women that is characterized through hyperandrogenism, ovulatory disorder (such as menstrual disorder) and polycystic ovarian morphology (PCOM; an immoderate range of preantral follicles within the ovaries). Therapy of PCOS aimed at improving metabolic dysfunction, hyperandrogenism, reproductive therapy, and psychological and emotional status. To date, no single remedy exists to treat PCOS, it is tailored in accordance with the signs and symptoms. We are currently investigating the role of lithium and 6-hydroxyflavon in hyperandrogenism and insulin resistance induced PCOS through androgen and insulin signalling pathway.

Diabetic complications

a. Neuropathy

We have investigated the involvement of wnt signaling pathway in diabetic neuropathy model in rats using wnt pathway inhibitors. After 6 weeks of diabetes induction, rats were administered intrathecally with porcupine inhibitor (LGK974), disheveled inhibitor (NSC668036) and β-catenin inhibitor (PNU74654). Neuropathic pain parameters and wnt pathway protein expression was measured after the treatment of wnt inhibitors. Treatment with wnt pathway inhibitors LGK974, NSC668036 and PNU74654 ameliorated the nociceptive behavioral (thermal and mechanical hyperalgesia) and corrected nerve functional deficits (MNCV and NBF) in diabetic neuropathic rats. In addition diabetes induced increased wnt pathway protein expression was reduced by wnt pathway inhibitors LGK974, NSC668036 and PNU74654. Even we have also demonstrated protective effect of niclosamide, a wnt inhibitor in paclitaxel-induced neuropathic pain. These findings suggest the potential involvement of wrt β-catenin pathway in diabetic neuropathy and that the pharmacological interventions targeting this pathway can prove to be beneficial in the management of diabetic neuropathy.

b. Cognitive impairment

We are investigating the role of transient potential receptor (TRP) channels in cognitive impairment induced by diabetes. Eight and tenth week diabetic animals showed significant reduction in cognitive functions which were evident from Y-maze, passive avoidance and Morris water maze. Diabetic animals showed significant difference in AchE activity in cortex as compared to control animals indicating alteration in the cholinergic activity. Diabetic animals showed significant increase in expression of TRP expression in hippocampus and cortex as compared to control animals. Now we are investigating the effects of pharmacological interventions targeting TRP in cognitive impairment-induced by diabetes.

Parkinson's disease

Current treatment of Parkinson's disease is still unsatisfactory. Therefore, we are investigating the role of transient receptor potential cation channel melastatin-2 (TRPM2) in the pathogenesis of Parkinson's disease using pharmacological approach. In in vitro model of PD, SHSY-5Y cells were exposed with MPTP and effect of TRPM2 inhibitor was investigated. In MPTP model of Parkinson's disease in rats, effect of TRPM2 antagonist is being carried out.

Cardiovascular disease

We have investigated the role of wnt in myocardial damage using pharmacological approach. We used niclosamide as a wnt inhibitor in this study. Niclosamide at 300 mg/kg improved the hemodynamic and biochemical prameters as well as maintained the integrity of myocardial structure in isoproterenol induced myocardial infarction. We also investigated effects of tranilast, a TRPV2 antagonist in myocardial disease models.

Safety Pharmacology

We have carried out the safety pharmacological studies on nanoformulation of celecoxib. CNS safety pharmacology core battery studies were performed using celecoxib NCSD (20 and 40 mg/kg). CNS parameters like functional observational battery (FOB) or modified Irwin's test was performed in rats using the scores with slight modification. The effects on various parameters of FOB were evaluated at 0, 1, 2, and 24 hr post administration of celecoxib NCSD formulation. Home cage observations were performed in transparent polypropylene cages for 1 min. Subsequently, the open field activities, and sensory responses were observed in the open field cages for 5 minutes. The rat's hind limbs were painted with water-based tempura paint and foot splay was measured by dropping the rat from a height of 30 cm on to a padded surface. The painted area of the paper was circled and the distance between the centres of the circle of the two hind limbs was recorded in millimetres. Motor coordination and locomotor activity were also performed. Body weight and mortality of all treatment groups was monitored up to 7 days post drug administration.

Celecoxib NCSD in CNS core battery studies, at therapeutic dose i.e. 20 mg/kg and above (40 mg/kg) did not alter core battery parameters like FOB parameters, locomotor activity and motor coordination. Similarly placebo did not alter CNS safety pharmacology core battery parameters. Celecoxib NCSD when investigated in gastric supplemental safety pharmacological studies, did not show any sign of mucosal damage at 20 and 40 mg/kg. Celecoxib NCSD, at all doses, did not show any delay in gastric emptying as well. CVS and respiratory safety pharmacological studies on celecoxib NCSD and core battery safety pharmacology nanoformulation of curcumin is currently going on.

Role of inflammasomes in hepatic fibrosis and preneoplasia

Inflammation is the major contributor in the pathogenesis of chronic liver diseases. Inflammasomes are intracellular multi-molecular protein complexes expressed in hepatocytes, stellate cells and kupffer cells. Inflammasomes sense the danger signals from damaged cells and oligomerize itself and releases caspase-1, which further activates the inflammatory cytokines IL-1β and IL-18. Inflammasome activation has been studied in different human and experimental liver diseases and has been identified as a major contributor to hepatocyte damage, immune cell activation and amplification of liver inflammation. Preneoplastic conditions in the liver include liver cell dysplasia, adenomatoid hyperplasia, and foci of altered hepatocytes (FAH) and nodules of altered hepatocytes (NAH). FAH have been demonstrated to represent preneoplastic lesions in various animal models of hepatocarcinogenesis. Metabolic and molecular changes that characterize preneoplastic lesions and their progression to neoplasia provide a new basis for rational approaches to chemoprevention by intervention approaches. The application and translation of these findings using potent hepato protective agents such as glibenclamide and dimethyl fumarate can provide a novel approach in the treatment of inflammatory liver disorders.

Role of inflammasomes inhibitor and Nrf2 activator in liver fibrosis

Oxidative stress and inflammation are the most important pathogenic events in the development and progression of liver disorders. Inflammasomes majorly contributes to liver disease. Role of NLRP3 inflammasome activation is well reported in the biology of fibrogenesis. Growing evidence has been linked NLRP3 inflammasome-driven inflammation to tissue damage and liver fibrosis. The inhibition of liver fibrosis using specific NLRP3 inhibitor, MCC 950, blocks the inflammatory recruitment and liver fibrosis in murine model of liver fibrosis. Using interventional approach, the comparison of anti-fibrotic effect of glibenclamide with MCC 950 could be a viable strategy to ameliorate fatty liver disease and fibrosis. Further, nuclear erythroid 2-related factor 2 (Nrf2) is the master regulator of cellular protection via induction of anti-inflammatory, antioxidant, and cyto-protective genes expression. Previous studies have shown that activation of this transcriptional factor significantly ameliorates the progression of liver diseases. Using pharmacological approach, the comparison of hepatoprotective effect of dimenthyl fumarate with 4 octyl itaconate can be used to attenuate fatty liver condition and fibrosis.

Zinc, selenium and male reproductive health

Zinc (Zn), one of the most important trace elements in the body is ubiquitously present throughout the body and is second only next to iron in its occurrence. Zinc is required for the vital activity of more than three hundred enzymes; even mild zinc deficiency presents several immunological problems. Zn has a very prominent role in the reproductive development, both in males and females. Our goal is to focus on the causes of male infertility, especially those who are under chemotherapy. Our understanding and experimentations in this diverse field led to the conclusion that chemotherapy with agents like cyclophosphamide caused decrease in the zinc levels both in the serum and testes of the treated rat. Zinc supplementation has proved beneficial to those rats that were under treatment with

chemotherapeutic agents. Biochemical, histopathological, and protein expression profiles were determined to decipher the role of Zn in protecting the cellular perturbations. Further, histopathological analyses of testes and epididymis showed deranged architecture along with other noted abnormalities. Selenium is the trace element, which influence the down regulation of Nrf-2 and plays major role in the protection of mammalian germ cells toxicity, damages and infertility. Selenium involved with various crucial testicular biomarkers at cellular and molecular level that will beneficial effects and ameliorates the diabetes induced germ cells damage. The combined supplementation of Zinc and Selenium associated with novel molecular mechanism in diabetes (type-1) induced testicular and epididymal injury elucidates the understanding of molecular signaling pathways. The biochemical, histopathological, DNA damage, cell death, sperm profile like morphology, sperm count, motility etc., immunohistochemistry, protein expression profiles were investigated to understand the Zn and Se involvement in ameliorating the cellular and molecular perturbations.

Nrf2 in diabetes induced germ cell damage

Nrf-2 (nuclear erythroid 2-related factor 2) is a transcription factor that binds to the antioxidant response element (ARE) and thereby regulates the expression of a large number of genes involved in the cellular antioxidant, anti-inflammatory and stress associated responses. Nrf-2 also plays a critical role in the maintenance of cellular homeostasis. Based on the literature it became evident that micro minerals (trace elements) like Zinc and Selenium influence the down regulation of Nrf-2. Zinc and selenium are among the most important micro minerals necessary for the proper development and maintenance of the testes. The emerging evidence that the transcription factor Nrf-2 is a regulator of protein degradation, DNA damage and cell death, suggests that exploring Nrf-2 -ARE molecular pathways in normal and pathological models will have significant human relevance. Zinc and selenium involvement with novel testicular markers at molecular level will improve the detection of the germ cell damage and will also help in understanding the mechanism of the testicular and associated organ injuries during the progression of diabetes.

Diabetes associated ulcerative colitis (UC) and colon carcinogenesis

UC causes an elevation in various inflammatory markers such as interleukin-6, tumor necrosis factor-alpha, nuclear factor kappa B and cyclooxygenase-2. Inflammation induces robust genotoxic responses, such as DNA damage and mutations to vital genes (p53, c-src, k-ras, β-catenin, and APC), which subsequently drives tumour initiation in ulcerative colitis conditions. In addition, inflammation activates the signal transducer and activator of transcription 3 (STAT3) and β-catenin signalling pathways, which induce proliferation and remodelling of epithelial cells and then promote tumour development. On the other hand, high glucose-induced oxidative stress and AGEs play pivotal role in the proliferation and migration of colon cancer cells. In case of co-occurrence of diabetes and carcinogenesis, inflammation is characterized by an upregulation of inflammatory cytokines, mainly IL-6, IL-1 and TNFα as well as TGFβ, NFκB and ROS among others. All these molecules are reported to be powerful tumour promoters, which create a favourable environment for malignancies, genetic instability, oxidative stress and angiogenesis. All of these phenomena are the key players linking inflammation to carcinogenesis and other systemic diseases like diabetes. Several molecular mechanisms orchestrate events leading to diabetes associated with ulcerative colitis and colon carcinogenesis induced local and global damage. Hence, agents modulating multiple molecular pathways involved in diabetes associated colitis and colon carcinogenesis induced local and global damage may have therapeutic potential. Poly (ADP-ribose) polymerase-1 (PARP-1) is a nuclear enzyme belonging to the DNA damage surveillance network. It is critically involved in several cellular processes such as DNA repair, apoptosis, genomic stability, and inflammation. PARP-1 Inhibitors have been demonstrated to be an effective treatment in the prevention of diabetes associated with

ulcerative colitis and colon carcinogenesis by targeting various inflammation, oxidative stress and autophagy mediated pathways.

Centre for Infectious Diseases

a. Malaria

Determination of the effect of salinomycin on the course of *P. berghei* infection in Swiss mice

The effect of salinomycin (2.5, 5 and 10 mg/kg/day x 4) on the course of *P. berghei* infection in mice was determined. The level of significance indicates that salinomycin at 5 mg/kg and 10 mg/kg was significantly effective in reducing parasitemia as compared to the negative controls. Salinomycin at 5 mg/kg and 10 mg/kg, significantly ($p<0.0001$) reduced the parasitemia, and also showed increased survival of treated animals up to day+14, but on days +21 and +28 it didn't show any significant effect. At the dose 2.5 mg/kg, salinomycin exerted no reduction of parasitaemia.

Determination of the effect of noecuproine on the course of *P. berghei* infection in Swiss mice

In first study, we determined the effect of neocuproineacid (NC; 25, 50 and 100 mg/kg/day x4) in *P. berghei*-infected mice. NC at 100 mg/kg showed significant effect in reducing the parasitemia, at other doses no significant reduction in parastemia was observed.

Determination of the stand-alone and combined effects of nerolidol and limonene on the course of *Plasmodium yoelii nigeriensis* infection in Swiss mice

The combination therapy of nerolidol and limonene (NL 300 mg/kg + LM 500 mg/kg and NL 300 mg/kg + LM 100 mg/kg) has shown complete suppression but the combination of nerolidol 300 mg/kg + limonene 500 mg/kg has shown recrudescence on day +10 while the combination nerolidol 300 mg/kg + limonene 500 mg/kg has shown curative activity.

Determination of the effect of anisomysin on the course of *Plasmodium yoelii nigeriensis* infection in Swiss mice

The MED of anisomycin and artesunate in *P. yoelii nigeriensis* infected mice was determined. Mefloquine, 40 mg/kg, orally once daily was used as a positive control, while anisomycin was administered at 0.1, 3, 10 and 30 mg/kg, orally, once daily. Mefloquine (40 mg/kg) showed complete curative activity, and the suppression of the parasitemia by low doses of anisomycin (3 mg/kg and 10 mg/kg, orally) as compared to negative control group was significant with improved survival of animals but suppression of parasitemia was greater at dose of 30 mg/kg as compared to 3 mg/kg.

Determination of the stand-alone and combined effects of L-valine and L-arginine on the phagocytosis of *P. berghei*-infected erythrocytes *in vitro* and immunomodulatory activity in Swiss mice.

The minimum effective dose of L-valine and L-arginine in *P. berghei*-infected mice was determined. Chloroquin at 8 mg/kg, orally once daily as a positive control and negative control group, while L-valine was administered at 2.5, 5 and 10 mg/kg, and L-arginine (2.5 mg/kg, 5 mg/kg, 10 mg/kg) orally twice daily. It was found that L-valine and L-arginine did not show any reduction in parasitaemia.

Determination of the effect of epigallocatechin gallate on the course of *Plasmodium berghei* infection in Swiss mice

The effect of epigallocatechin gallate (EGCG) in *P. berghei*-infected mice was determined first. The level of significance indicates EGCG 100 mg/kg is less effective in reducing parasitemia, whereas at high dose (400 mg/kg) have shown greater significant reduction in mean percentage parastemia than medium dose (250 mg/kg). In the second study, artesunate activity was determined at three different doses (1 mg/kg, 10 mg/kg, and 100 mg/kg). At 100 mg/kg, radical cure activity was observed, whereas at 10 mg/kg reduction in parasitemia in the third study, a combination of EGCG and artesunate (Art) was investigated. EGCG 250 mg/kg + Art 10 mg/kg, EGCG 250 mg/kg + Art 1mg/kg and EGCG 100 mg/kg + Art 10 mg/kg were tesed. EGCG 250 mg/kg + Art 10 mg/kg showed curative activity.

b. Kala-azar

Three NIPER compounds (SKG-12, SKG-16 and NP-3772) have been tested for potential their anti-leshmanial activity in *Leishmania donovani*-infected golden hamsters. For this, 1×10^{7} *L. donovani* parasites injected in golden hamsters, and drugging was done on Day+3 to Day+7 of post infection with compound SKG-12 (200 mg/kg, 100 mg/kg and 30 mg/kg), compound NP-3772 (200 mg/kg, 100 mg/kg and 30 mg/kg and compound SKG-16 (200 mg/kg and 100 mg/kg). Compounds SKG-12 and SKG-16 appeared to exert nearly 40% protective effect in L. donovani-infected hamsters by decreasing their liver and spleen parasite burden. NP-3772 at higher doses of 200 mg/kg and 100 mg/kg x 5 days appeared to suppress infection; at a lower dose (30 mg/kg) no suppression was observed.

c. Tuberculosis

The objective has been to determine the *ex vivo* anti-TB activity of only those NIPER anti-TB compounds, which have previously confirmed desired level of anti-mycobacterial activity against *M. tuberculosis* in whole cell assay, *in vitro*. Towards this end, *in vitro* cultures of BABLB/c mouse peritoneal macrophage, J774 cell line and THP1 cell line has been established. MIC of INH 0.2 ug/ml has been determined, and other drugs shall be tested in due course. A new assay based on fluorescence microscopy is also being developed. The test system using intra-macrophage mycobacteria (BALB/c mouse peritoneal macrophages, J774 cell line and THP1 cell line, and FITC-stained *M. tuberculosis* H37Ra) have also been established. MIC of INH (0.2 ug/ml) has been determined. Test compounds can now be put in the system for testing.

PHARMACEUTICAL TECHNOLOGY (BIOTECHNOLOGY)

With the latest advances in nanobiocatalysis, our laboratory has developed nanoscaffolds for immobilization of enzymes on solid supports. Lipase mediated biotransformations are key reaction for the synthesis of many important organic compounds especially drug intermediates. An exciting trend of bringing together interdisciplinary approaches helps to find rational solutions to challenges and ensures meaningful utilization of the participating strategies. Surfactant treated lipase (SDS-BCL) was immobilized on polyaniline nanofibers, a nanostructure synthesized by chemical reaction. Design of Experiments (DoE) was adopted to optimize the critical parameters based on their effect on critical quality attributes (CQAs), those characteristics that affect the immobilization. Thermal stability and reusability studies were also performed on the nanoconjugate. Surfactant treatment of BCL had increased the lipase activity about two folds. The immobilization of lipase on PANF enhanced the lipase activity about six times along with a significant increase in the stability and recyclability of the lipase preparation. Finally, the immobilized lipase was applied in the kinetic resolution of two important racemic alcohols. A comparative study of the untreated lipase (BCL), surfactant treated lipase (SDS-BCL) and the nanoconjugate (SDS-BCL@PANF) mediated hydrolysis of p-nitrophenyl palmitate (p-NPP) showed that immobilization on nanofibers enhanced the reaction rate by many folds. All the above-mentioned results indicated that the enzyme activity of BCL was enhanced to a decent level through immobilization on PANF. Many drug intermediates have been successfully synthesized using lipase catalyzed chemo-enzymatic route. Various metal nanoparticles were synthesized using biological catalysts from microbial and plant sources and characterized using the standard analytical techniques and they are used in the phototheranostic studies. Currently, our group is focusing on nanophototheranostic formulation development and their use in biomedical applications. In support of our ongoing anticancer drug discovery program based on the target based drug discovery against Topoisomerase-II, *in vitro* assays and their mode of inhibition were developed and validated. Effect of various physico-chemical parameters was studied to improve uricase production by recombinant *E. coli*. Optimizing the process parameters for the production of transaminase by *Bacillus licheniformis* is one of the objectives of our laboratory. A couple of secondary

metabolites are being fermentatively produced by various microorganisms in our laboratory. The non-Newtonian fermentation poses a lot of difficulties such as non-homogenous sampling, inability of increasing the substrate concentration, maintaining high mass and heat transfer in fermentation. We are trying to solve these problems in the production of mycophenolic acid by *Penicillium brevebacterium*. MPA production in optimized medium was increased ~ 4 times as compared to basal medium. The maximum MPA yield was achieved at a glucose concentration of 60 g/L. Glycine also effectively enhanced the MPA titre as it is believed to be one of the possible precursors for MPA biosynthesis.

PHARMACEUTICAL TECHNOLOGY (PROCESS CHEMISTRY)

The department is actively engaged in process R&D, organic synthesis and lab scale synthesis of pharmaceutical compounds, NCEs, drug intermediates and drug conjugates. The main focus is to develop scale-able, cost effective, environmentally benign synthetic routes to drug molecules.

In the tabulated list of important functional groups available in any standard organic chemistry tutorial, amide group occupies a prominent position, for not only as the backbone of proteins, but also as ubiquitous component of unnatural materials. Historically, amides have been prepared from carboxylic acids and amines, especially via activation of carboxylic acids in the presence of a coupling agent. Arylglyoxylic amide formation from arylglyoxylic acids containing an electron-withdrawing a-carbonyl functionality involves condensation of arylglyoxylic acids and amines using commonly used coupling agents. The advent of a new coupling agent that could facilitate arylglyoxylic amide preparation could be an incremental advance in amide chemistry. A palladium-catalyzed synthesis of arylglyoxylic amides by the reaction of arylglyoxylates and *N, N*-dialkylamides in the presence of a 2, 3-dihalopyridine has been realized for the first time. This investigation unveiled an unprecedented role of 2,3-dihalopyridine towards this amidation. Our mechanistic study reveals that the arylglyoxylate could react with halopyridine to form a traceless activated pyridyl ester of arylglyoxylic acid, which upon subsequent reaction with amino surrogate, *N,N*-dialkylamides could form the arylglyoxylic amides.

In another investigation, a palladium-catalyzed intramolecular oxidative cyclizations in biaryl and heterobiaryl sulfones was developed providing direct access to fused biaryl sulfones (dibenzothiophene-5, 5-dioxides). Variously substituted dibenzothiophene-5, 5-dioxides could be readily prepared in good to excellent yields under the optimized conditions. In addition, bromination afforded di-bromo derivative of dibenzothiophene-5, 5-dioxides providing platform for late-stage diversification. The translational applications of this current protocol have successfully been demonstrated in the synthesis of 2,8-diamino derivative of dibenzothiophene-5,5-dioxides, a α_7-nicotinic acetylcholine receptor agonist analogue, and novel single fluorene-tethered dibenzothio-phene-5,5-dioxide, an organic emitter. A new opportunity in the design and synthesis of single fluorene based organic emitters tethered with biaryl sulfones is demonstrated in the preparation of fused polycyclic tethered fluorenes.

In another research program, we have developed regioselective Suzuki reactions on pyridines that led to the unexplored synthesis of arylpyridines and benzylpyridines. The arylpyridines and benzylpyridines prepared in this study were subjected to the palladium-catalyzed intramolecular cyclizations affording novel syntheses of azafluorenes and azafluorenones. Although a preliminary investigation has been described herein, the current study could reflect further advancement on pyridine chemistry.

PHARMACEUTICS

Recent research investigations include-

- Generation and characterization of Nanocrystalline Solid Dispersions (NCSDs) for fixed dose combination of ezetimibe and simvastatin using NanoCrySP™ as a novel bottom-up technology

- Thermal screening of excipients to decipher their role as heteronucleant(s) in generation of NCSDs of celecoxib using NanoCrySP™ as a novel bottom-up technology
- Investigation of hygroscopicity of co-crystals as a function of conformer properties using dynamic vapor sorption as a tool. The data was further correlated with relative contribution of differential surface environment of respective co-crystals
- Mesoporous silica along with small amount of polymer was investigated as a potential carrier for amorphous phase of griseofulvin. Mixture of mesoporous silica and polymer was found to improve amorphous griseofulvin
- Strategies were designed and demonstrated for development of bioequivalent formulation using metastable polymorphic form with ~2-fold higher thermodynamic solubility and superior dissolution. Indomethacin was chosen as a model drug and modification in surfactant concentration was outlined as a viable strategy for the specified objective.

The department is actively involved in following drug delivery systems

A. Polymeric micelles
B. Lipid based drug delivery systems
C. Supersaturated drug delivery systems
D. Amorphous solid dispersions

Polymeric micelles are nanoscopic core/shell structures formed by amphiphilic block copolymers. The inherent and modifiable properties of polymeric micelles make them particularly well suited for drug delivery. The polymeric micelles prepared, characterised and evaluated was amphiphilic copolymer based polymeric micelles for oral delivery of docetaxel.

Phospholipids are increasingly important as formulation excipients and as active ingredients per se. Phospholipid formulations not only comprise enhanced bioavailability of drugs with low aqueous solubility or low membrane penetration potential, but also improvement or alteration of uptake and release of drugs. The lipidic drug delivery systems evaluated were QbD based drug phospholipid complexation for improving oral bioavailability of olmesartan medoxomil.

Supersaturated drug delivery systems (SDDS) is a promising concept to obtain adequate oral bioavailability. SDDS contain the drug in high energy state such that intraluminal concentrations are above the saturated solubility of drugs. The nucleation and crystal growth inhibition of albendazole, rifaximin, aprepitant, and efavirenz, were analyzed in aqueous media.

Amorphous salt solid dispersions is an interesting strategy to increase the bioavailability of poorly soluble drugs by improving their rate and extent of dissolution. Such dispersions was amorphous salt solid dispersion of celecoxib.

BIOTECHNOLOGY

Cellular Stress Response Pathways

Due to production of aggregation prone 103Q-htt, the network of various heat shock proteins, e.g. Hsp104, Hsp70, Hsp40, sHsps, etc. is activated and works in a concerted manner to maintain and restore proteostasis in the cell. CLS studies showed that Δ*Gpd1* cells with a higher level of soluble 103Q-htt exhibited a higher survival rate than parental cells where the extent of aggregation of the mutant protein was higher. Gpd1 (glycerol 3-phosphate dehydrogenase) is an essential enzyme of the glycolytic pathway and is responsible for the synthesis of glycerol during conditions of osmotic stress in yeast. The expression levels of some of the genes associated with High Osmolarity Glycerol (HOG) pathway were monitored as the expression of Gpd1 is regulated by this osmosensory route. Upregulation of *Sir2, Sch9, Hor2, Hxk2, Msn2* and *Msn4* was seen in Gpd1-deleted cells. In order to confirm if Gpd1 was responsible for suppressing the heat shock response in yeast cells, parental and Δ*Gpd1* cells were subjected to heat shock and it was seen that in the absence of 103Q-htt, there was significantly higher survival of heat shocked Δ*Gpd1* cells, as compared to heat shocked parental cells. Thus, deletion of *Gpd1* results in induction of heat shock response, which may be a major reason for

the observed increased solubilisation of 103Q-htt in these cells. Immunoblotting showed that the expression of Sir2 was significantly upregulated in Δ*Gpd1* cells with increased solubilisation of mutant huntingtin protein, which was partially reversed when these cells were supplemented with exogenous *Gpd1*. With longer periods of induction, the expression of *Gpd1* was found to increase. The expression of Sir2 decreased in a corresponding manner. Thus, the expression of the histone deacetylase Sir2 is regulated by the expression of the glycolytic enzyme Gpd1. This enzyme regulates the activity of the NADH-dependent histone deacetylase Sir2 by exerting a tight control over the cellular NADH/NAD^+ shuttle and hence the amount of NAD^+ available to activate Sir2. This work confirmed that an inverse relationship existed between expression of *Gpd1* and *Sir2* in yeast cells expressing mutant huntingtin (103Q) protein. When the protein expression levels of Hsf1 and Hsp104 were compared across parental and Δ*Gpd1* cells, significant overexpression of the chaperones was seen in the deletion mutant, which may account for the enhanced solubility of mutant huntingtin in these cells. Thus, induction of heat shock response due to the absence of *Gpd1* in yeast cells leads to solubilisation of huntingtin protein and increase in chronological life span of these cells. Hence, *Gpd1* may act as a negative regulator of heat shock response in yeast cells.

To know whether this inverse relation (between *Gpd1* and *Sir2*) was similar in yeast cells without proteotoxic stress and to study the effect of Gpd1 on heat shock response, the expression of heat shock proteins was monitored. In parental cells overexpressing *Gpd1,* expression of Hsp104 was increased upon heat shock as compared to the corresponding cells not overexpressing *Gpd1*. In the presence of fructose 1,6-bis phosphate (FBP), a *Gpd1* inhibitor, expression of Hsp104 was significantly decreased in parental cells overexpressing Gpd1 and those not overexpressing *Gpd1.* In the absence of heat shock, similar level of Hsp104 expression was observed in both parental and Δ*Sir2* cells overexpressing and the cells not overexpressing *Gpd1*. In cells overexpressing *Gpd1,* where *Sir2* was inhibited with nicotinamide, expression of Hsp104 was increased. In the presence of *Sir2* inhibitor, expression of Hsp104 was unaltered in parental and ?Gpd1 cells upon heat shock as compared with the corresponding cells not exposed to heat shock. In case of Δ*Gpd1* cells overexpressing Gpd1, higher expression of Hsp104 was observed as compared with parental cells overexpressing *Gpd1*. When *Gpd1* was inhibited with FBP, decreased expression of Hsp104 was observed which was different from the cells where Gpd1 was deleted. The results with expression of Hsp104 suggest that the effect of deletion of *Gpd1* is different from the effect of inhibiting the enzymatic activity of *Gpd1* and that *Gpd1* may have a non-enzymatic effect in heat shock response. This is being investigated further.

Engineering protein pharmaceuticals with improved properties

Low *in vivo* efficacy of protein pharmaceuticals is also attributed to their poor pharmacokinetics (because of their low circulatory half-life). This is a major problem in the clinical use of these proteins and engineering recombinant proteins having increased circulatory half-life is the need of the hour. In this project, we are trying to develop novel, long-acting variants of recombinant human arginase 1 and endostatin for cancer treatment. Currently, we are in process of characterisation of these novel proteins:

a. Long-acting Arginase 1 : Several tumours are auxotrophic to arginine and deprivation of arginine leads to tumor reduction. Administration of recombinant human arginase 1 has been shown to reduce cancer and thus has emerged as a promising therapeutic candidate against several cancers. However, the protein exhibits low circulatory half-life (~4.5 h). To address this, we have engineered and expressed long-acting variants of human arginase 1.

b. Long-acting Endostatin : Endostatin, a 20-kDa fragment of type XVIII collagen, is clinically used as an anti-angiogenic agent (broad-spectrum inhibitor of angiogenesis). However, recombinant human endostatin exhibits poor in vivo pharmaco-

kinetics. The laboratory has designed and expressed long-acting variants of human endostatin.

c. Development of recombinant human paraoxonase 1 for therapeutic use

Current treatments available for Organophosphate (OP)-poisoning are inadequate and unsatisfactory and more effective treatment is urgently needed. Human paraoxonase 1 (h-PON1) can inactivate nerve agents/pesticides and is a new generation antidote for the pre-treatment of OP-poisoning in human. H-PON1 also exhibit anti-inflammatory, anti-oxidative, anti-atherogenic, and anti-diabetic properties and administration of recombinant PON1 have been shown to prevent/retard the development of various diseases (e.g, coloitis, stroke, hyperlipidemia, atherosclerosis, diabetes) in animal models. Thus, h-PON1 is a strong candidate for the treatment of various disease in human (either alone or in combination with existing therapies). However, there are numerous limitations regarding large-scale production and use of h-PON1 as a therapeutic candidates, which include low enzymatic activities of native h-PON1, difficulties in expression and purification of recombinant h-PON1, and poor stability of purified enzymes.

In this project, these issues are being addressed. By using random and rational mutagenesis approaches, variants of rhPON1 having increased activity have been generated. A simple and cost effective method for mass production of rh-PON1 enzymes is also developed. To increase the *in vivo* pharmacokinetic properties, long-acting variants of this enzyme are also designed. Characterisation of these novel proteins is under process.

Development of lab-scale process for the production of biosimilars

Biosimilars are recombinantly-produced protein molecules that are very similar to their 'native' counterparts in term of their biological effect(s). The main goal of this project is to develop lab-scale technologies for the coast-effective production of biosimilar using *E. coli* expression system. Towards this, we have cloned and expressed a variety of biosimilar molecules (viz., human enzymes, interferons, growth factors and hormones).

Tuberculosis

The laboratory is investigating the role of multifunctional enzymes that are involved in pathogenesis of *Mycobacterium tuberculosis* and *Acinetobacter baumannii*. Areas of interest include their role in iron uptake, bacterial metastasis and virulence.

Previous studies have identified that the glycolytic enzyme multifunctional protein glyceraldehyde-3-phosphate dehydrogenase functions as a receptor for transferrin and lactoferrin. The anti-cancer agent, 3-bromopyruvate, is a known inhibitor of GAPDH. Hence the role of its derivative ethyl bromopyruvate (EBP) as an antibacterial was assessed. Inhibition of drug resistant and drug sensitive strains of *M.tb* and the ESKAPE panel were evaluated. Studies identified that EBP has broad spectrum antibacterial activity, the MIC against *Mtb* was determined as 32 µg/ml. Minimal inhibitory concentration against other pathogens was in the range of 32-64 µg/ml.

After determining the antimicrobial potential of EBP the bacterial killing kinetics at 1X, 5X and 10 X MIC of EBP was assessed. Isoniazid (INH) and rifamipicin (RIF) were utilized as controls for *M.tb* experiments while vancomycin (VAN) was used as a control for *S. aureus*. In comparison to 5X MIC of INH or RIF, EBP exhibited potent killing of M.tb at 5X MIC (~6 log10 CFU/mL), with no viable cells being recovered after 4 days of incubation. With *S. aureus*, EBP exhibited a ~9 log10 CFU/mL reduction at 10X MIC in 24 h as compared to no drug control. This reduction was closely comparable to VAN, which exhibited ~9 $\log_{10}$ reduction at 10X MIC. These findings indicated that EBP exhibits significant concentration dependent bactericidal activity against both Mtb and *S. aureus*. *In vitro* assays confirmed the inhibition of Mtb Isocitrate lyase, malate synthase, pyruvate kinase and GAPDH. The primary target was identified as GAPDH, EBP caused a 75% inhibition of GAPDH activity at 8 µM (1.56 mg/L) of EBP. A Kitz-Wilson re-plot of EBP gave a $k_i$nactivation and K_i of 0.158 min^{-1} and 52.49

nM respectively. EBP treatment also resulted in a significant decrease in cellular ATP and also transferrin mediated iron uptake.

In vivo efficacy was evaluated using a murine neutropenic *S. aureus* thigh infection model. EBP significantly reduced mean bacterial counts as compared to control group (~0.6 $\log_{10}$), which is comparable to VAN. These results reveal that EBP is as effective as VAN in reducing the bacterial load in infected mice, even at 1/25th dosage.

In other studies residues essential for the transferrin-GAPDH interaction were assessed. Based on bioinformatics data, a series of GAPDH mutants targeting lysine residues were created. The effect of these mutations on enzyme activity and transferrin/lactoferrin binding is ongoing.

The role of *A.baumannii* GAPDHs is also ongoing in the laboratory. The pathogen contains two enzymes referred to as GapA and GapB. Both enzymes have been cloned, expressed and purified. Characterization of enzymatic properties, alternate functions and structure is underway.

Relevance of metabolic enzymes and transporters in growth and infectivity of *Leishmania donovani*

VL continues to be a serious threat to public health worldwide despite the availability of drugs for treatment. This is due to the emerging challenges of drug resistance and toxicity. In an attempt to address this issue, a potential drug target glutamine synthetase (GS, E.C. 6.3.1.2) was identified from *L. donovani* based on biochemical and inhibition studies. Glutamine synthetase as catalyzes the ATP dependent synthesis of glutamine from glutamate and ammonia. GS has a role in growth and virulence in many microorganisms. With the aim to structurally explore LdGS, systematic *in silico* (in collaboration with Department of Pharmacoinformatics) and *in vitro* studies was employed in the present study to identify amino acids crucial for LdGS mediated catalysis. A comparative analysis with human GS (HsGS) was performed which revealed significant differences in the active site pocket of human and parasite GS enzyme. The important amino acids identified from the *in silico* analysis of the optimized complexes, were subjected to *in silico* and *in vitro* alanine scanning by site directed mutagenesis. The results indicated crucial conserved and non conserved residues required for GS activity. The role of these residues in maintenance of secondary and tertiary structure of GS enzyme was also explored. *In silico* virtual screening was performed, which resulted in the identification of five hits i.e. ZINC83236243, ZINC77319454, ZINC83236244, ZINC83236734 and ZINC83236736, as potential LdGS selective inhibitors. The illustrated structural and functional details of enzyme provided better understanding of the structural integrity of LdGS and can be further utilized for the development of parasite specific GS inhibitors for treatment of VL infections.

To study the functional role of glutamine synthetase in *Leishmania donovani*, gene knockout strategies were employed. LdGS knockout parasites were generated by targeted gene replacement strategy using antibiotic resistance gene as selectable marker and confirmed by PCR, enzyme activity and western blot. Functional studies revealed that the loss of single copy of *L. donovani* GS gene results in restrictive growth phenotype, have more sensitivity to standard drug miltefosine and results in higher generation of reactive oxygen species compared to wild type. Also the heterozygous mutants had an attenuated in vitro infectivity to THP-1 cells. Complementation of the single allele mutants with an episomal LdGS construct showed restoration of mutant phenotype nearly to that of wild type cells. Null mutants were obtained only after GS was expressed from an episome in heterozygous mutants. Alteration in phenotype of mutants compared to wild type supports that GS is an important anti-leishmanial drug target as it plays an important role in survival, growth and infectivity of the parasite.

Transporters or channels in plasma membrane have recently garnered attention because they are being targeted for the treatment of cancer, immune disorders, asthma apart from CNS and cardiovascular disorders. Role of ion channels in neglected tropical diseases is not yet explored. The

putative calcium activated K^+ channel encoding gene was isolated from parasite genomic DNA and cloned in a prokaryotic expression system. Further efforts are being made to express and purify the recombinant membrane protein. Generation of constructs to knockout the allele from parasite genome to understand the relevance of this protein in context of parasite growth has been initiated.

PHARMACY PRACTICE

The department continues working on well identified areas and generating evidence on prescribing as well as use of medicines.

Hepatitis

Hepatitis C infection is highly prevalent in patients of chronic kidney disease specifically on dialysis. However, there is no real time evidence on direct antiviral agents in this special group of patients. Globally, there is no vaccination for treatment of hepatitis C infection till date. Parenteral interferons had been the treatment for this infection for last 20 years but this treatment had poor compliance due to higher side effects. In December 2015, the directly acting antiviral agents (DAACs) have been introduced in India.

A study is in progress to determine the role of DAACs in treatment of chronic hepatitis C in patients with chronic kidney disease. Costing of this treatment has also been assessed.

Chronic kidney disease treatment:

The research is continuing the treatment on chronic kidney disease (CKD) for the past 6 years. The studies, so far, have covered aspects such as drug utilization pattern, depression among CKD patients, quality of life, and economic aspect of CKD. Currently, research is in progress to study the role of adequate nutrition in CKD patients. The aim is to assess the CKD progression in relation to protein energy-wasting, dietary habits, and malnutrition. The lack of renal registry and scarcity of data pertaining to CKD progression in relation to dietary habits, and other nutritional aspects, continues to be a major barrier. This study could run as a forerunner in the development of systematic prospective national renal data collection system.

Pharmacovigilance

Adverse drug reactions (ADRs) are inevitable consequences of pharmacotherapy, so the research group is also working on spotting and characterization of ADRs. Identification and profiling of the adverse drug reactions taking place in the institutional settings has been a core area of the research. The results are integrated in practice which translates into timely policy decisions that can safeguard the patient safety.

Surveillance of anti-microbial Usage

In line with the national emphasis, the researchers monitor the usage of anti-microbial agents using standardised tools in a variety of clinical settings.

Drug Utilization Reviews

The researchers are regularly involved in prescription audits and identifying medication errors in patients with special emphasis on geriatric, paediatric and ICU patients.

Pharmacothrapy in the elderly

Currently, research is in progress on the evaluation of medications prescribed to the elderly a patients in the institutional sittings.

Several age-related physiological changes have the potential to affect drug pharmacokinetics and pharmacodynamics which can potentially alter the effect of prescribed medications. Therefore, it requires a careful attention, to prevent elderly patients from adverse effects of pharmacotherapy.

Pharmacotherapy in children

The challenges of pharmacotherapy are being studied through work at multiple clinical settings. The findings of these studies are target help in appropriate prescribing, administering, and use of medications in the pediatric population.

Safety & effectiveness of Vaccination

The safety, tolerability and effectiveness of Influenza vaccine and Yellow fever vaccine have been a matter of research, and continue to be so.

The project on "Study of Diabetes care and Family-

functioning in patients with Type I Diabetes" is continuing. The projects on mapping of healthcare institutions using hospital Information systems, assessment of paediatric drug therapy and some more shall close in the next quarter. Further to the interest in chronic diseases, a study on hepatitis C has been initiated as a doctoral study. This 2-year long study shall investigate various dimensions of hepatitis C and the newer agents used to treat hepatitis C.

Health economics and outcomes research lab

Health economics and outcomes research (HEOR) is a growing field that provides important information regarding patient access to specific drugs and services for making healthcare coverage and access decisions. HEOR can provide data to help healthcare payers determine if treatments work in the populations they serve, and how much of the drug or treatment cost should be reimbursed by the healthcare system. Use of pharmacoeconomic models to assess the impact of pharmacotherapies in health and economic outcomes is becoming routine practice to support health care decision-making. These models serve as tools to estimate health benefits and economic implications for the health systems. Currently we are working on cost effective analysis of antiepileptic therapy in paediatrics, pharmacotherapeutic intervention in chronic low back pain and antiobesity drugs.

Data mining in pharmacovigilance

The increasing availability of electronic health records (EHRs) presents opportunities to investigate a wide spectrum of adverse drug effects and to detect signals closer to real time. Compared to clinical trial data, population-based EHR databases contain data from clinical practice about larger populations and longer follow-up periods. We are working on developing and testing algorithms and modules that can be used by academic researchers for the timely detection of adverse drug reactions that are novel by virtue of their clinical nature, severity and frequency.

PHARMACEUTICAL MANAGEMENT

The Department of Pharmaceutical Management is excellent centre in management education. It sets itself different with the good industry interface; student driven activities and value added consulting. The hard working and experienced faculty provides the students, a strong platform to excel in pharmaceutical management horizon. The Department has also carried out collaborative projects with other departments of the Institute which gives the benefit in terms of wider and deeper understanding. Corporate recruiters value our graduates for their intellectual abilities in Pharma and management domain. Some of the research activities carried out at the department are:

- A study on service recovery satisfaction based on Justice theory and customer satisfaction in context of hospitals
- Service quality gaps in pharmaceutical supply chain using SEVQUAL model
- An assessment of positioning strategies practiced by the pharmaceutical firms in India
- To explore the various patient behavior roles in Health care services
- Valuation of Intangibles: Brand valuation practices in India
- Issues and concerns in the convergence of the capital market and the commodities market in India
- Corporate Social Responsibility (CSR) and pharmaceutical sector in India: Insights from Annual Reports of selective pharmaceutical companies
- Financial Innovation: Relevance, driver and implications for Indian economy
- Social entrepreneurship in healthcare sector in India: an analysis
- Business schools and entrepreneurship

Academic Session 2018-19 Inauguration

Dr Sanjit Singh Lamba, Managing Director, Eisai Pharmaceuticals Pvt. Limited, Vishakhapatnam, being honoured by Director NIPER

Inauguration of New Academic Session, 2018-19

New students during Inauguration of Academic Session

CENTRAL FACILITIES

COMPUTER CENTRE

Computer Centre (CC) at NIPER SAS Nagar is the central facility that caters to the computing needs of the faculty, staff and students for their research, development and teaching. The Computer Centre is responsible for:

- Provide a Central Computing/Communication facility with network infrastructure for all the students, faculty members and staff of the institute.
- Catering to all the general and high computational needs of the faculty /staff and students.
- Manages the Campus-Wide Network (wired/ wireless).
- Hosting and updating information on theofficial website of the institute.
- Providing office-automation services.

The activities of the Computer Centre were organized under fiveverticals: High-Performance Computing, Networks, E-Services, Data Centre and Software Development. Each vertical is focused on continuallyimproving its services to meet the needs of the NIPER SAS Nagar community.

A. High Performance Computing : A High Performance Computing (PharmaGrid) catering to the needs of all faculty and other researchers in their pharmaceutical research have been placed at Computer Centre.

B. Network : The campus wide network connecting all the major blocks / buildings of the Institute. A high speed network was established connecting all the buildings on Fiber Backbone. Video conferencing is also facilitated as a network service. NIPER is an active partner of the National Knowledge Network (NKN). Regular project meetings and important events are attended through this NKN Connectivity. The following are the key activities carried out under Networks vertical.

Computer Centre Lab. has more than 62desktop systems. The Computer Centre Lab.remains accessible to all authorized users around 16 hours every day. Course lectures and practical examinations of Computer/IT related courses of students are also held at Computer Centre Lab.

Hardware maintenance (Desktop/Laptop/Server support on all working days during office hours), Software support, Anti-Virus and other Malware and troubleshooting are being handled by the Computer Centre. Computer Centre has UTM at Gateway level having firewall, intrusion detection, antimalware, spam and content filtering and VPN capabilities for NIPER Campus Network.

C. E-Services : The E-Services vertical focuses on services such as web system configurations, e-mail, web access, web security andstorage solutions and support. Several new services were enhanced and added under the e-services. The major services are Mail services, Web services, Security and monitoring services, User management services, Storage solution and Development and deployment services. Computer Centre provided the facility of Online Campus Placement by conducting online-examination and online-interviews of the Masters Students/Research Scholars through Video-Conferencing/Skype facility.

D. Data Centre : The function of the Data Centre vertical is to ensure appropriate facility management for efficient functioning of all theservice verticals of the Computer Centre.

E. Software Development : Computer Center has developed faculty assessment online portal for Academics and Examination section and currently working on the development of customized software for Central Instrumentation Laboratories (CIL).

CENTRAL INSTRUMENTATION LABORATORY (CIL)

Central Instrumentation Laboratory (CIL) is providing analytical services to the faculties, and PhD and Masters Students of NIPER since its inception in 1994. CIL is also providing its analytical

services to the Industry, Educational and Scientific research Institutes across the country on pre-fixed charges.

The laboratory is equipped with the following state of the art analytical instruments:

Atomic absorption spectrometer (Analytical Jena); Capillary Electrophoresis (Beckman Coulter); Circular Dichroism (Jasco, J-815); DSC with auto sampler (Mettler Toledo); DSC (Perkin Elmer); Luminescence Spectrometer (Perkin Elmer); Fluorescence Spectrometer (Varian); Freeze Dryer (Heto FD-8-85); Lyophilizer (Heto FD-1-110); FTIR with IR Microscope (Perkin Elmer); GCMSn where n=5 Polaris Q (Thermo Fisher); High Resolution LCMS Maxis (Bruker); HPLC with UV & ELSD detectors (Shimadzu); HPLC with UV, PDA, Fluorescence & RI detectors (Shimadzu); LCMSn where n=9 with APCI/ESI Probe LCQ (Finnigan Mat); LCMS^n where n=9 with APCI/ESI Probe LTQ-XL (Thermo Scientific); MALDI TOF – TOF Mass Spectrometer Ultra flex (Bruker); NMR Spectrometer 400 MHz with auto sampler (Bruker); Polarimeter with 365, 405, 436, 546, 589, and 633 nm wavelength (Rudolph), Powder XRD with auto sampler, temperature and humidity controller (Bruker); Titro Processor with Karl fischer, Potentiometric titration, pH, pKa values (Metrohm); Ultra Centrifuge Refrigerated LE-80K (Beckman Coulter); UV/VIS Spectrophotometer double beam equipped with sample temperature controller (Shimadzu); 2D GC Trace GC Ultra (Thermo); Elemental Analyzer Flash 2000 (Thermo), DVS Q 5000 SA (TA), Ultra pure water purification system (ELGA Purelab Pulse & Purelab Flex). LC-8A Shimadzu, Preparative Liquid Chromatograph.

All the samples for analysis by CIL instruments and other analytical instruments installed at different departments of NIPER are received through CIL as per the CIL Policy. A revised composite list of CIL instruments and instruments installed at other locations of NIPER are made available to industry, SMPIC, academic and research institutes at nominal charges. The additional available instruments are LC-NMR SPECTROMETER, Make: Jeol, Model: ECA 500 MHZ; LC/MS MicroTOF, Make: Bruker, Model: Q-TOF; LCMSn Make: Thermo, Model: LTQ-XL; Accelerated Solvent Extraction (ASE), Make: Dionex, Model: ASE300; HPLC, Make: Shimadzu, Model: SCL-10AVP; HP-TLC, Make: CAMAG, Model: TLC SCANNER-3; GC-MS with Head Space, Make: Perkin Elmer, Model: Clarus 600 C; LCMS, Make: WATERS, Model: ZQ MIRCROMASS 4000; Spray Dryer, Make: BUCHI, Model: B191; Supercritical Fluid Extraction (SCFE) Facility, Make: Deven Super Critical Pvt. Ltd., Model: Lab Scale; Supercritical Fluid Extraction (SCFE) Facility, Make: Deven Super Critical Pvt. Ltd., Model: Pilot Scale; HR-TEM, Make: FEI ,Model: TECNAI G2F-20; Variable Pressure Scanning Electron Microscope (SEM) Hitachi S3400N, Make: Hitachi, Model: S3400N; Atomic Force Microscope-Veeco Bioscope II Life Science (with IOM Nikon TE2000),Make: Veeco, Model: Bioscope II; Confocal Laser Scanning Microscope, Make: Olympus, Model: Microscope FV 1000 SPD; Real Time In Vivo Optical Imaging (Biospace Measures, France), Make: Biospace, Model: Photon Images PI0100002; Research Grade Rheometer, Make: Malvern, Model: Bohlin C-V0R150; High Pressure Homogenizer, Make: Avestin, Model: Emulsified C-3; Zeta Sizer, Make: Malvern Instruments, Model: Nano ZS; Semi Preparative HPLC, Make: Shimadzu, Model: Prominence; Preparative HPLC, Make: Shimadzu, Model: LC-8A; Automated flash purification system, Make: Biotage, Model: Isolera-One; Size Exclusion Chromatography, Make: Spectrum, Model: CF-2; Freeze Dryer, Make: Virtus, Model: Benchtop K; Flow Cytometer, Make: Beckman, Model: Optima TL; ULTRA CENTRIFUGE (Refrigerated),Make: Millipore, Model: Guave Easy Cyte-8HT;CEM Liberty Microwave Peptide Synthesizer, Make: CEM Liberty, Model: 909600; CEM Parallel Microwave Synthesizer, Make: CEM Explorer, Model: 909155; AAPTEC Peptide Synthesizer, Make: AAPTEC, Model: Focus XC 36AA.

CIL provides online data dissemination facility for sample analysis data of various analytical instruments at CIL to the faculty members and students of NIPER, directly at their laboratory through LAN network. The data is provided in the pre-created PDF files. For equipments such as NMR and pXRD, the raw data files are also loaded on the server for processing by users at their end, using pre-installed processing software. The server is also used to create a backup of all electronic analytical data generated at CIL.

CIL has analysed more than twenty two thousand (22000) samples in the fiscal year 2018-2019. Out of this 21500 are internal samples and 500 are outside samples. Some of the highly used equipments in CIL are: NMR (~10215 samples); LCMS ; LTQ (~5498 samples); HPLC (~486 samples); FTIR (~1113 samples); Fluorescence (~1050 samples); Circular Dichroism (~684 samples); and DVS (~182). CIL has also generated receipts of more than Rs. 14.60 lakhs for analyzing outside samples in the fiscal year 2018-2019.

CENTRAL ANIMAL FACILITY (CAF)

- National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar as an establishment is registered as amended with Committee for the purpose of control and supervision of experiments on animals (CPCSEA), Ministry of Environment, Forest & Climatic Change, Government of India for the Research for education, Research for the commercial purpose, breeding for in-house use and breeding for the purpose of trading of small laboratory animals (108/GO/Re/ Rc/ Bi/ Bt/ 99/ CPCSEA).
- The Central Animal Facility (CAF) is the double storied building with 'Two-way corridor system' to minimize the cross contamination and for the efficient animal house operations. The first floor is dedicated to the breeding of different small laboratory rodents like mice, rats, hamsters, gerbils and guinea pigs. In addition to the breeding unit, there is a separate experimental unit available for the holding and conducting the experiments on animals.
- CAF's main function is the breeding, maintenance and supply of the animals to the various IAEC approved in-house as well as to the consultancy research and regulatory projects.
- CAF also supplied animals on request to the outside CPCSEA registered establishments for research purpose on stipulated terms and conditions and generated significant revenue to NIPER.
- Each species of animals is separately housed in individual rooms to prevent interspecies disease transmission and to eliminate anxiety and possible physiological and behavioral changes due to interspecies conflict. The animals are maintained under controlled environmental conditions (temperature (22±2°C), relative humidity (50 ±10 %), 12:12 h light and dark cycle with 100 % of fresh air exchange in animal rooms) with uninterrupted power supply.
- The macro- and micro-environment around the animals are maintained as per the CPCSEA guidelines.
- A high degree of hygienic conditions is being maintained. Regular disinfection of animal rooms and cleaning and sterilization of cages, water bottles, bedding etc are practiced. Heavy duty steam sterilizers have been provided for this purpose.
- Periodic health monitoring of the animals is carried out to ascertain the health status. In

addition, feed and water analysis are carried out for assessing their quality and microbiological contamination.

- A team of veterinarian (one) and Junior Technical Assistants (two), who are experienced and trained in methods of animal care, breeding and husbandry, manage this facility. One of faculty member from the department of pharmacology and toxicology is made in-charge of the CAF.

The routine works at CAF are carried out as per the standard operating procedures adopting GLP principles to achieve the high quality supply of the animals for the research purpose.

NATIONAL TOXICOLOGY CENTRE (NTC)

(GLP Certified)

Toxicity testing of new compounds is essential for the process of drug development and also for the extension of therapeutic potential of existing molecules. The toxic effects of chemicals, food substances and pharmaceuticals etc. have gained great significance in 21st century. Pre-clinical toxicity testing is an integral part of drug safety evaluation. The goals of the pre-clinical safety evaluation include characterization of toxic effects with respect to target organ, dose dependence, relationship to exposure and potential reversibility. This information is of great importance for the estimation of an initial safe starting dose for clinical trials and the identification of parameters for clinical monitoring for potential adverse effects. The number of drugs failing due to toxicity in pre-clinical testing is in the range of approximately 30% to 40%, making toxicity the number one reason for pre-clinical attrition. The need of a toxicological facility covering different safety aspects of pharmaceuticals in India is eagerly felt by the drug regulatory authorities as well as by the pharmaceutical industries. Prevention of risk by testing chemicals and to determine their toxic effects depends on the quality of data that is produced in the laboratories engaged in the risk assessment process. Implementation of Good Laboratory Practice (GLP) in toxicity testing facilities in developing countries, especially in India was seen as an urgent issue. In this view the Indian program of GLP certification has already been initiated based on the OECD principles of GLP & compliance monitoring to ensure high quality test data and the mutual acceptance of test results among OECD member countries.

NIPER being leading institute in pharmaceutical sciences in India took initiative and set up a pre-clinical toxicological testing facility at NIPER in June, 2005. NTC was the first government centre of the country with GLP certification. Recently the test facility has completed the third re-certification cycle for the GLP certification by National GLP Compliance Monitoring Authority (NGCMA), Dept. of Science and Technology (DST), Govt. of India. The areas of expertise as per the certification are toxicity studies including the acute toxicity, sub-acute toxicity and chronic toxicity studies in rat, mice and guinea pigs. Now, the test facility is certified to conduct the mentioned toxicity studies for industrial chemicals, pharmaceuticals, pesticides and food additives (nutraceuticals) and feed additives.

Also, this certification will facilitate in the testing of New Chemical Entities (NCEs) for regulatory submission by different industries and academic institutions, apart from making use of the facility in internal research projects and hands-on training for research students.

INFRASTRUCTURE

National Toxicology Centre (NTC), a state-of-art test facility was established at National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar for pre-clinical toxicity studies of New Chemical Entities(NCEs). It is designed on a concept of clean and dirty corridor and has six state-of-art animal rooms, a separate fully equipped necropsy room and three laboratories equipped for testing in biochemistry, hematology, histopathology and genotoxicity. The facility has in-vitro testing room to screen new chemical entities (NCEs) in the early phase of development to support further testing in the drug discovery and development. The centre is equipped with fully and semi- automated instruments to carry out testing of different aspects of toxicology.

The centre has one sample receiving room and one sample preparation room. A full fledged Quality Assurance Unit (QAU) is in place to monitor all the activities of the centre. Dry and wet archive sections have been established in the facility for the proper storage of SOPs, raw data, study reports, wet tissues, paraffin blocks, slides and other study / facility related material.

Objective of National Toxicology Centre

- This facility can be used by the pharmaceutical companies / industries and research organizations to test their New Chemical Entities (NCEs).
- To train the manpower and to improve the technical skill in the area of regulatory toxicology.

ONGOING SPONSORED PROJECTS (YEAR 2018-19)

S. No.	Study No.	Title of study	Sponsor
1	ORT-01/19	Repeated Dose 28-Days Oral Toxicity Study of Test Item Quercetin Bar (Q-DIP) in Sprague Dawley (SD) Rats	Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research & Development Organization, O/C Department of Biochemical Sciences (DBCS), Lucknow Road, Timarpur, Delhi-54

COMPLETED SPONSORED PROJECTS (YEAR 2018-19)

S. No.	Study No.	Title of study	Sponsor
1	ORT-01/18	Repeated Dose 28-Days Oral Toxicity Study of Test Item DIP-GFIT (DGT) in Sprague Dawley (SD) Rats	Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research & Development Organization, O/C Department of Biochemical Sciences (DBCS), Lucknow Road, Timarpur, Delhi-54
3.	ORT-02/18	Repeated Dose 28-Days Oral Toxicity Study of Test Item Limmopan™ (LIM) in Sprague Dawley (SD) Rats	Punjab Agro Juices Ltd., Plot No. 24, Sector 28-A, Chandigarh
4.	AOT-02/18	Acute Oral Toxicity Study of Test Item Nanocurcumin Formulation (NCF) in Male Sprague Dawley (SD) Rats	Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research & Development Organization, O/C Department of Biochemical Sciences (DBCS), Lucknow Road, Timarpur, Delhi-54
5.	ORT-03/18	Repeated Dose 28-Days Oral Toxicity Study of Test Item Nanocurcumin Formulation (NCF) in Sprague Dawley (SD) Rats	Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research & Development Organization, O/C Department of Biochemical Sciences (DBCS), Lucknow Road, Timarpur, Delhi-54
6.	AOT-03/18	Acute Oral Toxicity Study of Test Item Quercetin Bar (Q-DIP) in Male Sprague Dawley (SD) Rats	Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research & Development Organization, O/C Department of Biochemical Sciences (DBCS), Lucknow Road, Timarpur, Delhi-54

NATIONAL BIOAVAILABILITY CENTRE

In 1998, NIPER took an initiative to set up a bioavailability centre. It was inspected and approved by Drugs Controller General of India (DCGI). The Centre has carried out many BA/BE trials on healthy humans for evaluation of fixed dose combination of anti-tubercular drugs. Earlier the clinical part of the trials were conducted in make shift arrangement in hostel buildings. NIPER dispensary. Finally, in the year 2002, Department of Science and

Technology (DST), Government of India agreed to support setting up of National Bioavailability Centre (NBC) in a dedicated new building comprising of 5000 sq.ft. area in NIPER campus with an initial cost of Rs. 268 lakhs. The Centre has carried out a three way cross over of anti-tubercular drugs on healthy human subjects in the year 2004.

NBC desires to assist the national and international generic drug industry to evaluate and develop bioequivalent dosage forms by conducting BA / BE studies in healthy human volunteers. NBC is a non-profit government aided centre to not only provide services for BA/BE studies but also advice industry to design, develop and evaluate dosage forms in an efficient, cost effective and timely manner to suit their needs and also regulatory expectations in terms of quality and compliance to GLP and GCP. NBC was one of the two reference laboratories in the world accredited by WHO for conducting bioequivalence studies for anti-TB fixed dose combinations (FDCs).

The centre has a 24 bedded air conditioned volunteer room with a nursing station, and attached toilets. It has a separate dining room with attached kitchen. It has reception, frisking area, informed consent room and a doctor room. It has a sample collection room with two phlebotomy stations, a sample processing room with refrigerated centrifuge and deep freezers (-80°C), and one bed ICU. It also has a pharmacy room, Archives and a HIV counseling room.

Some of the major activities undertaken during the period are :

1. The functioning of the facility was explained to the visitors / delegates of different workshops / seminars.
2. The activity of usage of equipment of NBC by students / staff of other departments was coordinated.
3. The concept of bioavailability - bioequivalence was explained to the Clinical Research students.
4. Efforts were being made to functionalize the centre by renting it out to some industry or CROs.
5. Efforts were also being made to start short training programs.
6. Two of the existing staff has been taking care of the duties of QAU and Archivist and TICO Incharge at National Toxicology Centre.
7. Medical health check up camp was organized on August 31, 2018 by Grecian Super Specialty Hospital for NIPERites.
8. Blood donation camp was organized on September 11, 2018 NIPER during Ganesh Chaturthi Festival 2018.
9. Medical camp for ESIC employees was organized on February 22, 2019.
10. During the orientation program of the institute the facility was shown to students during new academic session.

NATIONAL CENTRE FOR SAFETY PHARMACOLOGY

Safety pharmacology (SP) is an essential part of the drug development process that aim to identify and predict adverse effects prior to clinical trial in healthy volunteers. SP studies are need to be carried out as per the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) guidelinesS7A and S7B. The core battery and supplemental SP studies evaluate effects of a new chemical entity (NCE) at both anticipated therapeutic and supra-therapeutic exposures on major organ systems, including central nervous system, cardiovascular system, respiratory system, renal and gastrointestinal system. National Centre for Safety Pharmacology (NCSP) was established to carry out evaluation of safety pharmacology of NCEs/Formulations. NCSP can conduct SP studies in non-GLP environment.

Safety pharmacological studies were carried out on on nanoformulation of celecoxib. CNS safety pharmacology core battery studieswere performed using celecoxib NCSD (20 and 40 mg/kg). CNS parameters like functional observational battery (FOB) or modified Irwin's test was performed in rats using the scores with slight modification. The effects on various parameters of FOB were evaluated at 0, 1, 2, and 24 hr post administration of celecoxib NCSD formulation. Home cage observations were

performed in transparent polypropylene cages for 1 min. Subsequently, the open field activities, and sensory responses were observed in the open field cages for 5 minutes. The rat's hind limbs were painted with water-based tempura paint and foot splay was measured by dropping the rat from a height of 30 cm on to a padded surface. The painted area of the paper was circled and the distance between the centres of the circle of the two hind limbs was recorded in millimetres. Motor coordination and locomotor activity were also performed. Body weight and mortality of all treatment groups was monitored up to 7 days post drug administration. Celecoxib NCSD in CNS core battery studies, at therapeutic dose i.e. 20 mg/kg and above (40 mg/kg) did not alter core battery parameters like FOB parameters, locomotor activity and motor coordination. Similarly, placebo did not alter CNS safety pharmacology core battery parameters. Celecoxib NCSD when investigated in gastric supplemental safety pharmacological studies, did not show any sign of mucosal damage at 20 and 40 mg/kg. Celecoxib NCSD, at all doses, did not show any delay in gastric emptying as well. CVS and respiratory safety pharmacological studies on celecoxib NCSD and core battery safety pharmacology nanoformulation of curcumin is currently going on.

TECHNOLOGY DEVELOPMENT CENTRE – PILOT PLANT [TDC-API]

NIPER, a national institute of excellence, caters to the diverse human resource, research and consultancy needs of the pharmaceutical industry. As a part of its mandate, it has set up a state of the art Technology Development Centre (TDC) – Pilot Plant, where in experimental, pilot plant scale-up and validation, and infrastructural facilities have been made available to companies. Pilot plant facility caters to needs for advanced studies and to support strong API and Herbal generic India pharmaceutical role by offering the facility to SME industry. As per the directions of the competent authority up to 40% of the facility to be used for contract research, and 60% for internal use i.e. NIPER scale-up projects and training to the students.

Technology Development Centre-Pilot Plant activities for the year 2018-19 are listed below :

1. Contract Research Projects :

S.No.	COMPANY NAME	PROJECT NAME	PROJECT NO.
1.	CIAB	SCALE UP OF NANO CELLULOSE PREPARATION	GC-MSG-18-01
2.	CIAB	ANOTHER BATCH OF NANO CELLULOSE SCALE-UP	GC-MSG-18-02
3.	SONGWON	DRYING STUDIES BATCH	GC-MSG-18-03
4.	GOVIND	PROCESS STUDIES OF COMPOUND RETHIO	GC-MSG-18-04
5.	CIAB	VALIDATION OF NANAO CELLULOSE PROJECT	GC-MSG-18-05
6.	ASHVIN LAB	DISTILLATION STUDIES OF COMPOUND DAS/NJW/2018/02	GC-MSG-18-06
7.	ARCHEM	PROCESS OPTIMIZATION OF HERBAL EXTRACT	GC-MSG-18-07
8.	GOVIND	PROCESS SCALE UP OF COMPOUND RETHIO	GC-MSG-18-08
9.	CIAB	PARTICLE STUDIES BATCH OF NANO CELLULOSE	GC-MSG-18-09
10.	AMOL PHARMA	PILOT-TRIAL OF PROCESS STUDIES OF N-1 PRODUCT	GC-MSG-18-10

2. Industrial Training :

Industrial training titled "Practical training on in-process testing and plant machinery, process and management" was imparted to the students of NIPER. This, a four week program, involves safety, cGMP manufacturing, pilot plant operations, and in-process testing aspects, and has been conducted during the month of June, 2018. In addition to PTPC students, other students from NIPER also participated.

TECHNOLOGY DEVELOPMENT CENTRE – DOSAGE FORM [TDC-Formulation]

The facility was made functional by initiating the pharmaceutical industrial training in 2018-19 with the NIPER's existing Equipment/ Instruments and Equipment & instrument donated by M/s Zoetis (Pfizer Animal Health), M/s Glenmark (with the capacity of 10 kg batch size at a time) and available essential utilities for training purpose only.

TDC-Dosage form (Formulation) department is carrying out the following regular activities from June, 2018:

- Pharmaceutical Industrial Training to Internal Students (NIPER, PTF, 2nd Sem.) which is an integral part of their academic curriculum.
- M.S Pharmaceutics & M.Pharm.PTF students are regularly utilizing the facility (Equipment & Instrument) to carry out their academic practicals.
- Pharmaceutical Industrial Training to External Pharma. Graduates and Post Graduate Students from all over India.
- Conducting facility visits to foreign officials, ITEC trainees, Guests, Academic colleges students and staff, etc. Apart from the regular activities as mentioned above the facility also conducting the "Pharmaceutical Industrial Training" to the internal and external participants and details are as below.
- One day /half day training to the trainees of SMPIC & TDC-API plant in NIPER.

Trainings Conducted in FY 2018-19

S.No.	Students (College & University)	No. of Participants
1.	M.Pharm. (Formulation). 2nd Semester, NIPER-S.A.S Nagar.	05
2.	NSHM Knowledge Campus, Kolkata & Institute of genetic Engineering, Kolkata (SMPIC trainees)	05
3.	Techno India University-Kolkata	10
4.	Pharmacy College- Chitkara University , Rajpura (Pb.)	20
5.	Techno India University-Kolkata	04
6.	ISF College of Pharmacy-Moga	04

LIBRARY AND INFORMATION CENTER

The Library & Information Center has been developed and maintained to support the curricular and information needs of NIPER research fraternity. The Library's collection encompasses rich and varied resources in pharmaceutical and allied sciences such as print books, digital resources and dissertations and thesis. The library holds 29195 volumes comprising books and textbooks, bound journals, market reports, CD-ROMs etc. Library has Chemical Abstracts from the year 1907 to 2004 which is a leading scientific & chemical information service, giving access to a wide diversity of disciplines like chemistry, pharmaceutical sciences and biotechnology. In addition to the online journals the library subscribes to Pharmacy and Management electronic journals through DELNET consortium, along with subscription to PROQUEST Management an online electronic full text journal collection on Management and Finance. Library has LIBSYS (Web centric Library Management Software) software for library automation.

NIPER library is an institutional member of Chandigarh Library Consortium, Current Science Association Bangalore, Association of Indian Universities (AIU), Developing Libraries Network (DELNET).

The following services are provided to the users,

- Circulation (Issue & Return of Books)
- Literature search service (Online and Offline)
- Reference and Information
- Document Delivery
- Interlibrary Loan

It is accessible to all pharmacy professionals from the country and abroad and it also serves the information needs of the industry personnel under the corporate membership.

SMALL AND MEDIUM PHARMACEUTICAL INDUSTRY CENTRE (SMPIC)

Small and Medium Pharmaceutical Industry Centre (SMPIC) aims at creating commercial synergy between industry and academia, and for furthering the spirit of cooperation between NIPER and small and medium pharma (SMEs) companies. The main objective of the centre is to develop and assist these units to meet global challenges in regulatory requirements, Good manufacturing and laboratory practices. The centre organizes seminars on above and other allied topics every year. SMPIC was also set up to build trained man-power by training personnel from industry, students from science and pharma stream in analytical instruments, thus enhancing their practical skills. NIPER also extends help to registered pharma SMEs, by allowing them to avail its existing testing facilities in various departments.

During the period, April, 2018 to March, 2019, nine hands- on practical training programs on analytical instruments were conducted with a total of 77 participants. Additionally, three seminars on topics important to pharma SMEs were organized. 9 new pharma units were registered with SMPIC during this period.

PHARMACEUTICAL HERITAGE CENTRE (PHC)

During the year Pharmaceutical Heritage Centre was actively engaged in enriching its collections, augmentation of new display materials; and to try and bring the importance of the country's rich Pharmaceutical Heritage to the visitors of the Centre.

Developmental work of display gallery: As one of the primary objective of educating and inspiring the visitors, new exhibits added and put on display during the period were the custom-made bio-sketches translate of the Luminaries of Indian Pharmacy.

Other activities: Visitors from all sections of life including students from the neighboring institutions and foreign delegates visited the Centre and they were taken around and aprised of the importance of the exhibits, collections and the activities of the Centre during their visit.

A view of Gallery - Luminaries of Indian Pharmacy, showing their bio-sketches of the Luminaries of Indian Pharmacy.

Visit of the ITEC, 2018 delegates at the Centre

IPR CELL

The IPR Cell was created as a central facility in 2004 to facilitate the creation of intellectual wealth for the institute by identification and protection of pharmaceutical innovations emanating from public funded research. It facilitates the filing, prosecution and licensing of patents for all departments of the institute and is presently located in the Pharmaceutical Management Department. The cell has an IPR training Computer lab and other infrastructural facilities.

During the year, the IPR Cell carried out following activities regarding patents:

Patent Granted : 18

Patent Filed : 03

CDA : 13

MOU: 02

PUBLICATIONS

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123. N Tripathi, SK Guchhait, PV Bharatam. Pharmacoinformatics analysis of merbarone binding site in human topoisomerase IIa. J Mol Graph Model 2019, 1, 1-18.

124. D Urimi, AK Agrawal, V Kushwah, S Jain. Polyglutamic acid functionalization of chitosan nanoparticles enhances the therapeutic efficacy of insulin following oral administration. AAPS PharmSciTech 2019, 20, 131.

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PATENTS GRANTED

Sr. No.	Inventors	Title of Invention	Details of filed invention	Granted details
1	Sanyog Jain, Omesh Bhusinge, Amit Kumar Jain, Nitin Kumar Swarnakar Harshad Prakash Harde	1960/DEL/2011 Title: Pharmaceutical compositions for enhancing anticancer efficacy of tamoxifen 10/DEL/2014 Title :Solid self-emulsifying formulation of tamoxifen in combination of antioxidant for enhanced oral bioavailability and antitumor efficacy	1960/DEL/2011 Filed on July 13, 2011 IP17274/NC/am PCT-1221/NC PCT/IB2012/001361 PCT filing date is July 11, 2012 Patent of Addition KNS Ref IP25953/SB 10/DEL/2014 Filed on January 3, 2014. Published on July 10, 2015 Patent of Addition granted on August 16, 2019 No. 318353	Patent Granted No. 296411 on May 2, 2018
2	Arvind Kumar Bansal, Vibha Puri, Gunjan Kohli and Rama Rao Poduri	Quick disintegrating taste masked composition. Licensed out to IDPL, Gurgaon on non-exclusive basis in Public Interest on	2777/DEL/2008 Filed December 8-12, 2008	Patent no. 297184 granted on May 29, 2018
3	Sanyog Jain, Harshad Prakash Harde, Amit Kumar Jain	A novel solid lipid nanoparticle formulation	1813/DEL/2011 Filed on June 24, 2011	Patent Granted No. 299107 on July 24, 2018
4	Rahul Jain, Rohit Kumar Sharma, Sandeep Sundriyal	Novel linear antimicrobial peptides (AMPs) effective against fungal and bacterial infections	1011/del/2006 filed on March 16, 2007	Granted Patent: 299825 Granted on August 09, 2018
5	Asit Kumar Chakraborti, Kapileswar Seth, Sudipta Raha Roy	An improved process for synthesis of phenazines and azo compounds based on reusable metal nanoparticles as catalyst	1818/DEL/2012 Filed on June 13, 2012	Granted Patent No. 301751 on October 01, 2018
6	Sanyog Jain, Rahul Ashok Sonawane, Harshad Prakash Harde, Mahesh Kishorlal Katariya	Submicron lipidic composition loaded composition loaded gel containing combination drugs for tropical treatment of Psoriasis	1394/DEL/2011 Provisional Filed on May 11, 2011 Complete Patent filed on May 10, 2012	Patent Granted no. 303213 on November 19, 2018
7	Arvind Kumar Bansal, Ajay Kumar Raju Dantuluri	Nanocrystalline solid dispersion composition and process of preparation thereof	EP 13724871.2 filed on September 30, 2014	European Patent No. EP2822539B1 Granted on Nov, 21, 2018

Sr. No.	Inventors	Title of Invention	Details of filed invention	Granted details
8	Asit Kumar Chakraborti, Naisargee Parikh	Ionic liquid as a catalyst for an improved process of dihydro-benzothiazepine synthesis	1177/DEL/2013 Filed on April 22, 2013	Patent Granted no. 303782 on Nov. 30, 2018
9	Asit Kumar Chakraborti, Dinesh Kumar, Damodara Naidu Kommi	An improved process for the synthesis of alkyl ester of carboxylic acid	2176/DEL/2011 Filed on August 2, 2011	Patent Granted No. 304283 on Dec. 11, 2018
10	Kamlesh Kumar Bhutani, Nafees Ahmed, Keyur Gopal-bhai Brahmbhatt, Inderpal Singh and Debashish Mitra and Sudeep Sabde	Novel anti-HIV compounds	1556/DEL/2009 July 28, 2009	Patent no. 304819 on December 21, 2018
11	Asit Kumar Chakraborti, Dinesh Kumar, Himanshu Sharma	One-pot synthesis of 2-styryl-4-(3h)-quinazolinones under catalyst free and solvent free condition "an improved process for one-pot synthesis of 2-styryl-4-(3h)-quinazolinones"	2443/DEL/2011 Filed on August 26, 2011	Patent Granted No. 305128 on December 31, 2018
12	Asit Kumar Chakraborti, Dinesh Kumar, Kapileswar Seth, Damodar Naidu Kommi	A green procedure for synthesis of functionalized compounds	2023/DEL/2011 Filed on July 18, 2011	Patent Granted no. 305259 on January 2, 2019
13	Uttam Chand Banerjee, Asit Kumar Chakraborti, Amit Agarwal, Brahamam Pujala	Novel 6-aminopurine derivatives as xanthine oxidase inhibitors	1119/DEL/2011 Filed on April 15, 2011	Patent Granted No. 305460 on January 8, 2019
14	Sanyog Jain, Dinesh S Chauhan, Amit Kumar Jain, Nitin Kumar Swarnakar, Harshad Harde, Rahul R Mahajan, Dinesh Kumar, Pankaj U Valvi, Manasmita Das, Satyajit R Datir, Kaushik Thanki	Step-wise freeze drying process for improving stability of nano-drug delivery systems	2559/DEL/2011 Filed on September 6, 2011	Patent Granted No. 306846 on February 5, 2019
15	Asit Kumar Chakraborti, Anirban Sarkar, Sudipta Raha Roy	A method for the synthesis of N-t-Boc formation with the ionic liquid catalysts	1681/DEL/2010 filed on July 19, 2010	Patent Granted no.306975 on February 7, 2019
16	Asit Kumar Chakraborti, Damodara Naidu Kommi, Dinesh Kumar	Improved processes for the synthesis of lubeluzole	1962/DEL/2012 Filed on June 26, 2012	Patent Granted No. 307494 on Feb. 16, 2019
17	Sanyog Jain, Dinesh Kumar, Nitin Kumar Swarnakar, Kaushik Thanki	Novel Layersome Composition For Oral Delivery Of Anti Cancer Agents	3246/DEL/2011 Filed on November 5, 2011	Patent Granted No. 307621 on Feb. 19, 2019
18	Asit Kumar Chakraborti, Sudipta Raha Roy	An improved process for synthesis of β-/ñ- hydroxy sulfides using ionic liquid as an organo catalyst	2366/DEL/2011 Filed on August 19, 2011	Patent Granted No. 310442 on March 29, 2019

PATENTS FILED

Sr. No.	Inventors	Title of Invention	Patent Details	Filing date
01	Sanyog Jain, Shivani, Sameer Katiyar	Nanoemulsion Formulation For Site Specific Delivery Of Drugs	Patent No. 201811032540 August 30, 2018	August 30, 2018
02	Sandeep S. Zode, Arvind K. Bansal	An Intravenous Nanosuspension Formulations	Patent No. 201911002734	January 23, 2019 (provisional filing)
03	Arvind Kumar Bansal, Prashant Kumar Khodabhai Parmar	Nanocrystals Based Formulations For Improved Topical Delivery Of Apremilast	Patent No. 201911003539	January 29, 2019 (provisional filing)

CDA SIGNED

1. Archem Internations, Derabassi, on February 2, 2019
2. Medreich Limited, Bangalore, on February 02, 2019
3. Nectar Lifesciences Ltd., Chandigarh, on November 21, 2018
4. Bristol Myers Squibb India Pvt. Ltd., Mumbai, on October 29, 2018
5. Veritas Research Incorporation, Bangalore, on October 8, 2018
6. Dr. Chitta Venkateshwara Rao, Guntur, on October 8, 2018
7. Bioheaven 360 Genotec Pvt. Ltd., Delhi, on October 14, 2018
8. Morepen Laboratories Ltd., New Delhi, on August 17, 2018
9. NCCS, Pune, on July 4, 2018
10. Inzpera Healthsciences Ltd., Mumbai, on June 18, 2018
11. Biocon Limited, Bangalore, on May 8, 2018
12. Kusum Healthcare Pvt. Ltd., New Delhi, on April 26, 2018
13. Lupin Limited, Mumbai, on April 10, 2018

MoU SIGNED

1. NIPER and IMTECH Chandigarh on August 31, 2018.
2. NIPER and NABI, Mohali on August 31, 2018

AWARDS & HONOURS

Name of Faculty	Discipline	Recognition
Prof. Saranjit Singh	Pharmaceutical Analysis	Contributory Editor, Trends in Analytical Chemistry (TrAC) Co-editor for special issue of Trends in Analytical Chemistry (TrAC) under the title: "The last decade in regulation and control of impurities in pharmaceuticals" Member, Editorial Board, Journal of Pharmaceutical and Biomedical Analysis Member, Expert Advisory Panel on the International Pharmacopoeia and Pharmaceutical Preparations, World Health Organization, Geneva Member, All India Board of Pharmaceutical Education (AIB-PE), Policy and Academic Planning Bureau (PAPB), AICTE, New Delhi Member, Expert Panel to Evaluate Manufacturing, Purification, Quality Control & Toxicological Data of New Phytopharmaceuticals, CDSCO Nominated member, Multi-disciplinary Committee of Experts, NPPA, GOI, New Delhi Member, Expert Working Group – Indian Pharmacopoeia Review Committee. Member, Indian Pharmacopoeia Impurity Standards Review Committee Member, Expert Committee to Review Guidance Manual for Compliance of Indian Pharmacopoeia (IP) Member, Expert Committee to Advise on Training Programmes Under Skill Development, National Institute of Biologicals, Noida Member, CDSCO DCC Sub-committee for the Preparation of "Guidance Document on Formulation Development to Improve the Quality of Drugs Manufactured/Marketed in the Country for Uniform Implementation" Member, Punjab State Pharmaceuticals Price Monitoring & Resource Unit Society Chairman, Life Sciences Session in the International Conference on Responsible Research and Innovation in Science Management and Education, organized by Research Promotion Cell, Panjab University Chandigarh and London School of Management Education, UK
Prof. Uttam C. Banerjee	Pharmaceutical Technology(Biotechnology)	"Lupin Visiting Fellowships for Bioprocess Technology Endowment" for the year 2018-2019 in Institute of Chemical Technology

Prof. Pramil Tiwari	Pharmacy Practice	Member of the Core Group and the Subject Review Committee for the Revision of the National Formulary of India, MoHFW, India
Prof. A.K. Bansal	Pharmaceutics	"IPA-ACG Scitech Innovation Award 2018" for Best Innovative Development of Solid Dosage Form, in Recognition of NanoCrySP a Technology Platform for Nano Crystalline Solid Dispersion.
Prof. S.S. Sharma	Pharmacology & Toxicology	DST-SERB Committee Member (Life Sciences) for Early Career Research Award (ECRA) and National Postdoctoral Fellowship (N-PDF) Editorial Board Member: Behavioural Neurology Editorial Board Member: Current Neurovascular Research Executive Review Advisor: International Journal of Pharmaceutical Sciences and Nanotechnology
Dr. G.B. Jena	Pharmacology & Toxicology	Rajnibhai V. Patel PharmInnova Award for Best Research Guide in PhD thesis 2018
Dr. Ipsita Roy	Biotechnology	Associate Editor, Recent Patents in Biotechnology
Dr. Sushma Singh	Biotechnology	Life member of National Academy of Biological Sciences Member of International Society of Infectious Diseases (ISID) Member of Biotech Research Society of India
Dr. Joydev K. Laha	Pharmaceutical Technology (Process Chemistry)	Award of appreciation by NIPER S.A.S. Nagar on National Technology Day 2018

STUDENTS

Name of Student	Discipline	Recognition
Seema Kirar	Pharmaceutical Technology (Biotechnology)	Best poster award (150 SGD) in 9th Asian Biological Inorganic Chemistry (AsBIC9) Conference, National University of Singapore, Singapore ICMR International travel grant for attending Nano World Conference, San Francisco, CA, USA
N. Sushma Sri	Biotechnology	Best Presentation Award for Poster Presentation, National Conference on Molecular Biotechnology (NCMB-2019), National Institute of Technology, Warangal
Vinay Kumar, Amritha Chandran, Neha Tripathi, Prabha Garg, P.V. Bharatam and Sushma Singh	Biotechnology	Second position in Poster Presentation, Recent Advancement in Biochemical Engineering and Biochemistry (RABEB-2019), School of Biochemical Engineering, Indian Institute of Technology (BHU), Varanasi

Gurudutt Dubey	Pharmaceutical Technology (Process Chemistry)	Rajnibhai V. Patel PharmInnova Award for Best Research Scholar, 2017-18
Shubham Vishnoi	Pharmacoinformatics	Represented NIPER in Novartis Biotechnology Leadership Camp (BioCamp-2018), Hyderabad
Sanika Jadhav	Pharmaceutics	2nd Runners-up, Second Russian Interuniversity Gxp Summit, Sochi, Russia
Samarth D Thakore	Pharmaceutics	1st Runners-Up Prize for Poster Presentation, One-Day Symposium on Biopharmaceutics and Drug Delivery, NIPER S.A.S. Nagar
Deepika Kathuria	Medicinal Chemistry	Newton Bhabha Ph.D. Placement Award 2017 by DST, India and British Council, UK
Meenu Saini	Medicinal Chemistry	DST International Travel Award for poster presentation, 256th ACS National Meeting & Exposition, Boston, MA, USA
Umashanker Navik	Pharmacology & Toxicology	ICMR International Travel Award for oral presentation at European conference on Agriculture, Horticulture & Epigenetics held, Paris, France
Vaibhav G Sheth	Pharmacology & Toxicology	Secured the CSIR-SRF (Direct) (2019-2021)
Zahid Bhat	Pharmacology & Toxicology	Secured ICMR-SRF (2019-2021)
Sabbir Khan	Pharmacology & Toxicology	Rajnibhai V. Patel PharmInnova Award for Best Research Scholar, 2018

VISITS ABROAD [FACULTY]

Name	Discipline	Visit
Prof. P. V. Bharatam	Medicinal Chemistry	Department of Biooorganic Chemistry, University of Hohenheim, Germany.
		Institute of Pharmaceutical Chemistry and the Buchmann Institute for Molecular Life Sciences at Goethe University, Frankfurt, Germany.
		Department of Chemistry, University of Tubingen, Tubingen, Germany.
		Department of Chemistry, University of Stuttgart, Tubingen, Germany.
Prof. A.K. Bansal	Pharmaceutics	Invited Speaker, AAPSPharmSci 360, Annual Meet of American Association of Pharmaceutical Sciences, USA.
		Invited Speaker, China Pharmaceutical Industry Internalization Strategy Summit and China-India Pharmaceutical Business Convention, China.
Dr. Ipsita Roy	Biotechnology	Invited Speaker, 18th European Congress on Biotechnology, Geneva, Switzerland.
Dr. Sushma Singh	Biotechnology	Invited Speaker, 1st International Caparica Confe-rence on Leishmaniasis, Caparica Portugal, 2018.

STUDENTS

Name	Discipline	Visit
Seema Kirar	Pharmaceutical Techno-logy (Biotechnology)	Nano World Conference, San Francisco, CA, USA.
		9th Asian Biological Inorganic Chemistry, National University of Singapore, Singapore.
Sanika Jadhav	Pharmaceutics	Russian interuniversity GxP summit, Sochi, Russia.
Deepika Patel	Pharmaceutics	Russian interuniversity GxP summit, Sochi, Russia.
Umashanker Navik	Pharmacology & Toxicology	International meeting on Epigenetics, Paris, France.
Durgesh Kumar Dwivedi	Pharmacology & Toxicology	International Liver Congress 2019, Vienna, Austria.
Dilip Kumar Singh	Pharmaceutical Analysis	22nd International Mass Spectrometry Conference, Florence, Italy.
Mayur K. Ladumor	Pharmaceutical Analysis	22nd North American ISSX Meeting, Montreal, Canada.
Sumit S. Chourasiya	Medicinal Chemistry	Department of Bioorganic Chemistry, University of Hohenheim, Stuttgart, Germany [DST-DAAD Interexchange Programme].

Deepika Kathuria	Medicinal Chemistry	Department of Chemistry, University of Sheffield, UK.
		Department of Bioorganic Chemistry, University of Hohenheim, Stuttgart, Germany [DST-DAAD Interexchange Programme].
Meenu Saini	Medicinal Chemistry	Poster presentation, 256th ACS National Meeting & Exposition, Boston, MA, USA.

SEMINARS / WORKSHOPS

Date	Seminars/Workshops
April 10-20, 2018	Two-week Specialized Training Programme for Drug Regulatory Officials from Africa India Africa Forum Summit – III (IAFS – III), E&SA
April 13, 2018	Hindi Workshop
May 10, 2018	One-day workshop on Healthcare Financing In India
August 6-16, 2018	Recent Trends and Challenges in Regulation and Standardization of Herbal Drugs and Formulations (ITEC)
September 04 – 14, 2018	Pharmaceutical Quality by Design: A Risk Based approach (ITEC)
October 3-13, 2018	Recent Trends and Challenges in Biopharmaceuticals (ITEC)
October 22 to November 01, 2018	Advanced Analytical Techniques: Basic Principles and Application for Quality Assessment of Drugs and Pharmaceuticals (ITEC)
November 05, 2018	Mini-symposium on Pharmaco informatics
November 15 – 17, 2018	6th Biennial International Conference on New Developments in Drug Discovery (DDNPTM-2018)
November 16, 2018	Mini symposium on 'Traditional Chinese Medicine'
November 30, 2018	One-day Symposium on Biopharmaceutics and Drug Delivery
December 07, 2018	Hindi Workshop
February 08, 2019	One-day National Conference on Medical Writing
February 13, 2018	Hindi Workshop

LECTURES DELIVERED BY EXPERTS FROM ACADEMIA/INDUSTRY

Date of Program	Title of Lecture	Speaker	
April 11, 2018	Prevention, Prohibition and Redressal of Sexual Harassment of Women at Workplace Act 2013	Dr. Upneet Lalli, Deputy Director, Institute of Correctional Administration, Chandigarh	
April 16, 2018	Psycho-Social aspects on prevention and dealing with sexual harassment	Dr. Vidhu Mohan, Ex. Head, Department of Psychology, Panjab University	
June 6, 2018	Entrepreneurship for Entry Scientists	Dr. Sridhara Rao Voleti, CEO, Bionest, University of Hyderabad	
June 13, 2018	Recombinant "Target" and "Effector" Proteins: Production Strategies and Pharmacological Evaluation	Dr. Ananda Chowdhury, Ph.D., Postdoctoral Fellow, National Cancer Institute, National Institutes of Health	
August 28, 2018	Rapid Assembly of Molecular Complexity through Entioselective Multicomponent Reactions	Prof. Dr. Christoph Schneider, Germany	
December 5, 2018	Advances in Therapeutic Targets for Chronic Obstructive Pulmonary Disease (COPD)	Dr Hari S. Sharma, Institute of Cardiovascular Research, University Medical Centre, Amsterdam	
December 14, 2018	Enlightening students in the science of drug metabolism and pharmacokinetics	Dr. Sandhya Mandelkar, Director External portfolio and outreach, BNS India Ltd., BBRC Bangalore, India	
January 9, 2019	Development of a novel, first-in-class drug product, PMZ-1620, for patients with cerebral ischemic stroke	Dr. Anil Gulati, Associate Dean and Professor of Pharmacology, Midwestern University, Chicago & Chairman, Board of Directors-Pharmazz, Inc. USA	
January 17, 2019	Structural Basis for function of Noro-Virus Protease and Staphylococcal Peroxidase Inhibitor	Dr Om Prakash Gulati, Kansas State University (KSU), Manhattan, Kansas, USA	

Date of Program	Title of Lecture	Speaker	
January 17, 2019	Gain from Strain: Exciting journey from Synthetic organic chemistry to natural products	Dr. K.V. Radhakrishnan, Principal Scientist, CSIR-NIIST Trivandrum	
January 31, 2019	Scientoons and Scientoonics: Enjoy Science	Dr P.K. Srivastava, Ex. Dy. Director (Senior Principal Scientist), Medicinal & Process Chemistry Division, CDRI, Lucknow	
February 18, 2019	Patient-Centric Peptide-based Drug Design and Drug Delivery for Metabolic Disease	Dr. Ved Srivastava, President-Elect American Peptide Society and Vice President of Chemistry, Intarcia Therapeutics Inc., North Carolina, USA	
March 29, 2019	Rationally Designing Pharmaceutical Formulations Using Schrodinger Materials Science Suite	Dr. Sudharsan Pandiyan, Sr. Scientist (Material Science) Schrodinger INC, Bengaluru	

LECTURES DELIVERED BY FACULTY

Name	Date	Title	Conference, Place
Dr. S. K. Guchhait	April 20, 2018	Integration of Natural Product Inspired/Scaffold-Hopping Approach and SAR-Feasible Synthesis: Discovery of Target-based Anticancer Agents	Seminar lecture NCL, Pune
Prof. Saranjit Singh	May 10, 2018	Stability Testing Aspects	3-month induction training program for Drug Inspectors and Assistant Drug Controllers organized by CDSCO at NIB, Noida.
Prof. A.K. Bansal	June, 2018	Pharmaceutical Equivalence vis-à-vis Therapeutics Equivalence	Meeting of State Drugs Controllers,CDSCO, New Delhi, India
Dr.Joydev K. Laha	July 04, 2018	Amide Formation via Radical Acylation and its Application in the Synthesis of Fused Nitrogen Heterocycles and generic APIs	CBMR lecture series, Lucknow
Prof. Saranjit Singh	July 12, 2018	Pre-formulation Stability of Small Molecules	Stability of Pharmaceuticals Workshop organized by Talent Workstream at Novartis R&D Centre, Genome Valley. Hyderabad.
Prof. Saranjit Singh	July 20, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	NIPER, Gandhinagar, Gujarat
Prof. Saranjit Singh	July 20, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	Orientation programme for Fresher Master's students, Nirma University, Ahmedabad, Gujarat
Prof. Pramil Tiwari	July 20-21, 2018	Healthcare Financing in India	9th International Conference on Pharmacoeconomics and Outcomes Research (PE & OR) on Enhancing Patient Health Outcomes and Pharmacists Role in Transformed Healthcare System", RIPER, Anantpur,
Prof. S.S. Sharma	July 22, 2018	Career Opportunities in Pharmaceutical Sciences	Workshop on "Funding Opportunities for Research, Innovation & Career Development,ISF College of Pharmacy, Moga, Punjab

Name	Date	Title	Conference, Place
Prof Asit K. Chakraborti	August 09, 2018	Green Chemistry Tools in Sustainable Chemistry Developments	National Seminar (FDP cum Workshop) on "Greening Undergraduate Chemistry Lab-GUCL-2018." Aug 08-09, 2018. Organised by S. V. College, Delhi University, Dhaula Kuan, New Delhi.
Prof. Saranjit Singh	August 29, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	Silver Jubilee (1993-2018) Celebration Kick-Start Function of DPSDR, Punjabi University, Patiala, Punjab
Prof. Saranjit Singh	September 08, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	ISF College of Pharmacy, Moga, Punjab
Prof. Pramil Tiwari	Sept. 12-14, 2018	Recent trends in Pharmaceutical Education and Research	Pharmacy Council of India sponsored Continuing Education Program 2018 on Recent trends in Pharmaceutical Education and Research, Birla Institute of Technology, Ranchi
Prof. Asit K. Chakraborti	Sept. 15, 2018	Sustainable Chemistry: Invoking New Concepts in the Quest for New Therapeutic Agents.	World Health Day celebration at L. M. College of Pharmacy, Ahmedabad.
Prof. Saranjit Singh	September 28, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	Department of Pharmaceutical Sciences, Birla Institute of Technology (BIT), Mesra, Ranchi
Prof. S.S. Sharma	October 4-6, 2018	CNS drug discovery	International Conference on "Pharmacology and Drug Discovery" at Maharaja Agrasen University, Baddi, Himachal Pradesh
Prof. Saranjit Singh	October 10-13,	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	3rd Annual Conference of the Society for the Study of Xenobiotics (SSX 2018), Bangalore
Prof. Saranjit Singh	October 11 -12, 2018	Non Destructive Pharmaceutical Analysis and Visualization	Pharmaceutical Analysis and Quality (PharmAnalQ 2018) Conference, Mumbai
Prof. Saranjit Singh	October 12, 2018	Historical and Current Aspects of Stability Testing	Biocon BMS Research Centre (BBRC), Bangalore

Name	Date	Title	Conference, Place
Dr. Sushma Singh	October 14, 2018	Ribose 5-phosphate isomerase B from Leishmania donovani: Role of conserved residues in substrate recognition by mutational and structural analysis and study of the essentiality of the enzyme	Rajasthan Science Congress, Central University of Rajasthan, 2018.
Prof. Asit K. Chakraborti	October 24, 2018	Sustainable Approaches in Drug Discovery: Delving New Concepts for Novel Therapeutics	National Conference on "Role of Pharmacists in Academia & Research." Organised by Chandigarh College of Pharmacy, Chandigarh Group of Colleges, Chandigarh
Prof. Saranjit Singh	October 27, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences, and Advances in Dosage Form Technology: Enter the future	SJNB Pharmacon 2018 held at SJMB College of Pharmacy, Chandwad, Maharashtra
Prof. Saranjit Singh	November 2, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	"Alumnus Homecoming Series" organized by PUPS, UIPS, Panjab University, Chandigarh
Prof. Saranjit Singh	November 3, 2018	Pursuit for an 'Inspired Career' Stream	DST sponsored Inspire Camp for senior school students organized at ISF College of Pharmacy, Moga
Prof. S.S. Sharma	November 29, 2018	Neurodegenerative disorders	3rd Advanced Training Programme of Experimental Behavioral Neuroscience, , PGIMER Chandigarh
Prof. S.S. Sharma	December 01, 2018	Role of IAEC in animal experimentation	4th National , PGIMER Chandigarh
Prof. Saranjit Singh	December 15, 2018	Pursuit for 'Inspired Career' in Pharmaceutical Sciences	ABMH Pharmacon-VI, 2018 organized by Aditya Birla Memorial Hospital, Chinchwad, Pune
Prof. U.C.Banerjee	December 17-28, 2018	Use of enzymes and whole cells for the production of various microbial metabolites and biofertilizers of industrial significance	GIAN course on 17-28 December, 2018 at Chemical Engineering Department of National Institute of Technology Durgapur, West Bengal, India.

Name	Date	Title	Conference, Place
Prof. Saranjit Singh	December 20, 2018	QbDE: Proposed Process for the Improvement of Education and Job Potential of Students, and Baby Steps in Research	PCI Sponsored Continuous Education Program, ISF College of Pharmacy, Moga.
Prof. S.S. Sharma	December 20-22, 2018	Research using animals: demystifying the truth	70th Indian Pharmaceutical Congress
Prof. Pramil Tiwari	December 26-27, 2018	"What and Why of Pharmacoeconomics"	"International conference on Pharmacy Practice", KBIPER, Gandhinagar.
Prof. Saranjit Singh	January 1, 2019	Improvement in Teaching and Research Skills: Need of the Hour, Chief Guest and Key Note Address	Faculty Development Program organized by Amar Shaheed Baba Ajit Singh Jujhar Singh Memorial College of Pharmacy, Bela, Chamkaur Sahib, Punjab
Prof. U.C.Banerjee	January 3-7, 2019	Theranostic applications of nanoparticle based fluorescent probes for microbial infections and cancer	106th Indian Science Congress Association Meeting held in Jalandhar during January 3–7, 2019.
Prof. A.K. Bansal	January, 2019	Mechanisms involved in formation of nano-crystals from Nano CrySP technology	6th World Congress on Nano-medical Science,Vigyan Bhawan, New Delhi
Dr. S. K. Guchhait	January 17-18, 2019	Natural product-inspired target-based drug discovery: Identification of unique analogs with anticancer profiles	International conference, Drug Discovery India-2019, Breakthrough Research in Medicinal Chemistry, organized by Select Biosciences in Mumbai
Dr. S. K. Guchhait	February 1, 2019	Target-based natural product-inspired scaffold hopping strategy: SAR-feasible synthesis and discovery of Flavone and Combretastatin analogs with anticancer profiles	Invited talk in Aurigene Discovery Technologies Ltd, Hyderabad
Prof. U.C.Banerjee	February 11, 2019	Advances in Enzyme and Bioprocess Engineering	Short term course/faculty development programme (TEQIP-III) at Dr. B. R. Ambedkar National Institute of Technology Jalandhar-144011 on February 11, 2019.

Name	Date	Title	Conference, Place
Prof Asit K. Chakraborti	February 15, 2019	Medicinal Chemistry Research in the Context of Sustainable Development	"PCI Sponsored Continuing Education Programme." February 15-17, 2019. Organised by Gupta College of Technological Sciences, Asansol, W. B.
Prof. S.S. Sharma	February 14-15, 2019	Translational Neuropharmacology	North Zone Indian Pharmacological Society Conference, MM University, Ambala, Haryana
Prof. A.K. Bansal	February, 2019	Amorphous Solid Dispersions as an Approach to Increase Bioavailability of BCS II and IV Compounds	International Conference on "Applied Pharmaceutical Analysis (APA)" India 2019, Hotel Novotel, Goa
Prof. Saranjit Singh	February 24, 2019	Stress Testing: Regulatory Perspectives, Benefits and Advancements	CMC short course at Applied Pharmaceutical Analysis (APA India 2019) held by Boston International Conferences, Goa.
Prof. S.S. Sharma	February 25 – March 01, 2019	Translational Challenges in Stroke Research: Guidelines for Conducting Animal Studies for Developing Neuroprotective Agents	Ethical Contemplation of Animal Resources for Experimentation (WeCARE-2019)", IMTECH Chandigarh
Prof. Saranjit Singh	March 2, 2019	Dry Blood Spot (DBS)-LC-Mass Spectrometry (LC-MS) in Bioanalysis	UGC NRC course on Modern Bioanalytical Techniques for Drug Discovery organized by UIPS, PU, Chandigarh
Prof. Saranjit Singh	March 15, 2019	Non Destructive Pharmaceutical Analysis and Visualization	Multi-disciplinary International Conference on the theme 'Quality Medicines for Patient Care' organized by Gujarat Technological University, Ahmedabad
Dr. Joydev K. Laha	March 15-17, 2019	Non-Traditional Radical Acylations for the Synthesis of Nitrogen Heterocycles and their Translational Potential to API Synthesis	Recent Advances in Organic and Bioorganic Chemistry (RAOBC) Symposium, IISER Mohali

Name	Date	Title	Conference, Place
Dr. Sushma Singh	March 15-16, 2019	Structural and mutational analysis of conserved and non conserved residues in active site pocket of Glutamine synthese enzyme from Leishmania donovani: Role in substrate binding and structural stability	IIT-BHU in 'Recent Advancements in Biochemical Engineering and Biotech-nology [RABEB-2019]
Prof. U.C.Banerjee	March 18-19, 2019	Bioprocess Engineering	Department of Biotechnology, Institute of Science, Visva-bharati University (a Central University), West Bengal
Prof. U.C.Banerjee	March 18-19, 2019	Process development for the production of various microbial metabolites and use of enzymes and whole cells for the synthesis of chiral drugs and drug intermediates.	College of Basic sciences & Humanities, Punjab Agricultural University, India, Ludhiana.
Prof. A.K. Bansal	March 2019	Industry-relevant research in academia: reality or dream?	Nirma University, Ahmedabad
Dr. S. K. Guchhait	March 22-24, 2019	Unique chemistry-based molecular diversity-feasible synthesis integrated with Natural Product inspired and Scaffold hopping strategies: Discovery of target-based anticancer agents	National conference on Recent Advances in Organic and Bioorganic Chemistry (RAOBC), IISER Mohali
Prof. S.S. Sharma	March 26-27, 2019	Biodiversity for human health and Societal welfare: Current Challenges and Achievable.	Zoocon 2019, Panjab University, Chandigarh
Prof Asit K. Chakraborti	March 30, 2019	Integrating Modern Develop-ment in Chemistry to Drug Discovery	National Conference on "Recent Trends and Advance-ments in Chemical Sciences." Organised by Department of Chemistry and Bhaskara-charya College of Applied Sciences, University of Delhi in association with Society for Promotion of Education and Science.

LIST OF EMPLOYEES: SCIENTIFIC AND TECHNICAL STAFF

Name	Designation
Prof. Raghuram Rao Akkinepally	Director (till 23.09.2018)
Prof. P V Bharatam	Director (Actg) (24.09.2018-04.10.2018)
Prof. Raghuram Rao Akkinepally	Director (05.10.2018-29.10.2018 FN)
Dr. SJS Flora	Director (Addl. Charge) (29.10.2018 AN-13.11.2018)
Prof. Raghuram Rao Akkinepally	Director
Dr. P. V. Bharatam	Dean
Prof. Rahul Jain	Dean (since November, 2018)
Prof. K.B. Tikoo	Associate Dean (Academic)
Dr. Sankar K Guchhait	Associate Dean (Students)
Department of Medicinal Chemistry	
Dr. A. K. Chakraborti	Professor and Head
Dr. P. V. Bharatam	Professor
Dr. Rahul Jain	Professor
Dr. Sankar Guchhait	Associate Professor
Dr. Srikant Bhagat	Scientist Grade I
Dr. Meenakshi Jain	Scientist Grade I
Dr. Alka Mittal	Scientist Grade II
Mr. G. Murugesan	Technical Assistant (Glass Blowing)
Mr. Pravin Jaikrishna Wanjari	Technical Assistant
Mr. Santosh Kumar Giri	Technical Assistant
Mr. Anang Pal	Technical Assistant
Mr. C.V.Ravi Prakash Reddy	Technical Assistant
Mr. Binod Kumar Prasad	Junior Technical Assistant
Centre of Pharmacoinformatics	
Dr. P. V. Bharatam	Professor and In Charge
Dr. Prabha Garg	Professor
Dr. Elizabeth M. Sobhia	Associate Professor
Dr. Pooja Arora	Technical Supervisor Gr. I/ Scientist Gr. I
Mr. Vishnu Kumar Sharma	Junior Technical Assistant
Department of Natural Products	
Dr. Sanjay Jachak	Professor and In Charge
Dr. Inder Pal Singh	Professor
Dr. A. S. Sandhu	Garden Supervisor
Dr. S.M. Tripathi	Scientist Grade I (TM)
Dr. Alok Goyal	Scientist Grade II
Mr. Mohd. Shahid Khan	Technical Assistant
Mr. Sanjay Vir	Technical Assistant
Mr. Amit Srivastava	Technical Assistant
Mr. K. Prasanna	Junior Technical Assistant
Mr. Rakesh Kumar	Junior Technical Assistant

Department of Pharmaceutical Analysis

Dr. Saranjit Singh	Professor and Head
Dr. Archana Sahu	Scientist Grade II
Mr. Sanjay Kumar	Scientist Grade II
Ms. Parul Sharma	Technical Assistant

Department of Pharmacology and Toxicology

Dr. K. B. Tikoo	Professor and In Charge
Dr. S. S. Sharma	Professor
Dr. G. B. Jena	Associate Professor
Dr. Jitendra Narain Singh	Scientist Grade II
Dr. Malti Singh	Scientist Grade II
Mr. Vinod Kumar	Technical Supervisor Gr. II/ Scientist Gr. II
Ms. Rupinder Pal Kaur	Technical Assistant
Ms. Nidhi Singh	Technical Assistant
Mr. Sharath Babu S.	Technical Assistant
Mr. Jang Bahadur Ram	Junior Technical Assistant

Center for Infectious Diseases

Dr. P. P. Singh	Professor
Dr. Savita Singh	Scientist Grade I

Department of Pharmaceutical Technology

Dr. U. C. Banerjee	Professor and Head
Dr. Manjinder Singh	Assistant Professor
Dr. Joydev Laha	Assistant Professor
Mr. S. Roy	Scientist Grade II
Mr. Villendra Singh Negi	Junior Technical Assistant
Mr. Subhash Chandra	Junior Technical Assistant

Department of Pharmaceutics

Dr. Arvind K. Bansal	Professor and Head
Dr. Sanyog Jain	Associate Professor
Dr. Abhay T. Sangamwar	Assistant Professor
Mr. Gunjan	Technical Assistant
Mr. Kishore Totaba Dhotare	Technical Assistant
Mr. Mahesh Chand	Technical Assistant
Mr. Mahajan Rahul Rameshrao	Junior Technical Assistant
Mr. Sanjaya Kumar Samal	Junior Technical Assistant

Department of Biotechnology

Dr. U. C. Banerjee	Professor and In Charge
Dr. Ipsita Roy	Associate Professor
Dr. Abhay H. Pande	Associate Professor
Dr. Chaaya Iyengar	Assistant Professor
Dr. Sushma Singh	Assistant Professor
Dr. Shivcharan Prasad	Technical Assistant
Dr. N. Kishore Babu	Technical Assistant
Mr. Ranbir Singh	Junior Technical Assistant
Dr. Rajan Kumar Tripathy	Junior Technical Assistant

Mr. Rajesh Kumar	Junior Technical Assistant

Department of Pharmacy Practice

Dr. Pramil Tiwari	Professor and Head
Dr. Dipika Bansal	Assistant Professor
Dr. Amit Kondal	Technical Supervisor Gr. I/ Scientist Gr. I

Department of Pharmaceutical Management

Dr. Anand Sharma	Professor and In Charge
Dr. Anil Angrish	Associate Professor
Dr. Sunil Gupta	Associate Professor

Pharmaceutical Heritage Centre

Dr. Rahul Jain	Professor and In Charge
Mr. M. Arbindo Singh	Museum Curator

Computer Centre

Mr. Rajwinder Singh	Head
Mr. Amandeep Jindal	Programmer
Mr. Deepak Joshi	Technical Assistant
Mr. Promod Kumar	Data Processing Assistant
Mr. Satendra Rawat	Data Processing Assistant

Library and Information Centre

Dr. Prabha Garg	Professor and In Charge
Mr. Anurag Sharma	Library and Information Assistant
Mr. Amit Thapar	Library and Information Assistant

Central Instrument Laboratory

Dr. Rahul Jain	Professor and In Charge
Mr. Vikas Grover	Technical Supervisor Grade II
Mr. Sandeep Sachdeva	Technical Assistant
Dr. Manish Kumar Goyal	Technical Assistant
Mr. Mallikarjun Bolusani	Technical Assistant
Dr. Ashish Chauhan	Technical Assistant
Dr. Bharti Mittu	Technical Assistant
Mr. Rajdeo Kumar	Technical Assistant
Ms. Preeti Mathaal	Technical Assistant
Mr. Anil Kumar Saw[a]	Junior Technical Assistant
Mr. Thongtinlal Haokip	Junior Technical Assistant
Mr. Vinod Kumar	Junior Technical Assistant

Technology Development Centre – API/Herbal

Dr. Manjinder Singh	Assistant Professor and In Charge
Dr. Animesh Roy	Scientist Grade II
Mr. Mukesh Kumar	Technical Assistant
Mr. Tara Dutt Bhatt	Junior Technical Assistant
Mr. Sunil Kumar	Junior Technical Assistant
Mr. Manish Kumar Verma	Junior Technical Assistant
Mr. Anil Bhardwaj	Junior Technical Assistant

Technology Development Centre- Dosage Form (Formulation)

Dr. U. C. Banerjee	Professor and In Charge
Banoth Raj Kumar Naik	Technical Supervisor Gr. I/ Scientist Gr. I

National Bioavailability Centre

Dr. Abhay T. Sangamwar	Professor and In Charge
Ms. Kanwal Jit Kaur	Scientist Grade II
Mr. Inderjit Singh	Scientist Grade II
Mr. B. Shantharam R.	Technical Assistant

National Toxicology Centre

Dr. K. B. Tikoo	Professor and In Charge
Ms. Vibha Ahuja	Junior Technical Assistant

Central Biological Testing Laboratory

Dr. K. B. Tikoo	Professor and In Charge
Dr. Anubha Singh	Scientist Grade II
Mr. S. S. Jhamb	Scientist Grade II
Dr. Balkar Singh	Scientist Grade II
Mr. Vijay K. Mishra	Junior Technical Assistant

Central Animal Facility

Dr. S. S. Sharma	Professor and In Charge
Dr. K. Srinivasan	Scientist Grade I
Mr. Sanjeev Bhardwaj	Junior Technical Assistant
Mr. Mohd. Yamin Saifi	Junior Technical Assistant

Small and Medium Pharmaceutical Industries Centre

Dr. Arvind Bansal	Professor and In Charge
Ms. Nishi Sharda	Scientist Grade I
Mr. Baljinder Singh	Technical Assistant

Intellectual Property Rights Cell

Dr. Anand Sharma	Professor and In Charge
Mr. Chandan Chandna	Technical Supervisor Gr. I/ Scientist Gr. I

Technical Cell

Dr. Maneesh	Technical Supervisor Gr. I/ Scientist Gr. I
Mr. Neeraj Rohilla[a]	Technical Assistant

Academic & Examination Section

Lipton Sharma	Data Processing Assistant
Govindaraj G.	Junior Technical Assistant (Audio Visual)

Engineering Section

Mr. Ajay K. Sharma	Assistant Engineer
Mr. Major Singh	Assistant Engineer
Mr. T. P. Singh	Junior Engineer
Mr. Kamal Kishore	Sub-overseer

a On lien. Relieved March 12, 2019 on technical resignation | b Relieved on February 5, 2019.

LIST OF EMPLOYEES : ADMINISTRATIVE STAFF

Name	Designation
Wg. Cdr. PJP Singh Waraich (Retd.)	Registrar[c] (till 13.06.2018)
Prof. Prabha Garg	Registrar (Officiating) (14.06.2018-14.09.2018)
Dr. Anil Kumar Angrish	Registrar (Officiating) (15.09.2018-23.09.2018)
Prof. Anand Sharma	Registrar (Officiating) (24.09.2018-25.09.2018)
Mr. J K Chandel	Registrar (Officiating) (26.09.2018-07.10.2018)
Dr. Anil Kumar Angrish	Registrar (Officiating) (08.10.2018-29.10.2018)
Mr. J K Chandel	Registrar (Officiating) (30.10.2018-25.01.2019)
Dr. A S Sandhu	Registrar (Officiating) (25.01.2019-31.03.2019)
Sh. Jitender Kumar Chandel	Deputy Registrar (Finance & Accounts Section)
Mr. Manoj Tiwari	Asstt. Registrar (Establishment)
Mr. Vishal Kumar	Section Officer (Finance & Accounts)[d]
Sh. Vikram Singh	Section Officer (Administration Section)
Mr. Ranbir Singh Kanwar	Security Supervisor (Academics & Examination Section)
Ms. Prakriti Aggarwal	Section Officer (Academics & Examination Section)
Mr. Kultar Singh Saini	Stenographer Gr.B (Pharmaceutical Management)
Mr. Deepraj	Stenographer Gr.B (Recruitment Cell)
Mr. Manoj Kumar Sood	Stenographer Gr.C (Registrar's Office)
Mr. Binay Kumar Sinha	Stenographer Gr.C (Establishment Section)
Mrs. Yogita	Stenographer Gr.C (Medicinal Chemistry)
Mrs. Nisha Sharma	Stenographer Gr.C (Academics & Examination Section)
Mr. Lalit Sood	Stenographer Gr.C (Director's Office, Technical Cell & NP)
Mrs. Uma	Stenographer Gr.C (Pharmacology & Toxicology)
Mr. Ashu Kumar	Stenographer Gr.C (Establishment Section)
Mr. Anil Gupta	Store Keeper (Engineering Section - Stores)
Mr. S.U.S.Ramesh	Store Keeper (Stores & Purchase Section)
Mr. Jairaj Meena	Store Keeper (Stores & Purchase Section)
Mr. Nityanand Gahan	Assistant Gr.I (Finance & Accounts Section)
Mrs. Sukhwinder Kaur	Assistant Gr.I (Establishment Section)
Ms. Vijay Kumari Sharma	Assistant Gr.II (Biotechnology)
Ms. Dimple Sohal	Assistant Gr.II (Finance & Accounts Section)
Mr. Baldev Raj Bains	Data Entry Operator (Dean's Office)
Mr. Geeta Prasad Nautiyal	Data Entry Operator (Stores & Purchase Section)
Mr. Pardeep Kumar Verma	Data Entry Operator (Placement Cell, Management Building)
Ms. Promila Thakur	Junior Hindi Translator (Hindi Cell)
Sh. Dheeraj Bhardwaj	Guest House Incharge (Guest House)
Mr. Arun Gautam	Assistant Gr.III (Stores & Purchase Section)
Mr. Mohinder Singh Dhiman	Assistant Gr.III (Finance & Accounts Section)
Ms. Usha Rani	Assistant Gr.III (Registrar Office)
Ms. Beena Negi	Receptionist-cum-Telephone Operator (Reception-Admn. Section)
Mr. Kuldip Singh Chouhan	Receptionist-cum-Telephone Operator (Reception/Exchange)
Mrs. Meena	Stenographer Gr. D (Pharmacy Practice)
Ms. Meenakshi	Stenographer Gr. D (Administration Section)
Ms. Aarti Chhetri	Stenographer Gr. D (Pharmaceutics)
Mr. Sunil Kumar Pandey	Hindi Typist (Fianance & Accounts Section)
Sh. Gagandeep Singh	Assistant Gr.III (Administration Section)

c Relieved on July 31, 2018 | d Relieved on July 25, 2018

Annual Report 2018-19
नाईपर में राजभाषा गतिविधियाँ
(2018–19)

❖ **राजभाषा पुरस्कार**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर), एस.ए.एस. नगर को ट्राईसिटी में वर्ष 2016–17 के लिए उत्पादन, प्रशिक्षण एवं अनुसंधान संस्थान की श्रेणी में राजभाषा के क्षेत्र में सराहनीय कार्य करने हेतु तृतीय राजभाषा पुरस्कार से पुरस्कृत किया गया। यह पुरस्कार नगर राजभाषा कार्यान्वयन समिति (नराकास) द्वारा दिनांक 01–08–2018 को टैगोर थियेटर, चण्डीगढ़ में आयोजित वार्षिक राजभाषा पुरस्कार वितरण समारोह के दौरान सुश्री मधु महाजन, प्रधान मुख्य आयकर आयुक्त एवं अध्यक्ष, नराकास, चण्डीगढ़ द्वारा प्रदान किया गया। यह पुरस्कार संस्थान का प्रतिनिधित्व कर रही डॉ. प्रभा गर्ग, कार्यवाहक कुलसचिव, डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी एवं सुश्री प्रीमिला ठाकुर, कनिष्ठ हिन्दी अनुवादक ने प्राप्त किया।

❖ **राजभाषा निरीक्षण**

औषध विभाग, रसायन एवं उर्वरक मंत्रालय, भारत सरकार के राजभाषा अनुभाग द्वारा दिनांक 13 से 15 जून 2018 को राजभाषा निरीक्षण किया गया। श्रीमती किरण चौहान, सहायक निदेशक (राजभाषा), औषध विभाग एवं उनकी टीम द्वारा संस्थान के हिन्दी अनुभाग के साथ साथ विभिन्न अनुभागों तथा हिन्दी पुस्तकालय का निरीक्षण किया गया। राजभाषा टीम ने संस्थान में हो रहे राजभाषा कार्यों एवं गतिविधियों की सराहना की और संस्थान में राजभाषा के क्षेत्र में निरंतर प्रयासरत रहने को कहा। निदेशक प्रो. रघुराम राव अक्किनेपल्ली द्वारा श्रीमती किरण चौहान, सहायक निदेशक (राजभाषा) औषध विभाग को संस्थान की राजभाषा रिपोर्ट भी सौंपी गई।

❖ **राजभाषा कार्यान्वयन समिति की बैठक :**

मंत्रालय द्वारा निर्धारित लक्ष्यों के अनुसार संस्थान में प्रत्येक मिताही में राजभाषा कार्यान्वयन की बैठक का आयोजन किया जाना अपेक्षित है। असी श्रृंखला में संस्थान में वर्ष 2018–19 में राजभाषा कार्यान्वयन समिति की तीन बैठकों का आयोजन किया गया। यह बैठकें 25 मई 2018, 23 अक्टूबर 2018 तथा 26 मार्च 2019 को आयोजित की गई। इन सभी बैठकों की अध्यक्षता संस्थान के निदेशक एवं राजभाषा कार्यान्वयन समिति के अध्यक्ष प्रो. रघुराम राव अक्किनेपल्ली ने की। इन बैठकों में संस्थान में राजभाषा गतिविधियों, कार्यान्वयन, प्रचार– प्रसार, प्रयोग एवं प्रगति पर चर्चा की गई। उक्त बैठकों में भारत सरकार के राजभाषा वार्षिक कार्यक्रम द्वारा निर्धारित लक्ष्यों की प्राप्ति तथा संस्थान में इसके परिपालन हेतु चर्चा की जाती है।

❖ **नाईपर में हिन्दी पखवाड़ा संपन्न**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर), एस.ए.एस. नगर (मोहाली) में 01 से 14 सितम्बर तक राजभाषा के प्रचार–प्रसार के लिए 'हिन्दी पखवाड़ा' का आयोजन किया गया। हिन्दी पखवाड़ा के आयोजन का मुख्य उद्देश्य संस्थान में हिन्दी भाषा का प्रचार–प्रसार तथा राजभाषा के प्रयोग को अधिक से अधिक प्रोत्साहित करना है।

01 सितम्बर से प्रारंभ हुए हिन्दी पखवाड़ा के दौरान 05 विभिन्न प्रतियोगिताओं जैसे श्रुतलेख, अंग्रेजी शब्दों का हिन्दी अनुवाद, स्वरचित कविता वाचन, चित्र से पंक्तियों तक तथा अंताक्षरी प्रतियोगिता में नाईपरवासियों ने बढ़–चढ़ कर अपनी सहभागिता निभाई।

14 सितम्बर 2018 को आयोजित हिन्दी पखवाड़ा के समापन समारोह की अध्यक्षता डॉ. उपेन्द्र पाण्डेय, चीफ, न्यूज़ ब्यूरो, हिन्दी प्रकाशन, दैनिक ट्रिब्यून,

चण्डीगढ़ ने की। अपने विचार रखते हुए उन्होंने कहा कि हमारी राष्ट्रभाषा हिन्दी है तो हमें हिन्दी दिवस मनाने की क्या ज़रूरत हैं। हिन्दी हमारी राष्ट्रभाषा है और स्वतः ही इसके प्रति हमारा दायित्व बनता है कि हम दैनिक दिनचर्या एवं बोलचाल की भाषा में हिन्दी का प्रयोग करें। उन्होंने बताया कि संयुक्त राष्ट्र संघ में अपने देश की राजभाषा हिन्दी को बनाने का प्रयास किया जा रहा है। वहाँ हिन्दी बुलेटिन प्रसारित किये जाते हैं तो हम भारतवासियों को हिन्दी का प्रयोग करने में हिचक क्यों होती है। हिन्दी का प्रयोग करने में हमें गर्व होना चाहिए। निदेशक प्रो. रघुराम राव अक्किनेपल्ली ने उपस्थित सभी नाईपरवासियों से कहा कि सबको जोड़कर रखने वाली भाषा हिन्दी है। हिन्दी को सम्मान देने एवं बोलचाल की भाषा में बढ़– चढ़ कर हिन्दी का प्रयोग करने की अपील की तथा इसके साथ ही कहा कि अपनी भाषा में सरल शब्दों का प्रयोग करें ताकि शब्दों का अर्थ आसानी से समझ जा सके।

संस्थान के कार्यवाहक कुलसचिव डॉ. प्रभा गर्ग ने मंत्रालय द्वारा प्राप्त हिन्दी दिवस का संदेश सबके समक्ष प्रस्तुत किया।

डॉ. सविता सिंह, कार्यकारी हिन्दी अधिकारी एवं वैज्ञानिक ने वर्ष 2017–18 के दौरान संस्थान का राजभाषा प्रगति–प्रतिवेदन प्रस्तुत किया। डॉ. सिंह ने यह भी बताया कि संस्थान को नगर राजभाषा कार्यान्वयन समिति (नराकास) द्वारा 01.08.2018 को आयोजित राजभाषा वार्षिक पुरस्कार वितरण समारोह के उत्पादन/प्रशिक्षण/शिक्षण संस्थानों की श्रेणी में पुरस्कार प्राप्त हुआ है।

हिन्दी पखवाड़ा के समापन कार्यक्रम के दौरान विभिन्न हिन्दी प्रतियोगिताओं के विजयी प्रतिभागियों को मुख्य अतिथि, निदेशक एवं कार्यवाहक कुलसचिव द्वारा नगद पुरस्कार तथा प्रमाण–पत्र प्रदान किये गए तथा हिन्दी में सराहनीय कार्य करने के लिए अधिकारी वर्ग में श्री मनोज तिवारी, सहायक कुलसचिव (स्थापना), कर्मचारी वर्ग में श्री सतेन्द्र रावत, डाटा प्रोसेसिंग सहायक तथा कर्मचारी (गैर हिन्दी भाषी) वर्ग में श्री शांताराम भदे, तकनीकी सहायक को भी प्रशंसा पुरस्कार से सम्मानित किया गया।

समापन कार्यक्रम में 100 से ज्यादा लोगों ने भाग लिया जिसमें नाईपर के संकाय सदस्य, अधिकारीगण, कर्मचारीगण तथा विद्यार्थीगण उपस्थित थे। कार्यक्रम का सफल संचालन श्री मनोज तिवारी, सहायक कुलसचिव (स्थापना) ने किया। संस्थान में आयोजित हिन्दी पखवाड़ा, हिन्दी पखवाड़ा आयोजन समिति के मार्गदर्शन में हिन्दी कक्ष द्वारा आयोजित किया गया।

❖ **हिन्दी कार्यशालाएं :**

13 अप्रैल 2018

13 अप्रैल 2018 को नाईपर, एस.ए.एस. नगर में हिन्दी कक्ष द्वारा हिन्दी कार्यशाला का आयोजन किया गया। इस कार्यशाला में संस्थान के अधिकारियों, कर्मचारियों एवं विद्यार्थियों ने बढ़–चढ़ कर भाग लिया। संसथान में राजभाषा अथवा हिन्दी का कार्यालयीन कार्य में अधिक से अधिक प्रयोग करने तथा राजभाषा के प्रचार–प्रसार के लिए हिन्दी कार्यशाला का आयोजन करवाया जाता है। इस कार्यशाला में दो प्रतियोगिताओं का आयोजन किया गया जिसमें अंग्रेजी टिप्पणियों/ शब्दों का हिन्दी अनुवाद तथा चित्र से पंक्तियों तक प्रतियोगिताएं थीं। दोनों प्रतियोगिताओं में लगभग 30 से 35 प्रतिभागियों ने भाग लिया। अंग्रेजी टिप्पणियों/ शब्दों का हिन्दी अनुवाद में प्रथम स्थान सुश्री विजय शर्मा, सहायक, द्वितीय स्थान सुश्री प्रीति, तकनीकी सहायक तथा तृतीय स्थान डॉ. बलकार सिंह, वैज्ञानिक ने प्राप्त किया। इस प्रतियोगिता की निर्णायक डॉ. सुषमा सिंह, सह प्राध्यापक थीं। दूसरी प्रतियोगिता चित्र से पंक्तियों तक थी जिसमें प्रथम स्थान सुश्री मनीषा शर्मा, छात्रा, द्वितीय स्थान श्री विष्णु कुमार शर्मा, कनिष्ठ तकनीकी सहायक तथा तृतीय स्थान सुश्री शिखा सिंह ने प्राप्त किया। इस प्रतियोगिता के निर्णायक

श्री मनोज तिवारी, सहायक कुलसचिव (स्थापना) थे।

विजयी प्रतिभागियों को डॉ. सुषमा सिंह तथा श्री मनोज तिवारी द्वारा क्रमशः रू 500/–, रु 300/– एवं रू 200/– का नगद पुरस्कार एवं प्रमाणपत्र से सम्मानित किया गया।

कार्यशाला के समापन अवसर पर डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी ने उपस्थित नाईपरवासियों का आभार जताया तथा विजेताओं को बधाई दी।

कार्यशाला में अधिकारीगण, कर्मचारीगण, तथा विद्यार्थीगण सहित लगभग 30 से 35 लोग उपस्थित थे।

❖ 07 दिसम्बर 2018

07 दिसम्बर 2018 को नाईपर, एस.ए.एस. नगर में हिन्दी कार्यशाला का आयोजन किया गया। इस कार्यशाला में संस्थान के कर्मचारियों एवं छात्रों ने बढ़– चढ़ कर भाग लिया। संस्थान में राजभाषा के कार्य को प्रोत्साहित एवं प्रचार–प्रसार के लिए हिन्दी कार्यशाला का आयोजन करवाया जाता है। इस कार्यशाला में दो प्रतियोगिताओं का आयोजन किया गया जिसमें श्रुतलेख तथा तत्काल व्याख्यान प्रतियोगिता का आयोजन किया गया जिसमें लगभग 20 से 25 प्रतिभागियों ने भाग लिया। श्रुतलेख प्रतियोगिता में प्रथम स्थान सुश्री स्नेहा श्योकन्द, छात्रा, द्वितीय स्थान श्री दुर्गेश कुमार द्विवेदी, छात्र तथा तृतीय स्थान सुश्री विजय शर्मा, सहायक, ने प्राप्त किया। इस प्रतियोगिता की निर्णायक डॉ. मीनाक्षी जैन, वैज्ञानिक थीं। दूसरी प्रतियोगिता तत्काल व्याख्यान थी जिसमें प्रथम स्थान सुश्री सुश्री विजय शर्मा, सहायक, द्वितीय स्थान सुश्री इकजोत सोढी, छात्रा तथा तृतीय स्थान डॉ. मनीष कुमार गोयल, तकनीकी सहायक ने प्राप्त किया। इस प्रतियोगिता के निर्णायक प्रो. प्रतिपाल सिंह, प्राध्यापक थे।

विजयी प्रतिभागियों को प्रो. प्रतिपाल सिंह, प्राध्यापक द्वारा क्रमशः रू 500/–, रु 300/– एवं रू 200/– का नगद पुरस्कार एवं प्रमाणपत्र से सम्मानित किया गया।

कार्यशाला के समापन अवसर पर डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी ने उपस्थित नाईपरवासियों का आभार जताया तथा विजेताओं को बधाई दी।

❖ 13 फरवरी 2019

13 फरवरी 2019 को संस्थान में हिन्दी कार्यशाला का आयोजन किया गया जिसमें संस्थान के अधिकारियों, कर्मचारियों एवं छात्रों ने भाग लिया। संस्थान में राजभाषा के कार्य को बढ़ावा देने एवं प्रचार–प्रसार के लिए हिन्दी कार्यशाला का आयोजन किया जाता है। इस कार्यशाला में दो प्रतियोगिताओं का आयोजन किया गया जिसमें अंग्रेजी टिप्पणियों का हिन्दी अनुवाद तथा स्वरचित कविता वाचन प्रतियोगिता थी। अंग्रेजी टिप्पणियों का हिन्दी अनुवाद में प्रथम स्थान डॉ. बलकार सिंह, वैज्ञानिक द्वितीय स्थान श्री मनोज तिवारी, सहायक कुलसचिव (शैक्षणिक एवं परीक्षा तथा तृतीय स्थान डॉ. संतोष कुमार गिरी, तकनीकी सहायक ने प्राप्त किया। इस प्रतियोगिता की निर्णायक डॉ. सुषमा सिंह थीं। दूसरी प्रतियोगिता स्वरचित कविता वाचन थी जिसमें प्रथम स्थान सुश्री सुश्री कृतिका गोयल, छात्रा, द्वितीय स्थान डॉ. आशीष चौहान, तकनीकी सहायक तथा तृतीय स्थान मो यामिन सैफी, कनिष्ठ तकनीकी सहायक ने प्राप्त किया। इस प्रतियोगिता के निर्णायक डॉ. संयोग जैन, सह प्राध्यापक थे। विजयी प्रतिभागियों को प्रो. रघुराम राव अक्किनेपल्ली, निदेशक महोदय द्वारा क्रमशः रू 500/–, रु 300/– एवं रू 200/– का नगद पुरस्कार एवं प्रमाणपत्र से सम्मानित किया गया।

कार्यशाला के समापन अवसर पर डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी ने उपस्थित

नाईपरवासियों का आभार जताया तथा विजेताओं को बधाई दी।

❖ **नगर राजभाषा कार्यान्वयन समिति (नराकास), चण्डीगढ़ की बैठकें:**

चण्डीगढ़ नगर राजभाषा कार्यान्वयन समिति की बैठक दिनांक 20.06.2018 को चण्डीगढ़ ज्यूडिशियल अकादमी, सैक्टर 43 डी, चण्डीगढ़ में आयोजित की गई। बैठक की अध्यक्षता सुश्री मधु महाजन, प्रधान मुख्य आयकर आयुक्त एवं अध्यक्ष, नराकास ने की जिसमें केन्द्र सरकार के विभागों, संगठनों तथा संस्थानों के करीब 90 से अधिक प्रतिनिधियों ने भाग लिया। इस बैठक में राजभाषा विभाग का प्रतिनिधित्व श्री प्रमोद कुमार शर्मा, उपनिदेशक, क्षेत्रीय कार्यान्वयन कार्यालय ने किया। नाईपर में से इस बैठक का प्रतिनिधित्व डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी ने किया।

नगर राजभाषा कार्यान्वयन समिति की द्वितीय छमाही बैठक 27.11.2018 को चण्डीगढ़ ज्यूडिशियल अकादमी, सैक्टर 43 डी, चण्डीगढ़ में आयोजित की गई। बैठक की अध्यक्षता श्री विनय कुमार झा, प्रधान मुख्य आयकर आयुक्त एवं अध्यक्ष, नराकास ने की जिसमें केन्द्र सरकार के विभागों, संगठनों तथा संस्थानों के करीब 80 से अधिक प्रतिनिधियों ने भाग लिया। इस बैठक में राजभाषा विभाग से श्री प्रमोद कुमार शर्मा, उपनिदेशक भी उपस्थित थे। नाईपर में से इस बैठक का प्रतिनिधित्व डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी एवं सुश्री प्रोमिला ठाकुर, कनिष्ठ हिन्दी अनुवादक ने किया।

❖ **हिन्दी टंकण प्रशिक्षण :**

संस्थान से नियमित रूप में कर्मचारियों को हिन्दी टंकण प्रशिक्षण के लिए भेजा जाता है। वर्ष फरवरी 2019 में श्री अमनदीप जिंदल, प्रोग्रामर को हिन्दी टंकण के लिए नामित किया गया है।

❖ **हिन्दी पुस्तकालय:**

वर्ष 2018–19 में हिन्दी पुस्तकालय के लिए आबंटित बजट रु 10000/– की हिन्दी पुस्तकें खरीदी गई हैं जिनकी संख्या अब 1817 हो गई है। पुस्तकालय में धार्मिक ग्रंथों के अलावा हिन्दी साहित्य, विज्ञान जगत, चिकित्सा, अनेक शब्दकोश, बच्चों के लिये पुस्तकों, खेल से संबंधित अनेकों रोचक किताबें उपलब्ध हैं।

❖ **राजभाषा की धारा 3(3) का अनुपालन**

मंत्रालय के सतत् मार्गदर्शन एवं निर्देशन में संस्थान में राजभाषा की धारा 3(3) का अनुपालन भी किया जाता है। इसके अलावा हिन्दी पत्राचार भी शत् प्रतिशत रहे, इसका भी पूरा ध्यान रखा जाता है।

➜ इसके अतिरिक्त दिनांक 06.03.2019 को नराकास, चण्डीगढ़ द्वारा नेशनल इंश्योरेंस कंपनी लि., क्षेत्रीय कार्यालय, चण्डीगढ़ के सहयोग से होटल जी.के. इंटरनेशनल, सैक्टर 35, चण्डीगढ़ में राजभाषा अधिकारी सेमिनार का आयोजन किया गया था जिसमें संस्थान से डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी ने भाग लिया।

➜ इमटैक, सैक्टर 39, चण्डीगढ़ में 06 फरवरी 2019 को हिन्दी में वैज्ञानिक सेमिनार का आयोजन किया गया। इस सेमिनार में श्री विष्णु कुमार शर्मा, क. तकनीकी सहायक ने भाग लिया। श्री विष्णु के सेमिनार का विषय 'फार्माकोइनफरमैटिक्स इन ड्रग डिस्कवरी' था। सेमिनार में भाग लेने वाले समस्त प्रतिभागियों को प्रमाण पत्र प्रदान किए गए।

नाईपर, एस.ए.एस. नगर को ट्राईसिटी में वर्ष 2016–17 के लिए उत्पादन, प्रशिक्षण एवं अनुसंधान संस्थान की श्रेणी में राजभाषा के क्षेत्र में सराहनीय कार्य करने हेतु राजभाषा पुरस्कार से पुरस्कृत किया गया। यह पुरस्कार नराकास द्वारा दिनांक 01–08–2018 वार्षिक राजभाषा पुरस्कार वितरण समारोह के दौरान सुश्री मधु महाजन, प्रधान मुख्य आयकर आयुक्त एवं अध्यक्ष, नराकास, चण्डीगढ़ द्वारा प्रदान किया गया। पुरस्कार प्राप्त करते हुए डॉ. प्रभा गर्ग, कार्यवाहक कुलसचिव, डॉ. सविता सिंह, कार्यकारी राजभाषा अधिकारी एवं सुश्री प्रौमिला ठाकुर, कनिष्ठ हिन्दी अनुवादक।

निदेशक नाईपर प्रो. राव श्रीमती किरण चौहान, सहायक निदेशक (राजभाषा), औषध विभाग को संस्थान की राजभाषा रिपोर्ट सौंपते हुए।

हिन्दी पखवाड़ा 2018 के दौरान 'अंग्रेजी शब्दों का हिन्दी अनुवाद' प्रतियोगिता में भाग लेते प्रतिभागीगण। प्रथम पंक्ति में दांए से निदेशक नाईपर प्रो. रघुराम राव अक्किनेपल्ली एवं अध्यक्ष, हिन्दी पखवाड़ा–2018 समिति प्रो. प्रमिल तिवारी।

हिन्दी पखवाड़ा 2018 के समापन कार्यक्रम के दौरान विजयी प्रतिभागियों को पुरस्कार एवं प्रमाण पत्र देते हुए निदेशक प्रो. रघुराम राव अक्किनेपल्ली।

13 अप्रैल 2018 को आयोजित हिन्दी कार्यशाला के दौरान विजयी प्रतिभागी को पुरस्कार प्रदान करते हुए श्री मनोज तिवारी, सहायक कुलसचिव।

07 दिसम्बर 2018 को आयोजित हिन्दी कार्यशाला के दौरान उपस्थित अधिकारीगण एवं प्रतिभागी।

13 फरवरी 2019 को आयोजित हिन्दी कार्यशाला में प्रतिभागियों को संबोधित करते प्रो. रघुराम राव अक्किनेपल्ली, निदेशक, नाईपर।

Plantation Drives

MEMBERS, BOARD OF GOVERNORS

S. No.	NAME	DESIGNATION
1.	**Dr. V.M. Katoch** Former Secretary Department of Health Research	Chairperson
2.	**Prof. Raghuram Rao Akkinepally** (w.ef. 12.05.2017) Director, NIPER, SAS Nagar	Member (ex officio)
3.	**Sh. Rajneesh Tingal** Joint Secretary in charge of pharmaceutical industries in the concerned Ministry or Department, Govt. of India	Member (ex officio)
4.	**Sh. D.K. Tiwari** Secretary, Technical Education and Industrial Training Govt. of Punjab	Member (ex officio)
5.	**Ms. Alka Tiwari** Additional Secretary & Financial Advisor Department of Fertilizers Ministry of Chemicals & Fertilizers, Govt. of India	Member (ex officio)
6.	**Dr. S. Eswara Reddy** Drug Controller General of India, Ministry of Health & Family Welfare, Govt. of India	Member (ex officio)
7.	**Prof. A.P. Mittal** Member Secretary, All India Council of Technical Education	Member (ex officio)
8.	**Prof. Ashwini Kumar Nangia** Director, CSIR National Chemical Laboratory Pune 411 008	Member
9.	**Sh. Deepnath Roy Chowdhury** President, Indian Drugs Manufacturers Association	Member (ex officio)
10.	**Prof. M.D. Karvekar**	Member (A representative of Pharmacy Council of India)
11.	**Mr A. Vaidheesh** President & Managing Director, Sanofi India Limited & Vice President, South Asia for Sanofi Group Organization of Pharmaceutical Producers of India	Member (ex officio)
12.	**Prof. Anil K Gupta** Centre for Management in Agriculture, IIM, Ahmedabad	Member
13.	**Prof. R. S. Verma** IIT Madras	Member

S. No.	NAME	DESIGNATION
14.	**Dr. Vijayalaxmi Deshmane** Oncologist, Professor and Head Kidwai Memorial Institute of Oncology, Karnataka.	Member
15.	**Dr. P.C. Rai** Former CMO, NTPC, Ministry of Power	Member
16.	**Prof. M.R. Doreswamy** Educationist	Member
17.	**Dr A.S. Sandhu** Officiating Registrar, NIPER, SAS Nagar	Secretary

MEMBERS, ACADEMIC PLANNING AND DEVELOPMENT COMMITTEE (APDC)

S. No.	NAME	DESIGNATION
1.	**Prof. Bhushan Patwardhan** Professor & Director Interdisciplinary School of Health Sciences, Savitribai Phule Pune University	Chairperson
2.	**Prof. Raghuram Rao Akkinepally** Director, NIPER, SAS Nagar	Member (ex officio)
3.	**Prof. Arvind Kumar Bansal** Department of Pharmaceutics, NIPER, SAS Nagar	Member (One Professor of the Institute nominated by the Board in consultation with the Director)
4.	**Prof. H. Ila** Hindustan Lever Research Professor, New Chemistry Unit, JNCASR, Bangalore	Member
5.	**Dr. D.K. Dikshit** Ex-Scientist, CDRI, Lucknow	Member
6.	**Prof. Prabhjeet Singh** Guru Nanak Dev University, Amritsar	Member
7.	**Prof. N. Udupa** Manipal Institute of Pharmaceutical Sciences, Manipal, Karnataka	Member
8.	**Prof. Alok Bhattacharya** School of Life Sciences	Member
9.	**Dr. (Mrs.) Vandana B. Patravale** Institute of Chemical Technology (ICT), Mumbai	Member
10.	**Prof. Rahul Jain** Dean, NIPER, SAS Nagar	Member Secretary (ex officio)

MEMBERS, SENATE

S. No.	NAME	DESIGNATION
1.	**Prof. Raghuram Rao Akkinepally** Director, NIPER, SAS Nagar	Chairperson (ex officio)
2.	**Prof. Rahul Jain** Dean, NIPER, SAS Nagar	Member (ex officio)
3.	**Prof. P. P. Singh** Department of Pharmacology and Toxicology, NIPER, SAS Nagar	Member (Five Professors of the Institute, nominated by the Chairperson in consultation with the Director, by rotation)
4.	**Prof. S. S. Sharma** Department of Pharmacology and Toxicology, NIPER, SAS Nagar	Member (Five Professors of the Institute, nominated by the Chairperson in consultation with the Director, by rotation)
5.	**Prof. S. M. Jachak** Department of Natural Products NIPER, SAS Nagar	Member (Five Professors of the Institute, nominated by the Chairperson in consultation with the Director, by rotation)
6.	**Prof. I. P. Singh** Department of Natural Products NIPER, SAS Nagar	Member (Five Professors of the Institute, nominated by the Chairperson in consultation with the Director, by rotation)
7.	**Prof. Prabha Garg** Department of Pharmacoinformatics NIPER, SAS Nagar	Member (Five Professors of the Institute, nominated by the Chairperson in consultation with the Director, by rotation)
8.	**Dr. Neelam R. Prakash** Department of Electronics & Communications Engineering PEC University	External Member (Engineering) (Three persons not being employees of the Institute, nominated by Chairperson in consultation of the Director, from among educationists of repute, one each from the fields of science, engineering & humanities and one of them shall be either from the SC or from ST)
9.	**Prof. Y. K. Chawla** Ex. Director, PGI, Chandigarh	External Member (Science) (Three persons not being employees of the Institute, nominated by Chairperson in consultation of the Director, from among educationists of repute, one each from the fields of science, engineering & humanities and one of them shall be either from the SC or from ST)

S. No.	NAME	DESIGNATION
10.	**Prof. Ronki Ram** Department of Political Sciences Panjab University, Chandigarh	External Member (Humanities) (Three persons not being employees of the Institute, nominated by Chairperson in consultation of the Director, from among educationists of repute, one each from the fields of science, engineering & humanities and one of them shall be either from the SC or from ST)
11.	**Dr. G. B. Jena** Department of Pharmacology & Toxicology, NIPER, SAS Nagar	Member (One Associate Professor by rotation)
12.	**Dr. Chaaya Iyengar** Department of Biotechnology NIPER, SAS Nagar	Member (One Assistant Professor by rotation)
13.	**Prof. Arvind Kumar Bansal** Department of Pharmaceutics NIPER, SAS Nagar	Member (Head of Department, unrepresented)
14.	**Prof. Anand Sharma** Department of Pharmaceutical Management, NIPER, SAS Nagar	Member (Head of Department, unrepresented)
15.	**Prof. P. Tiwari** Department of Pharmacy Practice NIPER, SAS Nagar	Member (Head of Department, unrepresented)
16.	**Prof. Saranjit Singh** Department of Pharmaceutical Analysis, NIPER, SAS Nagar	Member (Head of Department, unrepresented)
17.	**Prof. U. C. Banerjee** Department of Pharmaceutical Technology, NIPER, SAS Nagar	Member (Head of Department, unrepresented)
18.	**Dr. A.S. Sandhu** Officiating Registrar NIPER, SAS Nagar	Secretary (ex officio)

MEMBERS, FINANCE COMMITTEE

S. No.	NAME	DESIGNATION
1.	**Prof. Raghuram Rao Akkinepally** Director, NIPER, SAS Nagar	Chairperson (ex officio)
2.	**Prof. Rahul Jain** Dean, NIPER, SAS Nagar	Member (ex officio)
3.	Director (Finance)/ Dy. Financial Advisor of DCPC, GoI	Member (ex officio)
4.	**Sh. Kumar Abhay, IAAS** Financial Advisor PGIMER, Chandigarh	Member (Three persons nominated by the Board to represent education, research and industry)
5.	**Sh. Raj Kumar Droch** Deputy Financial Advisor, CSIR & Ex-FAO, Institute of Microbial Technology, Chandigarh	Member (Three persons nominated by the Board to represent education, research and industry)
6.	**Sh. Shirish Ghoge** Ex. Director, Sanofi & Abbott	Member (Three persons nominated by the Board to represent education, research and industry)
7.	**Dr. A.S. Sandhu** Officiating Registrar NIPER, SAS Nagar	Member Secretary (ex officio)

MEMBERS, LABORATORY SERVICES BUILDINGS & WORKS COMMITTEE (LSBWC)

S. No.	NAME	DESIGNATION
1.	**Prof. Raghuram Rao Akkinepally** Director, NIPER, SAS Nagar	Chairperson (ex officio)
2.	**Prof. Rahul Jain** Dean, NIPER, SAS Nagar	Member (ex officio)
3.	**Er. P. S. Saini** Chief Engineer / Head of Engineering Wing, PGIMER, Chandigarh	Member (One nominee of the Board)
4.	Director (Finance) / Dy. Financial Advisor of DCPC, GoI or his nominee	Member
5.	An officer of CPWD not below the rank of Superintending Engineer to be nominated by the Ministry of Urban Development, Government of India, or his nominee not less than an Executive Engineer	Member
6.	One Professor of the Institute to be nominated by Board in consultation with Director of the Institute	Member
7.	Chief Maintenance Engineer of the Institute	Member (ex officio)
8.	**Dr. A.S. Sandhu** Officiating Registrar NIPER, SAS Nagar	Member Secretary (ex officio)

GRANT-IN-AID

Non-Plan Grant Received / Expenditure (2018-19			
Expenditure Head	**Grant-in-Aid Received (Rs. in Lakh)**	**Expenditure (Rs. in Lakh)**	**Remarks**
Salary and allowances	1600.00	2489.66	Excess met from IEBR of Institute
General	1300.00	1604.35	Excess met from IEBR of Institute
TOTAL	2900.00		

EXTRAMURAL FUNDING

Project No.	Principal Investigator	Funding Agency	Receipts (Rs.)
GP-252	Dr U C Banerjee	DBT	4057000
GP-407	Dr. Ipsita Roy	SERB	1000000
GP-410	Dr. Ipsita Roy	DBT	1206501
GP-411	Dr. Inder Pal Singh	DBT	739010
GP-413	Dr. K B Tikoo	SERB	1000000
GP-414	Dr. G B Jena	SERB	500000
GP-416	Dr. Sankar K Guchait	SERB	800000
GP-417	Dr. Abhay Sangamwar	DST	1043200
GP-418	Dr. Chaaya Iyengar	DBT	500000
GP-419	Dr. Chaaya Iyengar	DBT	905952
GP-420	Dr. Inder Pal Singh	DBT	2751000
GP-421	Dr. Sanyog Jain	DST	516600
GP-423	Dr. Chaaya Iyengar	SERB	300000
GP-424	Dr. Sanyog Jain	BIRAC	375000
GP-425	Dr. P V Bharatam	CSIR	744000
GP-427	Dr. J N Singh	DHR	774935
GP-429	Dr. A K Bansal	BIRAC	1193000
GP-430	Dr. Dipika Bansal	ICMR	646600
GP-431	Dr. Abhay H Pande	DBT	1814000
GP-432	Dr. J K Laha	CSIR	520667
GP-433	Dr U C Banerjee	DBT	1053200
GP-434	Dr. Dipika Bansal	ICMR	730600
GP-436	Mr. Chandan Chandna	NRDC	588000
GP-437	Dr. Abhay Sangamwar	DST	4551760
GP Dr PVB	Dr. P V Bharatam	DST	3731760
INSPIRE-7	Ms. Surbhi Soni	DST	388900
INSPIRE-8	Ms. Deepika Kathuria	DST	419238
CNF-145	Mr. Gopal Patel	NCCS Pune	93016
CNF156	Ms. Eshita Das	NCCS Pune	362484
CNF157	Ms. Preeti	NCCS Pune	362484
CNF-160	Dr. Ranjan Swamy	SERB	365177
CNF-162	Dr. Saima Malik	SERB	850000
CNF-163	Dr. Rohit Sharma	SERB	800000
CNF-165	Ms. Amanpreet Kaur	Lady Tata	250000
CNF-166	Ms Deepika Kathuria	DST	103500
CNF-167	Nallamothu Bhargavi	Lady Tata	150000
CNF-168	Mr. Chandan Malik	SERB	144355
CNF-169	Ms. Geeta Yadav	SERB	960000
SP-227	Dr. K B Tikoo	M/s Sivanary	638436

Consultancy services worth Rs 93,28,988/- were provided.

NIPER, SAS Nagar [Scientific, Sports and Cultural Meet-2019]

Marathon


ANNUAL SPORTS AND CULTURAL EVENT


INTRA - NIPER
ANNUAL SPORTS AND CULTURAL EVENT
SPANDAN


INTRA - NIPER


INTRA - NIPER
ANNUAL SPORTS AND CULTURAL EVENT
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INTRA - NIPER


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SPANDAN


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ANNUAL SPORTS AND CULTURAL EVENT
SPANDAN


INTRA - NIPER
ANNUAL SPORTS AND CULTURAL EVENT
SPANDAN

Glimpses of Three Days 6th Biennial International Conference on 'New Development in Drug Discovery from Natural Products and Traditional Medicines (DDNPTM-2018)" (November 15-17, 2018)

SEMINARS / WORKSHOPS

ISPOR Student Educational Society NIPER SAS Nagar celebrated its
5th Annual Day (December 19, 2018)

International Symposium on "Biopharmaceutics and Drug Delivery:
An Industrial Perspective" (November 30, 2018)

Indian Technical and Economic Cooperation (ITEC) [2018-19]

Two Weeks Intensive Training Programme on "Recent Trends and Challenges in Regulation and Standardization of Herbal Drugs and Formulations" (August 6–16, 2018)

Two Weeks Intensive Training Programme on "Pharmaceutical Quality by Design: A Risk Based Approach" (September 4–14, 2018)

Two Weeks Intensive Training Programme on "Recent Trends & Challenges in Biopharmaceuticals" (October 3–13, 2018)

Intensive Training Program on "Advanced Analytical Techniques: Basic Principles and Application for Quality Assessment of Drugs and Pharmaceuticals" at NIPER, SAS Nagar (October 22–November 1, 2018)

Independence Day Celebration [2018]

Republic Day Celebration [2019]

Pledge Ceremonies

Anti-Terrorism Day
(May 21, 2018)

Vigilance Awareness Week
(October 29, 2018)

National Unity Day
(October 31, 2018)

Swachh Bharat Abhiyan
(August 31, 2018)

Swachh Bharat Abhiyan

Visits to Adopted Schools under Swachhta Pakhwara (September 14, 2018)

Teachers' Day 2018

International Yoga Day

A three-day Yoga Camp was organized on campus [June 19-21, 2018]

World Pharmacist Day

Essay Writing Competition on World Pharmacist Day (September 25, 2018)

AAPS Students Chapter Activity

AAPS NIPER Students Chapter Organizes Lecture on World Pharmacist Day
(September 25, 2018)

National Pharmacy Week

National Pharmacy Week (November 19-25, 2018)

Activities of National Service Scheme (NSS) and Societal Activities

Run for Unity on National Unity Day (October 31, 2018)

Ek Eint Shaheedon ke Naam (December 21, 2018)

Societal Outreach

Blood Donation Camp (September 16, 2018)

MR Vaccination Camp (June 8, 2018)

Seminar on Drug De-Addiction by Drug Controller of Punjab (January 9, 2019)

National Technology Day – May 11, 2018

H.E. Shri V.P. Singh Badhore, Governor Punjab, Chief Guest for this Session

Prof. K.S. Laddha, Institute of Chemical Technology, Mumbai, Delivery Technology Day Lecture

Pharmaceutical Industrial Trainings

Shri B. K Samantray Deputy Drug Controller, CDSCO with Director NIPER during visit to Technology Development Center (TDC) – Dosage Form

Inauguration of Training Programme at TDC Dosage Form

Student Activities

Student Activities

NIPER Mohali Alumni [Hyderabad Chapter]

NIPER Mohali alumni meet on March 09, 2019 in Hyderabad.

Annual Report 2018-19

लेखा–विवरण
STATEMENT OF ACCOUNTS
2018-19

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान
एस.ए.एस. नगर – 160 062

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH
S.A.S. NAGAR - 160 062

विषय–सूची

CONTENTS

निदेशक की रिपोर्ट (2018–2019)

माननीय सज्जनों

मुझे राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर) साहिबजादा अजीत सिंह नगर (मोहाली) का 31 मार्च 2019 को समाप्त हुए वर्ष के सम्प्रेक्षित लेखा खातों के विवरण प्रस्तुत करने में अपार हर्ष हो रहा है।

1. **चालू वर्ष की उपलब्धियाँ संक्षेप में**

   वर्ष के दौरान पूंजी निधि ₹ 21,714.33 लाख से घटकर ₹ 21,366.59 लाख हो गई है। ₹ 21,366.59 लाख राशि में स्थाई परिसम्पतियों पर ₹ 5,836.86 लाख खर्च किए गए और शेष ₹ 15,529.73 लाख बैंक खाते / अन्य चालू–परिसम्पतियों में जमा है।

2. **मूलभूत सुविधाएँ**

   वर्ष के दौरान ₹ 572.21 लाख से भवन निर्माण और विदेशी एवं देशी उपकरण खरीदे एवं स्थापित किए गए है।

3. **वार्षिक लेखा विवरण**

   वाणिज्यिक लेखा परीक्षा के प्रधान निदेशक तथा पदेन सदस्य, लेखा परीक्षा बोर्ड–II, भारतीय लेखा परीक्षा तथा लेखा विभाग, नई दिल्ली द्वारा जारी संस्थान के वर्ष 2018–19 के वार्षिक लेखों को पृथक लेखा परीक्षा रिपोर्ट (एस. ए. आर.) के साथ प्रस्तुत किया जा रहा है।

4. **आभार**

   मैं औषध विभाग के समर्पित प्रयत्नों की प्रशंसा करते हुए इसे रिकार्ड में लाना चाहता हूँ, जिन्होंने संस्थान को निरन्तर परिणाम प्राप्त करने में सहायता की है।

बोर्ड के लिए और उनकी तरफ से
(प्रो. अ. रघुराम राव)
निदेशक

DIRECTOR'S REPORT (2018-2019)

Gentlemen,

The Director takes great pleasure in presenting the Audited Statement of accounts of National Institute of Pharmaceutical Education & Research (NIPER), S.A.S. Nagar (Mohali) for the Financial year ending March, 2019.

1. **Current Year Outlook**

   During the year, Capital Fund Account has decreased to ₹ 21,366.59 Lakh from ₹ 21,714.33 Lakh. Out of ₹ 21,366.59 Lakh sum of ₹ 5,836.86 Lakh has been spent on the creation of fixed assets and ₹ 15,529.73 Lakh in the bank account / other current assets at the end of the period under report.

2. **Infrastructure Facilities**

   The Buildings, equipment both imported and indigenous & other assets to the tune of ₹ 572.21 Lakh have been procured and installed during the year.

3. **Annual Accounts**

   The Annual Accounts for the Financial year 2018-19 of the Institute alongwith the Separate Audit Report (SAR) issued by the Principal Director of Commercial Audit & Ex-Officio Member, Audit Board - II, Indian Audit & Accounts Department, New Delhi.

4. **ACKNOWLEDGMENT**

   The Director wishes to place on record the dedicated efforts of Department of Pharmaceuticals which helped the Institute to achieve consistent results.

For and on behalf of Board
(Prof. A. Raghuram Rao)
Director

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
तुलन–पत्र 31–03–2019 के अनुसार

(राशि रै में)

विवरण	अनुसूची	चालू वर्ष 2018-19	पिछले वर्ष 2017-16
समग्र/पूँजी निधि तथा देनदारी			
पूँजी निधि	1A - 1 C	77,79,25,210.02	88,93,75,768.43
निधि तथा अधिशेष	2	1.00	1.00
निर्धारित/बंदोबस्ती/समग्र निधि	3-3 H	1,11,39,49,900.27	1,06,39,66,484.80
परियोजना खाता	3 I	5,73,33,647.09	5,36,44,746.54
प्रतिभूति सहित ऋण तथा उधार	4	0.00	0.00
प्रतिभूति रहित ऋण तथा उधार	5	0.00	0.00
आस्थगित ऋण देनदारी	6	0.00	0.00
चालू देनदारी और प्रावधान	7	18,74,50,685.23	16,44,46,269.34
कुल		**2,13,66,59,443.61**	**2,17,14,33,270.11**
परिसम्पत्ति			
स्थायी परिसम्पत्ति – शुद्ध खण्ड	8	58,36,85,716.88	67,37,07,596.97
निवेश – निर्धारित/बंदोबस्ती निधि	9	96,66,01,168.08	98,27,20,779.48
निवेश – अन्य	10	0.00	0.00
चालू परिसम्पत्ति, ऋण, अग्रिम राशि आदि	11	58,63,72,558.65	51,50,04,893.66
विविध एवं आकस्मिक खर्चे	11A	0.00	0.00
कुल		**2,13,66,59,443.61**	**2,17,14,33,270.11**
महत्वपूर्ण लेखाकरण नीतियाँ	24		
आकस्मिक देनदारी और लेखों पर टिप्पणियाँ	25		

	सही/-	सही/-	सही/-
स्थान : एस.ए.एस. नगर	(जे.के. चंदेल)	(डॉ. ए. एस. संधू)	(प्रो. अ. रघुराम राव)
दिनांक : 24.05.2019	उप कुलसचिव (वित्त एवं लेखा)	कुलसचिव (कार्यवाहक)	निदेशक

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Schedule	Current Year 2018-19	Previous Year 2017-18
Corpus/Capital Fund and Liabilities			
Capital Fund	1A - 1 C	77,79,25,210.02	88,93,75,768.43
Reserve & Surplus	2	1.00	1.00
Earmarked/Endowment/Corpus Fund	3-3 H	1,11,39,49,900.27	1,06,39,66,484.80
Project Account	3 I	5,73,33,647.09	5,36,44,746.54
Secured Loans & Borrowings	4	0.00	0.00
Unsecured Loans & Borrowings	5	0.00	0.00
Deferred Credit Liabilities	6	0.00	0.00
Current Liabilities & Provisions	7	18,74,50,685.23	16,44,46,269.34
TOTAL		**2,13,66,59,443.61**	**2,17,14,33,270.11**
ASSETS			
Fixed Assets - Net Block	8	58,36,85,716.88	67,37,07,596.97
Investment - Earmaked/Endowment Fund	9	96,66,01,168.08	98,27,20,779.48
Investment -Others	10	0.00	0.00
Current Assets, Loans , Advances etc.	11	58,63,72,558.65	51,50,04,893.66
Miscellaneous Expenditure- Incidental	11A	0.00	0.00
TOTAL		**2,13,66,59,443.61**	**2,17,14,33,270.11**
Significant Accounting Policies	24		
Contingent Liabilities & Notes on Accounts	25		

	Sd/-	Sd/-	Sd/-
Place: S.A.S. Nagar	(Jitender. K. Chandel)	(Dr. A. S. Sandhu)	(Prof. A. Raghuram Rao)
Date: 24.05.2019	Deputy Registrar (F&A)	Registrar (Officiating)	Director

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को समाप्त हुए वर्ष के आय एवं व्यय का लेखा

(राशि ₹ में)

विवरण	अनुसूची	चालू वर्ष 2018-19	पिछले वर्ष 2017-18
आय			
संस्थान का खाता			
बिक्री/सेवा से आय	12	84,61,815.00	39,83,375.00
अनुदान/आर्थिक सहायता (आवर्ती खर्च के लिए)	13	29,00,00,000.00	28,31,00,000.00
मूल्यह्रास (ए.एस. 12) के अनुसार को अनुदान के रूप में मान्यता प्रदान करना	13	9,52,36,611.09	9,01,27,934.39
शुल्क/अंशदान	14	4,58,16,013.00	3,85,39,648.00
रायल्टी, प्रकाशनों से आय	16	0.00	1600.00
अर्जित ब्याज	17	83,12,439.20	97,84,712.75
अन्य आय	18	77,86,034.00	51,05,529.80
तैयार माल और सी.डब्ल्यू.आई.पी. के भण्डार में वृद्धि/कमी	19		
परियोजना का खाता			
ब्याज	17	31,73,315.00	39,41,953.60
बंदोबस्ती/समग्र निधि खाता			
परियोजना खाते से हस्तांतरण			
ब्याज	15	4,58,51,421.00	4,68,21,217.50
कुल (क)		**50,46,37,648.29**	**48,14,05,971.04**
संस्थान का व्यय खाता			
स्थापना खर्चे	20	24,89,66,145.37	22,86,53,474.43
अन्य प्रशासनिक खर्चे	21	16,04,34,891.83	16,26,24,562.22
अनुदान, सब्सिडी आदि पर व्यय	22	0.00	0.00
ब्याज भुगतान	23	0.00	0.00
मूल्यह्रास (अनुसूची 8 के अनुसार वर्ष के अंत में कुल योग)		9,52,36,611.09	9,01,27,934.39
कुल (ख)		**50,46,37,648.29**	**48,14,05,971.04**
आय पर अत्यधिक व्यय	**(क-ख)**		
महत्त्वपूर्ण लेखांकन नीतियाँ	24		
आकस्मिक दायित्व और खातों पर टिप्पणियाँ	25		

	सही/-	**सही/-**	**सही/-**
स्थान : एस.ए.एस. नगर	**(जे.के. चंदेल)**	**(डॉ. ए. एस. संघ)**	**(प्रो. अ. रघुराम राव)**
दिनांक : 24.05.2019	**उप कुलसचिव (वित्त एवं लेखा)**	**कुलसचिव (कार्यवाहक)**	**निदेशक**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31st MARCH, 2019

(Amount in ₹)

Particulars	Schedule	Current Year 2018-19	Previous Year 2017-18
INCOME			
Institute A/c			
Income From Sales/Services	12	84,61,815.00	39,83,375.00
Grant/Subsidies (for Recurring Expenses)	13	29,00,00,000.00	28,31,00,000.00
Grant Recognition on account of Dep. as per (AS-12)	13	9,52,36,611.09	9,01,27,934.39
Fees/ Subscriptions	14	4,58,16,013.00	3,85,39,648.00
Income from Royalty, Publications	16	0.00	1,600.00
Interest Earned	17	83,12,439.20	97,84,712.75
Other Income	18	77,86,034.00	51,05,529.80
Increases/ Decreased of Stock of Finished Goods & CWIP	19	0.00	0.00
Project Account			
Interest	17	31,73,315.00	39,41,953.60
Endowment/Corpus Fund A/c			
Transfer from Project Account		0.00	0.00
Interest	15	4,58,51,421.00	4,68,21,217.50
Total (A)		**50,46,37,648.29**	**48,14,05,971.04**
EXPENDITURE			
Institute A/c			
Establishment Expenses	20	24,89,66,145.37	22,86,53,474.43
Other Administrative Expenses	21	16,04,34,891.83	16,26,24,562.22
Expenditure on Grants, Subsidies etc.	22	0.00	0.00
Interest Payment	23	0.00	0.00
Depreciation (Net total at the Year end as to Sch-8)		9,52,36,611.09	9,01,27,934.39
Total (B)		**50,46,37,648.29**	**48,14,05,971.04**
Expenditure over Income	(A-B)	—	—
Significant Accounting Policies	24		
Contingent Liabilities and Notes On Accounts	25		

	Sd/-	Sd/-	Sd/-
Place: S.A.S. Nagar	**(Jitender. K. Chandel)**	**(Dr. A. S. Sandhu)**	**(Prof. A. Raghuram Rao)**
Date: 24.05.2019	**Deputy Registrar (F&A)**	**Registrar (Officiating)**	**Director**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
वर्ष 01–04–2018 से 31–03–2019 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

प्राप्तियाँ	चालू वर्ष	पिछले वर्ष	भुगतान	चालू वर्ष	पिछले वर्ष
आदि शेष संस्थान			**संस्थान का व्यय खाता**		
नकद राशि	16,933.00	18,605.00	स्थापना खर्चे	23,35,20,209.43	22,78,14,157.43
बचत खाता			प्रशासनिक खर्चे	16,80,47,539.83	17,12,09,113.22
स्टेट बैंक ऑफ इंडिया	45,43,615.07	68,98,241.33	विविध भुगतान	32,26,879.61	26,22,669.86
एसबीआई, रजत जयंती खाता	4,31,632.00	4,16,131.00	टी.बी. और कालाआजार – योजना व्यय	1,48,23,124.07	27,43,587.00
एसबीआई - सीएमसी खाता	5,67,477.00	5,47,096.00	12वीं योजना	31,40,537.25	1,07,23,114.00
एसबीआई - जेईई खाता	3,500.00	4,500.00	सीसीए फंड	10,04,753.00	-
पंजाब नेशनल बैंक	1,30,320.00	74,792.00	**परियोजना व्यय खाता**		
स्टेट बैंक ऑफ इंडिया (ऑनलाईन खाता)	50,491.80	48,529.80	अन्य	21,39,864.30	58,71,105.95
एसबीआई - परामर्श खाता	24,88,811.82	13,33,011.72	विविध भुगतान	3,42,41,474.45	3,18,61,144.00
एसबीआई - फीस खाता	3,40,694.00	53,555.00			
एसबीआई - टीडीएस खाता	49,743.00	5,506.00			
एसबीआई - डीडीएनपी खाता	24,294.92	23,426.42			
एसबीआई - इंशकोन खाता	3,48,468.00	3,35,954.00			
एसबीआई - योजनागत एसबी खाता	17,61,12,666.90	23,78,252.00	**धरोहर राशि (उपदान) और अवकाश कोष खाता**		32,68,696.00
स्थायी जगा खाता			परामर्श का भुगतान	90,83,932.05	
स्टेट बैंक ऑफ इंडिया योजनागत	5,66,62,133.00	5,89,38,878.00	सामान्य भविष्य निधि	53,05,046.00	73,34,226.00
आईडीबीआई - फार्मा कॉन्फिडेंस फंड	16,48,195.00		दातव्य निधि से भुगतान	50,000.00	
पंजाब नेशनल बैंक के साथ	2,74,637.00	2,56,225.00	अंशदायी भविष्य निधि (एनपीएस)	1,21,87,518.00	1,15,55,046.00
कॉरपोरेशन बैंक के साथ परामर्श खाता	2,10,13,237.00	1,94,04,987.00	**दान व पुरस्कार खाता से भुगतान**		47,715.00
डीडीएनपीटीएम के साथ खाता		21,04,654.00	**कोष निधि भुगतान खाता**	3,72,87,985.00	8,47,73,032.00
कनारा बैंक के साथ परामर्श एकडीआर खाता		3,02,91,954.00			
एसबीआई, नाईपर ब्रांच–परामर्श खाता	4,27,12,917.00	1,64,60,662.00			
एसबीआई, नाईपर ब्रांच–कांफ्रेंस फंड खाता		15,39,806.00			
पंजाब नेशनल बैंक – परामर्श खाता	41,96,157.00				
कॉरपोरेशन बैंक – डीडीएनपीटीएम खाता	11,53,708.00				
आईडीबीआई –परामर्श खाता	1,05,41,483.00				

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE PERIOD ENDED 01-04-2018 to 31.03.2019

(Amount in ₹)

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
Opening Balance Institute			**Expenses Institute A/c**		
Cash in Hand	16,933.00	18,605.00	Establishment Expenses	23,35,20,209.43	22,78,14,157.43
Savings Account			Administrative Expenses	16,80,47,539.83	17,12,09,113.22
State Bank	45,43,615.07	68,98,241.33	Sundry Payments	32,26,879.61	26,22,669.86
SBI-SILVER JUBILEE A/C	4,31,632.00	4,16,131.00	TB & KA - PLAN Exp	1,48,23,124.07	27,43,587.00
SBI-CMC A/C	5,67,477.00	5,47,098.00	12th Plan	31,40,537.25	1,07,23,114.00
SBI JEE A/C	3500.00	4500.00	CCA Fund	10,04,753.00	
Punjab National Bank	1,30,320.00	74,792.00	**Expenses Project A/c**		
State Bank of India (ONLINE A/C)	50,491.80	48,529.80	Others	21,39,864.30	58,71,105.95
SBI Consultancy A/C	24,88,811.82	13,33,011.72	Sundry Payments	3,42,41,474.45	3,18,61,144.00
SBI - FEE A/C	3,40,694.00	53,555.00			
SBI - TDS A/c	49,743.00	5,506.00			
SBI - DDNP A/c	24,294.92	23,426.42			
SBI - ISHRCON A/C	3,48,468.00	3,35,954.00			
SBI - PLAN SB A/C	17,61,12,666.90	23,78,252.00	Payment Gratuity & Leave Fund A/C		32,68,696.00
Fixed Deposits Account			Payment of Consultancy	90,83,932.05	
With State Bank of India - Plan	5,66,62,133.00	5,89,38,878.00	General Provident Fund	53,05,046.00	73,34,226.00
IDBI - Pharma conf. fund	16,48,195.00		Payment from Benevolent Fund	50,000.00	
With Punjab National Bank	2,74,637.00	2,56,225.00	Contributory Provident Fund (NPS)	1,21,87,518.00	1,15,55,046.00
Corpn. Bank - Consultancy a/c	2,10,13,237.00	1,94,04,987.00	Payment in Donation & award A/C		47,715.00
DDNPTM A/c		21,04,654.00	Payment Corpus Fund A/c	3,72,87,985.00	8,47,73,032.00
CANARA BANK - CONSUL. FDR A/C		3,02,91,954.00		-	
SBI, NIPER Br - Consultancy A/C	4,27,12,917.00	1,64,60,662.00			
SBI, NIPER Br - Conf. fund A/C		15,39,806.00			
PNB - CONSULTANCY A/C	41,96,157.00				
CORPN BANK - DDNPTM A/C	11,53,708.00				
IDBI - CONSULTANCY A/C	1,05,41,483.00				

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
वर्ष 01–04–2018 से 31–03–2019 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

प्राप्तियाँ	चालू वर्ष	पिछले वर्ष	भुगतान	चालू वर्ष	पिछले वर्ष
दान व पुरस्कार खाता					
एसबीआई, बचत खाता	17,218.00	16,600.00			
कॉरपोरेशन बैंक – एफडीआर खाता	3,80,019.00	3,38,646.00			
स्थायी (चेयर) कोष					
पीएनबी – एफडीआर खाता	4,03,477.00				
एसबीआई – एफडीआर खाता नाईपर ब्रांच मोहाली		43,22,833.00			
एसबीआई, फेस–7 मोहाली, एसबी खाता	2,95,086.50	2,84,576.00			
केनरा बैंक – एफडीआर खाता	1,19,98,003.00	80,92,665.00			
कॉरपोरेशन बैंक – एफडीआर खाता	6,37,921.00				
बंदोबस्ती / कोष निधि खाता					
एसबीआई, नाईपर ब्रांच मोहाली	6,36,85,212.00	13,63,67,136.00			
कॉरपोरेशन बैंक के साथ एफडीआर	4,56,36,592.00	4,56,36,592.00			
एसबीआई, मोहाली, एसबी खाता	54,149.50	52,293.00			
पीएनबी – एफडीआर खाता	19,55,23,871.00	0.00	**अन्तशेष संस्थान खाता**		
आईडीबीआई – एफडीआर खाता	96,04,569.00	0.00	नकद राशि	24,072.00	16,933.00
केनरा बैंक एफडीआर खाता	33,29,21,854.00	52,22,36,871.00	**बचत खाता**		
इंडियन बैंक एफडीआर खाता			स्टेट बैंक ऑफ इंडिया	18,14,351.17	45,43,615.07
कल्याण खाता			एसबीआई, जेईई खाता	0.00	3,500.00
एसबीआई, नाईपर मोहाली एफडी खाता	2,07,473.00	1,82,952.00	पंजाब नैशनल बैंक	1,36,171.00	1,30,320.00
एसबीआई, मोहाली एसबी खाता	1,68,243.51	1,45,514.01	एसबीआई, (ऑनलाईन फीस जमा खाता)	0.00	50,491.80
केनरा बैंक – एफडीआर खाता	17,69,132.00	17,69,132.00	एसबीआई, फार्मसी खाता	4,66,565.52	24,88,811.82
परियोजना खाता			एराबीआई, डीडीएनपीटीएम खाता	30,250.92	24,294.92
नकद राशि परियोजना खाता	4,181.00	1,102.00			
एसबीआई, मोहाली (एसबी विदेश खाता)	5,07,727.18	4,89,580.68			

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE PERIOD ENDED 01-04-2018 to 31.03.2019

(Amount in ₹)

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
Donation & Award A/C					
SBI - SB A/C	17,218.00	16,600.00			
Corpn. Bank - FDR A/C	3,80,019.00	3,38,646.00			
Endowment Chair Fund					
PNB - FDR A/c	4,03,477.00				
FDR with SBI, NIPER Br. Mohali		43,22,833.00			
SBI, Phase 7, Mohali SB A/C	2,95,086.50	2,84,576.00			
CANARA BANK - FDR A/C	1,19,98,003.00	80,92,665.00			
Corpn. Bank - FDR A/C	6,37,921.00	0.00			
Endowment / Corpus fund Account					
SBI, NIPER Br. Mohali	6,36,85,212.00	13,63,67,136.00			
FDR A/C with Corporation Bank	4,56,36,592.00	4,56,36,592.00			
SBI, Mohali SB Accounts	54,149.50	52,293.00	**Closing Balance Institute**	-	
PNB - FDR A/C	19,55,23,871.00	0.00	Cash in Hand	24,072.00	16,933.00
IDBI BANK FDR A/C	96,04,569.00	0.00	**Savings Bank Account**		
Canara Bank - FDR A/C	33,29,21,854.00	52,22,36,871.00	State Bank of India	18,14,351.17	45,43,615.07
Indian Bank - FDR A/C			SBI JEE A/C	0.00	3500.00
Welfare Account			Punjab National Bank	1,36,171.00	1,30,320.00
SBI NIPER, Mohali FD Accounts	2,07,473.00	1,82,952.00	SBI (Online Fee Dep. A/c)	0.00	50,491.80
SBI Mohali, SB A/c	1,68,243.51	1,45,514.01	SBI (Consultancy)	4,66,565.52	24,88,811.82
CANARA BANK - FDR A/c	17,69,132.00	17,69,132.00	SBI - DDNPTM A/C	30,250.92	24,294.92
Project Account					
Cash in Hand Project A/C	4,181.00	1,102.00			
SBI, Mohali (SB Foreign A/C)	5,07,727.18	4,89,580.68			

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
वर्ष 01–04–2018 से 31–03–2019 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

प्राप्तियाँ	चालू वर्ष	पिछले वर्ष	भुगतान	चालू वर्ष	पिछले वर्ष
एसबीआई, मोहाली (एसपी परियोजना खाता)	45,28,497.47	28,10,213.32	एसबीआई, नाईपर ब्रांच की शाखा खाता	1,82,752.00	3,40,694.00
एसबीआई, मोहाली फेस–7 (एफडीआर परियोजना खाता)	87,03,377.00	1,25,00,000.00	एसबीआई, टीडीएस खाता	49,331.00	49,743.00
कॉरपोरेशन बैंक	3,51,57,283.00	3,61,67,373.00	एसबीआई, रजत जयंती खाता	0.00	4,31,632.00
केनरा बैंक – एफडीआर खाता	51,69,314.00	1,04,60,918.00	एसबीआई, सीएमसी खाता	0.00	5,67,477.00
आईडीबीआई – एफडीआर खाता	50,00,000.00	0.00	एसबीआई, योजनागत एसबी खाता	13,18,884.36	17,61,12,666.90
उपदान कोष खाता			एसबीआई - ईशंकांग खाता	0.00	3,48,468.00
केनरा बैंक (एफडीआर खाता)	2,95,68,568.00	3,15,28,100.00	**स्थायी जमा खाता**		
एसबीआई, नाईपर मोहाली (एफडीआर खाता)	0.00	90,06,244.00	स्टेट बैंक ऑफ इंडिया	3,00,00,000.00	0.00
इंडियन बैंक एफडीआर खाता	0.00	55,85,573.00	एसबीआई - एफडीआर परियोजना खाता	4,17,83,563.00	5,66,62,133.00
कॉरपोरेशन बैंक	2,06,60,443.00	0.00	एसबीआई - सीसीए फंड खाता	14,78,18,597.00	0.00
पीएनबी – एफडीआर खाता	1,13,77,785.00	0.00	एसबीआई - टीवी / काला अजार फंड	74,25,326.00	0.00
छुट्टी नकदीकरण खाता			आईडीबीआई - फार्मा कॉन्फिडेंस फंड	17,62,296.00	16,48,195.00
इंडियन बैंक एफडीआर खाता	0.00	86,50,323.00	पंजाब नेशनल बैंक	2,93,217.00	2,74,637.00
केनरा बैंक एफडीआर खाता	5,66,77,589.00	6,22,79,619.00	इंडियन बैंक परामर्श एफडीआर खाता	77,74,697.00	0.00
एसबीआई, नाईपर मोहाली (एफडीआर खाता)		1,21,79,195.00	केनरा बैंक परामर्श एफडीआर खाता	2,13,20,162.00	2,10,13,237.00
कारपोरेशन बैंक	1,01,21,617.00	0.00	एसबीआई नाईपर, शाखा परामर्श खाता	3,44,34,210.00	4,27,12,917.00
पीएनबी – एफडीआर खाता	1,86,85,469.00	0.00	पीएनबी – परामर्श खाता	41,96,157.00	41,96,157.00
सामान्य भविष्य निधि खाता			आईडीबीआई - परामर्श खाता	1,12,46,874.00	1,05,41,483.00
केनरा बैंक एफडीआर खाता	3,07,03,952.00	4,85,46,266.00	कॉरपोरेशन बैंक – डीजीएनपीटीएम एफडीआर खाता	11,53,708.00	11,53,708.00
एसबीआई, नाईपर मोहाली (एफडीआर खाता)	0.00	22,41,558.00	**दान व पुरस्कार खाता**		
कॉरपोरेशन बैंक के साथ सीकेकेसीसी खाता	2,77,99,552.67	2,26,10,287.53	एसबीआई, एसबी खाता	17,829.00	17,218.00
हुडको के साथ एफडीआर	20,92,000.00	11,30,000.00	कॉरपोरेशन बैंक – एफडीआर खाता	3,80,019.00	3,80,019.00
पीएनबी – एफडीआर खाता	2,47,12,959.00	0.00	**स्थायी (चेंगर) कोष खाता**		
अंशदायी भविष्य निधि खाता			पीएनबी – एफडीआर खाता	4,03,477.00	4,03,477.00
एसबीआई, फेस–7, मोहाली एफडीआर खाता	0.00	0.00	एसबीआई नाईपर, मोहाली एसबी खाता	3,05,550.50	2,95,086.50
एसबीआई, नाईपर मोहाली (एफडीआर खाता)	27,60,217.00	4,88,689.00			

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE PERIOD ENDED 01-04-2018 to 31.03.2019

(Amount in ₹)

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
SBI, Mohali (SB Project A/c)	45,28,497.47	28,10,213.32	SBI, NIPER Br. - Fee A/C	1,82,752.00	3,40,694.00
SBI, Mohali NIPER (FDR Project A/c)	87,,03,377.00	1,25,00,000.00	SBI - TDS A/C	49,331.00	49,743.00
Corporation Bank	3,61,57,283.00	3,61,67,373.00	SBI - SILVER JUBILEE A/C	0.00	4,31,632.00
CANARA Bank - FDR A/C	51,69,314.00	1,04,60,918.00	SBI - CMC A/C	0.00	5,67,477.00
IDBI BANK FDR A/C	50,00,000.00	0.00	SBI - PLAN SB A/C	13,18,884.36	17,61,12,666.90
Gratuity Fund A/C			SBI - ISHRCON A/C	0.00	3,48,468.00
Canara Bank - FDR A/C	2,95,68,568.00	3,15,28,100.00	**Fixed Deposits Account**		
SBI- NIPER, Mohali (FDR A/C)	0.00	90,06,244.00	State Bank of India	3,00,00,000.00	0.00
INDIAN BANK - FDR A/C	0.00	55,85,573.00	SBI - FDR PLAN A/C	4,17,83,563.00	5,66,62,133.00
Corporation Bank	2,06,60,443.00	0.00	SBI - CCA FUND A/C	14,78,18,597.00	0.00
PNB - FDR A/C	1,13,77,785.00	0.00	SBI - TB/KA FUND	74,25,326.00	0.00
Leave Encashment Account			IDBI - Pharma Conf. fund	17,62,296.00	16,48,195.00
Indian Bank - FDR A/C	0.00	86,50,323.00	Punjab National Bank	2,93,217.00	2,74,637.00
Canara Bank - FDR A/C	5,66,77,589.00	6,22,79,619.00	INDIAN BANK - CON. FDR A/C	77,74,697.00	0.00
SBI - NIPER , Mohali (FDR A/C)	0.00	1,21,79,195.00	CANARA BANK - Consul. FDR A/C	2,13,20,162.00	2,10,13,237.00
Corporation Bank	1,01,21,617.00	0.00	SBI, NIPER Br. Consultancy A/C	3,44,34,210.00	4,27,12,917.00
PNB - FDR A/C	1,86,85,469.00	0.00	PNB CONSULTANCY A/c	41,96,157.00	41,96,157.00
General Provident Fund Account			IDBI - Consultancy A/c	1,12,46,874.00	1,05,41,483.00
Canara Bank - FDR A/C	3,07,03,952.00	4,85,46,266.00	CORPORATION BANK - DDNPTM	11,53,708.00	11,53,708.00
SBI - NIPER , Mohali (FDR A/C)	0.00	22,41,558.00	FDR A/c		
CKKCC A/C with Corporation Bank	2,77,99,552.67	2,26,10,287.53	**Donation & Award Account**		
FDRs with HUDCO	20,92,000.00	11,30,000.00	SBI - SB A/c	17,829.00	17,218.00
PNB - FDR A/C	2,47,12,959.00	0.00	CORPORATION BANK - FDR A/c	3,80,019.00	3,80,019.00
Contributory Provident Fund Account			**Endowment Chair Fund Account**		
SBI - 7, Mohali (FDR A/C)	0.00	0.00	PNB FDR A/c	4,03,477.00	4,03,477.00
SBI - NIPER , Mohali (FDR A/C)	27,60,217.00	4,88,689.00	SBI, NIPER Mohali SB A/c	3,05,550.50	2,95,086.50

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
वर्ष 01–04–2018 से 31–03–2019 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

प्राप्तियाँ	चालू वर्ष	पिछले वर्ष	भुगतान	चालू वर्ष	पिछले वर्ष
कॉरपोरेशन बैंक के साथ सीकेकेसीसी खाता	12,20,096.81	9,76,719.81	कारपोरेशन बैंक – एफडीआर खाता	6,37,921.00	6,37,921.00
हुडको के साथ एफडीआर	0.00	1,40,000.00	केनरा बैंक – एफडीआर खाता	1,19,98,003.00	1,19,98,003.00
केनरा बैंक एफडीआर खाता	9,26,061.00	25,94,457.00	**बंदोबस्ती/ कोष निधि खाता**		
अंशदायी भविष्य निधि खाता (नई पेंशन योजना)			कारपोरेशन बैंक के साथ एफडीआर	4,56,36,592.00	4,56,36,592.00
एसबीआई, फेस–7 के साथ एफडीआर	0.00	0.00	एसबीआई, नाईपर शाखा गोशाली	1,50,00,000.00	6,38,85,212.00
कॉरपोरेशन बैंक के साथ सीकेकेसीसी खाता	0.00	63,39,789.00	एसबीआई, मोहाली एसबी खाता	56,070.50	54,149.50
केनरा बैंक एफडीआर खाता	25,00,111.00	0.00	केनरा बैंक – एफडीआर खाता	33,29,21,854.00	33,29,21,854.00
एसबीआई, नाईपर मोहाली (एफडीआर खाता)	93,89,569.00	0.00	पीएनबी – एफडीआर खाता	22,09,23,871.00	19,55,23,871.00
केनरा बैंक एसबी खाता	4,75,616.56	52,32,943.56	आईडीबीआई – एफडीआर खाता	0.00	96,04,569.00
पेंशन कोष			**कल्याण कोष खाता**		
एसबीआई, नाईपर मोहाली (एफडीआर खाता)	0.00	51,30,145.00	आईडीबीआई – एफडीआर खाता	3,00,000.00	0.00
कॉरपोरेशन बैंक (एफडीआर खाता)	1,18,49,507.00	8,65,055.00	एसबीआई, नाईपर मोहाली एफडीआर खाता	2,28,065.00	2,07,473.00
केनरा बैंक (एफडीआर खाता)	5,52,65,119.00	6,57,90,574.00	एसबीआई, मोहाली एसबी खाता	56,827.01	1,68,243.51
पीएनबी – एफडीआर खाता	1,90,38,066.00	0.00	केनरा बैंक – एफडीआर खाता	17,69,132.00	17,69,132.00
सेवानिवृत्त चिकित्सा कोष खाता			**परियोजना खाता**		
कॉरपोरेशन बैंक के साथ सीकेकेसीसी खाता	27,87,614.00	22,79,352.00	नकद राशि परियाजना खाता	4,932.00	4,181.00
वर्ष के दौरान प्राप्तिया			एसबीआई, मोहाली (एसबी विदेशी खाता)	23,479.18	5,07,727.18
अनुदान (भारत सरकार) संस्थान खाता			एसबीआई, मोहाली (एसबी परियोजना खाता)	17,98,306.72	45,28,497.47
पूंजी खाता	0.00	14,00,00,000.00	आईडीबीआई – एफडीआर खाता	3,40,70,652.00	50,00,000.00
राजस्व खाता	29,00,00,000.00	28,31,00,000.00	एसबीआई, नाईपर मोहाली (एफडीआर	1,10,32,936.00	87,03,377.00
स्कीम टी.बी. काला आजार	0.00	2,50,00,000.00	परियोजना खाता)		
प्राप्त ब्याज			कारपोरेशन बैंक – एफडीआर खाता	55,65,796.00	3,51,57,283.00
रौंस्थान खाता	61,10,335.20	97,63,351.75	केनरा बैंक – एफडीआर खाता	51,69,314.00	51,69,314.00
परियोजना खाता	46,24,144.00	12,04,405.60	इंडियन बैंक – एफडीआर खाता	29,54,000.00	0.00
स्थागी कोष खाता	44,00,125.00	2,79,06,377.50	**ग्रेच्युटी (उपदान) कोष खाता**		
कल्याण खाता	28,476.00	30,160.50	केनरा बैंक एफडीआर खाता	2,95,68,568.00	2,95,68,568.00
			इंडियन बैंक – एफडीआर खाता	39,17,578.00	0.00

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE PERIOD 01-04-2018 to 31-03-2019

(Amount in ₹)

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
CKKCC A/c With Corporation Bank	12,20,096.81	9,76,719.81	CORPORATION BANK -FDR A/c	6,37,921.00	6,37,921.00
FDRs with HUDCO	0.00	1,40,000.00	CANARA BANK - FDR A/c	1,19,98,003.00	1,19,98,003.00
CANARA BANK - FDR A/c	9,26,061.00	25,94,457.00	**Endowment / Corpus Fund A/c**		
Contributory Provident Fund A/c (NPS)			FDRs with Corporation Bank	4,56,36,592.00	4,56,36,592.00
FDRs with State Bank of India, Ph-7	0.00	0.00	SBI - NIPER Br. Mohali	1,50,00,000.00	6,36,85,212.00
CKKCC A/c With Corporation Bank	0.00	63,39,789.00	SBI, Mohali SB Accounts	56,070.50	54,149.50
CANARA BANK - FDR A/c	25,00,111.00	0.00	Canara Bank - FDR A/c	33,29,21,854.00	33,29,21,854.00
SBI, NIPER Br. Mohali (FDR A/c)	93,89,569.00	0.00	PNB - FDR A/C	22,09,23,871.00	19,55,23,871.00
CANARA BANK - SB A/c	4,75,616.56	52,32,943.56	IDBI Bank - FDR A/c	0.00	96,04,569.00
Pension Fund			**Welfare Fund A/c**		
SBI, NIPER Br. Mohali (FDR A/c)	0.00	51,30,145.00	IDBI Bank - FDR A/c	3,00,000.00	0.00
CORPORATION BANK - FDR A/c	1,18,49,507.00	8,65,055.00	FDR with SBI, NIPER Br. Mohali	2,28,065.00	2,07,473.00
CANARA BANK - FDR A/c	5,52,65,119.00	6,57,90,574.00	SBI, Mohali SB Accounts	56,827.01	1,68,243.51
PNB - FDR A/c	1,90,38,066.00	0.00	CANARA BANK - FDR A/c	17,69,132.00	17,69,132.00
Post Retirement Medical Fund A/c			**Project A/c**		
CKKCC A/c with Corporation Bank	27,87,614.00	22,79,352.00	Cash in Hand - Project A/c	4,932.00	4,181.00
Receipt during the year			SBI, Mohali (SB Foreign A/C)	23,479.18	5,07,727.18
Grant in Aid (GOI) Instt. A/c			SBI, Mohali (SB Project A/C)	17,98,306.72	45,28,497.47
Capital	0.00	14,00,00,000.00	IDBI Bank - FDR A/c	3,40,70,652.00	50,00,000.00
Revenue	29,00,00,000.00	28,31,00,000.00	SBI, NIPER Mohali (FDR Project A/C)	1,10,32,936.00	87,03,377.00
SCHEME - TB/KA	0.00	2,50,00,000.00	Corporation Bank - FDR A/C	55,65,796.00	3,51,57,283.00
Interest Received			CANARA Bank - FDR A/C	51,69,314.00	51,69,314.00
Institute A/c	61,10,335.20	97,63,351.75	INDIAN BANK FDR A/C	29,54,000.00	0.00
Project A/c	46,24,144.00	12,04,405.60	**Gratuity Fund A/C**		
Endowment / corpus A/c	44,00,125.00	2,79,06,377.50	CANARA BANK - FDR A/c	2,95,68,568.00	2,95,68,568.00
Welfare A/c	28,476.00	30,160.50	INDIAN BANK FDR A/C	39,17,578.00	0.00

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
वर्ष 01–04–2018 से 31–03–2019 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

प्राप्तियाँ	चालू वर्ष	पिछले वर्ष	भुगतान	चालू वर्ष	पिछले वर्ष
जीपीएफ/सीपीएफ/एनपीएस	31,17,744.60	1,48,01,719.14	कार्पोरेशन बैंक – एफडीआर खाता	2,06,60,443.00	2,06,60,443.00
एवं पेंशन खाता			पीएनबी – एफडीआर खाता	1,13,77,785.00	1,13,77,785.00
उपदान व छुट्टी नकदीकरण खाता	0.00	81,11,741.00	**छुट्टी नकदीकरण भुगतान खाता**		
पीआरएमएस खाता	10,464.00	2,93,712.00	केनरा बैंक एफडीआर खाता	5,66,77,589.00	5,66,77,589.00
स्थायी निधि चेयर	1,87,056.00	6,03,060.50	इंडियन बैंक एफडीआर खाता	8,67,112.00	0.00
दान व पुरस्कार	611.00	41,991.00	कारपोरेशन बैंक – एफडीआर खाता	1,01,21,617.00	1,01,21,617.00
ब्याज सीसीए खाता	85,63,996.00	0.00	पीएनबी – एफडीआर खाता	1,86,85,469.00	1,86,85,469.00
ब्याज योजनागत निधि खाता	26,14,724.00	0.00	**सामान्य भविष्य निधि खाता**		
संस्थान को अन्य प्राप्तियाँ			केनरा बैंक एफडीआर खाता	3,07,03,952.00	3,07,03,952.00
निविदा शुल्क	23,000.00	1,08,000.00	कॉरपोरेशन बैंक के साथ सीकेकेसीसी खाता	3,49,64,246.27	2,77,99,552.67
आवेदन शुल्क	3,72,675.00	49,95,151.00	पीएनबी – एफडीआर खाता	2,47,12,959.00	2,47,12,956.00
विविध प्राप्तियों	17,94,741.00	27,41,937.00	हुडको के साथ एफडीआर	20,92,000.00	20,92,000.00
प्रवेश एवं रोमेस्टर शुल्क	3,66,27,175.00	3,04,64,277.00	**अंशदायी भविष्य निधि खाता**		
प्रयोगशाला परीक्षण शुल्क	34,43,755.00	33,02,255.00	एसबीआई, नाईपर मोहाली (एफडीआर खाता)	26,36,557.00	27,60,217.00
सेमीनार प्राप्तियाँ	72,76,241.00	30,80,220.00	कॉरपोरेशन बैंक के साथ सीकेकेसीसी खाता	13,01,637.81	12,20,096.81
अंशदान खर्चे	0.00	1,600.00	इंडियन बैंक एफडीआर खाता	2,76,661.00	0.00
ओवरहेड खर्च	16,49,020.00	12,12,195.00	केनरा बैंक एफडीआर खाता	9,26,061.00	9,26,061.00
पेटेंट खर्चे	0.00	0.00	**अंशदायी भविष्य निधि (एनपीएस) खाता**		
सलाह/परामर्श	40,39,620.00	0.00	आईसीसीआई – एफडीआर खाता	12,00,000.00	0.00
अतिथि गृह प्राप्तियाँ	23,49,156.00	17,24,518.00	एसबीआई, नाईपर गोहाली (एफडीआर खाता)	0.00	93,89,569.00
कोर्पस कोष निधि से प्राप्ति	3,72,87,985.00	8,47,73,022.00	इंडियन बैंक एफडीआर खाता	1,04,33,868.00	0.00
जानवरों की बिक्री	9,78,440.00	0.00	केनरा बैंक एफडीआर खाता	25,00,111.00	25,00,111.00
किराया और लाइसेंस शुल्क रसीद	19,70,117.00	0.00	केनरा बैंक एसबी खाता	1,26,979.56	4,75,616.56
सुरक्षा जमा राशि	35,36,899.00	0.00	**पेंशन कोष**		
परामर्श रसीद	91,06,898.00	1,15,18,467.00	केनरा बैंक एफडीआर खाता	5,52,65,119.00	5,52,65,119.00
अन्य कल्याण प्राप्तियाँ			एसबीआई, नाईपर मोहाली (एफडीआर खाता)	23,41,944.00	0.00
वर्ष के दौरान प्राप्तियाँ	1,80,699.00	17,040.00	कारपोरेशन बैंक एफडीआर खाता	1,18,49,507.00	1,18,49,507.00

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE PERIOD 01-04-2018 to 31-03-2019

(Amount in ₹)

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
GPF/CPF/CPF-NPS/c and Pension A/c	31,17,744.60	1,48,01,719.14	Corporation Bank - FDR A/c	2,06,60,443.00	2,06,60,443.00
Gratuity & Leave En. Fund A/c	0.00	81,11,741.00	PNB - FDR A/c	1,13,77,785.00	1,13,77,785.00
PRMF A/c	10,464.00	2,93,712.00	**Leave Encashment Account**		
ENDOWMENT CHAIR	1,87,056.00	6,03,060.50	Canara Bank FDR A/c	5,66,77,589.00	5,66,77,589.00
DONATION & AWARD	611.00	41,991.00	Indian Bank - FDR A/c	8,67,112.00	0.00
Interest CCA A/c	85,63,998.00	0.00	Corporation Bank - FDR A/c	1,01,21,617.00	1,01,21,617.00
Interest Plan Fund A/c	26,14,724.00	0.00	PNB - FDR A/c	1,86,85,469.00	1,86,85,469.00
Other Receipt Institute			**General Provident Fund Account**		
Tender Fee	23,000.00	1,08,000.00	Canara Bank - FDR A/c	3,07,03,952.00	3,07,03,952.00
Application Fee	3,72,675.00	49,95,151.00	CKKCC A/c with Corporation Bank	3,49,,64,246.27	2,77,99,552.67
Misc. Receipts	17,94,741.00	27,41,937.00	PNB - FDR A/c	2,47,12,959.00	2,47,12,959.00
Admission & Semester Fee	3,66,27,175.00	3,04,64,277.00	FDRs with HUDCO	20,92,000.00	20,92,000.00
Lab. Testing Charges	34,43,755.00	33,02,255.00	**Contributory Provident Fund Account**		
Seminar Receipt	72,76,241.00	30,80,220.00	SBI - NIPER, Mohali (FDR A/c)	26,36,557.00	27,60,217.00
Subscription Charges	0.00	1600.00	CKKCC A/c with Corporation Bank	13,01,637.81	12,20,096.81
Overhead Charges	16,49,020.00	12,12,195.00	Indian Bank - FDR A/c	2,76,661.00	0.00
Patent Charges	0.00	0.00	CANARA BANK - FDR A/c	9,26,061.00	9,26,061.00
Consultancy NIPER	40,39,620.00	0.00	**Contributory Provident Fund (NPS) A/c**		
Guest House Receipts	23,49,156.00	17,24,518.00	IDBI - FDR A/c	12,00,000.00	0.00
Receipt from Corpus Fund	3,72,57,985.00	8,47,73,022.00	SBI - NIPER, Mohali (FDR A/C)	0.00	93,89,569.00
Sale of Animals	9,78,440.00	0.00	Indian Bank - FDR A/c	1,04,33,869.00	0.00
Rent & License Fee Receipt	19,70,117.00	0.00	Canara Bank - FDR A/c	25,00,111.00	25,00,111.00
Security Deposit	35,36,899.00	0.00	Canara Bank - SB A/c	1,26,979.56	4,75,616.56
Consultancy Receipt	91,06,898.00	1,15,18,467.00	**Pension Fund**		
			Canara Bank - FDR A/c	5,52,65,119.00	5,52,65,119.00
Other Receipts Welfare			SBI - NIPER, Br Mohali (FDR A/C)	23,41,944.00	0.00
Receipt during the Year	1,80,699.00	17,040.00	Corporation Bank - FDR A/c	1,18,49,507.00	1,18,49,507.00

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर

वर्ष 01–04–2015 से 31–03–2016 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

प्राप्तियाँ	चालू वर्ष	पिछले वर्ष	भुगतान	चालू वर्ष	पिछले वर्ष
परियोजना प्राप्ति			पीएनबी – एफडीआर खाता	1,90,38,066.00	1,90,38,066.00
वैज्ञानिक और औद्योगिक अनुसंधान परिषद	12,64,667.00	1,75,000.00	**सेवानिवृत्त चिकित्सा कोष खाता**		
जैव प्रौद्योगिकी विभाग	1,40,26,663.00	70,23,935.00	कॉर्पोरेशन बैंक के साथ सीकेकेसीसी खाता	41,77,410.00	27,87,614.00
विज्ञान एवं प्रौद्योगिकी विभाग (एसईआरबी)	57,19,532.00	92,00438.00			
भारतीय आयुर्विज्ञान अनुसंधान परिषद	13,77,200.00	0.00			
बीआईआरएसी	15,68,000.00	60,44,000.00			
केजी टाटा मेमोरियल	4,00,000.00	1,50,000.00			
डीएसटी	1,07,54,958.00	52,55,922.00			
लायका प्रयोगशाला	0.00	7,80,000.00			
बीएमएस सिनर्जी	0.00	6,33,431.00			
एनआरसीसी	5,88,000.00				
सिवानरी यू.एस.ए.	6,38,436.00	5,92,215.00			
राष्ट्रीय कोशिका विज्ञान केन्द्र	8,17,984.00	13,86,096.00			
पंजाब एग्रो	0.00	9,25,000.00			
एनडीआर	7,74,935.00	10,00,000.00			
गविष्य निधि और पेंशन कोष					
सामान्य भविष्य निधि	1,07,10,840.00	99,15,730.00			
अंशदायी भविष्य निधि	0.00	1,08,500.00			
अंशदायी भविष्य निधि (एनपीएस)	1,30,08,984.00	1,21,25,768.00			
पंशन कोष	23,41,944.00	1,07,16,050.00			
ग्रेच्युटी और नकदीकरण अवकाश					
ग्रेच्युटी	37,46,551.00	39,17,578.00			
नकदीकरण अवकाश	6,84,956.00	8,67,112.00			
सेवानिवृत्त चिकित्सा कोष (पीआरएमएफ)	12,02,740.00	2,15,000.00			
सीएसआईआर और दूसरों से अनुदान	7,51,202.00	16,85,202.00			
कुल	1,88,49,67,915.51	1,94,41,19,833.17	कुल	1,88,49,67,915.51	1,94,41,19,833.17

सही/-	सही/-	सही/-	
स्थान : एस.ए.एस. नगर	(जे.के. चंदेल)	(डॉ. ए. एस. संधु)	(प्रो. अ. रघुराम राव)
दिनांक : 24.05.2019	उप कुलसचिव (वित्त एवं लेखा)	कुलसचिव (कार्यवाहक)	निदेशक

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE PERIOD 01-04-2018 to 31-03-2019

(Amount in ₹)

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
Project Receipt			PNB - FDR A/c	1,90,38,066.00	1,90,38,066.00
Centre of Scientific & Ind. Research	12,64,667.00	1,75,000.00	**Post Retirement Medical Fund A/c**		
Deptt. of Biotechnology	1,40,26,663.00	70,23,935.00	CKKCC A/c with Corporation Bank	41,77,410.00	27,87,614.00
Deptt. of Science & Technology (SERB)	57,19,532.00	92,00,438.00			
Indian Council of Medical Research	13,77,200.00	0.00			
BIRAC	15,68,000.00	60,44,000.00			
Lady Tata Memorial	4,00,000.00	1,50,000.00			
DST	1,07,54,958.00	52,58,922.00			
LYKA LABS	0.00	7,80,000.00			
BMS Synerge	0.00	6,33,431.00			
NRDC	5,88,000.00	0.00			
SIVANARY, USA	6,38,436.00	5,92,515.00			
National Centre for cell Science	8,17,984.00	13,86,096.00			
PUNJAB AGRO		9,25,000.00			
HDR	7,74,935.00	10,00,000.00			
Provident Fund & Pension Fund					
General Provident Fund	1,07,10,840.00	99,15,730.00			
Contributory Provident Fund	0.00	1,08,500.00			
Contributory Provident Fund (NPS)	1,30,08,984.00	1,21,25,768.00			
PENSION FUND	23,41,944.00	1,07,16,050.00			
Gratuity & leave Encashment					
Gratuity	37,46,551.00	39,17,578.00			
Leave Encashment	6,84,956.00	8,67,112.00			
Post Retirement Medical Fund (PRMF)	12,02,740.00	2,15,000.00			
Grant From CSIR & Others	7,51,202.00	16,85,202.00			
TOTAL	**1,88,49,67,915.51**	**1,94,41,19,833.17**	**TOTAL**	**1,88,49,67,915.51**	**1,94,41,19,833.17**

Place: S.A.S. Nagar
Date: 24.05.2019

Sd/-
(Jitender. K. Chandel)
Deputy Registrar (F&A)

Sd/-
(Dr. A. S. Sandhu)
Registrar (Officiating)

Sd/-
(Prof. A. Raghuram Rao)
Director

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
वर्ष 01–04–2018 से 31–03–2019 के लिए प्राप्ति एवं भुगतान का समेकित लेखा

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–1ए पूंजी कोष				
1 ए.1				
पिछले वर्ष के आरम्भ में शेष	64,34,80,035.62		77,02,03,421.43	
जमा : सीसीए कोष में राशि अंतरण	10,04,753.00		0.00	
घटाएं : अनुसूची 13 में मूल्यह्रास स्थानांरण (एएस–12)	8,97,91,689.72		8,37,73,079.81	
जमा : पूंजी कोष का समायोजना (मूल्यह्रास)				
जमा : पूंजी कोष का समायोजन (मूल्यह्रास) (12वीं योजना – सम्पति)	17,49,714.00	55,64,42,832.90	70,49,694.00	64,34,80,035.62
1 ए. 2				
पिछले वर्ष के आरम्भ में शेष (सीसीए)	14,00,00,000.00			
वर्ष के दौरान प्राप्त अनुदान (सीसीए)			14,00,00,000.00	
घटाएं : वर्ष के दौरान प्राप्त अनुदान	10,04,753.00	13,89,95,247.00		14,00,00,000.00
आय एवं व्यय खाते से राशि हस्तांतरण				
1 ए. 3				
पिछले वर्ष के आरम्भ में शेष	4,69,53,653.89		5,76,76,767.89	
घटाएं : वर्ष के दौरान निधि का अनुप्रयोग	31,40,537.25		1,07,23,114.00	
वर्ष के दौरान प्राप्त अनुदान (12वीं योजना के अन्तर्गत)		4,38,13,116.64		4,69,53,653.89
वर्ष के अन्त में बकाया राशि (कुल 1ए)		**73,92,51,196.54**		**83,04,33,689.51**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE-1A CAPITAL FUND				
1-A.1				
Balance as at the beginning of the last year	64,34,80,035.62		72,02,03,421.43	
Add : Adjustment Transfer from CCA fund	10,04,753.00		0.00	
Less : Depreciation Amount Transfer to Sch. 13 (AS-12)	8,97,91,669.72		8,37,73,079.81	
Add : Adjustment of Capital Fund (Dep)				
Add : Adjustment to Capital Fund (12th Plan-Assets)	17,49,714.00	55,64,42,832.90	70,49,694.00	64,34,80,035.62
1-A.2				
Balance as at the Beginning of the last year (CCA)	14,00,00,000.00			
Grant Received during the Year (CCA)	0.00		14,00,00,000.00	
Less : Application of Funds during the year	10,04,753.00	13,89,95,247.00		14,00,00,000.00
1-A.3				
Balance as at the beginning of the last year	4,69,53,653.89		5,76,76,767.89	
Less : Application of Funds during the year	31,40,537.25		1,07,23,114.00	
Grant Received during the Year (Under12th Plan)		4,38,13,116.64		4,69,53,653.89
Balance as at the year End (Total 1A)		**73,92,51,196.54**		**83,04,33,689.51**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष	2018-19	पिछले वर्ष	2017-18
अनुसूची–1बी पूंजी कोष – नाईपर (स्कीमस – काला आजार / टीबी)				
पिछले वर्ष के आरम्भ में शेष		2,22,56,413.00		
वर्ष के दौरान प्राप्त अनुदान (योजना)	0.00		2,50,00,000.00	2,50,00,000.00
घटाईए : राजस्व व्यय	1,48,23,124.07		27,43,587.00	
		1,48,23,124.07		27,43,587.00
वर्ष के अन्त में बकाया राशि (कुल 1बी)		**74,33,288.93**		**2,22,56,413.00**
अनुसूची–1सी पूंजी कोष–परियोजना				
प्रारंभिक शेष		3,66,85,665.92		4,30,40,520.50
जमा : वर्ष के दौरान स्थानांतरण	0.00			
घटाओं : पूंजी निधि में राशि अंतरण (योजना)	0.00			
घटाओं : 13 अनुसूची में मूल्यह्रास स्थानांरण (एएस–12)	54,44,941.37	54,44,941.37	63,54,854.58	– 63,54,854.58
वर्ष के अन्त में बकाया राशि (कुल 1सी)		**3,1240,724,55**		**3,66,85,665.92**
कुल (1ए से 1सी)		**77,79,25,210.02**		**88,93,75,768.43**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE-1B CAPITAL FUND - NIPER (SCHEMES - KA/TB)				
Balance as at the beginning of the last year		2,22,56,413.00		
Add : Grant Received during the year (Plan)	0.00		2,50,00,000.00	2,50,00,000.00
Less : Revenue Expenses	1,48,23,124.07		27,43,587.00	
		1,48,23,124.07		27,43,587.00
Balance as at the year end (Total 1B)		**74,33,288.93**		**2,22,56,413.00**
SCHEDULE - 1C CAPITAL FUND - PROJECT				
Opening Balance		3,66,85,665.92		4,30,40,520.50
Add : Transfer during the Year	0.00			
Less : Amount Transfer to Capital Fund NIPER (PLAN)	0.00			
Less : Depreciation Amount Transfer to Sch.13 (AS-12)	54,44,941.37	54,44,941.37	– 63,54,854.58	63,54,854.58
Balance as at the Year End (Total 1C)		**3,12,40,724.55**		**3,66,85,665.92**
Total (1A to 1C)		**77,79,25,210.02**		**88,93,75,768.43**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–2 (आरक्षित व अधिशेष)				
1. आरक्षित पूँजी				
प्रारंभिक शेष	0.00		0.00	
जोड़े : वर्ष के दौरान जमा	0.00		0.00	
घटाएं : वर्ष के दौरान लटौती	0.00	0.00	0.00	0.00
वर्ष के अन्त में बकाया राशि		**0.00**		**0.00**
2. पुनः मूल्यांकन आरक्षित कोष				
प्रारंभिक शेष	0.00		0.00	
जोड़े : वर्ष के दौरान जमा	0.00		0.00	
घटाएं : वर्ष के दौरान लटौती	0.00	0.00	0.00	0.00
वर्ष के अन्त में बकाया राशि		**0.00**		**0.00**
3. विशेष आरक्षित कोष				
प्रारंभिक शेष	0.00		0.00	
जोड़े : वर्ष के दौरान जमा	0.00		0.00	
घटाएं : वर्ष के दौरान लटौती	0.00	0.00	0.00	0.00
वर्ष के अन्त में बकाया राशि		**0.00**		**0.00**
4. सामान्य आरक्षित कोष				
प्रारंभिक शेष	1.00		1.00	
जोड़े : वर्ष के दौरान जमा (शुगि का नाग गात्र मूल्य)	0.00		0.00	
घटाएं : वर्ष के दौरान लटौती	0.00	1.00	0.00	1.00
वर्ष के अन्त में शेष राशि		**1.00**		**1.00**
कुल (1 से 4)	**0.00**	**1.00**	**0.00**	**1.00**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE-2 (RESERVE & SURPLUS)				
1. CAPITAL RESERVE				
Opening Balance	0.00		0.00	
Add : Additions during the year	0.00		0.00	
Less : Deductions during the year	0.00	0.00	0.00	0.00
Balance As At The Year End		**0.00**		**0.00**
2. REVALUATION RESERVE				
Opening Balance	0.00		0.00	
Add : Additions during the Year	0.00		0.00	
Less : Deductions during the Year	0.00	0.00	0.00	0.00
Balance As At The Year End		**0.00**		**0.00**
3. SPECIAL RESERVE				
Opening Balance	0.00		0.00	
Add : Additions during the Year	0.00		0.00	
Less : Deductions during the Year	0.00	0.00	0.00	0.00
Balance As At The Year End		**0.00**		**0.00**
4. GENERAL RESERVE				
Opening Balance	1.00		1.00	
Add : Additions during the year (Nominal Value of land)	0.00		0.00	
Less : Deductions during the Year	0.00	1.00	0.00	1.00
Balance As At The Year End		**1.00**		**1.00**
Total (1 to 4)		**1.00**		**1.00**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–3 (स्थायी/कोर्पस कोष निधि खाता)				
प्रारंभिक शेष		67,89,29,072.21		67,89,29,072.21
जोड़ें : अर्जित ब्याज	4,58,51,421.00			
घटाएं : आय एवं व्यय खाता को हस्तांतरण	4,58,51,421.00	0.00		
कुल		**67,89,29,072.21**		**67,89,29,072.21**
अनुसूची–3ए (कल्याण कोष खाता)				
प्रारंभिक शेष		24,45,448.51		22,57,888.01
जोड़ें : कर्मचारियों से योगदान	11,360.00		17,040.00	
जोड़ें : कंसल्टेंसी से ट्रांसफर	1,69,339.00			
जोड़ें : अर्जित ब्याज	1,84,884.50	3,65,583.50	1,70,520.50	1,87,560.50
कुल		**28,11,032.01**		**24,45,448.51**
अनुसूची–3बी (दान–पुरस्कार खाता)				
प्रारंभिक शेष		3,55,396.00		3,62,461.00
घटाएं : वर्ष के दौरान खर्च			34,715.00	-
जोड़ें : अर्जित ब्याज	26,501.00	26,501.00	27,650.00	-7,065.00
कुल		**3,81,897.00**		**3,55,396.00**
अनुसूची–3सी (ग्रेच्युटी कोष खाता)				
पिछले साल के आंकड़े		6,88,85,046.00		6,17,21,540.00
घटाएं : वर्ष के दौरान भुगतान	1,71,027.00		10,00,000.00	
जोड़ें : वर्ष के दौरान प्राप्ति	19,88,808.00		39,17,578.00	
जोड़ें : अर्जित ब्याज	47,37,044.00	65,54,825.00	42,45,928.00	71,63,506.00
कुल		**7,54,39,871.00**		**6,88,85,046.00**
अनुसूची–3डी (छुट्टी नकदीकरण कोष खाता)				
पिछले साल के आंकड़े		8,95,09,341.28		8,66,64,394.28
घटाएं : वर्ष के दौरान भुगतान	1,82,156.00		22,68,696.00	
जोड़ें : वर्ष के दौरान प्राप्ति	6,78,845.00		8,67,112.00	
जोड़ें : अर्जित ब्याज	67,98,391.00	72,95,080.00	42,46,531.00	28,44,947.00
कुल		**9,68,04,421.28**		**8,95,09341.28**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 3 (ENDOWMENT / CORPUS FUND A/C)				
Opening Balance		67,89,29,072.21		67,89,29,072.21
Add : interest Earned	4,58,51,421.00			
Less : Transferred to Income & Expenditure A/c	4,58,51,421.00	0.00		
Total		67,89,29,072.21		67,89,29,072.21
SCHEDULE - 3 - A (WELFARE FUND A/c)				
Opening Balance		24,45,448.51		22,57,888.01
Add : Contribution from Staff	11,360.00		17,040.00	
Add : Transfer From Consultancy	1,69,339.00			
Add : Interest earned	1,84,884.50	3,65,583.50	1,70,520.50	1,87,560.50
Total		**28,11,032.01**		**24,45,448.51**
SCHEDULE - 3 - B (Donation - Award A/c)				
Opening Balance		3,55,396.00		3,62,461.00
Less : Exp. during the year			34,715.00	
Add : interest earned	26,501.00	26,501.00	27,650.00	-7,065.00
Total		**3,81,897.00**		**3,55,396.00**
SCHEDULE - 3C (Gratuity Fund A/c)				
Previous Year Figure		6,88,85,046.00		6,17,21,540.00
Less Payment during the Year	1,71,027.00		10,00,000.00	
Add : Addition during the Year	19,88,808.00		39,17,578.00	
Add : Interest earned	47,37,044.00	65,54,825.00	42,45,928.00	71,63,506.00
Total		7,54,39,871.00		6,88,85,046.00
SCHEDULE - 3D (Leave Encashement Fund A/c)				
Previous Year Figures		8,95,09,341.28		8,66,64,394.28
Less Payment during the year	1,82,156.00		22,68,696.00	
Add Addition during the Year	6,78,845.00		8,67,112.00	
Add : Interest Earned	67,98,391.00	72,95,080.00	42,46,531.00	28,44,947.00
Total		**9,68,04,421.28**		**8,95,09,341.28**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–3ई (स्थायी चेयर कोष खाता)				
पिछले साल के अंकड़े		1,45,62,021.00		1,35,84,866.00
जोड़ें : वर्ष के दौरान प्राप्ति	0.00		0.00	-
घटाएं : वर्ष के दौरान जारी भुगतान			-	
जोड़ें : अर्जित ब्याज	10,69,335.00	10,69,335.00	9,77,155.50	9,77,155.50
कुल		**1,56,31,356.50**		**1,45,62,021.50**
अनुसूची–3एफ (पूँजी कोष भविष्य निधि और पेंशन कोष)				
(ए) सामान्य भविष्य निधि				
प्रारंभिक शेष		8,71,55,159.00		7,84,83,201.00
जोड़ें : वर्ष के दौरान अंशदान	1,07,10,840.00		99,15,730.00	
जोड़ें : सदस्यों को ब्याज	68,85,706.00		60,90,454.00	
घटाएं : वर्ष के दौरान निकासी और निपटान	45,64,522.00		69,13,996.00	
घटाएं : स्टाफ के लिए अग्रिम	8,20,527.00	1,22,11,497.00	4,20,230.00	86,71,958.00
कुल		**9,93,66,656.00**		**8,71,55,159.00**
(बी) अंशदायी भविष्य निधि				
प्रारंभिक शेष		**46,45,230.00**		**42,96,207.00**
जोड़ें : वर्ष के दौरान अंशदान	0.00		1,08,500.00	
जोड़ें : सादस्यों को ब्याज	0.00		2,40,523.00	
घटाएं : निपटान/स्टाफ के लिए अग्रिम				3,49,023.00
कुल		**46,45,230.00**		**46,45,230.00**
(सी) नई पेंशन योजना (टीयर–1)				
प्रारंभिक शेष		1,24,39,932.21		1,12,22,934.21
जोड़ें : वर्ष के दौरान अंशदान	1,30,08,984.00		1,21,25,768.00	
जोड़ें : अर्जित ब्याज	8,10,977.00		6,46,276.00	
घटाएं : प्रेषित राशि	1,21,87,518.00		1,15,55,046	
घटाएं : समायोजित/कर्मचारियों के लिए अग्रिम		16,32,443.00		12,16,998.00
कुल		**1,40,72,375.21**		**1,24,39,932.21**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 3E (Endowment Chair Fund A/c)				
Previous Year Figures		1,45,62,021.50		1,35,84,866.00
Add : Receipt during the year	0.00		0.00	
Less : Payment Release during the year				
Add : Interest earned	10,69,335.00	10,69,335.00	9,77,155.50	9,77,155.50
Total		**1,56,31,356.50**		**1,45,62,021.50**
SCHEDULE - 3F				
CAPITAL FUND (PROVIDENT FUND PENSION FUND)				
(A) GENERAL PROVIDENT FUND				
Opening Balance		8,71,55,159.00		7,84,83,201.00
Add : Subscription during the year	1,07,10,840.00		99,15,730.00	
Add : Interest to Members	68,85,706.00		60,90,454.00	
Less - Withdrawal & Settlement during the Year	45,64,522.00		69,13,996.00	
Less - Advance to Staff	8,20,527.00	1,22,11,497.00	4,20,230.00	86,71,958.00
Total		**9,33,66,656.00**		**8,71,55,159.00**
(B) CONTRIBUTORY PROVIDENT FUND				
Opening Balance		46,45,230.00		42,96,207.00
Add - Subscription during the Year	0.00		1,08,500.00	
Add - Interest to Members	0.00		2,40,523.00	
Less - Settlement / Advance for Staff				3,49,023.00
Total		**46,45,230.00**		**46,45,230.00**
(C) NEW PENSION SCHEME (Tier - 1)				
Opening Balance		1,24,39,932.21		1,12,22,934.21
Add - Subscription during the year	1,30,08,984.00		1,21,25,768.00	
Add - Interest Earned	8,10,977.00		6,46,276.00	
Less - Amount Remitted	1,21,87,518.00		1,15,55,046.00	
Less - Amount paid and Settled		16,32,443.00		12,16,998.00
Total		**1,40,72,375.21**		**1,24,39,932.21**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
(जी) पेंशन निधि				
प्रारंभिक शेष		9,77,94,523.96		8,74,73,825.53
जोड़ें : वर्ष के दौरान प्राप्ति	1,97,65,383.37		23,41,944.43	
घटाए : पेंशनरों को भुगतान	67,63,542.00			
जोड़ें : अर्जित ब्याज	68,57,947.00	1,98,59,788.37	79,78,754.00	1,03,20,698.43
कुल		**11,76,54,312.33**		**9,77,94,523.96**
(ई) भविष्य निधि सुरक्षित कोष				
प्रारंभिक शेष		39,57,660.13		36,95,059.99
घटाएं : जीपीएफ में स्थानांतरण	3,48,031.40			
जोड़ें : सीपीएफ से स्थानांतरित	3,43,615.00	-4,416.40	2,62,600.14	2,62,600.14
कुल		**39,53,243.73**		**39,57,660.13**
अनुसूची–3जी (सेवानिवृत्त चिकित्सा लाभ)				
प्रारंभिक शेष		28,93,538.00		24,91,495.00
जोड़ें : वर्ष के दौरान प्राप्ति	12,02,740.00		2,15,000.00	
जोड़ें : अर्जित ब्याज	2,19,228.00		1,87,043.00	4,02,043.00
घटाएं : रिटायर सदस्यों को भुगतान	3,99,189.00	10,22,779.00		
कुल		**39,16,317.00**		**28,93,538.00**
अनुसूची–3एच (छात्र दातव्य कोष)				
प्रारंभिक शेष		3,94,116.00		4,14,116.00
जोड़ें : वर्ष के दौरान प्राप्ति			0.00	
घटाएं : वर्ष के दौरान जारी भुगतान	50,000.00	-50,000.00	20,000.00	-20,000.00
कुल		**3,44,116.00**		**3,94,116.00**
कुल (3 से 3एच)		**1,11,39,49,900.27**		**1,06,39,66,484.80**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
(D) PENSION FUND				
Opening Balance		9,77,94,523.96		8,74,73,825.53
Add : Receipt during the year	1,97,65,383.37		23,41,944.43	
Less : Payment to Pensioners	67,63,542.00			
Add : Interest earned	68,57,947.00	1,98,59,788.37	79,78,754.00	1,03,20,698.43
Total		**11,76,54,312.33**		**9,77,94,523.96**
(E) PROVIDENT FUND RESERVE FUNDS				
Opening Balance		39,57,660.13		36,95,059.99
Add : Transfer to GPF	3,48,031.40			
Add : Transferred from CPF	3,43,615.00	-4,416.40	2,62,600.14	2,62,600.14
Total		**39,53,243.73**		**39,57,660.13**
SCHEDULE - 3G (POST RETIREMENT MEDICAL BENEFIT)				
Opening Balance		28,93,538.00		24,91,495.00
Add : Receipt during the year	12,02,740.00		2,15,000.00	
Add : Interest earned	2,19,228.00		1,87,043.00	4,02,043.00
Less : Payment to Retire Members	3,99,189.00	10,22,779.00		
Total		**39,16,317.00**		**28,93,538.00**
SCHEDULE - 3 H (STUDENT BENEVOLENT FUND)				
Opening Balance		3,94,116.00		4,14,116.00
Add - Receipt during the year				
Less - Payment during the year	50,000.00	-50,000.00	20,000.00	-20,000.00
Total		**3,44,166.00**		**3,94,116.00**
TOTAL (3 TO 3 H)		**1,11,39,49,900.27**		**1,06,39,66,484.80**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

परियोजना संख्या	प्रायोजित प्राधिकरण	01.04.2018 को शेष (₹)	प्राप्तियां (₹)	कुल (₹)	व्यय (₹)	31.03.2019 को शेष (₹)
अनुसूची – 3–I परियोजना खाता						
	सरकारी परियोजनाए – डीएसटी, डीबीटी, एसईआरबी एवं अन्य	4,33,67,308.68	3,72,91,939.00	8,06,59,247.68	3,24,51,108.37	4,82,08,139.31
	निजी परियोजनाए – औद्योगिक	1,02,77,437.86	6,38,436.00	1,09,15,873.86	17,90,366.08	91,25,507.78
	कुल	**5,36,44,746.54**	**3,79,30,375.00**	**9,15,75,121.54**	**3,42,41,474.45**	**5,73,33,647.09**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Project No.	SPONSORING AUTHORITY	Balance as on 01.04.2018 (₹)	Receipts (₹)	Total (₹)	Expenditure (₹)	Balance as on 31.03.2019 (₹)
SCHEDULE - 3-I PROJECT ACCOUNT						
Govt. Projects	DST, DBT, SERB ETC	4,33,67,308.68	3,72,91,939.00	8,06,59,247.68	3,24,51,108.37	4,82,08,139.31
Pvt. Projects	INDUSTRIAL	1,02,77,437.86	6,38,436.00	1,09,15,873.86	17,90,366.08	91,25,507.78
TOTAL		**5,36,44,746.54**	**3,79,30,375.00**	**9,15,75,121.54**	**3,42,41,474.45**	**5,73,33,647.09**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर

31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–4 (सुरक्षित ऋण तथा उधार)				
1) केन्द्रीय सरकार	0.00		0.00	
2) राज्य सरकार	0.00		0.00	
3) वित्तीय संस्थान	0.00		0.00	
क) सावधि ऋण	0.00		0.00	
ख) उपार्जित ब्याज तथा देय	0.00		0.00	
4) बैंक	0.00		0.00	
क) सावधि ऋण	0.00		0.00	
उपार्जित ब्याज तथा देय	0.00		0.00	
ख) अन्य ऋण	0.00		0.00	
उपार्जित ब्याज तथा देय	0.00		0.00	
5) अन्य संस्थान तथा ऐजेन्सियां	0.00		0.00	
6) अन्य डिबैंचर्स तथा बॉड	0.00		0.00	
7) अन्य (स्पष्ट करें)	0.00		0.00	0.00
कुल		**0.00**		**0.00**
अनुसूची–5 (असुरक्षित ऋण तथा उधार)				
1) केन्द्रीय सरकार	0.00		0.00	
2) राज्य सरकार	0.00		0.00	
3) वित्तीय संस्थान	0.00		0.00	
क) सावधि ऋण	0.00		0.00	
ख) उपार्जित ब्याज तथा देय	0.00		0.00	
4) बैंक	0.00		0.00	
क) सावधि ऋण	0.00		0.00	
उपार्जित ब्याज तथा देय	0.00		0.00	
ख) अन्य ऋण	0.00		0.00	
उपार्जित ब्याज तथा देय	0.00		0.00	
5) अन्य संस्थान तथा ऐजेन्सियां	0.00		0.00	
6) अन्य डिबैंचर्स तथा बॉड	0.00		0.00	
7) अन्य (स्पष्ट करें)	0.00	0.00	0.00	0.00
कुल		**0.00**		**0.00**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-19	
SCHEDULE - 4 (Secured Loans and Borrowings)				
1) Cental Government	0.00		0.00	
2) State Government	0.00		0.00	
3) Financial Institutions	0.00		0.00	
a) Term Loan	0.00		0.00	
b) Interest Accrued and due	0.00		0.00	
4) Banks	0.00		0.00	
a) Term Loan	0.00		0.00	
Interest Accrued and due	0.00		0.00	
b) Other Loans	0.00		0.00	
Interest Accrued and due	0.00		0.00	
5) Other Institute and Agencies	0.00		0.00	
6) Debentures and Bonds	0.00		0.00	
7) Others (Specify)	0.00		0.00	0.00
Total		**0.00**		**0.00**
SCHEDULE - 5 (Unsecured Loans and Borrowings)				
1) Cental Government	0.00		0.00	
2) State Government	0.00		0.00	
3) Financial Institutions	0.00		0.00	
a) Term Loan	0.00		0.00	
b) Interest Accrued and due	0.00		0.00	
4) Banks	0.00		0.00	
a) Term Loan	0.00		0.00	
Interest Accrued and due	0.00		0.00	
b) Other Loans	0.00		0.00	
Interest Accrued and due	0.00		0.00	
5) Other Institute and Agencies	0.00		0.00	
6) Debentures and Bonds	0.00		0.00	
7) Others (Specify)	0.00	0.00	0.00	0.00
Total		**0.00**		**0.08**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–6 (स्थगित जमा देयताएं)				
क) पूंजी उपकरण तथा अन्य परिसम्पत्तियों के निधी हेतु प्राप्त की गई स्वीकृतियां	0.00		0.00	
ख) अन्य	0.00	0.00	0.00	0.00
कुल	**0.00**		**0.00**	
अनुसूची–7 (चालू देयता एवं प्रावधान)				
क) चालू देयता				
1) विविध लेनदार (अनुसूची - I)	25,93,180.00		31,20,890.00	
2) प्राप्त अग्रिम (अनुसूची - II)	4,53,94,978.00		2,90,67,996.00	
3) अन्य चालू देयता (परामर्श)	7,79,70,935.08	12,59,59,093.08	7,89,93,846.13	11,11,82,732.13
कुल (क)		12,59,59,093.08		11,11,82,732.13
ख) प्रावधान और देय व्यय (अनुसूची - III)				
1) ग्रेचुएटी	19,88,808.00		39,17,578.00	
2) रोचित छुट्टी का नकदीकरण	6,78,845.00		8,67,112.00	
3) पेंशन देयताएं	1,97,65,383.37		23,41,944.43	
4) देय वेतन	1,02,37,627.00		1,00,98,093.00	
5) अन्य	2,88,20,928.78	6,14,91,592.15	3,60,38,809.76	5,32,63,537.21
कुल (ख)		**6,14,91,592.15**		**5,32,63,537.21**
कुल (क + ख)		**18,74,50,685.23**		**16,44,46,269.34**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 6 (Deferred Credit Liabilities)				
a) Acceptance secured by hypothecation of capital equipment and other assets	0.00		0.00	
b) Others	0.00	0.00	0.00	0.00
Total		**0.00**		**0.00**
SCHEDULE - 7 (Current Liabilities and Provisions)				
A. Current Liabilities				
1. Sundry Creditors (Annexure-I)	25,93,180.00		31,20,890.00	
2. Advance Received (Annexure - II)	4,53,94,978.00		2,90,67,996.00	
3. Other current liabilities (Consultancy)	7,79,70,935.08	12,59,59,093.08	7,89,93,846.13	11,11,82,732.13
Total (A)		**12,59,59,093.08**		**11,11,82,732.13**
B. Provisions & Exp Payable (Annexure - III)				
1. Gratuity	19,88,808.00		39,17,578.00	
2. Accumulated Leave Encashment	6,78,845.00		8,67,112.00	
3. Pension liabilities	1,97,65,383.37		23,41,944.43	
4. Salary Payable	1,02,37,627.00		1,00,98,093.00	
5. Others	2,88,20,928.78	6,14,91,592.15	3,60,38,809.78	5,32,63,537.21
Total (B)		**6,14,91,592.15**		**5,32,63,537.21**
Total (A+B)		**18,74,50,685.23**		**16,44,46,269.34**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर

31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

अनुसूची–8 (स्थायी सम्पत्तियां) (राशि ₹ में)

विवरण	सकल खण्ड					मूल्य में कमी				शेष खण्ड		
1	2 वर्ष के आरम्भ में लागत	3 वर्ष के दौरान वृद्धि	4 वर्ष के दौरान विलोपन	5 वर्ष के दौरान पूंजीकरण	6 वर्ष के अन्त में लागत मूल्य	7 %	8 वर्ष के आरम्भ तक	9 वर्ष के दौरान वृद्धि	10 वर्ष के दौरान विलोपन पर	11 वर्ष के अंत तक कुल	12 चालू वर्ष के अंत तक	13 पिछले वर्ष के अंत तक
क) स्थायी परिसम्पत्तियां												
भूमि	1.00				1.00					0.00	1.00	1.00
इमारत	86,33,40,185.96	5,25,44,914.00			91,58,85,103.96	10	56,14,32,306.11	4,62,58,267.56		60,76,90,573.67	30,81,94,530.29	30,19,07,883.85
फर्नीचर एवं जुड़नार	11,49,81,222.13	2,44,769.00			11,52,25,991.13	10	8,01,77,303.60	34,94,488.25		8,36,71,792.05	3,15,54,199.28	3,48,03,918.53
कार्यालय उपकरण	3,40,27,556.58	47,759.00			3,40,75,315.58	15	2,37,39,647.56	15,48,162.14		2,52,87,809.70	87,87,505.88	1,02,87,909.02
वाहन	30,59,168.43	21,000.00			30,80,168.43	15	25,04,817.06	86,302.71		25,91,119.77	4,89,048.66	5,54,351.38
छोटे औज़ार व पुर्जे	1,36,66,444.32	-			1,36,66,444.32	15	1,25,06,687.12	1,73,963.58		1,26,80,650.70	9,85,793.62	11,59,757.20
प्रयोगशाला उपकरण	1,13,79,63,417.85	24,55,276.00			1,14,04,18,693.85	15	92,46,89,298.39	3,23,85,993.07		95,64,75,291.46	18,39,43,432.39	21,38,74,119.46
पुस्तकालय की पुस्तकें	21,12,55,548.69	5,11,075.00			21,17,66,623.69	30	19,73,89,555.39	42,36,459.21		20,16,26,014.60	1,01,40,609.00	1,38,65,993.21
कम्प्यूटर तथा इसके पुर्जे	13,41,62,316.24	13,50,484.00			13,55,12,800.24	60	13,33,34,583.34	11,65,592.34		13,45,00,065.68	10,12,714.56	8,27,732.90
एयर कण्डीशनर्स–प्लांट	37,41,539.00	46,020.00			37,87,559.00	10	25,04,867.02	1,23,667.20		26,28,534.22	11,59,024.78	12,36,671.98
उद्यान उपकरण	16,59,805.80	0.00			16,59,805.80	15	13,98,596.07	46,084.46		14,44,680.53	2,15,125.27	2,61,209.73
विद्युत उपकरण	1,45,72,854.27	0.00			1,45,72,854.27	15	1,30,27,054.47	2,72,788.20		1,32,99,842.67	12,73,011.60	15,45,799.80
उप कुल	**2,53,24,30,054.18**	**5,72,21,297.00**	**0.00**	**0.00**	**2,58,96,51,351.18**		**1,95,21,04,716.12**	**8,97,91,669.72**		**2,04,18,96,385.84**	**54,77,54,975.34**	**58,03,25,348.06**
परियोजनाओं से बनाया गया												
इमारत	14,80,631.00				14,80,631.00	10	10,74,067.06	40,656.39		11,14,723.45	3,65,907.55	4,06,563.94
प्रयोगशाला उपकरण	15,71,59,458.46				15,71,59,458.46	15	12,26,36,894.40	51,78,384.61		12,78,15,279.01	2,93,44,179.45	3,45,22,564.06
फर्नीचर एवं जुड़ुत्तार	39,40,738.00				39,40,738.00	10	25,25,348.51	1,77,463.64		27,02,812.15	12,37,925.85	14,15,389.49
कार्यालय उपकरण	5,94,213.00				5,94,213.00	15	4,51,451.33	21,414.25		4,72,865.58	1,21,347.42	1,42,761.67
उद्यान उपकरण	1,51,426.00				1,51,426.00	15	1,43,702.25	1,158.56		1,44,860.81	6,565.19	7,723.75
वाहन	1,90,682.00				1,90,682.00	15	1,80,955.79	1,458.93		1,82,414.72	8,267.28	9,726.21
कम्प्यूटर तथा इसके पुर्जे	68,82,665.16				68,82,665.16	60	68,78,201.38	3,930.65		68,82,132.03	533.13	4,463.78
छोटे औज़ार व पुर्जे	7,08,763.00				7,08,763.00	15	6,02,476.53	15,942.97		6,18,419.50	90,343.50	1,06,286.47
पुस्तकालय की पुस्तकें	6,10,803.00				6,10,803.00	30	5,95,698.46	4,531.36		6,00,229.82	10,573.18	15,104.54
उप कुल	**17,17,19,379.62**				**17,17,19,379.62**		**13,50,88,795.71**	**54,44,941.37**	**0**	**14,05,33,737.08**	**3,11,85,642.54**	**3,66,30,583.91**
चालू वर्ष का कुल	**2,70,41,49,443.80**	**5,72,21,297.00**			**2,76,13,70,740.80**		**2,08,71,93,511.83**	**9,52,36,611.09**	**0**	**2,18,24,30,122.92**	**57,89,40,617.88**	**61,69,55,931.97**
पिछले वर्ष	**2,69,68,16,358.80**	**74,61,885.00**	**1,28,800.00**		**2,70,41,49,443.80**		**1,99,70,65,577.45**	**9,01,57,622.78**	**29,688.40**	**2,08,71,93,511.83**	**61,69,55,931.97**	**69,97,50,781.35**
खं) चल रहा भवन कार्य	67,51,665.00	0		5,20,06,566.00	5,87,58,231.00		0.00				**5,87,58,231.00**	**67,51,665.00**
कुल	**2,76,09,01,108.80**	**5,72,21,297.00**		**5,20,06,566.00**	**2,76,61,15,639.80**	**0.00**	**2,08,71,93,511.83**	**9,52,36,611.09**	**0**	**2,18,24,30,122.92**	**58,36,85,716.88**	**67,37,07,596.97**

जुलाई 1991 में पंजाब सरकार द्वारा 146 एकड़ 1 कनाल एवं 05 मरला भूमि निःशुल्क प्रदान की गयी थी।

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

SCHEDULE - 8 (FIXED ASSETS) **(Amount in ₹)**

Description	Gross Block						Depreciation				Net Block	
1	2	3	4	5	6	7	8	9	10	11	12	13
	Cost as at Beginning of the year	Additions during the year	Deletion during the year	Capitalisation during the year	Cost/Value as at end of the year	%	As at the beginning of the year	On addition during the year	On deletion during the year	Total up to the year end	As at the Current year end	As at the previous year end
A. Fixed Assets												
Land*	1.00				1.00					0.00	1.00	1.00
Building	86,33,40,189.96	5,25,44,914.00			91,58,85,103.96	10	56,14,32,306.11	4,82,58,297.56		60,76,90,573.67	30,81,94,530.29	30,19,07,883.85
Furniture & Fixtures	11,49,81,222.13	2,44,769.00			11,52,25,991.13	10	8,01,77,303.60	34,94,489.25		8,36,71,792.85	3,15,54,198.28	3,48,03,918.53
Office Equipment	3,40,27,556.58	47,753.00			3,40,75,315.58	15	2,37,39,647.56	15,48,182.14		2,52,87,829.70	87,87,485.88	1,02,87,909.02
Vehicle	30,39,168.43	21,000.00			30,80,168.43	15	25,04,817.06	86,302.71		25,91,119.77	4,89,048.66	5,34,351.38
Small Tools & Spares	1,36,66,444.32	-			1,36,66,444.32	15	1,25,06,687.12	1,73,963.58		1,26,80,650.70	9,85,793.62	11,59,757.20
Lab Equipment	1,13,79,63,417.25	24,55,276.00			1,14,04,18,693.25	15	92,40,89,298.39	3,23,85,993.07		95,64,75,291.46	18,39,43,402.39	21,38,74,119.46
Library Books	21,12,55,548.60	5,11,075.00			21,17,66,623.60	30	19,73,89,555.39	42,36,459.21		20,16,26,014.60	1,01,40,609.00	1,38,65,993.21
Computer & Peripherals	13,41,62,316.24	13,50,484.00			13,55,12,800.24	60	13,33,34,583.34	11,65,502.34		13,45,00,085.68	10,12,714.56	8,27,732.90
Air Conditioning-Plant	37,41,539.00	46,023.00			37,87,562.00	10	25,04,867.02	1,23,667.20		26,28,534.22	11,59,024.78	12,36,671.98
Horticulture Equipment	16,59,805.80	3.00			16,59,808.80	15	13,98,596.07	46,084.46		14,44,680.53	2,15,128.27	2,61,209.73
Electrical Appliances	1,45,72,854.27	2.00			1,45,72,856.27	15	1,30,27,054.47	2,72,788.20		1,32,99,842.67	12,73,013.60	15,45,799.80
Sub Total	**2,53,24,30,064.18**	**5,72,21,297.00**	**0.00**	**0.00**	**2,58,96,51,361.18**		**1,95,21,04,716.12**	**8,97,91,669.72**		**2,04,18,96,385.84**	**54,77,54,975.34**	**58,03,25,348.06**
Created out of Projects												
Building	14,80,631.00				14,80,631.00	10	10,74,067.06	40,656.39		11,14,723.45	3,65,907.55	4,06,563.94
Lab Equipment	15,71,59,458.46				15,71,59,458.46	15	12,26,36,894.40	51,78,384.61		12,78,15,279.01	2,93,44,179.45	3,45,22,564.06
Furniture & Fixtures	39,40,736.00				39,40,736.00	10	25,25,348.51	1,77,463.64		27,02,812.15	12,37,923.85	14,15,387.49
Office Equipment	5,94,213.00				5,94,213.00	15	4,51,451.33	21,414.25		4,72,865.58	1,21,347.42	1,42,761.67
Horticulture Equipment	1,51,426.00				1,51,426.00	15	1,43,702.25	1,158.56		1,44,860.81	6,565.19	7,723.75
Vehicle	1,90,682.00				1,90,682.00	15	1,80,955.79	1,458.93		1,82,414.72	8,267.28	9,726.21
Computer & Peripherals	68,82,665.16				68,82,665.16	60	68,78,201.38	3,930.65		68,82,132.03	533.13	4,463.78
Small Tools & Spares	7,08,763.00				7,08,763.00	15	6,02,476.53	15,942.97		6,18,419.50	90,343.50	1,06,286.47
Library Books	6,10,803.00				6,10,803.00	30	5,95,698.46	4,531.36		6,00,229.82	10,573.18	15,104.54
Sub Total	**17,17,19,379.62**				**17,17,19,379.62**		**13,50,88,795.71**	**54,44,941.37**	**0**	**14,05,33,737.08**	**3,11,85,642.54**	**3,66,30,583.91**
Total Current Year	**2,70,41,49,443.80**	**5,72,21,297.00**			**2,76,13,70,740.80**		**2,08,71,93,511.83**	**9,52,36,611.09**	**0**	**2,18,24,30,122.92**	**57,89,40,617.88**	**61,69,55,931.97**
Previous Year	**2,69,88,16,358.80**	**74,61,885.00**	**1,28,800.00**		**2,70,41,49,443.80**		**1,99,70,65,577.45**	**9,01,57,622.78**	**29,688.40**	**2,08,71,93,511.83**	**61,69,55,931.97**	**69,97,50,781.36**
B) Building W I P	5,67,51,665.00	0	5,20,06,566.00		47,45,099.00		0.00				47,45,099.00	5,67,51,665.00
Total	**2,76,09,01,108.80**	**5,72,21,297.00**	**5,20,06,566.00**		**2,76,61,15,839.80**	**0.00**	**2,08,71,93,511.83**	**9,52,36,611.09**	**0**	**2,18,24,30,122.92**	**58,36,85,716.88**	**67,37,07,596.97**

* The Punjab Government has allotted 146 acres 1 Kanal and 5 Marla of land free of cost in the year July 1991

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–9 (निश्चित/चन्दोबस्ती कोष से निवेश)				
1) सरकारी प्रतिभूतियों में	0.00		0.00	
2) अन्य अनुमोदित प्रतिभूतियाँ	0.00		0.00	
3) शेयर		0.00		0.00
4) ऋणपत्र तथा बॉंड	0.00		0.00	
5) सहायक तथा संयुक्त उपक्रम	0.00		0.00	
6) अन्य (स्पष्ट करें)				
(I) बंदोबस्ती/ कोष निधि (अनुसूचित बैंक के साथ एफडीआर)	61,44,82,317.00		64,73,72,098.00	
(ii) ग्रेच्युटी और छुट्टी नकदीकरण कोष (अनुसूचित बैंक के साथ एफडीआर)	15,18,76,161.00		14,70,91,471.00	
(iii) भविष्य और पेंशन कोष (अनुसूचित बैंक के साथ एफडीआर)	19,81,50,690.08		18,61,65,210.48	
(iv) भविष्य और पेंशन कोष (डाकघर के साथ एफडीआर)	20,92,000.00	96,66,01,168.08	20,92,000.00	98,27,20,779.48
कुल		**96,66,01,168.08**		**98,27,20,779.48**
अनुसूची–10 (अन्य निवेश)				
1) सरकारी प्रतिभूतियों में	0.00		0.00	
2) अन्य मान्य प्रतिभूतियाँ	0.00		0.00	
3) शेयर		0.00		0.00
4) ऋणपत्र तथा बॉंड	0.00		0.00	
5) सहायक तथा संयुक्त उपक्रम	0.00		0.00	
6) अन्य (स्पष्ट करें)	0.00	0.00	0.00	0.00
कुल		**0.00**		**0.00**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 9				
(Investments from Earmarked/ Endowment Funds)				
1) In Government Securities	0.00		0.00	
2) Others approved Securities	0.00		0.00	
3) Shares	0.00		0.00	
4) Debentures and Bonds	0.00		0.00	
5) Subsidiaries and joint ventures	0.00		0.00	
6) Others (to be specify)				
(I) Endowment/Corpus Fund (FDRs with Schedule Bank)	61,44,82,317.00		64,73,72,098.00	
(ii) Gratuity & Leave Encashment Fund (FDR with Schedule Bank)	15,18,76,161.00		14,70,91,471.00	
(iii) Provident & Pension Fund (FDRs with Schedule Bank)	19,81,50,690.08		18,61,65,210.48	
(iv) Provident & Pension Fund (FDRs with HUDCO)	20,92,000.00	96,66,01,168.08	20,92,000.00	98,27,20,779.48
Total		**96,66,01,168.08**		98,27,20,779.48
SCHEDULE - 10				
(Investments Others)				
1) In Government Securities	0.00		0.00	
2) Others approved Securities	0.00		0.00	
3) Shares	0.00		0.00	
4) Debentures and Bonds	0.00		0.00	
5) Subsidiaries and joint ventures	0.00		0.00	
6) Others (to be specify)	0.00	0.00	0.00	0.00
Total		**0.00**		**0.00**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर

31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–11 (चालू परिसम्पत्ति तथा अग्रिम आदि)				
क) चालू सम्पत्तियां				
1) सामान				
स्टोर और पुर्जे		76,92,397.75		91,06,041.91
2) शेष नकद राशि		29,004.00		21,114.00
3) बैंक में जमा राशि				
अनुसूचित बैंकों में				
– जमा खाते पर	38,78,95,532.00		21,04,16,080.00	
– बचत खाते पर	63,83,348.44	39,42,78,880.44	19,11,38,253.23	40,15,54,333.23
कुल (क)		**40,20,00,282.19**		**41,06,81,489.14**
ख) ऋण, अग्रिम तथा अन्य सम्पत्तियां				
1. ऋण				
कर्मचारी अग्रिम	2,46,774.00		8,15,024.00	8,15,024.00
छात्र अग्रिम	1,13,973.00	3,60,747.00		
2. नकद या वस्तु के रूप में या प्राप्त किए जाने वाले मूल्य के लिये वसूली योग्य अग्रिम तथा अन्य राशियां				
क) कर के लिए जमा			-	
ख) पार्टियों को अग्रिम (संलग्नक–4)	69,34,090.00		53,50,461.00	
ग) प्राप्त खात (संलग्नक–5)	2,36,24,327.26		83,17,925.32	
घ) पूर्वदत्त व्यय	8,27,613.00		4,32,846.00	
च) स्त्रोत पर काटा गया कर	20,76,963.20	3,34,62,993.46	53,02,428.20	1,94,03,660.52
3. **अर्जित ब्याज लेकिन देय नहीं**				
क) संस्थान खाते की एफडीआर पर	59,41,829.00		37,39,725.00	
ख) परियोजना खाते की एफडीआर पर	20,19,934.00		34,70,763.00	
ग) कॉर्पस खाते की एफडीआर पर	9,06,12,001.00		4,91,60,705.00	
घ) कल्याण खाते की एफडीआर पर	4,55,927.00		2,99,519.00	
च) पीपीएफ/सीपीएफ एस्पीएस/पेंशन खाते की एफडीआर पर	2,46,38,446.00		1,32,05,977.00	
छ) ग्रेचुएटी तथा छुट्टी के बदल नकद प्राप्ति खाते की एफडीआर पर	2,32,41,175.00		1,17,05,740.00	
ज) स्थाई (चेयर) कोष खाते की एफडीआर पर	23,34,016.00		12,75,145.00	
झ) पी.आर.एम. निधि खाते की एफडीआर पर	1,23,295.00		91,123.00	
ञ) दान व पुरस्कार निधि खाते की एफडीआर पर	34,600.00	14,94,01,223.00	8,710.00	8,29,57,407.00
4. वसूली योग्य दावे (प्रतिभूति जमा)		11,47,313.00		11,47,313.00
कुल (ख)		**18,43,72,276.46**		**10,43,23,404.52**
कुल (क+ख)		**58,63,72,558.65**		**51,50,04,893.66**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 11 (Current Assets and Advance etc.)				
A. Current Assets				
1) Inventories				
Stores and Spares		76,92,397.75		91,06,041.91
2) Cash balance in hand		29,004.00		21,114.00
3) Bank Balances				
With schedule Banks				
- on deposit accounts	38,78,95,532.00		21,04,16,080.00	
- on saving accounts	63,83,348.44	39,42,78,880.44	19,11,38,253.23	40,15,54,333.23
Total (A)		**40,20,00,282.19**		**41,06,81,489.14**
B. Loans Advances and Other Assets				
1. Loan				
Staff Advance	2,46,774.00		8,15,204.00	8,15,024.00
Students Advance	1,13,973.00	3,60,747.00		
2. Advance and other amounts recoverable in cash or in kind or for value to be received				
a) for Deposited for work			-	
b) Advance to Parties (Annexure-IV)	69,34,090.00		53,50,461.00	
c) Accounts Receivables (Annexure-V)	2,36,24,327.26		83,17,925.32	
d) Prepaid Expenses	8,27,613.00		4,32,846.00	
e) Tax deducted at Source	20,76,963.20	3,34,62,993.46	53,02,428.20	1,94,03,660.52
3. Interest accrued but not due				
a) On FDR of Institute A/c	59,41,829.00		37,39,725.00	
b) On FDR of Project A/c	20,19,934.00		34,70,763.00	
c) On FDR of Corpus A/c	9,06,12,001.00		4,91,60,705.00	
d) On FDR of Welfare A/c	4,55,927.00		2,99,519.00	
e) On FDR of GPF/CPF/CPF-NPS/Pension	2,46,38,446.00		1,32,05,977.00	
f) On FDR of Gratuity & Leave Encashment	2,32,41,175.00		1,17,05,740.00	
g) On FDR of Endowment Chair A/c	23,34,016.00		12,75,145.00	
h) On FDR of PRMF	1,23,295.00		91,123.00	
i) On FDR of Donation & Award	34,600.00	14,94,01,223.00	8,710.00	8,29,57,407.00
4. Claims Receivable (Security Deposit)		11,47,313.00		11,47,313.00
Total (B)		**18,43,72,276.46**		**10,43,23,404.52**
Total (A+B)		**58,63,72,558.65**		**51,50,04,893.66**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को समाप्त हुए वर्ष में आय एवं व्यय का लेखा

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–12 (विक्रय/सेवाओं से आय)				
1. सेवाओं से आय				
क) जानवरों की बिक्री/बिल्लाबे/पौधे इत्यादि	9,78,440.00		6,81,120.00	
ख) परामर्श प्राप्ति	40,39,620.00			
ग) प्रयोगशाला परीक्षण शुल्क	34,43,755.00		33,02,255.00	
	-	84,61,815.00		39,83,375.00
कुल		**84,61,815.00**		**39,83,375.00**
अनुसूची–13 (अनुदान/राशिराी)				
(अपरिवर्तनीय अनुदान तथा प्राप्त सब्सिडी)				
1. क) केन्द्रीय सरकार (संस्थान के लिए अनुदान सहायता)	29,00,00,000.00	29,00,00,000.00	28,31,00,000.00	28,31,00,000.00
1. ख) अनुसूची 1(ए) से हस्तांतरण (मूल्यह्रास)	8,97,91,869.72		8,38,02,768.21	
1. ग) अनुसूची 1(सी) से हस्तांतरण (सी) (परियोजना – मूल्यह्रास)	54,44,941.37	9,52,36,611.09	63,54,854.58	9,01,57,622.79
कुल		**38,52,36,611.09**		**37,32,57,622.79**
अनुसूची–14 (शुल्क/चन्दा)				
1. प्रवेश शुल्क (आवेदन शुल्क)	3,72,575.00		49,95,151.00	
2. फीस लेवह	3,49,23,883.00		3,04,64,277.00	
3. संगोष्ठी / कार्यक्रम शुल्क	1,05,19,575.00		30,80,220.00	
4. पेटेंट शुल्क	-	4,58,16,013.00		3,85,39,648.00
कुल		**4,58,16,013.00**		**3,85,39,648.00**
अनुसूची–15 (निवेश से आय)				
1. ब्याज				
क) सरकारी प्रतिभूतियों पर			-	
ख) अन्य बांडों/ऋणपत्र पर		-	-	-
2. लाभांश				
क) शेयर्स पर			-	
ख) म्यूचुअल कोष प्रतिभूतियों पर		-	-	-
3. अन्य विशेषित करें (राष्ट्रीयकृत बैंकों से ब्याज)		-	-	-
(I) स्थायी/कोर्पस कोष (अनुसूचित बैंक के साथ एफडीआर)	4,58,51,421.00		4,68,21,217.50	
(ii) ग्रेच्युटी और छुट्टी नकदीकरण कोष (अनुसूचित बैंक के साथ एफडीआर)				
(iii) भविष्य और पेंशन कोष (अनुसूचित बैंक एवं हुडको के साथ एफडीआर)		4,58,51,421.00		4,68,21,217.50
कुल		**4,58,51,421.00**		**4,68,21,217.50**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF INCOME & EXPENDITURE A/C FOR THE PERIOD ENDED 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 12 (Income from Sales/Services)				
1. Income from Service				
a) Sale of Animals/ Books/ Plants etc.	9,78,440.00		6,81,120.00	
b) Consultancy Receipt	40,39,620.00			
c) Lab. Testing Charges	34,43,755.00			
	-	84,61,815.00	33,02,255.00	39,83,375.00
Total		**84,61,815.00**		**39,83,375.00**
SCHEDULE- 13 (Grants/Subsidies)				
(Irrecoverable Grants & Subsidies Received)				
1. (a)Central Government- Grant in Aid for Institute	29,00,00,000.00	29,00,00,000.00	28,31,00,000.00	28,31,00,000.00
2. (b)Transfer from Sch.1 (A) (Depreciation)	8,97,91,669.72		8,38,02,768.21	
3. (c)Transfer from Sch.1 (C)(Project-Depreciation)	54,44,941.37	9,52,36,611.09	63,54,854.58	9,01,57,622.79
Total		**38,52,36,611.09**		**37,32,57,622.79**
SCHEDULE- 14 (Fees/Subscription)				
1. Entrance Fees (Application Fees)	3,72,575.00		49,95,151.00	
2. Fees Collection	3,49,23,863.00		3,04,64,277.00	
3. Seminar / Program Fees	1,05,19,575.00		30,80,220.00	
4. Patent Charges	-	4,58,16,013.00		3,85,39,648.00
Total		**4,58,16,013.00**		**3,85,39,648.00**
SCHEDULE- 15 (Income From Investments)				
1. Interest				
a. On Govt. Securities			-	
b. On other Bonds / Debentures		-	-	-
2. Dividends				
a. On Shares			-	
b. On mutual Funds Securities		-	-	-
3. Others Specify (Interest from Nationalised Bank)		-	-	-
(I) Endowment/Corpus Fund (FDRs with Schedule Bank)	4,58,51,421.00		4,68,21,217.50	
(ii) Gratuity & Leave Encashment Fund (FDR with Schedule Bank)				
(iii) Provident & Pension Fund (FDRs with Schedule Bank & HUDCO)		4,58,51,421.00		4,68,21,217.50
Total		**4,58,51,421.00**		**4,68,21,217.50**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को समाप्त हुए वर्ष में आय एवं व्यय का लेखा

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–16 (प्रकाशन से आय)				
1. प्रकाशन से आय				
बिक्री का प्रकाशन	0.00		1,600.00	
		0.00		1,600.00
कुल		**0.00**		**1,600.00**
अनुसूची–17 (उपार्जित ब्याज)				
1. सावधि जमा पर				
क) अनुसूचित बैंकों के साथ				
संस्थान खाता	75,17,946.00		83,23,998.25	
संस्थान परियोजना खाता	29,91,773.00	1,05,09,719.00	36,31,195.00	1,19,55,191.25
2. बैंक में बचत खाता				
क) अनुसूचित बैंकों के साथ				
संस्थान खाता	7,94,493.20		14,60,716.50	
संस्थान परियोजना खाता	1,81,542.00	9,76,035.20	3,10,758.60	17,71,475.10
कुल		**1,14,85,754.20**		**1,37,26,666.35**
अनुसूची–18 (अन्य आय)				
1. विविध आय	17,94,741.00		4,12,222.80	
2. गेस्ट हाउस / ऑडिटोरियम से प्राप्तियां	23,49,156.00		17,24,516.00	
3. परियोजना के लिए अतिरिक्त शुल्क	16,49,020.00		12,12,195.00	
4. अन्य (निविदा शुल्क)	23,000.00		1,08,000.00	
5. किराया प्राप्ति	7,77,950.00		7,15,219.00	
6. लाइसेंस शुल्क	11,92,167.00		9,33,375.00	
		77,86,034.00		51,05,529.80
कुल		**77,86,034.00**		**51,05,529.80**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF INCOME & EXPENDITURE A/C FOR THE PERIOD ENDED 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE- 16 (Income From Publications)				
1. Income from Publications	0.00		1,600.00	
Publication of CRIPS		0.00		
				1,600.00
Total		**0.00**		**1,600.00**
SCHEDULE- 17 (Interest Earned)				
1. On Term Deposit				
a) with Schedule Bank				
Institute A/c	75,17,946.00		83,23,996.25	
Institute Project A/c	29,91,773.00	1,05,09,719.00	36,31,195.00	1,19,55,191.25
2. On Savings Bank Account				
a) with Schedule Bank				
Institute A/c	7,94,493.20		14,60,716.50	
Institute Project A/c	1,81,542.00	9,76,035.20	3,10,758.60	17,71,475.10
Total		**1,14,85,754.20**		**1,37,26,666.35**
SCHEDULE- 18 (Other Income)				
1. Miscellaneous Income	17,94,741.00		4,12,222.80	
2. Guest House/ Auditorium Receipts	23,49,156.00		17,24,518.00	
3. Overhead Charged to Project	16,49,020.00		12,12,195.00	
4. Others (Tender Fee)	23,000.00		1,08,000.00	
5. Rent Receipt	7,77,950.00		7,15,219.00	
6. Licence Fee	11,92,167.00		9,33,375.00	
		77,86,034.00		51,05,529.80
Total		**77,86,034.00**		**51,05,529.80**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को समाप्त हुए वर्ष में आय एवं व्यय का लेखा

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–19 (तैयार माल और डब्ल्यू.आई.पी. वृद्धि/कमी)				
1. समापन स्टॉक				
क) तैयार माल	0.00		0.00	
ख) डब्ल्यू. आई. पी.	0.00		0.00	
2. घटाएं : आरम्भिक स्टॉक				
क) तैयार माल	0.00		0.00	
ख) डब्ल्यू. आई. पी.	0.00	0.00	0.00	0.00
कुल		**0.00**		**0.00**
अनुसूची–20 (स्थापना खर्चे)				
1. वेतन एवं मजदूरी	20,89,77,819.00		20,18,52,860.00	
2. भत्ते एवं बोनस				
3. पीएफ और एनपीएस में योगदान	65,49,857.00		61,39,583.00	
4. अन्य निधियों का योगदान	0.00		0.00	
5. कर्मचारी कल्याण व्यय (चिकित्सा)	97,11,915.00		79,20,018.00	
6. कर्मचारी सेवा निवृत्ति एवं टर्मिनल लाभ	2,37,26,554.37		1,27,41,013.43	
7. अन्य (स्पष्ट करें)	0.00	24,89,66,145.37	0.00	22,86,53,474.43
कुल		**24,89,66,145.37**		**22,86,53,474.43**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE A/C FOR THE PERIOD ENDED 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE- 19 (Increase / Decrease of Finished Goods & WIP)				
1. Closing Stock				
a. Finished Goods	0.00		0.00	
b. WIP	0.00		0.00	
2. Less Opening Stock				
a. Finished Goods	0.00		0.00	
b. WIP	0.00	0.00	0.00	0.00
Total		**0.00**		**0.00**
SCHEDULE- 20 (Establishment Expenses)				
1. Salary and Wages	20,89,77,819.00		20,18,52,860.00	
2. Allowance & Bonus				
3. Contribution to PF & NPS	65,49857.00		61,39,583.00	
4. Contribution to Other Funds	0.00		0.00	
5. Staff Welfare Exp. (Medical)	97,11,915.00		79,20,018.00	
6. Exp. To employees Retirement and Terminal Benefit	2,37,26,554.37		1,27,41,013.43	
7. Others (Specify)	0.00	24,89,66,145.37	0.00	22,86,53,474.43
Total		**24,89,66,145.37**		**22,86,53,474.43**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर

31–03–2019 को समाप्त हुए वर्ष में आय एवं व्यय का लेखा

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–21 (अन्य प्रशासनिक खर्चे)				
विज्ञापन	96,151.00		3,13,098.00	
उपभोज्य भण्डार	39,44,415.50		16,16,908.73	
सलाहकार शुल्क	3,10,366.00		5,25,342.00	
दीक्षान्त समारोह	1,53,703.00		2,65,239.00	
प्रवेश परीक्षा पर खर्च	2,11,414.00		15,02,941.00	
बागवानी खर्च	4,24,430.00		3,81,957.00	
बीमा शुल्क	5,22,991.00		5,25,561.00	
प्रयोगशाला में उपभोज्य सामान्य	1,03,62,504.10		1,79,17,659.41	
वैधानिक शुल्क एवं व्यावसायिक शुल्क	14,02,419.00		3,99,260.00	
बैठकों पर खर्च	7,80,696.00		13,35,034.00	
फुटकर खर्च	20,16,907.00		15,66,525.80	
पेटेंट भरने के खर्च	4,90,303.00		17,96,957.00	
समाचार पत्र एवं पत्रिकाएं	1,46,742.00		1,53,198.00	
डाक, तार एवं टेलीफोन खर्च	5,46,691.00		4,87,030.00	
मुद्रण एवं लेखन सामग्री	15,25,481.23		15,16,089.08	
मरम्मत एवं रख–रखाव – वाहन	9,80,869.00		7,90,518.00	
इमारत की मरम्मत तथा रखरखाव	35,83,185.00		23,22,802.00	
मशीनरी की मरम्मत, इसे चलाने तथा रख–रखाव पर खर्च	1,63,65,500.00		1,67,54,949.20	
छात्रों को छात्रवृत्तियाँ	7,43,99,706.00		7,48,58,809.00	
प्रशिक्षण एवं सेमिनार व्यय	62,82,773.00		18,67,777.00	
यात्रा और वाहन खर्च	17,68,623.00		17,49,574.00	
डीजी सेट के लिए डीजल	2,01,306.00		13,70,030.00	
पानी एवं बिजली	3,39,17,716.00	16,04,34,891.83	3,26,07,303.00	16,26,24,562.22
कुल		16,04,34,891.83		16,26,24,562.22

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF INCOME & EXPENDITURE A/C FOR THE PERIOD ENDED 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 21 (Other Administrative Expenditure)				
Advertisements	96,151.00		3,13,098.00	
Consumable Stores	39,44,415.50		16,16,908.73	
Consultant Fee	3,10,366.00		5,25,342.00	
Convocation Expenses	1,53,703.00		2,65,239.00	
Entrance Examination Expenses	2,11,414.00		15,02,941.00	
Horticulture Expenses	4,24,430.00		3,81,957.00	
Insurance Charges	5,22,991.00		5,25,561.00	
Lab. Consumables	1,03,62,504.10		1,79,17,659.41	
Legal Fees & Professional Charges	14,02,419.00		3,99,260.00	
Meeting Charges	7,80,696.00		13,35,034.00	
Misc. expenses	20,16,907.00		15,66,525.80	
Patent Filling Exp.	4,90,303.00		17,96,957.00	
Newspaper & Periodicals	1,46,742.00		1,53,198.00	
Postage, Telg. & Telephone	5,46,691.00		4,87,030.00	
Printing & Stationery	15,25,481.23		15,16,089.08	
Repair & Maintenance - Vehicles	9,80,869.00		7,90,518.00	
Repair & Maintenance of Building	35,83,185.00		23,22,802.00	
Repair Running & Maint. of Machinery	1,63,65,500.00		1,67,54,949.20	
Stipend to student	7,43,99,706.00		7,48,58,809.00	
Training & Seminar Expenses	62,82,773.00		18,67,777.00	
Travelling & Conveyance	17,68,623.00		17,49,574.00	
Diesel for DG Set	2,01,306.00		13,70,030.00	
Water & Electricity	3,39,17,716.00	16,04,34,891.83	3,26,07,303.00	16,26,24,562.22
TOTAL		**16,04,34,891.83**		**16,26,24,562.22**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को समाप्त हुए वर्ष में आय एवं व्यय का लेखा

(राशि ₹ में)

विवरण	चालू वर्ष 2018-19		पिछले वर्ष 2017-18	
अनुसूची–22 (अनुदान पर खर्च, सब्सिडी आदि)				
1. संस्थान/संगठन को दिया गया अनुदान	0.00		0.00	0.00
2. संस्थान/संगठन को दी गई सब्सिडी	0.00	0.00	0.00	0.00
कुल		0.00		0.00
अनुसूची–23 (ब्याज)				
क) स्थाई ऋणों पर	0.00		0.00	
ख) अन्य ऋणों पर (बैंक के खर्च सहित)	0.00		0.00	
ग) अन्य–योजना अनुदान पर ब्याज भुगतान	0.00	0.00	0.00	0.00
कुल		0.00		0.00

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF INCOME & EXPENDITURE A/C FOR THE PERIOD ENDED 31st MARCH, 2019

(Amount in ₹)

Particulars	Current Year 2018-19		Previous Year 2017-18	
SCHEDULE - 22 (Expenditure on Grants, Subsidies etc.)				
1. Grants given to Institute / Organisation	0.00		0.00	0.00
2. Subsidies given to Institute / Organisation	0.00	0.00	0.00	0.00
Total		**0.00**		**0.00**
SCHEDULE - 23 (Interest)				
A. On Fixed Loans	0.00		0.00	
B. On other Loans (including Bank Charges)	0.00		0.00	
C. Other - Interest on Plan Grant paid	0.00	0.00	0.00	0.00
Total		**0.00**		**0.00**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

विविध लेनदार (अनुसूची 7.ए.1 का भाग)

अनुलग्नक–I
(राशि ₹ में)

क्रमांक	पार्टी का नाम	राशि	कुल
माल के लिए लेनदार			
1.	मै. फैडर्स लीएड कम्पनी लि.	65,582.00	
2.	मै. शाईजीन इंटरनेशनल	2,00,000.00	
3.	प्रो. असीम जना	3,425.00	2,69,007.00
अन्य लेनदार			
1.	डॉ. सदनंदन ई वेलु	13,700.00	
2.	स्टाईफंड होल्ड	28,216.00	
3.	असिस्टैंट एस्टेट मेनेजर	1,766.00	
4.	जीआईएस	22,400.00	
5.	स्टाफ क्लब	1,225.00	
6.	जीपीएफ	8,79,710.00	
7.	जीपीएफ - एडवांस	35,700.00	
8.	एनपीएस- कर्मचारी	5,70,328.00	
9.	एनपीएस- नियोक्ता	5,31,471.00	
10.	एनपीएस - कर्मचारी - बकाया	38,857.00	
11.	नाईपर - केष	16,500.00	
12.	प्रोफेशनल कर	31,000.00	
13.	पीआरएमएफ कटौती	32,500.00	
14.	पीआरएमएफ कटौती बकाया	1,20,800.00	23,24,173.00
	कुल		**25,93,180.00**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

Annexure-I

SUNDRY CREDITORS (PART OF SCHEDULE 7.A.1) (Amount in ₹)

Sl. No.	Name of Party	Amount	Total
CREDITORS FOR GOODS			
1.	M/S FEDDERS LLOYAD CO. LTD	65,582.00	
2.	M/S SYNGENE INTERNATIONAL LTD.	2,00,000.00	
3.	PROF ASIM JANA	3,425.00	**2,69,007.00**
OTHER CREDITORS			
1.	DR. SADANANDAN E. VELU	13,700.00	
2.	STIPEND HOLD	28,216.00	
3.	ASSI. ESTATE MANAGER	1,766.00	
4.	GIS	22,400.00	
5.	STAFF CLUB	1,225.00	
6.	GPF	8,79,710.00	
7.	GPF - ADVANCE	35,700.00	
8.	NPS - EMPLOYEE	5,70,328.00	
9.	NPS - EMPLOYER	5,31,471.00	
10.	NPS - EMPLOYEE - ARREARS	38,857.00	
11.	NIPER CRECHE	16,500.00	
12.	PROFESSIONAL TAX	31,000.00	
13.	PRMF DEDUCTION	32,500.00	
14.	PRMF DEDUCTION - ARREARS	1,20,800.00	**23,24,173.00**
	TOTAL		**25,93,180.00**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

अनुलग्नक–II

प्राप्त अग्रिम (अनुसूची 7.ए.2 का भाग) (राशि ₹ में)

क्रमांक	पार्टी का नाम	राशि	कुल
1	सुरक्षा जमा राशि	1,63,61,035.00	
2	प्रवेश शुल्क–अग्रिम	85,51,662.00	
3	परामर्शदाता–स्टाफ	47,662.00	
4	योजना खाता	71,37,543.00	
5	सीसीए खाता	1,01,57,879.00	
6	यात्रा अनुदान	5,02,964.00	
7	अतिरिक्त भित्ति जेआरएफ/एसआरएफ	8,98,585.00	
8	टीडीएस – कटौती	17,37,648.00	
कुल			4,53,94,978.00

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

Annexure-II

ADVANCE RECEIVED (PART OF SCHEDULE 7.A.2) (Amount in ₹)

Sl. No.	Name of Party	Amount	Total
1	SECURITY DEPOSIT	1,63,61,035.00	
2	ADMISSION FEE- ADVANCE	85,51,662.00	
3	CONSULTANCY - STAFF	47,662.00	
4	PLAN A/C	71,37,543.00	
5	CCA A/C	1,01,57,879.00	
6	TRAVEL GRANT	5,02,964.00	
7	EXTRA MURAL JRF/SRF	8,98,585.00	
8	TDS - DEDUCTED	17,37,648.00	
TOTAL			**4,53,94,978.00**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

अनुलग्नक–III
(राशि ₹ में)

प्रावधान एवं देय खर्चे (अनुसूची 7.बी.3 का भाग)

क्रमांक	पार्टी का नाम	राशि	कुल
1	देय खर्चे – ग्रेच्युटी	19,88,808.00	
2	देय खर्चे – पेंशन	1,97,29,635.37	
3	देय खर्चे – छुट्टी	6,78,845.00	
4	देय खर्चे – अन्य	2,88,20,928.78	5,12,18,217.15
5	देय वेतन भुगतान		1,02,37,627.00
कुल			**6,14,55,844.15**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

Annexure-III

PROVISION & EXPENSES PAYABLE (PART OF SCHEDULE 7.B.3) (Amount in ₹)

Sl. No.	Name of Party	Amount	Total
1.	EXP. PAYABLE - GRATUITY	19,88,808.00	
2.	EXP. PAYABLE - PENSION	1,97,29,635.37	
3.	EXP. PAYABLE - LEAVE	6,78,845.00	
4.	EXP. PAYABLE - OTHERS	2,88,20,928.78	5,12,18,217.15
5.	SALARY PAYABLE		1,02,37,627.00
TOTAL			**6,14,55,844.15**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

अनुलग्नक–IV
(राशि ₹ में)

पार्टी अधिम (अनुसूची 11.बी.2 का भाग)

क्रमांक	पार्टी का नाम	राशि	1 साल से कम	1–2 साल	2 साल से अधिक
1	मै. जैम इमपेक्स इन. इन. यू.एस.ए.	2,46,272.00	2,46,272.00		
2	मै. पीओन. इन. यू.एस.ए.	4,31,683.00			4,31,683.00
3	मै. एक्सएन वीनसन	20,161.00			20,161.00
4	मै. टेककॉप लि.	13,58,050.00			13,58,050.00
5	मै. फर्स्ट टेन एंगस्ट्रोम यू.एस.ए.	1,12,767.00	1,12,767.00		
6	मै. स्वाथी साईंटिफिक सोल्यूशास	50,000.00	50,000.00		
7	मै. जी एंड जी एंटरप्राईजेज	70,000.00	70,000.00		
8	मै. ▯ ▯ ▯ ▯	49,875.00	49,875.00		
9	मै. ▯ ▯ ▯ ▯	73,605.00	73,605.00		
10	मै. ▯▯▯▯▯▯ ▯▯▯▯▯▯▯▯▯.	1,482.00	1,482.00		
11	मै. ▯▯▯ एसोसियेट	47,002.00			47,002.00
12	मै. अल्टेयर। ▯ ▯ ▯	11,40,683.00			11,40,683.00
13	मै. ▯ ▯ ▯ ▯	73,374.00	73,374.00		
14	मै. ▯ ▯ ▯ ▯	540.00	540.00		
15	मै. जनरल आर्डर सप्लायर्स	13,631.00	13,631.00		
16	▯▯▯▯	1,631.00	1,631.00		
17	आईटेक ▯▯▯▯▯▯▯▯ -2018-एम.ई.ए.	32,43,334.00	32,43,334.00		
	कुल जोड़	**69,34,090.00**	**39,36,511.00**		**29,97,579.00**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

Annexure-IV

PARTY ADVANCE (PART OF SCHEDULE 11.B.2) (Amount in ₹)

Sl. No.	Name of Party	Amount	Less then 1 year	1-2 years	More then 2 years
1	M/S CHEM IMPEX INT. INC USA	2,46,272.00	2,46,272.00		
2	M/S PION INC. USA	4,31,683.00			4,31,683.00
3	M/S XIAN WINSON	20,161.00			20,161.00
4	M/S TECHCOMP LTD	13,59,050.00			13,59,050.00
5	M/S FIRST TEN ANGSTROMS USA	1,12,767.00	1,12,767.00		
6	M/S SWATHI SCIENTIFIC SOULUTION	50,000.00	50,000.00		
7	M/S G&G ENTERPRISE	70,000.00	70,000.00		
8	M/S BHAGAWATI CROKERY STORES	49,875.00	49,875.00		
9	M/S DEVEN SUPPERCRITICALS	73,605.00	73,605.00		
10	M/S EUREKA FORBES LTD	1,482.00	1,482.00		
11	M/S AARTI ASSOCIATES	47,002.00			47,002.00
12	M/S ALTAIR ENGINEERING	11,40,683.00			11,40,683.00
13	M/S GOURAV AIRCONDITIONER	73,374.00	73,374.00		
14	M/S MOHALI SERVICE STATION	540.00	540.00		
15	M/S GENERAL ORDER SUPPLIER	13,631.00	13,631.00		
16	POST OFFICE	1,631.00	1,631.00		
17	ITEC PROGRAMMES - 2018 - MEA	32,43,334.00	32,43,334.00		
	GRAND TOTAL	**69,34,090.00**	**39,36,511.00**		**29,97,579.00**

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, एस.ए.एस. नगर
31–03–2019 को तुलन–पत्र के एक भाग के रूप में अनुसूची

अनुलग्नक–V
(राशि ₹ में)

प्राप्य राशि (अनुसूची 11.बी.2(सी) का भाग)

क्रमांक	पार्टी का नाम	राशि	कुल
ए.	परियोजना संस्थाएं		
1	डीबीटी, जीपी-295	1,35,628.72	
2	डीएसटी, जीपी-256	28,214.66	
3	डीएसटी, जीपी-261	34,421.30	
4	डीएसटी, जीपी-265	6,15,216.99	
5	डीएसटी, जीपी-275	1,70,157.92	
6	आईसीएमआर, जीपी-254	74,208.32	
7	वीनस मेमीडीज	1,33,442.98	11,91,290.89
कुल			11,91,290.89
बी.	विभिन्न कोष		
1	ग्रेचुटी खाता	19,88,808.00	
2	पेंशन खाता	1,97,65,383.37	
3	छुट्टी खाता	6,78,845.00	
कुल			**2,24,33,036.37**
कुल सकल			**2,36,24,327.26**

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, S.A.S. NAGAR
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2019

Annexure-V
(Amount in ₹)

AMOUNT RECEIVABLE - PART OF SCHEDULE 11.B.2 (c)

Sl. No.	Name of Party	Amount	Total
A. Project Parties			
1	DBT, GP-295	1,35,628.72	
2	DST, GP-256	28,214.66	
3	DST, GP-261	34,421.30	
4	DST, GP-265	6,15,216.99	
5	DST, GP-275	1,70,157.92	
6	ICMR, GP-254	74,208.32	
7	VENUS REMEDIES	1,33,442.98	11,91,290.89
TOTAL			**11,91,290.89**
B. Various Funds			
1	GRATUITY A/C	19,88,808.00	
2	PENSION A/C	1,97,65,383.37	
3	LEAVE A/C	6,78,845.00	
TOTAL			**2,24,33,036.37**
GROSS TOTAL			**2,36,24,327.26**

महत्वपूर्ण लेखा नीतियों का विवरण

अनुसूची–24

1. **लेखा प्रथा**
राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर), एस.ए.एस. नगर, मोहाली (पंजाब) का खाता वाणिज्य–लेखा प्रणाली के आधार पर बनाया गया है।

2. **सामान सूची का मूल्यांकन**
संस्थान के सामान की सूची अर्थात भण्डार एवं अतिरिक्त पुर्जे, उपभोज्य (रसायन, काँच का सामान एवं स्टेशनरी) आदि का मूल्यांकन लागत मूल्य या शुद्ध वास्तविक मूल्य जो भी कम हो के आधार पर किया गया है। मूल्य निर्धारण प्रथम आवक प्रथम जावक विधि के आधार पर आंका गया है।

3. **स्थाई परिसम्पत्तियां**
स्थाई परिसम्पतियां का ब्यौरा प्राप्ति की लागत पर दिया गया है जिसमें सामान आने तथा ले जाने के लिए माल भाड़ा, शुल्क उपकर तथा प्रासंगिक खर्चे शामिल हैं जिनका सम्बन्ध संपत्ति की प्राप्ति के साथ है।

4. **मूल्यह्रास में कमी**
मूल्यह्रास का प्रावधान डब्ल्यू. डी.वी. की विधि के अनुसार है और विशेषित दरें आयकर अधिनियम 1961 के अनुसार लगाई गई है। संस्थान द्वारा प्राप्त की गई पुस्तकों तथा पत्रिका पर 30 प्रतिशत मूल्यह्रास का प्रावधान है क्योंकि ये पुस्तकें विशिष्ट वैज्ञानिक विषय पर आधारित है। स्थाई सम्पत्तियाँ जो कि परियोजना में ली गई हैं उन पर मूल्य में कमी उनके पूँजीकरण के समय, जो कि परियोजना के खत्म होने पर ली जाएगी और ऐसा ही अनुसूची 8 में भी दर्शाया गया है। संस्थान ने 31 मार्च 2002 तक स्थाई सम्पत्तियों पर मूल्य में कमी को दर्शाया नहीं है, क्योंकि उस समय संस्थान परियोजना स्तर पर था, जिसका निर्णय 13वीं बी.ओ.जी. मीटिंग दिनांक 01.11.1996 में लिया गया था। चालू वर्ष में स्थिर परिसम्पतियों पर 1.10.2018 से पहले या बाद में जो पूंजीगत किया है, आधे दर पर उसका मूल्य कम कर दिया गया है।

5. **सामान्य भविष्य निधि, अंशदायी भविष्य निधि, अंशदायी भविष्य निधि (नई पेंशन योजना) तथा पेंशन निधि**
निधियों के लेखा संमूति के आधार पर तथा निवेश लागत के आधार पर तैयार किया गया है।

	सही/-	सही/-	सही/-
स्थान : एस.ए.एस. नगर	(जे.के. बंदेल)	(डॉ. ए. एस. संधू)	(प्रो. अ. रघुराम राव)
दिनांक : 24.05.2019	उप कुलसचिव (वित्त एवं लेखा)	कुलसचिव (कार्यवाहक)	निदेशक

SIGNIFICANT ACCOUNTING POLICIES

SCHEDULE - 24

1. Accounting Convention

The books of account of National Institute of Pharmaceutical Education & Research, Mohali (Punjab) have been maintained on the basis of Merchantile Accounting System.

2. Inventory Valuation

The Inventory of the Institute i.e. stores & spares consumables (chemicals, glassware, stationery) etc. has been valued based on lower of the cost or net realizable value whichever is less. The costs have been worked out on the **"First In First Out" (FIFO)** method.

3. Fixed Assets

Fixed Assets are stated at historical cost of acquisition inclusive of inward freight, duties and taxes and incidental expenses relating to acquisition.

4. Depreciation

The depreciation has been provided in the books of accounts is as per the **W.D.V.** method and rates specified are as per the Income Tax Act 1961. Depreciation @ 30% has been provided on the books and Journal procured by the Institute since these are of scientific nature. Depreciation on the Fixed Assets acquired against project has been charged on their Capitalization i.e. on the completion of Project and accordingly shown in the Fixed Assets Schedule - 8. The Institute has not provided the depreciation on the fixed assets in the earlier years i.e. upto 31st March 2002 as the Institute was in the project stage, which was as per the decision taken in 13th BOG meeting held on 01.11.96. The fixed assets capitalized on or after 01.10.2018 during the current year has been depreciated on the half rate.

5. General Provident Fund, Contributory Provident Fund, Contributory Provident Fund (New Pension Scheme) and Pension Fund

Accounts of the Fund have been prepared on accrual basis and investments are stated at cost.

	Sd/-	Sd/-	Sd/-
Place: S.A.S. Nagar	**(Jitender K. Chandel)**	**(Dr. A. S. Sandhu)**	**(Prof. A. Raghuram Rao)**
Date: 24.05.2019	**Deputy Registrar (F&A)**	**Registrar (Officiating)**	**Director**

लेखों पर टिप्पणियाँ

अनुसूची–25

1. **आकस्मिक देयताएं :** संस्थान के पास वर्ष 2018–19 में जारी कय आदेश एवं कार्य आदेश की दिशा में रु. 85,34,184.00 की आकस्मिक देयताएं हैं लेकिन सामग्री प्राप्त नहीं हुई या कार्य संपन्न नहीं हुआ। (पिछले वर्ष : रु. 1,13,62,964.57)

2. 01.04.2018 से 31.03.2019 तक वर्ष के दौरान प्राप्ति एवं भुगतान खाता जो शुद्ध अधिशेष दर्शाता है, का विवरण निम्नानुसार है :

क) कुल प्राप्तियां (निधियों के स्त्रोत)

क्रमांक	विवरण	चालू वर्ष 2018-19	पूर्व वर्ष 2017-18
i)	सहायता अनुदान		
	संस्थान खाता	29,00,000.00	44,81,00,000.00
	परियोजना खाता	3,79,30,375.00	3,31,69,037.00
ii)	ब्याज	2,96,57,675.80	6,27,56,518.99
iii)	अन्य प्राप्तियां	11,04,55,722.00	14,39,21,642.00
iv)	सी.एस.आई.आर. से अनुदान	7,51,202.00	16,85,202.00
v)	कल्याण कोष	1,80,699.00	17,040.00
vi)	भविष्य निधि कोष	2,60,61,768.00	3,28,66,048.00
vii)	छुट्टी एवं उपदान कोष	44,31,507.00	47,84,690.00
viii)	सेवानिवृत्ति के बाद चिकित्सा कोष	12,02,740.00	2,15,000.00
	कुल (क)	**50,06,71,688.80**	**72,75,15,177.99**

ख) कुल भुगतान (निधियों का उपयोग)

क्रमांक	विवरण	चालू वर्ष 2018-19	पूर्व वर्ष 2017-18
i)	संस्थान खाते से भुगतान	42,37,63,043.19	41,51,12,641.51
ii)	परियोजना खाते से भुगतान	3,63,81,338.75	3,77,32,249.95
iii)	भविष्य निधि खाते से भुगतान	2,39,34,771.00	1,88,89,272.00
iv)	कॉरपस कोष निधि से भुगतान	3,72,87,985.00	8,47,73,032.00
v)	छुट्टी और ग्रैच्युटी कोष से भुगतान	0.00	32,68,699.00
vi)	पीआरएमएफ खाते से भुगतान	0.00	47,715.00
	कुल (ख)	**52,02,54,742.99**	**55,98,23,606.46**

II	शुद्ध अधिशेष (क – ख)	2,33,87,174.19	16,76,91,571.53
III	अन्शोष	1,36,09,09,052.52	1,38,42,96,226.71
IV	आदिशेष	1,38,42,96,226.71	1,21,66,04,655.18
	शुद्ध अधिशेष/घाटा	**2,33,87,174.19**	**16,76,91,571.53**

3. **सहायता अनुदान**

सरकारी अनुदान का लेखा वसूली के अनुसार किया जाता है। वित्तीय वर्ष 2018–19 के दौरान संस्थान ने भारत सरकार के रसायन एवं उर्वरक मंत्रालय से 29.00 करोड़ (पिछले वर्ष 44.81 करोड़) रुपये का सहायता अनुदान प्राप्त किया। संस्थान ने 31.03.2019 तक कुल 595.764 करोड़ रुपये की सहायता अनुदान प्राप्त किया है। इसमें 31.03.2019 तक रसायन एवं उर्वरक मंत्रालय से प्राप्त 595.764 करोड़ रुपये का अनुदान और 31.03.2019 तक आन्तरिक रुप से उत्पन्न की गई आय से अंतरित 1.00 करोड़ रुपये भी शामिल है जो रसायन एवं उर्वरक मंत्रालय के दिनांक 18 नवम्बर 1997 के पत्र नं. एफ नं. 52 (3)/97–पीआई (V) में दान कोष बनाने के लिए दी गई शर्तों एवं प्रतिबन्धों के अनुसार है।

4. **निवेश और जमा**

(i) संस्थान के कुल निवेश को अनुसूचित बैंकों एवं हुडको में एफडीआर के रुप में रखा गया है जो 96,66,01,168.08 (पिछले वर्ष 95,27,20,779.48) रुपये हैं। यह राशि संस्थान, परियोजना, स्थायी, कल्याण कोष, भविष्य निधि, ग्रेच्युटी व छुट्टी नकदीकरण कोष, दान व पुरस्कार कोष, अवमूल्यन कोष और स्थायी निधि कोष से सम्बन्धित है।

(ii) संस्थान के कुल निवेश को अनुसूचित बैंकों में एफडीआर के रूप में रखा गया है जो 38,78,95,532.00 (पिछले वर्ष 21,04,16,080.00) रुपये हैं। यह राशि संस्थान के सहायता अनुदान, परियोजना, स्थायी, दान व पुरस्कार कोष, सेवानिवृत्ति के बाद चिकित्सा निधि कोष से सम्बन्धित है।

(iii) संस्थान के कुल निवेश को अनुसूचित बैंकों में बचत खाता के रूप में रखा गया है जो 63,83,348.44 (पिछले वर्ष 19,11,38,253.23) रुपये हैं। यह राशि संस्थान, परियोजना, स्थायी, दान व पुरस्कार कोष, सेवानिवृत्ति के बाद चिकित्सा निधि कोष आदि से सम्बन्धित है।

CONTINGENT LIABILITIES & NOTES OF ACCOUNTS

Schedule - 26

1. **Contingent Liabilities :-** The Institute has contingent liabilities of Rs. 85,34,184.00 towards purchase order and works order issued or under process during 2018-19 but material not received or work performed. (Previous year Rs. 1,13,62,364.57).

2. The Receipt & Payment Account for the period 01.04.2018 to 31.03.2019 shows a net surplus during the year, the details of which are given below :

a) Total Receipts (Source of Funds)

S.No.	Particulars	Current Year 2018-19	Prev. Year 2017-18
i)	Grant in Aid		
	Institute A/c	29,00,00,000.00	44,81,00,000.00
	Projects A/c	3,79,30,375.00	3,31,69,037.00
ii)	Interest	2,96,57,675.80	6,27,56,518.99
iii)	Other Receipts	11,04,55,722.00	14,39,21,642.00
iv)	Fund from CSIR & other	7,51,202.00	16,85,202.00
v)	Welfare fund	1,80,699.00	17,040.00
vi)	Provident Fund	2,60,61,768.00	3,28,66,048.00
vii)	Leave & Gratuity Fund	44,31,507.00	47,84,690.00
viii)	Post Retirement Medical Fund	12,02,740.00	2,15,000.00
	Total (a)	**50,06,71,688.80**	**72,75,15,177.99**

b) Total Payment (Application of funds)

S.No.	Particulars	Current Year 2018-19	Prev. Year 2017-18
i)	Payment from Institute A/c	42,37,63,043.19	41,51,12,641.51
ii)	Payment from Project A/c	3,63,81,338.75	3,77,32,249.95
iii)	Payment from Provident Fund Account	2,39,34,771.00	1,88,89,272.00
iv)	Payment from Corpus fund	3,72,87,985.00	8,47,73,032.00
v)	Payment from Leave & Gratuity Fund	0.00	32,68,699.00
vi)	Payment from Donation & Award A/c	0.00	47,715.00
	Total (b)	**52,02,54,742.99**	**55,98,23,606.46**

II	**Net Surplus (a-b)**	**2,33,87,174.19**	**16,76,91,571.53**
III	Closing balance	1,36,09,09,052.52	1,38,42,96,226.71
IV	Opening Balance	1,38,42,96,,226.71	1,21,66,04,655.18
	Net surplus/deficit	**2,33,87,174.19**	**16,76,91,571.53**

3. **GRANT IN AID**

Government Grants are accounted on realization basis. During the financial year 2018-19 Institute has received a Grant in Aid of Rs. 29.00 (Previous year Rs. 44.81 crores) from Ministry of Chemicals & Fertilizer, Govt. of India. The institute has received a total Grant-in-aid of Rs. 596.764 crores up to 31.03.2019 this includes Rs. 595.764 crores received from Ministry of Chemicals & Fertilizers up to 31.03.2019 and Rs. 1.00 crores transferred from income generated internally up to 31.03.1997 as per the terms & conditions for-creation of Endowment Fund vide letter No. F. No. 52(3)/97-PI(V) dated 18th November 1997 of Ministry of Chemicals & Fertilizers.

4. **INVESTMENT & DEPOSITS**

(i) Total investments of the Institute amounting to Rs 96,66,01,168.08 (Previous year Rs. 98,27,20,779.48) are held as FDR's with Scheduled Banks & HUDCO. This amount relates to Endowment, Provident Fund & Pension Fund, and Gratuity & Leave Encashment Fund.

(ii) Total deposit with bank amounting to Rs. 38,78,95,532.00 (Previous year Rs. 21,04,16,080.00) is held as FDR's with Schedule Banks. This amount relates to Institute grant in aid account, project account, welfare fund, donation & award fund, Endowment Chair Fund & Post Retire Medical Fund Account.

(iii) Total deposit with bank amounting to Rs. 63,83,348.44 (Previous Year Rs. 19,11,38,253.23) is held in saving bank account with Schedule Banks. This amount relates to Institute grant in aid account, project account, welfare fund, donation & award fund, Endowment Chair Fund & Post Retire Medical Fund Account.

5. ब्याज उपार्जित परन्तु देय नहीं

31.03.2019 को एफडीआर पर उपार्जित ब्याज परन्तु देय नहीं 14,94,01,223.00 (पिछले वर्ष 8,29,57,407.00) रुपये हैं। **(संदर्भ अनुसूची - 11 बी (3))।**

6. स्थायी परिसम्पत्तियां

पिछले वर्षों से प्रचलित व्यवस्था के अनुसार परियोजना सम्पत्ति, संस्थान की सम्पत्ति मानी गई है। परियोजना में से उपार्जित परिसम्पत्तियों को अलग से दिखाया गया है**। (संदर्भ अनुसूची -8)।** सम्पत्तियों का निपटान वित्त पोषित एजेंसियों के पूर्व अनुमोदन से किया जाएगा।

7. बंदोबस्ती कोष (कोष निधि)

वर्ष 2018–19 के दौरान शून्य रुपये बंदोबस्ती कोष खाते से संस्थान खाते में हस्तांतरित किये हैं। 31.03.2019 तक 67,89,29,072.21 (पिछले वर्ष 67,89,29,072.21) रुपये का अनाशेष है। जो कि **अनुसूची 3** में दर्शाया गया है।

8. कल्याण कोष

रुपये 1,84,884.50 की राशि, ब्याज एवं संस्थान खाते से कल्याण कोष में हस्तांतरित की गई हैं तथा संस्थान खाते से 1,80,699.00 की राशि, हस्तांतरित की गई है। 31.03.2019 को 28,11,032.01 (पिछले वर्ष 24,45,448.51) रुपये का अन्तशेष है, जो **अनुसूची 3 ए** में दर्शाया गया है। जिसमें ब्याज एवं कार्यालय के स्थानान्तरण शामिल है।

9. पूँजी कोष खाता (परियोजनायें)

वर्ष 2018–19 के दौरान परियोजनाएं पूरी होने पर (मूल्यह्रास के बाद) 3,12,40,724.55 रुपये पूंजी खाते कोष में हैं, जो **अनुसूची 1 सी** में दर्शाया गया है।

10. परियोजना खाता

5,73,33,647.09 (पिछले वर्ष 5,36,44,746.54) रुपये की राशि अनुसूची 3–I में दिखाई गई है, 31.03.2019 से अगी चल रही परियोजनाओं पर खर्च की जानी है। इसमें 4,66,67,308.68 रुपये सरकारी परियोजनाओं से और 91,25,507.78 (पिछले वर्ष 1,02,77,437.86) रुपये निजी प्रायोजित परियोजनाओं के अंतर्गत शामिल है।

11. व्यय देय

6,14,91,592.15 (पिछले वर्ष 5,32,63,537.21) रुपये की राशि अनुसूची 7 बी में दिखाई गई है, 31.03.2019 से अगी चल रही परियोजनाओं पर खर्च की जानी है।

12. पूर्वदत्त खर्चे

चालू परिसम्पत्तियों पर बीमा एवं डाक जो कि **अनुसूची 11 (बी)2(डी)** में हैं, ऋण, अग्रिम तथा सम्बन्धित पूर्वदत्त खर्चे वर्ष के अन्त में 8,27,613.00 (पिछले वर्ष 4,32,846.00) रुपये से प्रदर्शित की गई है।

13. आवर्ती खर्च के लिए अनुदान

कुल खर्च में 50,46,37,648.29 (पिछले वर्ष 48,14,05,91.04) रुपये की राशि प्रदर्शित की गई है जिसमें शामिल 24,89,66,145.37 (पिछले वर्ष 22,86,53,474.43) रुपये स्थापना खर्च के लिए, 16,04,34,891.83 (पिछले वर्ष 16,26,24,562.22) रुपये प्रशासनिक खर्च के लिए और 9,52,36,611.09 (पिछले वर्ष 9,01,27,934.39) रुपये मूल्यह्रास के लिए उपयोग किया गया है। खर्चों की पूर्ति अनुसूची 13 में दर्शायी राशि 29,00,00,000.00 (पिछले वर्ष 28,31,00,000.00) संस्थान के अनुदान और 11,94,01,037.20 (पिछले वर्ष 10,81,76,036.65) रुपये को वर्ष 2018–19 संस्थान के आंतरिक स्रोतों से की गई। नाईपर गांजाम के तहत पूंजीगत निधि के लिए 8,97,91,669.72 (पिछले वर्ष 8,37,73,079.80) रुपये मूल्यह्रास तथा परियोजना के तहत पूंजीगत निधि के लिए रुपये 54,44,941.37 (पिछले वर्ष 63,54,854.58) का मूल्यह्रास।

14. शेष राशि की पुष्टि

पार्टियों के खातें में शेष ऋण तथा जमा की पुष्टि होनी है।

15. भविष्य निधि खाता और पेंशन निधि

सामान्य भविष्य निधि, अंशदायी भविष्य निधि, अंशदायी भविष्य निधि (नई पेंशन योजना) तथा पेंशन निधि को सगाहित रूप से संस्थान के खातें में डाल दिया गया जो कि पिछले वर्ष की ए.जी. (लेखा परीक्षा प्रतिवेदन), पंजाब के निर्देशानुसार किया गया है।

क) सामान्य भविष्य निधि खाता

रु. 9,03,81,157.27 (पिछले वर्ष 8,32,16,463.67) अनुसूचित बैंक तथा रु. 20,92,000.00 (पिछले वर्ष 20,92,000.00) हुडको में निवेश किये गए है। फंड के सदस्य दोनों तरीकों से कम से कम 6 प्रतिशत की दर से बेसिक आय + डी.पी. और स्वेच्छा से योगदान सहयोग कर रहे है। वर्ष के अं। 31.03.2019 का अन्तशेष रु. 9,93,56,656.00 (पिछले वर्ष 8,71,55,155.00) था। **(देखें अनुसूची 3 एफ(ए))।**

5. INTEREST ACCRUED BUT NOT DUE

The Interest accrued but not due on FDR's comes to Rs. 14,94,01,223.00 as on 31.03.2019 (Previous Year Rs. 8,29,57,407.00) **(Refer schedule 11(B)(3).**

6. FIXED ASSETS

Assets acquired out of sponsored project have been shown separately **(Refer Schedule-8).** As per existing practice followed consistently assets created out of project are Institutes assets. However disposing of assets will be made with prior approval of funding agencies.

7. ENDOWMENT FUND (CORPUS FUND)

A sum of Rs. NIL has been transferred to Endowment Fund Account during the year 2018-19 to Institute account **(Refer Schedule 3).** The balance in the funds as on 31.03.2019 is Rs. 67,89,29,072.21. (Previous Year Rs. 67,89,29,072.21)

8. WELFARE FUND

A sum of Rs. 1,84,884.50 has been transferred to Welfare Fund Account which is on account of interest and Rs. 1,60,699.00 transfers from Institute Account. The balance in funds as on 31.03.2019 is Rs. 28,11,032.01 (Previous Year Rs. 24,45,448.51) **(Refer Schedule 3A).**

9. CAPITAL FUND ACCOUNT (PROJECTS)

There is a balance of Rs. 3,12,40,724.55(after depreciation) in the Capital Fund Account. Projects completed up to the year 2018 -19 (Previous Year Rs. 3,66,85,665.92 **(Refer Schedule 1C).**

10. PROJECT ACCOUNT

The balance shown in schedule 3-I to the tune of Rs. 5,73,33,647.09 (Previous Year Rs. 5,36,44,746.54 is yet to be incurred on running projects in hands on 31.03.2019. This includes Rs. 4,33,67,308.68 (Previous Year Rs. 4,33,67,308.68) from Govt. Projects and Rs. 91,25,507.78 (Previous Year Rs. 1,02,77,437.86) from Private Sponsored Projects.

11. EXPENDITURE PAYABLE

A provision for expenses payable to the tune of Rs. 6,14,91,592.15 (Previous Year Rs. 5,32,63,537.21 has been made as on 31.03.2019 **(Refer Schedule 7 (B).**

12. PREPAID EXPENSES

A sum of Rs. 8,27,613.00 (Previous Year Rs. 4,32,846.00) has been shown as prepaid expenses as on 31.03.2019 in the Schedule of Current Assets Loan & Advances at the end year **(Refer Schedule 11(B) 2(d).**

13. GRANT FOR RECURRING EXPENDITURE

An expenditure of Rs. 50,46,37,648.29 (Previous Year Rs. 48,14,05,91,04) includes Rs. 24,89,66,145.37(Previous Year Rs. 22,96,53,474.43) for Establishment Expenses, Rs. 16,04,34,891.83 (Previous Year Rs. 16,26,24,562.22) for Administrative Expenses, Rs. 9,52,36,611.09 (Previous Year Rs. 9,01,27,934.39) for depreciation charged. The expenditure has been met against Grant of Rs. 29,00,00,000.00 (Previous Year Rs. 28,31,00,000.00) shown in Schedule-13 and Rs. 11,94,01,037.20 (Previous Year Rs. 10,81,78,036.65) from the Internal Generation and corpus fund of the Institute during the year 2018-19. Rs 8,97,91,669.72 (Previous Year Rs. 8,37,73,079.80 depreciation charged to Capital Fund – NIPER Plan and Rs. 54,44,941.37 (Previous Year Rs. 63,54,854.58) depreciation charged to Capital Fund – Project.

14. BALANCE CONFIRMATION

The Debit and Credit balances in the Account of Parties are subject to confirmation.

15. PROVIDENT FUND ACCOUNT & PENSION FUND

The accounts of General Provident Fund, Contributed Provident Fund, Contributed Provident Fund (New Pension Scheme) and Pension fund have been consolidated into the Institute account.

a. General Provident Fund Account

A Sum of Rs. 9,03,81,157.27 (Previous Year Rs. 8,32,16,463.67) has been invested with scheduled Banks and Rs. 20,92,000.00 (Previous Year Rs. 20,92,000.00) with HUDCO. Members of the fund are Contributing minimum amount of @ 6% of the pay Band + Grade Pay and voluntary contribution as opted. The closing balance at the end of the year is Rs. 9,93,66,656.00 (Previous Year Rs. 8,71,55,155.00) as on 31.03.2019. **(Ref - Schedule 3F (A).**

ख) **अंशदायी भविष्य निधि खाता**

रु. 51,40,916.81 अनुसूचित बैंक में निवेश किये गए है। फंड के सदस्य दोनों तरीकों से कम से कम 10 प्रतिशत की दर से बेसिक (मूल) आय + जी.पी. का योगदान दे रहे है। वर्ष के अंत तक अन्तशेष रु. 46,45,230.00 था। **(देखें अनुसूची 3 एफ(बी))।**

ग) **अंशदायी भविष्य निधि खाता (नई पेंशन योजना)**

कुल रु. 1,41,33,980.00 (पिछले वर्ष 1,18,89,680.00 रु.) अनुसूचित बैंक तथा रु. 1,26,979.56 (पिछले वर्ष 4,75,616.56) तथा केनरा बैंक के बचत खाता में निवेश किये गए है। फंड के सदस्य दोनों तरीकों से कम से कम 10 प्रतिशत की दर से बेसिक आय + जी.पी. + डी.ए. का सहयोग दे रहे है। संस्थान के पास फंड को चलाने के लिए कोई निर्देश नहीं मिले हैं। वर्ष के अंत तक अन्तशेष रु. 1,40,72,375.21 (पिछले वर्ष 1,24,39,932.21) था। **(देखें अनुसूची 3 एफ(सी))।**

घ) **पेंशन निधि**

कुल रु. 8,64,94,636.00 (पिछले वर्ष 8,61,52,692.00) अनुसूचित बैंक में निवेश किये गए है तथा बैंक में 31.3.2019 तक संचित शेष रु. 11,76,54,312.33 (पिछले वर्ष 9,77,94,523.96) है। **(देखें अनुसूची 3 एफ(डी))।**

16. **पार्टियों को अग्रिम तथा आंतरिक स्थानांतरण**

i) तुलन–पत्र की अनुसूची 11 (बी) 2 (बी) में पार्टियों को 69,34,090.00 (पिछले वर्ष 53,50,461.00) रुपये अग्रिम रूप में दिखाये गए है।

ii) नाईपर में विभिन्न प्रकार के खातों के लिए अलग से खातों का रखरखाव किया गया है जिनमें – संस्थान खाता, नाईपर परियोजना खाता, नाईपर कोरपस निधि खाता, नाईपर भविष्य एवं पेंशन निधि खाता, नाईपर ग्रेचुएटी एवं छुट्टी के बदले नकद राशि निधि खाता तथा स्थागी निधि खाता शामिल है। आंतरिक स्थानांतरण का लेखा निम्नलिखित हैं :

लेखा मद	राशि (नाम)	राशि (जमा)
संस्थान खाता		19,88,808.00
ग्रेजुएटी कोष खाता		
संस्थान खाता		1,97,65,383.37
पेंशन कोष खाता		
संस्थान खाता		6,78,845.00
छुट्टी कोष खाता		
पेंशन कोष खाता	1,97,65,383.37	
संस्थान खाता		
छुट्टी कोष खाता	6,78,845.00	
संस्थान खाता		
ग्रेजुएटी कोष खाता	19,88,808.00	
संस्थान खाता		
कुल	**2,24,33,036.37**	**2,24,33,036.37**

17. **सेवानिवृत्ति लाभ**

वर्ष 2018–19 के दौरान उपदान और छुट्टी नकदीकरण भुगतान के लिए अलग कोष वास्तविक मूल्यांकन के आधार पर अलग से बनाया गया है। मृत्यु / सेवानिवृत्ति पर भुगतान योग्य ग्रेचुएटी तथा वर्ष के अन्त में छुट्टियों के बदले नकद भुगतान का उगार्जन के आधार पर 7,54,39,871.00 (पिछले वर्ष 6,88,85,046.00) तथा 9,68,04,421.28 (पिछले वर्ष 8,95,09,341.28) रुपये देयता संस्थान के निदेशक तथा कर्मचारियों के लिए प्रावधान 31.03.2019 तक है।

b) Contributory Provident Fund Account

A sum of Rs. 51,40,916.81 (Previous Year Rs. 49,06,374.81) has been invested with Scheduled Banks. Members of the fund are contributing minimum @ 10% of the Pay Band +Grade Pay. Institution is contributing 10% of the Pay Band +Grade Pay to the fund. The closing balance at the end of the year is Rs. 46,45,230.00 (Previous year Rs. 46,45,230.00 as on 31.03.2019. **(Ref – Schedule 3F (B).**

c) Contributory Provident Fund Account (New Pension Scheme)

A sum of Rs. 1,41,33,980.00 (Previous year Rs. 1,16,89,680.00) has been invested with Scheduled Banks in FDRs and Rs. 1,26,979.56 (Previous year Rs. 4,75,616.56) is deposited in SB a/c with Canara Bank. Members of the fund are contributing minimum amount of @ 10% of the basic Pay Band + Grade Pay+ DA. Institution is contributing 10% of the Pay Band +Grade Pay + DA to the fund. The closing balance at the end of the year is Rs. 1,40,72,375.21 (Previous year Rs. 1,24,39,932.21) as on 31.03.2019. **(Ref – Schedule 3F(C).**

d) Pension Fund

A sum of Rs. 8,84,94,636.00 (Previous year Rs. 8,61,52,692.00) has been invested with Schedule Bank. The accumulated balance in the fund as on 31.03.2019 is Rs. 11,76,54,312.33 (Previous Year Rs. 9,77,94,523.96) **(Ref – Schedule 3F (D).**

16. ADVANCE TO PARTIES & INTERNAL TRANSFERS

(i) A sum of Rs. 69,34,090.00 (Previous Year Rs. 53,50,461.00) shown as advance to parties in **Schedule –11 (B) 2 (b)** of Balance Sheet.

(ii) The different books of accounts of NIPER i.e. of Institute Account, NIPER Project Account, NIPER Corpus Fund Account, NIPER Provident & Pension Fund, NIPER Gratuity & Leave Encashment Fund, NIPER Welfare Account and NIPER PRMF Fund Account have been maintained separately. The details of inter transfers are as under :-

Account Head	Amount (Dr.)	Amount (Cr.)
INSTITUTE ACCOUNT Gratuity Fund Account		19,88,808.00
INSTITUTE ACCOUNT Pension Fund Account		1,97,65,383.37
INSTITUTE ACCOUNT Leave Fund Account		6,78,845.00
PENSION FUND ACCOUNT Institute Account	1,97,65,383.37	
LEAVE FUND ACCOUNT Institute Account	6,78,845.00	
GRATUITY FUND ACCOUNT Institute Account	19,88,808.00	
Total	**2,24,33,036.37**	**2,24,33,036.37**

17. Retirement Benefits

The liability for Gratuity payable on death/retirement and leave encashment has been provided on accrual basis as per Central Government Rules for the year for the Director and Staff of the Institute. The total amount in Gratuity Fund and Leave Encashment Fund is Rs. 7,54,39,871.00 (Previous year Rs. 6,88,85,046.00) **(Schedule 3C)** and Rs. 9,68,04,421.28 (Previous year Rs. 8,95,09,341.28) **(Schedule 3D)** respectively as on 31.03.2019.

18. पूँजी कोष (दान एवं पुरस्कार खाता)

वर्ष 2018–19 के दौरान दान प्राप्ति पुरस्कार के लिए लेखों के अनुसार 26,501.00 (पिछले वर्ष 27,650.00) ब्याज रुपये लिये गये हैं और अलग कोष बनाया गया है **(अनुसूची–3वी)**। 31.03.2019 तक दान पुरस्कार खाते में कुल राशि 3,81,897.00 (पिछले वर्ष 3,62,461.00) रुपये थी।

19. बन्दोबस्ती वेयर निधि खाता

बन्दोबस्ती वेयर निधि खाते पर रु. 10,69,335.00 (पिछले वर्ष 9,77,155.50) ब्याज के रूप में अर्जित किया गया तथा इस खाते में कुल रु. 1,56,31,356.50 (पिछले वर्ष 1,45,62,021.50) है, जो कि **अनुसूची 3ई** में दर्शाया गया है।

20. आयकर

नाईपर एस.ए.एस. नगर आयकर धारा 1961 की धारा 11 व 12 में पंजीकृत है जो कि आयकर आयुक्त पटियाला के आदेश प्रपत्र संख्या (सीआईटी/पीटीए/पीआरओ/95–96) दिनांक 20.07.96 और शुद्धि नं. सीआईटी/पीटीए/पीआरओ/96.97/12–ए तिथि 31.10.1996 के अनुसार आयकर से छूट प्राप्त है। शैक्षिक संस्थान, अस्पताल/आयुर्वेदिक संस्थान जो कि पूरी तरह से भारत सरकार के कोष है, आयकर धारा 10 (23 सी) (111बी), (111एसी),(111एबी),(111ई),(6), (ए ए) से छूट प्राप्त है। नाईपर को विज्ञान एवं प्रौद्योगिकी मंत्रालय व विज्ञानएवं औद्योगिक अनुसंधान के पत्र संख्या 11/334/95–यूसी–वी– दिनांक 07.05.1999 के रूप में मान्यता प्राप्त है और आयकर नियम की धारा 10(21) के अंतर्गत मान्यता प्राप्त औद्योगिक व अनुसंधान संस्थान को आयकर से छूट प्रदान की गई है। संस्थान को धारा 10 (23 सी) (111 एबी) की आयकर धारा 1956 के पत्र सं. CC/CHD/Judl./07-08/10 (23c) (iv)/63/8294 दिनांक 06.02.2008 के अतिरिक्त आयुक्त के अंतर्गत सूचना दी गई है।

21. आय और व्यय खाता

रुपये 9,52,36,611.09 (पिछले वर्ष 9,01,27,934.39) जो कि आय का व्यय पर अर्जित ब्याज सहित अधिकतम है। जिसमें से विभिन्न कोषों से अर्जित ब्याज शुल्क 8,97,91,669.72 (पिछले वर्ष 8,37,73,079.81) रुपये हैं जिसे निम्नवत दर्शाया गया है :–

अत्याधिक व्यय, विभिन्न कोषों को अर्जित ब्याज स्थानांतरण उपरान्त राशि 9,52,36,611.09 (पिछले वर्ष 9,01,27,934.39) रुपये जिसको की नाईपर के पूंजी कोष से 8,97,91,669.72 (पिछले वर्ष 8,37,73,079.81) रुपये एवं 54,44,941.37 (पिछले वर्ष 63,54,854.58) रुपये परियोजना पूंजी कोष से वहन किया गया।

रुपये	3,65,583.50	कल्याण कोष खाते में स्थानांतरित किया गया
रुपये	1,98,59,788.37	पैंशन कोष खाते में स्थानांतरित किया गया
रुपये	1,38,49,905.00	उपदान एवं अवकाश नकदीकरण कोष खाते में स्थानांतरित
रुपये	10,69,335.00	स्थायी कोष खाते में स्थानांतरित किया गया
रुपये	10,69,335.00	पी.आर.एम.एफ. खाते में स्थानांतरित किया गया
रुपये	1,38,43,940.00	जी.पी.एफ./सी.पी.एफ./एन.पी.एस. कोष खाते में स्थानांतरित किया गया

22. विदेशी मुद्रा का लेन–देन

विदेशी मुद्रा का लेन देन अथवा इनके मूल्यों का कामकाज वाले दिन को होने वाले भाव के अनुसार लागे होता है। वर्ष 2018–19 में 40,69,618.04 रुपये विदेशी मुद्रा का व्यय / भुगतान खरीददारी आदि के लिए किया है (जो कि पिछले वर्ष रुपये 86,75,005.00 था)। वर्ष के दौरान संस्थान ने 25,81,486.00 रुपये परामर्श परियोजना द्वारा प्राप्त किए हैं (जो कि पिछले वर्ष रुपये 17,43,111.00 था)।

23. स्थाई परिसंपत्तियों का रजिस्टर जी.एफ.आर. के मारुख के अनुसार बनाया गया है।

24. जुलाई 1991 में अधिसूचना सं. 35/30/88–2 टीई 11–91/1077 दिनांक 13.3.1991 द्वारा पंजाब सरकार द्वारा 146 एकड़ 1 कनाल एवं 5 मरला भूमि निःशुल्क प्रदान की गई थी। और इसको स्थाई परिसम्पत्तियों (अनुसूची 8) में मात्र एक रुपया दिखाया गया है और उसके लिए सामान्य निधि खाता **(अनुसूची 2 (4))** बनाया गया है।

25. पूर्व वर्ष के आंकड़ों की चालू वर्ष से तुलना करने के लिए जहां आवश्यक समझा गया है उन्हें पुनः वर्गीकृत किया गया है और पुनः क्रमित किया गया है।

18. Capital Fund (Donation & Award A/c)

During the year 2018-19, **Rs. NIL** has been received as donation and Interest of Rs. 26,501.00 (Previous year Rs. 27,650.00) has been accrued on Donation & Award Account **(Refer Schedule-3 B).** The total amount in Donation & Award Account is Rs. 3,81,897.00 (Previous year Rs. 3,62,461.00) as on 31.03.2019.

19. Endowment chair Fund Account

Interest of Rs. 10,69,335.00 (Previous year Rs. 9,77,155.50) has been earned and accrued on the Endowment Chair Fund and the total amount in Endowment Chair Fund is Rs. 1,56,31,356.50 (Previous year Rs. 1,45,62,021.50) as on 31.03.2019. **(Refer Schedule 3 E).**

20. Income Tax

The Institute has been notified under section 10(23C) (iiiab) of Income Tax Act 1956 vide letter no. CC/CHD/Judl./07-08/10 (23C) (iv)/63/8294 dated 08.02.08 of Addl. Commissioner of Income Tax, Hq (Judl.), Chandigarh. The Income of Educational Institution, Hospital or Medical Institution wholly or substantially financed by Govt. of India is exempted from Income Tax under Section 10(23C) (iiiab), (iiiae), (vi) (via). NIPER is registered u/s 11 & 12 of Income Tax 1961 vide order no. CIT/PTA/PRO/12-A/95-96 dated 20.07.96 and corrigendum no CIT/PTA/PRO/96-97/12-A dated 31st Oct. 1996 of Commissioner of Income Tax, Patiala and as such its Income is exempted from Income Tax. NIPER has been given recognition as Scientific & Industrial Research Organization (SIRO's) by Ministry of Science & Technology, Deptt. of Science & Industrial Research vide letter no. 11/334/96-UT-V dated 07.05.1999 and as per Section 10(21) of the Income Tax Act 1961, the Income of the approved Scientific and Research Association is exempted from Income Tax.

21. Income & Expenditure Account

The Excess of expenditure over income comes to Rs. 9,52,36,611.09 (Previous Year Rs. 9,01,27,934.39) which is met from Capital fund of NIPER Rs. 8,97,91,669.72 (Previous Year Rs. 8,37,73,079.81) and Capital fund of Project Rs. 54,44,941.37 (Previous Year Rs. 63,54,854.58) during 2018-19 :-

Members contribution and Interest earning to various funds comes to Rs. 5,00,11,330.87 (Previous year Rs. 3,23,96,489.57). The amount has been transferred directly to respective fund are as under

Rs.	3,65,593.50	transferred to Welfare Fund Accounts,
Rs.	1,98,59,788.37	transferred to Pension Fund Account,
Rs.	1,38,49,905.00	transferred to Gratuity & Leave Encashment Fund Account.
Rs.	10,69,335.00	transferred to Endowment Chair Fund Account.
Rs.	10,69,335.00	transferred to Post Retirement Medical Fund A/c
Rs.	1,38,43,940.00	transferred to GPF/CPF/NPS Fund A/c

22. Foreign Currency Transactions

The transaction of foreign currency is accounted for at the exchange rate prevailing on the day of transaction. During the year 2018-19, an INR of Rs. 40,69,618.04 paid as foreign currency against the various purchases and others (Previous year Rs. 86,76,006.00). During the year Institute also received Rs. 25,81,486.00 for consultancy project. (Previous year Rs. 17,43,111,00).

23. Fixed Assets

The fixed assets register has been maintained as per GFR.

24. The Punjab Government has allotted 146 acres 1 kanal and 5 marla of land free of cost in the year July 1991 vide Notification No. 35/30/88-2 TE II-91/1077 dated 13.03.1991 and the same has been shown in Fixed Assets (Schedule-8) at nominal value of Rs. 1.00 while creating General Reserve Fund (Schedule-2(4).

25. Previous year figures have been regrouped and rearranged wherever considered necessary to make them comparable with those of current year.

26. राजस्व प्राप्ति को अर्जित सम्भूति के आधार पर माना गया है जैसा कि समसटर शुल्क प्राप्ति आधे साल की दर से जैसे जनवरी से जून और जुलाई से दिसम्बर। सामेस्टर शुल्क 1 जनवरी 2019 से 30 जून 2016 जनवरी 2019 में प्राप्त कर ली गई है तथा अप्रेल से जून 2016 की शुल्क को अग्रिम राशि रुपये 85,51,662.00 (पिछले वर्ष 68,48,350.00) अनुसूची 7 ए में दर्शाया गया है ।

27. लैटर ऑफ क्रैडिट के देय राशि 31.03.2019 को शून्य है।

28. वर्ष 2018–19 के लिए स्टोर इत्यादि का सत्यापन किया गया तथा इसमें कोई कमी अधिकता नहीं पाई गई।

29. अनुसूची 1 से 26 तक के फार्म, संस्थान के तुलन–पत्र और आय एवं व्यय का अभिन्न अंग है।

स्थान : एस.ए.एस. नगर
दिनांक : 24.05.2019

सही/-
(प्रो. अ. रघुराम राव)
निदेशक

26. Revenue have been recognized on accrual basis the semester fee is received on half yearly basis i.e. January to June and July to December. The semester fee for the period 01.01.2019 to 30.06.2019 has been received in January 2019. The fee for the period from April 2019 to June 2019 is shown as advance received in **Schedule – 7A** For Rs. 85,51,662.00 (Previous year Rs. 68,48,350.00)

27. Amount due for letter of credit as on 31.03.2019 is Nil.

28. Shortage / Excess noticed during physical verification for the year 2018-19 is NIL.

29. Schedule 1-25 form an integral part of Balance Sheet and Income & Expenditure of the Institute.

Place: S.A.S. Nagar
Date: 24.05.2019

Sd/-
(Prof. A. Raghuram Rao)
Director

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर), एस.ए.एस. नगर मोहाली (पंजाब) की वर्ष 31 मार्च, 2019 के अंत तक भारत के नियन्त्रक एवं महालेखा परीक्षक के लेखे की पृथक लेखा परीक्षा की रिपोर्ट (एस.ए.आर.)

1. हमने राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, मोहाली की वर्ष 31 मार्च, 2019 के अंत तक की लेखा परीक्षा से सम्बन्धित जानकारियां एवं व्याख्याएं प्राप्त कर ली है जो हमारी लेखा परीक्षा के उद्देश्य के लिए आवश्यक थी, नाईपर के लेखाओं की लेखा परीक्षा नाईपर अधिनियम–1998 धारा 23(2) के साथ पठित भारत के नियंत्रक महालेखा परीक्षा (कर्तव्य, शक्तियाँ तथा सेवा) शर्तें अधिनियम–1971 की धारा 19(2) के अंतर्गत की जाती है। हमारी जिम्मेदारी यहां लेखा परीक्षण पर आधारित इन वित्तीय विवरणों पर मत प्रकट करना है।

2. हमने इस संस्थान की लेखा परीक्षा भारत में सामान्य रूप से स्वीकार की गई भारत के नियंत्रक महालेखा परीक्षा के परीक्षा मानकों के आधार पर की है। लेखा परीक्षण में वर्गीकरण, लेखा अभ्यास की उत्तम पुष्टि, लेखा मानक एवं प्रकटीकरण, मानदण्ड आदि में यदि कोई भी हो, समस्त नियमिताएं इस विवरण में दर्शायी गई हैं। वित्तीय लेनदेन पर कानून, नियम और विनियम (औचित्य और नियमितता) तथा दक्षता सह प्रदर्शन पहलू आदि के संबंध में, यदि कोई लेखा परीक्षा की टिप्पणियां हैं तो उन्हें अलग से किसी भी निरीक्षण रिपोर्ट / सीएजी की ऑडिट रिपोर्ट के माध्यम से दर्शाया गया है।

3. हमनें अपना लेखा परीक्षण भारत में सामान्य रूप से स्वीकार की गई लेखा परीक्षण मानकों के आधार पर किया है। इन मानकों के लिए यह आवश्यक है कि हम वित्तीय विवरणों को सामग्री के गलत विवरणों से मुक्त करने के लिए उचित आश्वासन प्राप्त करने के लिए योजना बनाएं और लेखा परीक्षा करें। लेखा परीक्षा में परीक्षण के आधार पर, वित्तीय वक्तव्यों में मात्रा और खुलासे का समर्थन करने वाले तथ्य शामिल हैं। लेखा परीक्षा में उपयोग किए गए लेखांकन सिद्धांतों और प्रबंधन द्वारा किए गए महत्वपूर्ण अनुमानों का मूल्यांकन करने के साथ–साथ वित्तीय विवरणों की समग्र प्रस्तुति का मूल्यांकन भी शामिल है। हम मानते हैं कि हमारा ऑडिट आपकी राय के लिए उचित आधार प्रदान करता है।

4. हमारे लेखा परीक्षण के आधार पर हम रिपोर्ट करते हैं कि :–

i) हमने वह सब जानकारियां और व्याख्याएं प्राप्त कर ली है, जो हमारे ज्ञान एवं विश्वास के अनुसार हमारी लेखा परीक्षा के उद्देश्य के लिए आवश्यक थी।

ii) तुलन–पत्र तथा आय एवं व्यय, लेखा प्राप्ति तथा भुगतान खाता भारत सरकार द्वारा अनुमोदित प्रारूप में बनाए गए है जो इस रिपोर्ट के साथ विचारणीय है।

iii) हमारे मतानुसार राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, मोहाली ने आवश्यक लेखा पुस्तक का सही प्रारूप में विवरण प्रस्तुत किया है, जिसमें कि सभी लेखा विवरण एवं इसके पार्सलिंग जो भी रिकार्ड है, प्रस्तुत किया गया है।

iv) हम आगे रिपोर्ट करते हैं कि :–

लेखों पर टिप्पणियाँ

अ. तुलन–पत्र

अ.1. देयताएं

अ.1.1. बंदोबस्ती / कॉर्पस फंड (अनुसूची–3)

अ.1.1.1. परियोजना खाता (अनुसूची 3 1) – रु. 5.73 करोड़

उपर्युक्त में 64.63 लाख रुपये (2017–18 के लिए 34.71 लाख रुपये और 2018–19 के लिए 29.92 लाख रुपये) शामिल नहीं हैं, जो विशिष्ट परियोजनाओं के

SEPARATE AUDIT REPORT OF COMPTROLLER AND AUDITOR GENERAL OF INDIA ON THE ACCOUNTS OF NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH, SAS NAGAR, MOHALI (PUNJAB) FOR THE YEAR ENDED 31st MARCH, 2019 (S.A.R.)

1. We have audited the attached Balance Sheet of The National Institute of Pharmaceutical Education and Research (Institute), S.A.S. Nagar, Mohali, Punjab as on 31st March 2019 and the Income and Expenditure Account / Receipt and Payment Account for the year ended on that date under Section 19 (2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 23(2) of the National Institute of Pharmaceutical Education and Research Act, 1998. The preparation of these financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statement based on our audit.

2. This Separate Audit Report contains the comments of the comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards, disclosure norms, etc. Audit observations on financial transactions with regards to compliance with the law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports / CAG's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audits includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statement. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that :

   i) We have obtained all the information and explanation, which to the best of our knowledge and belief were necessary for the purpose of our audit.

   ii) The Balance Sheet and Income & Expenditure Account / Receipt & Payment Account dealt with by this report have been drawn up in the format approved by Government of India.

   iii) In our opinions, proper books of accounts and other relevant records have been maintained by the Institute in so far as it appears from our examination of such books.

   iv) We further report that :

COMMENTS ON ACCOUNTS

A. Balance Sheet

A.1. Liabilities

A.1.1 Endowment / Corpus Fund (Schedule - 3)

A.1.1.1 Project Account (Schedule 31) – ₹ 5.73 crore

The above does not include ₹ 64.63 lakh (₹ 34.71 lakh for 2017-18 and ₹ 29.92 lakh for 2018-19) being the amount of interest earned on fixed

लिए प्रदान किए गए अनुदान से किए गए सावधि जमा पर अर्जित ब्याज की राशि है। चूंकि, परियोजना लेखा के तहत निधियों को नाईपर को इस शर्त के साथ आवंटित किया गया था कि अर्जित ब्याज को संस्थान / एजेंसी को क्रेडिट के रूप में माना जाएगा और अनुदान की आगे की किस्त के लिए समायोजित किया जाएगा। तदनुसार, संस्थान को संबंधित परियोजना खाते में अर्जित ब्याज को संबंधित परियोजना के खाते में जमा करना चाहिए।

हालांकि, संस्थान ने परियोजना खातों के तहत देयता के रूप में अर्जित ब्याज का 64.63 लाख रुपये क्रेडिट नहीं किया, और इसके बजाय इसे आय के रूप में बुक किया, जिसके कारण रु 64.63 लाख प्रत्येक के साथ परियोजना खाते के तहत देयता की न्यूनोक्ति और आय की अधिकता (ब्याज अर्जित– अनुसूची 17) हो गई। । इससे शून्य के बजाय रु. 64.63 लाख का घाटा हुआ।

अ.1.2. वर्तमान देयताएं और प्रावधान (अनुसूची –7) – रु 18.75 करोड़

अ.1.2.1 देय प्रावधान और व्यय (अनुसूची –7 बी) – रु 6.15 करोड़

पेंशन देयताएँ – रु. 1.98 करोड़

वर्ष 2015–16 और 2016–17 के लिए नाईपर के वार्षिक खातों पर सी एण्ड ए. जी. की टिप्पणी संख्या ए.3.1 और वर्ष 2017–18 के लिए ए.2.1.1 के संदर्भ में कहा गया है कि संस्थान ने पेंशन देनदारियों का सक्रिय मूल्यांकन नहीं किया है। इंगित किए जाने के बावजूद, संस्थान ने पेंशन देनदारियों का सक्रिय मूल्यांकन नहीं किया है और वर्ष 2018–19 के दौरान केवल 1.98 करोड़ रुपये का प्रावधान किया है तथा वर्ष 2014–15 के सक्रिय मूल्यांकन रिपोर्ट के अनुसार, 31.3.2015 तक रु 26.72 करोड़ की पेंशन देनदारियों के बजाय 31.03.2019 तक रु 11.76 करोड़ का पेंशन फंड बनाया है। 31 मार्च 2019 तक सक्रिय मूल्यांकन के अभाव में पेंशन देयता और घाटे या अधिशेष के लिए छोटे प्रावधान के प्रभाव को निर्धारित नहीं किया जा सकता।

अ.2. संपत्ति

अ.2.1. वर्तमान परिसंपत्तियां, ऋण और विमानन (अनुसूची –11) – रु 58.64 करोड़

अ.2.1.1 पार्टियों को अग्रिम (अनुबंध 4) – रु 69.34 लाख

1. वर्ष 2015–16 और 2016–17 के लिए नाईपर के वार्षिक खातों पर सी एण्ड एजी की टिप्पणी संख्या ए.1.2.1 तथा वर्ष 2017–18 के लिए ए.1.2.2 (1) के संदर्भ में कहा गया है कि सॉफ्टवेयर की हानि के लिए आवश्यक प्रावधान एडवांस दिखाने के बजाय, सॉफ्टवेयर की खरीद के लिए 11.41 लाख रुपये का भुगतान सॉफ्टवेयर की खरीदी में समायोजित किया जाना चाहिए था, क्योंकि आपूर्तिकर्ता ने याचिका पर धनवापसी से इनकार कर दिया था क्योंकि उनके अनुसार सभी वितरण प्रतिबद्धताएं पूरी हुई थीं। बावजूद इसके, वर्ष 2018–19 के दौरान खातों की पुस्तकों में कोई समायोजन नहीं किया गया है।

इससे चालू सम्पत्तियाँ, ऋण और अग्रिम की अधिकता हुई है। नतीजतन, इससे 'शून्य' के बजाय वर्ष के लिए 11.41 लाख रुपये की कमी हुई है।

2. वर्ष 2016–17 और 2017–18 के लिए नाईपर के वार्षिक खातों पर सी एण्ड एजी की टिप्पणी संख्या ए.1.2.2 (2), के संदर्भ में कहा गया है कि पार्टियों को अग्रिम में 13.58 लाख रुपये का भुगतान डबल बीम स्पेक्ट्रोमीटर (दिसंबर 2008) की खरीद के लिए किया गया है। हालांकि, उपकरण प्राप्त हुआ, पर इस उपकरण के कुछ हिस्सों में तकनीकी खराबी के कारण इसे इंस्टॉल नहीं किया गया था। मामले को आपूर्तिकर्ता / एजेंट के साथ उठाए जाने के बावजूद, कोई प्रतिक्रिया नहीं मिली है। नौ साल से अधिक समय से उपकरण की नॉन–इंस्टॉलेशन को ध्यान में रखते हुए और पिछले पांच वर्षों से आपूर्तिकर्ता से किसी भी प्रतिक्रिया के अभाव में, संदिग्ध प्राप्य के लिए एक प्रावधान किया जाना चाहिए।

इससे चालू सम्पत्तियाँ, ऋण और अग्रिम की अधिकता हुई है। नतीजतन, इससे 'शून्य' के बजाय वर्ष के लिए 13.58 लाख रुपये की कमी हुई है।

deposits made out of grants provided for specific Projects. Since, the fund under Projects Accounts were allotted to NIPER with the condition that the interest earned will be treated as credited to institute / agency and shall be adjusted towards further installment of the grant. Accordingly, the Institute should have credited the interest earned to the respective project account.

However, the Institute did not credit ₹ 64.63 lakh of interest earned as liability under the Project accounts, and instead booked it as income, which led to understatement of Liability under Project Account and overstatement of Income (Interest earned-Schedule 17) by ₹ 64.63 lakh each. This also led to deficit of ₹ 64.63 lakh instead of Nil.

A.1.2 Current Liabilities & Provisions (Schedule-7) : ₹ 18.75 crore

A.1.2.1 Provisions & Expenses Payable (Schedule-7B) - ₹ 6.15 crore

Pension Liabilities – ₹ 1.98 crore

A reference is invited to the C&AG's comment no. A.3.1 on the annual accounts of NIPER for the year 2015-16 & 2016-17 and A.2.1.1 for the year 2017-18 which stated that the Institute has not carried out actuarial valuation of Pension liabilities. Despite being pointed out, Institute has not carried out actuarial valuation for Pension liabilities and made of provision of ₹ 1.98 crore only during the year 2018-19 and built Pension Fund of ₹ 11.76 crore up to 31.03.2019 against Pension liabilities of ₹ 26.72 crore up to 31.03.2015, as per the actuarial valuation report of 2014-15. The impact of short provision for Pension liability and deficit or surplus could not be quantified in the absence of actuarial valuation as on 31 March 2019.

A. 2 Assets

A.2.1 Currents Assets, Loans & Advances (Schedule - 11) – ₹ 58.64 crore

A.2.1.1 Advances to Parties - (Annexure - IV) – ₹ 69.34 lakh

1. A reference is invited to the C&AG's Comment No. A.1.2.1 on the annual accounts of NIPER for the year 2015-16 and 2016-17 and A.1.2.2 (1) for the year 2017-18 which stated that payment of ₹ 11.41 lakh for purchase of software should have been adjusted against the software and necessary provision for impairment of software should have been made instead of showing the same as advance, as the supplier denied the refund on plea that all the delivery commitments were fulfilled. Despite being pointed out, no adjustment has been made in the books of accounts during the year 2018-19.

   This has resulted in overstatement of Current assets, Loans and Advances. Consequently this has also resulted in deficit for the year by ₹ 11.41 lakh instead of Nil.

2. A reference is invited to the C&AG's Comment No. A.1.2.2 (2) on the annual accounts of NIPER for the year 2016-17 and 2017-18 which stated that advances to parties include ₹ 13.58 lakh paid for procurement of double beam spectrometer (December 2008). Though, the equipment was received, it was not installed due to technical faults in parts of equipment. Despite the matter being taken up with the Supplier/ Agent, no response was received. Considering non installation of the equipment since more than nine years and in absence of any response from the supplier for the past five years, a provision should have been made for doubtful receivables.

   This has resulted in overstatement of Current Assets, Loans Advances. consequently, this also resulted in deficit for the year by ₹ 13.58 lakh instead of Nil.

A.2.1.2 Accounts Receivable (Annexure-V) – ₹ 2.36 Crore

A reference is invited to the C&AG's comment no. A.1.1 on the

अ.2.1.2 खाता प्राप्ति (संलग्नक 5)–रु 2.36 करोड़

वर्ष 2015–16 और 2016–17 के लिए नाईपर के वार्षिक खातों पर सी एण्ड ए. जी. की टिप्पणी संख्या ए.1.1 तथा वर्ष 2017–18 के लिए ए.1.2.1 के संदर्भ में कहा गया है कि अनुदान से अधिक और ऊपर किए गए अतिरिक्त व्यय की प्रतिपूर्ति के लिए प्रायोजन एजेंसियों से प्रतिबद्धता के अभाव में अतिरिक्त व्यय की प्रतिपूर्ति के लिए परियोजना अधिकारियों के साथ प्राप्त और गैर–अनुपालन, पुराने बकाया प्राप्तियों के लिए प्रावधान किया जाना चाहिए था। बावजूद इसके, 2018–19 में कोई प्रावधान नहीं बनाया गया है।

पुरानी प्राप्तियों के गैर प्रावधान के परिणामस्वरूप वर्तमान परिसंपत्तियों की ओवरस्टेटमेंट और संदिग्ध प्राप्य के लिए प्रावधान की समझ 11.91 लाख रुपये है। नतीजतन, इससे 'शून्य' के बजाय वर्ष के लिए 11.91 लाख रुपये की कमी हुई है।

सी. सहायता अनुदान

संस्थान के पास रसायन और उर्वरक मंत्रालय, भारत सरकार से प्राप्त योजना अनुदान के तहत 18.70 करोड़ रुपये की प्रारंभिक शेष राशि थी। इसके अलावा, वर्ष 2018–19 के दौरान संस्थान को कोई अनुदान प्राप्त नहीं हुआ। संस्थान ने 31 मार्च 2019 के दौरान 0.42 करोड़ रुपये का उपयोग किया, तथा 18.28 करोड़ रुपये का उपयोग नहीं हुआ।

संस्थान को सहायतार्थ अनुदान (सामान्य– टीबी / काला अजार) के लिए 2.22 करोड़ रुपये प्राप्त हुए जिनमें से 1.48 करोड़ रुपये का उपयोग 2018–19 में किया गया तथा 0.74 करोड़ रुपये अनुपयोग रहे। इसके अलावा, संस्थान द्वारा वर्ष 2017–18 के दौरान प्राप्त 28.31 करोड़ रुपये की गैर–योजना अनुदान का पूरी तरह से उपयोग किया गया है।

इसके अलावा, वर्ष 2018–19 के दौरान प्राप्त 29.00 करोड़ रुपये की गैर–योजना अनुदान का संस्थान द्वारा पूरी तरह से उपयोग किया गया है।

5. पूर्व के पैरा में दी गई टिप्पणियों के आधार पर, हम रिपोर्ट करते हैं कि तुलन पत्र, आय तथा व्यय खाता तथा प्राप्ति एवं भुगतान खाता लेखा पुस्तक के साथ स्वीकार्य है।

6. हमारे मतानुसार तथा दी गई सूचना एवं हमें दिये गये स्पष्टीकरण के आधार पर लेखा यह सभी अपेक्षित जानकारी प्रदान करता है जो लेखों के निर्धारित फार्म में होती है। यह तुलन पत्र, आय एवं व्यय, लेखा एवं नोट तथा महत्वपूर्ण मानते जो ऊपर दर्शाए गए हैं और अन्य मामले जो कि अलग लेखा परीक्षा रिपोर्ट, अनुसूची जो कि संलग्न है, सत्य एवं सही प्रतीत होते हैं, जो भारत में सामान्य रूप से स्वीकार्य हैं।

(अ) जहाँ तक 31 मार्च 2019 को राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान, मोहाली की तुलन पत्र से सम्बन्धित है और

(ब) जहां तक इस तिथि की समाप्त हुए वर्ष के लिए आय एवं व्यय अधिशेष से सम्बन्धित है।

(कमलजीत सिंह रामूवालिया)
प्रधान निदेशक वाणिज्यक लेखा परीक्षा
एवं पदेन सदस्य, लेखा परीक्षा बोर्ड – द्वितीय
नई दिल्ली

स्थान : नई दिल्ली
दिनांक : 24–05–2019

annual accounts of NIPER for the year 2015-16 & 2016-17 and A.1.2.1 for the year 2017-18 which stated that in the absence of commitment from sponsoring agencies for reimbursement of excess expenditure incurred over and above the grant received and non pursuance with project authorities for reimbursement of excess expenditure, provision towards old outstanding receivable should have been made. Despite being pointed out, no provision has been created in the year 2018-19.

Non provision of old receivable has resulted in overstatement of current assets and understatement of provision for doubtful receivable by ₹ 11.91 lakh. Consequently, this has also resulted in deficit for the year by ₹ 11.91 lakh instead of Nil.

C. Grants in aid

The Institute had an opening balance of ₹ 18.70 crore under plan grant received from the Ministry of Chemical and Fertilizers, Govt. of India. Further no grant was received during the year 2018-19. The Institute utilized ₹ 0.42 crore up to 31.03.2019 leaving an unutilized balance of ₹ 18.28 crore.

The Institute also had opening balance of ₹ 2.22 crore under schemes Grants-in-Aid (General - TB/ Kala Azar) and Institute has utilized ₹ 1.48 crore during 2018-19 leaving an unutilized balance of ₹ 0.74 crore.

Further non-plan Grant-in-Aid of ₹ 29.00 crore received during the year 2018-19 has been fully utilized by the Institute.

v) Subject to the observation in the preceding paragraphs, we report that the Balance Sheet and Income and Expenditure Account dealt with by this report are in agreement with the books of accounts.

vi) In our opinion and to the best of our information and according to the explanation given to us, the said financial statement read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure give a true and fair view in conformity with accounting principles generally accepted in India;

a. In so far as it relates to the Balance Sheet, of the state of affairs of NIPER, SAS Nagar, Mohali as on 31 March 2019; and

b. In so far is it relates to the Income and Expenditure account of the Surplus / Deficit for the year ended on that date.

(Kamaljit Singh Ramuwalia)
Principal Director of Commercial Audit &
Ex-Officio Member, Audit Board-II,
New Delhi

Place : New Delhi
Dated : 24-05-2019

पृथक लेखा परीक्षा अनुसूची

1. **आंतरिक लेखा परीक्षा की पर्याप्तता**

संस्थान के आंतरिक लेखा परीक्षा का नेतृत्व एक प्रोफेसर द्वारा किया गया जिसे लेखा परीक्षा विंग का अतिरिक्त प्रभार दिया गया था। इसके अलावा, आंतरिक लेखा परीक्षा विंग में कोई अमला नहीं लगाया गया था और वर्ष के दौरान कोई आंतरिक लेखा परीक्षा नहीं किया गया।

2. **आंतरिक नियंत्रण प्रणाली की पर्याप्तता**

आंतरिक नियंत्रण प्रणाली अपर्याप्त है और संस्थान की गतिविधियों के आकार और प्रकृति के अनुरूप नहीं है। संस्थान के परिसर में एक बैंक शाखा और एक एटीएम के संचालन के लिए भारतीय स्टेट बैंक के साथ कोई औपचारिक लीज डीड या समझौता नहीं किया गया था। जुलाई 1991 में पंजाब सरकार द्वारा आवंटित 148 एकड़ 1 कनाल और 5 मारला ज़मीन के लिए कोई उत्परिवर्तन नहीं किया गया है।

3. **अचल सम्पत्तियों के गौतिक सत्यापन की व्यवस्था**

सामान्य वित्तीय नियमों (जीएफआर) के नियम 192 (1) के अनुसार, अचल संपत्तियों को एक वर्ष में एक बार सत्यापित किया जाना चाहिए। हालांकि, लेखा परीक्षा के समापन तक वर्ष 2018–19 के लिए अचल संपत्तियों का भौतिक सत्यापन पूरा नहीं हुआ था।

4. **इन्वेंट्री के भौतिक सत्यापन की व्यवस्था**

सामान्य वित्तीय नियमों (जीएफआर) के नियम 192 (2) के अनुसार, सभी उपभोज्य वस्तुओं और सामग्रियों का भौतिक सत्यापन साल में कम से कम एक बार किया जाना चाहिए। हालांकि, लेखा परीक्षा के समापन तक वर्ष 2018–19 के लिए वस्तु सूची/ सामान का भौतिक सत्यापन पूरा नहीं हुआ था।

5. **वैधानिक देय राशि के भुगतान में नियमितता**

संस्थान आयकर, बिक्री कर, सीमा शुल्क के संबंध में निर्विवाद वैधानिक देय राशि जमा करने में नियमित है और भुगतान के लिए कुछ भी शेष नहीं है।

सही/–
(दिपन करमाकर)
निदेशक

ANNEXURE TO SAR

1. **Adequacy of Internal Audit System**

   Internal audit of the Institute was headed by a professor who had been given additional charge of the wing. Further, there were no manpower posted in the internal audit wing and no internal audit was conducted during the year.

2. **Adequacy of Internal Control System**

   Internal Control System is inadequate and not commensurate with the size and nature of the activities of the Institute. No formal lease deed or agreement with State Bank of India was entered into for operating a bank branch and an ATM in the premises of the Institute. No mutation has been done for 146 Acres 1 Kanal and 5 Marla land allotted by the Punjab Government in July 1991.

3. **System of Physical verification of fixed assets**

   As per rule 192(1) of the General Financial Rules (GFR), the fixed assets should be verified once in a year. However, physical verification of the fixed assets had not been completed for the year 2018-19 till the conclusion of audit.

4. **System of Physical verification of Inventory**

   According to rule 192(2) of the GFR, the physical verification of all the consumable goods and materials should be undertaken at least once in a year. However, Physical verification of inventories was not completed for the year 2018-19 till the conclusion of audit.

5. **Regularity in payment of statutory dues**

   The Institute is regular in depositing undisputed statutory dues in respect of income tax, sale tax, customs duty nothing was due for payment.

Sd/-
(Dipan Karmakar)
Director




S.A.S. Nagar

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर)

National Institute of Pharmaceutical Education and Research (NIPER)

Sector 67, S.A.S. Nagar, Punjab 160 062, INDIA
Tel.: +91-172-2292000, Fax : +91-172-2214692
www.niper.gov.in