

# HEAD TALK ON



## AURA OF PHARMACEUTICAL EDUCATION AND RESEARCH@BIT MESRA: JOURNEY TOWARDS 50 YEARS AND BEYOND....

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi

# Vision of the Department

To become a center of excellence in teaching and research for creating technical manpower to meet the technological need in the area of healthcare system contributing towards the socio-economic development of the country.

# MISSION OF THE DEPARTMENT

1. To develop state of the art education and research at undergraduate, post graduate and doctoral levels in different areas of pharmaceutical sciences and technology.
2. To provide excellent infrastructural facilities to strengthen research and development activities.
3. To extend proper academic guidance and career counselling to students in order to bridge the gap between academia and industry as per needs of the society.
4. To develop effective pedagogical and research potential among the faculties.
5. To create pharmaceutical knowledge pool with innovative, ethical and leadership qualities to serve the cause of the society.
6. To promote collaboration with academia, industries and research organizations at national and international levels in the areas of mutual interests.

# Courses offered: Summary

Program Type	Program			Duration (years)	Sanctioned Intake
UG	Bachelor of Pharmacy ( <b>1972</b> )			4	60
PG	Master of Pharmacy in Pharmaceutics (1983)			2	15
PG	Master of Pharmacy in Pharmaceutical Chemistry (1983)			2	15
PG	Master of Pharmacy in Pharmacology (2010)			2	15
PG	Master of Pharmacy in Pharmacognosy (2010)			2	15
PG	Master of Pharmacy in Pharmaceutical Quality Assurance (2017)			2	15
Ph.D. (2011-2021)	Awarded 138	Submitted 04	Registered 52		

**The Department will complete 50  
years in 2022**

**GOLDEN JUBILEE CELEBRATIONS**

# Faculty Profile

Sl. No	Name	Designation	Highest Qualification	Date of Joining the Institute	Additional Institute Responsibilities
1	Dr. P. R. P. Verma	Professor	Ph. D.	17.11.1988	<b>Former Head</b>
2	Dr. B.N. Sinha	Professor	Ph. D.	19.09.1983	<b>Former Head</b>
3	Dr. S. Samanta	Professor	Ph. D.	01.10.1985	<b>Former Head</b>
4	Dr. S. Jha	Professor	Ph. D.	29.09.1980	
5	Dr. (Ms.) S. Ganguly	Professor	Ph. D.	28.03.2001	<b>Head of the Department</b>
6	Dr. (Mrs.) P. Mitra Mazumder	Professor	Ph. D.	03.02.1998	<b>Chairperson, Internal Complaint Committee</b>
7	Dr. K. Jayaram Kumar	Professor	Ph. D.	06.03.2000	<b>In Charge-Medicinal Plant garden</b>
8	Dr. (Mrs.) S. M. Verma	Professor	Ph. D.	17.07.1990	
9	Dr. Venkatesan J.	Professor	Ph. D.	16.02.2004	<b>Member of IQAC</b>

# Faculty Profile

Sl. No	Name	Designation	Highest Qualification	Date of Joining the Institute	Additional Institutes Responsibilities
10	Dr. A. K. Patnaik	Associate Professor	Ph. D.	15.07.2003	<b>Warden (Hostel: 14 )</b>
11	Dr. A. Ghosh	Associate Professor	Ph. D.	14.08.2006 05.02.2009	<b>Member of NIRF</b>
12	Dr. S. K. Singh	Associate Professor	Ph. D.	17.10.2006	<b>PIC (Dramatics Society)</b>
13	Dr. Manik	Associate Professor	Ph. D.	14.08.2006	<b>Assistant COE</b>
14	Dr. (Mrs.) A. Pandey	Assistant Professor	Ph.D.	01.07.2004	
15	Dr. Abhimanyu Dev	Assistant Professor	Ph. D.	25.06.2007	

# Faculty Profile

Sl. No.	Name	Designation	Highest Qualification	Date of Joining the Institute	Additional Institute Responsibilities
16	Dr. Biswatrish Sarkar	Assistant Professor	Ph. D.	09.07.2007	<b>Faculty Coordinator-T&amp;P,</b>
17	Dr. Trishna Bal	Assistant Professor	Ph. D.	16.05.2008	
18	Dr. M.P. Chopra	Assistant Professor	Ph. D.	01.07.2002	
19	Dr. (Mrs.) Neelima Sharma	Assistant Professor	Ph. D.	05.02.2009	<b>Warden (Hostel: 8)</b>
20	Dr. K.K. Pradhan	Assistant Professor	Ph. D.	01.02.2012	<b>Warden (Hostel: 7)</b>



## Faculty Members



**Dr. (MS). S. Ganguly**



**Dr. P. R. P. Verma**  
Professor



**Dr. S. Samanta**  
Professor



**Dr. B. N. Sinha**  
Professor



**Dr. Sivesh Jha**  
Professor



**Dr. P. Mitra Mazumder**  
Professor



**Dr. K. Jayaram Kumar**



**Dr. (Mrs). S. M. Verma**  
Professor



**Dr. Venkatesan J.**  
Professor



**Dr. A. K. Pattnaik**  
Associate  
Professor



**Dr. Animesh Ghosh**  
Associate  
Professor



**Dr. S. K. Singh**  
Associate  
Professor



**Dr. Manik Ghosh**  
Associate  
Professor



**Dr. M. P. Chopra**  
Assistant  
Professor



**Dr. Anima Pandey**  
Assistant Professor



**Dr. Neelima Sharma**  
Assistant Professor



**Dr. Abhimanyu Dev**  
Assistant Professor



**Dr. Biswatrish Sarkar**  
Assistant Professor



**Dr. Tishna Bal**  
Assistant Professor



**Dr. K. K. Pradhan**  
Assistant Professor

# Recruitment of New faculty



**Dr. Bapi Gorain, Asst Professor**

B.Pharm. (2002): Jadavpur University

M.Pharm. (Pharmacology) (2004): Jadavpur University

PhD in Pharmacy (2014): Jadavpur University

Previous association: Taylor's University, Malaysia

**Joined BIT as Assistant Professor on 18.10.2021**

Area of research interest: **improvement of therapeutic efficacy and safety of therapeutic agents against chronic wound, cancer, hypertension and cognitive impairment using novel drug delivery platform**

Department of Pharmaceutical Sciences & Technology,  
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## Recruitment of New faculty



**Dr. Monika Dwivedi, Asst. Professor**

- **B.Pharm. (2008):** Rajeev Gandhi Technical University, Bhopal.
- **M.Pharm. (Pharmaceutics) (2010):** Jaipur National University, Jaipur, Rajasthan.
- **PhD (Pharmaceutics) (2016):** CSIR-N.B.R.I, Lucknow and Banasthali University, Rajasthan.
- **Postdoc Experience:**
  - CSIR-C.D.R.I, Lucknow.
  - University of Science and Technology of China, Hefei, China.
  - Texas A and M University, Texas, U.S.A
- **Joined BIT as Assistant Professor on 8.11.2021.**
- **Area of research interest:** Targeted and Bioresponsive delivery systems for cancer and tissue regeneration, Phyto-pharmaceuticals and Female reproductive health management.

# Adjunct Faculty

S. No.	Name of Faculty Member	Department	Designation	Highest Qualification
1	Dr. S. K. Jain	Mathematics	Professor	Ph.D.
2	Dr. S. Padhi	Mathematics	Professor	Ph.D.
3	Dr. P. Kaur	Mathematics	Assistant Professor	Ph.D.
4	Mr. S. K. Sinha	Mechanical Engineering	Associate Professor	M. Tech.
5	Dr. A. Sharon	Chemistry	Professor and Head	Ph.D.
6	Dr. G. Agarwal	Chemistry	Assistant Professor	Ph.D.
7.	Dr. M. Yadav	Sports	Assistant Professor	Ph.D.

# Adjunct Faculty

S. No.	Name of Faculty Member	Department	Designation	Highest Qualification
8	Dr. S. Mahapatra	Chemistry	Assistant Professor	Ph.D.
9	Dr. Rohini Jha	Management	Assistant Professor	Ph.D.
10	Dr. Rohit K. Pandey	Management	Assistant Professor	Ph.D.
11.	<b>Dr. Vandana</b>	Mathematics	Assistant Professor	Ph.D.
12.	<b>Dr. B.K. Chanda</b>	Computer Science and Engg	Assistant Professor	Ph.D
13.	<b>Dr. G.T. Mohan Raj</b>	Chemical Engineering	Associate Professor	Ph.D

# Adjunct Faculty

S. No.	Name of Faculty Member	Department	Designation	Highest Qualification
14	<b>Dr. Gautam Sen</b>	Chemistry	Assistant Professor	PhD
15	<b>Dr. Neeta Kumari</b>	Civil and Environmental	Assistant Professor	PhD
16	<b>Dr. Nirupma</b>	Chemical Engineering	Assistant Professor	PhD
17	<b>Dr. Soubhik Chakraborty</b>	Mathematics	Professor	PhD
18	<b>Raweesh Choudhary</b>	Biogen USA	<b>Director, Strategy, Medical Excellence</b>	B. Pharm., MBA

# **DEPARTMENTAL ACHIEVEMENTS (TEACHING AND RESEARCH)**

# RESEARCH AREAS AND ACTIVITIES

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi



# Pharmaceutics:

- New Drug Delivery Systems
- BA/BE Studies
- Nanotechnology Based Formulation Development
- Exploration of Natural molecules as Pharmaceutical Adjuvant

# Pharmaceutical Chemistry:

- *In silico* design, synthesis and evaluation of novel candidate compounds with special reference to **heterocyclic moieties** and **small peptides** in various pharmacological areas.
- Molecular modeling, QSAR and predictive ADME studies using **CADD based software**
- **Natural products**-chemistry/pharmacology/structure standardization/using spectroscopic methods.
- Studies on synthetic nutraceuticals

# Pharmacology:

- General pharmacological screening, *in-vitro* and *in-vivo* toxicological studies of new bioactive molecules from synthetic and natural sources.
- Neuropharmacological studies of bioactive molecules with special reference to cognitive functions.
- Studies of bioactive molecules on experimentally induced diabetes, and its implications in animal models.
- Biochemical and Molecular Pharmacological studies of bioactive molecules.
- Antioxidant and DNA protective properties of bioflavonoids.

# Pharmacognosy

- Validation of traditional systems of medicine
- Validated methodologies for development of new herbal formulations.
- Development of Drug molecules from natural sources and their enhancement by biotechnological approaches.
- Exploring natural resources for novel drug delivery systems.

# Pharmaceutical Quality Assurance:

- Analytical Method Development and Validation
- Bioanalytical Method Development and Validation
- Standardization of traditional drugs and polyherbal formulations
- Pharmaceutical Validation

# Competency of Faculties

## Professors

Sl. No.	Name of Faculty	Program	Specific Research Area
1	Dr. P. R. P. Verma	Pharmaceutics	<b>Drug delivery</b>
2	Dr. B. N. Sinha	Pharmaceutical Chemistry	<b>Drug Discovery approaches with regard to Synthetic and Natural Leads using Modern Analytical Techniques and Softwares with special reference to Antiviral and Anticancer agents on different targets and Teaching &amp; Learning Strategies --Pedagogical Concepts</b>
3	Dr. S. Samanta	Pharmaceutical Chemistry	<b>Antidibetics and cardiomyopathy ,Retinopathy. Analgesics and anti-inflammatory agents Anticancer agents : Liver cancer ,colon cancer. CADD based design ,Synthesis of Peptide hybrid compounds and their screening .</b>
4	Dr. S. Jha	Pharmacognosy	<b>Rural Technology and Technology Transfer, Standardization of Ayurvedic Drugs,Nutraceuticals</b>
5	Dr.(Ms.)Swastika Ganguly	Pharmaceutical Chemistry	<b>Molecular modelling/ <i>In silico</i> design, synthesis and studies of some heterocyclic moieties with special reference to Antimicrobial and antiHIV agents</b>
6	Dr.Papiya Mitra Mazumder	Pharmacology	<b>Pharmacological screening of bioactive molecules from natural, semisynthetic &amp; synthetic sources with respect to metabolic disorders and their allied complications</b>
7	Dr.K. Jayaram	Pharmacognosy	<b>Investigating natural excipients to improve the functional performance of API. Intelligent techniques in drug delivery Standardisation protocol for traditional systems of medicine</b>
8	Dr. S M. Verma	Pharmaceutical Chemistry	<b>Design , synthesis and evaluation of novel chemical entities , natural product chemistry</b>
9	Dr. Venkatesan J	Pharmaceutical Chemistry	<b>Drug design against validated targets in the chemotherapeutic segment of Tuberculosis, RNA viruses and Cance</b>

# Competency of Faculties

## Associate Professors

SI. No.	Name of Faculty	Program	Specific Research Area
9	Dr. A.K. Pattanaik	Pharmacology	<b>Development of Obesity animal model , Management of obesity with natural products, Wound healing study, Antiulcer study, Teratogenic study and Psychopharmacological study</b>
10.	Dr. Animesh Ghosh	Pharmaceutics	<b>Pharmaceutical Cocrystallization to tailor the physicochemical properties of API and drug delivery engineering to deliver pharmaceutical cocrystals</b>
11	Dr. Manik	Pharmaceutical Chemistry	<b>Docking, Molecular Modeling and ADMET studies on Natural Products for revealing their Antiviral and Anicancer properties including Extraion and isolation of lead compounds Quality Assurance of Pharmaceuticals with respect to Analytical and Bioanalytical Education Technology - Use of ICT in Education</b>
12	Dr. Sandeep Singh	Pharmaceutics	<b>Nanoparticles Based Drug Delivery System, <i>In silico</i> Simulations, Self Emulsifying Drug Delivery Systems, Lipid Based Drug delivery System, Silk Nanoparticles</b>

# Competency of Faculties

## Assistant Professors

Sl. No.	Name of Faculty	Program	Specific Research Area
12	Dr. Abhimanyu Dev	Microbiology	Delivery of natural or synthetic origin therapeutic molecules using novel drug delivery carriers such as niosome, carbon dots etc. Development of suitable biosensors or diagnostic kits against microbes such as viruses or bacteria.
13	Dr. Biswatrish Sarkar	Microbiology	Deciphering the effects of polyphenols against oxidative stress linked with different diseases and development of phyto-formulations thereafter
14	Dr.(Mrs.)Trishna Bal	Pharmaceutics	Graft copolymer, Polymeric Scaffolds for Tissue regeneration, Super Porous hydrogel, Nanofibers, Stimuli sensitive Systems
15	Dr. (Mrs.) Anima Pandey	Pharmacognosy	Standardization of Herbal products from Natural origin and Novel drug delivery systems.
17	Dr.(Mrs.) Neelima Sharma	Biochemistry	Biochemical studies for evaluation of Immunomodulatory and Anti-cancer activities of bioactive compounds from both synthetic and natural sources, Toxicological and Biocompatibility evaluation of various synthetic and natural moieties, and <i>in vitro</i> studies using Animal Cell Culture.
19	Dr. Kishanta Pradhan	Pharmaceutical Analysis	Development and Validation of Analytical and Bioanalytical Method ,Stability Study of API and pharmaceutical products as per ICH guidelines & Impurity Profiling, Natural Product Research
20	Dr. M. P. Chopra	Pharmacology	Anti- diabetic studies as well as wound healing in presence of diabetes of herbal plants



# Competency of Faculties

## Newly recruited Assistant Professors

Sl. No.	Name of Faculty	Program	Specific Research Area
21	Dr. Bapi Gorain	Pharmacology and Pharmaceutics	Improvement of therapeutic efficacy and safety of therapeutic agents against chronic wound, cancer, hypertension and cognitive impairment using novel drug delivery platform
22	Dr. Monika Dwivedi	Pharmaceutics	Targeted and Bioresponsive delivery systems for cancer and tissue regeneration, Phyto-pharmaceuticals and Female reproductive health management.

## **The Department encourages projects supported by various national and international funding agencies like :**

- **UGC,**
- **AICTE,**
- **DRDO,**
- **CSIR,**
- **ICMR,**
- **DST,**
- **TRIFED**
- **UGC-UKIERI etc.**

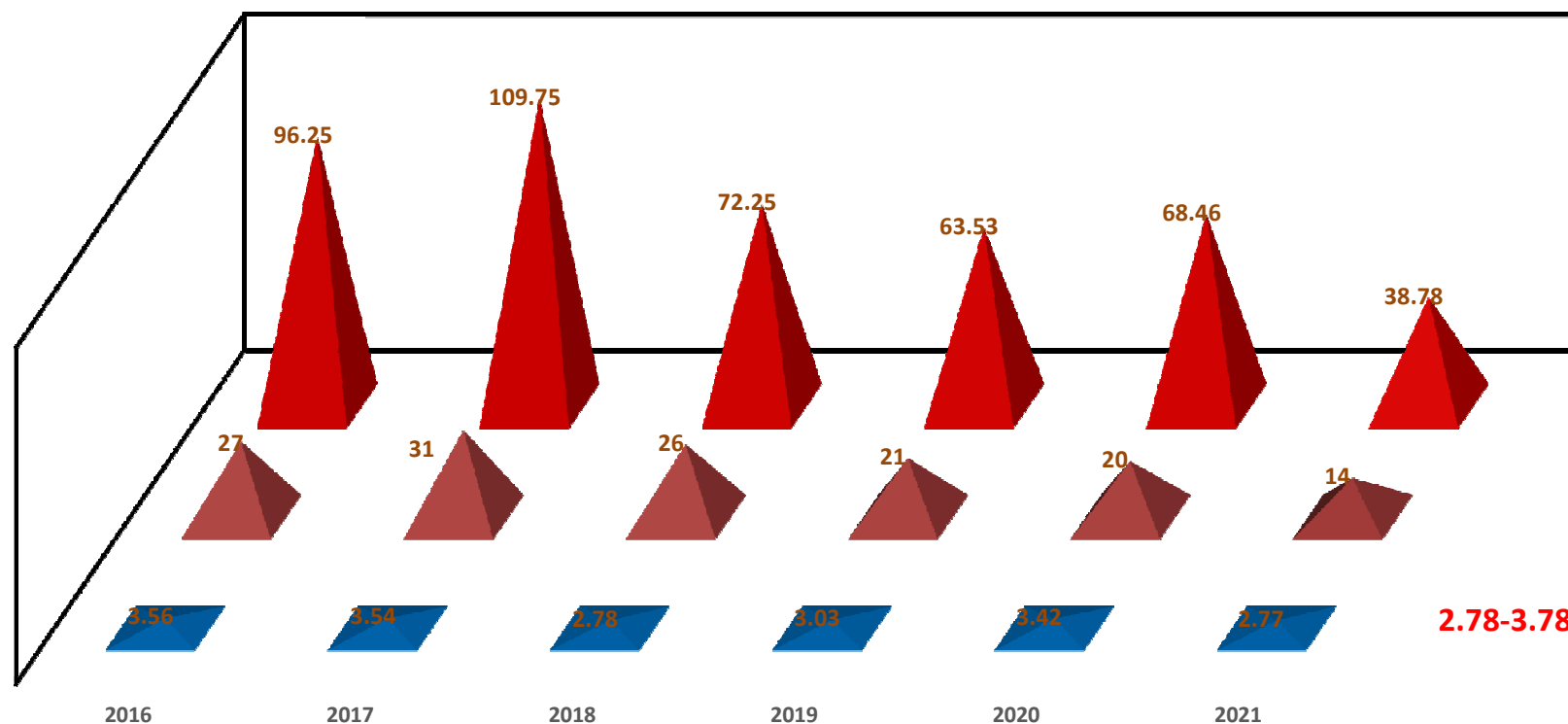
## **The Department has been an UGC SAP and DST FIST supported Department**

- **DST FIST Phase I- obtained in February 2006**
  - **Amount sanctioned and released: Rs. 38 lacs**
  - **Equipments: HPLC, DSC, GC and Balance**
  - **Networking: 3 lacs**
  - **Maintenance: 5 lacs**
  - **DST FIST Phase II- obtained in 2011**
  - **Amount sanctioned: 33.50 lacs Amount released: 30 lacs**
  - **With the cooperation of the Institute FESEM was procured.**
  
- **UGC SAP: Obtained in 2007, Duration : 5 years**
  - **Two Thrust Areas: Computer Aided Drug Design, synthesis and Natural Products, Chemistry and Pharmacology**
  - **Amount: 65 lacs.**
  - **Every year- 5 UGC BSR fellowships granted for Ph.D. students**

# Publications

PUBLICATION MATRIX

■ Impact factor per Article   ■ Number of Articles   ■ Cumulative Impact Factor



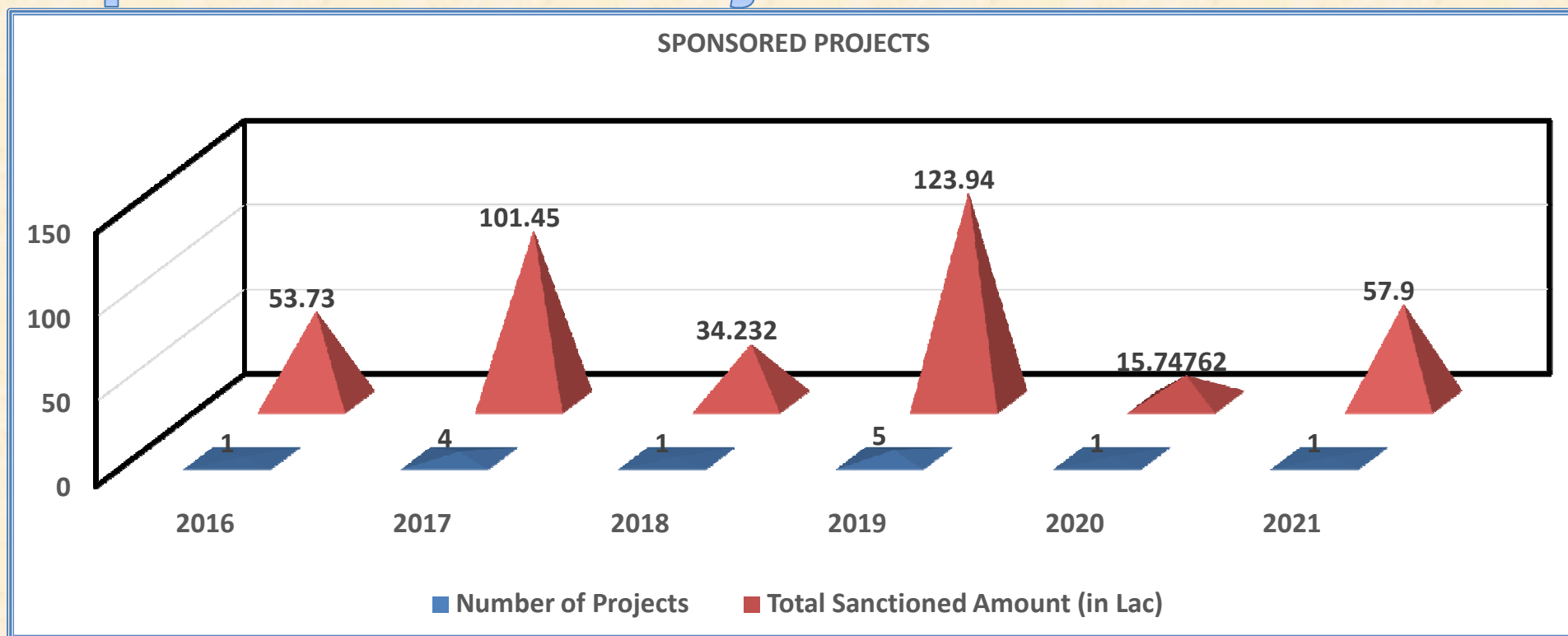
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# Publications

- Total number of publications  
from 2016-2021: **239**

[Publication list \(2016- 2021\) for Head Talk.doc](#)

# Sponsored Projects

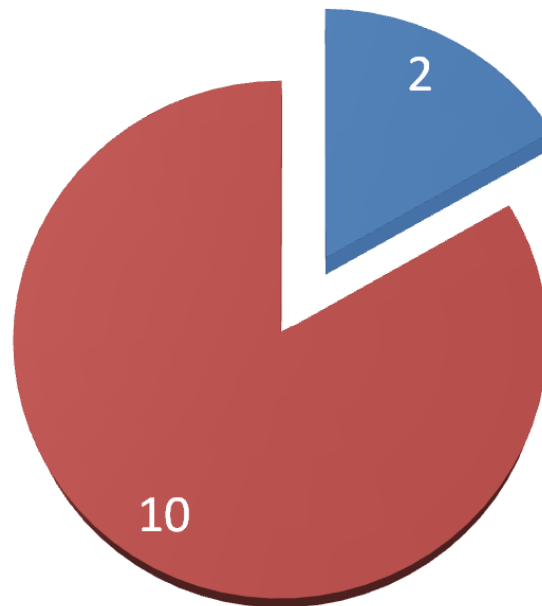


[Projects from 2016-21.doc](#)

# Projects(International)

- *Title of the project:* **Design and synthesis of potent dual inhibitors of Cdk4 and tubulin as anticancer agents**
- PI: Dr. B. N. Sinha Team member: Dr. Venkatesh
- Collaborator:
  - Prof. Bob Chaudhuri, De Montfort University, UK
  - **UGC-UKIERI**
  - 6<sup>th</sup> Mar 2013
  - Amount: 30.88 lakhs
  - Duration: 2 years
- *Title of the project:* **Structure-based discovery of antivirals for the treatment of Chikungunya virus infections (Anti-Chick)**
- Co-PI: Dr. B. N. Sinha
- Collaborator:
  - Dr. D. Velmurugan, University of Madras, India
  - Dr. Rolf Hilgenfield, University of Lubeck, Germany
  - Dr. Bruno Canard, Axis Marsielle University, France
  - **DBT BMBF-GERMANY**
  - 4<sup>th</sup> Feb 2011
  - Amount: 34.62 lakhs
  - Duration: 2 years

# Patents Granted / Applied





# Patents Granted:

- Antioxidant Composition containing microspheres from extract of *Lagenaria siceraria* fruits and a method thereof"- Patent No.-351088/Certificate issued on 6th November 2020- (Intellectual Property India)
- Novel orally administrable antidiabetic compounds, process for producing them and therapeutic compositions containing the same (granted on 25th March 2009.)

# Interdepartmental Collaboration

- Department of Applied Chemistry
- Department of Applied Physics
- Department of Bioengineering
- Department of Chemical Engineering

# Faculty Interaction with Outside World

Name of faculty	Visit or Interaction	Collaboration	Weblink
<b>Dr. B. N. Sinha</b>	Visited University of Leubeck, Germany, De Montfort University, Leicester , UK, EU India Science and Technology Days at Vienna, Austria, Nan Yang Technological University, Singapore, Aix-Marseille Université, Marseille, France	Collaborates with University of Leubeck, Germany, De Montfort University, Leicester , UK, EU India Science and Technology Days at Vienna, Austria, Nan Yang Technological University, Singapore, Aix-Marseille Université, Marseille, France	<a href="http://www.dzif.de">www.dzif.de</a> › rolf-hilgenfeld <a href="https://www.researchgate.net/scientific-contributions/Bhabatosh-Chaudhuri-39662731">https://www.researchgate.net/scientific-contributions/Bhabatosh-Chaudhuri-39662731</a> <a href="https://www.unom.ac.in/index.php?route=department/department/deptpage&amp;deptid=23">https://www.unom.ac.in/index.php?route=department/department/deptpage&amp;deptid=23</a>
<b>Dr. S. Ganguly</b>		1)Collaboration with Dr. Yong-Tang Zheng Kunming Institution of Zoology (KIZ) Chinese Academy of Sciences (CAS) P.R. China 2)Collaboration with Dr. Mark Ashton and his Team, University of Newcastle, UK 3)Collaboration with Kiattawee Chowgoomoon, Kasetsart University, Bangkok, Thailand	<a href="http://sourcedb.kiz.cas.cn/yw/zjrc/sc/200908/t20090813_2394217.html">http://sourcedb.kiz.cas.cn/yw/zjrc/sc/200908/t20090813_2394217.html</a> <a href="https://www.ncl.ac.uk/pharmacy/people/profile/markashton.html">https://www.ncl.ac.uk/pharmacy/people/profile/markashton.html</a> <a href="https://www.researchgate.net/lab/Kiattawee-Choowongkomon-Lab">https://www.researchgate.net/lab/Kiattawee-Choowongkomon-Lab</a>

# Faculty Interaction with Outside World

Name of faculty	Visit	Interaction/Collaboration	Weblink
<b>Dr. S. Samanta</b>	Visited Omics Group Conference, Las Vegas, USA		
<b>Dr. Venkatesan J</b>	Visited Anadolu University, Eskisehir, Turkey	Colloaboration with Dr. Sanjib Bhakta, University of Birckbeck	<a href="https://www.bbk.ac.uk/our-staff/profile/8005781/sanjib-bhakta">https://www.bbk.ac.uk/our-staff/profile/8005781/sanjib-bhakta</a>
<b>Dr. Animesh Ghosh</b>		<p>Collaborations</p> <p>1. Prof. Changquan Calvin Sun, FRSC, AAPS Fellow <i>Professor and Director of Graduate Studies</i> Associate Department Head Department of Pharmaceutics University of Minnesota, USA</p> <p>2. Dr. Venu Vangala <i>Senior Lecturer</i> in Medicines Development &amp; Pharmaceutical Sciences Centre for Pharmaceutical Engineering Science School of Pharmacy and Medical Sciences, University of Bradford, UK</p> <p>3. Dr. Franziska Emmerling BAM Federal Institute for Materials Research and Testing, Richard-Willstatter-Strasse 11, 12489 Berlin, Germany.</p>	<p>1. <a href="https://www.pharmacy.umn.edu/departments/pharmaceutics/changquan-calvin-sun-lab">https://www.pharmacy.umn.edu/departments/pharmaceutics/changquan-calvin-sun-lab</a></p> <p>2. <a href="https://www.bradford.ac.uk/staff/vgrvangala">https://www.bradford.ac.uk/staff/vgrvangala</a></p> <p>3. <a href="https://www.bam.de/Navigation/EN/About-us/Organisation/Organisation-Chart/President/Department-6/Division-63/division63.html">https://www.bam.de/Navigation/EN/About-us/Organisation/Organisation-Chart/President/Department-6/Division-63/division63.html</a></p>

# Faculty Interaction with Outside World

Name of faculty	Visit	Interaction/Collaboration	Weblink
<b>Dr. Sandeep K. Singh</b>	Post Doc at Pukyong National University, South Korea		
<b>Dr. Manik</b>	PEIN AWARD University of Santiago de Compostella, Lugo Campus, Galacia, Spain		
<b>Dr. B Sarkar</b>	Visited North Carolina University, USA and University of Montpellier, France for conference		

# DEPARTMENT INFRASTRUCTURE AND LABORATORIES

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi

# Medicinal Plant Garden

- Size/Area of the garden – 5 hectares of land
- More than 250 types and varieties of plants are available
- The boundary of the garden is properly demarcated
- A permanent arrangement
- Plants are planted by adapting some systems like herbs, shrubs, trees, xerophytes, plants growing under shade, perennial plants etc in demarcated areas

# Medicinal Plant Garden



Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi



# Animal House



Animal House Registration No: **621/02/ac/CPCSEA**

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra. Ranchi

# Details of Animal House

## House Facilities

1. Quarantine Room
2. Rabbit Room
3. Rat and Mice Room
4. Guinea Pig Room
5. Animal Issue room
6. Wash Room
7. Store Room
8. Experimental Room
9. Office Room
10. Breeding Room

## Animal

- Swiss Albino Mice 260
- Wistar Albino Rat 180
- Sprague Dawley Rat 20
- Albino Rabbit 09
- Guinea Pig 07

## Number

# Molecular Modelling laboratory(2008)

## ➤ **Software:**

- Sybyl 7.1
- COMFA and COMSIA
- Flexidock
- Scigress Explorer Ultra 7.7
- Statistica
- ADME Works Model Builder
- Flex X
- Autodock 4.0.2/Vina
- Recore
- Various open source CADD software

# Molecular Biology Set-up at Department of Pharmaceutical Sciences & Technology, BIT Mesra

- Grant received in the project entitled “**Phenyloxazoline Synthetase Inhibitors as Antitubercular Agents (POSIAA)**“
- Agencies- **DST SERB and AICTE RPS project**
- Dr. B. N. Sinha, Dr. Venkatesan Jayaprakash , Dr. Biswatrish Sarkar and Dr. Abhimanyu Dev.
- Thermal Cycler (**PCR machine, Eppendorf**) – Required for amplification of DNA
- Horizontal & vertical electrophoresis Unit (**Bio-Rad**) – Required for resolution DNA & protein
- Western blotting assembly (**Bio-Rad**) – Required for the confirmation of expressed recombinant proteins using antibodies
- Gel documentation system (**ChemidocXR+, Biorad**) – required for visualization of DNA, proteins & Blots -
- Refrigerated centrifuge (**Eppendorf**) –required in various molecular biology protocols. -
- Incubator shaker (**Excella 24R, Eppendorf**)- required for growth of cells for expression of proteins -
- Microcentrifuge (**Eppendorf**) -
- Multimode microplate multimode plate reader (**Spectramax iD3**) – required for checking absorbance, fluorescence & chemiluminescence

# Solid State Pharmaceuticals Set-up at Department of Pharmaceutical Sciences & Technology, BIT Mesra

- **Scope**

- Tailoring the physicochemical properties of API(s) by modifying their crystal habit.
- Enhancing the bioavailability of API(s) by cocrystallization, amorphization, co-amorphization, solid dispersion, milling etc.

- **Infrastructural Facilities:**

- DSC and TGA – Perkin Elmer
- HPLC – Thermofisher Scientific
- Planetary micro mill - Fritsch
- Dissolution apparatus - Electrolab
- Diffusion cell apparatus - Fabricated

***These infrastructural facilities are created out of various sponsored projects funded by DRDO, UGC, SERB, BIRAC, AICTE.***

# RURAL TECHNOLOGY CELL

## ➤ **Coordinator- Dr. S. Jha**

➤ **Turmeric Based Face Cream:** A moisturizing conditioner containing PG, glycerine and sorbitol in suitable proportion.

➤ **Water Steam Distillation Plant:** The simplest and cheapest method of extracting essential oils.

### ➤ **Solar Dryer for drying medicated herbs:**

- A cabinet type domestic solar air heated medicinal herb/plant drier for drying medicinal plants & their products (5-8 kg capacity).

➤ **Hand Operated Brass Metal Utensil Polishing Machine:** Presently the artisans are scrapping the brass metal utensils by hand operated tools for finishing & polishing.

- **Amla punching machine:** A cost-effective, simple and handy Amla Punching Machine that produces required number of pin-holes of required depth on the surface in one stroke only, thus effectively increases the production rate.

# High level Sophisticated Instruments

Name of Instrument	Make	Price(INR)
FTIR 8400S	Shimadzu	6,00000.00
Gel DOC	Bio Rad	11,00000.00
Horizontal Gel electro phoresis	Bio Rad	1,00000.00
HPLC	WATERS (1525)	15,00000.00
HPLC(Knauer)	KNAUER	13,00000.00
HPLC(Waters)UV-Vis & Electrochemical Detector	WATERS	9,71916.00
Chemi Documentation System(Semidoc xr plus)	Biorad	11,00000.00

# High level Sophisticated Instruments

Name of Instrument	Make	Price(INR)
HPTLC(Camag)	CAMAG	7,00000.00
Hydrogen Gas Generator CLIND	CLIND	4,00000.00
Incubator Shaker	Eppendrof	6,50,000.00
Leica Microscope Model DM LS2 with PC attached	LEICA	72,000.00
Leica Microscope Model DM LS2 with PC attached	LEICA	72,000.00
Leica Microscope Model DME with PC attached	LEICA	72,000.00
Malvern Viscometer	Brook-Field	9,00000.00

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# High level Sophisticated Instruments

Name of Instrument	Make	Price(INR)
Microscope	Olympus	2,40,000.00
Mini Ball Mill & MINI BLENDER	Karnavati Engg.	5,00,000.00
Nitrogen Gas Generator CLIND	CLIND	4,00,000.00
pHMeter	Cyber Scan	47,000.00
Planetary Micro Mill	Retsch	5,00,000.00
Portable Hardness Tester	Electrolab (Model EH-01)	80,000.00
R & D COATER	ACG	6,00,000.00

Department of Pharmaceutical Sciences & Technology,  
Birla Institute of Technology, Mesra, Ranchi

# High level Sophisticated Instruments

Name of Instrument	Make	Price(in IINR)
Refrigerated Centrifuge	Eppendorf (5804R)	5,50,000.00
Refrigerated centrifuge	Eppendrof	1,00000.00
Rotary Evaporators RII	Buchi	4,50,000.00
Rotatory Evaporator	RG09EV	3,50,000.00
Refrigerated Centrifuge	Eppendorf (5804R)	5,50,000.00
Spray Dryer	Labultima	24,00000.00
Stability Chamber	Thermolab	1,60,000.00

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra. Ranchi

## High level Sophisticated Instruments

Name of Instrument	Make	Price(in INR)
TA-60 Thermal Analyzer	Simazhu	5,00000.00
Table Top Ultracentrifuge	Beckman coulter (Optima Max XP)	18,00000.00
Tablet Compression Machine(16 Station)	Cadmach	4,50,000.00
Tap Densitometer Model	Electrolab (ETD-1020)	80,000.00
Tap Densitometer Model ETD-1020	Electrolab (ETD-1020)	80,000.00
Texture Analyzer of Load Frame	Stable Micro Systems Ltd (TA. TXTPLUS)	13,00000.00
Thermal Cycler	Eppendorf	3,50,000.00
MilliQ Water System	Merk Millipore	9,00000.00

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra. Ranchi

# High level Sophisticated Instruments

Name of Instrument	Make	Price(in INR)
UHPLC Dionex Ultimate 3000(Auto sampler)	Thermo Scientific	20,50,000.00
Ultrasonic Cleaner	Trans-O-Sonic	2,10,000.00
Ultrasonic Homogenizer	Sonoplus Bandlein Sonoplus	3,80,000.00
Ultrasonic Homogenizer	Sonoplus	2,50,000.00
UV-Vis Spectrophotometer UV-1700(Shimadzu)	Shimadzu	3,50,000.00
UV-Vis Spectrophotometer UV-1800(Shimadzu)	Shimadzu	5,00,000.00
UV-Vis Spectrophotometer UV-2450(Shimadzu)	Shimadzu	6,00,000.00

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra. Ranchi

# High level Sophisticated Instruments

Name of Instrument	Make	Price(in INR)
Vertical Gel electrophoresis unit	Bio Rad	1,00000.00
Viscometer	Malvern (Bohlin Visco 88)	9,00000.00
Western Bolt	Bio Rad	1,00000.00
Carousel 12 plus Reaction Station	Radley	4,10,000.00
Thermal Cycler	Ependorf	3,50,000.00
Multiplate Reader	Molecular Device	16,50000.00

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra. Ranchi



CAAD Lab



Instrument Room - I



Departmental Library



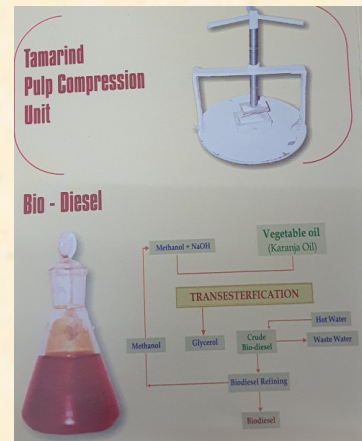
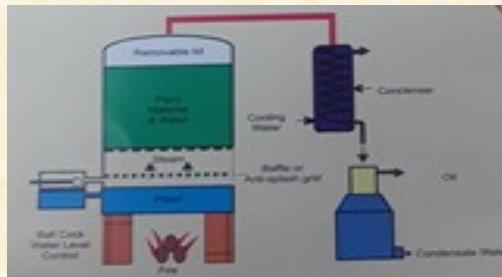
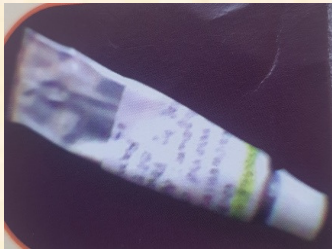
FESEM

Solid State Pharmaceutics set up



# RURAL TECHNOLOGY CELL-Coordinator: Dr. S. Jha

**Turmeric Based Face Cream**      **Water Steam Distillation Plant**

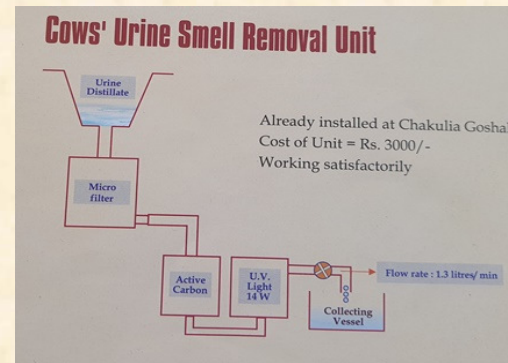
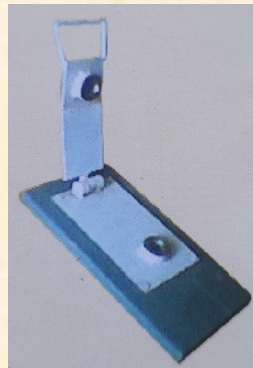


### Hand Operated Brass Metal Utensil Polishing Machine

Presently the artisans are scrapping the brass metal utensils by hand operated tools for finishing & polishing. This process is very slow and time taking. The polishing quality is also very poor. To improve the polishing process we developed a hand operated polishing machine. With the help of this machine we are now getting very good quality of polishing in the utensil. Moreover, by implementing this machine more work can be achieved in comparatively less time.

**Solar Dryer for drying medicated herbs**

**Amla Punching Machine**



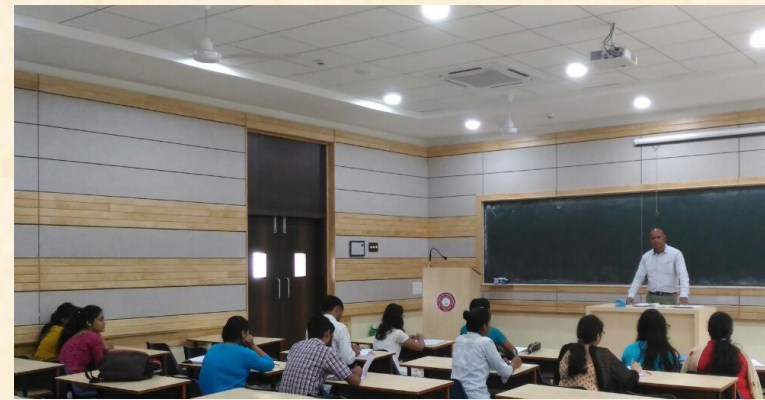
### Activities at a glance

Solar distillation Unit : To get almost pure water for the preparation of drugs.

Collection of Medicinal Plants with participants.  
The plant shown is *Jatropha Curcas* (Ratanjoti) - a source of bio-diesel.



# Course Content Delivery



Content  
Delivery

Audio  
Visual  
Aids/  
Online lectures  
and demo

Black  
Board  
Teaching

Assignments

Interaction  
Sessions

Tutorials

Laboratory  
Sessions

Seminars/  
Journal Club/  
Practice School

## **Top Universities** **where our graduates have been admitted for higher studies**

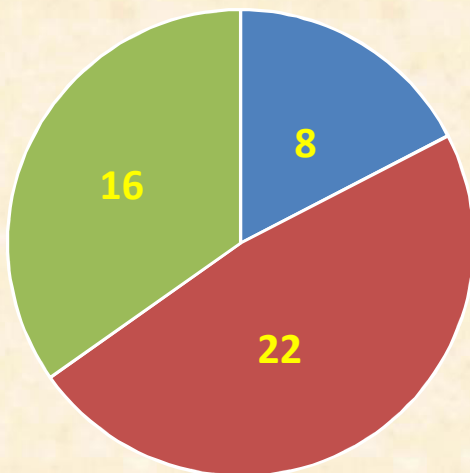
1.	<b>Tripta Kumari</b>	<b>CSIR-Indian Institute of Chemical Biology, Kolkata</b>	<b>PhD (DST INSPIRE-JRF)</b>	<b>2017</b>
2.	<b>Aditi Dasgupta</b>	<b>Shobhaben Pratapbhai Patel Of School of Pharmacy &amp; Technology Management NMIMS, Mumbai</b>	<b>M.PHARM+MBA (PHARMACEUTICS)</b>	<b>2014-17</b>
3.	<b>Aachal Pacheriwala</b>	<b>Shobhaben Pratapbhai Patel of School of Pharmacy &amp; Technology Management NMIMS, Mumbai</b>	<b>M.PHARM+MBA (PHARMACEUTICS)</b>	<b>2014-17</b>
4.	<b>Soumya Verma</b>	<b>Manipal University, Manipal</b>	<b>M.PHARM. PHARMACEUTICS</b>	<b>2015-17</b>
5.	<b>Juhi Priya</b>	<b>Manipal University, Manipal</b>	<b>M.PHARM INDUSTRIAL PRACTICE</b>	<b>2016-18</b>
6.	<b>Swati Jha</b>	<b>Rajeev Gandhi Proudयोगiki Vishwavidyalaya, Bhopal</b>	<b>M.PHARM PHARMACEUTICS</b>	<b>2015-17</b>
7.	<b>Pooja Jha</b>	<b>BITS Plani-Hyderabad Campus</b>	<b>M.PHARM PHARMACEUTICS</b>	<b>2016-18</b>
8.	<b>Thakur Prataphansda</b>	<b>IIM-Ranchi</b>	<b>PGDM</b>	<b>2017-19</b>

## Foreign Universities where our graduates have been admitted for higher studies

S. No.	Name	Name of University/Institute	Name of Programme	Year
9.	Abhishek Thakur	University Of Miami, USA	PhD	2015-20
10.	Kamalika Samanta	University of Tennessee Health Science Centre, USA	MS PhD	2017-23
11.	Nirnoy Dan	University of Tennessee Health Science Centre, USA	MS PhD	2016-22
12.	Priyanshu Bharadwaj	Universit� de Bourgogne, France	MS	2019-21
13.	Parth Rathee	Miami University, USA	PhD	2019-24
14.	Sounak Bagchi	Texas Tech University Health Sciences Center, Texas, USA	PhD	2018-23
15.	Tabassum Khair	Queensland University of Technology, School of Chemistry and Physics, Faculty of Science	PhD	2019-24

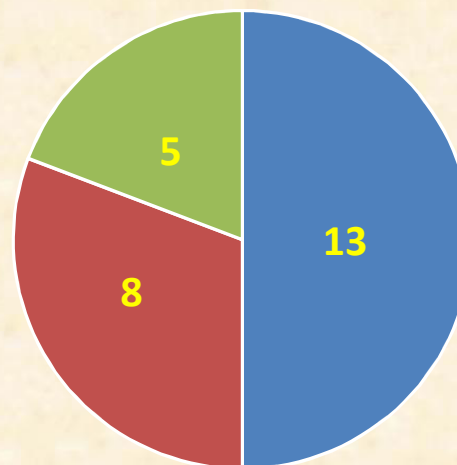
# Placement with the help of T and P cell

**M. Pharm**



■ 2017-2018 ■ 2018-2019 ■ 2019-2020

**B. Pharm**



■ 2017-2018 ■ 2018-2019 ■ 2019-2020

# Major Recruiters

- Cipla
- Cognizant
- Indegene
- Mylan labs
- Nestle India
- Abott
- Dr. Reddy's
- Macleods Pharma
- Sun Pharma
- Think and Learn
- Alkem Labs
- ACG Pharma

# A few Distinguished Alumni of the Department

S.No.	Name	Designation	Company/Organization
1	Dr. P.H.Rao	Professor	Admn. Staff College of India, Hyderabad
2	Dr. Maya Prakash Singh	Vice President	Wyeth Research Lab., New York, USA
3	Dr. Sunil K Gupta	Vice President	Alza Corporation, USA
4	Dr Tousif Munif	President, CPP	Lambda, India
5	Mr. Ashish K Sarkar	Vice President	Cadila Health care Ltd., Ahmedabad, India
6	Dr. Shivaji Singh	Vice President	Navtech LLC, Atlanta, USA
7	Mr. Anjani Kumar	General Manager (Production)	Cipla, Mumbai, India
8	Dr Susmita Chanda	Vice President	Alios Biopharma, California
9	Dr. Sanjay Chanda	Vice President	Anacor Pharmaceuticals, California
10	Mr. Sanjay Sinha	Sr. General Manager	Sun Pharma, India

# A few Distinguished Alumni of the Department

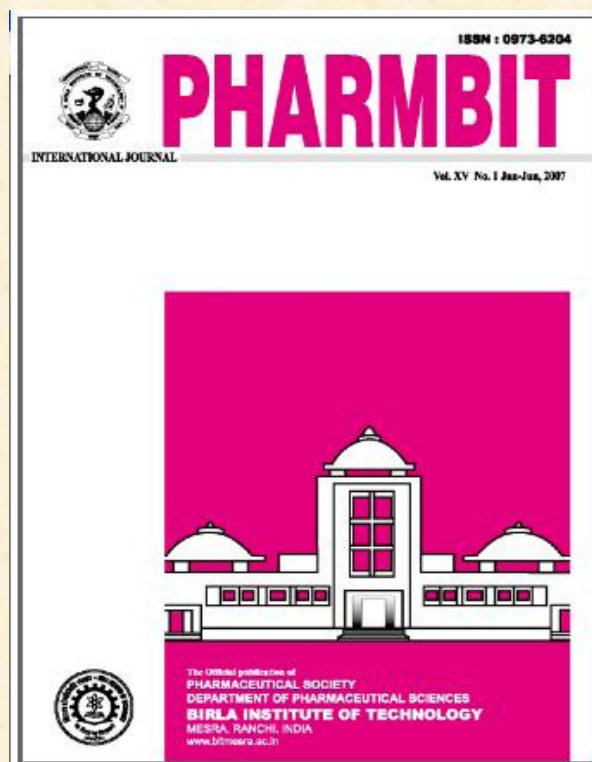
S.No.	Name	Designation	Company/Organization
11	Dr. T. R. Krishanan	Senior Scientific Advisor (Bureau of Pharm. Sciences)	Health Canada , Ottawa
12	Dr. S. S.Mahli	Dy. Commissioner	Central Excise, Jamshedpur
13	Dr. B.M.Singh	General Manager	SSI-Govt. of MP, Bhopal
14	Mr. Abhay Kr Singh	Income Tax Commissioner	Govt. of India
15	Mr. Dipak Vidyarthi	AIG-Prison	Govt. of Jharkhand
16	Dr. T. R. Choudhry	Head-Marketing	Johnson & Johnson, Eastern Region
17	Ms. Ritu Sahay	Drug Controller, Jharkhand State	Government of Jharkhand, Ranchi, Jharkhand, India
18	Mr. Raweesh Choudhary	Director, Medical Affairs	Astrazeneca, USA



**Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi**



# PHARMBIT



**International Journal  
(ISSN: 0973-6204)**

Published by:  
Pharmaceutical Society, BIT, Mesra

Indexed in “Chemical Abstract”

[PHARMBIT, 36, JAN-DEC, 2020 by PHARMBIT - issue](#)

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi

# **Workshops/ Conferences organized by the Department**

# The Department is a recognized AICTE sponsored Quality Improvement Program (QIP) Centre

Every year there are three QIP programs.

In 2021 the following four programs were hosted online:

Sl. No.	Name of the Program & Date	Coordinator
1	Recent advances in Therapeutic research with special emphasis on nanomedicine (24th– 29 <sup>th</sup> May, 2021)	Dr. Neelima Sharma
2	Applications of Machine Learning in Drug Discovery & Development (31 <sup>st</sup> May- 5 <sup>th</sup> June, 2021)	Dr. K. K. Pradhan
3	<i>In Silico</i> Approaches in Drug Delivery (11-17 <sup>th</sup> June, 2021)	Dr. S. K. Singh
4	Bio-analytical Techniques and Tools for Drug Discovery Process	Dr. B. Sarkar

# Other Activities of the Department

- The Department has signed MOU with NIPER Kolkata in March 2021.
- The Department organized a webinar on **MultiComponent Solids: Opening New Avenues for Pharmaceutical Industry on 14<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> August**
- The Department with IPA jointly hosted a national webinar on “ **CBNR Emergency Management**” on 28<sup>th</sup> August 2021
- The Department with IPA in collaboration with NIPER Kolkata jointly celebrated World Pharmacist’s day on 25<sup>th</sup> September 21
- The Department arranged a Webinar entitled” **Product Life Cycle “ by Dr. T. R. Krishnan, Retd. Senior Scientific Advisor, Health Canada and distinguished alumunus of 1976 batch B. Pharm.**
- The Department in collaboration with IPA, Jharkhand celebrated the National Pharmacy Week on 26<sup>th</sup> November 2021.
- The Department hosted an International Conference on Emerging trends in drug discovery and development from 20<sup>th</sup> to 21<sup>st</sup> January 2022

**The Department has been  
accredited by NBA for its  
B. Pharm program from 2017-  
2022**

# Professional Activities

- ❑ **Pharmaceutical Society**
- ❑ **IPA Jharkhand State branch: Holds students events like quiz, elocution contest, Oral/ Poster presentations, cricket match**
- ❑ **APTI Jharkhand State branch**
- ❑ **Entrepreneurship initiatives, product design, and innovation: Through invited lectures by distinguished alumni and R&D personalities**
- ❑ **Publications and awards in inter institute events by students: IDMA –JB MODY AWARD for 1st rank holders in B. Pharm**
- ❑ **Publication of technical magazines, newsletters, etc:**
  - **PHARMBIT**
  - **PHARMVISION(Wall Magazine)**

## Approval by Important Pharmaceutical Agencies

IPA, Jharkhand State branch – 2004

### Awards:

- Best State Branch PRIZE in 2010
  - Special Recognition PRIZE in 2017
  - World Pharmacist Day
  - National Pharmacy week
- } celebrated every year

**IPA STUDENT'S CHAPTER: Jharkhand  
Branch (2021-22)**

### ➤ Constitution:

**President: Dr. R.N.Gupta**

**Vice President: Dr. B.N.Sinha**

**Hon. Secretary: Dr. M.P.Chopra**

**Jt. Secretary: Dr. S.Samanta**

**Treasurer: Dr.Sujit Kumar**

**Council Members: Dr.(Mrs.)Swastika Ganguly,  
Dr.P.M.Mazumdar, Dr. Jayaram Kumar, Dr. Ashok  
Patnaik. Dr. Awadesh Oraon,  
Prof.(Mrs)S.G.Panaplia, Mr.Anjani Kumar,Mrs. Ritu  
Sahay,**

## Approval by Important Pharmaceutical Agencies

APTI(Association of Pharmaceutical Teachers of India), Jharkhand State branch - 2008

**APTI Women's Forum Coordinator(East Zone) : Dr. Swastika Ganguly**

Webinar hosted on 8<sup>th</sup> March,  
International Women's day by APTI Women's  
Forum, East Zone and  
Indian Pharmacological Society on  
**"Role of Pharmacy in Women's Healthcare"**

### ➤ **Constitution:**

**President: Dr. B. N. Sinha**

**Vice President: Dr. Swastika Ganguly**

**Vice President: Dr. K. Jayaram**

**Hon. Secretary: Dr. Manik**

**Treasurer: Dr.Papiya Mitra Mazumder**



# Other Awards and Achievements

- Eminent Pharmacist Award
- Best Pharmaceutical Scientist Award
- M. L. Khorana Best Paper Award for IJPS
- Al-Ameen College of Pharmacy Award for best paper in IJPER
- Indian Pharmaceutical President Oration Award
- Best Pharmaceutical Professionals in India Award
- IPA Fellow Award
- Jharkhand Gaurav Award
- Pharma Achievement Award
- S. Laskar Memorial Pharma Excellence Award
- Gandhian Young Technology Innovation (GYTI) Award
- UGC Research Award (2014-2016)

# **Co-curricular & Extra Curricular Activities**

# Cultural Functions

Welcome and Farewell functions



Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra. Ranchi

# Alumni Networking and Invited Lectures



Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi



**Swacch Pakhwada  
Abhiyan**



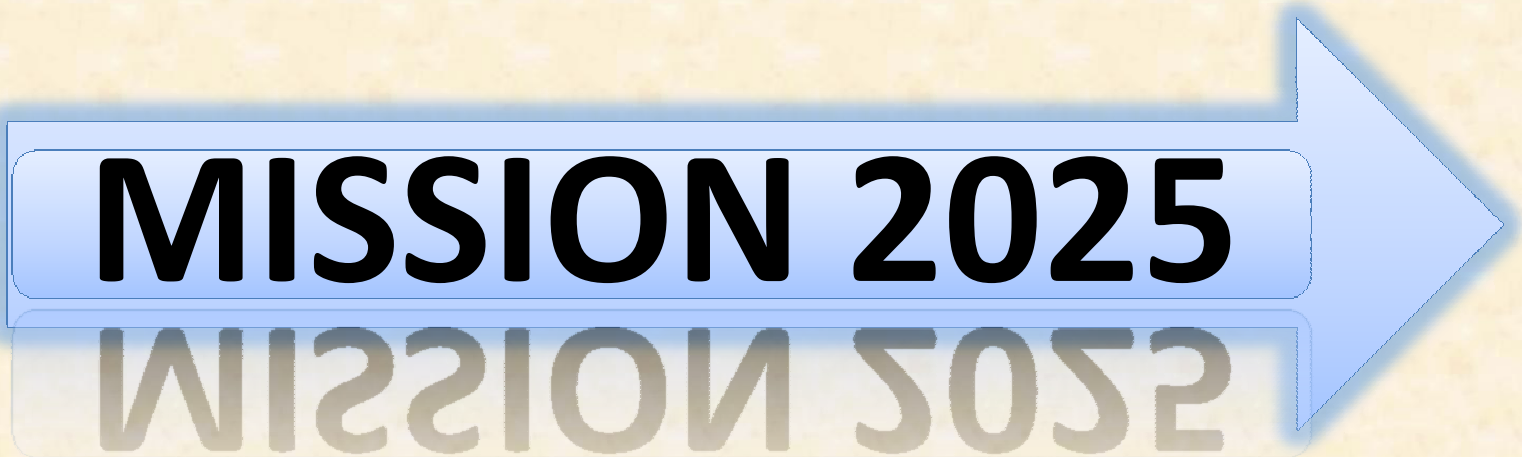
**IPA Cricket Match**

# Pharmaceutical Aura Celebrating Euphoria



Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi

# MISSION 2025



MISSION 2025

# FACULTY AFFAIRS

## 1. FACULTY RECRUITMENT /PROMOTION/ DEPUTATION

- Gazette Notification of PCI (2014)
- Requirement of 26- 32 faculty, Teacher student ratio should be 1: 12( according to PCI)1:15 (according to NIRF)
- Current strength : 22
- The Department hopes to increase the frequency of recruitment as required.
- **Robust Faculty Appraisal by the Department**



### **3. RESEARCH**

- Joint research guidance has been encouraged for new faculty members initially for 1-3 years with due acknowledgement for CAS promotion.
- Assistant Professors are also being encouraged for independent PhD guidance and R & D projects( which can help develop research labs).
- Interdisciplinary/ Interinstitutional research is also being encouraged with allied Departments like- Bioengineering, Chemical Engineering, Applied Chemistry

### **4. OUTREACH**

- Every year Department proposes to organize National/ International Conference.
- Betterment of AICTE QIP programs with novel topics addressed.
- Training with online courses (Coursera, FDPs , AICTE ATAL FDPs etc.) is being encouraged for Executives & Teachers (National & International) from Industry & Institutions.

## **5. ACADEMIC GROWTH OF DEPARTMENT**

- New degree as proposed in faculty meeting -
  - (i) M. Pharm. Biotechnology (PCI approved 15 seats).
  - (ii) M. Pharm. Industrial Pharmacy (Pharmaceutics Division) (PCI approved 15 seats).

# STUDENTS AFFAIRS

## 1. PhD SCHOLARS:

- To be admitted through admission test (Common Entrance Examination) complying with UGC guidelines.
- Part Time Scholars – The Department encourages/will encourage part timers only if they are from a reputed Industry / CSIR labs and equivalent.

## • STUDENT INTAKE

- UG (B. Pharm Programme) – Plan to increase from 60 to 100 / Batch after proper permission from PCI/ AICTE.
- **Robust ERP system which contains the total student life cycle starting from Admissions to becoming an alumunus**
- **Proposal for Post-Doctoral fellowship (National & International) may be initiated in phased manner.(very Important for Academic Growth)**

## 2. AMENITIES

- Common Room for PG and PHD scholars in the Department
- **Tinkering Laboratory Scale up facility:**
- State of art project Lab. related to
  - Plant Tissue Culture lab**( process of development going on)
  - ***In vitro* cell culture lab development.**(process of development going on)
  - Formulation with GMP facility pilot plant for Bulk drug (API) manufacturing
  - Herbal Standardization
  - Quality Control
  - **Good Corridor and Bad Corridor-Animal House(immediately required)**
  - (Basic infrastructure to be upgraded of all UG and PG labs).
- **New laboratories for new courses (M. Pharm. Biotechnology and M. Pharm. Industrial Pharmacy)**

### 3. PLACEMENT / TRAINING

To plan & support Pharmacy Department through

- **Placement UG / PG / Ph.D** - A Robust T and P cell with constant support by frequent meetings, whatsapp forum(BIT Pharma Placement Group), facebook page, social handles and networking with alumni and alumna
- **Robust and High end Practice School ( an arena for industry institute interaction running very successfully)**
- **Support for Jobs**
- Teaching Job – National / International
- Govt. Jobs

Involvement of Faculty members, Staff, Student members with remuneration for assistance in Placement Cell.

4. **STUDENT FEEDBACK** – Compulsory for all students through **robust ERP system** for Teaching Learning.

# INFRASTRUCTURE

## 1. ACADEMICS

- **Department is ready for vertical extension which is on its way to house**
- **(i)New labs for new courses (ii) Museum (iii) Faculty Chambers (iv) Common Staff Room @ PCI regulations.**
- Safety measures: Fire extinguishers installation & maintenance, safety hoods.
- **Gas installation: Replacement with new setup on priority basis after the construction completes**

## 2. FACILITIES

- Requirement to provide **Air Conditioning** specially for all faculty cubicles during summer season.
- Requirement for furnishing of office and Head's Chamber with carpeting, New office table, Chair, Cupboards , sofa sets etc.
- **A washroom in the basement on prior basis.**

**3. STRONG INTERNET (Bandwidth) in Office/ Hostels/ Quarters to support work from home & online classes (Optical Fibres)**

- Robust ERP system to support academic & other administrative activities.

**4. AMBIENCE**

- Regular maintenance of garden
- Grass cutting, Flowering etc.in an around our Department.
- Requirement of a well-furnished subsidized Faculty / Staff / Students canteen separate space for families, Faculty center for small get together.
- **Waste management / Disposal Priority for disposal of Biological waste.**
- Garbage with guideline how to dispose different type of waste. Clearing of dumping yard occasionally through caretaker network.
- Visual display to showcase Departmental activities, research and facilities with the help of large screens around the Department.
- Some visual display within campus and Department for making general awareness, regarding healthcare, hygiene , good practices in disposal of different type of waste.

# GENERAL ADMINISTRATION

- 1. External Agencies Approval:** NAAC , NBA, NIRF, PCI
  - Awareness to faculty & students through virtual / physical meeting.
  - Preparation of the same on a day to day basis.
- 2. STAFF – New appointment,** Job rotation, training & skill upgradation, appraisal for their performance.
  - **Office / Technical staff(Store In charge) / supporting staff(Medicinal Plant Garden)- required on prior basis.**
  - **Training from established Industry / services organization.**
  - **Staff to be housed in the campus(Very important and urgent)**



# REPUTATION AND BRANDING

- **INDUSTRY CONNECT** – Very important to get projects,
  1. Internship of students in various industries being encouraged .
  2. Encouragement of adjunct faculty / visiting Professor from reputed Institution / organization.
  3. **INTERNATIONAL COMPONENT:** Faculty and students being encouraged in attending international:
    - Conferences & visit to Developed Countries.
    - Collaboration & Joint Research programme.
  4. **Courses @ PCI / AICTE** – Plans to suggest for new implementation.

# ALUMNI CONNECT:

## GOLDEN JUBILEE 2022

- Batch Brand ambassador/ Branch Brand ambassador
- Separate Section of Alumni Affairs
- Strong networking/annual meets/ webinar series- GOLDEN JUBILEE WEBINAR SERIES
- Invitation and honor to Alumni as and when possible.
  - Plan for well defined Modus operandi for fund raising/accepting their financial support/ donations by alumni.
  - Creation of platform for financial support from reputed alumni (National / International).
- Workout possibility to create Chair Professor specially for Faculty who have retired or to retire shortly.

- Rationalization of our efforts to improve NIRF ranking

**To appear in the top 25 of Pharmacy institutions**

**Getting all programs of UG/ PG NBA accredited for 5 years along with Institutional NAAC accreditation**

- The Department has a positive attitude to see our Institute along with all the Departments comparable to National / International Institutions.



# Thank You

Department of Pharmaceutical Sciences & Technology  
Birla Institute of Technology, Mesra, Ranchi