3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Name of the research project/ endowment	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency	Type (Government/non-Government)
Synthesis and development of Novel, Stable QD's with suitable device for Pharmaceutical, healthcare and Biotech industry applications	Dr Anuvrat Sharma	Pharmaceutics	Applied Proposal	49.88 Lakhs (Budget of Proposal submitted)	1.5 years	BIRAC	Government
Workshop on harmonization of Curriculum-Industry academic meet	Dr Arifa Begum SK	Phamaceutics	Applied for Workshop	75000 (Budget of Proposal submitted)	Applied in 2023	PCI	Government
Development and evaluation of polyherbal formulation with potent anti-epileptic activity	Dr.Sumalatha govindu & Dsouza Marina	Pharmacology	2022	84666	3 years	AICTE	Government
Targetted drug delivery in the treatment of diseases of heart and vasculature using sterically stablized long circulating stealth liposomes and combination with depot polymeric scaffolds	Dr.Srinivas Nimmagadda & Sampurna Chengalvala	Pharmacetics	2022	616666	3 Years	AICTE	Government
Workshop on recent trends in Clinical Data Management	Dr.B Sridevi	Pharmacy Practice	2022	15000	1 Year	Telengana Academy of sciences	Non Government
Development and evaluation of polyherbal formulation with potent anti-epileptic activity	Dr.sumalatha govindu & Dsouza Marina	Pharmacology	Proposal Submitted	84666 (Budget of Proposal submitted)	Applied in 2021	AICTE	Government
Targetted drug delivery in the treatment of diseases of heart and vasculature using sterically stabkized long circulating stealth liposomes and combination with depot polymeric scaffolds	Dr.Srinivas Nimmagadda &Sampurna Chengalvala	Pharmacetics	Proposal Submitted	616666 (Budget of Proposal submitted)	Applied in 2021	AICTE	Government
One day National seminar on Zebra fish: A super fast and precise animal model for A to Z Human diseases	Dr A V Badarinath & Dr S Gurunath	Pharmacology	Proposal Submitted	90000	Applied in 2020	ICMR	Government
Development and Standardization of Broad Spectrum herbomineral Nutrient tablets for Universal Cancer prevention	Dr A V Badarinath & Dr N Harishankar	Pharmaceutics	Proposal Submitted	97800 (Budget of Proposal submitted)	Applied in 2019	Ministry of AYUSH	Government
Preclinical Anti-Diabetic studies of Polyherbal Formulation on Streptozotocin induced diabetic rats	Dr Mrinmay Das	Pharmaceutics	Proposal Submitted	50000 (Budget of Proposal submitted)	Applied in 2019		
Intranasal insitu gel Nanoparticles of Anticancer drugs for Brain cancer	Dr Y Phalguna	Pharmaceutics	Proposal Submitted	50000 (Budget of Proposal submitted)	Applied in 2019		
Development of Instrument tobacco smoke induced lung cancer chamber as effective natural animal model	Dr A V Badarinath	Pharmaceutics	Proposal Submitted	50000 (Budget of Proposal submitted)	Applied in 2019		

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telangana.

Proposal Reference No.: BT/TEMP18445/BIG-22/23

FACE SHEET

Title Of The Proposal
Synthesis and Development of Novel, Stable QDs with Suitable Device for Pharmaceutical, Healthcare and Biotech Industry Applications
Proposal Duration
18 (months)
Thematic Area
Healthcare-Devices
Sub Thematic Area
Medical Devices
Thematic Options
None of these
Keywords
Quantum dots
Have you sought mentoring/guidance through an Associate Partner?
No
Application Type
Registered Company
Company Name
Innatura Scientific Pvt Ltd
BIG Partner
IKP Knowledge Park, Hyderabad
Project Co-ordinator
Dr. Nandan Duddukuri
Have you applied through another BIG partner(s) in the current call?
No
Is this the same proposal
No
Have you applied for BIG in earlier rounds?
No

Total Funding Requirement
INR 49.88 Lakhs

PARTICULARS OF THE APPLICANT

Applicant Name : Innatura Scientific Pvt Ltd			
Contact Details			
Address1:	HNo_7-152, Mye Villas, Opp FCI Godown road, Mallapu	**Address2:**	
Street/Village:	Hyderabad	**City/Town:**	Hyderabad
State:	TELANGANA	**Country:**	India
Pincode/Zip:	500076	**Landline:**	91-863-9107187
Mobile:		**Website:**	https://www.inaturas.com/
Fax:	–		

Brief Background Of The Incubatee
Date of incorporation of company
2018
Number of Years since Registration
5
Registration Certificate Of Company
View file
PAN Card
View file
Memorandum of Association of company
No File Uploaded
Article of Association of company
No File Uploaded
Audited Financial Statements (Annual Report and Balance Sheet)
View file
Are the Shares Of the Company held to the Extent Of 51% By Indian Citizens (including NRIs) ?
Yes
Shareholding Pattern of the Company Indicating Name And Address Of Foreign Shareholders, Overseas Corporate Bodies And Shares Held By NRIs
View file
Number of shareholders
2
Passports of Shareholders
View file
Is this Company a subsidiary to a Parent Company?
No
Is any promoter holding 20% or more shares of the applicant company, a co-promoter of another company(ies)/ a partne another LLP?
No
Is any partner of the LLP, a co-partner of another LLP(s)/ a co-promoter of another company(ies)?
No
Do you have a Functional Laboratory of your own ?
Yes

Have you been been associated with any other BIRAC funding scheme?
No

Shareholding Pattern Of The Company

Shareholding Pattern Of The Company				
S.No	Category of shareholder	Number of shareholders	Total number of shares	Total share holding as % of total number of shares
Shareholding of promoter & Promoter Group				
1)	Indian	2	2	100
2.a)	Foreign:- NRI	0	0	0
b)	Foreign:- Foreign individual	0	0	0
	Total	2	2	100
Public Shareholding				
1)	Indian	0	0	0
2.a)	Foreign:- NRI	0	0	0
b)	Foreign:- Foreign individual	0	0	0
	Total	0	0	0
	Grand Total	2	2	100

Project Coordinators Details			
Title	Dr	Organization	Innatura Scientific Pvt Ltd
First Name	Nandan	Last Name	Duddukuri
Designation	Chief Scientific Officer	Gender	Male
Email	innaturasolutions@gmail.com	Landline	+91-040-8639107187
Mobile	+91-9966161722	Resume	View file
Passport Copy	No File Uploaded		

Team Members			
Title	Dr	Organization	Innatura Scientific Pvt Ltd
First Name	Srikanth	Last Name	Gatadi
Designation	Scientific Officer	Gender	Male
Email	gatadi.srikanth8@gmail.com	Landline	+91-040-8639107187
Mobile	+91-7013738653	Resume	View file
Associated with any other BIG project (ongoing/completed)		No	

Team Members			
Title	Dr	Organization	Bharat Institute of Technolo Pharmacy
First Name	Anuvrat	Last Name	Sharma
Designation	Director	Gender	Male
Email	director@bitpharmacy.org	Landline	+91-040-8639107187
Mobile	+91-7993640745	Resume	View file
Associated with any other BIG project (ongoing/completed)		No	

Scientific Advisors			
Title	Dr	Organization	Innatura Scientific Pvt Ltd
First Name	VENKATA RAMESH	Last Name	GUBBALA
Designation	Scientific Advisor	Gender	Male
Affiliation	CBIT	Area(s) of Expertise	Nanotechnology
Email	gubbala.v.ramesh@gmail.com	Landline	+91-040-8639107187
Mobile	91-8076909068	Resume	View file

PROPOSAL SUMMARY

oposal Summary [Provide a brief one paragraph overview of the proposal, i.e. the idea and the problem it may solve and project plan.]

proposed project focuses on the synthesis and development of novel and stable Quantum Dots QDs for various applications in pharmaceutical, healthcare, and biotech businesses. QDs are a type of nanomaterial that have unique optical and electronic perties, making them useful in a range of applications such as medical imaging, drug product tracking, product development, drug very and biosensors, etc. The aim of this proposed project is to design, synthesize and develop new QDs with improved stability l biocompatibility, making them suitable for use in above mentioned industries. This project also aims to develop a suitable device t can effectively be utilized using these novel QDs in real-world applications. The ultimate goal of the project is to contribute to the vancement of these industries by providing new, innovative solutions based on QD technology. This project is expected to have a nificant impact on the development of new technologies and products for the pharmaceutical, healthcare, and biotech industries.

ease upload a concept note explaining the technology with necessary figures and diagrams :

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Briefly state the Objectives and Proposed Approach

Describe how the proposed project addresses the problem. Clarify the current status of the innovation.]

he description should cover the following points:

). Strategy and/or methodology of work.

). Scope and boundaries of the work, including any issues that will not be covered.

). Data analysis (sample size,data collection)

he objectives of the proposed project are as follows:

. To Design, synthesize and develop novel and stable quantum dots QDs with improved stability and bio compatibility.

2. To develop suitable device that can effectively utilize these novel QDs in real-world applications.

3. To contribute to the advancement of the Pharmaceutical, Healthcare, and Biotech industries by providing new, innovative solutions ased on QD technology.

The proposed approach to achieve these objectives is as follows:

1. Strategy and methodology of work: The project will be approached using a multi-disciplinary view, combining expertise in material cience, chemistry, and biomedical engineering. A combination of synthetic and characterization techniques will be used to synthesize the QDs, and the biocompatibility and stability of the QDs will be evaluated. The development of suitable device will nvolve the integration of these novel QDs into existing technologies or the development of new technologies.

2. Scope and boundaries: The scope of the project will focus on the synthesis and development of novel and stable QDs for use in he Pharmaceutical, Healthcare, and Biotech industries. The project will not cover the commercialization of the developed products.

3. Data analysis: The sample size for the study will be determined based on statistical considerations and the results will be analyzed using appropriate statistical tools. Data collection will involve the use of various characterization techniques, including optical spectroscopy, electron microscopy, XRD and in vitro & in vivo studies to evaluate the biocompatibility and stability of the QDs. The data collected will be used to validate the suitability of the developed QDs and devices in real-world applications.

3. Novelty

[Explain how your idea is innovative and how it is different from the existing products in the markets or current state-of-the-art. Tabular representation of the difference between your idea and the other products in market or competitive product which are under development will be appreciated. Concrete market data is encouraged.]

he proposed project aims to address a key challenge in the development of quantum dots for use in the Pharmaceutical, lthcare, and Biotech industries, which is the stability and biocompatibility of the QDs. The proposed project is innovative because ns to synthesize and develop novel and stable quantum dots with improved biocompatibility and stability, which is a significant rovement over the current state-of-the-art.\r\n2. Currently, several QDs available in the market suffer from a lack of stability and compatibility, which limits their use in the pharmaceutical, healthcare, and biotech industries. The novel QDs developed in this ject will have improved stability and biocompatibility, making them more suitable for use in these industries. Further, the velopment of suitable devices to utilize these novel quantum dots will be a significant innovation in the field, as it will enable the ective utilization of these quantum dots in real-world applications.\r\n3. Table: Comparison of proposed project and existing ducts in the market\r\n4. Feature 5. Proposed Project 6. Existing Products\r\n7. Stability 8. Improved 9. Limited\r\n10. compatibility 11. Improved 12. Limited\r\n13. Device Integration 14. Suitable devices developed 15. Limited integration with isting devices\r\n16. The proposed project is innovative and offers several advantages over existing products in the market. The proved stability and biocompatibility of the novel quantum dots, along with the development of suitable devices, will make them ore attractive for use in the pharmaceutical, healthcare, and biotech industries. The concrete market data will be evaluated and alyzed once the project is completed and the results are available..No File Uploaded

Opportunity

What is the potential societal and market impact? Provide details of the problem you propose to solve.]

e proposed project has the potential to have a significant impact on the Pharmaceutical, Healthcare and Biotech industries. By nthesizing and developing Novel and Stable QDs with improved biocompatibility and stability, the project aims to address a key allenge in the development of QDs for use in these industries. The improved stability and biocompatibility of the novel quantum ts, along with the development of suitable devices to utilize them, will enable the effective utilization of quantum dots in real-world plications in these industries.

the pharmaceutical industry, QDs have the potential to revolutionize medical imaging and drug delivery. The improved stability and ocompatibility of the novel QDs will make them more suitable for use in these applications, providing more effective and safer eatments for patients.

the healthcare industry, quantum dots have the potential to be used in biosensors and diagnostic tools, providing faster and more ccurate diagnoses. The improved stability and biocompatibility of the novel quantum dots, along with the development of suitable evices, will make these tools more effective and accessible.

n the biotech industry, QDs have the potential to be used in a range of applications, including gene expression analysis and protein abeling. The improved stability and biocompatibility of the Novel QDs, along with the development of suitable devices, will make hese applications more effective and efficient.

n summary, the proposed project has the potential to have a significant impact on the pharmaceutical, healthcare, and biotech ndustries by providing new, innovative solutions based on quantum dot technology. The improved stability and biocompatibility of the ovel quantum dots, along with the development of suitable devices, will enable the effective utilization of quantum dots in real-world pplications in these industries.

. Challenges or risk factors associated with the project

[What are the challenges and risk factors that you envision which may affect this project?]

What are the critical success factors/potential barriers?

There are several challenges and risk factors associated with the proposed project:

Synthesis and development of stable and biocompatible quantum dots: The development of stable and biocompatible quantum d is a complex and challenging task. There is a risk that the proposed synthesis and development methods may not result in the de stability and biocompatibility of the quantum dots, which would limit their use in the pharmaceutical, healthcare, and biotech industries.

Integration with devices: The development of suitable devices to utilize the novel quantum dots is also a complex task, and there risk that the proposed devices may not function as intended or may not be suitable for use in real-world applications.

Biocompatibility testing: The biocompatibility of the novel quantum dots must be thoroughly tested to ensure that they are safe fo in the pharmaceutical, healthcare, and biotech industries. The testing process is time-consuming and there is a risk that the resul may not be favorable, which would limit the use of the novel quantum dots.

Regulatory approval: In order for the novel quantum dots and associated devices to be used in the pharmaceutical, healthcare, a biotech industries, they must undergo a required regulatory approval process. There is a risk that the Novel QDs and associated devices may need some additional data, which will limit their further development.

Competition: The development of quantum dots and associated devices is a rapidly evolving field, and there is a risk that other companies or research institutions may develop similar or superior products, reducing the market potential for the proposed proje

The critical success factors for the proposed project include:

Successful synthesis and development of stable and biocompatible quantum dots: The success of the proposed project depends the ability to synthesize and develop stable and biocompatible quantum dots that meet the desired specifications.

Successful integration with devices: The success of the proposed project also depends on the ability to develop suitable devices utilizing the Novel QDs.

Favorable biocompatibility testing results: The biocompatibility of the Novel QDs must be thoroughly tested, and favorable result critical for the success of the proposed project.

Regulatory approval: The regulatory approval process is a critical success factor for the proposed project, as the Novel QDs an associated devices data are limited.

6. Has any preliminary work been carried out? Give status of work done
If no, please provide the background details.

QDs are a type of nanoscale material that have unique optical and electronic properties, making them useful for a range of applications, including imaging and sensing. In recent years, there has been growing interest in developing quantum dots that ar stable and biocompatible for use in the pharmaceutical, healthcare, and biotech industries.

The development of biocompatible and stable quantum dots requires a thorough understanding of the synthesis and characteriz of these materials. This includes optimizing the size, shape, and composition of the quantum dots, as well as ensuring that they non-toxic and do not interfere with biological systems.

In addition, the integration of quantum dots with suitable devices is also a critical component of the development process. This includes developing devices that can effectively utilize the unique properties of quantum dots, such as their fluorescence and siz specific applications in the pharmaceutical, healthcare, and biotech industries.

Overall, the field of quantum dots and their potential applications in the pharmaceutical, healthcare, and biotech industries is an active area of research and development, and there have been numerous advances in recent years.

7. Please provide current and expected Technology Readiness Level (TRL)

Current TRL

TRL - 1

This project is yet to take off as per the plan mentioned above.

Expected TRL

TRL - 4

The critical milestones would be updated as per the below mentioned details.

8. Proposed end-outcomes (Your BIG Project is expected to result in the following end-outcomes).

A Product for customers

An intellectual property right for licensing or sale

ture Plan of Commercialization

at do you envision to be the key next step to making impact with this innovation (e.g., sponsored research support, nsing, venture financing)? What is the time frame?]

mmercialization plan should indicate :

Market entry strategy.

Timelines and Milestones.

. Data analysis (sample size,data collection)

comprehensive business/commercialization plan for the stable QD technology solutions would include the following steps: Scale up, sting.

. Market research and analysis: Conduct market research to determine the size and growth potential of the relevant industry gments pharmaceutical and biotechnology, bioimaging, and supply chain management and to identify potential customers and mpetitors.

. Product development and validation: Further develop and validate the technology solutions through collaboration with industry artners, universities, or research institutions.

. Intellectual Property protection: Obtain patents and other forms of intellectual property protection to secure the technology olutions and provide a competitive advantage in the market.

. Go-to-market strategy: Develop a go-to-market strategy to commercialize the technology solutions, including pricing, distribution nd marketing strategies. This could involve licensing the technology to industry players or launching a standalone product.

. Business and financial planning: Develop a comprehensive business plan and financial model to ensure the viability of the ommercialization efforts and to secure funding from investors or strategic partners.

6. Industrial collaboration: Establish partnerships and collaborations with relevant industry players to jointly develop and commercialize the technology solutions.

7. Exit strategy: Develop an exit strategy for incubation, which could involve selling the company or spinning off the technology solutions into a standalone entity. The exit strategy for industrial collaboration would depend on the needs of the partnership agreement.

Overall, the commercialization plan for the stable QD technology solutions would involve a systematic and comprehensive approach to bring the technology to market, including market research, product development, IP protection, go-to-market strategy, business and financial planning and exit strategy.

10. Intellectual Property

i. Does the applicant or the applicant company own any IP related to this project. If yes, give details.(Please mention Patent Number, Patent Title and Patent Assignee)

The proposed project will enter in to IP related activities as and when it will achieve critical milestones. As a part of strategy, the IP Cell with required expertise will be a part of this project.

ii. List Of Patents That Appear To Cover Any Part Of The Technology Of Interest Or Similar (And Possibly Overlapping) Technologies And Thereby Restrict The Freedom-To-Operate In The Envisaged Area.
(Please mention Patent Number, Patent Title and Patent Assignee)

NA

iii. If there are patents that are overlapping and may restrict FTO, does the applicant have the required license/s to practise these inventions for the purposes of the proposed project? Please provide license agreement details if any or provide information of the proposed next steps to obtain said license/s.

NA

11. Relevant References.

1. Zhigao et al. Highly stable quantum dot light-emitting diodes with improved interface contacting via violet irradiation, Appl. Sur Sci. 615 2023 156339
2. Bright and Stable Quantum Dot Light-Emitting Diodes. Adv. Mater. 34 2022 2106276.
3. A.M. Smith, S. Dave, S. Nie, L. True, X. Gao, Multicolor quantum dots for molecular diagnostics of cancer, Expert Rev. Mol. Diagn. 6 2006 231-244.
4.] Q. Duan, Y. Ma, M. Che, B. Zhang, Y. Zhang, Y. Li, W. Zhang, S. Sang, Fluorescent carbon dots as carriers for intracellula doxorubicin delivery and track, J. Drug Deliv. Sci. Technol. 49 2019 527-533.
5. V.G. Reshma, P.V. Mohanan, Quantum dots: applications and safety consequences, J. Lumin. 205 2019 287-298
6. G.N. Vajubhai, S.K. Kailasa. Glutathione-ascorbic acid-functionalized molybdenum oxide quantum dots-based fluorescent sensor for the detection of isoniazid drug in pharmaceutical samples, 287 2023 122041.
7. J.D. Schiffman, R.G. Balakrishna, Quantum dots as fluorescent probes: synthesis, surface chemistry, energy transfer mechanisms, and applications, Sens. Actuators B Chem. 258 2018 1191-1214.
8. F. Mollarasouli, V. SerafÃ-n, S. Campuzano, P. anez-Sede, J.M. Pingarr, K. Asadpour-Zeynali, Ultrasensitive determination receptor tyrosine kinase with a label-free electrochemical immunosensor using graphene quantum dots-modified screen-printe electrodes, Anal. Chim. Acta 1011 2018 28-34.
9. M. Roushani, A. Valipour, M. Bahrami, The potentiality of the functionalized nitrogen and thiol-doped graphene quantum dots GQDs-NS to stabilize the antibodies in the designing of human chorionic gonadotropin immunosensor, Nanochem. Res. 4 2019 20-26.
10. Y. Qian, J. Feng, H. Wang, D. Fan, N. Jiang, Q. Wei, H. Ju, Sandwich-type signaloff photoelectrochemical immunosensor based on dual suppression effect of PbS quantum dots/Co3O4 polyhedron as signal amplification for procalcitonin detection, Sens. Actuators B Chem. 300 2019 127001.

12. Please upload declaration document on ethical/legal/safety/regulatory issues involved, if any .
No File Uploaded

13. Presentation
View file

14. Undertaking by the Principal Investigator with regards to the originality of proposal submitted
View file

Any other information relevant to the project

Please Upload the Relevant Document
View file
View file
View file

OBJECTIVE AND TIMELINES

PROPOSAL OBJECTIVES & WORK PLAN
Objective1: Design, synthesis and development of a Novel and Stable Quantum Dots QDs with improved stability and bio compatibility.
Methodology/Experimental Design Detailed Work Plan :
The synthesis plan and development strategy will be shared as an when it is ready
Alternate Strategies:
Multiple synthesis strategies will be worked out parallelly
Objective2: Development of suitable validated stability indicating analytical methods
Methodology/Experimental Design Detailed Work Plan :
A Validated analytical method will be developed for various analytical techniques
Alternate Strategies:
Alternate analytical methods and tools will be studied

ve3: Development of suitable device that can effectively utilize these novel QDs in real-world applications.
dology/Experimental Design Detailed Work Plan :
ible device to process the fluorescence patternof the novel QDs will be developed and validated
ate Strategies:
ate device architecture will be studied
ctive4: To contribute to the advancement of the Pharmaceutical, Healthcare, and Biotech industries by providing new, innovative ions based on QD technology
hodology/Experimental Design Detailed Work Plan :
ous applications of the Novel QDs in Pharmaceutical, Healthcare and Biotech industries will be explored
rnate Strategies:
erent possible real life applications will be explored

IE LINES

Activities	Month Of Start Of Activity	Month Of End Of Activity	Indicators Of Progress
JECTIVE :Design, synthesis and development of a Novel and Stable Quantum Dots QDs with improved stability and bio mpatibility.			
sign, synthesis and development a Novel and Stable Quantum Dots Ds with improved stability and bio mpatibility.	0	4	The synthesis plan and development strategy will be shared as an when it is ready
Activities	**Month Of Start Of Activity**	**Month Of End Of Activity**	**Indicators Of Progress**
BJECTIVE :Development of suitable validated stability indicating analytical methods			
evelopment of suitable validated ability indicating analytical ethods	5	7	A Validated analytical method will be developed for various analytical techniques
Activities	**Month Of Start Of Activity**	**Month Of End Of Activity**	**Indicators Of Progress**
BJECTIVE :Development of suitable device that can effectively utilize these novel QDs in real-world applications.			
Development of suitable device that an effectively utilize these novel QDs in real-world applications.	8	10	A suitable device to process the fluorescence patternof the novel QDs will be developed and validated
Activities	**Month Of Start Of Activity**	**Month Of End Of Activity**	**Indicators Of Progress**
BJECTIVE :To contribute to the advancement of the Pharmaceutical, Healthcare, and Biotech industries by providing new, innovative solutions based on QD technology			
To contribute to the advancement of the Pharmaceutical, Healthcare, and Biotech industries by providing new, innovative solutions based on QD technology	11	16	Various applications of the Novel QDs in Pharmaceutical, Healthcare and Biotech industries will be explored

QUANTIFIABLE MILESTONES

Sl. No	Milestone Name	Month Of End Of Activity(In Months)
1	Signing of Contract	--
2	Design, synthesis and development of a Novel and Stable Quantum Dots QDs with improved stability and bio compatibility.	4
3	Development of suitable device that can effectively utilize these novel QDs in real-world applications.	10

BUDGET DETAILS

Non Recurring Cost(Rs. In Lakhs)

S.No	Equipments/Accessories	Total
1	10.00	10.00

Recurring Cost(Rs. In Lakhs)

Human Resources(A)	Consumables(B)	Other Heads(C)	Total(A+B+C)
14.88	20.00	5.00	39.88

OTHER FINANCIAL DETAILS

Have you approached any other organisation/agency for financial support for the present activity? Please give details
Not approcahed

	To contribute to the advancement of the Pharmaceutical, Healthcare, and Biotech Industries by providing new, innovative solutions based on QD technology	16
	Submission Of Report	--

PROPOSED EQUIPMENTS & ACCESSORIES DETAILS

Details Of Equipment Proposed To Be Acquired Through BIRAC's Grant

S.No	Infrastructure/Equipment	Capacity	Quantity	Specific Requirement In The Project	Estimated Value(Rs.In Lakhs)
1	Stability chambers	2	2	stability test	5.00
2	Animal house & related expenditure	1	1	safety tests	3.00
3	autoclave	1	2	synthesis	2.00
					Total :10.00

HUMAN RESOURCES TO BE INVOLVED

Human Resource to be involved with the project

S.No	Position	No Of Positions	Qualification	Exp.(Years)	Age(In Years)	Hired Duration (in months)	Role In Project	Monthly Salary(In Lakhs)	Total Cost(In Lakhs)
1	Research Scientist	1	PhD	5.00	32	16.0	Synthesis and stability studies	0.50	8.00
2	Research Associate	1	MSc	2.00		16.0	Design and Synthesis	0.25	4.00
3	Research Associate	1	BTech	2.00	27	16.0	stabilty, safety studies	0.18	2.88
									Total : 14.88

CONSUMABLES DETAILS

Through BIRAC's Contribution

S.No	Items	Quantity	Units(e.g:- g/ml etc.)	Approximate Cost (Rs.in lakhs)	Justification For The Requirement
1	HPLC Comuns	4	4	5.00	Purification
2	Detectors	3	3	3.00	analysis
3	reference standards	5	5	3.00	analysis
4	solvents chemicals	3	10	6.00	synthesis
5	Deep freezer	1	1	1.00	storage
6	Autoclave	2	2	2.00	synthesis
				Total Amount Required For Consumables:	20.00

JUSTIFICATION FOR OTHER RECURRING HEADS

Through BIRACs Contribution

S.No	Other Cost (Rs.in lakhs)	Justification
1	5.00	for special studies and collaboration with professionals in the same work and Travelling for conferences and workshops for dissemination of information

Confidential

Title:

"Development of Stable Novel Quantum Dots with Companion Reader Devices for Pharmaceutical and Biotech Applications"

Synthesis and development of novel stable QDs, with suitable reader device and their applications in Pharmaceutical health care and Biotech industry

Summary:

Stable quantum dots (QDs) are a groundbreaking technology with numerous potential applications in the pharmaceutical and biotechnology industries. They offer improved stability compared to traditional QDs, making them suitable for a wide range of applications such as bioimaging, disease diagnosis, and drug delivery. These innovative QDs have the potential to revolutionize healthcare and biotechnology, delivering faster, more accurate results and improving patient outcomes.

Revolutionizing Healthcare with Stable Quantum Dot Technology: Stable quantum dots (QDs) are poised to revolutionize the healthcare industry with their exceptional stability and versatile applications. These nanoscale materials offer improved imaging capabilities, enhanced disease diagnosis, and targeted drug delivery. With the development of suitable reader devices, QDs hold great promise for improving patient outcomes and advancing the field of healthcare.

Enhancing Biotech and Pharmaceuticals with Advanced Quantum Dot Solutions: The development of stable quantum dots (QDs) has the potential to greatly enhance the biotechnology and pharmaceutical industries. These nanoscale materials offer improved stability and versatility, making them suitable for a wide range of applications such as bio imaging, disease diagnosis, and drug delivery. With the availability of suitable reader devices, QDs have the potential to revolutionize the way we approach healthcare and biotechnology, delivering faster, more accurate results and improving patient outcomes.

Problem:

1. Current Problems with QDs in Pharma/Biotech:

Instability: One of the main issues with traditional quantum dots (QDs) is their instability, which can limit their performance and shelf life in pharmaceutical and biotechnology applications.

Toxicity: Some QDs also have toxicity concerns, which can limit their use in medical applications.

High cost: The production of QDs can be costly, making it difficult for many companies in the pharmaceutical and biotechnology industries to adopt this technology.

2. Current Problems with QDs in Bioimaging:

Low sensitivity: Traditional QDs have limited sensitivity, which can lead to poor image quality and low signal-to-noise ratios in bioimaging applications.

Background interference: QDs can also produce background interference, which can negativ impact the accuracy of bioimaging results.

3. Current Problems with Supply Chain Barcode Technology:

Limitations in scanning: Barcode scanning technology can be limited by factors such as scanni distance, orientation, and environmental conditions, which can reduce its reliability.

Barcode degradation: Barcode labels can degrade over time, which can lead to unreadable coc and supply chain disruptions.

Cost: Barcode technology can be expensive to implement, particularly for smaller compani which can limit its widespread adoption.

Solution:

1. Solutions for Problems with QDs in Pharma/Biotech:

Stability: Developing stable QDs through advanced synthesis methods and encapsulati techniques can mitigate instability issues, making QDs more reliable and durable pharmaceutical and biotechnology applications.

Toxicity: By using safer and biocompatible materials in QD synthesis, toxicity concerns can l addressed, making QDs more suitable for medical applications.

Cost: The use of high-throughput and scalable production methods can reduce the cost of Q synthesis, making it more accessible to companies in the pharmaceutical and biotechnolo industries.

2. Solutions for Problems with QDs in Bioimaging:

Sensitivity: By using novel QD synthesis techniques, sensitivity can be improved, leading t higher quality images and improved signal-to-noise ratios in bioimaging applications.

Background Interference: By developing QDs with carefully controlled size, shape, and surfac properties, background interference can be reduced, leading to more accurate bioimaging results

3. Solutions for Problems with Supply Chain Barcode Technology:

Limitations in scanning: Developing advanced barcode scanning technology that can accurate scan from a greater distance, in different orientations, and under varying environmenta conditions can mitigate limitations in scanning.

Barcode degradation: By using high-quality materials for barcode labels and implementin protective coatings, barcode degradation can be reduced, leading to more reliable and long lasting barcodes.

Cost: Implementing cost-effective and scalable barcode technology solutions, such as using QR codes or other digital barcode systems, can reduce the cost of implementing barcode technology making it more accessible to smaller companies.

IP & Tech. Transfer Status with Validation plans with Collaborators/partners if any:

Regarding the solutions provided for the problems with QDs in pharma/biotech, bioimaging, and supply chain barcode technology, the IP and technology transfer status would depend on the specific solution and the stage of development.

For example, if a novel stable QD synthesis method has been developed and patented, the IP and technology transfer status would involve licensing the technology to interested companies in the pharmaceutical and biotechnology industries.

Similarly, for a new barcode scanning technology, the IP and technology transfer status would involve transferring the technology to interested companies in the supply chain management industry through licensing or joint venture agreements.

In terms of validation plans, it would involve conducting rigorous testing and validation of the technology in relevant industry applications. This could involve working with collaborators or partners such as universities, research institutions, or industry players to validate the technology in real-world scenarios.

Overall, the specific IP and technology transfer status and validation plans would depend on the specific solution and the stage of development, but the general approach would involve carefully testing and validating the technology with relevant industry partners to ensure its effectiveness and practicality.

Business/Commercialization Plan

(Please include your exit strategy for incubation

A comprehensive business/commercialization plan for the stable QD technology solutions would include the following steps:

1. Market research and analysis: Conduct market research to determine the size and growth potential of the relevant industry segments (pharmaceutical and biotechnology, bioimaging, and supply chain management) and to identify potential customers and competitors.
2. Product development and validation: Further develop and validate the technology solutions through collaboration with industry partners, universities, or research institutions.
3. Intellectual Property protection: Obtain patents and other forms of intellectual property protection to secure the technology solutions and provide a competitive advantage in the market.
4. Go-to-market strategy: Develop a go-to-market strategy to commercialize the technology solutions, including pricing, distribution, and marketing strategies. This could involve licensing the technology to industry players or launching a standalone product.
5. Business and financial planning: Develop a comprehensive business plan and financial model to ensure the viability of the commercialization efforts and to secure funding from investors or strategic partners.
6. Industrial collaboration: Establish partnerships and collaborations with relevant industry players to jointly develop and commercialize the technology solutions.
7. Exit strategy: Develop an exit strategy for incubation, which could involve selling the company or spinning off the technology solutions into a standalone entity. The exit strategy for industrial collaboration would depend on the specifics of the partnership agreement.

Overall, the commercialization plan for the stable QD technology solutions would involve a systematic and comprehensive approach to bring the technology to market, including market research, product development, IP protection, go-to-market strategy, business and financial planning, and exit strategy.

Major Objective Milestones

(Add more if required)

The major objective milestones for the stable QD technology commercialization plan could include the following:

1. Market research and analysis:

Conduct market research to determine the size and growth potential of the relevant industry segments.

Identify potential customers and competitors in the pharmaceutical and biotechnology, bioimaging, and supply chain management industries.

Evaluate the commercial potential of the technology solutions.

2. Product development and validation:

Further develop and validate the technology solutions through collaboration with industry partners, universities, or research institutions.

Conduct pilot studies and field trials to test the technology solutions in real-world scenarios.

Document the performance and reliability of the technology solutions to support commercialization efforts.

3. Intellectual Property protection:

Obtain patents and other forms of intellectual property protection to secure the technology solutions.

Conduct an IP landscape analysis to identify any potential infringement risks.

Implement measures to protect the IP, such as confidentiality agreements and trade secret protection.

4. Go-to-market strategy:

Develop a go-to-market strategy to commercialize the technology solutions. Determine the optimal pricing, distribution, and marketing strategies. Identify potential licensing or partnership opportunities.

5. Business and financial planning:

Develop a comprehensive business plan and financial model to ensure the viability of the commercialization efforts.

Secure funding from investors or strategic partners to support the commercialization efforts.

Develop a budget and timeline for the commercialization plan.

6. Industrial collaboration:

Establish partnerships and collaborations with relevant industry players to jointly develop and commercialize the technology solutions.

Define the terms and responsibilities of the collaboration agreement.

Implement measures to protect the IP and other proprietary information.

7. Exit strategy:

Develop an exit strategy for incubation, which could involve selling the company or spinning off the technology solutions into a standalone entity.

Plan for the transfer of ownership and management of the technology solutions.

Evaluate potential exit scenarios and determine the optimal exit strategy.

These milestones are meant to serve as a guide for the commercialization of the stable QD technology solutions and can be adapted and expanded based on the specifics of the project and the commercialization plan.

Synthesis and development of novel stable QDs, with suitable reader device and their applications in Pharmaceutical health care and Biotech industry

Development of Stable Novel Quantum Dots with Companion Reader Devices for Pharmaceutical and Biotech Applications

Applicant/Company Name : _____

Name of the PI : _____

(CLEAR DEFINITION OF Problem/Need and Opportunity)

Integrate with SCM

Healthecare

Novel stable QDs

Non visible QDs

Brand encription

The Proposed solution

(covering the details of underlying technology for the Solution)

Effective use of functionalized QDs for imaging and sensing in living cells and animals, however, requires an accurate assessment of stability.

To synthesize and develop novel stable QDs for the effectiveness in imaging, pharmaceutical product tracking, and biochemicals tagging for metabolite pathway exploration

This work will include design and synthesis of series of QDs and study of their stability (long term) to find the right candidate for the further investigation.

1. It has been many years since the first works on the reduced dimensionality of semiconductors, which led to the concept of "artificial atoms", or quantum dots (QDs). These semiconductor nanocrystals, with nanometer-sized diameters, exhibit quantum size effects in their optical and electronic properties.

2. Despite now being part of mature technologies, QD synthesis, characterization, and applications still constitute a highly active field of investigations.[1]

3. Quantum dots (QDs) are highly fluorescent and photostable, making them excellent tools for imaging. When using these QDs in cells and animals. [2]

Ref: 1. https://pubs.acs.org/doi/10.1021/acsanm.0c01386
2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3228364/

QDs for Light-Emitting Diodes (LEDs) and Display Applications

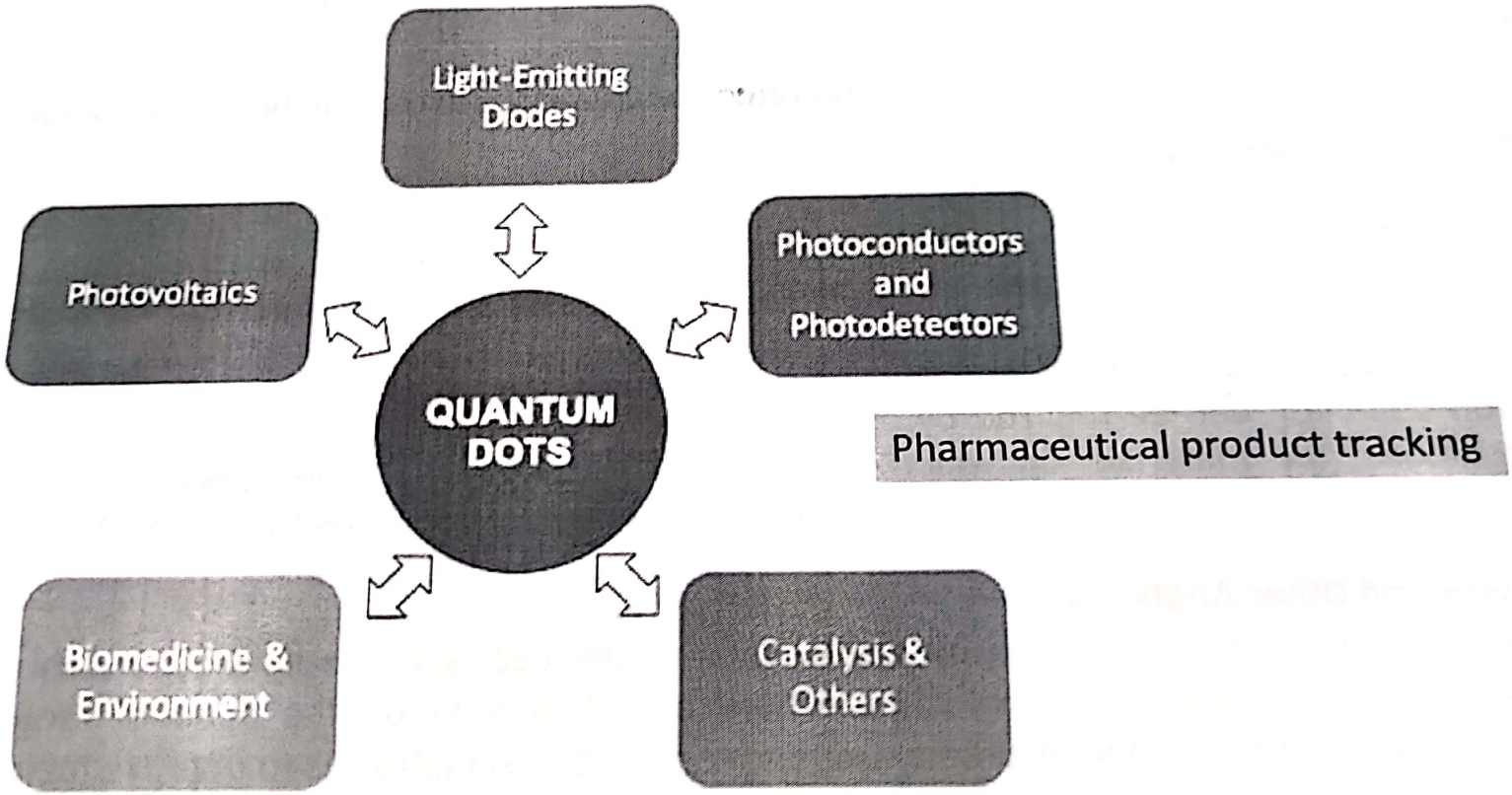


Figure 1. QD-based applications.

Quantum Dots and Their Applications

QDs are an active and intense field of investigation in applied nanomaterial research.

Photovoltaics

Devices for photovoltaics have long incorporated nanomaterials in order to boost the energy conversion efficiency.

Photoconductors and Photodetectors

Photon detection can be realized by many types of devices, such as light-dependent resistors (photoconductors) or photodiodes; the materials on which they are based depend on the spectral range of interest. QDs have been successfully integrated in these already-existing technological platforms to improve their performance.

Photoconductors and Photodetectors

Photon detection can be realized by many types of devices, such as light-dependent resistors (photoconductors) or photodiodes; the materials on which they are based depend on the spectral range of interest. QDs have been successfully integrated in these already-existing technological platforms to improve their performance.

Catalysis and Other Applications

Photon detection can be realized by many types of devices, such as light-dependent resistors (photoconductors) or photodiodes; the materials on which they are based depend on the spectral range of interest. QDs have been successfully integrated in these already-existing technological platforms to improve their performance.

Pharmaceutical product tracking

Since QD have fluorescent behavior when they are irradiated with UV & IR source they are finding a place in a product tracking

Business/Commercialization Plan
(Please include your exit strategy for incubation)

The novel and stable QDs have lot of business potential for their applications in pharmaceutical. Healthcare and biotech industries. Hence these products will be shared with entrepreneurs and potential business partners and marketing associates. To make it available in the market.

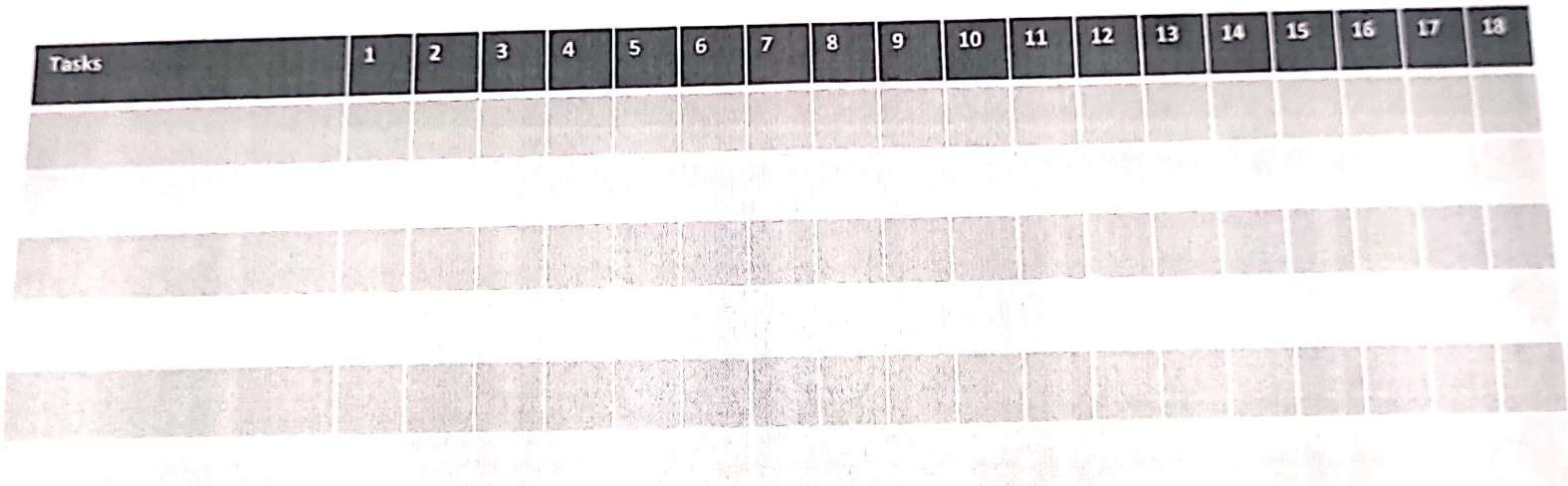
IP & Tech. Transfer Status

(Validation plans with Collaborators/partners if any)

The current involves synthesis and development of novel stable QDs and therefore these materials and this process to be protected through suitable IPR and related tech transfer activities to produce these QDs in large scale.

Work plan (Gantt chart)

(step by step process till commercialization)



Please include the plans till date and then another chart from now to next 6 months

Major Objective Milestones
(Add more if required)

S. No.	Milestone targets (targets to be met when you hit that milestone)	Timelines (Months)
1.	Signing of Agreement	0
2.		
3.		
4.		
5.		

Please include the milestones till date and objectives from now to next 6-12 months

Constraints/concerns or Any Ethical issues involved

Additional Slides

"Write a meta description that will entice people to click on the search result for a website on [Quantom dots services]

"Unlock the full potential of your technology with our cutting-edge Quantum Dot services. From OLED displays to solar cells, we offer expert solutions for all your Quantum Dot needs. Click now to learn more!"

Certificate No: QMS029-1310

Certificate of Registration

This is to certify that

BHARAT INSTITUTE OF TECHNOLOGY

MANGALPALLY(VILLAGE), RANGA REDDY(DISTRICT), IBRAHIMPATNAM(MANDAL),
TELANGANA-501510

has been independently assessed by ODPL Certification and is compliant with the requirements of

ISO 9001: 2015
Quality Management System

for the following scope of activities

M.PHARM PHARMACEUTICS, PHARMACOLOGY, PHARMACY PRACTICE
PHARMACEUTICAL CHEMISTRY AND PHARMACEUTICAL ANALYSIS

Date of Certification 02nd May 2022

1st Surveillance audit due: 02nd May. 2023

2nd Surveillance audit due: 02nd May. 2024

Certificate Expiry: 01stMay 2025

Signatory Authority

Validity of the certificate is subject to annual surveillance audits to be done successfully on or before 365 days from date of the 1st audit. In case if surveillance audit is not allowed to be conducted this certificate shall be suspended or withdrawn. The validity of the certificate can be verified at www.odplcert.com
This certificate of registration remains the property of ODPL Certifications and shall be returned immediately upon request ODPL Certification is accredited by Uk Accreditering Forum Limited, UK (www.ukaf.org.uk) Note: ODPL stands for Orissa Doot Pvt Ltd. Refer www.odplcert.com for validity check of the certificate.

5, Jupiter House, Calleva Park, Aldermaston, Reading Berkshire RG78NN UK
India Office: ODPL Certification, Bhubaneswar, Delhi and Bangalore. Mail Id: cert@odpl.in, www.odplcert.com

PHARMACY COUNCIL OF INDIA

APPLICATION FOR THE CONDUCT OF WORKSHOP UNDER THE SCHEME TO ORGANISE SEMINAR SYMPOSIUM AND WORKSHOP IN PHARAMCY COLLEGE

TOPIC: "Harmonization of Curriculum - Industry Academia Meet"

From BHARAT INSTITUTE OF TECHNOLOGY, MANFALPALLY, HYDERABAD, TELANGANA

Region /state :**Telangana**

1. ACTIVITY : **WORKSHOP**
2. GEOGRAPHICAL COVERAGE: State or inter-state level
3. Name of workshop : **Hormonization of Curriculum Industry Academia meet**
4. Dates : from: **16/6/23 TO 17/6/23**

   Total number of dates: : **2 Days**
5. Venue: **BHARAT INSTITUTE OF TECHNOLOGY (PCI-239)**
6. NAME AND ADDRESS OF ORGANISING COLLEGE:

   - COLLEGE NAME: Bharat Institute of Technology
   - DEPARTMENTS :Pharmacology, pharmaceutics, pharmacy practice, pharmaceutical chemistry, pharmaceutical analysis
   - ADDRESS: Mangalpally, Ibrahimpatnam ranga reddy dst.
   - PIN: 501510
   - PH.NO:9640909041,9640909044
   - EMAIL: principal.bit@biet.ac.in
   - NAME OF THE AFLILIATING UNIVERSITY : **JNTUH**

- ACCREDATION OF COLLEGE : NAAC/NBA : NAAC – B

  Grade

7. NAME DESIGNATION OF CONVENOR / CO-ORDINATOR/ CO-COORDINATOR

- **CONVENOR:** Dr.ANUVRAT SHARMA

  Director & Professor

- **CO-ORDINATOR:** Dr. ARIFA BEGUM SK

  Principal & professor

- **CO-COORDINATOR:** Dr. NAMRATHA SUNKARA, Professor

The workshop intends to provide a forum for brainstorming by extendingopportunities to the academicians and industry personals with national education policy (NEP)-2020

OBJECTIVE

The basic objective is to bring together academicians and expert from differentpharma industry to facilitate the exchange of knowledge and innovation.

SCHEDULE OF THE WORKSHOP

DAY-1	ACTIVITIES	DURATIONS	NAME OF EXPERT
SESSION 1	Introduction : discussion on the objective of the workshop	30 min	**N. KAMALAKAR RAO** GENERAL MANAGER FR&D, HITECH PHARM PVT LT, BOLARAM, SANGAREDDY PH: 9502592310
SESSION 2	Defining the core competencies of pharmacy profession and program outcomes	I hr	**BRIJENDRA KUMAR SHUKLA,** PLANT HEAD AND TECHNICAL DIRECTOR, HINDUSTAN LABORATORIES LTD, PALGHAR ,MAHARASTRA PUNE PH: 02242460505
SESSION 3	Discussion and delibration competencies of pharmacy profession and program outcomes	1.5hr	
LUNCH BREAK		1 hr	
SESSION4	Introduction to curriculum development and identification of critical factors of curriculum development	1hr	**PCI NOMINATED EXPERT** **&** **MR. SHARATH TEKADE** RN PHARMA CONSULTY/PARTNER QA MANUFACTURING PH: 8884225025
SESSION 5	Segregation of subject expert (industrial pharmacy, pharmaceutical chemistry, quality assurance , pharmacology and pharmacognosy & photochemistry) and brain storming session for framing the syllabus		
DAY-2			
Session -1	Brain storming session : Recap review on the outcomes from the Suggestions /proposal made for framing the syllabus fixing the duration of topics fxing credit points and to redefine the process of evaluation & assessment of student	1 hr	**Dr. GARAPATY RAMA PRASAD** RA CHEM PHARMA LTD MADHAPUR , HYD TELANGANA -81 PH: 040-44758595 **&** **R PURNIMA** PORTFOLIO MANAGER WELDING PHARMA 9885553332
Session	Discussion on the syllabus of the subject from participants belongs to that subject group	1.5hr	
Lunch break			
Session -3	Arrangement of the curriculum and final draft syllabus.	1.5 hr	**Ms Kavitha B** GVK BIOSCIENCES,

	concluding remarks		9949256510

The grant may be used for the following items:

S.NO		AMOUNT
1	ORGANIZING SECRETARY	5000/-
2	CODRDINATOR	5000/-
3	CO-COORDINATOR	2500/-
4	HONORARIUM PER PERSON	5000/- (PER PERSON)
5	PATICIPANTS PER PERSON	1000/-(50 PERSON)
6	TA	3000/-
7	PRE CONFERENCE PRINTING	5000/-
8	FOOD	48500/-

PRINCIPAL
BHARAT INSTITUTE OF TECHNOLOGY
MANHGALPALLY, RANGA REDDY, TELANGANA
PCI-239
9640909041
principal.bit@biet.ac.in

PHARMACY COUNCIL OF INDIA

(Constituted under the Pharmacy Act, 1948)

E-MAIL : registrar@pci.nic.in
WEBSITE : www.pci.nic.in
TELEPHONE : 011-61299901,
: 011-61299902,
: 011-61299903,

NBCC Centre, 3rd Floor,
Plot No.2, Community Centre
Maa Anandamai Marg
Okhla Phase I
New Delhi – 110 020

Circular

Ref.No.14-352/2020-PCI (A) (Seminar) /8

Dt. 1 APR 2023

To,
All Pharmacy Institutions approved by PCI-
c) For conduct of course
d) u/s 12 of the Pharmacy Act, 1948

Subject: Continuing Education Programme (CEP) for pharmacy teachers -reg.

Sir/Madam

Pharmacy Council of India is planning to initiate a scheme for teacher training and knowledge upgradation of Pharmacy Teachers. A draft is being circulated for the purpose and a link for suggestion is being attached. Inputs for this draft would be highly appreciated. The draft is attached.

Suggestions can be submitted through the link below mentioned:

https://forms.gle/nxtLsp1grTAmCokq9

This issue with the approval of the Competent Authority.

Yours faithfully

(ANIL MITTAL)
(I/C) Registrar-cum-Secretary

Pharmacy Council of India

New Delhi

Scheme - Continuing Education Programme (CEP) for Pharmacy Teachers

Draft Guideline Document

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1 General

(a) PCI shall conduct 30 CEPs for teachers per annum across the country.

(b) PCI will give a grant of up to Rs. 5.00 lakh per programme per institute for conduct of CEP.

2 Eligible Institutes

(a) Institutions which are approved u/s 12 of the Pharmacy Act for the purpose of registration as a pharmacist.

(b) Institutions having 10 years of establishment.

(c) Institutions which have not organized CEP of PCI in last 5 years.

3 Participation of Teachers

(a) Teachers from PCI approved Institutions shall only participate in CEP.

(b) Teachers having 5 or more than years of experience are eligible to participate in CEP.

(c) Maximum 3 teachers per institute shall be enrolled in CEP.

(d) Number of teachers in each training programme shall be limited to 30 only as per the following breakup-

No. of teachers from host institution - 3

No. of teachers from outside institution - 27

4 Duration of Programme

(a) Programme shall be for one week and preferably residential for all participants.

5 Resource Persons

(a) Institution applying for CEP shall submit the detailed programme schedule along with the proposed resource persons.

(b) Minimum two resource persons shall be nominated by PCI.

6 Topics of the Training

(a) Teaching/Learning Methodology

(b) Mentoring System for Students

(c) Assessment of learning objectives

(d) Communication skills

(e) Accreditation process

(f) Course development and design

(g) Institutional Quality Assurance

7 **Career Advancement Scheme**

(a) University/Colleges may consider participation of teacher in continuing education programme (CEP) supported by PCI for career advancement scheme.

8 **Certification of attending CEP**

(a) A test/assignment/presentation shall be conducted at the end of/ during the programme.

(b) A certificate to be issued to only those participants who attended the Programme and performance in the assessment.

(c) A certificate will be issued by PCI duly signed by the authorized official from PCI and the Programme Co-ordinator from the host Institution.

9 **Programme Fees**

(a) No fees shall be charged from the teachers participating in CEP.

(b) Lodging and boarding shall be provided by the organizing institute.

10. The application will be received throughout the year.

11. Any inputs on this will be highly appreciated. You are welcomed to submit your suggestions through following google link:

https://forms.gle/nxtLsp1grTAmCokq9

AQIS ID: 1-9306078160

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj,
New Delhi 110070

RPS - Sanction Letter

File No. 8-132/FDC/RPS/POLICY-1/2021-22 Date: 1

The Drawing and Disbursing Officer
All India Council for Technical Education
Nelson Mandela Marg,
Vasant Kunj, New Delhi 110070,

Sub: **Release of a sum of Rs. 539582/- being the 1st installment of the total grant of Rs. 616666/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2021-22.**

Sir,

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of Rs. 539582/- **(Rupees Five Lakh Thirty Nine Thousand Five Hundred Eighty Two Only)** as 1st installment out of a total approved grant-in-aid of **Rs.616666/-** for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:

I.	Name and address of the Beneficiary Institution (University / College / Institution)	:	**Registrar / Director / Principal, BHARAT INSTITUTE OF TECHNOLOGY, MANGALPALLY VILLAGE, IBRAHIMPATNAM MANDAL 501510, TELANGANA**
II.	Principal Investigator's Name & Dept /Course	:	**Dr. SRINIVAS NIMMAGADDA (PHARMACY)**
III.	Co-Principal Investigator's Name & Dept.	:	**SAMPURNA CHENGALVALA (PHARMACEUTICS)**
IV.	Grant in aid Sanctioned	:	Rs. 616666/- (Rs. 462499/- for non recurring and Rs 154167/- for recurring expenditure)
V.	**Amount to be Released during the year 2021-22 (as 1st installment)**	:	**Rs. 539582/-** (Rs. 462499/- Full amount of non recurring & Rs. 77083/- recurring i.e. 50 % of total sanctioned recurring grant)
VI.	Project Duration	:	**3 Years**
VII.	Title of the Project	:	**Targeted Drug Delivery in the Treatment of Diseases of Heart and Vasculature Using Sterically Stabilized, Long Circulating, Stealth Liposomes and their Combination with Depot Polymeric Scaffolds**

I. Release of funds:

1. The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of BHARAT INSTITUTE OF TECHNOLOGY, MANGALPALLY VILLAGE, IBRAHIMPATNAM MANDAL 501510, TELANGANA through PFMS
2. The sanctioned grant-in-aid is debitable to the **Major Head "601.12.a (RPS Plan)" Gen.** and is valid for payment during the financial year 2021-22.
3. The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant in aid is being released in conformity with the rules and principles of the Scheme.
4. The grant-in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

II. Maintenance of account by the Institute/PI:

1. Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the amount of interest accrued on the grant.
2. The grant is intended to cover items of expenditure/equipment approved by AICTE.
3. Acknowledgement of receipt of grant and letter of acceptance of terms and conditions is to be submitted to AICTE within **15 days** from the receipt of the grant to the following address:

Director (Faculty Development Cell), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi 110070

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telangana.

Contd. 2/

R.K.Nel

4. The accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or by any officer designated by them

5. The Principal and PI of the institute are requested to verify the correctness of the undermentioned bank account/RTGS/PFMS details submitted by them alongwith the Proposal, in which the grant is being released. In case of any omission, the same should be reported to AICTE immediately along with refund of entire grant.

Institute Pan No.	Bank Name	Bank Branch	Bank Branch Add.	Account Holder Name	Account Type	Account Number	IFSC Code
AAATC2571	STATE BANK OF INDIA	BONGLOOR	H. NO. 2-84, GANGANAGAR COLONY, BONGLOOR VILLAGE, IBRAHIMPATNAM MANDAL, R.R DISTRICT, TELANGANA 501510	B.I.T PRINCIPAL GENERAL ACCOUNT	Saving Account	62101095523	SBIN0021069

6. The grantee institution shall observe all financial norms and guidelines as prescribed by the AICTE/Government of India from time to time. Grantee institution must follow GFR guidelines in procuring the sanctioned items and maintain an updated record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets shall be maintained by the institute in the prescribed form i.e. GFR-19.

7. **Interest accrued on the sanctioned grant-in-aid will be reported and refunded to AICTE and not adjusted against the subsequent installment.**

III. General Instructions:

1. It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned multiple RPS Projects.

2. The duration of Project is 03 years and the **date of release of the grant by AICTE shall be taken as the date of commencement of the project**. The **Registrar/Director/Principal** shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take-up the project work **within 6 months** of the receipt of the grant, approval shall *ipso facto* lapse **and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said duration 18% interest will be levied on it.** The grant has to be refunded to AICTE, through RTGS as per details given below:

Account Number	55113199952
Name of the Account Holder	Member Secretary, AICTE, New Delhi
Bank Name	State Bank of India
Branch Name	Shashtri Bhawan, New Delhi
IFSC Code	SBIN0050203

3. The Institute may constitute a Project Monitoring Committee (PMC). The composition of the PMC shall be as under:

   i. Principal/Director of the institution (Chairperson)
   ii. Two HODs from institute (Members)
   iii. In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
   iv. Coordinator of the project (Member Secretary)

4. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the institute from its own resources.

5. Similarly, the recurring grant can be used for the items (non-recurring) sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference within the country, the travel expenses may be met from the recurring grant.

Contd...3/-

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telangana.

6. No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own resources.

7. The institute/University shall not charge any overheads on this Project and will provide all the administrative support and timely release of grant to PI for completion of the Project.

8. The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AICTE/Government of India. The revised proposal should be within the total grant sanctioned and duly supported with reasons and recommendations of the Project Monitoring Committee (PMC).

9. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed of encumbered or utilized for the purpose other than those for which the Grant was given without prior sanction of the All India Council for Technical Education.

10 Each project sanctioned by AICTE is assigned a specific Reference Number, which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained

11. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.

IV. Submission of documents by the institute/PI to AICTE:

A. Documents to be submitted within one month of completion of each financial year:

i. Annual Progress Report, indicating therein the number of patents, publications or any other achievement.

ii. Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure.

iii. Audited record of assets acquired wholly or substantially out of the grant-in aid and a register for assets in the prescribed form i.e. GFR 19.

iv Separate Bills/vouchers related to Non recurring and recurring expenditures duly signed & stamped by the PI & Head of the institution.

v. Stock entry register duly verified by the Store-in-charge and PI & counter signed by Head of institution.

B. Documents to be submitted within two month of completion of the Project:

i. The consolidated Utilization Certificate (UC) and Receipt & Payment Account for the Project duration, duly audited.

ii. Consolidated audited statement of expenditure, to the effect that the grant has been utilized for the purpose for which it has been sanctioned. It should contain the head wise break up of expenditure made from the grant-in-aid provided by the Council.

iii. Project Completion Report duly signed & stamped by the PI & Head of the institution and Project Evaluation Committee (PEC) Members.

iv. Principal Investigator/institute to submit the Feed Back Form in AICTE format.

v. The prescribed formats for submission of necessary mandatory documents and Terms & Conditions may please be downloaded from **www.aicte-india.org/schemes/research-innovations-development-schemes.**

Note: Any deviation from the above said time schedule will cause serious action against the institute.

Contd 4/

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M)
R.R. Dist - 501 510. Telangana

V. Approved List of Items under Non-recurring grant:

S. No.	Approved Items (As per proposal)	No. of Units	Amount recommended (in Rs.)
A.	Non-recurring		
i)	Lyophilizer	1	Rs. 462499/-
ii)	Probe Sonicator	1	
iii)	Solid Phase Extraction (SPE) Instrument	1	Rs. 77083/-
B.	Recurring i.e. 50% of total approved recurring grant) for Contingencies & Consumables only		
	Grand Total (A) + (B)		Rs. 539582/-

Copy forwarded for information and necessary action to

1. REGISTRAR / DIRECTOR / PRINCIPAL,

   BHARAT INSTITUTE OF TECHNOLOGY,
   MANGALPALLY VILLAGE, IBRAHIMPATNAM
   MANDAL -501510, TELANGANA

2. NAME OF PRINCIPAL INVESTIGATOR,

   Dr. SRINIVAS NIMMAGADDA,
   (PHARMACY)
   BHARAT INSTITUTE OF TECHNOLOGY,
   MANGALPALLY VILLAGE, IBRAHIMPATNAM MANDAL -501510,
   TELANGANA

3. OFFICE OF DIRECTOR GENERAL OF AUDIT
   GENERAL REVENUES, AGCR BUILDING
   I.P. ESTATE, NEW DELHI-110002.

4. GUARD FILE

(Col. B. Venkat)
Director (FDC)

Principal
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telangana.

AQIS ID: 1-9335705341

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj,
New Delhi 110070

RPS - Sanction Letter

File No. 8-133/FDC/RPS/POLICY-1/2021-22

Date: 16 FEB 22

The Drawing and Disbursing Officer
All India Council for Technical Education
Nelson Mandela Marg,
Vasant Kunj, New Delhi-110070,

Sub: Release of a sum of Rs. 74082/- being the 1st installment of the total grant of Rs. 84666/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2021-22.

Sir,

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of **Rs. 74082/- (Rupees Seventy Four Thousand Eighty Two Only)** as 1st installment out of a total approved grant in-aid of **Rs.84666/-** for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:

I.	Name and address of the Beneficiary Institution (University / College / Institution)	:	**Registrar / Director / Principal, BHARAT INSTITUTE OF TECHNOLOGY, MANGALPALLY VILLAGE, IBRAHIMPATNAM MANDAL 501510 TELANGANA**
II.	Principal Investigator's Name & Dept./Course	:	**Dr. SUMALATHA GOVINDU (PHARMACY)**
III.	Co-Principal Investigator's Name & Dept.	:	**DSOUZA MARINA (PHARMACOLOGY)**
IV.	Grant-in aid Sanctioned	:	Rs. 84666/- (Rs. 63499/- for non recurring and Rs.21167/- for recurring expenditure)
V.	**Amount to be Released during the year 2021-22 (as 1st installment)**	:	Rs. 74082/- (Rs. 63499/- Full amount of non-recurring & Rs. 10583/-recurring i.e. 50 % of total sanctioned recurring grant)
VI.	Project Duration	:	**3 Years**
VII.	Title of the Project	:	**Development and Evaluation of Polyherbal formulation with potent antiepileptic activity**

I. Release of funds:

1. The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in aid bill and shall be disbursed to and credited to the account of BHARAT INSTITUTE OF TECHNOLOGY, MANGALPALLY VILLAGE, IBRAHIMPATNAM MANDAL 501510, TELANGANA through PFMS.
2. The sanctioned grant-in aid is debitable to the **Major Head "601.12.a (RPS Plan)" Gen.** and is valid for payment during the financial year 2021-22.
3. The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
4. The grant in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

II. Maintenance of account by the Institute/PI:

1. Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the amount of interest accrued on the grant.
2. The grant is intended to cover items of expenditure/equipment approved by AICTE.
3. Acknowledgement of receipt of grant and letter of acceptance of terms and conditions is to be submitted to AICTE within **15 days** from the receipt of the grant to the following address.

Director (Faculty Development Cell), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

Contd.. 2/-

Q.K. Nct
Mangalpally (V), Ibrahimpatnam (M)
R.R. Dist - 501 510. Telangana.

4. The accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or by any officer designated by them.

5. The Principal and PI of the institute are requested to verify the correctness of the undermentioned bank account/RTGS/PFMS details submitted by them alongwith the Proposal, in which the grant is being released. In case of any omission, the same should be reported to AICTE immediately along with refund of entire grant: -

Institute Pan No.	Bank Name	Bank Branch	Bank Branch Add.	Account Holder Name	Account Type	Account Number	IFSC Code
AAATC2S 57J	STATE BANK OF INDIA	BONGLOOR	H. NO. 2-84, GANGANAGAR COLONY, BONGLOOR VILLAGE, IBRAHIMPATNAM MANDAL, R.R DISTRICT, TELANGANA- 501510	B.I.T PRINCIPAL GENERAL ACCOUNT	Saving Account	62101005523	SBIN0021069

6. The grantee Institution shall observe all financial norms and guidelines as prescribed by the AICTE/Government of India from time to time. Grantee institution must follow GFR guidelines in procuring the sanctioned items and maintain an audited record of assets acquired wholly or substantially out of the grant-in aid and a register for assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.

7. **Interest accrued on the sanctioned grant-in-aid will be reported and refunded to AICTE and not adjusted against the subsequent installment.**

III. General Instructions:

1. It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned multiple RPS Projects.

2. The duration of Project is 03 years and the **date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Registrar/Director/Principal** shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take-up the project work within 6 months of the receipt of the grant, approval shall *ipso facto* lapse **and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said duration 18% interest will be levied on it.** The grant has to be refunded to AICTE, through RTGS as per details given below:

Account Number	55113199952
Name of the Account Holder	Member Secretary, AICTE, New Delhi
Bank Name	State Bank of India
Branch Name	Shashtri Bhawan, New Delhi
IFSC Code	SBIN0050203

3. The Institute may constitute a Project Monitoring Committee (PMC). The composition of the PMC shall be as under:

   i. Principal/Director of the institution (Chairperson)
   ii. Two HODs from institute (Members)
   iii. In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
   iv. Coordinator of the project (Member Secretary)

4. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the Institute from its own resources.

5. Similarly, the recurring grant can be used for the items (non-recurring) sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference within the country, the travel expenses may be met from the recurring grant.

Contd 3/-

Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telangana.

6. No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the institute from its own sources.

7. The institute/University shall not charge any overheads on this Project and will provide all the administrative support and **timely release of grant to PI** for completion of the Project.

8. The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AICTE/Government of India. **The revised proposal should be within the total grant sanctioned and duly supported with reasons and recommendations of the Project Monitoring Committee (PMC).**

9. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.

10. Each project sanctioned by AICTE is assigned a specific Reference Number, which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained.

11. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.

IV. Submission of documents by the institute/PI to AICTE:

A. Documents to be submitted within one month of completion of each financial year:

i. Annual Progress Report, indicating therein the number of patents, publications or any other achievement.

ii. Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure.

iii. Audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets in the prescribed form i.e. GFR-19.

iv. Separate Bills/vouchers related to Non recurring and recurring expenditures duly signed & stamped by the PI & Head of the institution.

v. Stock entry register duly verified by the Store in-charge and PI & counter signed by Head of institution.

B. Documents to be submitted within two month of completion of the Project:

i. The consolidated Utilization Certificate (UC) and Receipt & Payment Account for the Project duration, duly audited.

ii. Consolidated audited statement of expenditure, to the effect that the grant has been utilized for the purpose for which it has been sanctioned. It should contain the head-wise break up of expenditure made from the grant-in-aid provided by the Council.

iii. Project Completion Report duly signed & stamped by the PI & Head of the Institution and Project Evaluation Committee (PEC) Members.

iv. Principal Investigator/institute to submit the Feed Back Form in AICTE format.

v. The prescribed formats for submission of necessary mandatory documents and Terms & Conditions may please be downloaded from **www.aicte-India.org/schemes/research-Innovations-development-schemes.**

Note: Any deviation from the above said time schedule will cause serious action against the institute.

Contd.....4/-

Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telangana.

V. Approved List of Items under Non-recurring grant:

S. No.	Approved Items (As per proposal)	No. of Units	Amount recommended (in Rs.)
A.	Non-recurring		
i)	Actophotometer	1	
ii)	Electroconvulsiometer	1	Rs. 63499/-
iii)	HPTLC	1	
B.	Recurring i.e. 50% of total approved recurring grant) for Contingencies & Consumables only		Rs. 10583/-
	Grand Total (A) + (B)		Rs. 74082/-

Copy forwarded for information and necessary action to:

1. REGISTRAR / DIRECTOR / PRINCIPAL,

   BHARAT INSTITUTE OF TECHNOLOGY,
   MANGALPALLY VILLAGE,
   IBRAHIMPATNAM MANDAL -501510,
   TELANGANA

2. NAME OF PRINCIPAL INVESTIGATOR,

   Dr. SUMALATHA GOVINDU,
   (PHARMACY)
   BHARAT INSTITUTE OF TECHNOLOGY,
   MANGALPALLY VILLAGE,
   IBRAHIMPATNAM MANDAL -501510,
   TELANGANA

3. OFFICE OF DIRECTOR GENERAL OF AUDIT
   GENERAL REVENUES, AGCR BUILDING
   I.P. ESTATE, NEW DELHI-110002.

4. GUARD FILE

(Col. B. Venkat)
Director (FDC)

Principal
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M),
R.R. Dist - 501 510. Telephone:

"One Day Workshop on Recent Trends in Clinical Data Management"

Organized by

Bharat Institute of Technology
Mangalpally, Ranga Reddy, Telangana
Approved by PCI, AICTE and Affiliated to JNTU-H
In Association with

TAS

Telangana Academy of Sciences
Tarnaka, Hyderabad, Telangana- 500017

March 26th 2022

SCHEDULE

Welcome address	9.30 AM - 9.40 AM	Principal
Inaugural address by Chief Patron & Patron	9.40 AM- 9.50 AM	Shri. Ch. Venugopal reddy, Chairman, Bharat institute of Technology &
Introduction of speaker	9.50 AM – 10.00AM	
Morning Session Handed over to guest speaker	10.00AM To 12.15 PM	
Concluding remarks for morning session (discussion)	12.15 AM To 12.30P M	
Lunch (12.30-1.30 PM)		
Afternoon session for practical workshop program	1.30 PM To 2.40P M	
Evaluation Test	2.40 To 3.10 PM	
Prize Distribution	3.30 To 3.45 PM	
Vote of thanks	3.45 To 4 PM	

CONVENOR: DR BHIMA SRIDEVI
Department of Pharmaceutical Chemistry
Bharat Institute of Technology
Email. ID:sridevibhima@bitpharmacy.org

CO-CONVENOR: DR ARIFA BEGUM SK
Department of Pharmaceutical Chemistry
Bharat Institute of Technology
Email. ID: arifabegum@bitpharmacy.org

BHARAT INSTITUTE OF TECHNOLOGY
(Approved by AICTE & PCI, New Delhi and Affiliated to JNTU, Hyderabad)
Sponsored by : CHINTA REDDY MADHUSUDHAN REDDY EDUCATIONAL SOCIETY
Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501 510.
Ph : 08414-252205, Fax : 08414-252046, E-mail : bitpharm@yahoo.com

Ref.:

To
The Regional Coordinator,
Rangareddy Dist. Regional Centre,
Telangana Academy of Sciences,
Hyderabad.

9th April 202
Hyderaba

Subject: Regarding Approval of financial assistance for expenses incurred for organizing the workshop.

I Dr.Bhima Sridevi, working as Asst. Professor at Bharat Institute of Technolog Ibrahimpatnam. It is our immense pleasure that our college has been grante sponsorship for the conduction of Workshop from TELANGANA ACADEMY O SCIENCES. As per the discussions, Bharat Institute of Technology in Associatio with Telangana Academy of Sciences, Hyderabad has organized One da Workshop on Recent Trends in Clinical Data Management dated on March 25t 2022. Expenses incurred on workshop were done towards:

1. Guest Speakers honorarium-10,000 /-
2. Banner, Certificates expenditure at Radha Hitech print solutions- 1740/-
3. Mementos for speakers and winners-500/-
4. Photos and documentation-500/-
5. Stationery purchases-1930/-
6. Publicity - 500/-

Please note all the expenditure along with supporting documents was submitted. I request you sir please transfer the amount of Rs.15,000/- to the college bank account. Account no: 62101095523

IfS code: SBIN0021069.

Thanking you Sir

Yours Sincerel
Dr.Bhima Sridev

PRINCIPAL
Bharat Institute of Tech

BHARAT INSTITUTE OF TECHNOLOGY
Approved by AICTE & PCI, New Delhi and Affiliated to JNTU, Hyderabad)
Sponsored by : CHINTA REDDY MADHUSUDHAN REDDY EDUCATIONAL SOCIETY
Mangalp ally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501 510.
Ph : 08414-253255, Fax : 08414-253545, E-mail : bitpharm@yahoo.com

Ref.:

Utilization certificate

This is to certify that Bharat Institute of Technology in Association with Telangana Academy of Sciences, Hyderabad organized "One day Workshop on Recent Trends in Clinical Data Management" as per the assurance of the financial assistance from TAS confirming with an email of cosponsor ship dated 16th February 2022. Assured amount has been utilized for the conducting of the event on March 25th 2022, expenditure incurred in organizing the program with original bills has been attached for your kind reference and perusal.

Signature of Convener
Date:-

Signature of the Head of the Institution
Date:-

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M)
R.R. Dist. Pin: 501510

BHARAT INSTITUTE OF TECHNOLOGY
(Approved by AICTE & PCI, New Delhi and Affiliated to JNTU, Hyderabad)
Sponsored by : CHINTA REDDY MADHUSUDHAN REDDY EDUCATIONAL SOCIETY
Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501 510.
Ph : 08414-252265, Fax : 08414-252645, E-mail : bitpharm@yahoo.com

Ref.:

Utilization certificate

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Signature of Convener
Date:-

Signature of the Head of the Institution
Date:-

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M)
R.R. Dist. Pin: 501510

BHARAT INSTITUTE OF TECHNOLOGY
(Approved by AICTE & PCI, New Delhi and Affiliated to JNTU, Hyderabad)
Sponsored by : CHINTA REDDY MADHUSUDHAN REDDY EDUCATIONAL SOCIETY
Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501'510.
Ph : 08414-252265, Fax : 08414-252645, E-mail : bitpharm@yahoo.com

Ref.:

9th April 2022,
Hyderabad

To
The Regional Coordinator,

Rangareddy Dist. Regional Centre,

Telangana Academy of Sciences,

Hyderabad.

Subject: Regarding Approval of financial assistance for expenses incurred for organizing the workshop.

I Dr.Bhima Sridevi, working as Asst. Professor at Bharat Institute of Technology, Ibrahimpatnam. It is our immense pleasure that our college has been granted sponsorship for the conduction of Workshop from TELANGANA ACADEMY OF SCIENCES. As per the discussions, Bharat Institute of Technology in Association with Telangana Academy of Sciences, Hyderabad has organized One day Workshop on Recent Trends in Clinical Data Management dated on March 25th, 2022. Expenses incurred on workshop were done towards:

1. Guest Speakers honorarium-10,000 /-
2. Banner, Certificates expenditure at Radha Hitech print solutions- 1740/-
3. Mementos for speakers and winners-500/-
4. Photos and documentation-500/-
5. Stationery purchases-1930/-
6. Publicity - 500/-

Please note all the expenditure along with supporting documents was submitted. I request you sir please transfer the amount of Rs.15,000/- to the college bank account. Account no: 62101095523

IfS code: SBIN0021069.

Thanking you Sir

Yours Sincerely

Dr.Bhima Sridevi

PRINCIPAL
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam (M)

INSTITUTE OF TECHNOLOGY

APPLICATION
FOR
"SEMINAR GRANT"

BHARAT INSTITUTIONS

HYDERABAD, TELANGANA

BHARAT INSTITUTE OF TECHNOLOGY

(Approved by AICTE & PCI, New Delhi and Affiliated to JNTU, Hyderabad)
Sponsored by : CHINTA REDDY MADHUSUDHAN REDDY EDUCATIONAL SOCIETY
Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501 510.
Ph : 08414-252265, Fax : 08414-252645, E-mail : bitpharm@yahoo.com

Ref.:

To:
Director General,
ICMR,
V.Ramalingaswami Bhawan,
Ansari Nagar,
New Delhi – 110029.
Phone: 011-26588895.

Kind Attention:
Dr. N. C. Jain,
Scientist 'G' & Head.

Letter No.:- BIT- R&D – ICMR – Seminar - 2010/14
Sub:- BIT-Application-Seminar Grant-Req.-Reg.

*****

Respected Sir,

Bharat Institute of Technology (Pharmacy) was established in the year 1999 with vision of conductive ambience and churn out students with the ability and passion to work wisely, creatively for betterment of society.

Our Institute is accredited by NAAC, approved by AICTE & PCI and affiliated to JNTUH Hyderabad.

We are here by submitting 'application for seminar grant' to your kind concern with all necessary and supporting documents.

Please do needful and thanks for your support.

Signature
Head of the Institution

Date:

Place:

WTel. : 26588895, 26588980,
26589794, 26589336
Email: headquarters@icmr.org.in
icmrhqds@sansad.nic.in

GRAM :SCIENTIFIC
FAX :011-26588662

INDIAN COUNCIL OF MEDICAL RESEARCH

V. Ramalingawami Bhawan, Ansari Nagar, Post Box Bo. 4911
New Delhi - 110029

Application for grant of financial assistance for organizing Seminar

1. **Title of Seminar.**
One Day National Seminar on "ZEBRA FISH; A SUPER FAST AND PRICISE ANIMAL MOLEL FOR 'A to Z' HUMAN DISEASES"

2. **Name of Institution seeking financial assistance.**
Bharat Institute of Technology (Pharmacy),
Accredited by NAAC,
Approved by AICTE & PCI,
Affiliated to JNTU Hyderabad,
Mangalpalli – 501 510(Village), Ibrahimpatnam (Mandal),
Hyderabad, Ranga Reddy District, Telangana.

3. **Name, designation and address of Organising Secretary & Convener with Pin Code including telephone/Mobile/Fax/e-mail address.**

Organising Secretary:
Dr. A.V.Badarinath, M.Pharm., Ph.D.,
In-charge, Research and Development Cell,
Bharat Institute of Technology (Pharmacy),
Mangalpalli – 501 510(Village), Ibrahimpatnam (Mandal),
Hyderabad, Ranga Reddy District, Telangana.
9440916296, avbadrinatha@gmail.com

Convener:
Dr. S.Gurnath, M.Pharm, Ph.D.,
Deputy In-charge, Research and Development Cell,
Bharat Institute of Technology (Pharmacy),
Mangalpalli – 501 510(Village), Ibrahimpatnam (Mandal),
Hyderabad, Ranga Reddy District, Telangana.
9966555091, s.gurunath1979@gmail.com

4. **Date (s) and place of organizing Seminar.**
One Day Seminar: **Date** 09-05-2020, Day – Saturday.
Place: Bharat Institute of Technology (Pharmacy),
Mangalpalli – 501 510(Village), Ibrahimpatnam (Mandal),
Hyderabad, Ranga Reddy District, Telangana.

5. **Grant requested for from ICMR :** Rs.90,000/-

6. (a) **Detailed Programme i.e. name of speakers and their topics/titles of papers/lectures etc. (date & time wise) along with list of participants may be submitted. Indicate confirmed speakers. (National & International)**
Kindly include names of speakers only after getting their consent or else mention clearly- consent awaited/ not yet confirmed.

Enclosures 1.Detailed Program 2.List of Participants

(b) **In what way is the Seminar expected to contribute to the existing knowledge in the field?**

Existing Scenario: Existing knowledge of animal models (Rats, Mice) in "drug discovery" for various human diseases has lot of limitations. The four major limitations are consumption of long time, applicable only to certain human diseases imprecise results, high cost consumption. This scares the scientists and pharmaceutical investors to enter into the field of drug discovery which results in lack of innovation of new drugs from past few decades. With the existing models, the drug discovery, output and patent process becomes tedious. Hence numbers of patents are not coming out. This makes India poor in Innovation Ranking and Global Competitiveness Rankings.

Seminar Outcome: This seminar will introduce "Super Animal Model" (Zebra Fish) to all research people in and around Hyderabad. This seminar will be "single shot answer" for all the above issues and definitely this seminar will remain as "breakthrough" in the drug discovery research. Sure this seminar gives zeal to all scholars, scientists, students, company scientists. The impact of this seminar comes live in short and makes our India to get good Innovation rank.

(c) **Has any Association/Chapter received any grant from ICMR during the last two years for organizing Seminar/Symposium? If so, give details year-wise and quote the ICMR letter No. and date, in tabular form under the following heads:-**

Name of the Association	Year	Amount	Letter No.& date	Purpose	Name of the Seminar/ Symposium	Whether UC/Report submitted
-Nil-	-Nil-	-Nil-	-Nil-	-Nil-	-Nil-	-Nil-

(d) **What is the total expenditure anticipated? Please give details under various heads.**

S. No	Particulars	Income	Expenditure
1	Registration Fee (300 Participants)	0	--
2	Honorarium (4 Speakers X 10,000)	--	40,000
3	Lunch for Participants (300 Participants) (Members 300 x Each meal 200/-)	--	60,000
4	Kits for Participants (300 Participants) (Members 300 x Each kit 200/-) (File, Pen, Pad, Seminar CD, Material, ID card)	--	60,000
5	Tea, Snackes (300 x 66/-) (Morning – Tea only) (Evening – Tea with Samosa/Biscuits)	--	20,000
6	Sponsor from Bharat Institute of Technology	90,000	--
7	Sponsor from ICMR	90,000	--
	Balance Match	**1,80,000**	**1,80,000**

7. **Details of grant requested/received from other agencies like DST, DBT, CSIR, UGC, INSA, NAMS and ICAR for the proposed Seminar/Symposium/Conference/Workshop:**

Name of the Agency	Grant Requested	Grant Received	Grant received or expected	Items for which grant has been asked for
-Nil-	-Nil-	-Nil-	-Nil-	-Nil-

8. (a) Name of the authority who will be responsible for submitting the audited statement of accounts/Utilization Certificate.

Organising Secretary:
Dr. A.V.Badarinath, M.Pharm., Ph.D.,
In-charge, Research and Development Cell,
Bharat Institute of Technology (Pharmacy),
Mangalpalli – 501 510(Village), Ibrahimpatnam (Mandal),
Hyderabad, Ranga Reddy District, Telangana.
9440916296, 7995649019, avbadrinatha@gmail.com

(b) **The Organizing Secretary would have to submit a brief summary of scientific activity & copy of proceedings report within a period of three months.**

Yes. Report will be sent with in a period of three months.

(c) **Please indicate whether you are willing to accept up to two nominees of the Council for participation in the Seminar without any registration charges:**

Yes. Surely we will accept up to two nominees without registration charges.

(d) **Name of the authority in whose favour payment of grant is to be released.**

Bank Name:	State Bank of India
Branch Name:	Bongloor Outer Ring Road, Hyderabad
Account Name:	BIT Principal General Account
Account Number:	62101095523
IFSC Code:	SBIN0021069

9. **Check list:**

(i) **4 copies of application –**

Yes. Included

(ii) **4 copies of detailed programme i.e. name of Speakers and their topics/titles of papers/lectures etc. (date, time-wise).**

Yes. Included

(iii) **4 copies of list of participants.**

Yes. Included

(iv) **Kindly send the soft copy in Words:-icmrseminars@gmail.com**

Yes. Mailed

10. **It may please be noted that incomplete application/after receiving the due date will not be considered and no correspondence will be entertained.**

Signature	**Signature**	**Signature**
Organizing Secretary	**Executive Authority**	**Head of the Institution**

Date:
Place:

Human Resource Planning and Development
Indian Council of Medical Research
Financial assistance for organizing Seminars/Symposia/Conferences/ Workshops

ELECTRONIC CLEARING SERVICE (CREDIT CLEARING) / REAL TIME GROSS SETTLEMENT (RTGS) FACULTY FOR RECEIVING PAYMENTS

A. DETAILS OF ACCOUNT HOLDER :-

1	NAME OF ACCOUNT HOLDER/INSTITUTE	BIT PRINCIPAL GENERAL ACCOUNT
2	***REGISTERED MOBILE NUMBER***	***9440916296***
3	COMPLETE CONTACT ADDRESS	Bharat Institute of Technology (Pharmacy), Mangalpalli – 501 510(Village), Ibrahimpatnam (Mandal), Hyderabad, Ranga Reddy District, Telangana.
5	TELEPHONE NUMBER / FAX / E MAIL	7995649019, avbadrinatha@gmail.com
6	TITLE OF THE SEMINAR	"ZEBRA FISH; A SUPER FAST AND PRICISE ANIMAL MOLEL FOR 'A to Z' HUMAN DISEASES"

B. BANK ACCOUNT DETAIL :- (Fellow Bank Account Details)

1	BANK NAME	STATE BANK OF INDIA
2	BRANCH NAME WITH COMPLETE ADDRESS, TELEPHONE NUMBER AND EMAIL	H.No- 2-84, Ganga Nagar Colony, Bongloor Village, Pin Code – 501 510, Ibrahimpatnam (Mandal), Hyderabad, Ranga Reddy District, Telangana. 08414-252479, agmsecreg2@sbhyd.co.in
3	WHETHER THE BRANCH IS COMPUTERIZED ?	YES
4	WHETHER THE BRANCH IS RTGS ENABLED? IF YES, THEN WHAT IS THE BRANCH'S **IFSC CODE**	SBIN0021069
5	IS THE BRANCH ALSO NEFT ENABLED?	Yes
6	TYPE OF BANK ACCOUNT (SB / CURRENT)	Current
7	COMPLETE BANK ACCOUNT NUMBER (LATEST)(**fellow account**)	00000052210042139
8	MICR CODE OF BANK	500002420

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information. I would not hold the user institution responsible.

Date : **(Signature & Seal of Organizer)** **(Signature of Head of Department)**

Certified that the particulars furnished above are correct as per our records.

(……. Signature & Seal of A.O. of the Concerned Division in ICMR……)

"ONE DAY NATIONAL SEMINAR"

ON

"ZEBRA FISH; A SUPER FAST AND PRICISE ANIMAL MODEL FOR 'A to Z' HUMAN DISEASES"

DETAILED PROGRAM

S. No	Name of the Speaker	Title of Lecture/s	Date & Time	Acceptance
1	**Dr. Munawwar Husain Kazmi,** Director (I/c), Central Research Institute of Unani Medicine (CRIUM), Ministry of Ayush, Erragadda, Hyderabad.	'Genetical and Anatomical Similarities' of Zebra Fish to Humans.	09-05-2020 Saturday 12.00-01.00PM	Confirmed Speaker
2	**Dr. Asiya Khanum,** Asst. Director, Central Research Institute of Unani Medicine (CRIUM), Ministry of Ayush, Erragadda, Hyderabad.	Features that make Zebra Fish as 'Superfast and Precise' Animal Model. Features that make Zebra Fish much Better Than Rats and Mice.	09-05-2020 Saturday 01.00-02.00PM	Confirmed Speaker
3	**Dr. B. Dinesh Kumar,** Scientist 'G' & HOD, Drug Safety, National Institute of Nutrition, NIN-ICMR, Tarnaka, Hyderabad.	Manipulation of Gene Functions in Zebrafish to Make It as Animal Model for All Cancers.	09-05-2020 Saturday 03.00-04.00PM	Confirmed Speaker
4	**Dr. N. Harishankar,** Scientist 'E' & Deputy Director, National Animal Resource Facility for Biomedical Research, National Institute of Nutrition, NIN-ICMR, Tarnaka, Hyderabad.	Methods That make Zebra Fish as An Animal Model for "Parkinson's Disease".	09-05-2020 Saturday 04.00-05.00PM	Confirmed Speaker

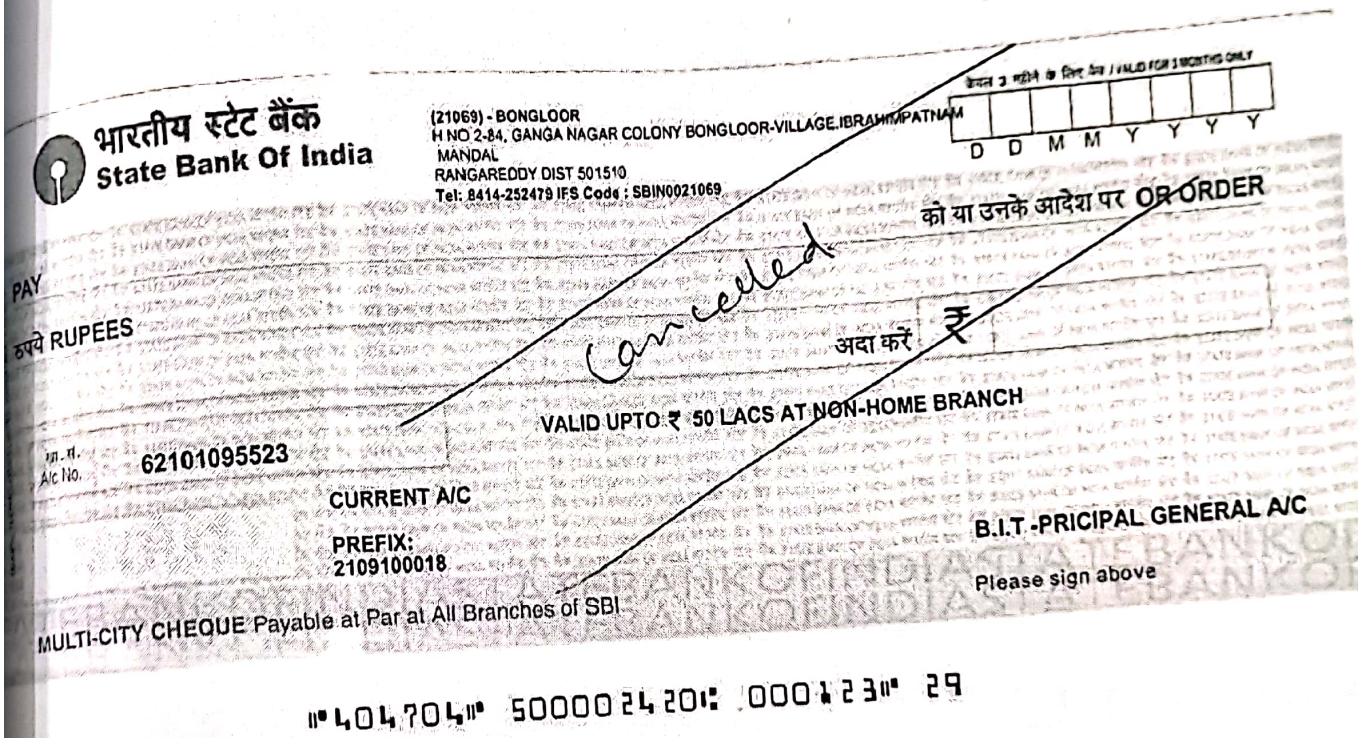
"ONE DAY NATIONAL SEMINAR"

ON

"ZEBRA FISH; A SUPER FAST AND PRICISE ANIMAL MOLEL FOR 'A *to* Z' HUMAN DISEASES"

LIST OF PARTICIPANTS

S. No	Participants Details	Approximate Number
1	Research Scholars of Jawaharlal Nehru Technological University, Hyderabad (NJTUH).	80
2	Research Scholars of Osmania University, Hyderabad.	35
3	M. Pharmacy (Pharmacology Specialization) Students of various universities, colleges etc.,	150
4	R &D staff of various pharmaceutical industry in Hyderabad.	35
	Total	**300**



भारतीय स्टेट बैंक
State Bank Of India

(21069) - BONGLOOR
H NO 2-84, GANGA NAGAR COLONY BONGLOOR-VILLAGE,IBRAHIMPATNAM
MANDAL
RANGAREDDY DIST 501510
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APPLICATION
FOR EXTRA MURAL RESEARCH

Submission to

सत्यमेव जयते

आयुष मंत्रालय
MINISTRY OF
AYUSH

By

BHARAT INSTITUTIONS

HYDERABAD, TELANGANA

ICMR | NIN

HYDERABAD, TELANGANA

ANNEXURE-1

MINISTRY OF AYURVEDA, YOGA & NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY

APPLICATION FOR GRANT-IN-AID OF EXTRA MURAL RESEARCH PROJECTS IN AYUSH

Section-A

1. Title of the Research Project:
   DEVELOPMENT AND STANDARDISATION OF BROADSPECTRUM HERBOMINERAL NEUTRIENT TABLETS FOR UNIVERSAL CANCER PREVENTION.

2. Details of the Institution submitting the research project:
   Name: Bharat Institute of Technology, (Pharmacy),
   Postal address: Bharat Institute of Technology, Mangalpally - 501510, Ibrahimpatnam, Ranga Reddy District, Telangana.
   Telephone: 9963477875 E-mail: bitpharm.hr@gmail.com

3. In case of Individuals submitting the Research project:
   Not applicable. Application is in the name of institution

4. Name and Designation of
   Principal investigator:
   Dr. A.V.Badarinath, M.Pharm., Ph.D.,
   Professor of Pharmaceutics,
   In-Charge: Research and Development Cell,
   Bharat Institute of Technology (Pharmacy),
   Mangalpally - 501510, Ibrahimpatnam, Ranga Reddy District, Telangana.
   Phone: 7995649019, 9440916296, E-Mail: avbadrinatha@gmail.com
   Co-Investigator(s):
   Dr. N.Harishankar, Ph.D.,
   Scientist 'E/Dy.Director'
   National Centre for Laboratory Animal Sciences.
   National Institute of Nutrition. Taranaka.
   HYDERABAD - 500 007. (A.P)
   Telephone: 00-91-40-27197202
   FAX: 00-91-40-27003317, E-mail: hsnemani2000@yahoo.com

5. Duration of Research Project: 3 years
   i) Period required for pre-trial preparations: 6 months
   ii) Period which may be needed for collecting the data: 6 months
   iii) Period that may be required for analyzing the data: 2 year

6. Amount of Grant-in-aid asked for:

	Total	1st Instalment	2nd Instalment	3rd Instalment	Remaining Amount (10%)	Withheld amount (10%)
Salary - Research Associate - 1. (23,000/-pm as per AYUSH norms)	8,28,000	2,20,800	2,20,800	2,20,800	82800	82800
Equipment Stability Chamber Make: EIE Instruments Pvt., Limited.	1,18,000	1,18,000	..	..	..	..
Books	..	..	..	..	..	..
Other Non-Recurring Expenditure Equipments	..	..	..	..	..	..
Recurring Expenditure, Chemicals Marker Compounds etc.,	1,00,000	1,00,000	..	..	..	..
TA/DA	40,000	10,000	10,000	10,000	5,000	5,000
Institutional Support (-)	1,00,000	30,000	35,000	35,000	--	--
Fee of PI and CoI	90,000 45,000	30,000 15,000	30,000 15,000	30,000 15,000	--	--
Miscellaneous Expenses	1,00,000	30,000	30,000	20,000	10,000	10,000
Total	12,21,000	4,93,800	2,70,800	2,60,800	97,800	97,800

7. DECLARATION AND ATTESTATION

Certified that:
I/We have read the provisions, terms and conditions, mentioned in the Extra-mural Scheme along with its Annexure, Guidelines formulated by the Ministry of AYUSH and I/we shall abide by the relevant provisions contained under EMR Scheme and General Financial Rules of Govt. of India.

Name and Signature of the:

a) Principal Investigator: Dr. V. Bachinath, 6-6-19

b) Co-Investigator(s): Dr. N. Harishankar, 6/6/2019.

c) Head of the Department: Dr. Y. PHALGUNA

Signature of the Head of the Institu: Dr. Sai Krushna Padhy 07/06/19

BRIEF SUMMARY OF THE PROJECT PROPOSAL

So far, there is no universal cancer preventive formulation in the market. At present, the modern treatments for cancer are incomplete, costly, complex, dangerous (severe side effects) and unpleasant for patients as it requires long period of treatment. Allopathy still battles relentlessly to end of trauma of cancer patients. So far, there is no magic bullet that can win the cancer completely. On the other hand, chances for getting the cancer are increasing day by day and they were unavoidable. Various causes of cancer are current life style, decreased physical exercise, lack of micro, macro nutrients and antioxidants, in daily food, environmental agents like ionizing radiation, pollution, addiction to alcohol, tobacco, increased mental stress, use of cell phones, betel quid chewing, neglecting own health, careless usage of strong medicines, unnecessary use of antibiotics for long time, frequent treatment by steroidal drugs, early menarche, late menopause, obesity, hormone use, diabetes, occupational carcinogens.[1-12]

However, avoiding or minimizing the human beings to expose these carcinogenic agents is practically not possible. **Prevention is better than cure.** Hence, it seems, cancer chemoprevention remains as ideal strategy in anticancer arsenal. Hence the objectives of the work –

- To develop safe and potential Herbo Mineral Formulation (HMF) for **prophylactic use of cancer.**
- To prepare conventional **oral tablets, by using Green tea and Sodium Selenite** for prophylactic use of all types of cancers. To standardize the developed formulation according to regulatory guidelines. To perform the Quality control, Safety, and Efficacy evaluation of the Formulation. To quantify the chemopreventive activity (prominent effect) of the formulation in the laboratory animals against above cancers.
- To prove its anticancer activity (reverse of cancer) in human cancer cell line studies.

DETAILED RESEARCH PROTOCOL

Criteria for the Selection of Herbals for Formulation:

Among the various herbals, *Camellia sinensis* (Green tea) was selected due to its following extraordinary properties.

- Shows affordable protection against most types of cancers like lung, liver, esophagus, fore stomach, duodenum, pancreas, colon, and breast.
- Economical, widely available and non-toxic.
- Nearly all the constituents of the green tea possess antioxidant activity.
- Proved as chemopreventive in animal as well as epidemiology studies.
- It is in final stage of human clinical trials by U.S. National Cancer Institute.
- It prevents treats as well as reveres the cancer.
- Protective against genotoxic damage induced by anticancer drugs like Cyclophosphonamide and Methane sulphonate.
- Associated with many other major health benefits like lowering cholesterol, elevated blood pressure, elevated blood sugar and boosting of immune system.

Criteria for the Selection of Mineral for Formulation

Among the various minerals, Sodium Selenite was selected due to its following suitable properties.

- Selenium is present in our body as a part of various antioxidant enzymes. Recognized and listed by National Cancer Institute, United States.
- It prevents major cancers like Liver, Stomach, Oral, Colon, Lung, Prostate etc.
- Comparatively safe mineral. Have potential chemopreventive and anticancer effects.
- Proved in animal and epidemiology studies. Daily consumption of Selenium throughout the world is very less & this leads to cancer.
- Economical and widely available. Essential for our body.

WORK PROTOCOL

Procurement of Materials

- Selection of Herbal and Mineral Compounds for formulation
- Preparation of Aqueous extract of Green Tea Leaves
- Standardization of Aqueous extract of Green Tea Leaves
- Quantification of Green Tea Catachin Contents by HPTLC
- Procurement of Mineral compound Sodium Selenite

Development of Formulation

- Pre formulation Studies (Flow Properties & Derived Properties)
- Drug Incompatibility Studies by FTIR
- Preparation of Tablets by Wet Granulation (6 Formulations)

  and Direct Compression methods (6 Formulations)
- Packing of Tablets (Blister Packing)
- Evaluation of Formulations (Physico chemical Evaluation)
- Dissolution(8 basket dissolution apparatus. Paddle)

Standardization of Formulation

- Standardization of Green Tea content in tablets by HPTLC Finger Printing

  (Comparing the peak areas with marker compounds)
- Standardization of Sodium Selenite in tablets by ICP-MS

Quality Assessment

- Shelf life Estimation as per ICH guide lines
- Microbial Evaluation of Tablets (Microbial Load Determination)

Safety Assessment

- Toxicological Evaluation of Tablets

  (Acute Oral Toxicity Studies as per OECD guidelines)

Efficacy Assessment

- In-vivo animal Chemopreventive Studies

  Selection of an animal model which mimics or duplicates the human experience in experimental animals was selected for this study.

- Prevention of Lung Cancer Induced by Tobacco Smoking in Mice
- Prevention of Liver Cancer induced by alcohol in Mice
- Prevention of Skin cancer Induced by UV rays in Mice
- Prevention of Colon Cancer Induced by Azoxymethane in Rats
- Cancer Cell line Studies in human lung and skin cancer cells

Government of India
Ministry of Environment, Forest and Climate Change
Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA)
5th Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

CERTIFICATE

This is to certify that the registration of Animal House Facility of ***Bharat Institute of Technology - Pharmacy, Ranga Reddy District, Telangana*** *with CPCSEA has been renewed for* ***Research for Education purpose on Small Animals*** *bearing registration number* ***1015/PO/Re/S/06/CPCSEA.***

The registration is valid for five years from ***26/09/2018*** to ***25/09/2023.***

(Jerome Minz)
Deputy Secretary (AW) & Member Secretary (CPCSEA)

JEROME MINZ
Member Secretary (CPCSEA)
Min. of Environment, Forest & Climate Change
Government of India
Jor Bagh Road, New Delhi

BHARAT INSTITUTE TECHNOLOGY

Mangalpally (V), Ibrahimpatnam (M) R.R. Dist

PROPOSAL FOR INDUSTRIL PROJECT
BUDGET ESTIMATE= Rs/- 50000

TITLE: PRECLINICAL ANTIDIABETIC STUDIES OF POLYHERBAL FORMULATION ON STREPTOZOTOCIN INDUCED DIABETIC RATS.

ABSTRACT

Necessity of work:

Plants are very useful to mankind. Many of them are used exclusively for medicinal purposes. According to the World Health Organization (WHO), "a medicinal plant is a plant which, in one or more of its organs, contains substances that can be used for therapeutic purposes, or which are precursors for chemo-pharmaceutical semi-synthesis." Such plants are in great demand by pharmaceutical companies for their active ingredients.

Diabetes mellitus is one of the most common disorders affecting almost 6% of the world population and the dynamics of the diabetes are changing rapidly in low- to middle-income countries. According to International Diabetes Federation's (IDF) estimates, 80% of the world diabetic population will be from low- and middle- income countries in 2030. Globally, diabetes is one of the six major causes of death and also causing various systemic complications. Diabetes mellitus is treated by hormone therapy (insulin) or by administering glucose- lowering agents such as alpha-glucosidase inhibitors, sulfonylureas, biguanides, and thiazolidinediones.

Development of an adverse event is one of the complications in the treatment of any systemic disorder; hence, many of the research institutes and pharmaceutical companies are involved in drug development to find the molecules with good therapeutic potential and less adverse events. In traditional systems of medicine, many plants have been documented to be useful for the treatment of various systemic disorders. Many of the traditional/indigenous systems of medicine are effective than the modern system of medicine, but they suffer from lack

of complete standardization which is one of the important challenges faced by the traditional system of medicine. The concept of polyhedral formulation is well documented in the ancient literature. Compared to the single herb, the polyherbal formulation has better and extended therapeutic potential. Hence, the present study was planned to formulate and standardize a polyherbal formulation using a plant having known antidiabetic activity and evaluate its therapeutic effects in rodents.

Aim and Objectives:

- The aim of the present study is to formulate a polyherbal formulation and evaluate its antidiabetic potential in animals.
- The quality of the finished product will be evaluated as per the World Health Organization's guidelines.
- Fingerprint analysis of the polyherbal formulation will be carried out to confirm the active compound present in the polyherbal formulation are same or not.
- The acute toxicity studies will be carried out for the determination of mortality rate and to fix the dose(s) of the formulation.
- The oral antidiabetic activity of the polyherbal formulation will be screened against streptozotocin induced diabetes mellitus in rats.

Plan of Work:

The plan of work for the project is described with following points:

- Collection of the plants, preparation of extracts and phytochemical analysis.
- Preparation of polyherbal formulation by wet granulation method.
- Preformulation studies and standardization of formulations.
- High-performance thin layer chromatography (HPTLC) fingerprint analysis.
- Development of quality control standards for the polyherbal capsule.
- Acute oral toxicity studies for dose fixation.
- Antidiabetic effect of herbal formulation in streptozotocin induced diabetic rats.

- ❖ Biochemical analysis and Histopathologic analysis study.
- ❖ Result analysis.

Importance of the work:

The major importance of the work will be formulation of a polyherbal drug, which will be standardized by using standard methods. The effectiveness of the active metabolites present in the extracts will be determined and quality control standards for polyherbal capsules will be development. The anti-diabetic activity studies of the polyherbal formulation will be carried out and data will be analyzed for the prescribed studies.

Proposed plan of work by

Dr. Mrinmay Das

HOD, Dept. of Pharmaceutical Chemistry, BIT.

BHARAT INSTITUTE TECHNOLOGY

Mangalpally (V), Ibrahimpatnam (M) R.R. Dist

PROPOSAL FOR INDUSTRIL PROJECT
BUDGET ESTIMATE= Rs/- 50000

TITLE: INTRANASAL *IN SITU* GEL NANOPARTICLES OF ANTICANCER DRUGS FOR BRAIN TARGETING

ABSTRACT

Necessity of work: Nasal drug delivery system provides an alternative route for the Drugs which cannot be absorbed orally.Nasal drug delivery is an efficient alternate route for systemic delivery of orally inefficient drugs. It also offers non-invasive delivery of potent peptide and perhaps protein drug molecules. The intranasal route is an accessible alternative to parenteral routes. The need for safe and effective nasal permeation and absorption enhancers is a major component for a promising future in the area of nasal drug delivery. It reduces systemic exposure and thus reduces the side effects.

AIM: The aim of the proposed research is to develop novel and stable lipid nano formulations for anticancer drugs i.e., a nanoemulsion at room temperature and turns to gel at nasal temperature for intranasal administration.

Objectives: The objectives are (1) to develop novel and stable nano particulate formulations of anticancer drugs and incorporating into an in situ gel, (2) optimization of formulation parameters using experimental designs, (3) to evaluate various physicochemical properties of these formulations, (4) to investigate the drug loading efficiency and gelation characteristics. (5) to study the stability of the developed formulations at room temperature (25°C), (6) to investigate the distribution of anticancer drugs in to the brain and cerebro spinal fluid from the formulation after intra nasal administration.

Plan of Work:

Preparation of various nanoparticulate formulations of drugs using polymers Incorporation of nanoparticle into in situ gels using lipid based polymers and emulsifiers. Eg.Triolein as lipid phase, phosphatidyl choline as surfactant 1, and a combination of poloxamer F68 and F127 as surfactant 2 were used based on literature analysis for the present study.Evaluation of intranasal insitu gels of nanoparticles: Various parameters such aspreformuation studies, gelation temperature, pH, drug content uniformity, particle sizedistribution, zeta potential, mucoadhesive strength, rheological properties, in vitro drug releasestudies, stability studies, lyophilization, and pharmacokinetic parameters evaluation.

Proposed plan of work by: Dr.Y.Phalguna

HOD, Dept.of Pharmaceutics, BIT.

BHARAT INSTITUTE OF TECHNOLOGY: MANGALPALLY

PROPOSAL FOR INDUSTRIAL PROJECT

BUDGET ESTIMATE = Rs. 50,000/-

TOPIC: DEVELOPMENT OF INSTRUMENT "TOBACCO SMOKE INDUCED LUNG CANCER CHAMBER" AS A EFFECTIVE NATURAL ANIMAL MODEL

ABSTRACT

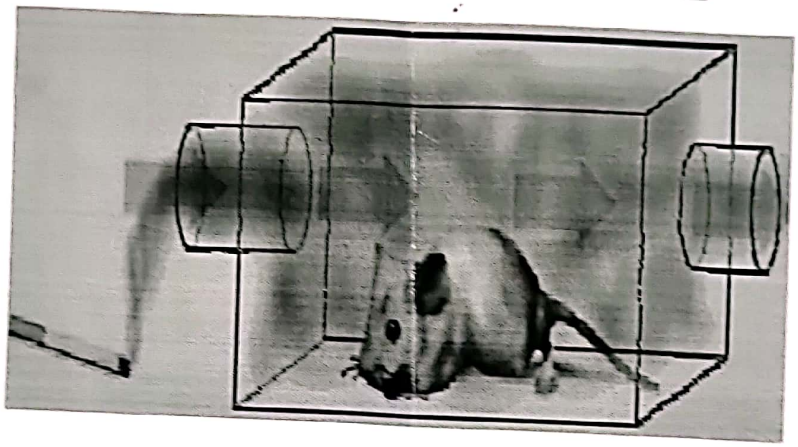
NECESSITY OF WORK: Inducing lung cancer in animals is essential step to develop anti cancer drugs. At present, all the models are using chemicals to induce the cancer in animal lungs. Developing the cancer in animals that mimics like in human (Cigarettes) is the idea of the present proposal.

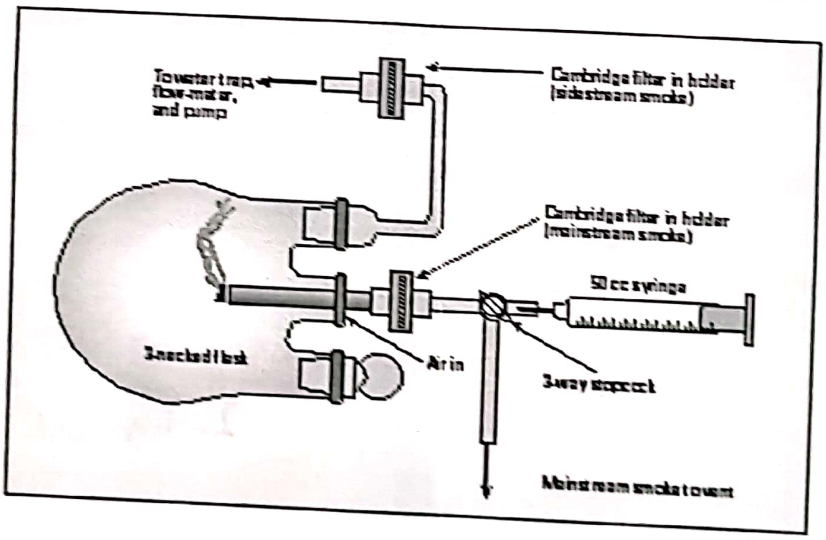
AIM: This proposal is aimed at development of naturally inducing lung cancer animal model in the line of development of anticancer drugs.

OBJECTIVE: To design, develop and getting patents the instrument **"TOBACCO SMOKE INDUCED LUNG CANCER CHAMBER".**

Outcome:-

PROPOSED IDEAL DESIGN AND DRAWINGS IN GRAPHICS





Proposed and Pictures Drawn by: Dr. A.V.Badari Nath, Professor, BIT.