



## Annual Report (Sep'2023- Aug'2024)

### Section A.

### About IIC Institute

#### INSTITUTION'S INNOVATION COUNCIL, BIT MESRA

##### • VISION

To create a vibrant local innovation ecosystem and start-up supporting mechanism in BIT. Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework. Establish Functional Ecosystem for Scouting Ideas and Pre-incubation of Ideas. Develop better Cognitive and Design Thinking Ability for Technology Students.

##### • FUNCTIONS

1. To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bound fashion.
2. Identify and reward innovations and share success stories.
3. Organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators.
4. Network with peers and national entrepreneurship development organizations.
5. Create an Institution's Innovation portal to highlight innovative projects carried out by institution's faculty and students.
6. Organize Hackathons, idea competition, mini challenges etc. with the involvement of industries.

##### • OUR JOURNEY

Since our establishment (October 2018), IIC Birla Institute of Technology Mesra, has consistently made the requisite efforts to thrust the innovation and start-up ecosystem amongst the students and faculty. The response of the participants in our informative sessions and events are a testimony to our claims. A separate Deanship has been created for Research, Innovation and Entrepreneurship. Today we are proud of the ecosystem that has been developed in the institute, and we see ourselves growing exponentially in the coming times.

##### • DIVERSITY

Our team consists of experienced individuals from various departments of our institution. We promote diversity on all fronts, may it be student participation or even the initiatives taken by our esteemed team of faculties.

## Members of IIC

**Prof. Indranil Manna**  
Vice Chancellor, BIT Mesra  
Chief Mentor, IIC-BIT

**Prof. C. Jeganathan**  
President, IIC-BIT

**Dr. Bhaskar Karn**  
Vice President, IIC-BIT

**IIC-BIT MEMBERS**

**Dr. Anand Prasad Sinha**  
Convener, IIC-BIT

**Dr. Manish Kr Pandey**  
Co-Convener, IIC-BIT

**Dr. Dilip Kr. Singh**  
Co-Convener, IIC-BIT

**Dr. Richa Mishra**  
Co-Convener, IIC-BIT

**Dr. Neeta Kumari**  
Co-Convener, IIC-BIT

## Section C.

Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution

Description	No.
Total number of IIC Members	180
Total number of Innovation Ambassadors	10
Total number of faculty Mentors	45

**IIC- Members 23-24 (Faculty)**

Sl No.	Name of Executive Members	Role in IIC
1.	Prof. Sudip Das	NIRF Coordinator
2.	Dr. Venkatesan Jayaprakash	IPR Convenor
3.	Dr. Ashoke Sharon	Member
4.	Dr. Anand Kumar Sinha	Member
5.	Mr. Vishal H Shah	Start-up Activity Coordinator & EDC Coordinator
6.	Dr. Richa Pandey,	IIC Celebration Activity Coordinator & Member
7.	Dr. Rajeev Kumar	Innovation Activity Coordinator & Member
8.	Dr. Dharmendra Kumar Chand	Internship Activity Coordinator & Member
9.	Dr. Satyaki Sarkar	Member
10.	Dr. Ritesh Kumar Singh	Member
11.	Dr. Sumit Mishra	Member
12.	Dr. Tanushree Bhattacharya	Member
13.	Dr. Sukalyan Chakraborty	Member
14.	Dr. Supriyo Roy	Member
15.	Dr. Vijay Nath	Member
16.	Dr. Kirti Abhishek	Member
17.	Dr. Sridhar K. Patnaik	Member
18.	Dr. Smriti Mishra	Member
19.	Dr. Dilip Singh	Member
20.	Dr. Raju Poddar	Member
21.	Dr. Anirban Pradhan	Member
22.	Dr. Praveen Srivastava	Member
23.	Dr. Praveen Mishra	Member
24.	Dr. Yogender Aggarwal	Member
25.	Dr. Anupam Roy	Member
26.	Dr. S.S Tripathy	Member
27.	Dr. Rohit Kr Pandey	Member
28.	Dr. Sujeet Kumar Mishra	Member
29.	Dr. Prabjot Kaur	Member
30.	Dr. Binay Kumar	Member

31.	Dr. Somak Datta	Member
32.	Dr. Amit Tiwari	Member
33.	Mr. Mrinal Pathak	Member
34.	Dr. Koel Mukherjee	Member
35.	Dr. Narendra Yadav	Member
36.	Dr. Gauri Shanker Gupta	Member
37.	Dr. Satish Kumar	Member
38.	Dr. Sumana Kumari	Member
39.	Mr. Brajesh Kumar	Member
40.	Mr. Arvind Sahu	Member
41.	Dr. P. K. Chatterjee, Former CGM, Mecon Ltd. Ranchi	Expert External Member,
42.	Mr. M. K. Gupta, Principal, Jharkhand Government Tool Room Ranchi	Expert External Member,
43.	Mr. Amitesh Anand, Founder & CEO - 366Pi Technologies, Ranchi	Expert External Member
44.	Mr. Abhishek Sagar, Co-founder, and CEO of Zuraverse	Expert External Member
45.	Mr. Ashish Satyavrat Sahu, Founder & Designer Sustainable Clothing Brand	Expert External Member

### **IIC- Members 23-24 (Students)**

<b>Sl No.</b>	<b>Name of Students</b>	<b>Branch</b>
1.	Riya Biswas	MNC
2.	Anshika Singh	MNC
3.	Koushiki Chakrabarti	MNC
4.	Astha Ohdar	MNC
5.	Shikha Kumari	MNC
6.	Harsh Raj	ECE
7.	Shruti Sikha	ECE
8.	Saurabh Kumar	ECE
9.	Nikhil Verma	IT
10.	Sakshat	IT
11.	Aryan Raj	BioTech
12.	Prashansa Agarwal	Che.Engg
13.	Yaagik Maurya	QEDS
14.	Harsh Ranjan	QEDS
15.	Aayushi Singh	QEDS
16.	Mahak Shah	CSE
17.	Parimita	CSE
18.	Rishika	CSE
19.	Ayush Kumar	CSE
20.	Jalaj Jain	CSE
21.	Priyanka Choudhary	CSE
22.	Raj Aryan	CSE
23.	Ritika Prasad	CSE
24.	Anudip Kumar	CSE
25.	Nidumolu Lakshmi Narayan Rao	CSE
26.	Udit Narayan	Mgt
27.	Akansha	Mgt
28.	Nandini Bhardwaj	Mgt

29.	Anjali Kumari	Mgt
30.	Pratyush Kumar Baghel	Mgt
31.	Neha Choudhary	Mgt
32.	Indrajit Das	Mgt
33.	Mugdha Shukla	Chemical Engineering department
34.	Kumar Varun	Mechanical Engineering
35.	Anshuman raj	Mechanical Engineering
36.	Vedant Gupta	EEE
37.	Kumar sarthak pratik	CSE
38.	Vir Pareek	Computer Science
39.	Aaditya Raj	CSE
40.	Purnendu	ECE
41.	Arnab Dutta	ECE
42.	Shubh Raj	CSE
43.	Aniket Kumar	ECE
44.	Ayush Kumar	ECE
45.	Aditya Kumar	Computer science
46.	Deb Jyoti Paul	AI/ML
47.	Satyam Prakash	CSE
48.	Achal Nilin	ECE
49.	ANJALI ANAND	AIML
50.	Nikita Kumari	CSE
51.	Ayush Kumar	CSE
52.	Ishan Aryan	CSE
53.	Kumar Ishan	ECE
54.	Rohan Kumar	CSE
55.	Amlan Jyoti	CSE
56.	Snigddha debnath	EEE
57.	Devashish Komiya	AIML
58.	Jagannath Hansda	CSE
59.	BIPLABRAJ MANDAL	CSE
60.	Arooshi Prasad	EEE
61.	Abhinav Kumar Choudhary	ECE
62.	Akanksha Kirti Lakra	AIML
63.	Ayushi kumari	ECE
64.	Anshu Aman	Computer science
65.	Aditya	CSE
66.	Anushka Shekhawat	Eee
67.	Aman Agrawal	AIML
68.	Subroto Mishra	ECE
69.	Abhigyan Srivastava	AIML
70.	Rishav Tiwari	ECE
71.	Kumar Gaurav	CSE
72.	Saksham Kumar Singh	ECE
73.	Kumar Sidharth	CSE
74.	Soneesh Kumar Srivastava	CSE
75.	Dibyadrasta Daxinray	CSE
76.	Nikhil Kumar	AIML
77.	Arya Chakraborty	AIML
78.	kunal kashyap	ECE
79.	Rahul kumar	ECE
80.	Sumit Shekhar	CSE
81.	RUDRAKSH SONI	ECE

82.	Randhir Kumar Raj	AIML
83.	Anshu Priya	EEE
84.	Ayush Raj	CSE
85.	Abhay Singh	ECE
86.	Mayank Nishant	CSE
87.	ARYAN RAJ	ECE
88.	Vibhu Jha	EEE
89.	Rakshit Jha	ECE
90.	Kumar Swapnil	EEE
91.	Chandrasekhar	CSE
92.	Anish Mehta	Computer science
93.	Sanchit Kumar	AIML
94.	Prashant Kumar	AIML
95.	Shrey Vijay	AI/ML
96.	sumit kumar	CSE
97.	Rahul Kumar	CSE
98.	Tanishka Paira	ECE
99.	Tanishq karmali	CSE
100.	Md Saquib Jawed	CSE
101.	Saksham Khalkho	CSE
102.	Harsh Raj	CSE
103.	Shaurya Aditya Verma	CSE
104.	Umang Srivastava	EEE
105.	Prithvi singh	Ece
106.	Daksh kweera	AIML
107.	ABHASH RICHARD EKKA	EEE
108.	Roshan Kumar Sahu	ECE
109.	Tej Pratap	CSE
110.	shakti oraon	ECE
111.	kabir talade	CSE
112.	Suryansh Dey	AIML
113.	Prashant	EEE
114.	Priyanshu Raj Mishra	ECE
115.	Rahul Bharti	ECE
116.	Yash Paliwal	Ece
117.	Utkarsh pal	CSE
118.	Prateek Sharma	CSE
119.	Daksh kweera	ECE
120.	Gaurav Kumar	AIML
121.	Md Altamash Rizwi	ECE
122.	Mit Vishwakarma	ECE
123.	Priyansh Saklecha	CSE
124.	Tatbang modi	CSE
125.	Abhay Tripathi	ECE
126.	Aayush Singh shekhawat	ECE
127.	Rashmi Agrawal	ECE
128.	Rihand Minz	CSE



Dr. Anand Pd Sinha  
Convenor, IIC-BIT Mesra

## SECTION D.

### Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.

1. In order to achieve this goal, the Entrepreneurship Development Cell (EDC) was established in 2007. Its main purpose is to provide early-stage start-ups and ideas from the college with a platform and appropriate channels to encourage their development. The Entrepreneurship and Development Cell (EDC) at Birla Institute of Technology, Mesra, operates under the esteemed guidance of the Dean of Research Innovation and Entrepreneurship. The EDC is dedicated to fostering an entrepreneurial spirit among students by cultivating a culture of innovation and creativity. Its primary aims are to inspire young minds to explore their entrepreneurial potential, providing them with the resources and support needed to turn their ideas into successful ventures. Additionally, the EDC focuses on increasing its market presence to establish itself as a leading brand in the entrepreneurial landscape. Through strategic initiatives, workshops, and networking opportunities, the EDC strives to build a strong, recognizable platform that encourages collaboration, showcases entrepreneurial achievements, and drives meaningful impact within the BIT community and beyond. 118 students, including 33 Executive members, are now enrolled in EDC BIT Mesra
2. A significant occasion worth highlighting is the main E-Summit event, the B-Plan/Innovation Contest. Here, IIC-BIT are conducted various angel and venture capitalists' seminar /workshop to provide young entrepreneurs with an opportunity to showcase their innovative concepts and hard work in exchange for money. It is one of the biggest B-Plan events in Eastern India. Different Mega Events (i.e. Workshop/Webinar/Seminar - "Entrepreneurship & Innovation as a Career Opportunity"/ Workshop on "Employment Generation Scheme to Start your Own Business Through Technological Intervention"/ 'Eco-Innovation: From ISM to Yale and Beyond' Drawing Lessons from Academic Excellence to Drive Sustainable Change / My Story- Motivational Session by SPIC MACAY/ "Research to Patentable Invention: Driving Innovation at various stages of Technology Readiness Level" etc. Innovation Competition Events like "Business Plan Competition"/ "BIT NISHAN" /"ENIGMA-A Technical Case Study Competition"/ "Internal Hackathon", "Sirf Excel 2.0"/ "Ancient Entrepreneur and Robotics Exhibition"/E-Summit/ Fin Street/National Technology Day Celebration/National Science Day Celebration/ Entrepreneurship Day/ World IPR Day ) were also conducted.
3. As part of the BIT-NISHAN (IIC-Annual Flag Ship Event) Innovation Contest, students submitted imaginative business ideas that were evaluated and after that they are getting upto Rs.1 Lakh for product development and startup registration.
4. The EDC hosts the annual Entrepreneurship-Summit, or E-Summit, to promote entrepreneurial thinking among college students and provide aspiring start-ups a platform. A variety of year-round events, including talks by well-known business figures and seminars on entrepreneurship, fundraising, and other pertinent topics, are planned in addition to the E-Summit.
5. Every year in October, BIT Mesra hosts "PANTHEON," one of the largest Technological Festivals in Eastern India, with the goal of inspiring students to pursue excellence and technical prowess and creative inventions. The festival hopes to start small and use technology to strengthen society in order to create a better future. It offers a space for invention, heartfelt celebration, and competition in technology.

## Section E

## Highlight Achievements (Narrative/Graphical/tabular representation)

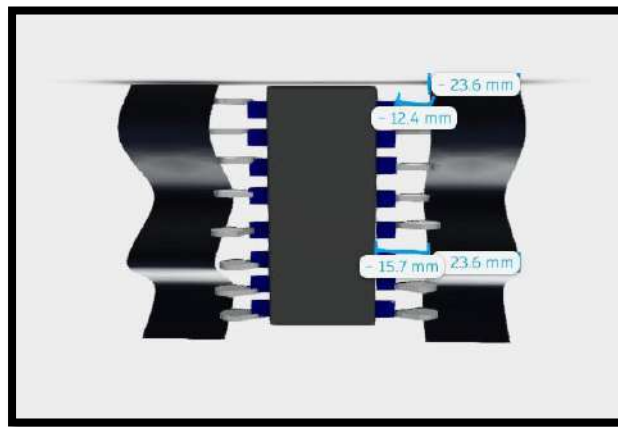
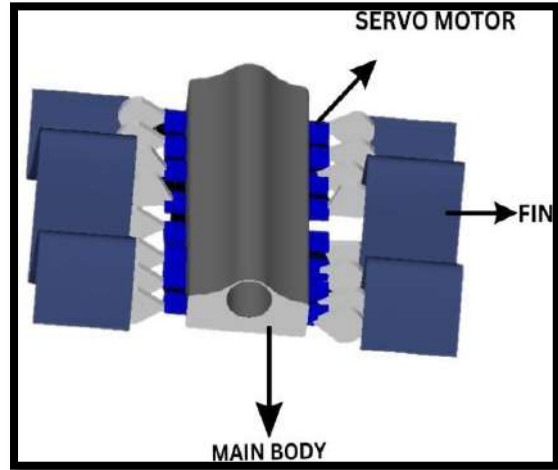
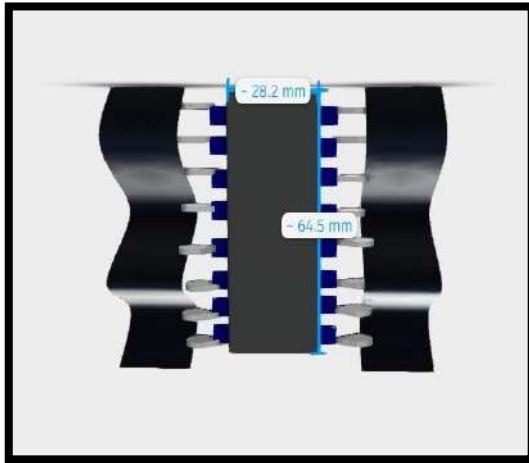
1. BIT has fostered innovation in every domain of the technology. BIT has made 25+ MOUs with Industry and institutions, funded 30+ technical clubs, organizes a regionally popular annual **TechFest – PANTHEON**, and sponsored & encouraged patents (03 granted, 60 published and 68 in filed status), and have 7 students Teams initial startup supporting in the month of March 2024 and every teams has supporting of Rs. 1 Lakhs from IIC-BIT Mesra for their product development and startup registration. Total 18.26 Sponsored Research Project Grant Received and 44 students participated under Immersive Summer Research Experience (ISRE), a funded collaboration with 5 US universities. BIT Mesra supporting Digital Innovation Lab @ CQEDS (~3.1Cr for 5 yrs) from Adrosonics Pvt. Ltd., Mumbai.
2. CIF facility at BIT has the latest and sophisticated instruments catering to research requirements of institute and outsiders in a subsidized manner.
3. Birla Institute of Technology, Mesra, organized a Technology Transfer Programme to license the two technologies of rapid drying and functional alteration equipment of agricultural and pharmaceutical ingredients of the Technology Licensing Agreement (TLA). Dr. Anupam Roy, IIC Member and faculty of Department of Chemical Engineering has developed two process machinery: 1. MSHCA-fluidized bed dryer and 2. MSHCAT tray dryer. The technologies are beneficial for rapidly drying Agricultural and food products like fruits and vegetables, nuts, spices and medicinal plants.

## SECTION F.

## Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum

1. **Dr. Binay Kumar**, Assistant Professor, Department of Production and Industrial Engineering, BIT Mesra Ranchi. and their Students Team members,
  1. Gaurav Kumar- Artificial Intelligence and Machine Learning, Department
  2. Tanwi Tejeswani- Computer Science Engineering, Department
  3. Ishan Singh - Artificial Intelligence and Machine Learning, Department
  4. Arnab Dutta – Electronics and Communication Engineering, Department
  5. Adarsh Kumar Singh -Electronics and Communication Engineering, Departmenthas developed their innovative product, the SEAFIN Submarine. He has been instrumental in guiding Team Pratyumnis to success in the 2nd Round of Robo-Fest 4.0 and awarded with **0.50 lakhs** for making POC (Proof of Concept) of ideation. His exceptional mentorship and strategic guidance were key factors in the timely completion of their innovative project, the SEAFIN Submarine. This advanced underwater vehicle utilizes fin propulsion, a novel approach that replaces traditional rotors with fin-based movement for enhanced efficiency and maneuverability. The team achieved this by using a Raspberry Pi and ESP32 to control OTV servos for precise fin movement. His unwavering dedication and commitment to academic excellence has significantly contributed to the team's achievements, reflecting his profound impact on the students' technical and professional development. His leadership continues to inspire and elevate the standards of innovation.

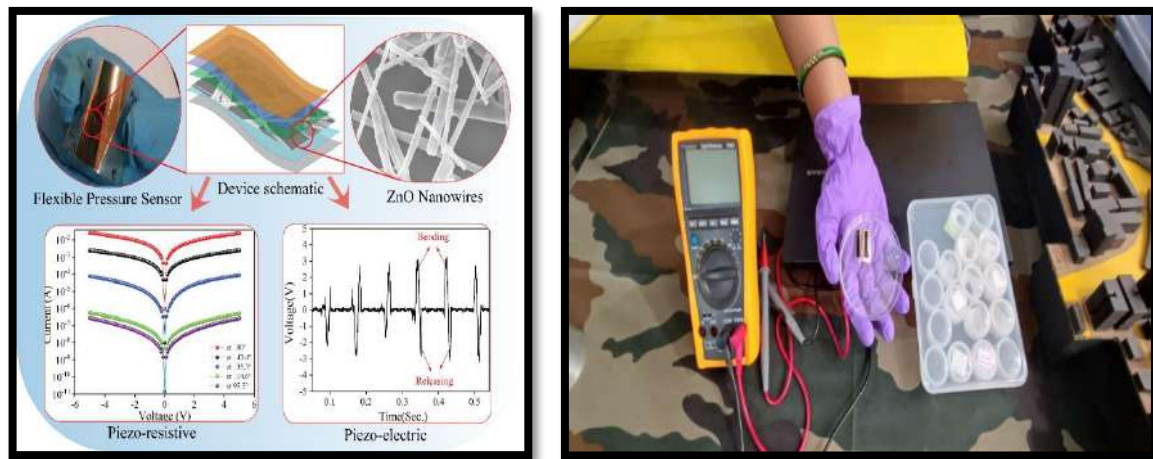




2. **Dr. Paritosh Mahata**, Assistant Professor, Department of Mechanical Engineering, BIT Mesra, and their teams has design and developed of a prototype of an All-Terrain Vehicle for carrying payload upto 650 kg. This ATV has already been designed for participating in the competition organized by BAJA SAEINDIA 2024. The ATV can pull easily the weight of 2 tons on the plain road surface. It can also follow the terrain of 45<sup>0</sup> inclination successfully.



1. **Dr. Dilip Kr. Singh**, Assistant Professor, Department of Physics and his PhD Scholar Manisha Kumari has developed “Flexible Nanogenerator Based on Zinc Oxide Nanowires”. Piezoelectric nanogenerators have sparked widespread interest due to their proficient technical possibilities, which include gathering mechanical energy from the living environment and developing self-powered nanoscale and small-scale electronics devices. Zinc Oxide (ZnO) was chosen as an active material for the nanogenerator because it is lead-free, semiconducting, biocompatible, low-cost, and has well-established development processes. This type of device can be used as source of power at remote locations. Soldiers can power their communication devices and small equipment’s using this device in adverse situations. The same device can also be used for sensing movements and health parameters of the soldiers in fields.



**Figure:- “Flexible Nanogenerator**

2. **Anurag Kumar Sinha**, BTech Students of Chemical Engineering Dept. has developed a **FIXED WING UAV** under the mentorship Dr. Priyank Kumar, Associate Professor, Dept. of Space Engineering & Rocketry Dept. BIT Mesra The micro class hand-launch UAV is engineered for extended endurance missions, prioritizing affordability without compromising performance. Designed for easy deployment, this lightweight UAV can be hand-launched, making it highly portable and versatile in various operational environments. It is equipped with an advanced autopilot system that enables fully autonomous flight, allowing it to conduct precise waypoint missions with minimal human intervention. The UAV's GPS integration ensures accurate navigation and positioning, while its telemetry system provides real-time data transmission, allowing operators to monitor the mission's progress and the UAV's status remotely. This UAV is ideal for applications requiring sustained flight over extended periods, such as environmental monitoring, border surveillance, or search and rescue operations. Its cost-effectiveness, combined with its advanced features, makes it an attractive solution for organizations seeking to expand their operational capabilities without incurring significant expenses. This UAV represents a perfect balance between functionality, endurance, and affordability.

## FIXED WING UAV



3. VISION AI developed by Navneet Kumar, BTech Students under the mentorship Dr. Manish Kumar Pandey, Assistant professor, Centre for Quantitative Economics and Data Science (CQEDS) Dept. BIT Mesra. The VISION AI Drone Platform is a next-generation solution designed to automate complex tasks with enhanced precision and reliability. Key innovations include:
  1. AI-Powered Visual Detection Models: The platform uses state-of-the-art AI models, trained on large datasets, to identify and classify objects with high accuracy.
  2. Autonomous Flight and Path Planning: Leveraging AI, the drones autonomously navigate through pre-defined areas, ensuring complete coverage while optimizing for speed and battery life.
  3. Cloud-Based Data Management: Real-time data gathered by the drones is uploaded to the cloud, enabling decision-makers to access detailed reports, images, and geolocation data remotely and instantly.



**SECTION H.**

**Highlight selected start-ups established by students/faculties with mention of founder/co-founder name**

The following recent startups initiated by Students who get the winning prizes of **Rs. 1 Lakh** from the Innovation contest i.e. BIT NISAHN-23 supporting by IIC -BIT Mesra.

**Qualified Final Teams for BIT NISHAN-23 with Mentors Name**

<b>Winner wise list</b>	<b>Name</b>	<b>Campus</b>	<b>Startup Name</b>	<b>Mentors Name</b>	<b>Prize Money</b>
1	Anurag Kumar Sinha	BIT Mesra	Yantra	Priyank Kumar Assistant Professor HOD, Space Engineering and Rocketry Dept.	1 Lakh
2	Ayush Kumar	BIT Mesra	Menta Mind	Dr. Anand Pd. Sinha Assistant Professor Department of Management	1 Lakh
3	Yash Vardhan	BIT Mesra	True Docs	Dr Abhijit Mustafi Associate Professor Department of Computer Science	1 Lakh
4	Aman Choudhary	BIT Mesra	Sweet Scapes	Mr. Vishal H Shah Assistant Professor Department of Electronics and Communication Engineering	1 Lakh
5	Manish Sharma	BIT Polytechnic	Smart Walking Stick	Dr. Anubha Singh Assistant Professor University Polytechnic	1 Lakh
6	Pratyush Prakash Upadhyay	BIT Mesra	Edvisorr	Dr. Manish Kr. Pandey, Assistant Professor CQEDS	1 Lakh
7	Kingshuk Banerjee	BIT Mesra	Anonymous Squirrels Business Solutions Pvt Ltd	Dr. Supriyo Roy Associate Professor Department of Management	1 Lakh
<b>Consolation Prizes</b>					
8	Anshika arya	BIT Deoghar	FRESH & PRESS	Mr. Sunit Prasad Dept. of Humanities and Management, Deoghar	Rs, 50,000/-
9	Ishika Pathak	BIT Polytechnic	Smart Adult Emotional care and recreation center	Dr. Sandhya Rani Assistant Professor University Polytechnic	Rs 50,000/-

## Final Approval & Selected Teams in BIT NISHAN-23

Received

No. 54209

20 DEC 2023

V.C. Office BIT, Mesra

Office of Vice-Chancellor, Innovation,  
Entrepreneurship (DIZ)

Ref. No. 2577

Date of Receipt: 20/12/23

Date of Issue: 20.12.2023

To  
The Vice Chancellor  
Birla Institute of Technology, Mesra  
Ranchi, Jharkhand-835215

Through : DEAN, RIE

**Subject:** Permission for Fund Distribution of BIT-NISHAN winner

Respected Sir,

Institution's Innovation Council (IIC-BIT) in association with Entrepreneurship Development Cell (EDC) and Finance Club (FC) are organized an Innovation Contest named as **BIT-NISHAN-23** on 15th Dec 2023.

The event was executed successfully. In prequalified BIT NISHAN-23, we have conducted Business Plan Competition on 14<sup>th</sup> Oct 23 which were total 35 teams from BIT Mesra and their off campuses are registered and presented their business plan ideas on 14<sup>th</sup> Oct 23 offline and after that 15 teams have qualified for the final round and they have presented show their prototype product on 15<sup>th</sup> Dec 2023. Out of 15 teams the total 7 teams have qualified for the final round of BIT NISHAN-23 and two teams got the consolation prize of Rs.50,000/-.

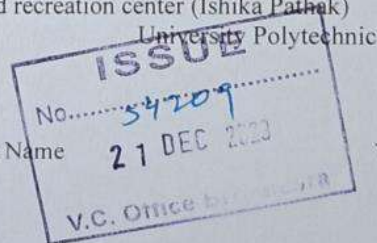
I request you to kindly grant us the permission to disburse the prize money of **Rs.1 Lakh** to all the 7 winning Teams and two teams' consolation prize for Rs.50,000/- through faculty mentors' monetary support for infrastructure backing/startup registration and product implementation.

**The top 7 startup teams have mentioned below.**

- |   |                            |
|---|----------------------------|
| 1. Yantra (Anurag Kr Sinha)- BIT Mesra  | - 1 <sup>st</sup> position |
| 2. Menta Mind ( Ayush Kumar)-BIT Mesra  | - 2 <sup>nd</sup> position |
| 3. True Docs ( Yash Vardhan)-BIT Mesra  | - 3 <sup>rd</sup> position |
| 4. Sweet Scapes ( Aman Chudhary)- BIT Mesra   | - 4 <sup>th</sup> position |
| 5. Smart Walking Stick ( Manish Sharma)- University Polytechnic BIT Mesra                     | - 5 <sup>th</sup> position |
| 6. Edvisorr ( Pratyush Prakash Upadhyay)  | - 6 <sup>th</sup> position |
| 7. Anonymous Squirrels (Kingshuk Banerjee) -BIT Mesra   | - 7 <sup>th</sup> position |
| 8. FRESH & PRESS (Anshika arya) - BIT Deoghar   | Consolation Prize          |
| 9. Smart Adult Emotional care and recreation center (Ishika Pathak)<br>University Polytechnic | Consolation Prize          |

Thanking You,

Encl: Details of the team with Mentors Name



Yours faithfully

20/12/23

Dr. Anand Pd. Sinha  
Co-Convenor, IIC & Faculty Advisor-FC

Forwarded to VC

Sir, you may kindly approve  
Fund is available for BIT-NISHAN-23

Approved  
Indranil  
20.12.23

The following list includes other startups that IIC-BIT provides financial support for product development and awareness-raising initiatives. (2023-24).

1. Floxus: An Ed-Tech Startup, Founded by Utkarsh Mishra, Hritik Shubham and Nagendra Kumar.
2. Psyber Duck: Software based Startup founded by Vibhu Bhatia, Tanay Goel and Arpit. (Web Services, supported 25+ companies in their tech end.)
3. Infinity Accord Private Limited – Founder Members- Ayush Kumar (Working in Decentralized Finance, AI Blockchain Confluence, Tokenization using Blockchain)
4. A.K. SP Solution Pvt Ltd.- Founder Members - Pratyush & Ayush (Mech Dept.), Sarang Gupta (Comp Science Department) Arryan Kumar (ECE Department) – Technical consultant and solution.

## SECTION I.

### List of any breakthrough Innovations / Technology Developed at the institute (2-3 technology with 2-3 lines about technology and innovation)

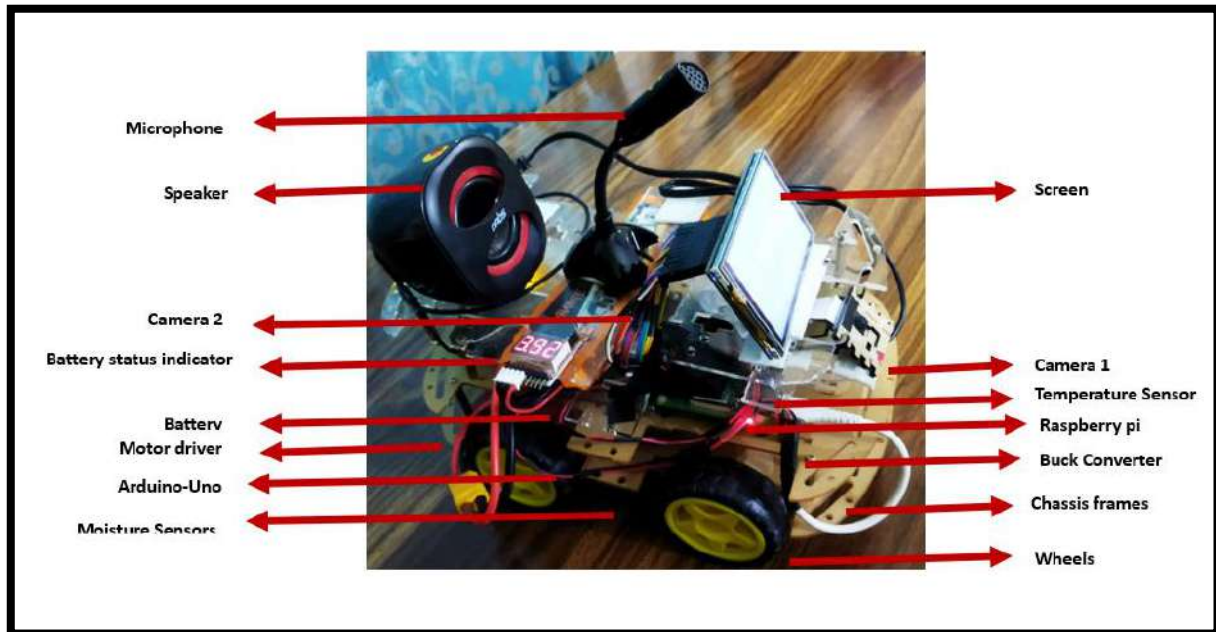
#### About Technology /Innovation

The activities that support the entrepreneurship development course for creation, and design of new products, services, or methods, as well as those that enhance already-existing products, are categorized as technological innovation. Additionally, technological innovation gives rise to new technological knowledge that may improve business models. BIT has promoted the culture of innovation, incubation, and entrepreneurship (IIE). Small Industrial Research and Development Organization (SIRDO), Small Industrial Research, Training and Development Organization (SIRTDO), and Science and Technology Entrepreneurship Park (STEP) were the organizations that were conceptualized and created to promote entrepreneurship among students. They were the first of their kind in the nation. With the passage of time, BIT has adapted to the difficulties and has taken several actions to increase the significance of IIE in this regard, an appropriate framework is envisioned through the Innovation, Incubation & Entrepreneurship (IIE) programme. The Entrepreneurship Development Cell at BIT Mesra aims to promote an entrepreneurial culture among students by bridging the gap between innovation and opportunity.

Some of the technology /innovation developed by students/Faculty of BIT Mesra are listed below.

1. **Dr Gajendra Kant Mishra**, Assistant Professor, Electronic and Communication Engineering has made prototype model which is *AI Based Interactive Toy for Child Surveillance*. It is a smart child surveillance toy specially designed to provide security solution for infants/ very small children who cannot take care of themselves and who's both the parents are working professionals. The modern nuclear family where husband and wife both are working have no other option to leave their child alone or with their baby seater, some send their kids to creche. All these parents are always worried about security of their kids and want to have an eye over their kids. To support such parents the proposed toy is a very good option.

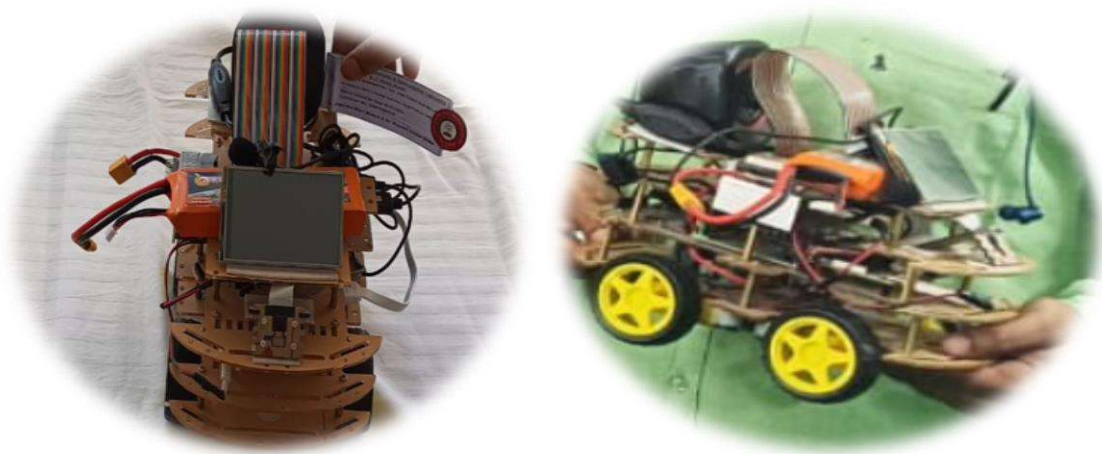
## AI Based Interactive Toy for Child Surveillance



### Features Highlights:

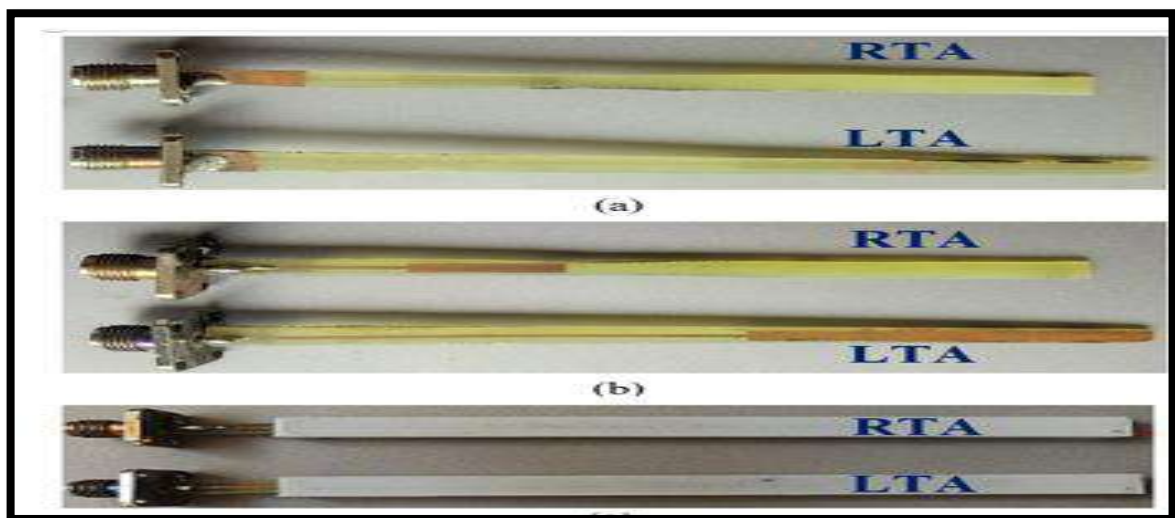
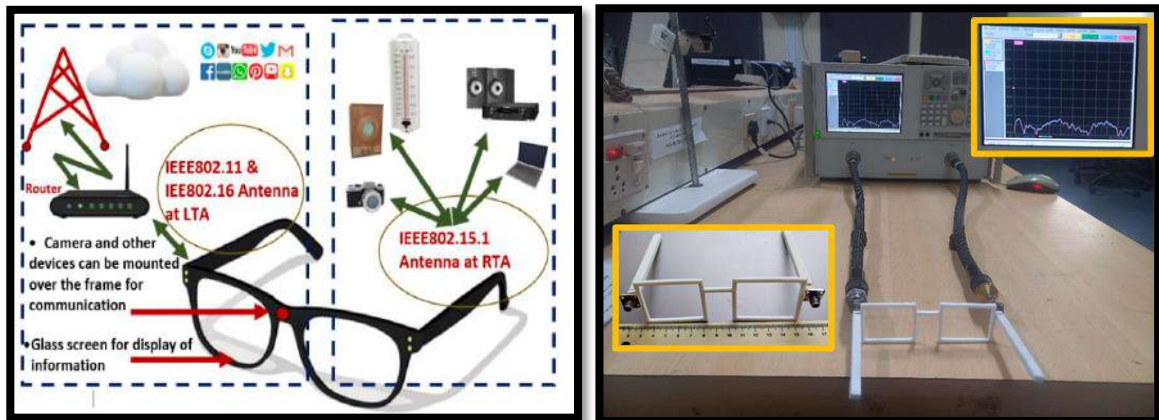
**Interactive:** It repeats the sound it hears, and also play some prerecorded songs/rhymes etc. This feature makes it amusing and attractive or rather the favorite toy for the kid. The child always wants to be with this toy and treat it as its best friend, it is very favorable condition for surveillance purpose.

**Child following feature:** The camera associated with the system take continuous photos of the child to know his position and follow it. It maintains a particular distance from the kid while following, so that it does not hit the child suddenly. It can easily identify and decide the movement of child and accordingly take left or right turn at correct angle or go straight according to the movement of the child.



**Live Video streaming:** The system can send continuous real time video over the internet (Live streaming) so that parents even at far distance can see the child and it's surrounding anywhere and anytime. The High-speed internet connectivity is a must to utilize this feature.

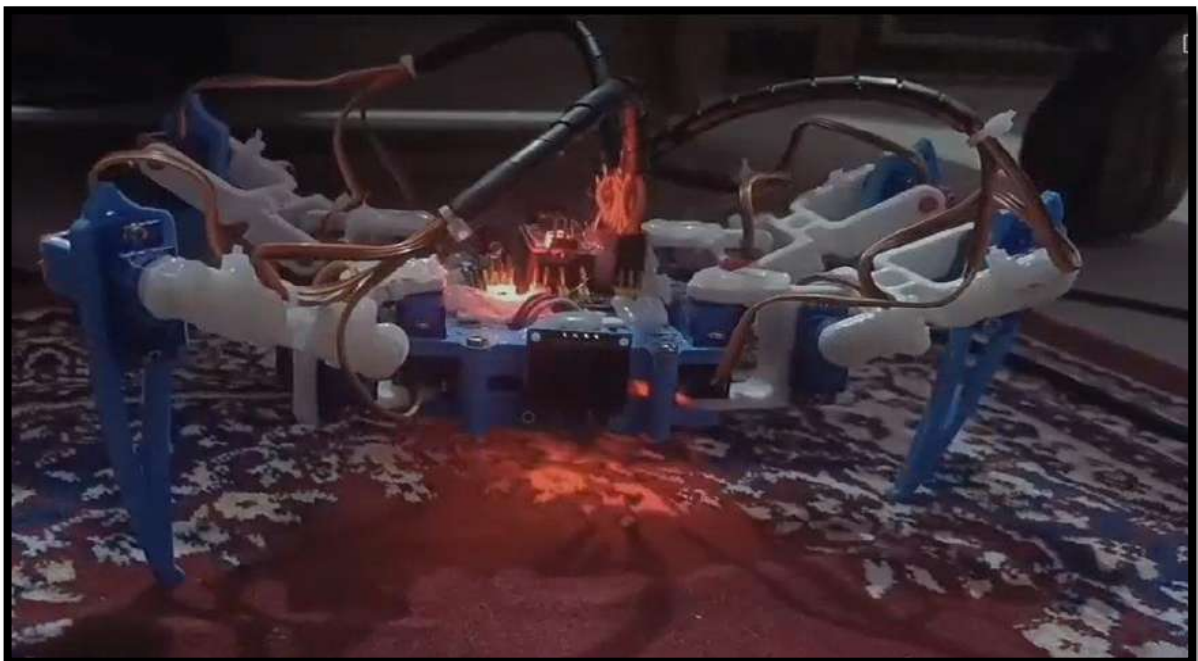
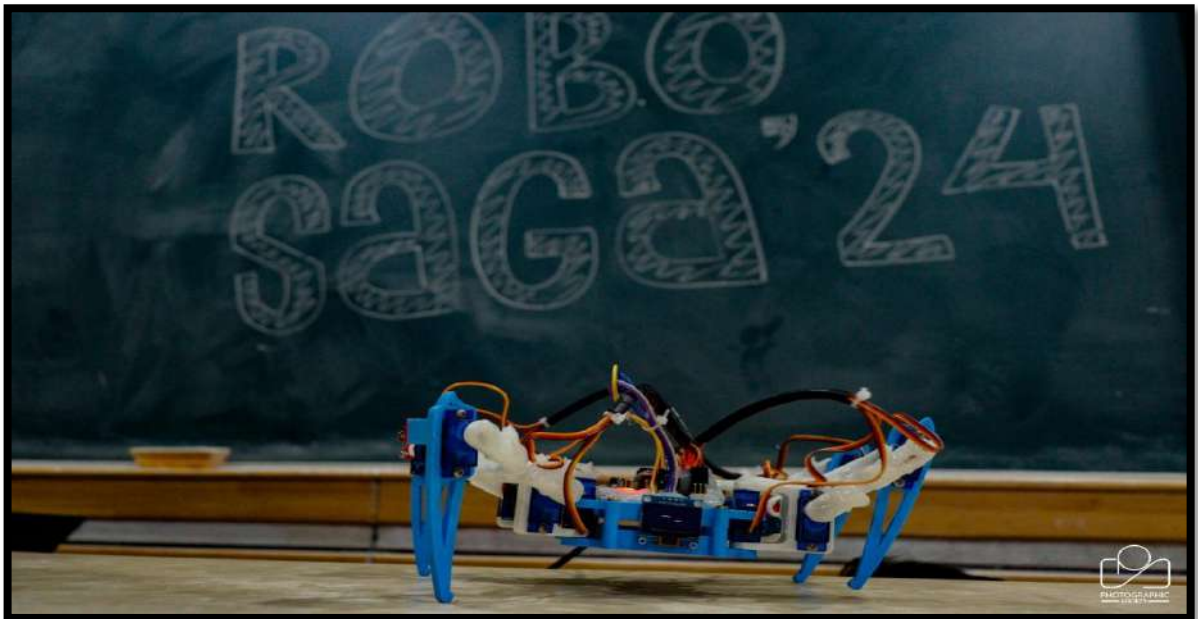
2. **Dr Gajendra Kant Mishra**, Assistant Professor, Electronic and Communication Engineering has developed prototype model i.e. “**Spectacle Antenna**”



The spectacle antenna is a complete antenna solution for Indoor IoT applications. To satisfy the internet based IoT application requirement, the LTA is capable to establish connection with nearby router using Wi-Fi (2.4 GHz/5.1GHz) or Wi-Max link. Whereas to communicate with nearby IoT devices directly RTA can establish Bluetooth connection. After the required signal processing with suitable supporting electronic arrangement over spectacle, the information will appear over the spectacle glass. Apart from antenna, camera and other supportive electronics are essential part of smart spectacles system, which can be arranged over the frame of the antenna. With dielectric cover both the temples are seamlessly identical and balanced, so that the user does not feel any discomfort. The design and performance of the proposed spectacle antenna system is quite significant. The overall antenna system is a complete indoor coverage solution for IoT applications.



- Saikat Dey**, a student of Mathematics and Computing (Roll no. IMH/10051/22) at BIT Mesra, Ranchi, has developed a quadpod, a four-legged robot with 12 degrees of freedom. This robot can move in various directions, dance, greet, and shake hands. It is controlled by an Arduino Nano and equipped with 12 servos, with the option to increase payload capacity using high-torque servos. For autonomous operation, the quadpod uses an RPLidar sensor and SLAM (Simultaneous Localization and Mapping) algorithm for navigation and environmental mapping. The project coordinator & Mentor is Dr. Binay Kuma, Assistant Professor, Department of Production and Industrial Engineering. The robot has potential applications in rescue missions and military operations as an all-terrain vehicle.



4. **Parth Surydhwaj**, Ph.D-Research Scholar (Digital Innovation Lab),Center of Quantitative Economics and Data Science, Birla Institute of Technology, Mesra under the guidance of Dr. Manish Kumar Pandey, Assistant professor, has developed software i.e. S.E.N.T.I.N.E.L (Strategic Evaluation and National Threat Intelligence for News and Security Indicators). This AI based solution provides news and social media sentiment summarization, developed for the purpose to generate real-time insightful summaries of hot-social topics across the media. Henceforth, helps in generating alerts for the army personnel on issues concerning over socio and geo-political conflicts, national security, boarder security issues, cross- border trades and more. This model works on LLM architecture, which leverages the RAG framework on the scrapped web data.



5. **Bhola Mahto**, Ph.D Scholar under the guidance of Dr. Manish Kumar Pandey, Assistant professor, has developed the Software- Real Time Spatial Data (Satellite & Drone) Monitoring through Web-Gis Approach. The increasing demand for real-time spatial data analysis has driven the evolution of Geographic Information Systems (GIS) into more dynamic and interactive platforms. Traditional GIS applications, often limited to desktop environments, have transformed into web-based systems that offer greater accessibility, flexibility, and scalability. A Web-GIS platform allows users to interact with spatial data in real-time, facilitating timely decision-making processes across various sectors such as environmental monitoring, urban planning, and disaster management. The development of such systems is significantly supported by open-source technologies, which provide cost-effective, scalable, and customizable solutions. PostgreSQL, a powerful open-source relational database system, serves as the backbone of these platforms by efficiently managing large volumes of spatial data. Enhanced with Post GIS, PostgreSQL extends its capabilities to include advanced spatial queries and geographic object handling, making it a robust choice for spatial database management. Geo Server, another critical component, acts as the map server responsible for delivering geographic data to web clients. It supports Web Map Service (WMS) and Web Feature Service (WFS), enabling the dynamic rendering and distribution of spatial data over the

web. This is particularly important for applications requiring real-time data visualization, as Geo Server can efficiently handle and deliver large datasets to end-users. On the client side, Open Layers and Leaflet are widely used for creating interactive web maps. These libraries provide the tools necessary to build responsive and user-friendly interfaces that allow users to visualize, analyze, and interact with spatial data seamlessly. Open Layers, with its extensive functionality, is suitable for complex mapping applications, while Leaflet is known for its simplicity and ease of use, making it ideal for lightweight applications.



## SECTION J.

### Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting specially for the schemes or programs

- The Smart India Hackathon is a national effort that gives students a forum to address some of the most serious issues we encounter on a daily basis, fostering a culture of product innovation and a problem-solving attitude. It's an open forum for the entrepreneurs and innovators of future to begin working towards a smarter India.
- The Hackathon Award-23 shortlisted Team under the **Internal Hackathon for KAVACH (Cyber Security Hackathon) for 2023.**

SL No.	Team Name	PS No	Rank
1	CS Geeks	KVH013	1
2	Mahesh	KVH009	2
3	Nazar Raksha Kavach	KVH001	3
4	Nari Shakti	KVH001	4
5	Variables	KVH003	5
6	Project Argus	KVH009	6
7	Data Detectives	KVH009	7
8	Varutr	KVH001	8

# IIC-Activities

## Sep' 2023 to Aug' 2024

SI No.	Description	Total
1	Total MIC Driven Activity	06
2	Total Celebration Activity	15
3	Total Self Driven Activity	19
4	Total IIC Calendar Activity	28
5	<b>Total</b>	<b>68</b>

SI No.	Name of The Event	Date	Evidence
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### Event List

#### Quarter 1 (1st September 2023- 30th November-2023)

1	<p style="color: red; font-weight: bold;">Chandrayaan-3 Mahotsav</p> <p style="color: red; font-weight: bold;">Event organized</p> <p>Institution's Innovation Council BIT Mesra Ranchi in collaboration with Rocketry and Space Engineering Department BIT Mesra Ranchi organized the <b>Chandrayan-3 Mahotsav</b> in G.P. Birla Auditorium of BIT Mesra, Ranchi, Jharkhand.</p>	<p>4<sup>th</sup>- 8<sup>th</sup> Sep 2023</p>	
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2	<p style="color: red; font-weight: bold;">Internal Hackathon for Smart India Hackathon, BIT Mesra, Ranchi-23</p> <p>Total 32 teams registered for the event.</p> <p>Each team was given a 15-20 mins for presentation and then evaluated (Max Marks-50) based on the presentation skills (10), Tools and Methodology (10), Novelty (20) and Implementation (10).</p>	<p>28<sup>th</sup> -29<sup>th</sup> Sep 2023</p>	
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3	<p style="text-align: center;"><b>Expert Talk on “Research Areas of Polymer in Defense Sector”</b></p> <p style="text-align: center;">by <b>Dr. Debdatta Ratna,</b> Scientist GNMRL, DRDO organized by Department of Chemical Engineering, BIT Mesra in collaboration with Institution's Innovation Council (IIC-BIT)</p>	9 <sup>th</sup> Oct 2023	
4	<p style="text-align: center;"><b>“Business Plan Competition Pre-Qualifier event of BIT NISHAN”</b></p> <p style="text-align: center;">Institution's Innovation Council (IIC-BIT) in association with Finance Club (FC) &amp; Entrepreneurship Development Cell (EDC) are organized a “Business Plan Competition”-23</p>	14 <sup>th</sup> Oct 2023	
5	<p style="text-align: center;"><b>Celebration of Institution's Innovation Day</b></p> <p style="text-align: center;">(Dr APJ Abdul Kalam Birth Anniversary) 15th October 2023</p>	15 <sup>th</sup> Oct 2023	

<p>6</p>	<p><b>Amrit Kaal Vimarsh Vikasit Bharat @2047</b></p> <p>Expert Talk on "Innovation and Next Practices in Agritech." by <b>Dr. Rahul Mirchandani</b> CMD, Aries Agro Limited, Mumbai.</p>	<p>30<sup>th</sup> Oct, 2023</p>	
<p>7</p>	<p><b>Exhibition Cum Workshop on “Employment Generation Scheme to Start your Own Business Through Technological Intervention”</b> Chief Guest- <b>Mr. Rajiv Malhotra,</b> Assistant Director, KVIS</p>	<p>30<sup>th</sup> Oct. 2023</p>	
<p>8</p>	<p><b>Workshop on “Entrepreneurship &amp; Innovation as a Career Opportunity”</b> by <b>Mr. Amitesh Anand</b> CEO, Flocard-366 Pi Technologies.</p>	<p>2<sup>nd</sup> Nov 2023</p>	

9	<p align="center"><b>Celebration of “National Entrepreneurship Day”</b></p> <p align="center">Seminar on Sustainable Entrepreneurship: Nurturing Innovation for a Better Future” by <b>Mr. Vishal H. Shah</b> Associate Dean, AIR &amp; EDC Coordinator</p>	9th Nov 2023	
10	<p align="center"><b>IIC-BIT Mesra Organized Field Visit</b></p> <p align="center">to Data Centre, Jharkhand Police, Police Headquarter, Ranchi</p>	17 <sup>th</sup> Nov 2023	
11	<p align="center"><b>'Eco-Innovation: From ISM to Yale and Beyond'</b></p> <p align="center"><i>Drawing Lessons from Academic Excellence to Drive Sustainable Change</i></p> <p align="center">by <b>Mr. Bipul Mayank,</b> Senior Consultant Deloitte</p>	23 <sup>rd</sup> Nov 2023	

12	<p><b>Seminar on My Story- Motivational Session by SPIC MACAY Founder</b> by <b>Prof. Kiran Seth</b> Professor Emeritus, IIT Delhi &amp; Founder SPIC MACAY</p>	29 <sup>th</sup> Nov 2023	 <p><b>Birla Institute of Technology Mesra Ranchi</b> INSTITUTION'S INNOVATION COUNCIL SPIC MACAY</p> <p><i>My Story - Motivational Session by "SPIC MACAY" founder</i></p> <p><b>29th Nov 2023</b> Time : 3:30 PM onwards</p> <p><b>Prof. Kiran Seth</b> Professor Emeritus Indian Institute of Technology, Delhi &amp; Founder, SPIC MACAY</p> <p><b>CAT Hall- BIT Mesra Ranchi</b></p>
<b>Quarter 2 (1st December 2023 - 28th February 2024)</b>			
13	<p><b>Celebration of National Pollution Control Day'23</b> Institution's Innovation Council, BIT Mesra in collaboration with Horizon Honda, organized Two-Wheeler Pollution Control Certification Camp on occasion of National Pollution Day Control held on 2<sup>nd</sup> December 2023 in BIT Mesra Campus.</p>	2 <sup>nd</sup> Dec 2023	 <p>BLUE SKIES FOR OUR CHILDREN</p> <p><b>Birla Institute of Technology</b> INSTITUTION'S INNOVATION COUNCIL</p> <p><b>NATIONAL POLLUTION CONTROL DAY</b> 2 Dec 2023 Time-10am</p> <p>Say Yes To Regular Pollution Checks Say Yes To Regular Service Reduce our waste</p> <p><b>Horizon Honda</b></p>
14	<p><b>Expert Talk on Geospatial Instruments and Applications Achieving Problem – Solution Fit and Product – Market Fit</b> by <b>Mr. Peter Pallos</b> Regional Manager, Teledyne Optech, Canada</p>	6 <sup>th</sup> Dec 2023	 <p><b>Birla Institute of Technology Mesra, Ranchi</b> INSTITUTION'S INNOVATION COUNCIL</p> <p><b>Expert Talk on GEOSPATIAL INSTRUMENTS AND APPLICATIONS</b> <i>Achieving Problem-Solution Fit and Product-Market Fit</i></p> <p><b>6th Dec 2023</b> Time : 3:00 PM</p> <p><b>Mr. Peter Pallos</b> Regional Manager Teledyne Optech, Canada</p> <p><b>Venue: Seminar Hall -1 R&amp; D Building, BIT Mesra Ranchi</b></p>



15	<p style="text-align: center;"><b>Workshop On “Research to Patentable Invention: Driving Innovation at various stages of Technology Readiness Level”</b></p> <p style="text-align: center;">by <b>Mr. Vedant Pujari</b> Accures Legal, Founding Partner &amp; Mr. Shashank Raj, Patent &amp; Design, Accures Legal</p>	11 <sup>th</sup> Dec 2023	
16	<p style="text-align: center;"><b>MIC Driven Activities Viksit Bharat@2047 Utsav</b></p> <p>Institution's Innovation Council, BIT Mesra (IIC-BIT), organized launching of <b>Viksit Bharat@2047 Utsav</b> on 11th Dec. 2023 at CAT Hall BIT Mesra Ranchi. Honorable Prime Minister Shri Narendra Modi ji had launched Viksit Bharat@2047 Utsav: Voice of Youth' through video conferencing.</p>	11 <sup>th</sup> Dec. 2023	
17	<p style="text-align: center;"><b>BIT NISHAN -23 Innovation Contest</b></p> <p>Institution's Innovation Council (IIC-BIT) in association with Entrepreneurship Development Cell (EDC) and Finance Club (FC) are organized an Innovation Contest named as <b>BIT-NISHAN-23</b>. Total 7 Teams shortlisted out of 32 Teams. Prize Money Supporting <b>(1 Lakhs Rupees each team)</b></p>	15 <sup>th</sup> Dec 2023	


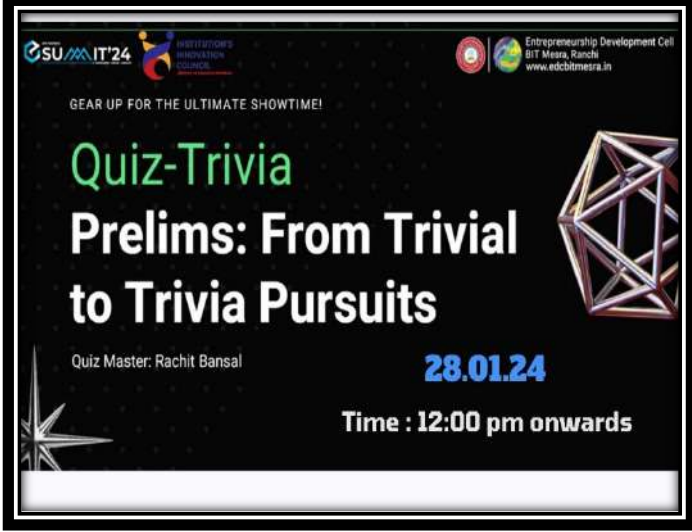

18	<p style="text-align: center;"><b>Celebration of National Energy Conservation Day (India)</b></p> <p>Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of “National Energy Conservation Day (India)” on 14<sup>th</sup> December 2023 from 10:00 am onwards in CAT Hall, Birla Institute of Technology, Mesra, Ranchi.</p>	15 <sup>th</sup> Dec 2023	
19	<p style="text-align: center;"><b>“Inter School Chemistry Quiz Contest-2023</b></p> <p>Department of Chemistry, BIT Mesra in collaboration with Institution's Innovation Council (IIC-BIT) &amp; STEMMED EDVOCATIONS OPC PVT Ltd, Bhubaneswar has organized One-day “Inter School Chemistry Quiz Contest-2023,”</p>	16 <sup>th</sup> Dec 2023	
20	<p style="text-align: center;"><b>MIC Driven Activities Institution's Innovation Council Regional Meet</b></p> <p>Ministry of Education Innovation Cell &amp; All India Council of Technical Education, New Delhi has organized an <b>Institution's Innovation Council “Regional Meet”</b> at Sister Nivedita University Kolkata on 12<sup>th</sup> Jan 2024.</p>	12 <sup>th</sup> Jan 2024	

21	<p style="text-align: center;"><b>Celebration of National Youth Day'24</b></p> <p>Institution's Innovation Council, BIT Mesra (IIC-BIT) in collaboration with Value Education Cell &amp; Vivekanand Study Circle organized a celebration of "National Youth Day" on 12th Jan 2024. from 10:40 am onwards in CAT Hall, Birla Institute of Technology, Mesra, Ranchi.</p>	12 <sup>th</sup> Jan 2024	
22	<p style="text-align: center;"><b>Seminar on Investor Startups Trader Stocks Money</b></p> <p style="text-align: center;">by <b>Mr. ABHISHEK KAR</b> Entrepreneur Business Strategist &amp; Renowned Youtuber, New Delhi</p>	20 <sup>th</sup> Jan 2024	
23	<p style="text-align: center;"><b>ENIGMA'24</b></p> <p>A National Level Technical Case Study Competition The Finance Club in collaboration with the Institution's Innovation Council BIT Mesra conducted "ENIGMA"-24 on 20th Jan 2024 at R&amp;D Building, Seminar Hall-1 BIT Mesra</p>	20 <sup>th</sup> Jan 2024	

<p>24</p>	<p><b>Workshop on Intro to Web 3 Smart Contract Deployment Entrepreneurship Skill, Attitude and Behaviors Development</b> by <b>Mr. Shahnawaz Khan</b> Block Chain, NFT's Developer</p>	<p>21st Jan 2024</p>	
<p>25</p>	<p><b>Workshop on “Designing Indigenous Material and technologies for Self-Reliant India”</b> Design Thinking, Critical Thinking and Innovation Design by <b>Dr. Bipin Kumar Gupta</b> Principal Scientist, New Delhi.</p>	<p>21<sup>st</sup> Jan 2024</p>	
<p>26</p>	<p><b>Celebration of National Startup Day</b> <b>Ancient Entrepreneur organized on the occasion of “National Startup Day”</b> “National Startup Day” which was scheduled on <b>16.01.2024</b>. Due to some unavoidable reason, this event organized the Flagship event of Entrepreneurship Development Cell (EDC), i.e., “E-Summit” under the DIRE office R&amp;D Cell on 21<sup>st</sup> Jan 2024.</p>	<p>21<sup>st</sup> Jan 2024</p>	

<p>27</p>	<p><b>Expert Talk on Director's cut Unveiling the Entrepreneurial Journey</b></p> <p>by <b>Mr. Akshay Maker,</b> Founder &amp; CEO, Climatenza Solar &amp; NetOlink</p> <p>Organized by Entrepreneurship Development Cell in Collaboration with Institution Innovation Council BIT Mesra</p>	<p>27<sup>th</sup> Jan 2024</p>	
<p>28</p>	<p><b>Expert Talk on Entrepreneurial Elevation: Dialogues with Industry Pioneers</b></p> <p>by <b>Mr. Pawan Kumar Rai</b> Co-Founder @Ditto Insurance</p> <p>Organized by Entrepreneurship Development Cell in Collaboration with Institution Innovation Council BIT Mesra</p>	<p>27<sup>th</sup> Jan 2024</p>	
<p>29</p>	<p><b>Startup Mela Startup Pitching</b></p> <p>This competition was a dynamic event centered around startup pitching, providing a vibrant platform for aspiring entrepreneurs to showcase their innovative ideas and products.</p>	<p>27<sup>th</sup> Jan 2024</p>	

30	<p><b>Battle Grounds Mobile India (BGMI)</b>  <b>Innovative Tech Game</b>  . BGMI was conducted to test the participants' knowledge in the world of esports gaming.</p>	27 <sup>th</sup> Jan 2024	
31	<p><b>Reverse Pitching</b>  Pitching as the company's CEO and creatively making its future goals</p> <p>The competition's two-round format strikes an engaging balance between testing participants' foundational business knowledge and pushing their creative boundaries.</p>	27 <sup>th</sup> Jan 2024	
32	<p><b>Expert Talk</b>  <b>On Innovator Insight: Fireside Chats</b>  by  <b>Mr. Vatsal Kanakiya</b>  CEO at 100x.Vc</p> <p>Organized by Entrepreneurship Development Cell in Collaboration with Institution Innovation Council BIT Mesra</p>	28 <sup>th</sup> Jan 2024	

<p>33</p>	<p><b>Trailblazing Talk: Executive Odyssey Unleashed</b></p> <p><b>By</b></p> <p><b>Mr. Ravi Ranjan</b></p> <p>Ex Curator Shark Tank India &amp; Founder Velocity<sup>1</sup>II 2xTedx</p>	<p>28<sup>th</sup> Jan 2024</p>	
<p>34</p>	<p><b>Quiz Trivia Innovation Tech Competition – “Business Quiz”</b></p> <p>This competition was designed to test participants’ knowledge in the world of startups, businesses, and Technology. Quiz-Trivia was a dynamic competition that challenged attendees with a variety of questions on entrepreneurship, innovation, and business acumen.</p>	<p>28<sup>th</sup> Jan 2024</p>	
<p>35</p>	<p><b>The National Science Day Celebration’24</b></p> <p>Celebration Theme <i>"Indigenous Technologies for Viksit Bharat"</i>.</p> <p><b>Chief Guest</b> <b>Dr. Sunil Sinha</b> Professor Director Civil and Environmental Engineering, Virginia Tech. USA</p>	<p>28<sup>th</sup> Feb 2024</p>	

Quarter 3 (1st March 2024 - 31st May 2024)		
<p>36</p>	<p><b>लोक शिक्षण कार्यक्रम</b>            People's Education Programme            "For creating awareness among the targeted beneficiaries &amp; employment generation scheme for starting your own business"  <b>Chief Guest</b>  <b>Mr. Rajiv Kr. Malhotra</b>            Assistant Director,            KVIC Ranchi</p>	<p>4th &amp; 5th March 2024</p> 
<p>37</p>	<p><b>International Women's Day Celebration</b>            Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of Women's Day on 8<sup>th</sup> March 2024 from 3:00pm to 7.30 pm in CAT Hall, Birla Institute of Technology, Mesra, Ranchi.</p>	<p>8<sup>th</sup> March 2024</p> 
<p>38</p>	<p><b>Inauguration of SEMICONDUCTOR MANUFACTURING FACILITY- Viksit Bharat @2047</b>            With the support of AICTE, Institution's Innovation Council BIT Mesra, Ranchi has organized a Live Streaming of Inauguration of Semiconductor Manufacturing Facility by Honorable Prime Minister of India, <b>Sri Narendra Modi</b> on 13th March from 9.30 am to 11.30am.</p>	<p>13<sup>th</sup> March 2024</p> 



<p>39</p>	<p><b>ANVESHAN'24 Exhibition Cum Technical Fest</b> Institution's Innovation Council (IIC-BIT) Birla Institute of Technology, Mesra, Ranchi in collaboration with University Polytechnic organized exhibition cum technical fest ANVESHAN'24 on the theme of "Science and Technology for upliftment of society"</p>	<p>14<sup>th</sup> March 2024</p>	
<p>40</p>	<p><b>Filed Visit "Software Technology Parks of India" (STPI)</b> Institution's Innovation Council (IIC-BIT Mesra) has organized an Industrial Visit in "Software Technology Parks of India" (STPI), Namkum Industrial Area, Ranchi on 19.03.2024 for Entrepreneurship Students Batch.</p>	<p>19<sup>th</sup> March 2024</p>	
<p>41</p>	<p><b>Celebration of "World Happiness Day"</b> Organized by AICTE, MoE Innovation Cell, New Delhi, through online WebEx platform.</p>	<p>20<sup>th</sup> March 2024</p>	

42	<p><b>Two-Day workshop On “Prototype/Process Design &amp; Development”</b></p> <p>A two-day workshop was organized under the calendar activity of Institution Innovation Council (IIC-BIT) in collaboration with AICTE IDEA lab of BIT Mesra. The topic of the workshop was <b>Prototype/Process Design &amp; Development”</b></p>	5th & 6th April 2024	 <p>The poster features logos for Institution's Innovation Council, AICTE IDEA Lab, and BIT Mesra. It includes a photo of a small robot on a table. Text on the poster: "Workshop On Prototype/Process Design and Development", "Organized by IIC-BIT", "5th-6th April 2024", "Time : 9:00AM onwards", "Venue : BIT Mesra- AICTE IDEA LAB".</p>
43	<p><b>One-Day Workshop on ‘Innovation &amp; Intellectual Property Rights (IIPRs) by Mr. Rahul Prakash, National Innovation Foundation (NIF) – India, Bhubaneshwar &amp; Mr. Shantanu Braj Choubey, Assistant Professor, National University of Study and Research in Law Organized by Institution's Innovation Council, BIT Mesra (IIC-BIT)</b></p>	15 <sup>th</sup> April 2024	 <p>The poster features logos for Viksit Bharat, Birla Institute of Technology, Mesra, and Institution's Innovation Council. It includes photos of Mr. Shantanu Braj Choubey and Mr. Rahul Prakash. Text on the poster: "One-Day Workshop on 'Innovation &amp; Intellectual Property Rights (IIPRs)'" "Organized by IPR Cell &amp; Institution's Innovation Council, BIT Mesra, Ranchi", "15th April 2024", "Time : 11:00 am Onwards", "Venue : Seminar Hall-1 R&amp;D Building BIT Mesra, Ranchi".</p>
44	<p><b>Competition on “How to Plan for Start- up and Legal &amp; Ethical Steps”</b></p> <p>Institution’s Innovation Council (IIC-BIT) organized a competition on “How to Plan for Start-up and Legal &amp; Ethical Steps” on 18th April 2024 at Seminar Hall -2 R&amp; D Building, BIT Mesra, Ranchi.</p>	18 <sup>th</sup> April 2024	 <p>The poster features logos for Institution's Innovation Council and BIT Mesra. It includes a circular graphic with a globe. Text on the poster: "Institution's Innovation Council BIT Mesra", "COMPETITION ON 'HOW TO PLAN FOR START-UP AND LEGAL &amp; ETHICAL STEPS'", "18TH APRIL 2024", "Timing : 10:30AM", "Venue : R&amp;D Building, Seminar Hall- 2 BIT Mesra, Ranchi".</p>

45	<p style="text-align: center;"><b>Celebration of “World Creativity and Innovation Day”</b></p> <p>Institution’s Innovation Council (IIC-BIT) in collaboration with AICTE IDEA (Idea Development, Evaluation &amp; Application) LAB organized a celebration of “World Creativity and Innovation Day”</p>	21 <sup>st</sup> April 2024	
46	<p style="text-align: center;"><b>Two-Day Poster Exhibition On “Patent Technology Innovative Product”</b></p> <p>Organized by Institution's Innovation Council, BIT Mesra (IIC-BIT), related to Patent Innovative Product Developed by faculty members BIT Mesra on 23.04.24 &amp; 24.04.24 at R&amp;D Building Seminar Hall-2, BIT Mesra, Ranchi.</p>	23 <sup>rd</sup> April to 24 <sup>th</sup> April 2024	
47	<p style="text-align: center;"><b>Celebration of “World Intellectual Property Day”</b></p> <p style="text-align: center;"><b>Resource Person Mr. Shantanu Braj Choubey</b> Assistant Professor, National University of Study and Research in Law, Ranchi.</p>	26 <sup>th</sup> April 2024	

<p>48</p>	<p style="text-align: center;"><b>Celebration of National Technology Day'24</b></p> <p>Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of National Technology Day'24 on 08.05.24 at CAT Hall BIT Mesra Ranchi. The theme of the day was <b>"From School to Startup-Igniting Young Minds to Innovate"</b></p> <p>Total 12 School Participated and 45 Prototype Technology Model has been displayed during this event.</p>	<p>08<sup>th</sup> May 2024</p>	
<p>49</p>	<p style="text-align: center;"><b>Expert Talk on "Startup Support &amp; Initiative Technology Transfer"</b></p> <p>Resource Person <b>Mr. Prakash Kumar</b> Deputy Director STPI Ranchi</p> <p>Institution's Innovation Council BIT Mesra organized Industry Expert Talk in association with Software Technology Parks of India</p>	<p>20<sup>th</sup> May 2024</p>	
<p>50</p>	<p style="text-align: center;"><b>Industry Expert Talk from JANYU TECH</b></p> <p>Waliv Phata, Sativali Road, Vasai East. Mumbai, Maharashtra</p> <p>Resource Person <b>Mr. Sudhir Jha</b> VP, Business Development <b>JANYU TECH</b></p> <p>JANYU TECH specialized in designing and manufacturing Human Enabling Collaborative Robots specifically engineered for hazardous, strenuous, and repetitive work environments.</p>	<p>28<sup>th</sup> May 2024</p>	

**Quarter 4 (1st June 2024- 31st August 2024)**

51	<p align="center"><b>Celebration of WORLD ENVIRONMENT DAY' 2024</b></p> <p>The theme of this celebration was "Our Land, Our Future - We are # Generation Restoration". Organized by Institution's Innovation Council BIT Mesra, Ranchi on 5<sup>th</sup> June 2024.</p>	5th June 2024	
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52	<p align="center"><b>Expert Talk on "Perspectives on Research and Innovation" Value Proposition Fit &amp; Business Fit By Prof. C. Jeganathan Dean, RIE &amp; President, IIC- BIT, Mesra, Ranchi</b></p>	5th June 2024	
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53	<p align="center"><b>IIC-BIT Organized Poster Exhibition On Product Innovation @ BIT : A Glimpse</b></p> <p align="center">Chief Guest Prof. Sukumar Mishra Director IIT/ISM Dhanbad</p>	15 <sup>th</sup> July 2024	
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<p>54</p>	<p><b>Workshop on Mastering UAV Design from Concept to Creation' 2024</b>          Department of Electronics and Communication Engineering and Institution's Innovation Council, Birla Institute of Technology, Mesra in association with Specialty Products and Services (India) LLP organized One-Week Workshop on "Mastering UAV Design from Concept to Creation -24" (UAVDW-2024) from 22nd July to 26th July 2024.</p>	<p>22nd to 26th July 2024</p>	
<p>55</p>	<p><b>Celebration of 4th National Education Policy (NEP-2020)</b>          Professor Asheesh Srivastava, Higher Education Policy, IUCTE, Banaras Hindu University was the Guest of Honor and Dr. Sanjay Kumar, Head, ECE department, BIT Mesra was the resource person.</p>	<p>29th July 2024</p>	
<p>56</p>	<p><b>Celebration of National Space Day &amp; Competition</b>          Department of Remote Sensing and National Remote Sensing Centre, ISRO, Hyderabad in collaboration with Institution's Innovation Council BIT Mesra organized "National Space Day" on 8th August 2024 at CAT Hall BIT Mesra Ranchi Mesra to commemorate the successful Chandrayaan-3 Mission with Vikram Lander and Pragyan Rover on the South Pole of Moon.</p>	<p>8th August 2024</p>	

57	<p><b>Workshop on Innovative Model of Flying Machine</b></p> <p>The Institution's Innovation Council of Birla Institute of Technology (BIT) Mesra in collaboration with AICTE Idea Lab and AEROSPACE SOCIETY organized a two-day workshop on Innovative Model of FLYING Machine.</p>	10th - 12th August 2024	 <p><b>WORKSHOP &amp; Flying Session</b></p> <p>We are ready for an amazing workshop, flying session and showcasing of models.</p> <p><b>10th -12th August 24</b>  <b>Venue : AICTE Idea LAB, BIT Mesra Ranchi</b>      <b>Time : 10:00 am</b></p>
58	<p><b>ONE DAY SEMINAR “Angel Investment/VC Funding Opportunity for Early-stage entrepreneurs”</b></p> <p>Guest of Honour &amp; Key Note Speaker  <b>Ms. Anshu Gupta</b>  Chartered Accountant  Agarwal &amp; Mantri (Partner - Chartered Accountancy Firm)</p>	13 <sup>th</sup> August 2024	 <p><b>Birla Institute of Technology, Mesra, Ranchi</b></p> <p><b>SEMINAR ON “Angel Investment/VC Funding Opportunity for Early-Stage Entrepreneurs”</b></p> <p>Organized by IIC-BIT Mesra</p> <p><b>13th August 2024</b>  <b>Time : 3:30 PM onwards</b></p> <p><b>Venue :</b>  <b>Seminar Hall-2 R&amp;D Building, BIT Mesra</b></p>
59	<p><b>Celebration of “78th Independence Day”</b></p> <p><b>Theme: “Developed India”</b></p> <p>Panting Competition- Viksit Bharat Ki Ek Tasveer’.</p> <p>Dance Competition - Viksit Bharat Ki Ek Jhalak</p>	15th August 2024	 <p><b>Birla Institute of Technology, Mesra, Ranchi</b></p> <p><b>Celebration of 78th Independence Day</b></p> <p><b>Theme : Developed India</b></p> <p><b>Dance Competition:</b> विकसित भारत की एक झलक  <b>Painting Competition:</b> विकसित भारत की एक तस्वीर</p> <p>Organized by IIC-BIT Mesra  <b>15th August 2024</b>  <b>Time : 10:00 AM onwards</b></p> <p><b>Venue :</b>  <b>Room No- 211 , Main Building. BIT Mesra Ranchi</b></p>
60	<p><b>Seminar on Mastering the Lean Startup &amp; Minimum Viable Product</b></p> <p><b>By Mr. Amitesh Anand</b>  CEO, Flo-Card</p>	16 <sup>th</sup> August 2024	 <p><b>Birla Institute of Technology, Mesra, Ranchi</b></p> <p><b>“Mastering the Lean Startup &amp; MVP”</b></p> <p>Organized by IIC-BIT Mesra  <b>16th August 2024</b></p> <p>Scan &amp; Attend  Or, Register on the Link : <a href="https://bit.ly/LeanBIT">https://bit.ly/LeanBIT</a></p> <p><b>Time : 3:30 PM - 05:00 PM</b>  <b>Venue :</b>  <b>Seminar Hall-2 R&amp;D Building, BIT Mesra</b></p>

<p>61</p>	<p style="text-align: center;"><b>Celebration of World Entrepreneur's Day '24</b> <b>Theme: INNOVATE-A- THON 2.0</b></p> <p style="text-align: center;">Resource Person <b>Mr. Shaurya Sinha</b> Co-Founder of Devtown</p> <p>Due to Induction programme 1<sup>st</sup> Year of BTech students, this World Entrepreneur's Day '24 celebrated on 23<sup>rd</sup> August in CAT Hall BIT Mesra.</p>	<p style="text-align: center;">23<sup>rd</sup> August 2024</p>	
<p>62</p>	<p style="text-align: center;"><b>Innovate-A-Thon 2.0 (Start-up Competition and Reward Best Start-ups)</b></p> <p>The Institution's Innovation Council) in association with Entrepreneurship Development Cell (EDC), AICTE Idea Lab, and BITOSA Pune organized.</p>	<p style="text-align: center;">24.08.24 to 25.08.24</p>	
<p>63</p>	<p style="text-align: center;"><b>Seminar on "Accelerators/Incubation- Opportunities for Students: Early-Stage Entrepreneurs"</b></p> <p style="text-align: center;">Resource Person <b>Dr. Sanjeev Kumar Shrivastava,</b> Director, Skillung Programs, Bangalore <b>Dr. Viswanadham Duppatla</b> VP - Biopharma Innovation &amp; Biomanufacturing, Hyderabad <b>Mr. Prakash Kumar,</b> Deputy Director, STPI-Ranchi</p>	<p style="text-align: center;">27th August 2024</p>	



<p>64</p>	<p><b>Seminar on Innovation and Start-up Ecosystem</b> By <b>Dr. Satish Kumar</b> Convener Training and Placement Cell, University Polytechnic, BIT Mesra, Ranchi</p>	<p>29th August 2024</p>	<p>Birla Institute of Technology, Mesra Ranchi, Jharkhand-835215</p> <p><b>Seminar on Innovation and Start-up Ecosystem</b> In collaboration with IIC -BIT &amp; University Polytechnic BIT Mesra</p> <p><b>Resource Person Dr. Satish Kumar</b> Convener Training and Placement Cell, University Polytechnic, BIT Mesra, Ranchi</p> <p><b>29th August 2024</b> Time : 11:00 am onwards</p> <p>Seminar Hall, University Polytechnic BIT Mesra, Ranchi</p>
<p>65</p>	<p><b>MIC Driven Activities Session on</b> “Guiding Framework for Creating and Engaging Trained Faculty and Student IIC Members Innovation Ambassadors (IA) in IIC Institutions and Rewarding Mechanisms for IAs” <b>Resource Person</b> Mr. Dipan Sahu, Assistant Innovation Director, MoE Innovation Cell, New Delhi</p>	<p>29<sup>th</sup> July 2024</p>	<p>MoE's INNOVATION CELL (GOVERNMENT OF INDIA)</p> <p>INSTITUTION'S INNOVATION COUNCIL Ministry of Education Initiative</p> <p><b>Mr. Dipan Sahu</b></p> <p><b>MIC Driven Session on</b> Guiding Framework for Creating and Engaging Trained Faculty and Student IIC Members Innovation Ambassadors (IA) in IIC Institutions and Rewarding Mechanisms for IAs</p> <p><b>Organized by MoE Innovation Cell, New Delhi</b></p> <p><b>29th July 2024</b></p> <p><b>Time : 11:00 AM onwards</b></p> <p><b>Venue: Online - Webex Platform/ You Tube</b> Birla Institute of Technology, Mesra, Ranchi</p> <p>Assistant Innovation Director, MoE Innovation Cell, New Delhi</p>
<p>66</p>	<p><b>MIC Driven Activities Session on</b> “ <b>Strengthening IIC Linkages with ATLS and SICs in Schools and Framework for providing Mentorship Guidance</b>” <b>Resource Person</b> Mr. Dipan Sahu, Assistant Innovation Director, MoE Innovation Cell, New Delhi</p>	<p>31st July 2024</p>	<p>MoE's INNOVATION CELL (GOVERNMENT OF INDIA)</p> <p>INSTITUTION'S INNOVATION COUNCIL Ministry of Education Initiative</p> <p><b>MIC Driven Session IIC6.0 (2023 - 24)</b></p> <p>All IIC Members are Requested to Join us on MIC YouTube Channel</p> <p><b>Mr. Dipan Kumar Sahu</b> Assistant innovation Director MoE's innovation Cell</p> <p>Wednesday 31st July 2024 11:00 AM</p> <p><b>Join Us on</b> YouTube <b>LIVE</b> @MoEInnovationCell</p> <p>12.00 mhrdinnova July 21 at 11:00 AM</p> <p>@mhrd_innovation /mhrd.innovationcell</p>

<p>67</p>	<p><b>MIC Driven Activities Session on "Building the Pipeline of Quality Innovations and Start-ups in HEIs with Ecosystem Enablers by Creating and Managing YUKTI Innovation and IPR Repository (YIIR)".</b>  <b>Resource Person</b>  <b>Mr. Dipan Sahu</b>  Assistant Innovation Director, MoE Innovation Cell, New Delhi &amp;  <b>Mr Abhishek Ranjan</b>  Innovation Officer &amp; Zone In-charge.</p>	<p>2<sup>nd</sup>  August  2024</p>	
<p>68</p>	<p><b>MIC Driven Activities Session on "Orientation cum Refreshers' Session on Institution's Innovation Council Objectives, Structure, Operation for IIC Institutions"</b>  <b>Resource Person</b>  <b>Mr. Dipan Sahu</b>  Assistant Innovation Director, MoE Innovation Cell, New Delhi</p>	<p>5<sup>th</sup>  August  2024</p>	

## IIC- BIT Events Details

### **Chandrayaan-3 Mahotsav** **4<sup>th</sup>-8<sup>th</sup> September 2023**

Institution's Innovation Council BIT Mesra Ranchi in collaboration with Rocketry and Space Engineering Department BIT Mesra Ranchi organized the Chandrayaan-3 Mahotsav on 4<sup>th</sup>-8<sup>th</sup> September 2023 in the G.P. Birla Auditorium of BIT Mesra, Ranchi, Jharkhand. The program commenced at 3:45 P.M. **Dr. Priyank Kumar**, Head, Rocketry and Space Engineering Department BIT Mesra and Coordinator of ARIIA delivered the talk about the Chandrayaan-3 journey to moon. After the session a panel discussion was held by Dr. P. V. Venkita Krishnan, retired, distinguished scientist and former Director at the Indian Space Research Organization. The discussion stimulated the minds of one and all and instilled a sense of pride in the newest achievement of the nation in the field of space exploration. This was followed by the first round of the General Quiz, a team event conducted by 'UNESQUO'- The United Engineers' Speaking and Quizzing Organization.



The poster features the logos of the Institution's Innovation Council and BIT Mesra Ranchi. It includes three circular images: a lunar lander on the moon, a rocket launch, and a lunar rover. The text on the poster is as follows:

**Chandrayaan Mahotsav**  
**4th-8th Sep 2023**

**Events to be organized**

- Visit to the department of Space Engg. & Rocketry
- Interaction with ISRO Scientist . . . .
- Flash Mobs . . . .
- Skits, Songs, Drama, Quizzes . . . .

**Birla Institute of Technology Mesra, Ranchi**  
**Tel+91-651-2275444**

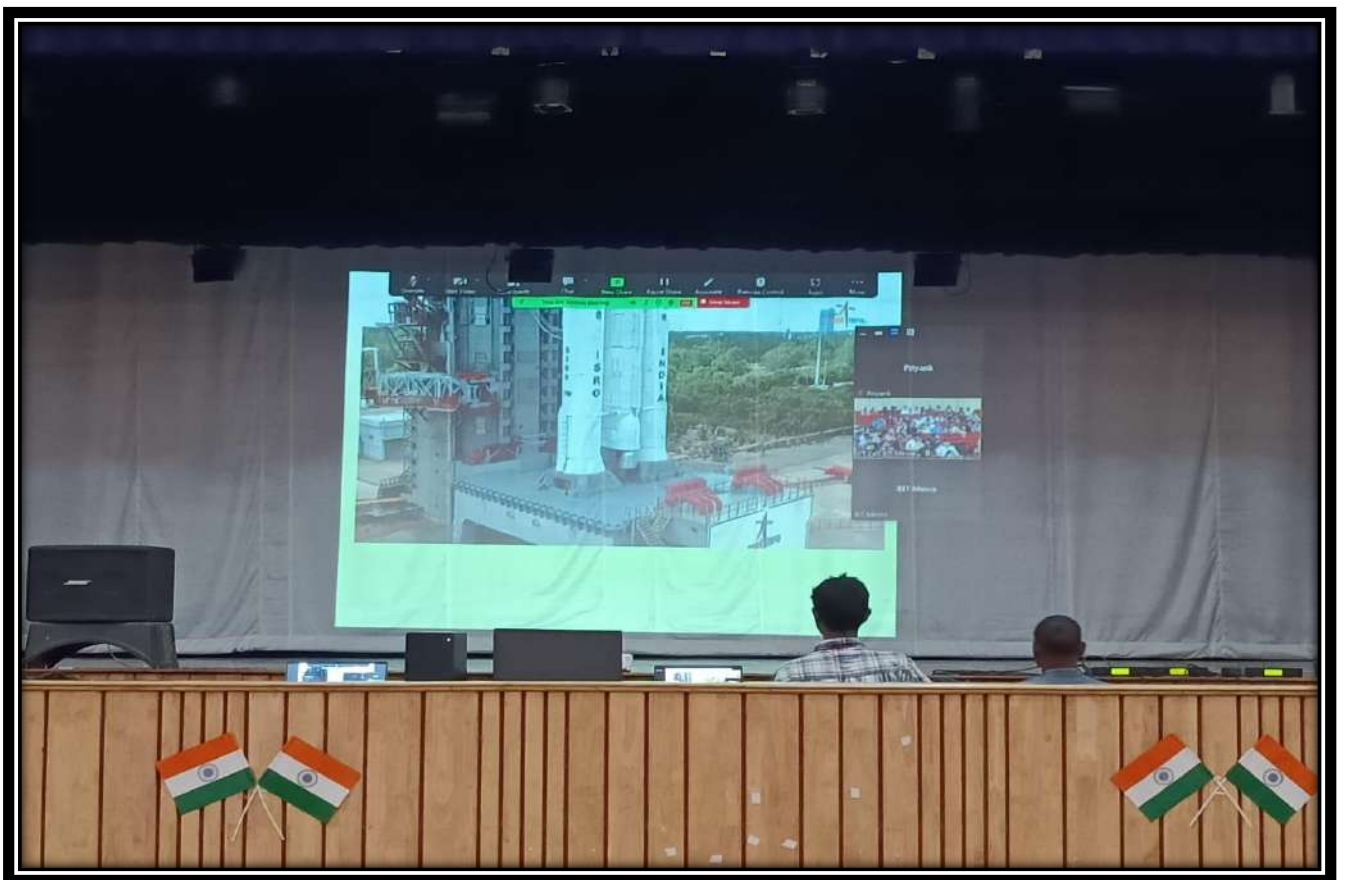
Thereafter 'Dhwani'- the Music Club of BIT Mesra performed the song 'Vande Mataram' by A.R. Rahman and one of their own compositions named 'Kan Kan Mein Bharat'. Their performances were very well received by the audience. Then, the Dance Club, BIT Mesra set the audience's feet tapping to the rhythm and flow of their performance on the song 'Shubh Din'. Following this, the Literary Society of BIT Mesra performed. They talked about India's Space Missions- Chandrayaan 1,2,3, Mangalyaan, Aditya L1, Rakesh Sharma, and Aryabhata (the first satellite). In the short film, a man yearns to break free from his monotonous life. When everyone vanishes, he enjoys the solitude but soon faces the weird reality of being stuck in a personal loop. Then, the announcement of finalists was made and the final round of the quiz- the Verbal Round on the stage was conducted by UNESQUO. Following this, the Awards Ceremony was held. The day's proceedings ended with the National Anthem being sung.



The event was attended by Dr. Bhaskar Karn, Dean of Student Affairs, Dr. Yogender Aggarwal, Associate Dean of Student Affairs, Dr. Anand Pd Sinha, Co-Convenor, IIC-BIT, Mr. Vishal H. Shah, Associate Dean, AIR & EDC Coordinator, and Dr. Sanjay Kumar, Chairperson, Value Education Cell. The total 1200 students were attended this session. The event ended at 7:45 P.M.









Social Media Link	<a href="https://www.instagram.com/p/CxWGRzfBQTo/">https://www.instagram.com/p/CxWGRzfBQTo/</a>
BIT Website Link	<a href="https://bitmesra.ac.in/Show_Other_Department?cid=1&amp;deptid=424">https://bitmesra.ac.in/Show_Other_Department?cid=1&amp;deptid=424</a>

1. Students Participating : 1200
2. Faculty Participating : 07
3. Budget : Rs 15000/-

REPORT  
**INTERNAL HACKATHON FOR SMART INDIA  
HACKATHON, BIT Mesra, RANCHI**  
28-29 SEP, 2023

**Institution Innovation Council BIT Mesra**  
**ORGANISES**  
**Internal Hackathon for SMART INDIA HACKATHON-2023**  
**28-29 Sep, 2023, Lab-IV, 9.00am, Dept. of CSE, BIT Mesra**  
**For Details <https://sih.gov.in/>**

**LAST DATE OF REGISTRATION**

**25 Sep 2023 Mon 5PM**  
QR code for registration

**Smart India Hackathon 2023**

**For details-SPOC**  
**Sridhar@9431187489**  
**Asso.Prof,CSE & Convenor,IIC**

**Student Coordinators**

Zoya Zubair,10438/22,CSE  
Kshitiz Mohanty,10135/22,ECE  
Deevesh Mishra,10161/22,CSE  
Tanishka Jaiswal,10057/22,CE  
Kriti Bhagat,10020/23,MCA  
Vikas Shukla,10061/23,MCA

**G20** भारत 2023 INDIA  
**सत्यमेव जयते**  
**Ministry of Education**  
Government of India  
**ANTE**  
आनंद आनंद आनंद  
**Ministry of Education's INNOVATION CELL**  
(GOVERNMENT OF INDIA)  
**75**  
**Azadi Ka Amrit Mahotsav**

Website: [www.PosterMyWall.com](http://www.PosterMyWall.com)

Institution's Innovation Council BIT Mesra Ranchi organized an Internal Hackathon for SIH-2023 on 28-29 Sep,2023 in the Department of CSE, BIT Mesra. The Chief Guest for the inaugural session was Prof C. Jeganathan, Dean, Research, Innovation and Entrepreneurship, BIT Mesra. SPOC Dr. K. Sridhar Patnaik and the Chief Guest inaugurated the Internal hackathon followed by institute prayer. Total 32 teams registered for the event. The total 31 female participants presented the idea along with 155 male members.



**BIRLA INSTITUTE OF TECHNOLOGY**  
MESRA, RANCHI JHARKHAND

**Internal Hackathon  
for SIH 2023**

**Date- 28-29 Sep, 2023**  
**Time: 9.00am to 5.00pm**

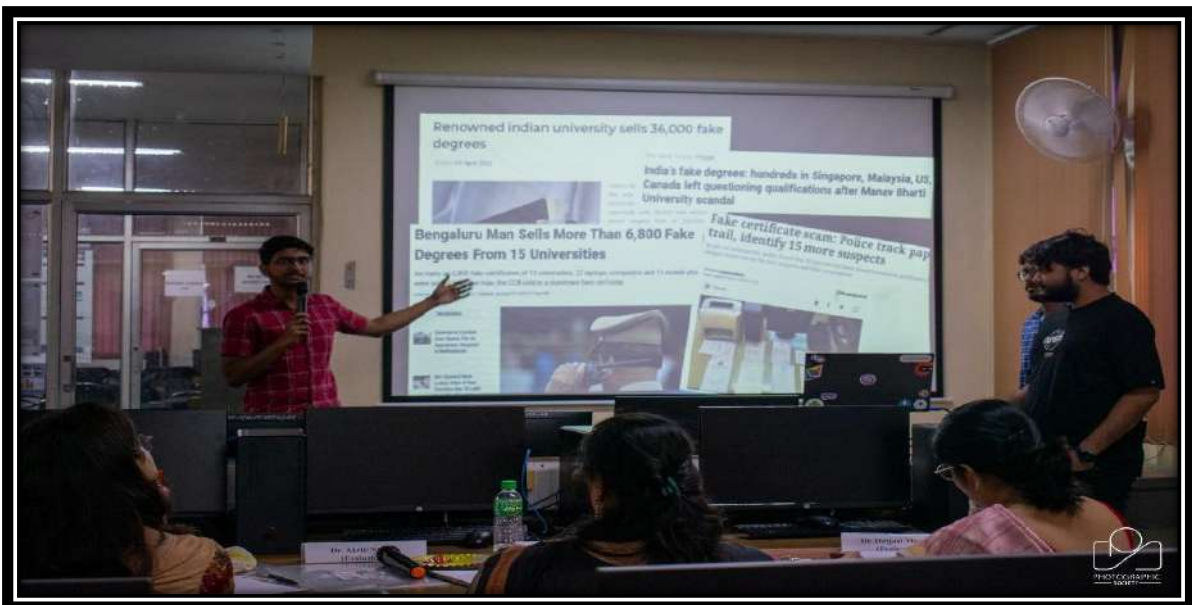
SMART INDIA HACKATHON 2023

<https://www.facebook.com/BITMesraRanchi> [https://twitter.com/BITMesra\\_Ranchi](https://twitter.com/BITMesra_Ranchi) <https://www.instagram.com/bit.mediacell/>

**SIH-23 SPOC Dr. Sridhar Patnaik welcome to all the participants during Inauguration**



**Students Presentation PIC**



## Jury Members -SIH 23



**Head, CSE Dept. SPOC SIH-23 and Winner Team PIC**



Each team was given a 15-20 mins for presentation and then evaluated (Max Marks-50) based on the presentation skills (10), Tools and Methodology (10), Novelty (20) and Implementation (10). The merit list was prepared as follows:

SL No.	Team Name	Rank
1	TrueDocs	1
2	Skynet	2
3	SweetSCapes	3
4	Cronos	4
5	Elyvate	5
6	404	6
7	Authentic Wizards	7
8	CropCrafters(HW)	8
9	Mahesh	9
10	CoalMiners	10
11	Magician	11
12	Y2K	12
13	Mavericks	13
14	Tech-Nage(HW)	14
15	Veerabhadra	15
16	Phoenix	16
17	Raanks	17
18	Devify-7174	18
19	Last Minute Legends	19
20	Techlance(HW)	20
21	Almost There	21
22	Advaya	22
23	Optimix	23
24	Byteforce	24
25	Anecdope	25
26	Turtle	26
27	Alpha03	27
28	Hello World	28
29	Outlier	29
30	Agratas	30
31	DevGeniuses	31

The winners are TureDocs, 1<sup>st</sup> Runner Up-Skynet, 2<sup>nd</sup> Runner Up-Sweet Scapes 31 teams has been nominated for the final round of SIH 2022. In which 9 from Software category and 1 from Hardware. 4 teams were placed in waiting list in Software Category.

Students Participation	186
Faculty Participation	11
Budget	30,000/-
Social Media Link (Instragram)	<a href="https://www.instagram.com/bit.mediacell/">https://www.instagram.com/bit.mediacell/</a>
Facebook	<a href="https://www.facebook.com/BITMesraRanchi/">https://www.facebook.com/BITMesraRanchi/</a>

  
 Dr. K. Sridhar Patnaik

# Expert Talk on Research Areas of Polymer in defense Sector 9<sup>th</sup> Oct 2023

**Birla Institute of Technology  
Mesra, Ranchi**

INSTITUTION'S  
INNOVATION  
COUNCIL  
Member of Education Initiatives

Collaboration with Dept. of  
Chemical Engineering &  
IIC-BIT Mesra

**Talk on  
Research  
Areas of  
Polymer  
In defence sector**

**Dr. Debdatta Ratna**

**Scientist G  
Head, Polymer SC & Tech.  
Directorate, NMRL, DRDO**

**Coordinator  
Dr. Akhil Kumar Sen  
Professor and Head  
Dept. of Chemical  
Engineering**

**9th Oct 2023**

**Time: 11:00am**

**Venue: Seminar Hall-1, R&D Building, BIT Mesra Ranchi**

The Department of Chemical Engineering, BIT Mesra in collaboration with Institution's Innovation Council (IIC-BIT) organized a seminar on “Research Areas of Polymer in defense Sector” on 9<sup>th</sup> Oct 2023 at seminar Hall -1, R&D Building, BIT Mesra Ranchi.

The keynote speaker Dr. Ratna graces the seminar by delivering valuable inputs relevant to the field of polymer. He has been working as a scientist in Naval Materials Research Laboratory (NMRL) (Defense research and development organization-DRDO). The Coordinator Prof. Akhil Kumar Sen, Head Department of Chemical Engineering gave a welcome speech and introduced the keynote speaker.

**Prof. Akhil Kumar Sen, Head Department of Chemical Engineering welcomed to keynote speaker**





**Prof. Akhil Kumar Sen, Head Department of Chemical Engineering gave a welcome speech and introduced the keynote speaker**



Dr. Ratna gave a brief introduction about the present scenario of polymer composites which have become a significant material requirement in every sphere of life from aerospace, automobile, sports material and having other major applications. He further emphasized in the current scenario polymer composite materials not only replace other material but are also being developed in areas where it was not considered replaceable in an earlier time. Polymer composite replacing metals, and ceramics in recent times. As compared to thermoset matrix, thermoplastics matrix has gained more importance

because of their lightweight characteristics, high strength, high-temperature resistance, fewer moisture contents, and also cost-effectiveness.



In recent trends, polymer matrix composite is used against metal matrix or ceramic matrix because it is easy to fabricate due to its low processing temperature. Dr Ratna mentioned the urgent need for sustainable development has even promoted the synthesis of natural biodegradable polymer composite in place of synthetic polymer composite industry demand. Polymer composites have attracted the largest consumer in the automobile industry due to their lightweight characteristics and cost savings. The mechanical properties of polymer composite result in an overall reduction of automobile waste, which indeed can enhance fuel efficiency and reduce emissions. The outstanding properties of polymer composite lie in compactness, bio-absorbability has remarkable applications in the biomedical domain. In this regard, he further elaborated polymer characterization is related to the molecular structure of the polymer materials and mass. The characterization will give information about the properties of the polymer. The thermal analysis technique application for characterizing polymer gives insight and in-depth information on polymer structure and behavior. Thermal behavior is one of the significant properties. In this regard, TGA, which is a thermos analytical method, is mainly used to study the thermal properties of elastomers, where the weight of the sample is monitored with temperature increment. Similarly, DSC is also a common technique for heat flow study in a material which has wide industrial use, where the manufacturer determines the thermal transition temperature, which includes  $T_g$ ,  $T_m$ , and  $T_c$ .



He further elaborated and gave insights of nanocomposites, nanomaterial, polymer nanocomposite, strategy of nanocomposite and carbonaceous nanomaterial. He also elaborated on product-functional coating, sheath technology, vibration dumping specially about the Mastic development, which helped to reduce the production days drastically. He elaborated on the new concepts about SONAR DOME

– which is used to detect caustic signal, polymer electrolyte membrane fuel cell and development of HTPEMFC stack. The seminar ended with interaction with the research scholars and a vote of thanks.



Students Participants	54
Faculty Participants	8
Budget	Rs.5000
Social Media Link Instagram	<a href="https://www.instagram.com/p/Cz6tTtMPKuM/">https://www.instagram.com/p/Cz6tTtMPKuM/</a>

# “Business Plan Competition

Pre-Qualifier annual event of BIT NISHAN

14th Oct 2023



The poster features a yellow and orange background with a faint image of a person holding a laptop. At the top left, it lists the Entrepreneurship Development Cell (EDC) at BIT Mesra, Ranchi, with the website www.edcbitmesra.in. To the right are the logos for the Institution's Innovation Council (IIC) and the Finance Club (FC) at BIT Mesra. The main text reads 'Institution's Innovation Council PRESENTS, Business Plan Competition-2023' in large, bold letters, followed by 'Cash Prize Upto 1.5 Lakhs'. A note specifies 'NOTE ONLY FOR BIT STUDENTS'. The event date and location are '14th Oct, 2023 | Seminar Hall 1'. A registration link is provided: 'REGISTRATION LINK https://bitly.ws/UgSc'. A QR code is located on the right side. The registration deadline is '\*\*Registration Deadline 10th October'. An Instagram handle 'financeclub\_bitm edcbitmesra' is shown at the bottom left.

Entrepreneurship Development Cell  
BIT Mesra, Ranchi  
www.edcbitmesra.in

INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of Education, Government of India)

FINANCE CLUB  
BIT INSTITUTE OF TECHNOLOGY, MESRA

**Institution's Innovation Council**  
**PRESENTS,**  
**Business Plan**  
**Competition-2023**  
**Cash Prize Upto 1.5 Lakhs**

**NOTE**  
**ONLY FOR BIT STUDENTS**

14th Oct, 2023 | Seminar Hall 1

**REGISTRATION LINK**  
<https://bitly.ws/UgSc>

**\*\*Registration Deadline**  
**10th October**

financeclub\_bitm  
edcbitmesra

Institution's Innovation Council (IIC-BIT) in association with Finance Club (FC) & Entrepreneurship Development Cell (EDC) are organized a “Business Plan Competition”-23 event on 14th Oct 2023. This event was a Pre-Qualifier event of IIC-BIT flagship annual event ‘BIT-NISHAN-23’ which will be held on 15<sup>th</sup> Dec 2023. This event is open for all current students of BIT Mesra and its off campuses.



## Delegates of Business Plan Competition



**Dr. C. Jeganthan welcomed to Prof. Indranil Manna, Vice Chancellor, BIT Mesra Ranchi.**



## **Prof. Indranil Manna, Vice Chancellor, BIT Mesra Ranchi, addressed to Participants & audience**



The Inauguration program kickstarted at 10.am on 14<sup>th</sup> Oct 23. The hosts for the ceremony were the students' coordinators who welcomed the dignitaries. The Chief Guest of this inauguration program was Prof. Indranil Manna, Vice Chancellor, BIT Mesra Ranchi. Mr. Vishal H. Shah, Faculty Advisor of EDC briefed about the competition to the audience. Dr. K. Shridhar Patnaik, Convener of IIC- BIT addressed the important of this Business event competition followed by Dr. C. Jeganathan, Dean RIE who motivated the participants to take part in the event. Dr. Bhaskar Karn, Dean of Student Affairs also interact with the students. The vote of thanks given by Dr. Anand Prasad Sinha, Co-Convener (IIC-BIT) and faculty advisor Finance Club conveyed the closing remarks in the ceremony and thanked all the participants as well as the panel of judges too.

In Business Plan Competition total 35 teams from BIT Mesra and their off campuses are registered and presented their business plan ideas on 14<sup>th</sup> Oct 23 offline in the front of Jury members of the different dept. of BIT Mesra and after that 15 teams have qualified for the final round and they will present and show their prototype product in the BIT NISHAN-23, it's an innovation contest which will be held on 15<sup>th</sup> Dec 2023. The all final 15 teams got the Cash prize of Rs.10000/- for making a prototype product and will be display and presented on 15<sup>th</sup> Dec for the final round of BIT NISHAN. Out of 15 teams, the final winning teams will get Rs 1 Lakhs cash prize for prototype product development and market survey expenses (or Startup Company registration etc.).

List of Jury Members as Mentioned below.

1. Dr. Sumit Mishra, Associate Professor, Department of Chemistry
2. Dr. R. Naresh Kumar, Associate Professor, Civil and Env Engineering
3. Dr. K. Sridhar, Patnaik, Associate Professor, CSE Dept.
4. Dr. Manish Kr Pandey, Assistant Professor, CQEDS Dept. BIT Mesra Ranchi.
5. Dr. Sanjaya Shankar Tripathy, ECE Dept. BIT Mesra Ranchi.
6. Dr. Dilip Kumar Singh, Assistant Professor, Physics Dept.

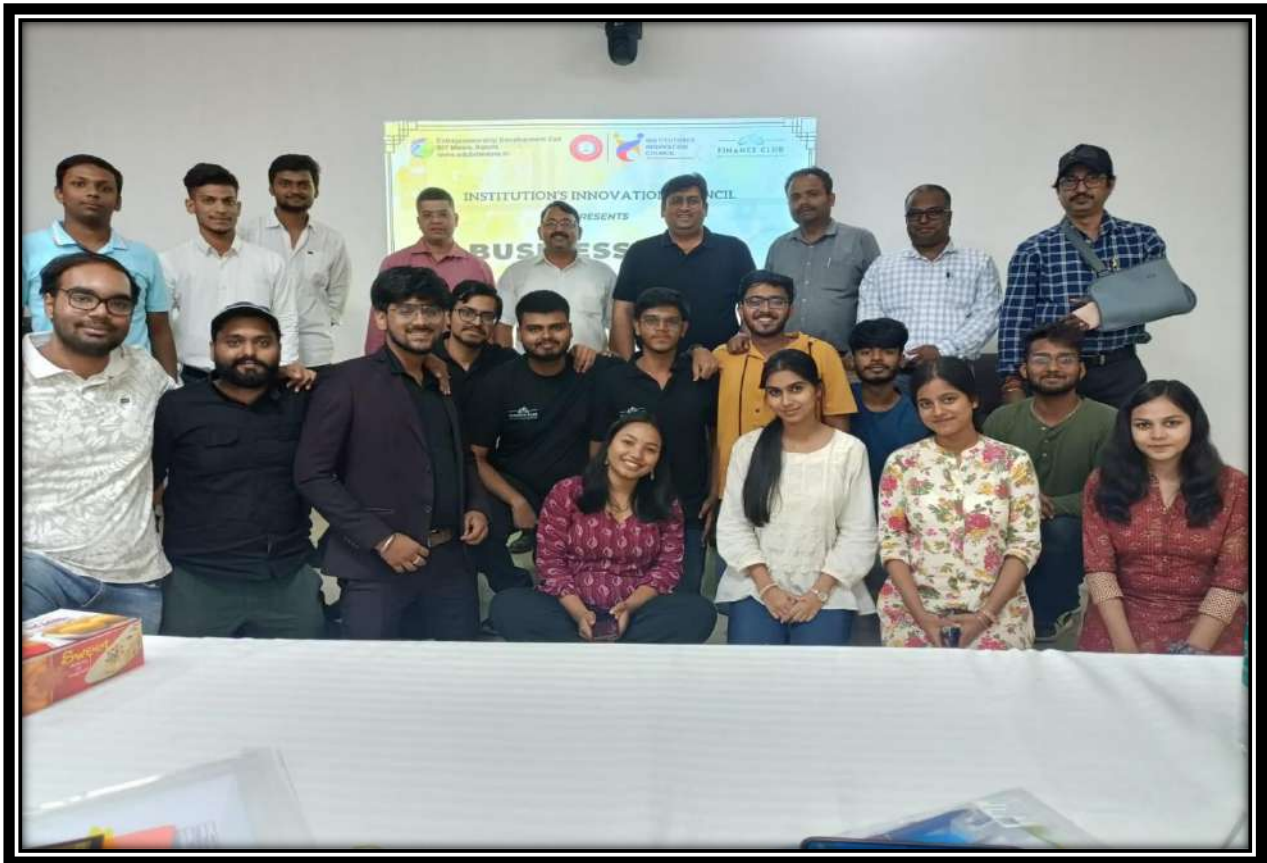
**Students hosting the events & Participants presented a Business Plan Idea**





## Jury Members for Business Plan Competition





## First Round Winner List Teams of “Business Plan Competition” -23

SL No.	Registration wise Business Plan Competition SL No.	Name	Email id	Campus	Startup Name	Total Points 500
1	7	Yash Vardhan	vjayshvardhan.786@gmail.com	BIT Mesra	True Docs	354
2	5	Aman Choudhary	aman.choudhary9785@gmail.com	BIT Mesra	Sweet Scapes	353
3	28	Ayush Kumar	ayushrajput3151@gmail.com	BIT Mesra	Menta Mind	342
4	6	Pratyush Prakash Upadhyay	upadhyaypratyush1@gmail.com	BIT Mesra	Edvisorr	338
5	9	Sarvagya Kulshreshtha	kulshreshthasarv@gmail.com	BIT Mesra	Kiddzy	338
6	8	Mayukh Pankaj	mayukhpankaj30@gmail.com	BIT Mesra	Campus Connect	329
7	12	Kingshuk Banerjee	btech10154.21@bitmesra.ac.in	BIT Mesra	Anonymous Squirrels Business Solutions Pvt Ltd	326
8	20	Shubham Srivastava	ied10033.23@bitmesra.ac.in	BIT Mesra	ChumsAI	289
9	22	Rachit Bansal	btech10483.22@bitmesra.ac.in	BIT Mesra	Ghummi Ghummi	282
10	19	Kshitiz Mohanty	kshitijaya783@gmail.com	BIT Mesra	RizzUp	281
11	27	Ishika Pathak	ishikaubit@gmail.com	BIT Polytechnic	Smart Adult Emotional care and recreation center	276
12	32	Anshika Arya	bba60009.23@bitmesra.ac.in	BIT Deoghar	Fresh & Press	276
13	26	Manish Sharma	sharmamanish5536@gmail.com	BIT Mesra	Smart Walking Stick	274
14	13	Priyanshu Agrahari	agraharipriyanshu52@gmail.com	BIT Mesra	Digi-workers	270
15	16	Anurag Kumar Sinha	anuragsinha2503@gmail.com	BIT Mesra	Yantra	265
Students Participation		80				
Faculty Participation		11				
Expenditure		Rs. 2,50,000/-				
Social Media Instagram		<a href="https://www.instagram.com/p/Cz6ttozvWsh/">https://www.instagram.com/p/Cz6ttozvWsh/</a>				

**Celebration of  
Institution's Innovation Day  
(Dr APJ Abdul Kalam Birth Anniversary)  
15th October 2023**

**Birla Institute of Technology  
Mesra, Ranchi-835215**

**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

**Institution's Innovation Council  
Celebrates  
Institution's  
Innovation Day**

**Dr APJ Abdul Kalam's birth anniversary**

**15th Oct 2023**

**R&D Building, Seminar Hall-1, BIT Mesra, Ranchi**

Institution's Innovation Council (IIC-BIT) with collaboration with technical Club of BIT Mesra organized an Institution's Innovation Day on the birth anniversary of Late Dr. APJ Abdul Kalam's, former president of India on 15th October 2023. The objective of the innovation day to encourage students' participation teams to think creatively and come up with new ideas, solutions, and approaches to challenges or opportunities. Honourable Sri C. K. Birla, Chairman, Board of Governor, Birla Institute of Technology, was the chief guest for this celebration and also inaugurated the Technical Innovation Fest "Pantheon 23." He addressed the students and spoke about Dr. APJ Abdul Kalam's life story. Dr Kalam played a crucial role in the development of Indian missile technology, aerospace advancements, and the advancement of science and technology in India. Dr. A. P. J. Abdul Kalam, the President of India and as a scientist the millions of people were influenced by his life. His vision inspired others to pursue similar goals and have lofty dreams. During this celebration, BIT students has made prototype technology model and display all the model in the front of dignitaries present over there. The total 175 students and 25 faculty members were attended this event. The Model display organized in the R&D building, BIT Mesra Ranchi.





*Honorable Sri C. K. Birla, Chairman, Board of Governor, Birla Institute of Technology*



**Honorable Shri C. K. Birla, Release the theme of Technical Innovation Fest - Pantheon'23**



**Innovative Model Made by Students from BIT Mesra**



*Honorable Sri C. K. Birla, Prof. Indranil Manna, Vice Chancellor, BIT Mesra & Dr. Bhaskar Karn, DSW Interact with the students.*







**Innovative Model made by the students**



**Innovative Model made by the Students**



**Students Group pic with the Model**





Students Participation	175
Faculty Participation	25
External Participants	4
Expenditure	Rs. 60,000/-
Social media	<a href="https://www.instagram.com/p/C45a3XZRqYx/">https://www.instagram.com/p/C45a3XZRqYx/</a>

Report on : Amrit Kaal Vimarsh Vikasit Bharat @2047

Expert Talk on  
"Innovation and Next Practices in Agritech."

October 30, 2023

Ministry of Education  
Government of India

AICTE  
The Council for  
Technical Education

75  
आज़ादी का  
अमृत महोत्सव

G20  
भारत 2023 INDIA

INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of Education Initiative)

**Amrit Kaal Vimarsh Vikasit Bharat @2047**

**Dr. Rahul Mirchandani**

**EXPERT TALK**

on

**INNOVATION AND NEXT PRACTICES IN  
AGRITECH**

**30th Oct 2023**

**Time: 10:00am**

**Chairman and Managing Director  
Aries Agro Limited**

**Venue: CAT Hall  
Birla Institute of Technology Mesra Ranchi**

**About the Event:**

Ministry of Education, Government of India in collaboration with AICTE, is organizing a series of seminars nationwide to address the transformational changes that have paved the way for the establishment of "Amrit Kaal Vimarsh Vikasit Bharat @ 2047, with the goal of realizing the vision of Honorable Prime Minister of India, Shri Narendra Modi Ji. As a continuation of this series, on October 30, 2023, Institution's Innovation Council, Birla Institute of Technology, Mesra's is organized a seminar on "Innovation and Next Practices in Agritech." The Guest of Honor of this Seminar was Dr. Rahul Mirchandani", CMD, Aries Agro Limited. The seminar commenced at 10:00 A.M. with the Institute Prayer. The guest speaker for the expert talk was Dr. Rahul Mirchandani, Chairman and Managing Director, Aries Agro Limited. Dr. Sudip Das, Dean of Admission, Accreditation and Coordination (DAAC), Dr. Kunal Mukhopadhyay, Dean of Faculty Affairs (DoFA), Dr. C. Jeganathan, Dean of Research, Innovation and Entrepreneurship, Dr. Anand Prasad Sinha, Associate Dean of Research, Innovation and Entrepreneurship, Dr. Vishal H. Shah, Associate Dean of Alumni and International Relations and other deans and faculties graced the occasion with their esteemed presence.



**Delegates of the session-"Innovation and Next Practices in Agritech."**



Dr. Kunal Mukhopadhyay, Dean of Faculty Affairs (DoFA) inaugurated the event and welcomed the guest with a bouquet.



Following this, Dr. Sudip Das, Dean of Admission, Accreditation and Coordination (DAAC) welcomed the crowd and introduced them to the vision of the Government of India in conducting such seminars and also talked about the visionary of “Amrit Kaal Vimarsh Vikasit Bharat @ 2047.



Dr. Kunal Mukhopadhyay, addressed the gathering his speech focused on the importance of taking agriculture and the significance of innovation in the field.



Following this, the guest of honor Dr. Rahul Mirchandani, CMD at Aries Agro Limited, took an interactive session on "Innovation and Next Practices in Agriculture". He shared that his company is the first company to receive manufacturing permission for agricultural chelates ultimately becoming the first company to manufacture calcium chelate and agriculture bactericides. He also shared that his company tackled problems related to reactive chemicals, water and labour. The company also uses audio and video methods to educate and train the farmers.

Dr. Rahul Mirchandani", CMD, Aries Agro Limited



### Audience in CAT Hall, BIT Mesra



### Interaction with the Audience



The audience also got the chance to interact and clarify their doubts related to the field of his expertise which included marketing, entrepreneurship and agriculture.

**Dr. C. Jeganathan, Dean RIE, BIT Mesra presented the memento to the guest of Honor as a token of respect**



The audience turned up in huge numbers and was highly engaged and impressed with the depth of knowledge the speaker possessed. A vote of thanks was then delivered by Dr. Anand Prasad Sinha, Associate, Dean Research innovation & Entrepreneurship, BIT Mesra Ranchi. The programme finally culminated at 11:50 A.M. with a High Tea.



## Guest of Honor Profile:

### **Dr. Rahul Mirchandani**

#### **CMD, Aries Agro Limited.**

Dr. Rahul Mirchandani has 23 years of experience as Director of Aries Agro Limited Ranked amongst the 30 Most Innovative CEOs in India in 2014, he has pioneered several unique marketing processes and brand management tactics at Aries. These include launching India's first loyalty programme in agribusiness, India's first Agribusiness flash sale (earning a Limca Book of Records), insurance-based customer retention programmes for farmers, executing the first nationwide single day launch for a specialty fertilizer brand as well as several shock-and-awe brand building programmes to sustain and grow 65 rural brands with zero mass media advertising. Many of these strategies are being documented and taught as case studies in customer relations management at leading Indian business schools.

He holds a Doctorate in Management Studies from NMIMS University, Mumbai and is also a Chartered Financial Analyst (CFA) and holds an MBA from the University of Canberra, Australia. Rahul has delivered sessions on Innovation and Entrepreneurship at the Oxford University, UK and has lectured at over 50 B-Schools in India. A Past National Chairman of the Confederation of Indian Industry's Young Indians (CII-Yi), he is the architect of Yi's Farmers Net program and has served on the CII Agriculture, Innovation, International Policy and India@75 National Councils. He has been the Chairman for the Yi's Next Practices platform and has also chaired Yi's International Relations and Partnerships and is the Founder of the Commonwealth Alliance of Young Entrepreneurs- Asia (CAYE-Asia). He is the recipient of the Bharat Ratna Rajiv Gandhi Yuva Shakti Award 2010 in recognition of outstanding achievements towards Youth Empowerment and Inclusive Growth. Recognized as one of the world's foremost achievers in his field, Rahul Mirchandani is listed in the Who's Who in the World 2013 and has been invited to Receptions at Buckingham Palace, the International Labour Organization, the Commonwealth Heads of Government meetings, High Commissioners Banquets, Association of MBAs Global Deans conference, amongst many others. He was a member of the Global Jury for the UN-Habitat Youth Entrepreneurship and Innovation Awards 2016 and also a Fellow of the 4Sight Class of Ananta Aspen's India Leadership Initiative and member of Aspen Global Leadership Network.

<b>Social Media Link</b>	
Facebook Link	<a href="https://www.facebook.com/BITMesraRanchi/posts/pfbid0v1Q9a21jUpncpyqdAiGF8Y1UruEd3Zie1Wa29N54BhfruM6Rqb7USz1gPMMpdFfl">https://www.facebook.com/BITMesraRanchi/posts/pfbid0v1Q9a21jUpncpyqdAiGF8Y1UruEd3Zie1Wa29N54BhfruM6Rqb7USz1gPMMpdFfl</a>
LinkedIn Link	<a href="https://www.linkedin.com/feed/update/urn:li:activity:7123908149757038593">https://www.linkedin.com/feed/update/urn:li:activity:7123908149757038593</a>
Twitter Link	<a href="https://twitter.com/BITMesra_Ranchi/status/1718142876259893484">https://twitter.com/BITMesra_Ranchi/status/1718142876259893484</a>
Instagram Link	<a href="https://www.instagram.com/p/Cy7nDvSRGII/">https://www.instagram.com/p/Cy7nDvSRGII/</a>
IIC-BIT Website Link	<a href="https://bitmesra.ac.in/Visit_Other_Department_9910?cid=1&amp;deptid=424&amp;pid=300">https://bitmesra.ac.in/Visit_Other_Department_9910?cid=1&amp;deptid=424&amp;pid=300</a>

No of Students	350
No. of Faculty Members	20
Duration of the Seminar	1 hrs. 30 Minutes
Budget	Rs. 5000

# **Exhibition Cum Workshop on**

## ***“Employment Generation Scheme to Start your Own Business Through Technological Intervention”***

**30.10.23**

The Khadi and Village Industries Commission (KVIC), Ministry of MSME, Government of India, in Collaboration with Institution’s Innovation Council BIT Mesra, Ranchi and coordinated by EDC, Finance Club & Unnat Bharat Abhiyan is organizing an Exhibition cum workshop on “Employment Generation Scheme to Start your Own Business Through Technological Intervention” on 30.10.23 from 3:30pm onwards in seminar hall-1 R&D building BIT Mesra Ranchi.

The welcome address was given by Dr Rajiv Kumar Associate Professor mechanical department and faculty advisor of Unnat Bharat. He welcomed Mr. Rajiv Malhotra assistant director and then later doctor K. Sridhar Patnaik president of IIC convener with his motivating speech followed by Dr C. Jagannath, Dean of research innovation and entrepreneurship. He inculcated among the students the true value of khadi and requested students to promote everyday life and then the workshop and seminar was begin by doctor Rajiv Malhotra very initially thanked everybody and then encouraged us with his motivating words.

The workshop on the theme of "Aatmanirbharta" or self-reliance and the promotion of Khadi and Village Industries was organized, featuring a keynote speech by Mr. Rajeev Malhotra. This event aimed to inspire self-employment and foster Aatmanirbharta, as well as shed light on the significance of small scale industries and the use of indigenous materials, particularly focusing on Khadi and Village Industries.

**Key Points from Mr. Rajeev Malhotra's, Assistant Director, KVIC Speech**

1. Gandhian Ideals: Mr. Rajeev Malhotra began the seminar by underlining the relevance of Mahatma Gandhi's ideals in the context of Aatmanirbharta. He emphasized that Mahatma Gandhi had always held that the development of village industries was key to providing employment opportunities for millions in India.
2. Importance of Small-Scale Industries: The significance of small-scale industries was highlighted, with a focus on their labour-intensive nature, their contribution to reducing regional disparities, and their utilization of local resources and skills, which align with sustainable development goals.
3. Khadi and Village Industries Commission (KVIC): Mr. Rajeev Malhotra elaborated on the role of the KVIC in promoting Khadi and Village Industries. He mentioned several KVIC schemes, including the Prime Minister's Employment Generation Programme (PMEGP), Market Promotion Development Assistance (MPDA), Interest Subsidy Eligibility Certificate (ISEC), Work shed Scheme for Khadi Artisans, and initiatives aimed at strengthening the infrastructure of Khadi institutions and supporting marketing infrastructure.



4. PMEGP Success: Notably, Mr. Rajeev Malhotra shared that the PMEGP, which provides financial assistance to individuals and groups for setting up micro-enterprises, distributed Rs. 64 crores in subsidies during the financial year 2022, leading to the creation of over 2 million jobs.

5. Vocal for Local: The seminar also addressed the "Vocal for Local" campaign initiated by the government, emphasizing the importance of supporting products made in India to boost sales and profitability for small scale industries and KVIs.

6. Reducing Dependency on Imports: Mr. Malhotra highlighted the role of SSIs and KVIs in reducing India's dependency on imported goods by producing a wide range of products domestically.

7. Promoting Technological Innovation: These industries were seen as potential drivers of technological innovation, which can enhance the quality and competitiveness of Indian products.

The workshop cum seminar by Mr. Rajeev Malhotra served as a significant platform for raising awareness about the principles of Aatmanirbharta and the vital role of small-scale industries, particularly Khadi and Village Industries. The event demonstrated that promoting these industries can lead to job creation, regional development, and sustainable growth. The government's commitment to schemes like PMEGP and the "Vocal for Local" campaign underlines its dedication to fostering Aatmanirbharta in the country. By supporting SSIs and KVIs and advocating for the use of Indian-made products, attendees left the seminar with a deeper understanding of how they can contribute to self-reliance and economic prosperity in India.

The banner features a header with logos of various organizations: Institution's Innovation Council, Entrepreneurship Development Cell (BIT Mesra, Ranchi), Finance Club, G20 India 2023, and the Ministry of MSME, Government of India. The main text is centered and reads: 'INSTITUTION'S INNOVATION COUNCIL, BIT MESRA in Collaboration with Khadi and Village Industries Commission (KVIC), Ministry of MSME, Government of India ORGANIZING Exhibition cum Workshop on Employment Generation Scheme to start your Own Business Through Technological Intervention'. The date is listed as 30/10/2023, and the guest of honor is Mr. Rajiv Malhotra, Assistant Director of KVIC. The time is 3:30 PM onwards, and the venue is Seminar Hall -1 R&D Building, BIT Mesra Ranchi.

**INSTITUTION'S INNOVATION COUNCIL, BIT MESRA**  
in Collaboration with Khadi and Village Industries Commission (KVIC),  
Ministry of MSME, Government of India  
ORGANIZING  
**Exhibition cum Workshop on**  
**Employment Generation Scheme to start your Own Business Through**  
**Technological Intervention**

**DATE**  
30/10/2023

**GUEST OF HONOR**  
**MR. RAJIV MALHOTRA**  
ASSITANT DIRECTOR  
KHADI AND VILLAGE INDUSTRIES COMMISSION (KVIC)

**TIME : 3:30 PM ONWARDS**

**VENUE : SEMINAR HALL -1 R&D BUILDING,  
BIT MESRA RANCHI**

## Inaugurate the Exhibition Cum Workshop PIC



**Dr. C. Jeganathan, Dean RIE, BIT, Mesra, Ranchi welcomed to Mr. Rajiv Malhotra, Assistant Director, Khadi and Village Industries Commission (KVIC), Jharkhand.**



**Mr. Rajiv Malhotra, Assistant Director, felicitated to Dr. C. Jeganathan, Dean RIE, BIT, Mesra, Ranchi.**





**Promotion of Buy Khadi by Faculty & Students from BIT Mesra**









Social Media Link	<a href="https://www.instagram.com/p/Cz6tpdJPYw6/">https://www.instagram.com/p/Cz6tpdJPYw6/</a>
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- 1. Students Participating : 75
- 2. Faculty Participating : 15 + 6 External
- 3. Budget : Rs 6000/-

# Workshop on “Entrepreneurship & Innovation as a Career Opportunity” 2.11.23

Institution’s Innovation Council (IIC-BIT) in association with Entrepreneurship Development Cell (EDC) and Finance Club (FC) has organized a workshop on “*Entrepreneurship & Innovation as a Career Opportunity*” on 2<sup>nd</sup> Nov 2023 at Seminar Hall -1 R& D Building, BIT Mesra, Ranchi. The resource person of this workshop was Mr. Amitesh Anand, CEO, FloCard-366 Pi Technologies. Mr. As the CEO of FloCard, he's dedicated to sustainability and innovation, while his role as the Founder of 366Pi Technologies focuses on cutting-edge tech solutions. The main objective of this workshop was

discover how entrepreneurship and innovation can be your career choice with Amitesh's guidance. He's also a guest faculty at IIM Ranchi and a TEDx speaker, bridging academia and real-world applications. Mr. Vishal H. Shah welcomed the resource person and audience and briefed about the workshop. Mr. Amitesh Anand has discussed about the “Entrepreneurship & Innovation as a career opportunity. He talked about the Idea formulation and validation as well as prototype development & business planning. Mr. Amitesh discussed to our students and explain today Innovative entrepreneurship can assist identifying possibilities that exist now or are likely to emerge in the future. It helps identify new market demands and trends. Successful businesses often anticipate future trends and create an idea or product to fulfil future demands effectively. He also explained the evaluation of technology innovation and what are the opportunity in recent days for young generation. In this workshop the total 65 students and 3 faculty members attended.

The poster is for a workshop titled "Entrepreneurship & Innovation as a Career Opportunity" held on Thursday, 3:30 PM, 2<sup>nd</sup> Nov. The speaker is Mr. Amitesh Anand, CEO of FloCard and Founder of 366 Pi Technologies. The event is organized by the Institution's Innovation Council (IIC-BIT), Entrepreneurship Development Cell (EDC), and Finance Club (FC) at BIT Mesra, Ranchi. The poster includes logos for the organizing bodies, a circular portrait of Mr. Anand, and social media icons for Instagram, Facebook, and LinkedIn. The website www.edcbitmesra.in is listed at the bottom.

INSTITUTION'S INNOVATION COUNCIL  
Entrepreneurship Development Cell  
BIT Mesra, Ranchi  
www.edcbitmesra.in  
FINANCE CLUB

on **WORKSHOP**  
ENTREPRENEURSHIP  
& INNOVATION  
as a *career opportunity*

**AMITESH ANAND**  
Seminar Hall 1

THURSDAY 3:30 PM 2<sup>nd</sup> NOV

CEO-FloCard | Founder-366 Pi Technologies | Investor | Mentor. Inspiring the next generation and Impacting global progress.

www.edcbitmesra.in

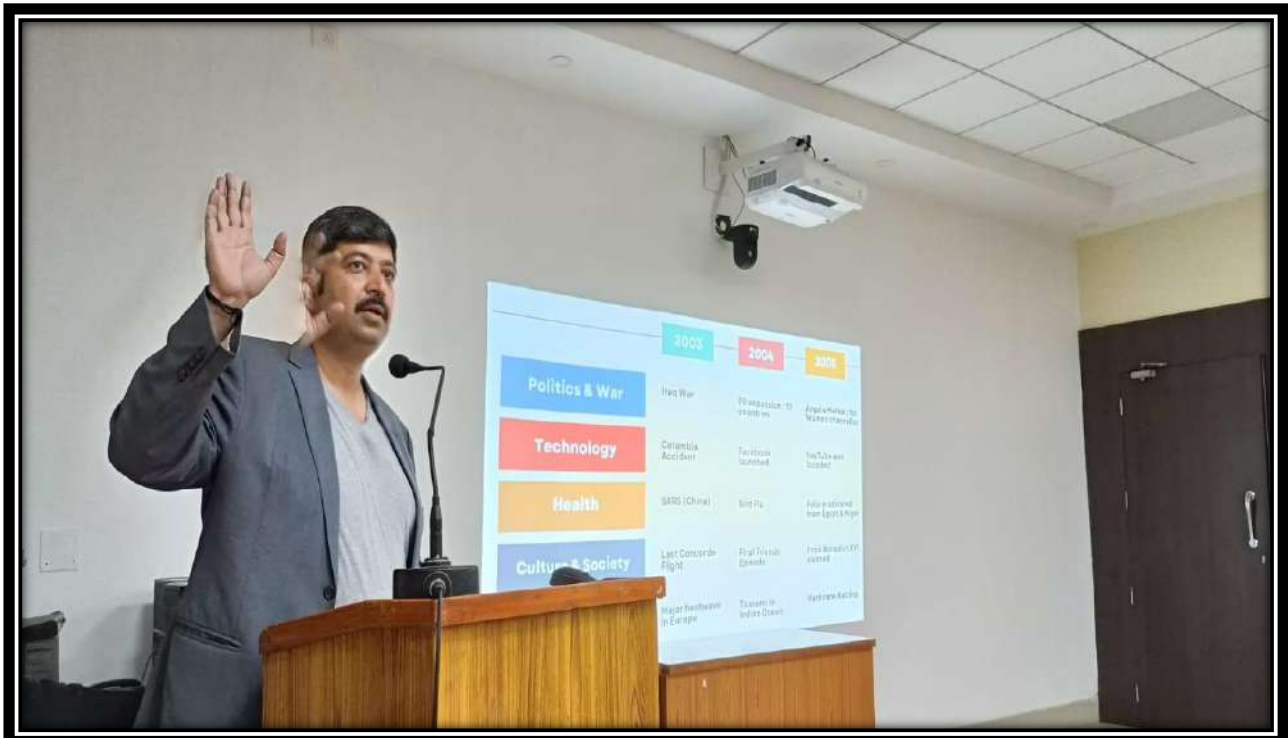


**Dr. Anand Pd Sinha, Associate Dean, RIE & Co-Convenor, IIC BIT Mesra presenting memento to the guest of Honor Mr. Amitesh Anand**



**Mr. Amitesh Anand -delivering the session**







Students Participation : 65  
Faculty Participation : 03  
Workshop Budget : Rs. 6000

Social Media	
Instagram	<a href="https://www.instagram.com/p/CzGVchzP3Xn/">https://www.instagram.com/p/CzGVchzP3Xn/</a>

# Celebration of National Entrepreneurship Day

## 9<sup>th</sup> November 2023 , IIC-BIT Mesra Ranchi

**Birla Institute of Technology  
Mesra, Ranchi**

**Institution's Innovation Council**  
organizes  
**NATIONAL ENTREPRENEURSHIP DAY**

**JOIN  
SEMINAR ON**

**3:30 PM onwards  
9th Nov 2023**

**"SUSTAINABLE ENTREPRENEURSHIP:  
NURTURING INNOVATION FOR A  
BETTER FUTURE"**



**Mr. Vishal H. Shah**  
Associate Dean, AIR &  
EDC Coordinator, BIT Mesra

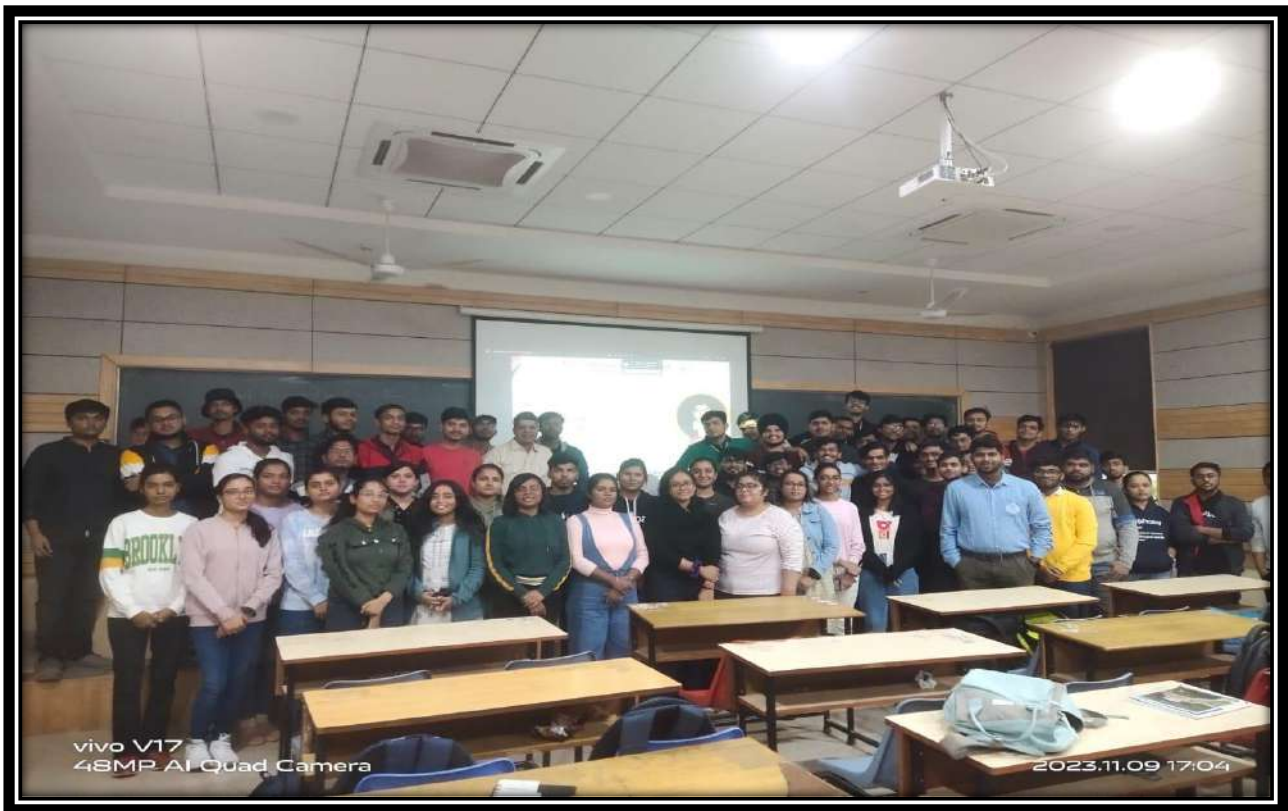
**Venue : Room No. 231 , BIT Mesra Ranchi**

### Overall Report of the Activity

<i>Date:</i> 9/11/2023	<i>Time:</i> 03:30 PM to 05:30 PM
<i>Speaker:</i> Mr. Vishal H Shah	Topic: Sustainable Entrepreneurship 'Nurturing Innovation for a better future'
<i>Speaker Profile:</i> Mr. Vishal H Shah is an Associate Dean of Alumni Relations. He is heading the Entrepreneurship Development Cell since 2006. In his career spanning 17 years at BIT Mesra he is instrumental in mentoring several startups.	
<i>Key Learning and Take-Aways:</i> a. Renewable Energy Innovations: Companies like Tesla have transformed the automotive industry by prioritizing sustainable energy solutions. Their electric vehicles and solar products exemplify how innovation can drive positive environmental impact.  b. Socially Responsible Brands: Companies like Patagonia have demonstrated the viability of integrating social responsibility into business models. Patagonia's commitment to ethical sourcing and environmental conservation resonates with conscious consumers.  c. Tech for Good: Various startups leverage technology to address social and environmental issues. For example, platforms like Ecosia use internet searches to fund tree-planting initiatives, showcasing the potential of digital innovations for positive change.	
Academic Year	2023-2024
Program driven by	Entrepreneurship Development Cell and Finance Club under Institution's Innovation Council

Quarter	One
Activity Name	National Entrepreneurship Day
Program Type	Seminar
Program Theme	Sustainable Entrepreneurship ‘Nurturing Innovation for a better future’
Program Start Date	09/11/2022
Program Ending Date	09/11/2022
Number of Students Participants	66
Number of Faculty Participants	2
Number of Expert Participants if any	NIL
Mode of Delivery	Offline
Remark	Sustainable entrepreneurship plays a pivotal role in shaping a resilient and thriving future for both businesses and the global community. The seminar was focused towards exploring the intersection of entrepreneurship and sustainability, emphasizing the importance of nurturing innovation as a catalyst for positive change. It delves into key principles, challenges, and success stories that exemplify the potential of sustainable entrepreneurship in creating a better future.
Objectives	<p>Participants were introduced towards sustainable entrepreneurship. The key principles of sustainable entrepreneurship are</p> <ol style="list-style-type: none"> <li>a) Triple Bottom Line: Sustainable entrepreneurs prioritize the triple bottom line—people, planet, and profit. They seek to generate positive social and environmental outcomes alongside financial success.</li> <li>b) Circular Economy: Embracing a circular economy model, sustainable entrepreneurs minimize waste, promote recycling, and design products for longevity. This approach contributes to resource conservation and reduces the ecological footprint.</li> <li>c) Inclusive Innovation: Sustainable entrepreneurship is inclusive, considering the needs of diverse communities. Entrepreneurs actively engage with stakeholders to develop solutions that address societal challenges and promote social equity.</li> </ol>
Benefits in terms of learning/skill/knowledge development	Sustainable entrepreneurship, rooted in innovation, is a powerful force for creating a better future. By adopting principles such as the triple bottom line, embracing circular economy models, and promoting inclusive innovation, entrepreneurs can contribute to building a more resilient and sustainable world. While challenges exist, success stories demonstrate that the integration of sustainability and entrepreneurship is not only possible but essential for the well-being of our planet and society. As we move forward, it is crucial to continue supporting and amplifying the efforts of sustainable entrepreneurs to drive positive change and shape a future that is both prosperous and sustainable.
Program Coordinator(s)	Vishal H Shah, Assistant Professor, ECE Department





Students Participation	66
Faculty Participation	2
Expenditure	2000
Social Media	<a href="https://www.instagram.com/p/Cz6tj1DvXJh/?igshid=NTYzOWQzNmJjMA==">https://www.instagram.com/p/Cz6tj1DvXJh/?igshid=NTYzOWQzNmJjMA==</a>
Instagram	<a href="https://www.instagram.com/p/Cz6tj1DvXJh/?igshid=NTYzOWQzNmJjMA==">https://www.instagram.com/p/Cz6tj1DvXJh/?igshid=NTYzOWQzNmJjMA==</a>

# Field Visit to the Data Centre, Jharkhand Police, Police Headquarter, Ranchi 17.11.24



Institution's Innovation Council, BIT Mesra in collaboration with Department of Centre for Quantitative Economics and Data Science has organized a field visit to Data Centre, Jharkhand Police located at Police Headquarter, Dhurwa, Ranchi on 17<sup>th</sup> November 2023. This was planned as part of Activity "Exposure and field visit for problem identification".

The Main Objectives of the visit

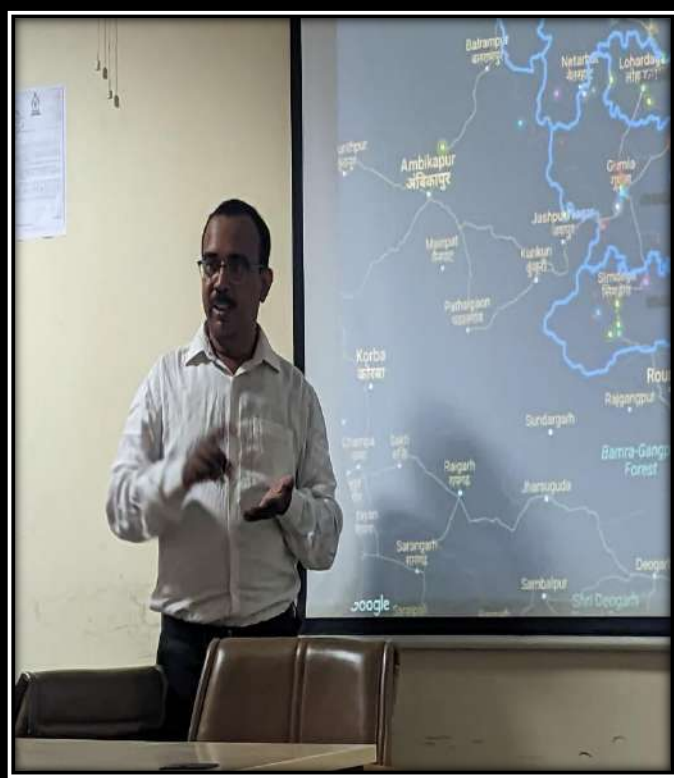
- Identifying and familiarizing with the data available with Jharkhand Police and adoption of design thinking for solutions.
- Systematically working towards establishment of data pools and modalities for working with existing pools like the Crime and Criminal Tracking Network System (CCTNS).
- Exploring, customizing, and implementing global best practices in data analytics to draw actionable insights transforming from useful to usable.
- Economic modelling and data-based inputs for policy formulation.

This visit was intended to make our students understand the intricacies of data generation from various police stations across the Jharkhand, how cyber policing works, how the data curation would be carried out as well as the challenges they are facing in order to offer them some support through some solutions developed by our students. A total of 35 students with background of data science along with couple of faculties have visited the centre. The importance of data in effective policing and the associated challenges were demonstrated by the Police officers. They have demonstrated various applications through which they are currently maintaining the law & order across the state and also, what they are expecting the students to support using cutting edge technologies. The students



were also given an exposure of systematically working towards establishment of data pools and modalities for working with existing pools like the Crime and Criminal Tracking Network System (CCTNS).

***Field Visit to the Data Centre, Jharkhand Police, Police Headquarter***







Students Participation	35
Faculty Participation	03
Budget	Rs. 6000
Social Media Link	
Instagram	<a href="https://www.instagram.com/p/Cz6vBEkylsl/">https://www.instagram.com/p/Cz6vBEkylsl/</a>

# 'Eco-Innovation: From ISM to Yale and Beyond'

*Drawing Lessons from Academic Excellence to Drive Sustainable Change*

23<sup>rd</sup> November 2023

Institution's Innovation Council (IIC-BIT) in association with Entrepreneurship Development Cell (EDC) and Finance Club (FC) has organized a seminar on '*Eco-Innovation: From ISM to Yale and Beyond*' drawing Lessons from Academic Excellence to Drive Sustainable Change on 23<sup>rd</sup> Nov 2023 at Seminar Hall -1 R& D Building, BIT Mesra Ranchi.

The poster features logos for Institution's Innovation Council, Finance Club, and Entrepreneurship Development Cell at BIT Mesra, Ranchi. The main title is 'ECO-INNOVATION: FROM ISM TO YALE AND BEYOND' in large red letters. Below it is the subtitle 'DRAWING LESSONS FROM ACADEMIC EXCELLENCE TO DRIVE SUSTAINABLE CHANGE'. The date and time are 'THURSDAY 23 NOVEMBER 2023 03:00-04:00 PM'. The speaker is identified as 'SPEAKER BIPUL MAYANK SENIOR CONSULTANT DELOITTE'. The location is 'SEMINAR HALL-1'. A photograph of Bipul Mayank, a man in a dark blue suit, is shown on the right side of the poster.

ENTREPRENEURSHIP DEVELOPMENT CELL  
BIT MESRA, RANCHI  
[www.edcbitmesra.in](http://www.edcbitmesra.in)

## ECO-INNOVATION: FROM ISM TO YALE AND BEYOND

DRAWING LESSONS FROM ACADEMIC EXCELLENCE TO DRIVE SUSTAINABLE CHANGE

**THURSDAY**  
23 NOVEMBER 2023  
03:00-04:00 PM

**SPEAKER**  
BIPUL MAYANK  
SENIOR CONSULTANT  
DELOITTE

**SEMINAR HALL-1**

Academic Year	2023-2024
Program driven by	Institution's Innovation Council, BIT Mesra Ranchi.
Activity Name	Self Driven Activity on sustainability
Program Type	Seminar
Program Theme	'Eco-Innovation: From ISM to Yale and Beyond'
Program Start Date	23/11/2022
Program Ending Date	23/11/2022
Number of Students Participants	63
Number of Faculty Participants	2
Number of Expert Participants if any	1
Expenditure	Rs.1500/-
Mode of Delivery	Offline
Remark	Eco-innovation refers to the development and application of new ideas, processes, products, or services with the primary aim of addressing environmental challenges and promoting sustainability. It involves the integration of environmentally friendly practices into business strategies and the creation of solutions that have a reduced impact on the environment. Eco-innovation encompasses a wide range of sectors, including industry, agriculture, energy, transportation, and more.
Objectives	<p>Participants were introduced to eco-innovation concepts and were motivated to suggest ideas via case studies. The key learning was</p> <ol style="list-style-type: none"> <li>a) Environmental Science: Understanding the principles of environmental science provides the foundation for eco-innovation. This includes knowledge of ecosystems, biodiversity, climate change, and the impact of human activities on the environment.</li> <li>b) Sustainable Development: Learning about sustainable development involves understanding how to meet the needs of the present without compromising the ability of future generations to meet their own needs. This includes studying social, economic, and environmental aspects of sustainability.</li> <li>c) Green Technologies: Familiarity with emerging green technologies is crucial for eco-innovation. This can include renewable energy technologies, energy-efficient systems, and environmentally friendly materials and processes.</li> </ol>
Benefits in terms of learning/skill/knowledge development	Students understood the importance of sustainability. Case studies of African Villages were presented, and students

	were made to provide solutions related to important environmental issues
Program Coordinator(s)	Vishal H Shah, Assistant Professor, ECE Department

### Overall Report of the Activity

<i>Date:</i> 23/11/2023	<i>Time:</i> 03:00 PM to 04:30 PM
<i>Speaker:</i> Mr. Bipul Mayank	Topic: 'Eco-Innovation: From ISM to Yale and Beyond' Drawing Lessons from Academic Excellence to Drive Sustainable Change

#### *Speaker Profile:*

Mr Bipul Mayank is a Graduate student focusing on responsible investment and environmental stewardship. He is one of a handful of 2-time grantees of the premier graduate-level fellowship in environmental impact. Selected as a fellow for Google's Global Sustainability Program in 2020 and S&P Global's Net-Zero Strategy Program in 2021. Selected from a pool of over 1000+ candidates, a cohort of ~100 EDF Climate Corps fellows spend a summer with leading companies and public sector organizations to reduce energy use, increase efficiencies, and make the business case for sustainability and energy management.

#### *Key Learning and Take-Aways:*

**Green Technologies:** Eco-innovation often involves the advancement of green technologies that contribute to sustainability. This can include the development of energy-efficient appliances, electric vehicles, and other technologies that have a lower environmental impact.

**Sustainable Agriculture:** Innovations in agriculture that promote sustainable farming practices, reduce the use of pesticides and fertilizers, and enhance soil health are part of the eco-innovation landscape.

**Waste Reduction:** Strategies for minimizing waste generation and improving waste management are integral to eco-innovation. This may involve developing biodegradable materials, promoting recycling initiatives, and finding innovative ways to deal with various types of waste.

**Policy and Regulation:** Eco-innovation is often influenced by government policies and regulations that encourage environmentally responsible practices. Incentives, subsidies, and regulatory frameworks can play a crucial role in promoting eco-innovation.

Social Media	<a href="https://www.linkedin.com/feed/update/urn:li:activity:7133111597413130240/">https://www.linkedin.com/feed/update/urn:li:activity:7133111597413130240/</a>
Face book	<a href="https://www.facebook.com/photo?fbid=10224824390540207&amp;set=a.1057512841191">https://www.facebook.com/photo?fbid=10224824390540207&amp;set=a.1057512841191</a>
Twitter	
YouTube	
Instagram	<a href="https://www.instagram.com/p/Cz6tj1DvXJh/?igshid=NTYzOWQzNmJjMA==">https://www.instagram.com/p/Cz6tj1DvXJh/?igshid=NTYzOWQzNmJjMA==</a>

Mr. Bipul Mayank, Sr. Consultant, Deloitte







Seminar on  
**My Story- Motivational Session by  
SPIC MACAY Founder**  
29<sup>th</sup> Nov 2023

**Birla Institute of  
Technology Mesra Ranchi**

**My Story - Motivational Session  
by "SPIC MACAY" founder**

**29th Nov 2023**  
**Time : 3:30 PM onwards**

**Prof. Kiran Seth**  
**Professor Emeritus  
Indian Institute of Technology, Delhi  
& Founder, SPIC MACAY**

**CAT Hall- BIT Mesra Ranchi**

Institution's Innovation Council, BIT Mesra in Association with Society for Promotion of Indian Classical Music and Culture amongst Youth (SPIC MACAY) organized the event -**My Story- Motivational Session** by Professor Kiran Seth, founder **SPIC MACAY** distinguished Padma Shree Awardee, former Professor and Emeritus Professor at Indian Institute of Technology, Delhi, on 29th November, 2023 in the CAT Hall of Birla Institute of Technology, Mesra.

Professor Kiran Seth was welcomed by Dr. Bhaskar Karn, Dean of Student Affairs, Dr. C. Jeganathan, Dean of Research, Innovation and Entrepreneurship and Mr. Rajiv Ranjan, Assistant Director SIRD, SPIC MACAY Jharkhand Chapter. The event commenced at 3:30 P.M. with institute prayer and Dr. Bhaskar Karn welcoming Professor Kiran Seth with a bouquet., Govt of Jharkhand and member of SPIC MACAY Jharkhand Chapter. The esteemed dignitaries present on the Dias were Professor Kiran Seth, Dr. Bhaskar Karn, Dr. C. Jeganathan and Mr. Rajiv Ranjan. Dr. Kiran Seth highlighted its significance in preserving the principles and continuing the notion

of Indian culture among youth. Professor Kiran Seth, having taken a unique undertaking of cycling from Kashmir to Kanyakumari, addressed the audience about his journey and emphasized the principles of SPIC MACAY and the desideratum of Indian culture in shaping the Indian Youth. Professor Kiran Seth's journey stands for a greater and noble cause; he started off from Kashmir on 15th August 2022 and is expected to arrive in Kanyakumari on 31st January 2024. Dr Bhaskar Karn, Dean of Student Affairs gave the vote of thanks on behalf of BIT Mesra to Professor Kiran Seth and the event culminated at 5:30 P.M.

### Dr. Bhaskar Karn, Dean DSW, welcomed to Professor Kiran Seth



***Dr. Kiran Seth, Emeritus Professor at Indian Institute of Technology, Delhi & Founder, SPIC Macay***



***Dr. C. Jeganathan, Dean of Research, Innovation and Entrepreneurship, briefed about the seminar and interaction with the audience***





Students Participants	150
Faculty Participants	10
Budget	Rs.5000
Social Media Link Instagram	<a href="https://www.instagram.com/p/C0ZdGbURxsu/">https://www.instagram.com/p/C0ZdGbURxsu/</a>

Celebration of  
**National Pollution Control Day'23**  
2<sup>nd</sup> December 2023



Institution's Innovation Council, BIT Mesra in collaboration with Horizon Honda, organized Two-Wheeler Pollution Control Certification Camp on occasion of National Pollution Day Control held on 2<sup>nd</sup> December 2023 in BIT Mesra Campus. During this celebration Horizon Honda has given an offered to subsidized rate for pollution control certification exclusively for the BIT MESRA community. The purpose of this programme is to guarantee that Vehicle meet pollution control regulations and to raise awareness of environmental issues.

**Dr. C. Jeganathan, Dean RIE & President IIC -BIT Mesra has inaugurated the ceremony**



Dr. C. Jeganathan, Dean Research Innovation & Entrepreneurship & President, IIC -BIT Mesra has inaugurated the ceremony. Dr. Richa Pandey, coordinator National Pollution Control Day'24 along with Dr. Neeta Kumari, Dr. Prabjot Kaur, & IIC-Co-Convenor Dr. Anand Pd Sinha extend a warm welcome to guest from Horizon Honda and staff members from BIT Mesra to join in the celebration of this wonderful chance to make vehicles more environmentally friendly and contribute to a cleaner world. During this event, 55 two-wheelers received pollution control certificates, and 37 vehicles received complimentary services from Horizon Honda. The program started at 10:00 am to 5.30pm.



**Dr. C. Jeganathan Welcome to Executive Members of Horizon Honda**



**Group PIC – BIT Faculty Members, Students and Executive Members of Horizon Honda**



**Two-wheeler Vehicle Pollution Checking & Free Services by Horizon Honda**





## Functioning of the Services



## Functioning of the Services



## Faculty & Staff Members Taking Services



Total Students Participation	20
Total Faculty & Staff Participation	92
Total External Faculty participation	11
Total Budget	Rs. 15000/-
Social Media Link ( Instagram)	<a href="https://www.instagram.com/p/C7luu6GRXoT/">https://www.instagram.com/p/C7luu6GRXoT/</a>

# Expert Talk on Geospatial Instruments and Applications

Achieving Problem – Solution Fit and Product – Market Fit

By **Mr. Peter Pallos**

6<sup>th</sup> Dec 2023

The poster features a blue and white color scheme with geometric shapes. At the top left is the Birla Institute of Technology logo. The main text is in bold, blue, and black fonts. A central hexagonal frame contains a portrait of Mr. Peter Pallos. Logos for the Institution's Innovation Council and Teledyne Optech are also present.

**Birla Institute of Technology  
Mesra, Ranchi**

**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

**Expert Talk on**  
**GEOSPATIAL INSTRUMENTS  
AND APPLICATIONS**  
*Achieving Problem-Solution Fit and  
Product-Market Fit*

**Mr. Peter Pallos**

**6th Dec 2023**

**Time : 3:00 PM**

**Regional Manager  
Teledyne Optech, Canada**

**Venue: Seminar Hall -1 R& D Building, BIT Mesra Ranchi**

Institution's Innovation Council (IIC-BIT) Birla Institute of Technology, Mesra, Ranchi conducted expert talk on “*Geospatial Instruments and Applications under the Achieving Problem – Solution Fit and Product – Market Fit*” by Mr. Peter Pallos, Regional Manager, Teledyne Optech, Canada. Teledyne Optech is a recognized leader in the development and manufacture of advanced lidar instruments, based in Toronto, ON, Canada. Mr. Peter Pallos has discussed about the function of the technology which is fully integrated lidar and camera solutions in airborne mapping, airborne bathymetry, mobile mapping, terrestrial laser scanning, mine cavity monitoring, and industrial process control, as well as space-proven sensors. He has also talked about the background of the Teledyne Optech company. Teledyne Optech has extensive experience in deploying systems in challenging environments such as aircraft, vehicles, rail, boats, underground mines, and even in space. The students form BTech and PhD Scholars has attended this seminar.

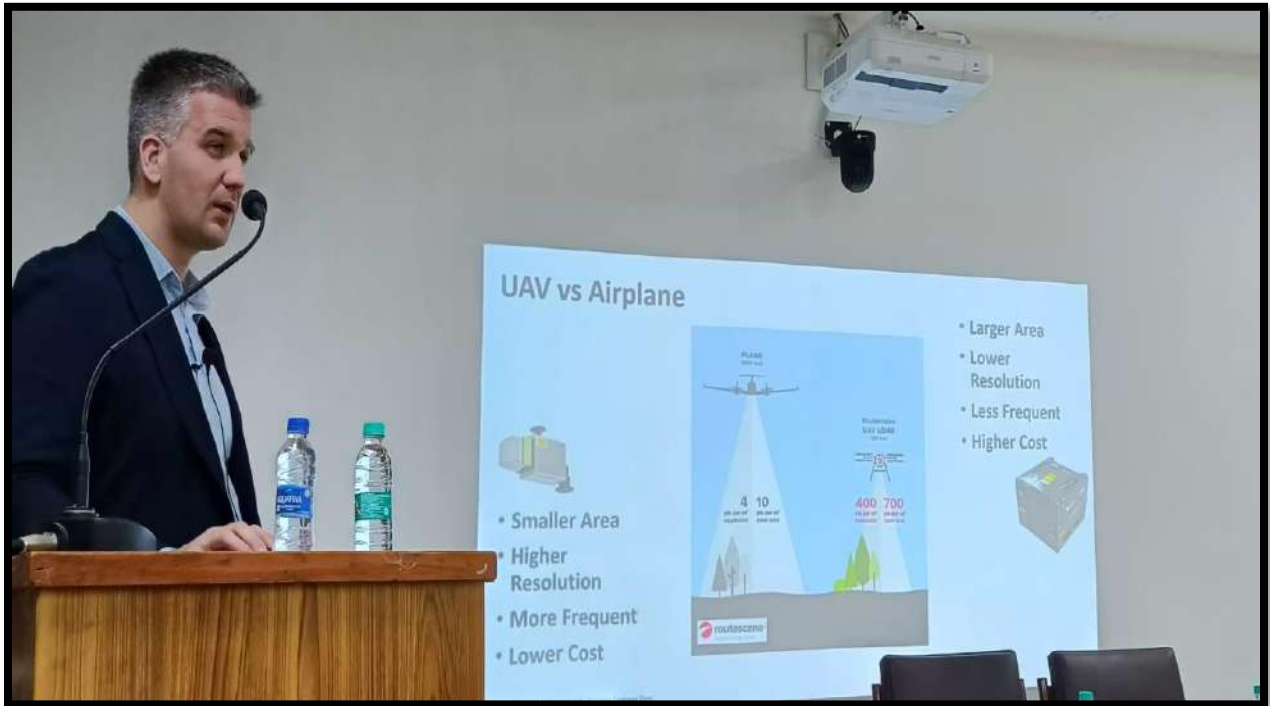
The total student's participation is 40 and faculty participation is 6 and 2 external members including resource person.



**Prof. C. Jeganathan, Dean, RIE & President, IIC-BIT welcome to Guest of Honor and Key note speaker Mr. Peter Pallos, Regional Manager, Teledyne Optech, Canada.**



Session delivered by Mr. Peter Pallos, Regional Manager, Teledyne Optech, Canada







Students Participation	40
Faculty Participation	06
External Participation	02
Total Budget	Rs,5000
Social Media -Instagram	<a href="https://www.instagram.com/p/C8wOv-zPUEe/">https://www.instagram.com/p/C8wOv-zPUEe/</a>



## Workshop On

# “Research to Patentable Invention: Driving Innovation at various stages of Technology Readiness Level”

11th Dec 2023

**Birla Institute of Technology, Mesra**  
Ranchi-835215

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education Initiative)

**One-Day Workshop on**  
“Research to Patentable Invention : Driving Innovation at Various Stages of Technology Readiness Level”

**Mr. Shashank Raj**  
Accures Legal Patents & Design

**Mr. Vedant Pujari**  
Accures Legal Founding Partner

Organized by IPR Cell & Institution's Innovation Council, BIT Mesra, Ranchi

**11th Dec 2023**  
Time : 10:00 am onwards

**Venue : CAT Hall BIT Mesra, Ranchi**

Registration Scan Here

On 11<sup>th</sup> Dec 2023 the Institution's Innovation Council, BIT Mesra (IIC-BIT), organized one-day workshop on “*Research to Patentable Invention: Driving Innovation at various stages of Technology Readiness Level*” at CAT Hall BIT Mesra Ranchi. The main objective of this workshop is to encourage Institute Research Fellows/Scholars and faculty members to understand the patent filing process and empower them to assess their innovation at various technology readiness levels to convert their intellectual property (IP), copyright, designs, software, and other inventions into patents. Also, learn the possible commercial exploitation opportunities. The workshop started at 10:15 am onwards and the welcome address was given by Dr. Ashoke Sharon, Convenor, IPR Cell BIT Mesra, Ranchi. The Inaugural address was given by Dr. Sandeep Singh Solanki, Head, ECE Dept. The guest of honor and key note speaker of this workshop was Mr. Vedant Pujari, Accures Legal, Founding Partner & other key note speaker Mr. Shashank Raj, Accures Legal, Patents & Design. Mr. Vedant talked about the Important of IPR and what are the process of patent file if they invented new product or any new design of the product. This workshop serves as a hands-on training programme for coming up with fresh concepts and innovative research projects that they can submit for patent applications. The total student participants of this workshop are 135 and the total 10 faculty members attended this workshop.

**Dr. Ashoke Sharon, Convener, IPR Cell BIT Mesra, Ranchi**



**Prof. Sandeep Singh Solanki welcome to Guest of Honor and Key note speaker Mr. Vedant Pujari, Accures Legal, Founding Partner**



**Dr. Ashoke Sharon presented a momentous to Guest of Honor and Key note speaker Mr. Vedant Pujari, Accures Legal, Founding Partner**



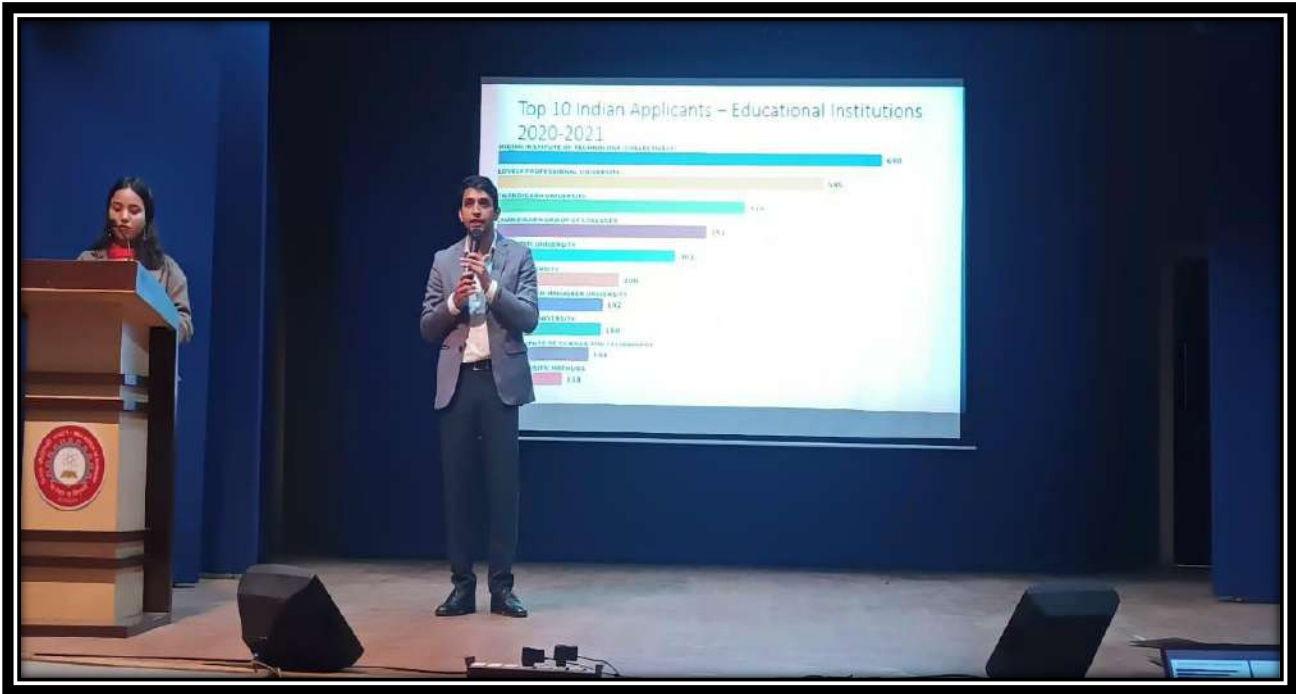
**Mr. Vishal H. Shah present a momentous to Mr. Shashank Raj, Accures Legal, Patents & Design**



**Inaugural Address given by Prof. Sandeep Singh Solanki, Head, ECE Dept.**



**Session Taken by Mr. Shashank Raj, Accures Legal, Patents & Design**



**Session Taken by Mr. Vedant Pujari, Accures Legal, Founding Partner & Mr. Shashank Raj, Accures Legal, Patents & Design**





Students Participation : 135  
 Faculty Participation : 10  
 Workshop Budget : Rs.30,000/-

Social Media	
Instagram	<a href="https://www.instagram.com/p/C4tP_DVSLfy/">https://www.instagram.com/p/C4tP_DVSLfy/</a>

# Viksit Bharat@2047 Utsav

11.12.2023

Institution's Innovation Council, BIT Mesra (IIC-BIT), organized launching of **Viksit Bharat@2047 Utsav** on 11th Dec. 2023 at CAT Hall BIT Mesra Ranchi. Honorable Prime Minister Shri Narendra Modi ji had launched Viksit Bharat@2047 Utsav: Voice of Youth' through video conferencing. During the event, Prime Minister Modi Ji addressed vice-chancellors of universities, heads of institutions and faculty members at workshops organized at state palaces across the country to mark the launch of this initiative. The Prime Minister stated that today is a unique opportunity in relation to this resolution and thanked all of the Governors for organizing the workshop for the building of a developed India. He appreciated their contribution in bringing together all the stakeholders who have the responsibility of guiding the youth of the country in achieving the goal of Viksit Bharat@2047 Utsav. The Prime Minister reiterated the glorious struggle for independence as a source of inspiration. He said that during that time every effort such as Satyagraha, revolutionary path, non-cooperation, Swadeshi and social and educational reforms were in the direction of independence. During this period, universities like Kashi, Lucknow, Visva Bharati, Gujarat Vidyapeeth, Nagpur University, Annamalai, Andhra and Kerala Universities strengthened the consciousness of the nation. A whole generation of youth came into existence dedicated to the freedom of the country, whose every effort was directed towards the goal of independence. "Today every institution, every individual should move forward with the resolve that every effort and work will be for a developed India.

**Viksit Bharat @2047 Utsav** विकसित भारत अभियान

**PM MODI LAUNCHES 'VIKSIT BHARAT @2047: VOICE OF YOUTH'**

**11th Dec 2023**

**Time : 10:30 am onwards**

**Venue : CAT Hall BIT Mesra, Ranchi**

**Online**

**Honorable Prime Minister Shri Narendra Modi Ji**











Students Participation : 125  
 Faculty Participation : 14  
 Budget : Rs. 5000

Social Media	
Instagram	<a href="https://www.instagram.com/p/C4tWwi5ytsB/">https://www.instagram.com/p/C4tWwi5ytsB/</a>

# BIT NISHAN -23

Innovation Contest

15<sup>th</sup> Dec 2023



Institution's Innovation Council (IIC-BIT) in association with Entrepreneurship Development Cell (EDC) and Finance Club (FC) are organized an Innovation Contest named as **BIT-NISHAN-23**. BIT-NISHAN aims to identify potential startup-idea and to ensure that no idea from BIT with the potential to excel shall go unnoticed and untested due to lack of opportunity, resources and capital.

Institution's Innovation council BIT Mesra organized a “**Business Plan Competition**” Pre-Qualifier event of BIT NISHAN-23 on 14<sup>th</sup> Oct 2023. In Business Plan Competition total 35 teams from BIT Mesra and their off campuses are registered and presented their business plan ideas on 14<sup>th</sup> Oct 23 offline and after that 15 teams have qualified for the final round and they have presented show their prototype product in the BIT NISHAN-23 innovation contest which was held on 15<sup>th</sup> Dec 2023.

BIT NISHAN event will help to promote the culture of entrepreneurship & innovation amongst students and faculty in BIT. In the future, we will expand to attract angel investors, and also, promote entrepreneurship and innovation amongst the students from other under-privileged colleges in Jharkhand. The event was open for all current students of BIT Mesra and its off campuses across the country. This event identified few good early-stage startup ideas conceived by the students. Out of 15 teams the total 7 teams have qualified for the final round of BIT NISHAN-23 and will be provided with support for immediate monetary (**1 Lakhs Rupees each team**) for infrastructure backing/startup registration and product implementation.

**Jury members of the BIT NISHAN**



**Mr. Abhishek Sagar, Dr. P. K. Chatterjee, Mr. Ashish Satyavrat Sahu**

**Dr. C. Jeganathan, Dean RIE & President, IIC-BIT Presented a Momentous to Dr. P. K. Chatterjee, Former Chief General Manager, Mecon Ltd. Ranchi.**



**Dr. C. Jeganathan, Dean RIE & President, IIC-BIT Presented a Momentous to Mr. Abhishek Sagar, Founder & CEO, Zuraverse (Web3, Game Fi, AI)**



**Dr. C. Jeganathan, Dean RIE & President, IIC-BIT Presented a Momentous to 1. Mr. Ashish Satyavrat Sahu, Founder & Designer Sustainable Clothing Brand (Khadi Wala Designer, APMEG Unit & Johargram -Made in Jharkhand**



**Pitching Session by Students**











**Prize Distribution of BIT NISHAN of Rs. 1 Lakh**







The top 7 startup teams got of Rs. 1 Lakh winning Prize and 2 Consolation Prize of Rs, 50,000/- . The team names have mentioned below.

- |   |                            |
|---|----------------------------|
| 1. Yantra (Anurag Kr Sinha)– BIT Mesra  | - 1 <sup>st</sup> position |
| 2. Menta Mind ( Ayush Kumar)-BIT Mesra  | - 2 <sup>nd</sup> position |
| 3. True Docs ( Yash Vardhan)-BIT Mesra  | - 3 <sup>rd</sup> position |
| 4. Sweet Scapes ( Aman Chudhary)- BIT Mesra   | -4 <sup>th</sup> position  |
| 5. Smart Walking Stick ( Manish Sharma)- University Polytechnic BIT Mesra                     | -5 <sup>th</sup> position  |
| 6. Edvisorr ( Pratyush Prakash Upadhyay)  | -6 <sup>th</sup> position  |
| 7. Anonymous Squirrels (Kingshuk Banerjee) -BIT Mesra   | -7 <sup>th</sup> position  |
| 8. RESH & PRESS (Anshika arya) - BIT Deoghar  | Consolation Prize          |
| 9. Smart Adult Emotional care and recreation center (Ishika Pathak)<br>University Polytechnic | Consolation Prize          |



ENTREPRENEURSHIP DEVELOPMENT CELL  
BIT MESRA, RANCHI  
www.edcbitmesra.in



INSTITUTION'S  
INNOVATION  
COUNCIL  
Ministry of Education, Government of India



FINANCE CLUB  
BIRLA INSTITUTE OF TECHNOLOGY, MESRA

# BIT NISHAN-23

## Winner List

<p style="text-align: center;"><b>1st Position</b></p> <p style="text-align: center;"><b>“Yantra”</b></p> <p style="text-align: center;">(Anurag Kr Sinha) BIT Mesra</p> <p style="text-align: center;"><b>2nd Position</b></p> <p style="text-align: center;"><b>Menta Mind</b></p> <p style="text-align: center;">( Ayush Kumar)-BIT Mesra</p> <p style="text-align: center;"><b>3rd Position</b></p> <p style="text-align: center;"><b>True Docs</b></p> <p style="text-align: center;">( Yash Vardhan)-BIT Mesra</p>	<p style="text-align: center;"><b>4th Position</b></p> <p style="text-align: center;"><b>Sweet Scapes</b></p> <p style="text-align: center;">( Aman Chudhary)- BIT Mesra</p> <p style="text-align: center;"><b>5th Position</b></p> <p style="text-align: center;"><b>Smart Walking Stick</b></p> <p style="text-align: center;">( Manish Sharma)-BIT Polytechnic</p> <p style="text-align: center;"><b>6th Position</b></p> <p style="text-align: center;"><b>Edvisorr</b></p> <p style="text-align: center;">(Pratyush Prakash Upadhyay) BIT Mesra</p>	<p style="text-align: center;"><b>7th Position</b></p> <p style="text-align: center;"><b>Anonymous Squirrels</b></p> <p style="text-align: center;">(Kingshuk Banerjee) BIT Mesra</p> <p style="text-align: center;"><b><u>Consolation Prize</u></b></p> <p style="text-align: center;"><b>FRESH &amp; PRESS</b></p> <p style="text-align: center;">Anshika arya BIT Deoghar</p> <p style="text-align: center;"><b>Smart Adult Emotional care</b></p> <p style="text-align: center;">Ishika Pathak BIT Polytechnic</p>
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financeclub\_bitm  
edcbitmesra

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8527117104, 9971124951

● ऋण/ आय

**लोन ही लोन**  
परिवर्तन लोन, एजुकेशन लोन, खेती-किसानी लोन, यशस्वी कर्माई लोन, गौशाला लोन, पूर्ण फलन लोन, व्यापार बढ़ाने के लिए लोन, मकान व दुकान बनाने के लिए लोन, 50% फ्लूट और 2% वार्षिक ब्याज, इतिविल खराब व्यक्ति भी सम्पर्क करें।  
**7599268249**  
**7599564281**

● नाम परिवर्तन

BY THE Affidavit no. 24071/16.12.2023. I Mohammad Kamran. Residence of O.no 6. Sulaiman Colony Iepo Road, Sadar Hazaribag, That my name, name, mohammad Kamran.

**15 ही दिन में फर्क देखें**  
रिस्क ₹ 999  
शरिना  
**घर बैठे दवा मंगवायें**

**सन्ध्यासी आयुर्वेद**  
2284, कोहिया पुल चौक, बुलानी दिल्ली  
● मंगोलपुरी ● कालकाजी  
फ्री सलाह: ☎ 8527001155

● एक्यूंपचर/ एक्यूंपेशर

BNYS, DNYS, D-Pharma, CMS-ED, B.Sc.(Voga)BPT, DMLT,BAVS, MBBAS, MD, DAT प्रवेश परीक्षा 15 Jan.24 से होगी सम्पर्क करें बुद्ध एक्यूंपेशर कॉलेज, पटना # 9334098121

● मेडिकल

## बीआईटी 'निशान-23' में सात स्टार्टअप टीमों ने बाजी मारी

रांची, प्रमुख संवाददाता। बीआईटी, मेसरा के इंस्टीट्यूशन ऑफ इनोवेशन काउंसिल, उद्यमिता विकास सेल और फाइनेंस क्लब के सहयोग से इनोवेशन प्रतियोगिता बीआईटी निशान-23 का आयोजन शनिवार को किया गया। इसमें बीआईटी मेसरा के सभी कैम्पस से चयनित 15 टीमों ने अपने प्रोटोटाइप उत्पाद प्रस्तुत किए। अपने मौलिक विचारों के कारण 15 टीमों में से 7 टीमों ने बीआईटी निशान-23 के अंतिम दौर के लिए अर्हता प्राप्त कर ली और उन्हें बुनियादी ढांचे के समर्थन/स्टार्टअप पंजीकरण व उत्पाद कार्यान्वयन के लिए तत्काल प्रत्येक टीम को एक लाख रुपये की सहायता प्रदान की गई। विजेताओं का चयन मेकॉन लिमिटेड के पूर्व मुख्य महाप्रबंधक डॉ पीके चटर्जी, जुरावस के सीईओ अभिषेक सागर, डिजाइनर सस्टेनेबल क्लोदिंग ब्रांड के संस्थापक आशीष सत्यव्रत साहू की निर्णायक मंडली ने किया।

● मेडिकल

**अंतर स्कूल रसायन विज्ञान में जेवीएम श्यामली विजेता**  
रांची। बीआईटी, मेसरा के रसायन विज्ञान विभाग की

● मेडिकल

**स्माइल ट्रेन इंडिया के सहयोग से**

## सात स्टार्टअप टीमों ने बीआईटी निशान-23 में मारी बाजी

बिड़ला प्रौद्योगिकी संस्थान (बीआईटी), मेसरा के इंस्टीट्यूशन ऑफ इनोवेशन काउंसिल (आईआईसी), उद्यमिता विकास सेल (ईडीसी) और फाइनेंस क्लब के सहयोग से...

# हिन्दुस्तान

Newswrap • हिन्दुस्तान टीन, रांची  
Sat, 16 Dec 2023 07:15 PM

हमें फॉलो करें

रांची, प्रमुख संवाददाता। बिड़ला प्रौद्योगिकी संस्थान (बीआईटी), मेसरा के इंस्टीट्यूशन ऑफ इनोवेशन काउंसिल (आईआईसी), उद्यमिता विकास सेल (ईडीसी) और फाइनेंस क्लब के सहयोग से इनोवेशन प्रतियोगिता बीआईटी निशान-23 का आयोजन शनिवार को किया गया। इसमें बीआईटी मेसरा के सभी कैम्पस से चयनित 15 टीमों ने अपने प्रोटोटाइप उत्पाद प्रस्तुत किए। अपने मौलिक विचारों के कारण 15 टीमों में से 7 टीमों ने बीआईटी निशान-23 के अंतिम दौर के लिए अर्हता प्राप्त कर ली और उन्हें बुनियादी ढांचे के समर्थन/स्टार्टअप पंजीकरण और उत्पाद कार्यान्वयन के लिए तत्काल प्रत्येक टीम को एक लाख रुपये की सहायता प्रदान की गई।

विजेताओं का चयन मेकॉन लिमिटेड के पूर्व मुख्य महाप्रबंधक डॉ पीके चटर्जी, जुरावर्स (वेब3, गेम फाई, एआई) के संस्थापक व सीईओ अभिषेक सागर, डिजाइनर सस्टेनेबल क्लोदिंग ब्रांड के संस्थापक आशीष सत्यव्रत साहू की निर्णायक मंडली ने किया।



प्रतियोगिता में बीआईटी मेसरा की टीम यंत्र (अनुराग कुमार सिन्हा) ने प्रथम स्थान प्राप्त किया। बीआईटी मेसरा की ही मेंटा माइंड (आयुष कुमार) दूसरे, टू डॉक्स (यशवर्द्धन) तीसरे और स्वीट स्केप्स (अमन चौधरी) चौके स्थान पर रहे। यूनिवर्सिटी पॉलिक्लिनिक बीआईटी मेसरा की टीम स्मार्ट वॉकिंग स्टिक (मनीष शर्मा) पांचवें स्थान पर रही, जो बुजुर्गों, नेत्रहीन, अल्जाइमर, पार्किंसंस जैसी बीमारियों से ग्रसित रोगियों के मदद के लिए बनाई गई है। वहीं, टीम एडवाइजर (प्रत्युष प्रकाश उपाध्याय) छठे और एनोनिमस स्किरल्स (किंगशुक बनर्जी) बीआईटी मेसरा सातवें स्थान पर रही।

Students Participation	90
Faculty Participations	8
External Participation	3
Total Budget	15 Lakhs
Social Link Instagram	<a href="https://www.instagram.com/p/C0ZJdmiR0B7/">https://www.instagram.com/p/C0ZJdmiR0B7/</a>

# **Celebration of National Energy Conservation Day (India) 15<sup>th</sup> Dec 2023**

Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of “National Energy Conservation Day (India)” on 14<sup>th</sup> December 2023 from 10:00 am onwards in CAT Hall, Birla Institute of Technology, Mesra, Ranchi. The main objective of National Energy Conservation Day is to highlight national accomplishments in energy efficiency and conservation as well as to promote awareness of the value of energy conservation.



 **Institution's Innovation Council  
BIT Mesra**  **INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

**CELEBRATES**

**NATIONAL  
ENERGY  
CONSERVATION  
DAY(INDIA)**

**14TH DECEMBER 2023**

**Timing : 10:00AM**

**Venue : CAT Hall, BIT Mesra, Ranchi**



**Address by Prof. Ashok Sharon, Head, Chemistry Dept. BIT Mesra Ranchi.**



The programme inaugurated by Prof. Ashok Sharon, Head, Chemistry Dept. BIT Mesra Ranchi. Prof. Ashok Sharon said that on December 14 of each year, the country observes National Energy Conservation Day to highlight the accomplishments in energy efficiency and conservation across the country and to promote awareness of the value of managing energy. The mission of National Energy Conservation Day is to raise public awareness of the value of energy conservation and efficiency. The programme coordinator Dr. Kirti Avishek, Associate Dean, Faculty Affairs was given a vote of thanks.



After the programe Don't waste energy stickers distributed to various office academic and administrative offices, including hostels. The total 2500 sticker pasted in administrative offices switch board, Class Room switch board, Hostel No.1 to 12 switch board. The student's participation in this celebration is 70 and around 12 faculty members attended the Inauguration Session.

### **Don't waste energy stickers pasted in Switch Board**





Total Students Participation	70
Total Faculty Participation	12
Total Budget	Rs. 4000/-
Social Media Link ( Instagram)	<a href="https://www.instagram.com/p/C7kIQSpybEb/">https://www.instagram.com/p/C7kIQSpybEb/</a>

# “Inter School Chemistry Quiz Contest-2023

16th December, Saturday, 2023

Department of Chemistry, BIT Mesra in collaboration with Institution's Innovation Council (IIC-BIT) & STEMMED EDVOCATIONS OPC PVT Ltd, Bhubaneswar has organized One-day “Inter School Chemistry Quiz Contest-2023,” on 16th December, Saturday, 2023, from 9:00AM to 5:00 PM at CAT Hall, BIT Mesra Ranchi.

The poster features the logos of Birla Institute of Technology Mesra, Ranchi, Institution's Innovation Council, and STEMMED. The title "INTER SCHOOL CHEMISTRY QUIZ CONTEST-2023" is prominently displayed in red. Below the title, it states the organizers: Department of Chemistry in collaboration with IIC- BIT Mesra, Ranchi & Stemmed Edvocations OPC Pvt Ltd, Bhubaneswar. A central banner reads: "This opens-up a golden opportunity for the students to explore science through a new mode of Science Quiz." To the left, under "Important points for the participation:", there are three bullet points: "Each school should nominate ten students (XIIth level only) along with two teachers.", "There is no registration fee.", and "Winner and Runner-up will be felicitated and awarded." A QR code is provided with the text "Registration Scan Here" below it. To the right, it identifies the "KeyNote Speaker: Prof. Suman Chakraborty" with a circular portrait of him. At the bottom left, the date "16th Dec 2023" is shown in green, followed by the venue "Venue: CAT Hall, BIT Mesra Ranchi" and contact information: "Contact: Phone: 8155542904, Email: office.chem@bitmesra.ac.in". At the bottom right, it lists "Department of Mechanical Engineering, IIT Kharagpur".

This event will open up a golden opportunity for the students to visit the Higher Education Institute (HEI) and explore options through a new Science Quiz mode that promotes science and outreach activities. During this event, Students will have a lifetime opportunity to interact directly with nationally and internationally renowned scientist and entrepreneur.

The event started with the institute prayer and an opening speech from Dr. Ashok Sharan, Prof. & Head, Department of Chemistry, who motivated the participants as well as brief about the quiz competition followed by Dr. C. Jeganathan, Dean, Research Innovation & Entrepreneurship who preside the event.



**Birla Institute of Technology  
Mesra, Ranchi**



**DEPARTMENT OF CHEMISTRY  
BIRLA INSTITUTE OF TECHNOLOGY (BIT) – MESRA, RANCHI,  
CORDIALLY INVITE YOU AND YOUR SCHOOL TO THE**

**“INTER SCHOOL CHEMISTRY QUIZ CONTEST-2023”**



**KEYNOTE SPEAKER :  
PROF. SUMAN CHAKRABORTY**



**DEPARTMENT OF MECHANICAL ENGINEERING, IIT KHARAGP**

**&**

***J. C. Bose National Fellow, Laureate of Infosys Prize, National  
Award for Teachers, Santi Swaroop Bhatnagar Prize***

**THIS OPENS-UP A GOLDEN OPPORTUNITY FOR THE STUDENTS TO  
EXPLORE SCIENCE THROUGH A NEW MODE OF SCIENCE QUIZ.**

**16th December 2023**

**Timing : 9.30 am – 5:00 pm**

**Venue: CAT Hall BIT Mesra Ranchi**



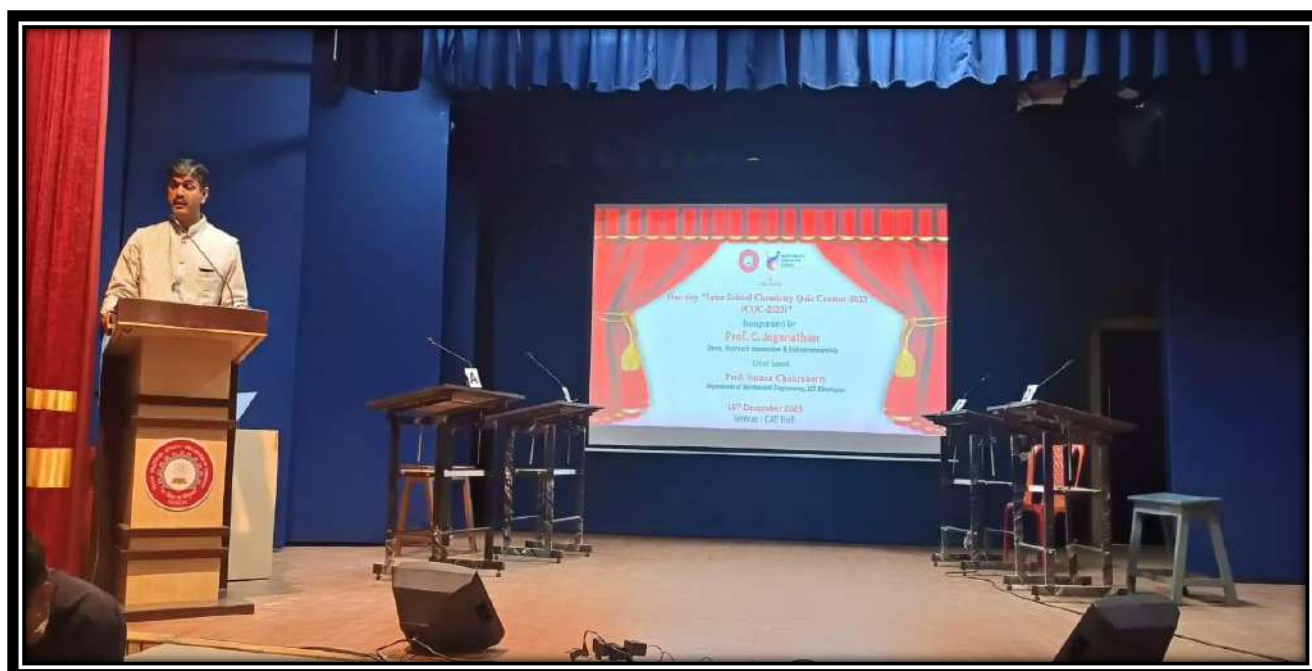
The Chief Guest of this event was Prof. Suman Chakraborty, Department of Mechanical Engineering, IIT Kharagpur. Prof. Chakraborty presented his valuable insights on how Chemistry is an integral subject that plays a significant role in almost every field of research. He emphasized that the technologies he developed to simplify health care for example, detection of plasma glucose and blood hemoglobin level detection etc. by making it accessible to even remote places collaborating with the front-line health workers.

**Dr. Ashok Sharon, Head, Chemistry Dept. Convenor, IPR Cell, BIT Mesra Ranchi,  
welcome to Chief Guest Prof. Suman Chakraborty**

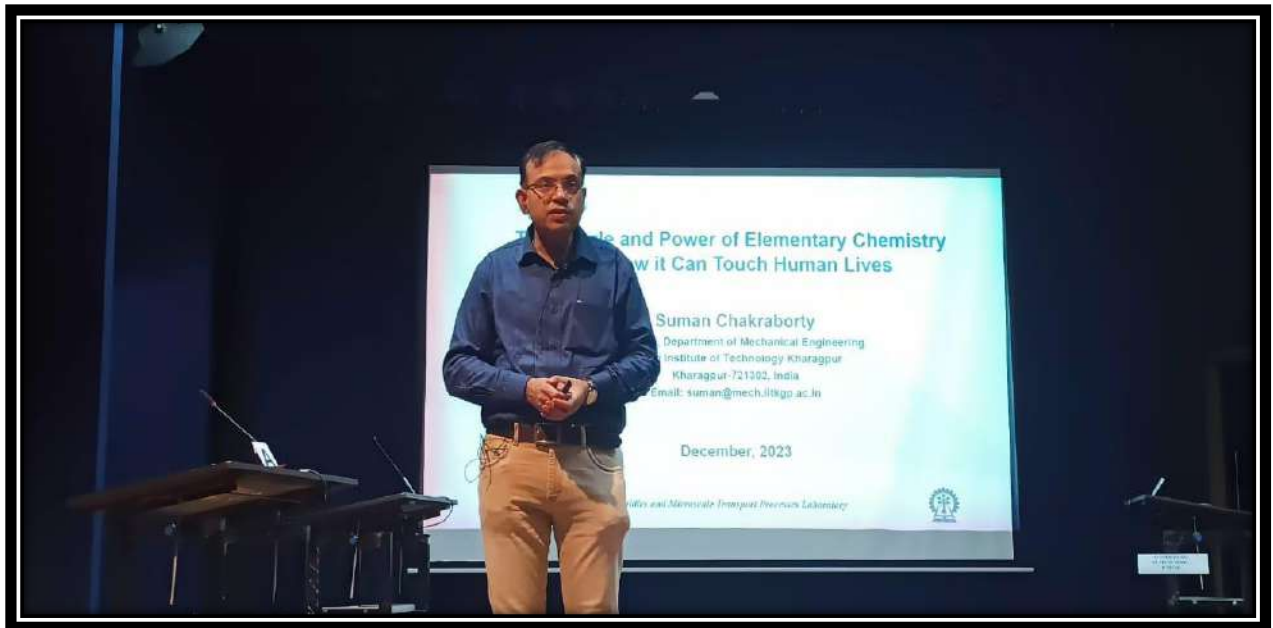


This event has opened up a golden opportunity for the students to visit the Higher Education Institute (HEI) and explore options through a new Science Quiz mode that promotes science and outreach activities. During this event, students were interacted directly with nationally and internationally renowned scientist and entrepreneur mentor Prof. Suman Chakraborty, Department of Mechanical Engineering, IIT Kharagpur.

**Address by Dr. C. Jeganathan, Dean, RIE & President, IIC BIT**



**Prof. Suman Chakraborty addressing the Audience**



**Dr. C. Jeganathan, Dean, RIE presented a Memento to Chief Guest Prof. Suman Chakraborty**





## Organize Quiz Competition





**Participants from Various School**



### Prize Distribution



In this quiz competition the total 14 school were participated and each school 10 students involved. The total student's participation was attended 140 and faculty members were present 15 and the external members were attended 30. The total 185 participants were present.

Out of 14 school the JVM Shyamali got the 1<sup>st</sup> position and 2<sup>nd</sup> position, got the DAV Nandraj School Ranchi.



**List of participating school has mentioned below.**

- 1.Dav Nandraj Public School Ranchi
- 2.Delhi Public School Ranchi
3. Tender Heart Sr Sec School Ranchi
- 4.Dav Public School, Bokaro Jharkhand
- 5.Surendrana Nath Centenary School Ranchi
- 6.Kairali School Ranchi
- 7.Dav Public School Hehal Ranchi
8. Dav Centenary Public School Khunti
9. Sarala Birla Public School Ranchi
- 10.Jawahar Navodaya Vidyalaya
- 11 G & H High School
- 12 JVM Shyamali
- 13, Taurian World School Ranchi
- 14 Manan Vidya School Ranchi

Students Participation	140
Faculty Participation	15
External Participants	30
Budget	Rs. 60,000
Social Media Instagram	<a href="https://www.instagram.com/p/C0ZLKPRRz-p/">https://www.instagram.com/p/C0ZLKPRRz-p/</a>

# Institution's Innovation Council Regional Meet

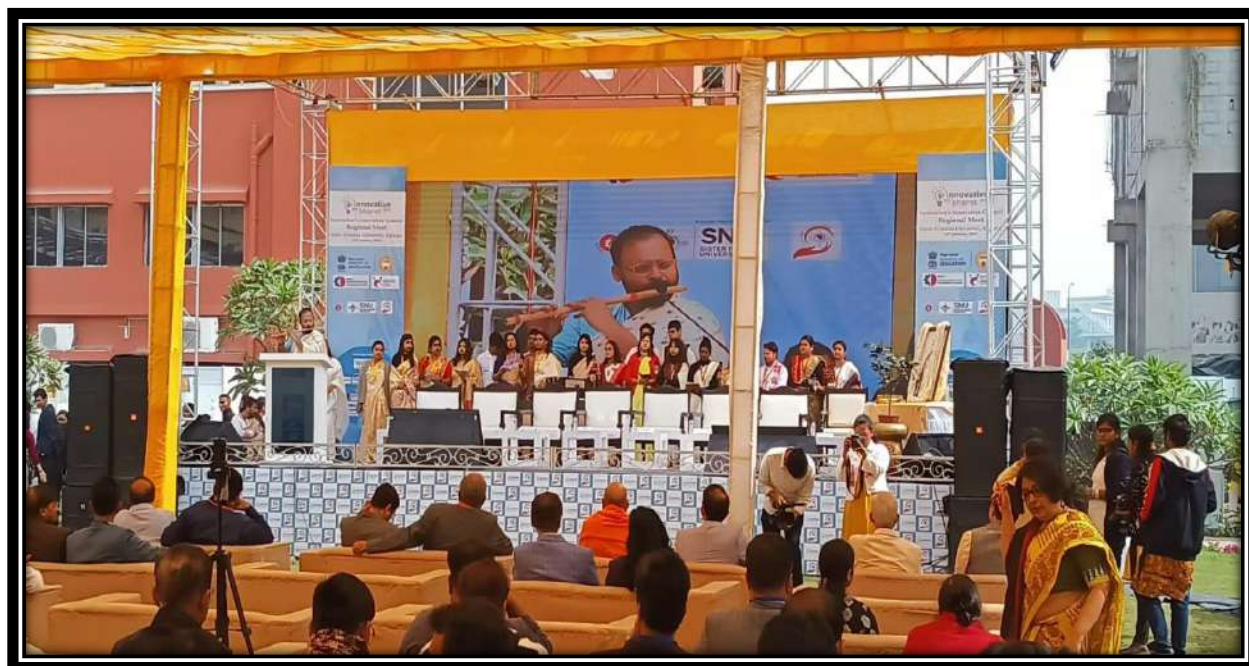
12<sup>th</sup> Jan 2024

Ministry of Education Innovation Cell & All India Council of Technical Education, New Delhi has organized an **Institution's Innovation Council Regional Meet** at Sister Nivedita University Kolkata on 12<sup>th</sup> Jan 2024. Around 350 IIC Members from 115 Higher Education Institutions from Eastern Zone has participated for the Knowledge sharing part and the Innovation and Poster Exhibition. In this regional meet IIC-BIT Mesra, Ranchi has attended a workshop and show their institution's innovation & Entrepreneurship Journey/Achievement during the year 21-23. We would like to give special thanks to **Mr. Dipan Sahu, Assistant Innovation Director**, Ministry of Education's Innovation Cell & **Ms. Monika Mam**, IIC- Eastern Regional Head and the individual Track Speakers of the event and to the Sister Nivedita University, Kolkata for hosting during the event, and furthermore to the effective organizing teams of it who did outstanding work in organizing the event Successfully. In this event the IIC-Convenor/IIC-Co-convenor/EDC coordinator were presented their institution's innovation & Entrepreneurship Journey/Achievement.

The list of the faculty members nominated in IIC- Regional Meet has mentioned below.

1. Dr. Anand Prasad Sinha, Associate Dean, RIE & Convenor, IIC BIT
2. Mr. Vishal H. Shah, Associate Dean, AIR & EDC Coordinator
3. Dr. Manish Kr Pandey, Assistant Professor & Co-Convenor IIC BIT

## Welcome song by Inauguration of Institution's Innovation Council Regional Meet



# Exhibition Poster of Innovation & Entrepreneurship Journey/Achievement.

**Viksit Bharat @2047 Utsav**

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education, Government of India)

**MoE's INNOVATION CELL**  
(GOVERNMENT OF INDIA)

**AICTE**  
(All India Council of Technical Education)

## Birla Institute of Technology, Mesra Ranchi

### 2021- 2023

**Patent Granted**  
13

**IIC Members**  
45

**IIC workshop/Seminar 8  
Event Conducted 80**

**Startups Created**  
23

**Patent Published**  
45

**Worlds Environment Day**

**Shri C. K. Birla Chairman Visited BIT Mesra**

**S20 initiative Technology Poster Exhibition**  
Shri C.P. Radhakrishnan, Honorable Governor of Jharkhand

**Great Bot Robot Robotics Exhibition**

**INNOVATION & ENTREPRENEURSHIP ECOSYSTEM**  
Hybrid EV Tractor-Retro Fitting Model

**3 ind AI-Enabled Drone for Farming Applications**

**ATL SCHOOL INNOVATION EXHIBITION**

**Hand Gesture Controlled Robot**

**Chandrayaan-3 Mahotsav**

**IIC SEMINAR - EXPERT TALK-IIC BIT**

**Karan Rajaj**  
Founder & CEO  
White Hat Jr/ BYJU'S Future School

**Mr. Atul Singhal**  
Co-founder & CEO of  
CUBETIX

**Dr. Rahul Kapoor**  
Founder & Director-Turnip  
Innovation

**Dr. Abhay D. Deshmukh**  
Director  
INCLUDEIN Foundation

**Ms. Manya Gaurav**  
Sales Operation Analyst  
Qualcomm india/USA

**Ms. Sohini Roy Chowdhury**  
Senior Manager, Digital  
Strategy, All Region  
Accenture

**Mr. Praveen Vettiyattil**  
CEO, YGI Technologies  
Pvt. Ltd

**Mr. Vedant Pujari**  
Accounts Legal (Franchising)  
Partnership New Delhi

**Mr. Abhishek Sagar**  
CEO of ZURVERSE

**IIC EVENT**  
Mande Antenna & Workshop on Satellites  
Manufacturing & Innovation design

**Enigma Tech Case Study Competition**

**BIT NISHAN-23**

**Internal Hackathon for KAVACH**

**AGTE IDEA LAB**

**Mr. Sandeep Sonawane**  
Director, IIC/IC  
Rural and Village Industries Commission



**Delegates of Institution's Innovation Council Regional Meet**



**Address by Mr. Dipan Sahu, Assistant Innovation Director  
Ministry of Education's Innovation Cell**



**Eastern Zone Various Institution's Faculty Members Participants**



Poster Exhibition attended by Dr. Anand Prasad Sinha, Associate Dean, RIE & Convenor, IIC-BIT, Dr. Manish Kr. Pandey, Assistant Professor & Co-Convenor IIC-BIT & Mr. Vishal H. Shah, Associate Dean, AIR & EDC Coordinator.



**Jury Members Evaluated Poster Exhibition**





**Other Institution's Faculty Members attended Poster Exhibition**



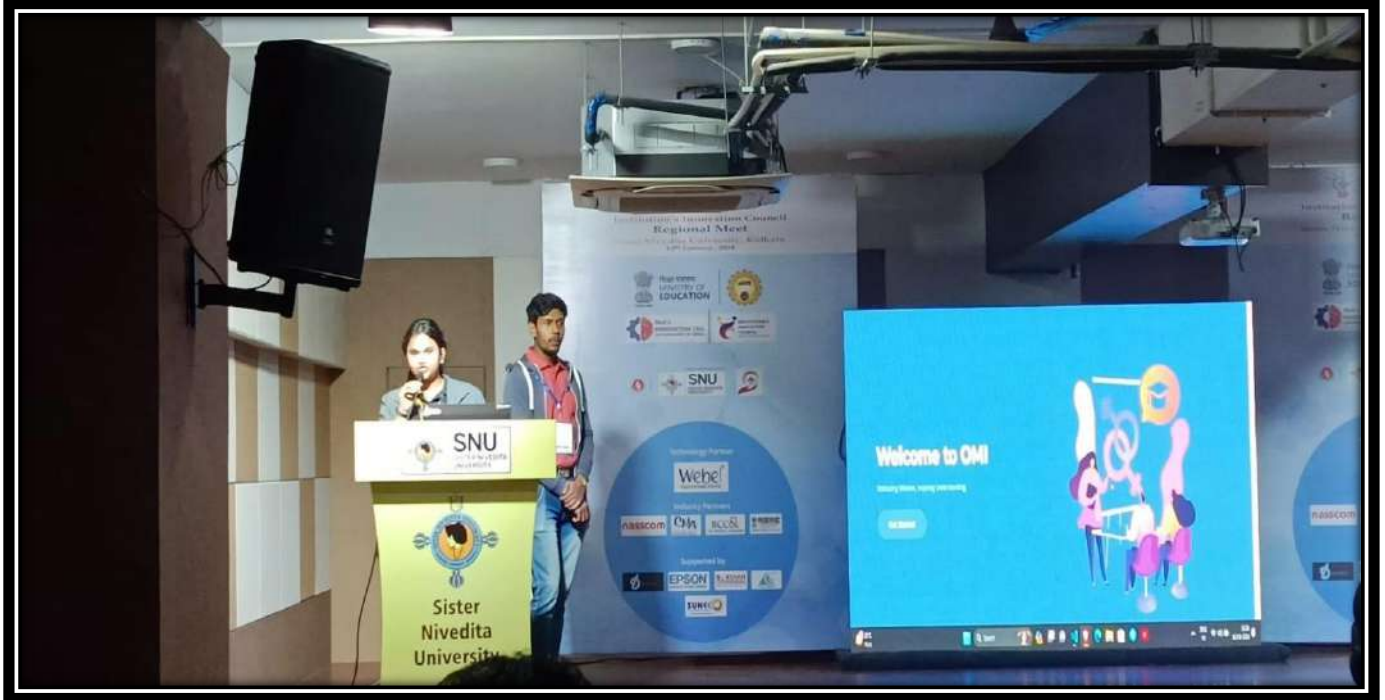


**Inauguration of Product Model Exhibition**





**Product model Presentation by Various School.**



# IIC-BIT Mesra Innovation Exhibition Poster

**Viksit Bharat @2047 Uday**

**INSTITUTION'S INNOVATION COUNCIL**

**MUEC INNOVATION CELL (UNIVERSITY OF BUBBA)**

**Birla Institute of Technology, Mesra Ranchi 2021-2023**

Patent Granted 13 | IIC Members 42 | IIC workshop/Seminar & Event Conducted 60 | Startups Created 23 | Patent Published 48

**World's Environment Day**

**Sri C. K. Birla Chairman Visited BIT Mesra**

**"G20-520 RSD Poster Exhibition"**  
Shri C.P. Radhakrishnan, Honorable Governor of Jharkhand

**INNOVATION & ENTREPRENEURSHIP ECOSYSTEM**  
Hybrid EV Tractor-Retro Fitting Model

**ATL SCHOOL INNOVATION EXHIBITION**

**IIC SEMINAR - EXPERT TALK - IIC BIT**

**IIC EVENT**  
Mande Antenna & Workshop on Satellites Manufacturing & Innovation design

**Epsilon Tech Case Study Competition**

**Internal Hackathon for KAVACH**

**Chandrayaan-3 Mahotsav**

**ATL School Innovation Exhibition**

**World's Environment Day**

**Sri C. K. Birla Chairman Visited BIT Mesra**

**"G20-520 RSD Poster Exhibition"**

**INNOVATION & ENTREPRENEURSHIP ECOSYSTEM**

**ATL School Innovation Exhibition**

**IIC SEMINAR - EXPERT TALK - IIC BIT**

**IIC EVENT**

**Epsilon Tech Case Study Competition**

**Internal Hackathon for KAVACH**

**Chandrayaan-3 Mahotsav**



# National Youth Day'24

## 12.01.2024

Institution's Innovation Council, BIT Mesra (IIC-BIT) in collaboration with Value Education Cell & Vivekanand Study Circle organized a celebration of "National Youth Day on 12<sup>th</sup> Jan 2024. from 10:40 am onwards in CAT Hall, Birla Institute of Technology, Mesra, Ranchi. The main objective of this national youth day is to help students achieve work life balance to lead a happy life and create a happy society as well as to encourage and uplift the youth by spreading Swami Vivekananda's beliefs and helping to build a more optimistic future for the nation. The benefits of the day are to invites young people/students to consider their abilities, potential, and social obligations. It gives young people a stage on which to express their vigor, excitement, and inventiveness, inspiring them to take an active role in determining the future of their country. This celebration activities inaugurated by Prof. Indranil Manna, Vice Chancellor BIT Mesra followed by Prof. C. Jeganthan, Dean, RIE & President IIC-BIT, Dr. Bhaskar Karn, Dean, Students Affairs & Vice-President, IIC-BIT, Dr. Sanjay Kumar, Convenor, Value Education Cell were present during inauguration ceremony.



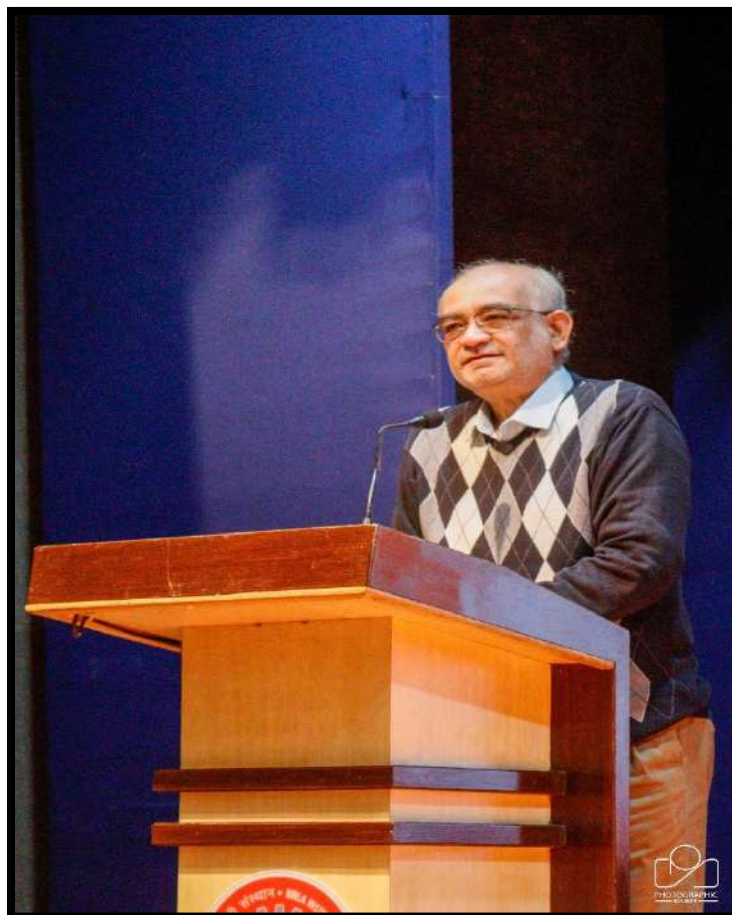
The poster for National Youth Day 2024 features a central portrait of Swami Vivekananda in a circular frame. The background is a mix of dark brown and yellow. At the top left, it says "Viksit Bharat @2047 Utsav" with a logo. At the top center, it says "Birla Institute of Technology Mesra, Ranchi" with a logo. At the top right, it says "INSTITUTION'S INNOVATION COUNCIL" with a logo. The main text reads "National Youth Day" in large white and yellow letters. Below that, it says "Organized by Vivekanand Study Circle in collaboration with IIC-BIT & Value Education Cell". The events listed are "EVENT 1: POSTER COMPETITION" and "EVENT 2: ORATORY COMPETITION". The date is "DATE: 12.01.2024" and the time is "Time: 10:40AM". The venue is "Venue: CAT Hall- BIT Mesra Ranchi".

During the inauguration ceremony, Prof. Indranil Manna, Vice Chancellor BIT Mesra, spoke to the students and inspired them all. He discussed the life of Swami Vivekananda, one of India's most remarkable spiritual and inspirational figures, who believed in the potential of youth and service to humanity. The students from various dept. BIT Mesra has attended this National Youth Day. The total students were present 110 and 12 faculty Members and 2 external members. The

vote of thanks was given by Dr. Ashok Kumar Patnaik, Associate Professor, Pharmaceutical Sciences and Tech. BIT Mesra Ranchi.



**Addressed by Prof. Indranil Manna, Vice Chancellor BIT Mesra**



**Addressed by Prof. Indranil Manna, Vice Chancellor BIT Mesra**



**Addressed by Prof. C. Jeganathan, Dean RIE & President IIC-BIT Mesra**



**Addressed by Dr. Sanjay Kumar, Convenor VEC BIT Mesra**



**Students Attended the Celebration of National Youth Day**



**Faculty, Staff and Students Attended the Celebration of National Youth Day**



**Addressed by Students**



## Prize Distribution for best performance



Total Students Participation	110
Total Faculty Participation	12
External Participation	02
Total Budget	Rs. 15,000/-
Social Media Link ( Instagram)	<a href="https://www.instagram.com/p/C8z1mnyyDgV/?hl=en">https://www.instagram.com/p/C8z1mnyyDgV/?hl=en</a>

**Seminar on**  
**Investor Startups Trader Stocks Money**

**Mr. ABHISHEK KAR**

**Entrepreneur Business Strategist & Renowned Youtuber, New Delhi**

**20th Jan 2024**

**20th Jan 2024**  
Time : 11:00 AM

**Join us with**  
**Room No.211**

**ABHISHEK  
KAR**

YOUTUBER 5M | BUSSINESS STRATEGIST  
INVESTOR | STOCK TRADER

The Finance Club in collaboration with the Institution's Innovation Council BIT Mesra organized a seminar on January 20, 2024, BIT Mesra. The key note speaker Mr. Abhishek Kar, expert trader, and content creator, took center stage for a captivating session in room 211, starting at 11:00 AM pm to 1:00 PM. Mr. Abhishek Kar's, Investor Startups Trader Stocks Money, from New Delhi was delivered a talk on and investment. In this seminar Miss Prachi as a coordinator of this session creating an evening that transcended the ordinary academic routine.

**Ms. Riya, executive member of IIC-BIT & Finance Club welcomed to Guest of Honor & Key Note Speaker, Mr. Mr. Abhishek Kar and audience**



As the session unfolded, Mr. Abhishek Kar's unique blend of humor and insightful anecdotes left an indelible mark on the BIT Mesra community. The collaboration between the Finance Club and IIC-BIT was evident, emphasizing the multidisciplinary approach that enriches the academic landscape of BIT Mesra.





**Dr. Manish Kr Pandey, Co-convenor IIC -BIT Present a Bouquet to Mr. Abhishek Kar**



**Session Taken by Mr. Abhishek Kar, New Delhi**





**BIT Students & Faculty Members attended a seminar of Mr. Abhishek Kar, New Delhi**



Dr. C Jeganathan Dean of Research Innovation and entrepreneurship and President of IIC Bit Mesra, presented a Memento to Mr. Abhishek Kar, symbolizing the institution's appreciation for his impactful session. In a poignant moment, Dr. Manish Kumar Panday, Co-Convenor of the

Institution Innovation Council, joined the stage, presenting a bouquet and further accentuating the collaborative efforts that made the evening memorable. Dr. Anand Prasad Sinha, Faculty Advisor of the Finance Club, also played a crucial role in the event's success. His active involvement added depth to the discussions and sessions, contributing to the overall vibrancy of the evening.



In conclusion, the harmonious fusion of Abhishek Kar's expertise, Miss Prachi as the coordinator of session adept hosting, the collaborative efforts of BIT Mesra's Finance Club and IIC, alongside the acknowledgments by Dr. C Jeganathan and Dr. Manish Kumar Panday, and the active

participation of Dr. Anand Prasad Sinha created an evening that will be cherished for its blend of entertainment, engagement, and insightful learning. Kudos to all involved for making this event a memorable highlight in the academic journey at BIT Mesra.

No. of Students Participation	300
No. of Faculty Members	06
External Members	04
Total Budget	20000
Social Link Instagram	<a href="https://www.instagram.com/p/C1v1RnjPfzc/?utm_medium=copy_link&amp;img_index=1">https://www.instagram.com/p/C1v1RnjPfzc/?utm_medium=copy_link&amp;img_index=1</a>

# ENIGMA'24

A National Level Technical Case Study Competition

20th Jan 2024



The poster for ENIGMA'24 features a dark blue background with a glowing green wireframe bull on the left and a yellow line graph on the right. At the top, logos for the Institution's Innovation Council (Ministry of Education Initiative), a gold dollar sign, and the Finance Club (Birla Institute of Technology, Mesra) are displayed. The text '020 ENIGMA' is prominently shown in large, white, 3D-style letters. Below it, 'NATIONAL LEVEL TECHNICAL CASE STUDY COMPETITION' is written in smaller white capital letters. To the right, a calendar icon is next to '20<sup>TH</sup> JAN', and a star in a ribbon is next to '8K CASH PRIZE'. At the bottom, contact information is provided: 'Shubham: 9693830321', social media icons for LinkedIn, Instagram, and Facebook, the handle 'financeclub\_bitm', and 'Aalok: 9546949124'.

The Finance Club in collaboration with the Institution's Innovation Council BIT Mesra conducted "ENIGMA"-24 on 20th Jan 2024 at R&D Building, Seminar Hall-1 BIT Mesra Ranchi. Enigma'24 is a national level technical case study competition which provides a platform to the students to showcase their strategic, technical and business acumen. Enigma 2024 showcased outstanding talents from various educational institutions and total 97 colleges from PAN India like IIT, IIM, NIMMT, University of Delhi, Scaler School of Technology, BIT Mesra, NITIE Mumbai, SSR, and other Business Management College has participated for this competition.

Round one of the competitions was conducted successfully on 18<sup>th</sup> Jan 2024 online and 15 teams were qualified for the 2nd round for final technical case study presentation in hybrid mode which was held on 20<sup>th</sup> January in seminar hall-1 R& D building, BIT Mesra .

The competition consisted of two phases. The first phase consisted of a quiz on the basis of current finance aptitude and general knowledge areas and the second phase consisted of a case study presentation on a particular topic in the field of Artificial Intelligence, NFT in Metaverse, Ecommerce disruption in traditional markets

The content of the presentation of this event evaluated on the basis of

- Presentation skills
- Time management prowess
- Responses to the judges' questions
- Content of the slide related to case study
- Better solution remarks

This Event Hosted and expertly coordinated by Ms. Aditi Dey coordinator Enigma-24, this grand occasion was led by the proficient co-coordinator Mr. Ritik, bringing together minds from diverse backgrounds to celebrate knowledge and innovation.

**Enigma'24 Jury Member - Dr. P.K Chatterjee, former CGM, Mecon Ltd,**



**Enigma'24 Jury Member -Dr. Avinash Kumar Sinha, Assistant Professor,  
BIT Lalpur Centre, Ranchi**



**Enigma'24 Jury Member -Dr. Neha Kaur, Assistant Professor, Ranchi Women's College,  
Ranchi University Ranchi**



**Hosting by Executive Member Finance Club – Ms. Aditi Dey**



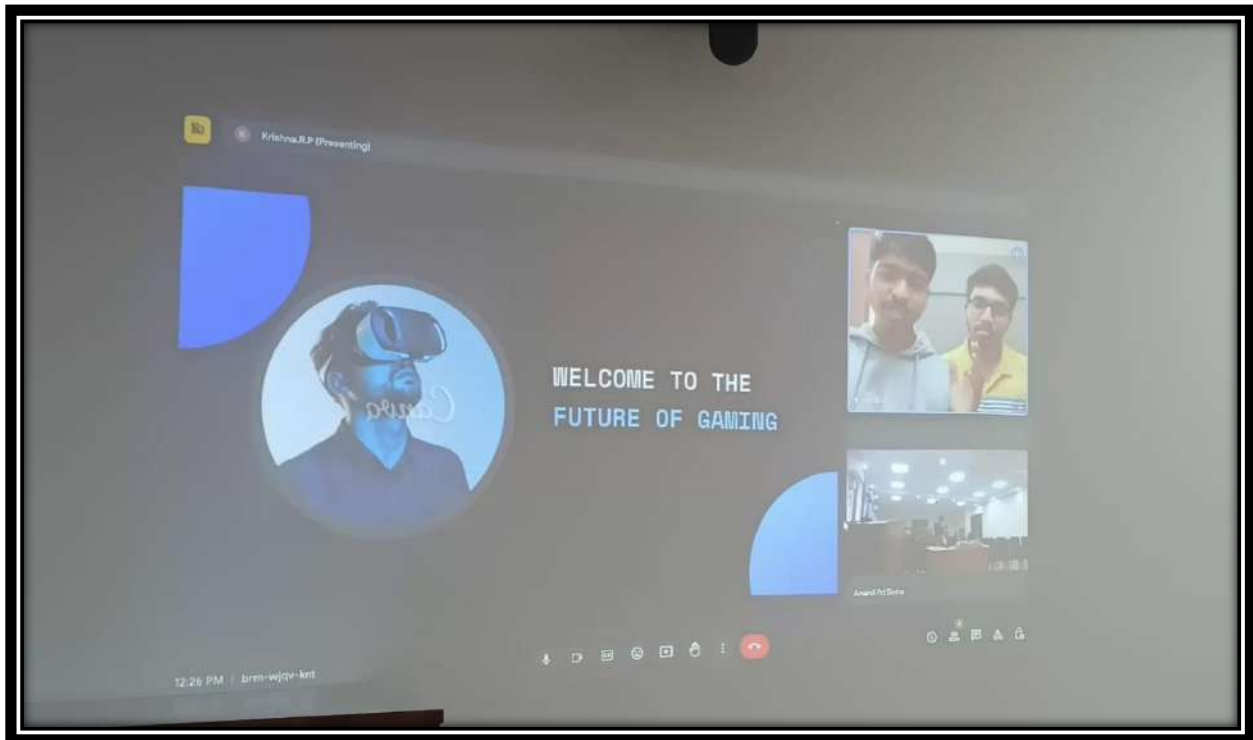
**Jury Members -ENIGMA'24**













The distinguished jury panel, comprising luminaries in their respective fields, added prestige to the event. Dr. P.K Chatterjee, former CGM, Mecon Ltd, Dr. Neha Kaur, Assistant Professor, Ranchi Women’s College, Ranchi University Ranchi and Dr. Avinash Kumar Sinha. Assistant Professor, BIT Lalpur Centre, Ranchi brought their expertise to the table, ensuring a rigorous evaluation process for the participants.

**The Final winner Colleges name is mentioned below.**

1. 1<sup>st</sup> position – Shahdeo College of Business Studies at the University of Delhi
2. 2<sup>nd</sup> Position – BIT Mesra Ranchi
3. 3<sup>rd</sup> Position - Scaler School of Technology in Bangalore

These students not only demonstrated exceptional aptitude but also exemplified the spirit of Enigma - a celebration of intellect, creativity, and perseverance. Enigma 2024 will undoubtedly be remembered as a testament to the commitment of the academic community to nurture and celebrate intellectual prowess. Congratulations to all participants, winners, and organizers for making Enigma 2024 an extraordinary and unforgettable event.

Students Participation	( 3 Members @15 Teams- Both offline and online -45 + 20 =65)
Faculty Participation	5
External Participants	3
Budget	Rs. 60,000/-
Social Media Instagram	<a href="https://www.instagram.com/p/C2ekEsOR-ot/?img_index=1">https://www.instagram.com/p/C2ekEsOR-ot/?img_index=1</a>

# Workshop on Intro to Web 3 Smart Contract Deployment

*Entrepreneurship Skill, Attitude and Behaviors Development*

by

**Mr. Shahnawaz Khan**

**Block Chain, NFT's Developer**

**21<sup>st</sup> Jan 2024**

The Institution's Innovation Council BIT Mesra in collaboration with Finance Club organized a workshop on “Intro to Web 3 Smart Contract Deployment as a Entrepreneurship Skill, Attitude and Behaviors Development” on January 21<sup>st</sup>, 2024, BIT Mesra from 5:00 PM to 7:00 PM. The Resource Person of this workshop was Mr. Shahnawaz Khan, Block Chain, NFT's Developer, Ranchi. Mr. Shahnawaz Khan worked from the last 2 years in the blockchain space and he is advocate in RiseIN and the Graph communities. A proficient blockchain enthusiast, developer, and researcher, he served as a lead developer at Antelope DAO in DeFi, showcasing expertise in critical projects. As a Summer of Bitcoin '23 Open-Source Developer, Shahnawaz excels in blockchain, project management, and collaboration with a strong background in Blockchain, NFTs, DeFi, Real-world Asset Tokenization, and Open Zeppelin. He is a skilled technologist and dedicated educator, having mentored over 1000 students in the blockchain field. During this seminar Mr. Khan has discussed about the How Blockchain does Work/ Block Generation and Architecture and Emergence of Ethereum and Smart Contracts as well as Smart Contract Deployment.

Join us with

## SHAHNAWAZ KHAN

BLOCKCHAIN . NFTS . DEVELOPER  
DeFi | REAL WORLD ASSET TOKENIZATION  
AntelopeDAO | ADVOCATE IN RISEIN

21<sup>st</sup> JAN

SHUBHAM : 9693830321  
ANLOK : 9546949124

FINANCECLUB\_BITM

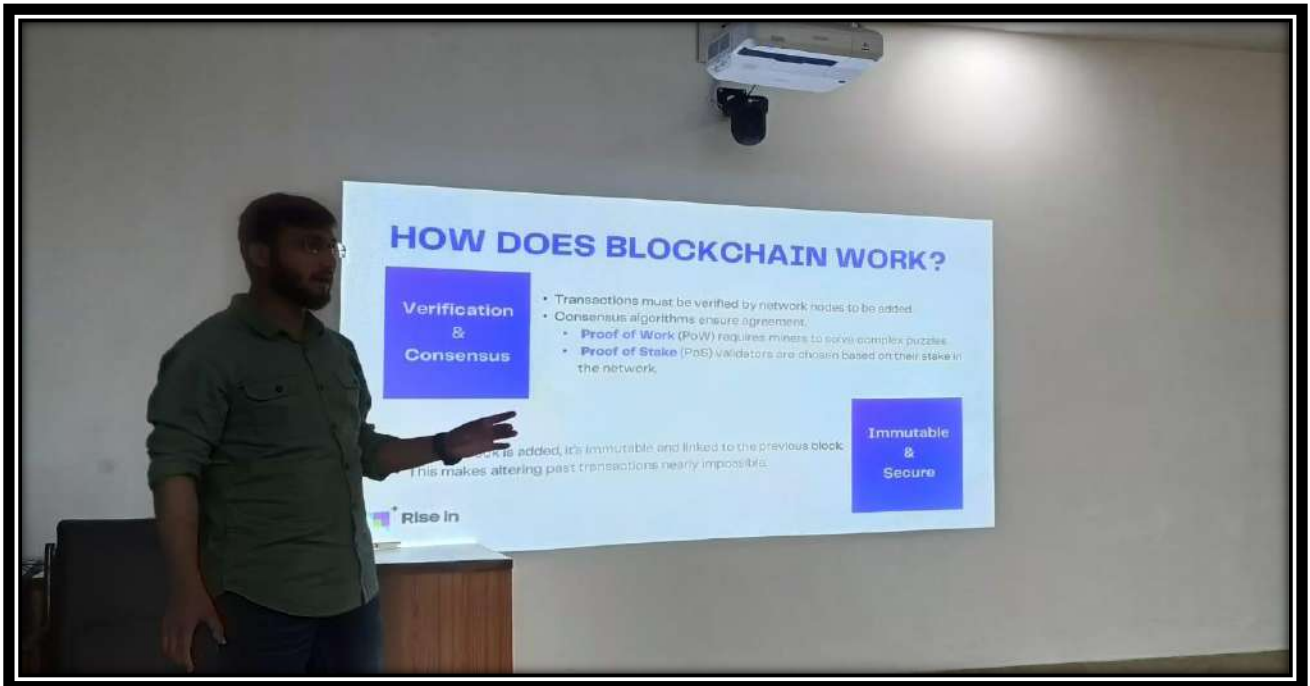
**Ms. Ritika Executive Member of IIC-BIT & Finance Club BIT Mesra welcomed to Key note Speaker Mr. Shahnawaz Khan**



**Dr. Anand Pd Sinha, Convenor IIC-BIT & Faculty Advisor, Finance Club BIT Mesra Ranchi present a Momentous to Resource Person Mr. Shahnawaz Khan, Block Chain, NFT's Developer**



**Mr. Shahnawaz Khan, Block Chain, NFT's Developer**







After the session Dr. Anand Pd. Sinha, Convenor IIC-BIT & Faculty Advisor Finance Club presented a momentous to Mr. Shahnawaz Khan. The total student's participation was 47. The vote of thanks was given by Ritika.

No. of Students Participation	47
No. of Faculty Members	02
External Members	02
Total Budget	5000
Social Link Instagram	<a href="https://www.instagram.com/p/C2WvNejPkvI/">https://www.instagram.com/p/C2WvNejPkvI/</a>

# Workshop on Designing Indigenous Material and technologies for Self-Reliant India

*Design Thinking, Critical Thinking and Innovation Design*  
21<sup>st</sup>. Jan 2024

The Institution's Innovation Council BIT Mesra in collaboration with Finance Club are organized workshop on “*Designing Indigenous materials and technologies for self-reliant India*” on 21<sup>st</sup> Jan 2024 in Seminar Hall -1 R&D Building BIT Mesra Ranchi from 3:00PM to 4:45PM. The Guest of Honor and resource person of this workshop was Dr. Bipin Kumar Gupta, Principles Scientist, New Delhi.

The poster features logos for the Institution's Innovation Council, BIT Mesra, and Finance Club. It includes a circular portrait of Dr. Bipin Kumar Gupta, a Principal Scientist. The text details the workshop title, theme, date (21st Jan 2024), time (3:00 PM), and venue (R&D Building, Seminar Hall-1, BIT Mesra, Ranchi).

Dr Bipin Kumar Gupta has given a talk on Design, Synthesis and Applications of optical materials specializing in multifunctional novel luminescent materials, two-dimensional materials and color shift/optically variable pigments for security ink formulation to combat the counterfeiting of currency, passports and important documents. It gives insight of development of invisible ink (red luminescent visible under 365 nm ultraviolet LEDs) to be used as deterrent against voting twice. The talk also includes development of carbon exotic materials (Graphene, Graphene Quantum Dots, Carbon Nanotubes and Nanofibers) for optical displays and energy storage applications.



**Dr. Dilip Kr. Singh, Co-Convenor IIC -BIT Mesra Presented a Momentous to Dr. Bipin Kumar Gupta, Principles Scientist, New Delhi.**



**Session taken by Dr. Bipin Kumar Gupta, Principles Scientist, New Delhi.**



Dr Bipin explained the development of luminogenic materials for high-contrast fluorescent cellular imaging as well as MRI high-contrast imaging for drug delivery applications during the workshop. Dr Bipin Kumar Gupta also give insight of development of yellow phosphor integrated with blue diode laser to produce white light for automobile headlight applications.





No. of Students Participation	54
No. of Faculty Members	04
External Members	02
Total Budget	5000
Social Link Instagram	<a href="https://www.instagram.com/p/C2ekY-GRLo_/">https://www.instagram.com/p/C2ekY-GRLo_/</a>

# The National Science Day Celebration'24

## 28.02.24

**IIC- BIT MESRA**  
Celebrates  
**National Science Day**

**28th Feb**  
**2024**

**Timing - 10:00 am Onwards**  
**Venue : CAT Hall, BIT Mesra, Ranchi**

**Chief Guest**  
**Dr. Sunil Sinha**

**Professor and Director**  
**Civil and Environmental Engineering**  
**Virginia Tech, USA**

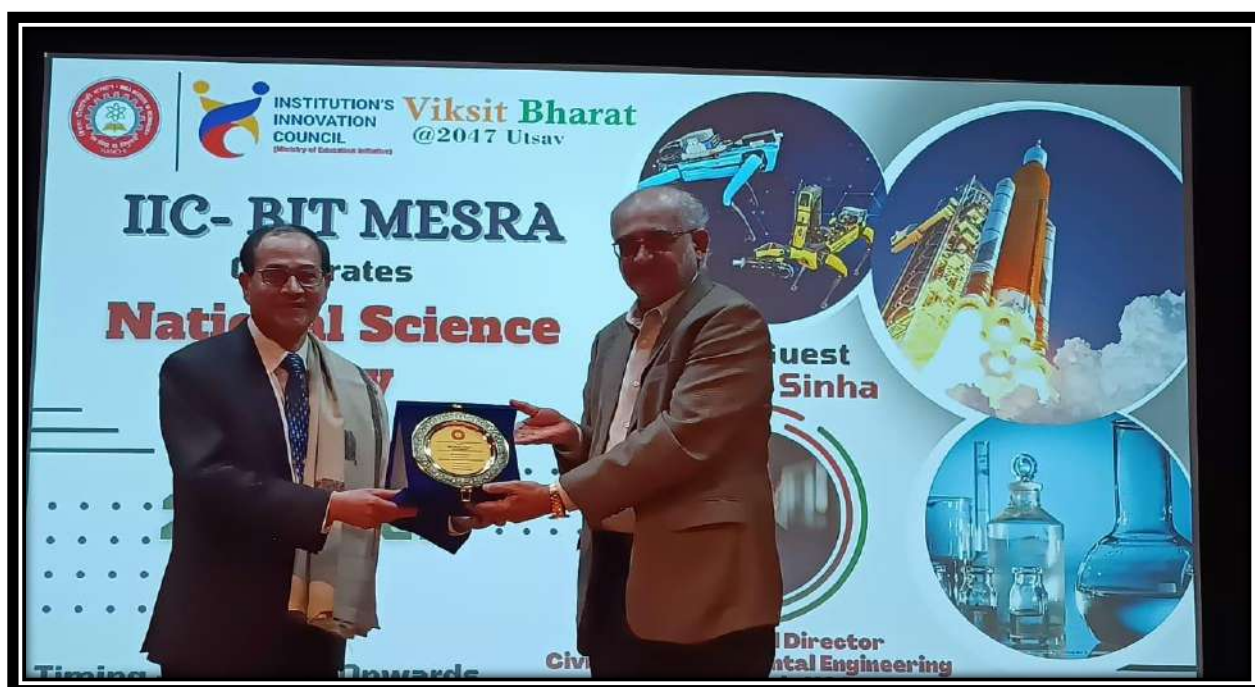
Institution's Innovation Council (IIC-BIT Mesra) organized "National Science Day Celebration" on 28th Feb 2024 in BIT Campus with the theme "*Indigenous Technologies for Viksit Bharat*". The purpose of this celebration is to raise awareness amongst students and faculty about the value of science, technology, and its application for national development.

The program started with a brief description about the instrumentation facilities available in the campus by Dr. Gautam Sarkhel, in charge, Central Instrumentation Facilities (CIF) BIT Mesra. He delivered valuable insights on the advanced characterizations and motivated all the students and faculties from various colleges present on the occasion to carry on their research with novel ideas.

*Inauguration Ceremony and Lighting the lamp with Chief Guest Prof. Sunil Sinha, Virginia, USA, Prof. Indranil Manna, Vice Chancellor, BIT Mesra and Dr. Sumit Mishra, Organizing Secretary, National Science Day*

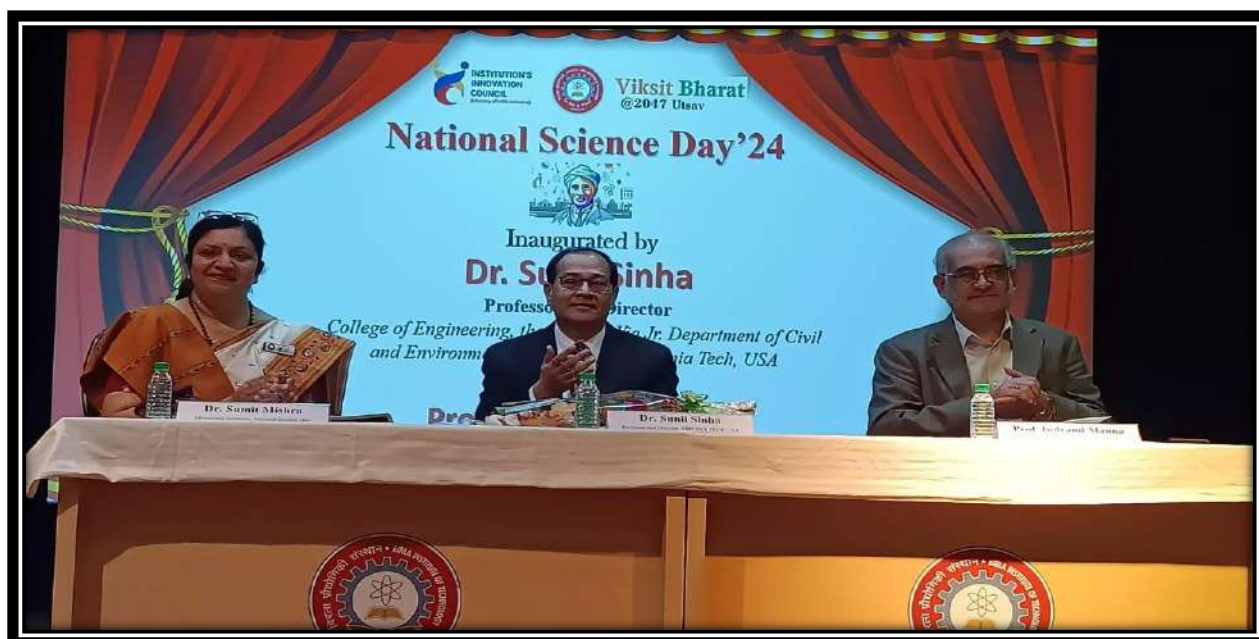


*Felicitation to Chief Guest Prof. Sunil Sinha, Professor and Director of Civil and Environmental Engineering, Virginia Tech. USA*





*On the dais Prof. Sunil Sinha, Prof Indranil Manna, & Dr. Sumit Mishra*



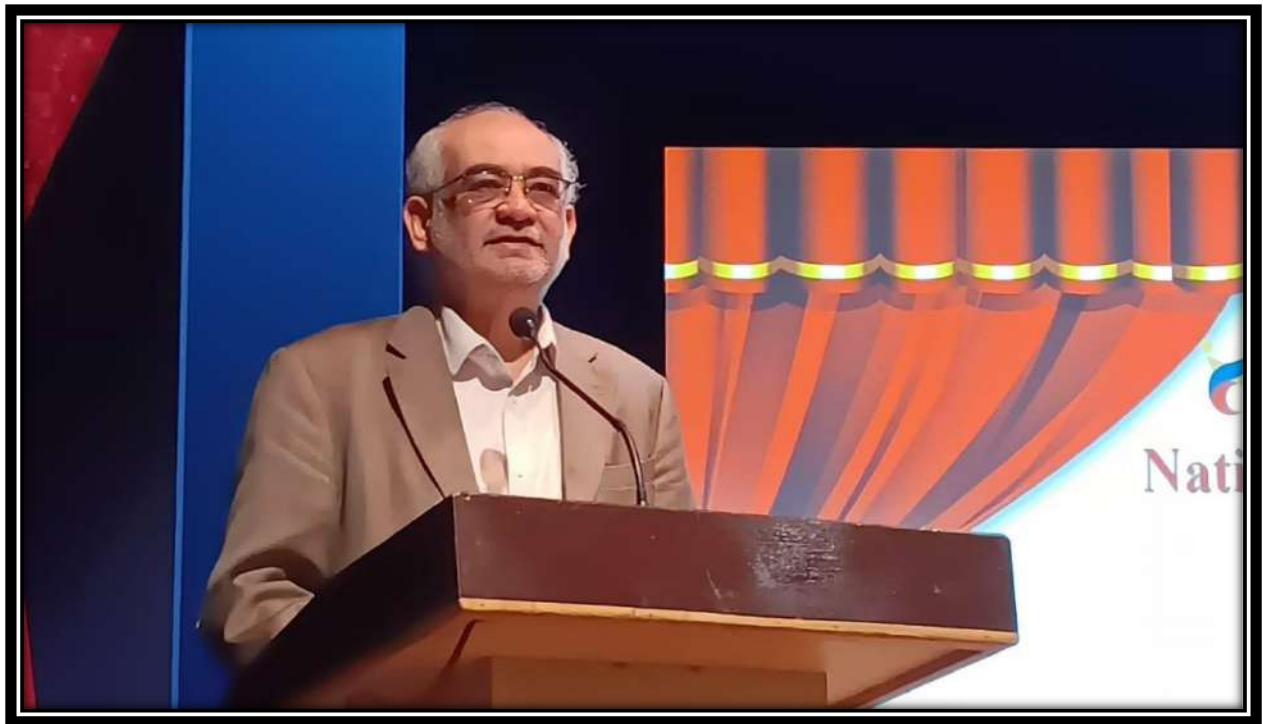
The ceremony was inaugurated by the honorable chief guest Prof. Sunil Sinha, Professor and Director of Civil and Environmental Engineering, Virginia Tech. USA, Professor Indranil Manna, Vice chancellor BIT Mesra and Dr. Sumit Mishra, Head of Chemistry Dept. and Organizing secretary, National Science Day 2024.

*Welcome address given by Dr. Sumit Mishra, Head of Chemistry Dept. and Organizing Secretary, National Science Day 2024.*



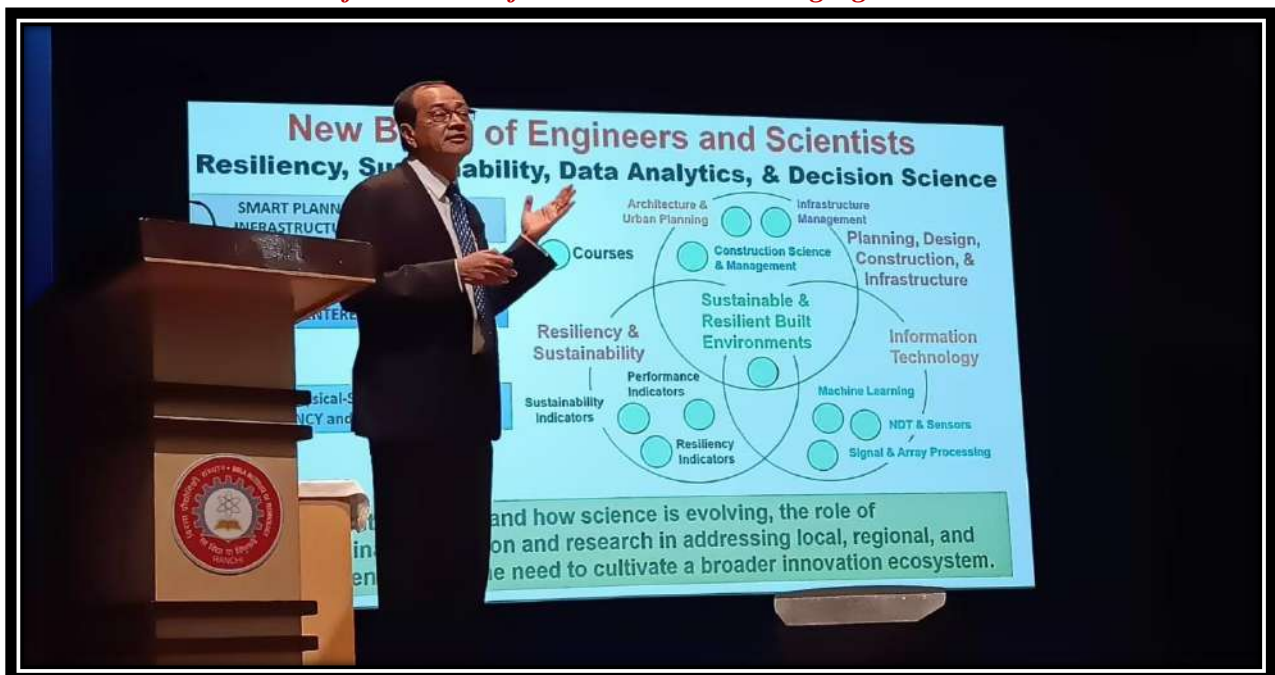
Dr. Sumit Mishra, highlighted the conquest of Sir C.V. Raman and motivated all the visiting college students and faculties to prosper in their career with a positive mindset.

*Professor Indranil Manna, Vice chancellor BIT Mesra addressed the audience*

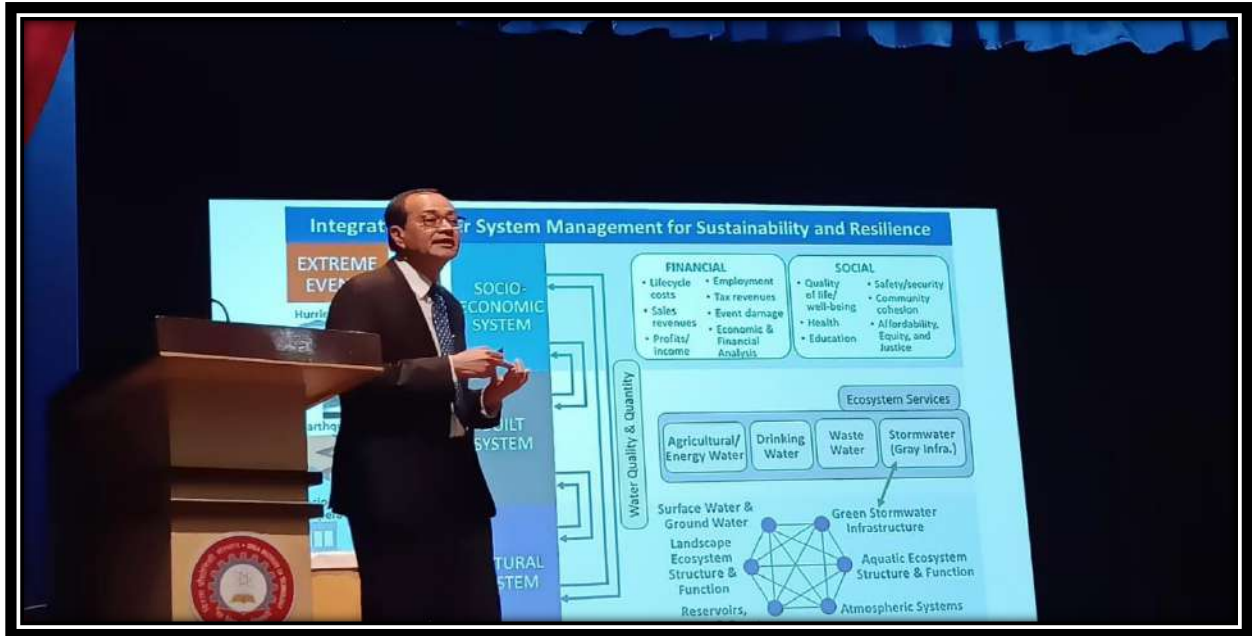


The students, faculties and the dignitaries were formally addressed by honorable Vice chancellor Prof. Indranil Manna conferring the inspiring life journey and the remarkable research career of sir C.V. Raman, leading him to be a Nobel prize winner scientist.

*Chief Guest Prof. Sunil Sinha delivered talked on “Resilient, Sustainable, Equitable, and Inclusive Infrastructure for All in an Everchanging Environment”*



The honorable chief guest Prof. Sunil Sinha delivered much valuable insights on the community, process and technology. He presented the development of intelligent water system through artificial intelligence emphasizing on the scarcity of water or groundwater depletion being faced in several states of the USA. He focused on the resilient and sustainable infrastructure systems to meet safety and quality and highlighted the evolution of Science, the role of transdisciplinary education and research in addressing local, regional and global challenges. He acknowledged the USAD-INDIA higher education partnership for disaster resilient infrastructure. He also had an insightful interaction with the audience. Thereafter the chief guest was felicitated by the Vice chancellor with a momentous and bouquet, as a token of love and respect.



*Students' interaction with the Chief Guest*

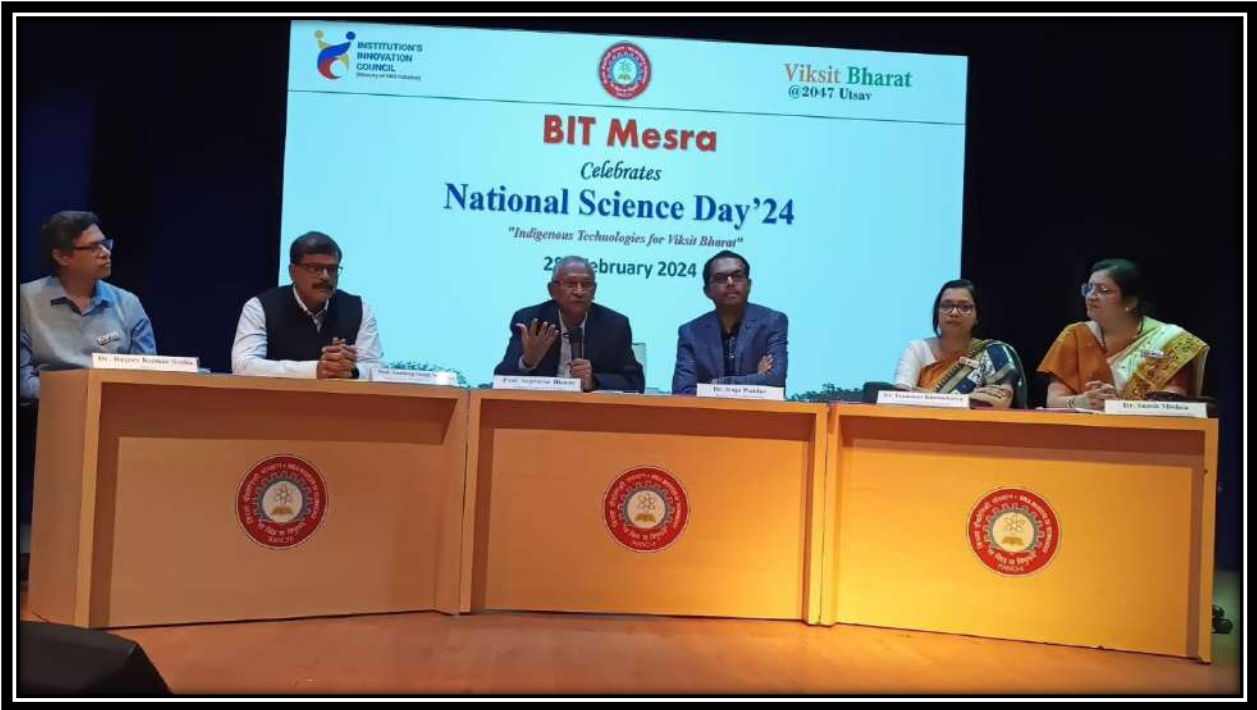


*Students' interaction with the Chief Guest*



During the program significant rewards of then institution was presented from DST PURSE/ FIST project presentation by, Dr. Abhijit Mustafi, Dr, Richa Mishra, Dr. Sukalyan Chakraborty Dr. Swagata Payra and on this gracious occasion, an open panel discussion session was organized involving Prof. Supratim Biswas (Head of Computer Science and Engineering Dept.). Prof. Sandeep Singh Solanki ( Dean Post Graduate Studies), Dr. Rajeev Kumar Sinha (Head of Department Physics), Dr. Raju Poddar (Associate professor, Bioengineering and Biotechnology), Dr. Tanushree Bhattacharya (Associate Professor, Civil and Environmental Engineering) and Dr. Sumit Mishra ( Head of Department Chemistry and Organizing secretary National Science Day 2024) as the panel experts. Students and faculties from all the colleges interacted and benefitted from the insightful perspectives of the experts.

*Panel Discussion with BIT Expert Members*



In the afternoon session, the poster presentation was organized in the R & D building, seminar Hall -2 BIT Mesra. Students from 13 Participating colleges namely Jharkhand Rai University, Usha Martin University, Dr. Shayama Prasad Mukherjee University, Yogoda Satsanga Mahavidyalaya, Indian Institute of Agricultural Biotechnology, University Polytechnic BIT Mesra and BIT Mesra Ranchi.

**INSTITUTION'S INNOVATION COUNCIL** (Ministry of Education Initiative) **Viksit Bharat @2017 Utsav**

**National Science Day Poster Competition**  
"Indigenous Technologies for Viksit Bharat"  
Organized by  
**IIC- BIT MESRA**

**28th Feb 2024**

**Poster Competition Theme**  
Research & Development for Indigenous Technologies & Sustainable development goals in Indian Context

**Timing - 10:00 am Onwards**  
**Venue : R&D Building, Seminar Hall-2 BIT Mesra, Ranchi**

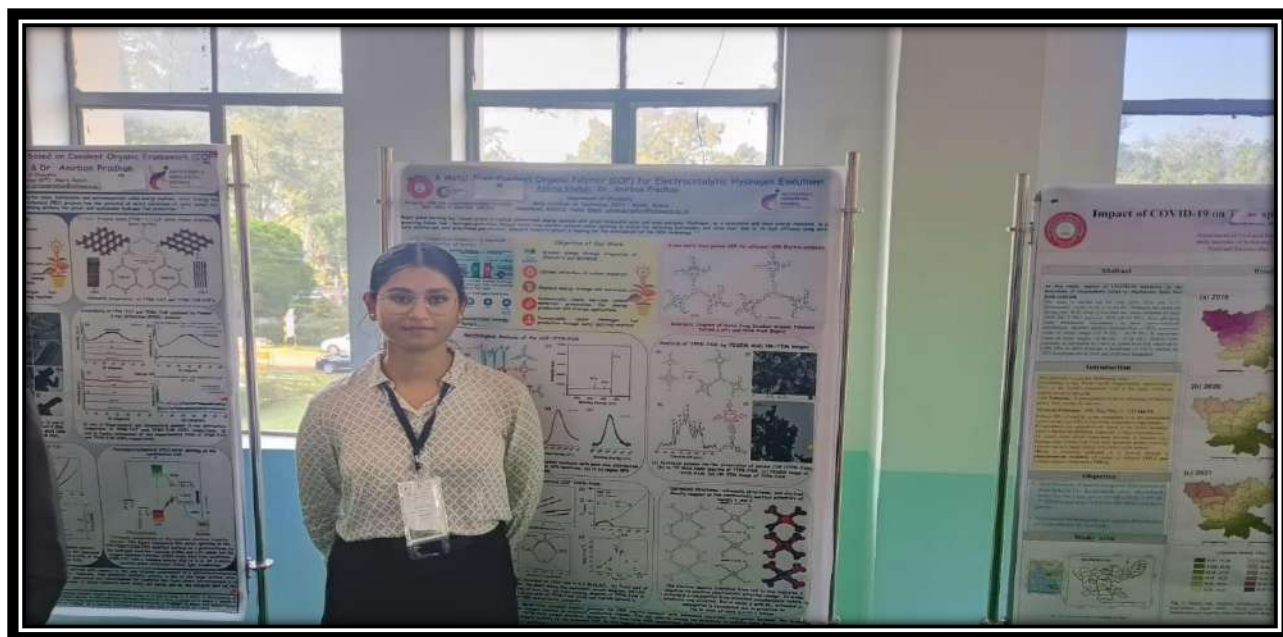
*Poster presentation Competition*



*Poster presentation Competition*



### ***Poster presentation Competition***



For poster competition the theme was *Research & Development for Indigenous Technologies & Sustainable development goals in Indian Context.*

### **Winner of Poster Competition**

1. BIT Mesra – 1<sup>st</sup> Position
2. Yogoda Satsanga Mahavidyalaya – 2<sup>nd</sup> Position
3. Dr. Shyama Prasad Mukherjee University – 3<sup>rd</sup> Prize



### *Prize Distribution Winning Team*



The Jury Members for the poster competition

1. Dr. Manish Pandey (CQEDS)
2. Dr. Dilip kr. Singh (Dept. of Physics)
3. Dr. Vijaynath (Electronics and Communication Engineering Dept.)
4. Dr. Koel Mukherjee (Bioengineering and Technology Dept.)
5. Dr. Anirban Pradhan (Chemistry Dept.)

The ceremony ended with certificate distribution for all the participants, leaving behind oceans of innovative thoughts in the field of science, technology and research, inculcated in the young minds and vote of thanks was given by Dr. Prabjot Kaur, Organizing Secretary, National science day'24.

Total Students Participation	130
Total Faculty Participation	20
Total External Faculty participation	19
Total Budget	Rs. 85000/-
Social Media Link ( Instagram)	<a href="https://www.instagram.com/p/C3fpoCzRG1E/?img_index=1">https://www.instagram.com/p/C3fpoCzRG1E/?img_index=1</a>



# लोक शिक्षण कार्यक्रम

## People's Education Programme

*“For creating awareness among the targeted beneficiaries & employment generation scheme for starting your own business”*

**4<sup>th</sup> & 5<sup>th</sup> March 2024**

**लोक शिक्षण कार्यक्रम**  
People's Education Programme

**Organized by**  
**खादी और ग्रामोद्योग आयोग**  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय, भारत सरकार  
राज्य कार्यालय, रांची, झारखण्ड

**Essay & Debate Competition**

*In collaboration with Institution's Innovation Council,  
BIT Mesra Ranchi*

**4th & 5th March 2024**

**Time : 2:30 PM onwards**

**Venue : Seminar Hall-1 R & D Building BIT Mesra Ranchi**

The Khadi and Village Industries Commission (KVIC), Ministry of MSME, Government of India, in Collaboration with Institution's Innovation Council BIT Mesra, Ranchi organized a workshop on “लोक शिक्षण कार्यक्रम” People's Education programme for creating awareness among the targeted beneficiaries & employment generation scheme for starting your own business” from 4th to 5th March 2024.

## Day 1:- 4<sup>th</sup> March 2024

On the dais Dr. Somak Dutta, Assistant Professor, Production Dept. , Mr. Rajiv Ghosh, Assistant Director – PMEGP, KVIC, Ranchi, Dr. Amit Kr Tiwari, Assistant Professor, Chemical Dept., Mr. Anup Kumar Gupta, OSD PMEGP Nodal Officer, KVIC, Ranchi



Mr. Vishal H. Shah, Associate Dean, Alumni International Relation, BIT Mesra presented a bouquet to Mr. Rajiv Ghosh, Assistant Director – PMEGP, KVIC, Ranchi.



***Mr. Vishal H. Shah, Associate Dean, Alumni International Relation, BIT Mesra presented a bouquet to Mr. Anup Kumr Gupta, OSD PMEGP Nodal Officer, KVIC, Ranchi***



This workshop aimed to inspire self-employment and foster Aatmanirbharta, as well as shed light on the significance of small-scale industries and the use of indigenous materials, particularly focusing on Khadi and Village Industries.


***Welcome address given by Dr. Prabjot Kaur, organizing secretary***



On 4th March 2024 a welcome address and brief about the workshop was given by Dr. Prabjot Kaur, organizing secretary.

# लोक शिक्षण कार्यक्रम

People's Education Programme



**लोक शिक्षण कार्यक्रम**  
"People's Education programme"


**Organized by**  
खादी और ग्रामोद्योग आयोग  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय, भारत सरकार  
राज्य कार्यालय, रांची, झारखण्ड

*In collaboration with Institution's Innovation Council,  
BIT Mesra Ranchi*

**4th & 5th March  
2024**

**Seminar &  
Essay/Debate Competition**

**Timing :  
2:30 PM onwards**



**Venue :  
Seminar Hall-1 R & D Building BIT Mesra Ranchi**



**लोक शिक्षण कार्यक्रम**  
"People's Education programme for creating awareness among the targeted beneficiaries & employment generation scheme for starting your own business"

**Organized by**  
खादी और ग्रामोद्योग आयोग  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय, भारत सरकार  
राज्य कार्यालय, रांची, झारखण्ड

*In collaboration with Institution's Innovation Council,  
BIT Mesra Ranchi*

**4th & 5th March  
2024**

**Seminar &  
Essay/Debate Competition**

**Timing :  
2:30 PM onwards**



**Venue :  
Seminar Hall-1 R & D Building BIT Mesra Ranchi**



**लोक शिक्षण कार्यक्रम**  
People's Education Programme

"For creating awareness among the targeted beneficiaries & employment generation scheme for starting your own business"

**Organized by**  
खादी और ग्रामोद्योग आयोग  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय, भारत सरकार  
राज्य कार्यालय, रांची, झारखण्ड

*In collaboration with Institution's Innovation Council,  
BIT Mesra Ranchi*

**Seminar &  
Essay/Debate  
Competition**

**Time :  
2:30 PM onwards**

**4th & 5th March  
2024**

**Venue :  
Seminar Hall-1 R & D Building BIT Mesra Ranchi**



On 4th March during this workshop three seminar was conducted by **Mr. Vishal H. Shah**, Associate Dean, Alumni International Relation shared his view on the topic “*Generation scheme for starting your own business through technological intervention*” after that **Mr. Mrinal Pathak**, Assistant Professor discussed the *Gandhism: Ideology & Relevance in the 21st Century* and **Dr. Satish Kumar Singh**, Assistant Professor, University Polytechnic, BIT Mesra discussed about the topic “*Grass Root Innovation*”.

*Mr. Vishal H. Shah, Associate Dean, Alumni International Relation*



*Mr. Mrinal Pathak, Assistant Professor, Humanities & Social Science Dept. BIT Mesra*



*Dr. Satish Kumar Singh, Assistant Professor, University Polytechnic BIT Mesra Ranchi*



During this workshop Essay & Debate Competition also organized. The essay competition has organized on 4<sup>th</sup> March 2024 and the total registration of essay competition is 40 from BIT Mesra and University Polytechnic. The debate competition organized on 5<sup>th</sup> March 2024 at Seminar Hall -1 R&D building BIT Mesra Ranchi. The theme of the Essay and Debate competition are mentioned below,

- **Essay Competition: "Gandhism: Ideology & Relevance in the 21<sup>st</sup> Century".**
- **Debating competition topic is "Rural Industrialization"**

### **Students Participant & Audience**





**Day 2 :- 5<sup>th</sup> March 2024**

**Inauguration Ceremony- लोक शिक्षण कार्यक्रम  
People's Education Programme**







**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education Initiatives)

**GOVERNMENT OF INDIA**  
MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

**Khadi India**

# लोक शिक्षण कार्यक्रम

## People's Education Programme

"For creating awareness among the targeted beneficiaries & employment generation scheme for starting your own business"

**Organized by**

**खादी और ग्रामोद्योग आयोग**  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय, भारत सरकार  
राज्य कार्यालय, रांची, झारखण्ड

**Seminar & Essay/Debate Competition**

*In collaboration with Institution's Innovation Council, BIT Mesra Ranchi*

**Time : 2:30 PM onwards**

**Venue : 4th & 5th March 2024**

**Seminar Hall-1 R & D Building BIT Mesra Ranchi**

*From left- Dr. Sanjay Kumar, Head, ECE Dept., Prof. Sandeep Singh Solanki, Dean, PGS, Mr. Rajiv Kr. Malhotra, Assistant Director, KVIC Ranchi, Dr. Vinay Sharma, Director University polytechnics, BIT Mesra & Dr. Prabjot Kaur, Organizing Secretary, "People Education Programme"*





On 5<sup>th</sup> March the Khadi and Village Industries Commission (KVIC), Ministry of MSME, Government of India, in Collaboration with Institution's Innovation Council BIT Mesra, Ranchi organized a workshop on “लोक शिक्षण कार्यक्रम” People's Education programme for creating awareness among the targeted beneficiaries & employment generation scheme for starting your own business”.

***Prof. Sandeep Singh Solanki, Dean, Post Graduate Studies presented a Bouquet to Mr. Rajeev Malhotra's, Assistant Director, KVIC, MSME Govt. of India***



The Inauguration ceremony of this workshop inaugurated by Prof. Sandeep Singh Solanki, Dean, Post Graduate Studies. Prof. S. S. Solanki, Dean, PGS presented a bouquet to Guest of honor Mr. Rajeev Malhotra's, Assistant Director, KVIC, MSME Govt. of India. Prof. S.S. Solanki, Dean PGS talked about how you can start a small-scale industry and the use of indigenous materials particularly focusing on Khadi and Village Industries followed by Prof. Vinay Sharma (Director University Polytechnic, BIT Mesra Ranchi). Prof. Vinay Sharma talked about the role of SSIs and KVIs in reducing India's dependency on imported goods by producing a wide range of products domestically. Dr. Sanjay Kumar, Head, ECE Dept. BIT Mesra Ranchi talked about the importance of Small-Scale Industries and their significance of small-scale industries was highlighted, with a focus on their labour- intensive nature, their contribution to reducing regional disparities, and their utilization of local resources and skills, which align with sustainable development goals.

*Dr. Prabjot Kaur welcome to Prof. S.S. Solanki, Dean, PGS, BIT Mesra Ranchi.*



*Prof. S.S. Solanki, Dean, PGS, BIT Mesra Ranchi addressed the audience*



**Prof. Vinay Sharma (Director University Polytechnic, BIT Mesra Ranchi addressed the audience**



**Prof Sanjay Kumar, Head, ECE, Department**



The guest of honor Mr. Rajeev Malhotra's, Assistant Director, KVIC, MSME Govt. of India addressed the audience.

*Mr. Rajeev Malhotra's, Assistant Director, KVIC, MSME Govt. of India- Guest of Honor*



## Key Points from Mr. Rajeev Malhotra's, Assistant Director, KVIC Speech

1. **Gandhian Ideals:** Mr. Rajeev Malhotra began the seminar by underlining the relevance of Mahatma Gandhi's ideals in the context of Aatmanirbharta. He emphasized that Mahatma Gandhi had always held that the development of village industries was key to providing employment opportunities for millions in India.
3. **Khadi and Village Industries Commission (KVIC):** Mr. Rajeev Malhotra elaborated on the role of the KVIC in promoting Khadi and Village Industries. He mentioned several KVIC schemes, including the Prime Minister's Employment Generation Programme (PMEGP), Market Promotion Development Assistance (MPDA), Interest Subsidy Eligibility Certificate (ISEC), Work shed Scheme for Khadi Artisans, and initiatives aimed at strengthening the infrastructure of Khadi institutions and supporting marketing infrastructure.
4. **PMEGP Success:** Notably, Mr. Rajeev Malhotra shared that the PMEGP, which provides financial assistance to individuals and groups for setting up micro-enterprises.
5. **Promoting Technological Innovation:** These industries were seen as potential drivers of technological innovation, which can enhance the quality and competitiveness of Indian products.

## Participants & Audience



## Essay Competition (4<sup>th</sup> March 24) & Debate Competition -5<sup>th</sup> March 2024

The theme of the Essay and Debate competition are mentioned,

- Essay Competition: "*Gandhism: Ideology & Relevance in the 21<sup>st</sup> Century*".
- Debating competition topic is "*Rural Industrialization*"

An online essay writing competition on *Gandhism: Ideology & Relevance in 21<sup>st</sup> Century* was organized for the students. Around 40 students registered and participated in it. The first prize for essay competition was given to Ayush Kumar (Mathematics Department), Second prize to Kashish Shrivastava (University Polytechnic) & third prize to Jagannath Hansda (CSE). In debate competition the total 14 students were registered and make two groups for their discussion on the topic "*Rural Industrialization*" which was held on R&D Building Seminar Hall-1. In debate competition the First prize was given to Ria Nayak (BMLT, University Polytechnique), the second prize was given to Shubradeep Giri (Mathematics) and the third prize was given to Saket Kumar (Mathematics).

### *Jury Members for Debate Competition*

*Dr. Amit Kr Tiwari, Mr. Mrinal Pathak & Dr. Rohit Kr Pandey*



## Students Participant -Debate Competition



**Vote of thanks given by Dr. Somak Dutta, Organizing Secretary**



Dr. Somak Dutta, Organizing Secretary of this programme conveyed the closing remarks in the ceremony and thanked all the delegates from KVIC, participants as well as the panel of judges too.

**Prize Distribution – Essay & Debate Competition**







**Winning prizes Group PIC.**



# Women's Day Celebration

8<sup>th</sup> March 2024



Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of Women's Day on 8<sup>th</sup> March 2024 from 3:00pm to 7.30 pm in CAT Hall, Birla Institute of Technology, Mesra, Ranchi. The event inaugurated with deep prajjwallan by Chief Guest Mrs. Snigdha Manna, first lady of the institute and Guest of honour Dr. Sangeeta Jha, Radiologist and Trekker and Dr. Manish Kiran, Associate Professor, Head of the Dept, Social Welfare and Psychiatry. The gathering was welcomed by Dr. Richa Pandey, Convenor of Women's Day Celebration.

The main objective of this event is to inspire and motivate the audience with stories of successful female entrepreneurs while focusing on the road of empowerment. The main benefits of this celebration were to witness the spirit of womanhood. The Chief Patron of this event Prof. Indranil Manna, Vice Chancellor, BIT Mesra Ranchi addressed all the lady's faculty members and he said that Women's Day events serve as a platform for action towards gender equality and the empowerment of women to realize their full potential in all spheres of life, in addition to honoring the accomplishments of women. The women's day celebration was very informative and distributed small quickies for questionnaire related to women's day and cultural program made it more enjoyable. The program was attended by all the female faculties and staff of BIT Mesra. In the closing ceremony, vote of thanks was given by Dr. Neeta Kumari, Co-Convenor of IIC-BIT Mesra Ranchi.

# Women's Day Celebration

**Prof. Indranil Manna, Vice Chancellor, BIT Mesra, welcomed to Chief Guest Mrs. Snigdha Manna, First lady of the institute**



**Prof. Indranil Manna, Vice Chancellor, BIT Mesra, welcomed to Guest of Honour Dr. Sangeeta Jha, Radiologist and Trekker**



# Women's Day Celebration

**Prof. Indranil Manna, Vice Chancellor, BIT Mesra, welcomed to Guest of honour  
Dr. Manish Kiran, Associate Professor, Head of the Dept, Social Welfare and Psychiatry,  
RIMS, Ranchi**



**Dr. Richa Pandey, Convener of Women's Day Celebration, welcomed to Prof. Indranil  
Manna, Vice Chancellor, BIT Mesra**



# Women's Day Celebration

Deep Prajjwallan by Chief Guest & Vice Chancellor



**Addressed by Prof. Indranil Manna, Vice Chancellor**



**Addressed by Chief Guest Mrs. Snigdha Manna, First Lady of the Institute**



## Performance by Faculty Members







**Mrs. Snigdha Manna, Presenting a Momentous to Faculty Members**



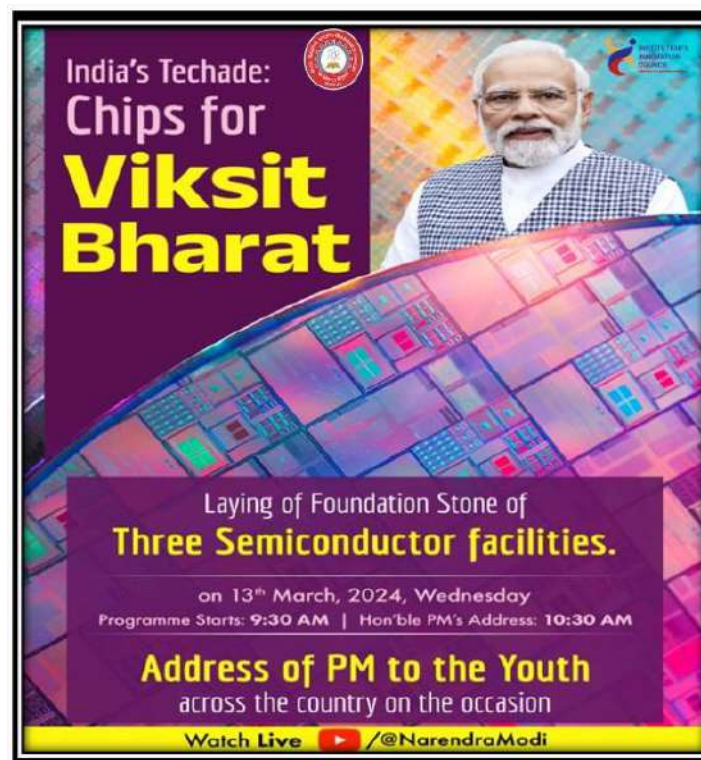




Students Participation	15
Faculty Participation	45
External Participants	04
Total Budget	Rs. 25,000/-
Social Media	<a href="https://www.instagram.com/p/C4bEtnkIgaR/">https://www.instagram.com/p/C4bEtnkIgaR/</a>

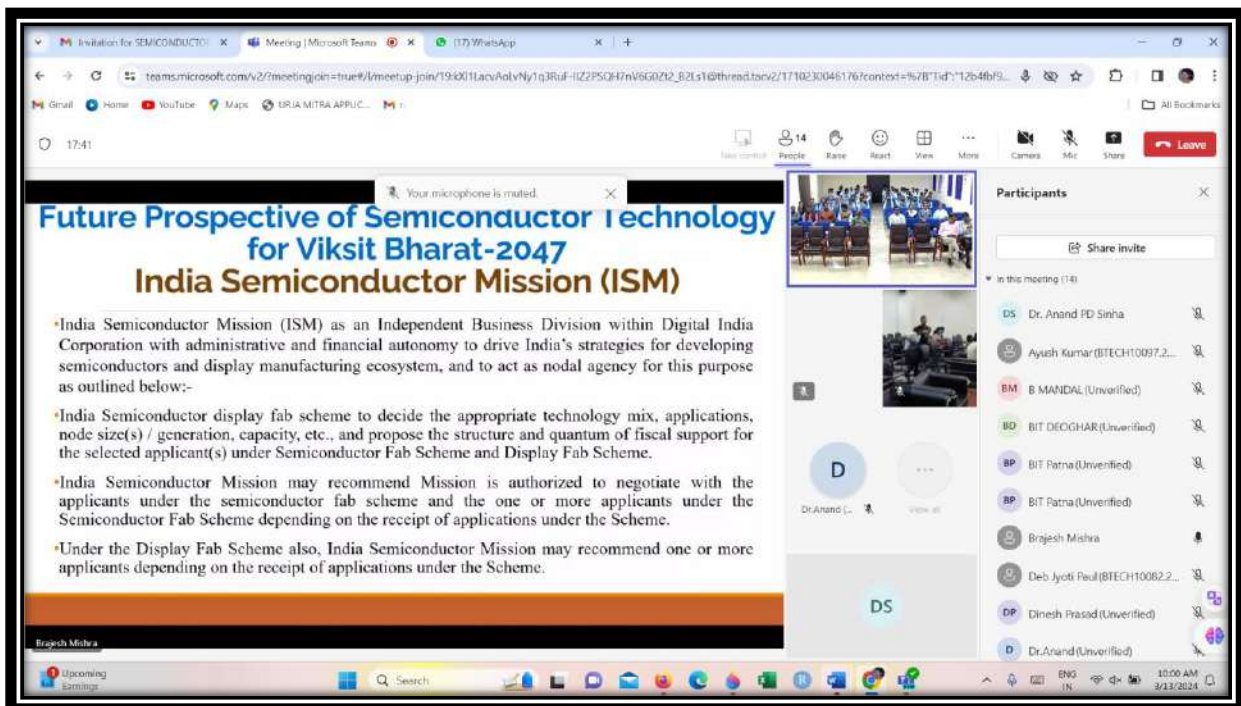
**Inauguration  
of  
SEMICONDUCTOR MANUFACTURING FACILITY-  
Viksit Bharat @2047  
13.03.2024**

With the support of AICTE, Institution's Innovation Council BIT Mesra, Ranchi has organized a Live Streaming of Honourable Prime Minister of India, **Sri Narendra Modi** for inauguration of **SEMICONDUCTOR MANUFACTURING FACILITY** on 13th March at 9.30 am to 11.30am. The main objective of this session is to deliberate on India's Techade vision, India's Semi-Conductor Mission and how Viksit Bharat @2047 can be achieved through research and innovation. In this inaugural ceremony, the faculty members & students from BIT Mesra and their off campuses has attended this program. Total participations of this program who attended was around 175.



The programme has started at 9.30 am in the Seminar Hall -1 R&D building BIT Mesra both offline & Online. From 9.30 am to 10.00am, Dr. Vijay Nath, Associate Professor, ECE, Department has delivered a talked on “*Future Prospective of Semiconductor Technology for Viksit Bharat -2047*” under India Semiconductor Mission.

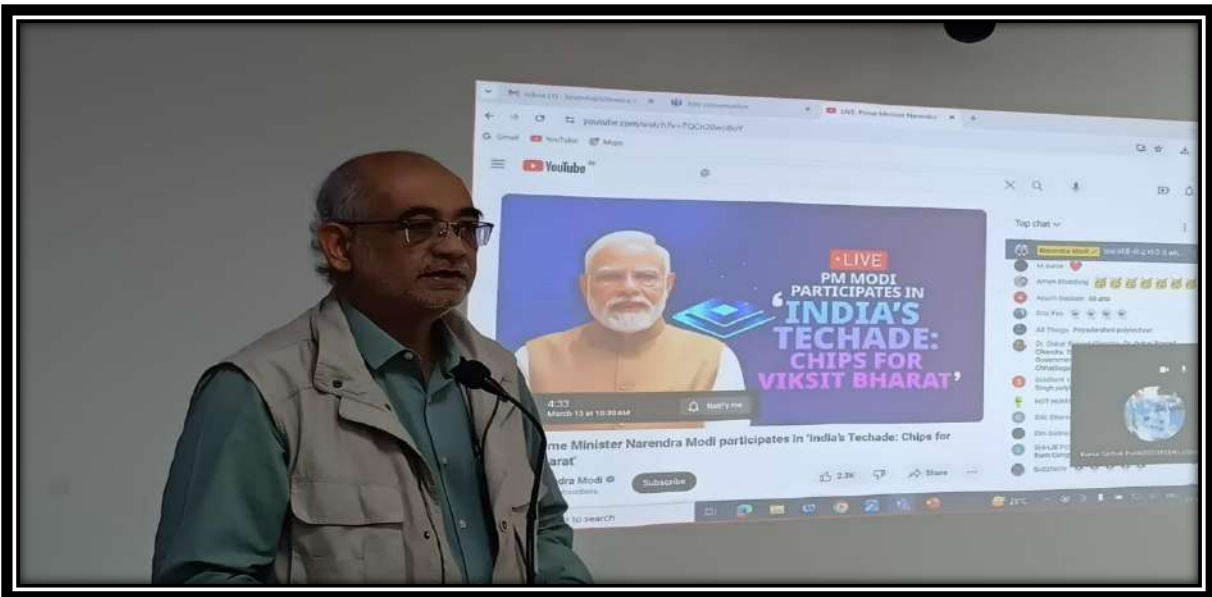
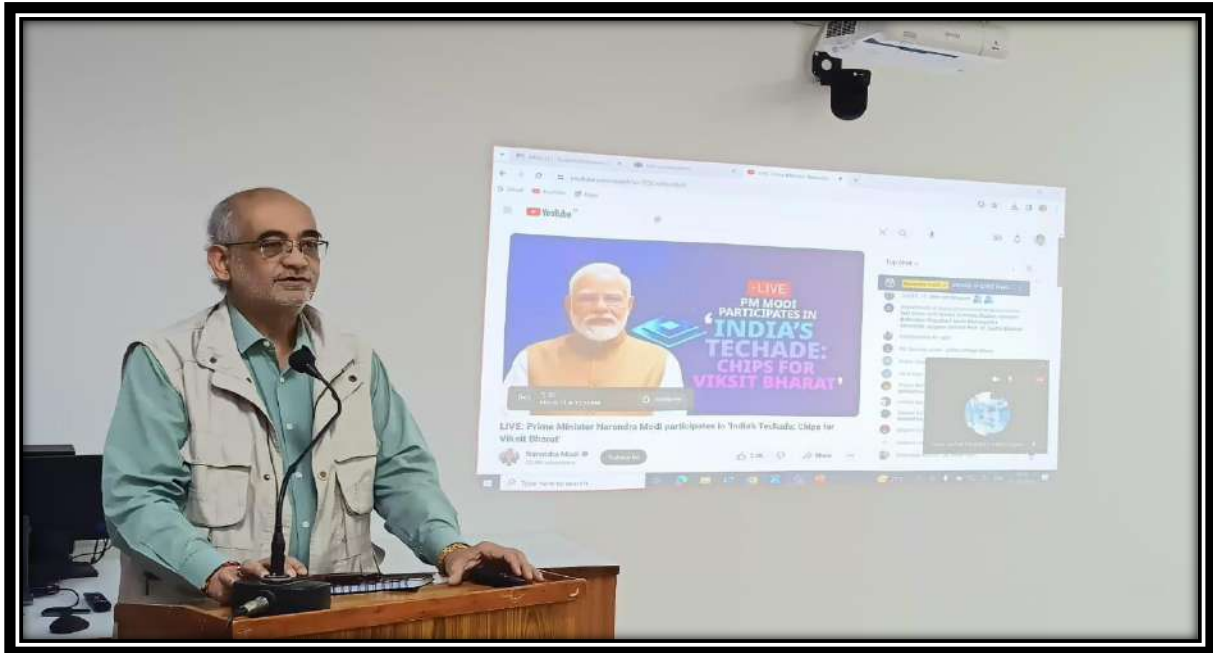
**Dr. Vijay Nath, Associate Professor, ECE, Department**



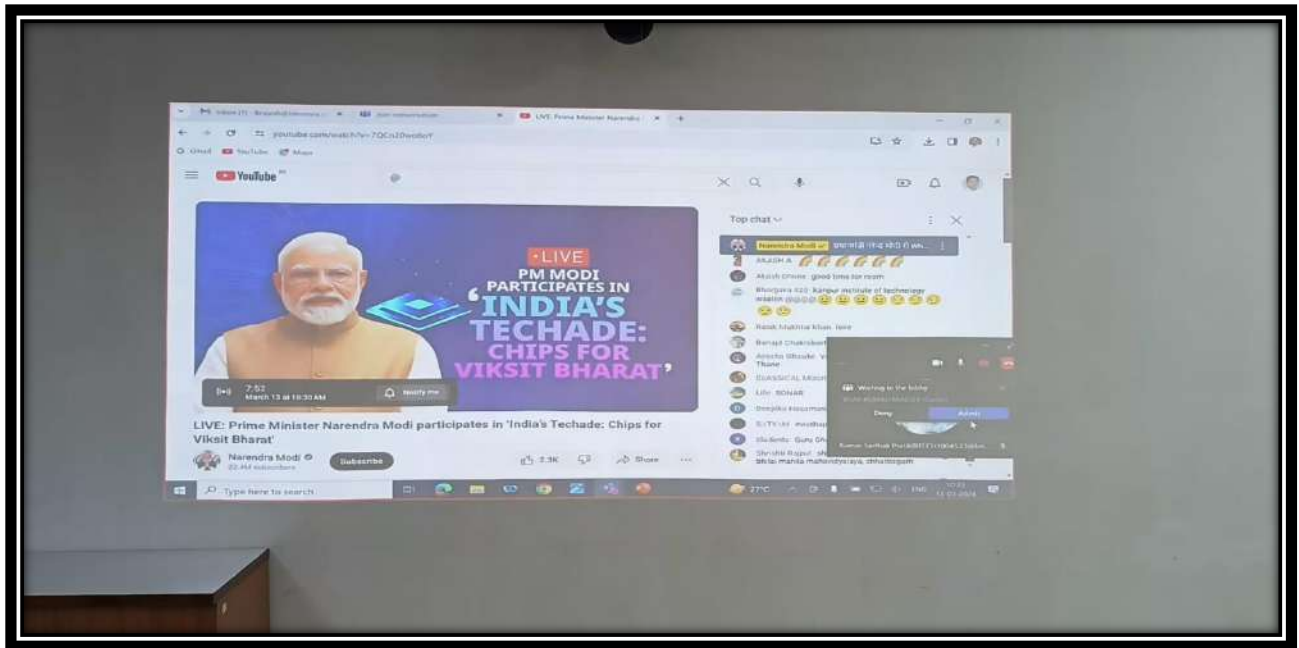
During the inauguration of Semiconductor Manufacturing Facility, Honourable Vice Chancellor, BIT Mesra, Prof. Indranil Manna, has addressed the session to all our students & faculty members

both offline and online. Prof. Indranil Manna has talked about the importance of India's semiconductor ecosystem will grow and establish a solid foundation. In addition to creating jobs in the semiconductor industry for thousands of young people, these units will also stimulate the creation of jobs in adjacent industries like telecom and electronics industry. After the talk of Vice Chancellor BIT Mesra, the inauguration of seminar on Semiconductor Manufacturing Facility was started at 10.30 am to 11.30 am.

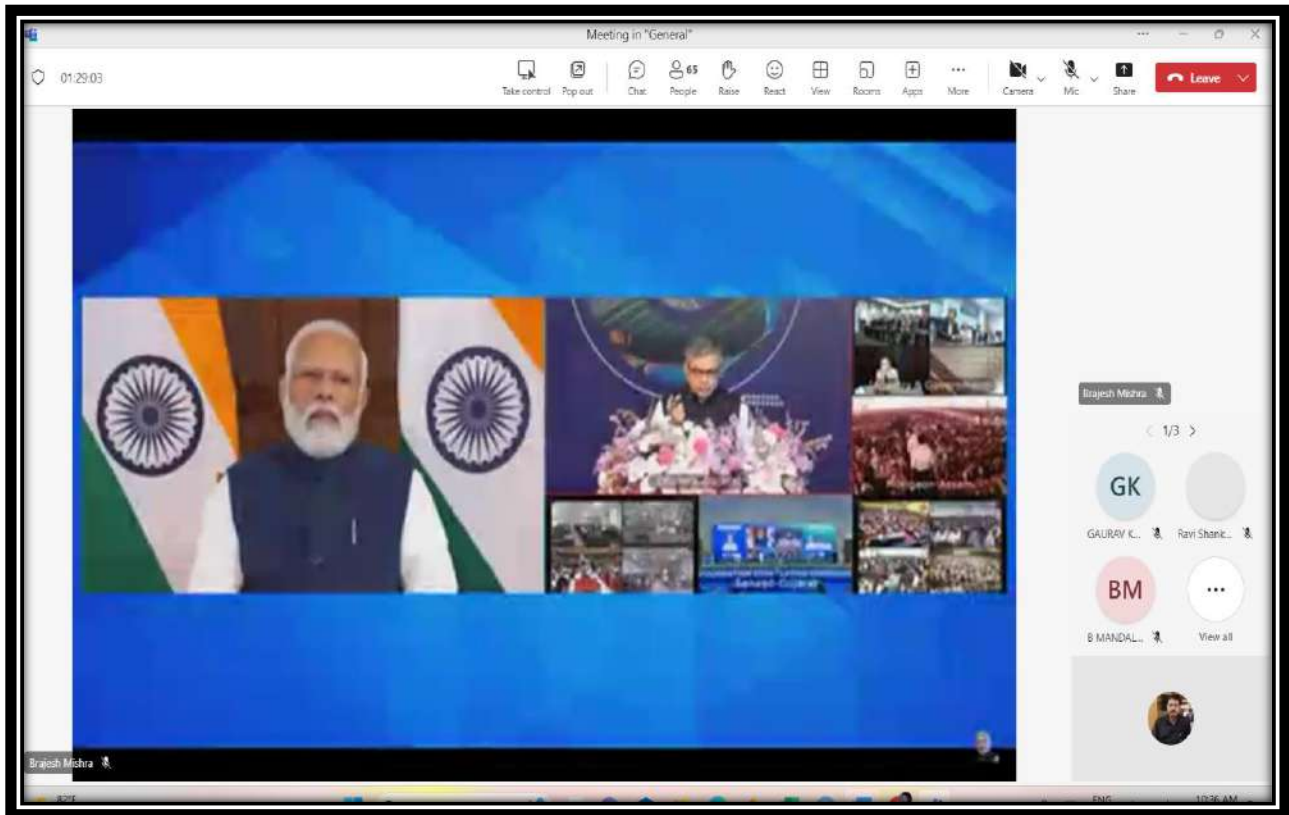
**Address by Prof. Indranil Manna, Vice Chancellor, BIT Mesra Ranchi**



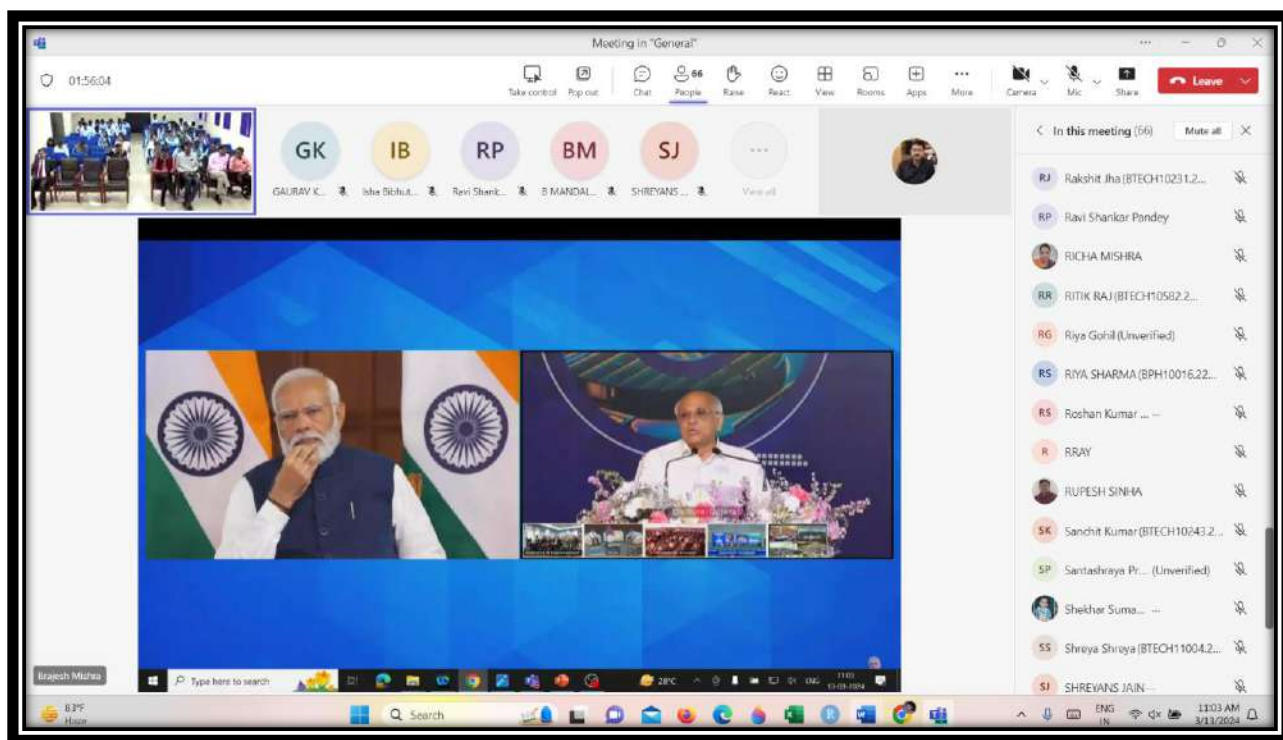
## Inauguration of Semiconductor Manufacturing Facility



*Honourable Prime Minister of India, Sri Narendra Modi Ji*



*Both Online & Offline Faculty Members & Students attending this Inauguration Ceremony*

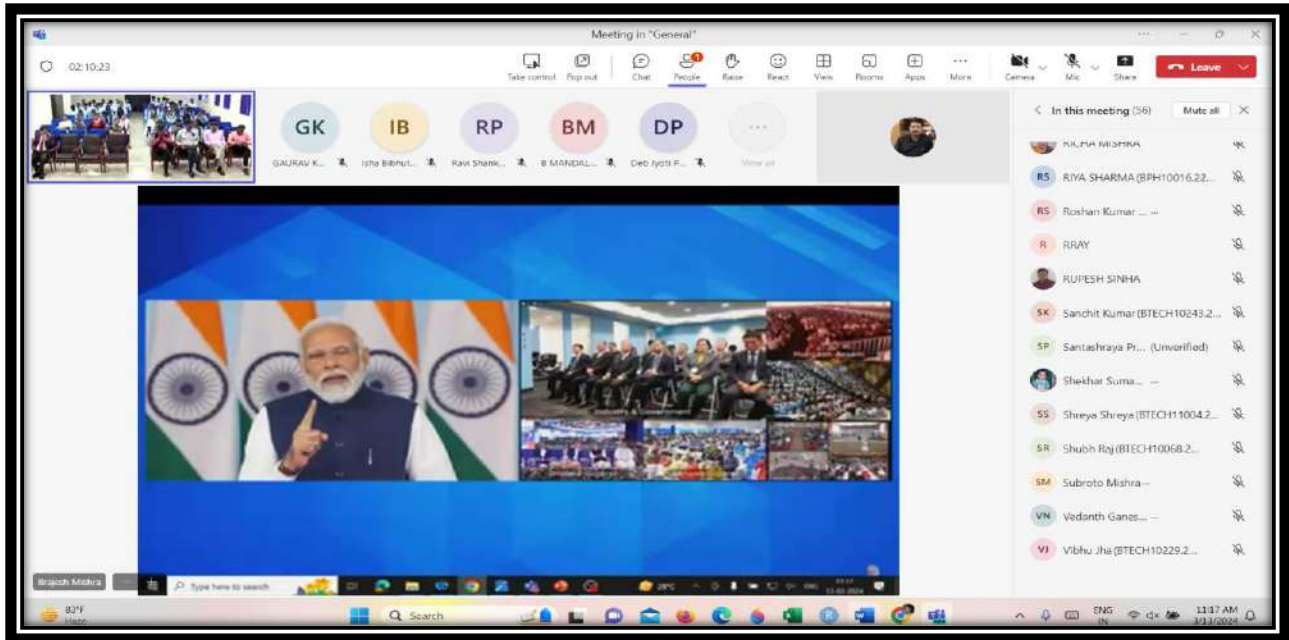


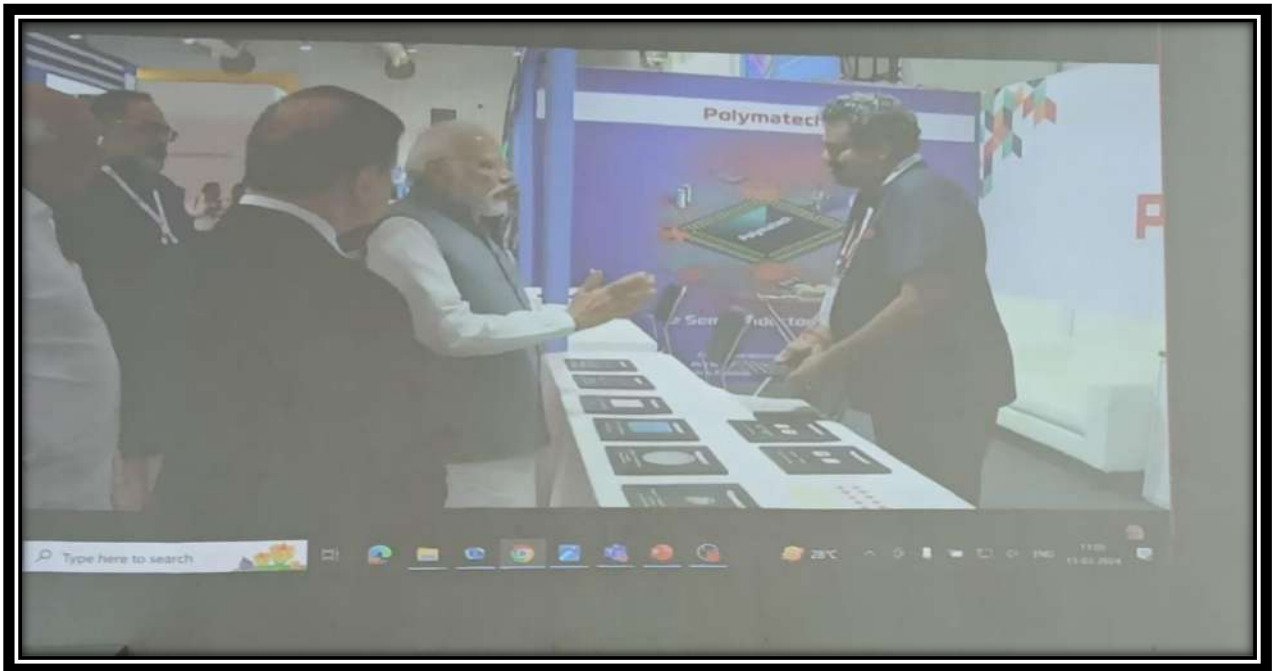


*Addressed by Honorable Prime Minister of India, Sri Narendra Modi Ji*



Honorable Prime Minister of India, Sri Narendra Modi has talked about the IT Hub and importance of semiconductor manufacturing in India. He said that India is well-known as an IT hub, and it currently wants to lead the way in fields like quantum computing, artificial intelligence, and semiconductor design and manufacturing. India's commitment to embrace the digital era is demonstrated by Techade, which represents the country's efforts to assure sustainable growth, generate new employment possibilities, improve living standards, and forge a significant position for itself in the world of technology.









# ANVESHAN'24

*Exhibition Cum Technical Fest*

**14.03.2024**



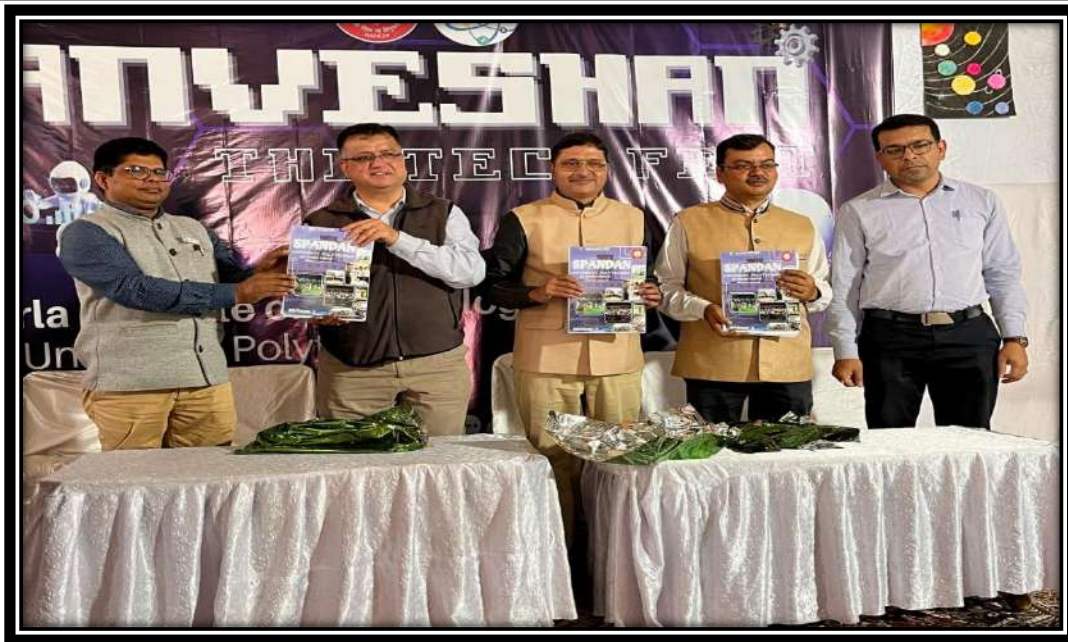
Institution's Innovation Council (IIC-BIT) Birla Institute of Technology, Mesra, Ranchi in collaboration with University Polytechnic organized exhibition cum technical fest ANVESHAN'24 on the theme of "*Science and Technology for upliftment of society*" on 14<sup>th</sup> March 2024 from 10:00 am to 6:00pm in university polytechnic Mesra campus Ranchi. The main objective of this exhibition cum technical fest is to provide a forum for students to pursue their natural curiosity and inventiveness to quench their thrust for creativity. It also highlights the role of science and technology producing good quality and environmentally friendly material for the use of society. The benefit of this technical fest is to create awareness concerning environmental issues and inspiring students to devise innovative ideas towards their mitigation and also develop critical thinking and competitiveness in the context of campus placement. The inauguration of this fest was start at 10:00 am and inaugurated by Prof. Vinay Sharma, Director polytechnic and followed by Dr. Satish Kumar Singh, Convenor- ANVESHAN'24. About 15 unique prototype models and imaginative posters were shown, along with a debate competition organized around the tech fest theme of "Science and Technology for Upliftment of Society," in which 150 students

took part of this tech fest. Dr. Vijay Nath, IIC Member, Dr. Narayan Yadav, IIC Member and 12 faculty members also attended this program.

***Inaugural Ceremony- Prof. Vinay Sharma, Director University polytechnic & Dr. Satish Kr. Singh, Convenor ANVESHAN'24.***



*Delegates on the Dais*





*Dr. Satish Kr. Singh, Convenor ANVESHAN'24 felicitated to Dr. Vijay Nath, Associate Professor, ECE & IIC-Member*



**Innovative Model Display**

*Smart Sensor Dustbin*



## *Solar Wind Power Generator*



## **Smart Home Automation using Arduino UNO Board**



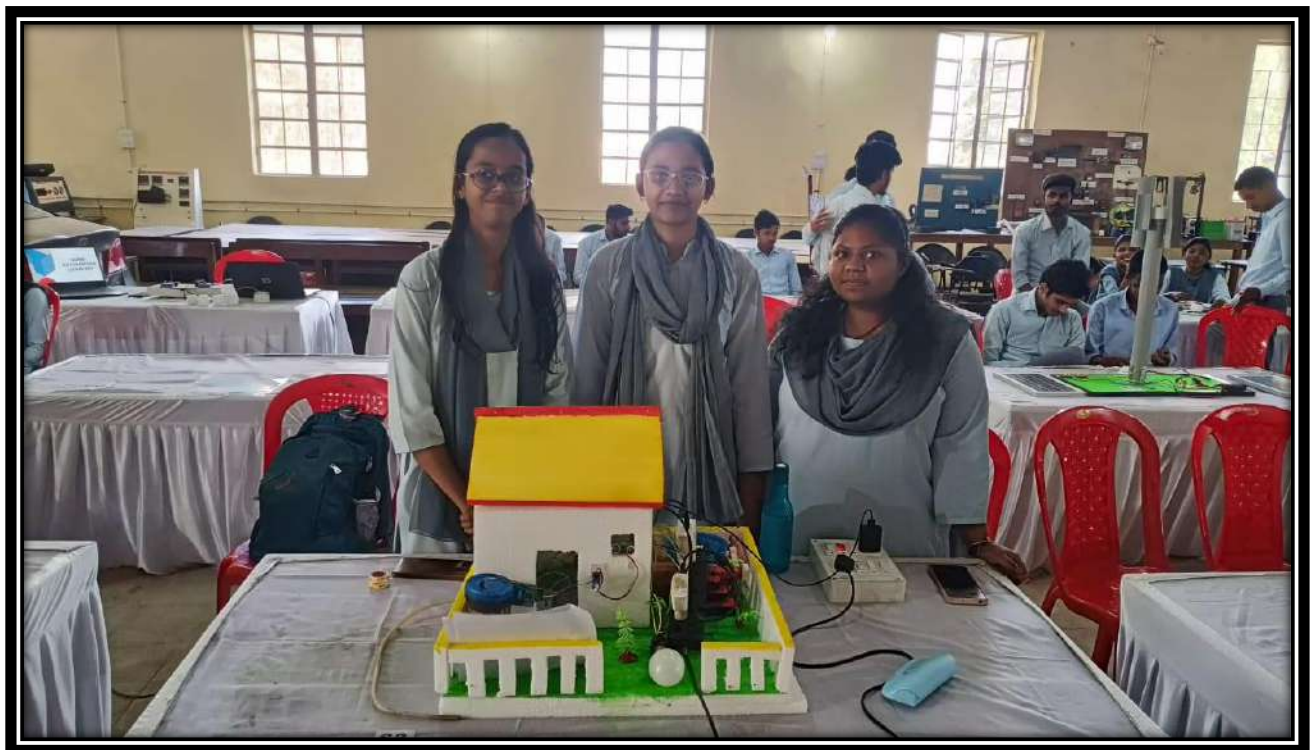


**River Cleaning Robot**





**Smart Room Light Controller**



## Smart Four-Wheeler Vehicle Parking System



## Foot Step Power Generator



## Dual Side Water Pumping System by using Scotch Yoke Mechanism



## Home Automation Using IOT



## Smart Walking Stick



## Creative Poster Display



## Prize Distribution



Total Students Participation	150
Total Faculty & Staff Participation	12
Total External Faculty participation	05
Total Budget	Rs. 25,000/-
Social Media Link ( Instagram)	<a href="https://www.instagram.com/p/C8kFGANymOL/">https://www.instagram.com/p/C8kFGANymOL/</a>



**Two-Day workshop**  
**On**  
**“Prototype/Process Design & Development”**  
**5<sup>th</sup> & 6<sup>th</sup> April 2024**

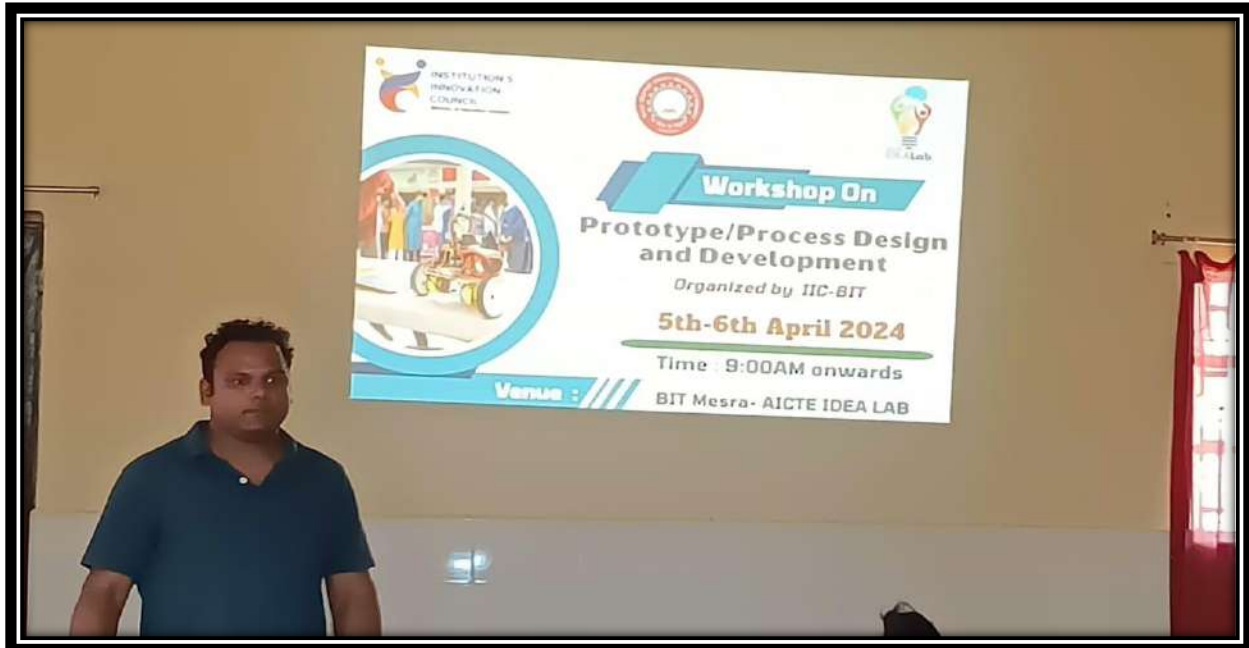
**Workshop On**  
**Prototype/Process Design  
and Development**  
*Organized by IIC-BIT*  
**5th-6th April 2024**  
**Time : 9:00AM onwards**  
**Venue : BIT Mesra- AICTE IDEA LAB**

A two-day workshop was organized under the calendar activity of Institution Innovation Council (IIC-BIT) in collaboration with AICTE IDEA lab of BIT Mesra. The topic of the workshop was **“Prototype/Process Design & Development”** from 5th and 6th April 2024 at BIT Mesra. The program included hands on experience on 3D Printing technology, covering its modeling and analysis on SOLID WORKS software. The students learnt how to convert the IGES file to STL (Stereolithography) file for the final model development. The participants included 35 post graduate students and 9 Ph.D. students and 6 faculty members from various disciplines like Mechanical Eng, Biotechnology, Civil and Environmental Eng and Electronics Eng. The instructor was trained personnel from AICTE IDEA Lab at BIT Mesra. Many faculty members from various disciplines coordinated to make the successful happening of the workshop.

The coordinator of the workshop was Dr. Richa Pandey, Assistant Professor, Mechanical Eng. BIT Mesra welcome all the participants and brief of the workshop which is more important to make product design and development. The workshop coordinated by Dr Neeta Kumari, Assistant Professor & Co-convener IIC-BIT Mesra, Dr. Koel Mukherjee, Assistant Professor, Bioengineering and Biotechnology dept. BIT, Mesra, Dr. Muthu Kumar, Assistant Professor,

Bioengineering and Biotechnology dept. BIT, Mesra, Dr. Richa Mishra, Assistant Professor, Electronics & Communication Engineering Department, BIT Mesra Ranchi and Dr. Anand Pd Sinha, Convenor, IIC- BIT Mesra Ranchi. The Programme Started at 9.30 am onwards and total 51 students participants including faculty members & Resource Person were present.

**Students attending the session on Prototype/Process Design & Development**



**Training on 3D Printing Technology covering its modeling**





## Participants Certificate Distribution





**Group PIC of Workshop**





Students Participation	44
Faculty Participation	06
External Participants	01
Total Budget	Rs. 13500/-
Social Media Link	<a href="https://www.instagram.com/p/C5sXOo4rDIV/">https://www.instagram.com/p/C5sXOo4rDIV/</a>

**One-Day Workshop**  
**on**  
**‘Innovation & Intellectual Property Rights (IIPRs)**  
**15.04.2024**

**Viksit Bharat**  
@2017 Utsav

**Birla Institute of Technology, Mesra**  
Ranchi-835215

**INSTITUTION'S INNOVATION COUNCIL**  
Ministry of Education, India

**One-Day Workshop**  
**on**  
**“Innovation & Intellectual Property Rights (IIPRS)”**

*Organized by IPR Cell & Institution's Innovation Council, BIT Mesra, Ranchi*

**15th April 2024**  
**Time : 11:00 am Onwards**

**Mr. Shantanu Braj Choubey**  
ASSISTANT PROFESSOR  
NATIONAL UNIVERSITY FOR STUDY AND RESEARCH IN LAW

**Mr. Rahul Prakash**  
Senior Innovation Associate  
National Innovation Foundation-India

**Venue : Seminar Hall-1 R&D Building**  
**BIT Mesra, Ranchi**

Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a one-day workshop on **‘Innovation & Intellectual Property Rights (IPRS)** at R&D Building Seminar Hall-1 BIT Mesra, Ranchi on 15<sup>th</sup> April 2024. The main objective of this workshop is to encourage Institute Scholar and Faculty members to expedite the Patent Filing Process, apply and granted and Innovation and creativity produce Intellectual Property (IP) in the form of patents, know-how, copyrights, designs, software's and other inventions, which can be commercially exploited either with or without registration under Patents Act/Copyright act. The Guest of Honor and Resource Persons Mr. Rahul Prakash, National Innovation Foundation (NIF) – India, Bhubaneshwar, Odisha and Mr. Shantanu Braj Choubey, Assistant Professor, National University of Study and Research in Law ,Nagri, Bukuru (PO), Kanke (PS), Kanke Pithoria Road, Kanke, Ranchi 834006, Jharkhand, India. Prof. Venkatesan Jayaprakash , Convenor, IPR Cell welcomed the guest and briefed about the workshop followed by Chief Guest of this session Prof. Sandeep Singh Solanki, Dean, Post Graduate and Studies. Prof. Sandeep Singh Solanki spoke about intellectual property rights' significance. He said that intellectual property rights (IPR) give innovators and inventors a competitive advantage by preventing others from copying and replicating their work. They can also recoup their investment and enjoy the fruits of their work to it. He urged everyone in the audience to come forward and



share their ideas to create their inventions and obtain patents for them. Vote of Thanks Given by Dr. Smiriti Mishra, Head & Associate Professor, Architecture Dept. BIT Mesra, Ranchi.

**Prof. Venkatesan Jayaprakash, Prof. S. S. Solanki, Mr. Shantanu Braj Choubey, Mr. Rahul Prakash**



**Prof. Sandeep Singh Solanki welcomed to Guest of Honor Mr. Rahul Prakash**



**Prof. Venkatesan Jayaprakash , Convenor, IPR Cell welcomed to Resource Person  
Mr. Shantanu Braj Choubey**



**Anchoring By Aditi**

**Address by Prof. Venkatesan Jayaprakash  
Convenor, IPR Cell**



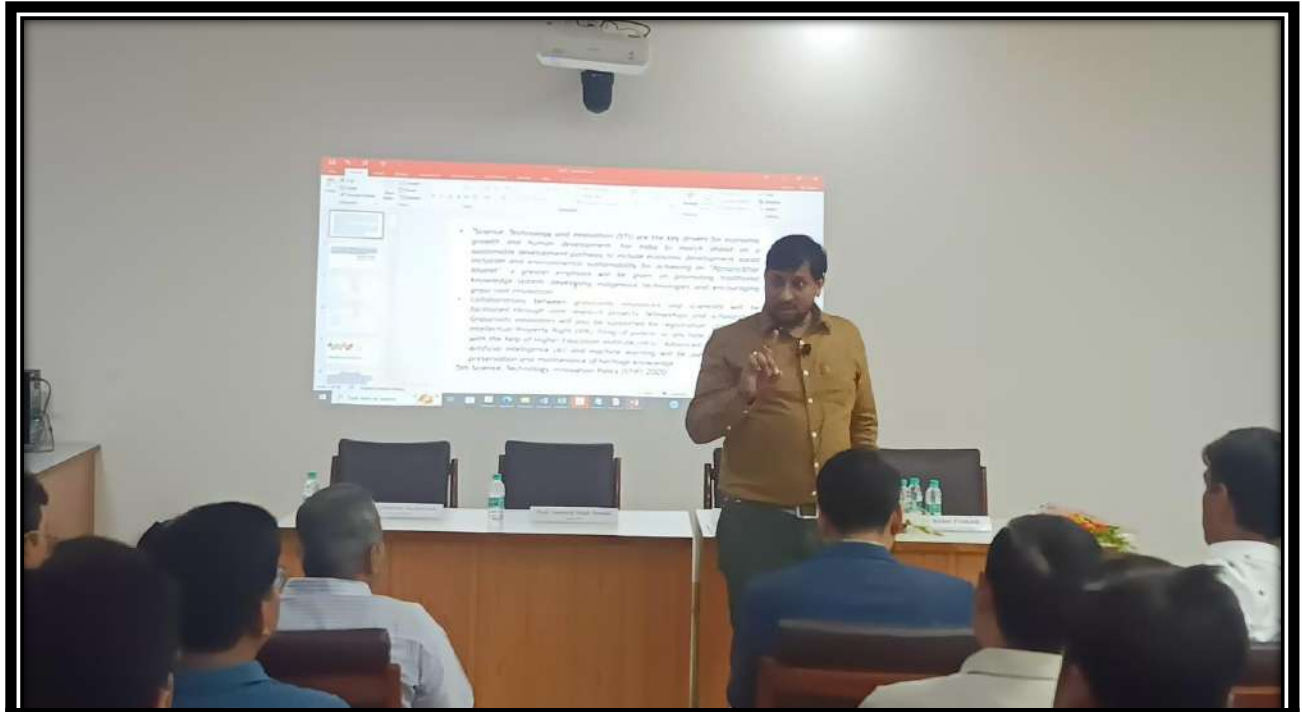
**Address by Prof. Sandeep Singh Solanki, Chief Guest, IPR Workshop**



**Session taken by Mr. Rahul Prakash, National Innovation Foundation (NIF) India, Bhubaneswar, Odisha**

**Session Title: Unleashing Potential-Grassroots Innovations and Their Impact on India's IP Ecosystem**



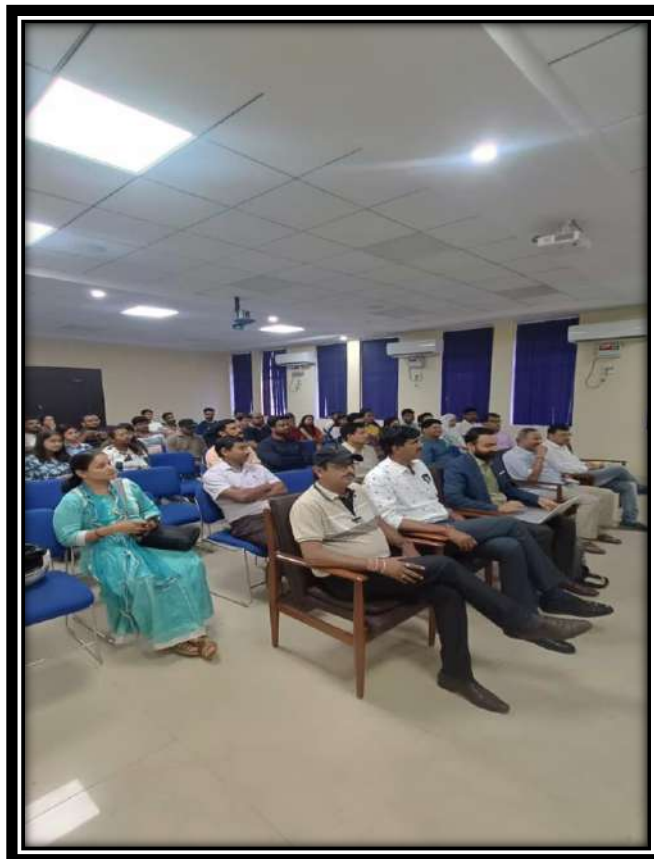


**Session taken by Mr. Shantanu Braj Choubey, Assistant Professor, National University of Study and Research in Law**

**Session Title : The Need to Protect & Promote GIs in Jharkhand**



**Faculty & Students Participated in IPR Workshop**



**Prof. C. Jeganathan, Dean RIE & President, IIC- BIT presented a Token of Appreciation to Resource Person Mr. Shantanu Braj Choubey**



**Prof. Venkatesan Jayaprakash, Convenor, IPR Cell, BIT presented a Token of Appreciation to Resource Person Mr. Rahul Prakash**



**Certification of participations given by Resource person**







**Dr. Smiriti Mishra, Head & Associate Professor, Architecture Dept. BIT Mesra, Ranchi.**



**Group Pic of IPR Workshop Participants**



Students Participation	45
Faculty Participation	10
External Participants	02
Total Budget	Rs. 22,000/-
Social Media Link	<a href="https://www.instagram.com/p/C5sXcfoLb38/">https://www.instagram.com/p/C5sXcfoLb38/</a>

# Competition on How to Plan for Start-up and Legal & Ethical Steps

**18.04.24**

Institution's Innovation Council (IIC-BIT) organized a competition on *“How to Plan for Start-up and Legal & Ethical Steps”* on 18<sup>th</sup> April 2024 at Seminar Hall -2 R& D Building, BIT Mesra, Ranchi. The main objective of the competition for start-up plan for ecosystem's current trends, obstacles, and possibilities should be given to the participants. This competition's primary goal was to give communities and college students get need to fulfil their entrepreneurial dreams, promote economic growth, foster innovation, and create stable long-term revenue streams. The event's advantages include improving start-up formation and entrepreneurial growth skill sets. Dr. Anand Pd Sinha, Convener, IIC BIT Mesra brief about the event and explain all the participants how many categories of start-ups (tech, social, service-based, etc.) and the particular planning needs that each has to pinpoint their market niche and target audience for more effective planning. The total 18 teams were participated for their business plan idea and how to plan for start-up for growing business.

**Institution's Innovation Council  
BIT Mesra**

**COMPETITION  
ON**

**“HOW TO PLAN FOR  
START-UP AND LEGAL &  
ETHICAL STEPS”**

**18TH APRIL 2024**

**Timing : 10:30AM**

**Venue : R&D Building, Seminar Hall- 2  
BIT Mesra, Ranchi**

The students have presented the start-up ideas along with their team members. The some of the list of ideas and start-up name has mentioned below.

1. start-up Name - ACCODIFY (all-encompassing, user-friendly solution through a singular platform, ensuring utmost convenience and comfort).
2. LET'S GUIDE THE FUTURE (Designed for students for classes 8, 9, 10.- Assists students in making informed decisions for their future).
3. VitalEats- "Unlock Your Potential: Where Nutrition Meets Innovation!"
4. ParKing: Leveraging Unused Parking Spaces for Profit
5. Hivekart- India ka apna bazaar!
6. AESTHETICA- making a website for artists and photographer where they can sell their vector designs, paintings , artifacts design and photos.
7. EQUINOX- Resolving the issue of piracy and designing of smart projector and screen.
8. AI Friend- A talking human like friend
9. INNOVATING MINDS- Create a better future for our next generation and to protect our priceless water sources by reducing the plastic discharge into the water bodies
10. Revolutionizing Healthcare Access in India – Connect-Med
11. Start-up- SPHERE (Swasthya Sahyog Card)
12. Start Up- SPAR
13. Campus Bazar- A Convenient Solution for Intra-Campus Transactions
14. Mave : The all-in-one solution for all home needs.



Start-up Business Ideas Winner of the list mentioned below:

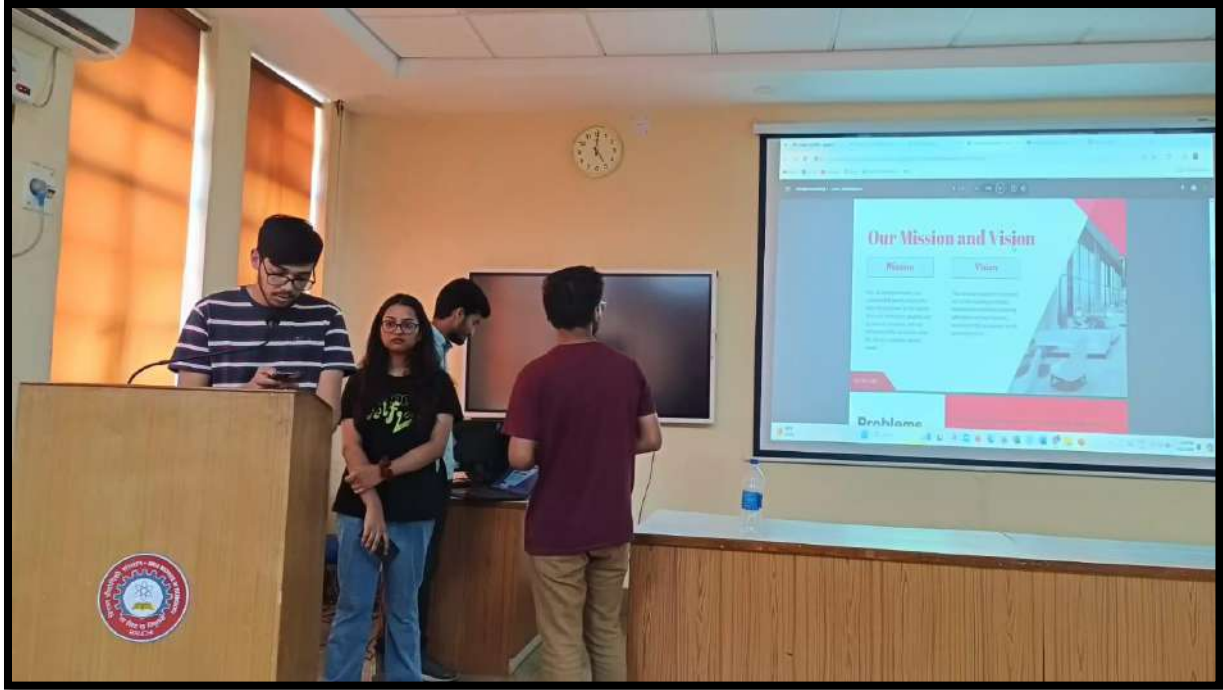
- The first prize – Team SPAR
- Second Prize - Team Velocity – AESTHETICA
- Third Prize - Team Campus Bazar

### Students Presenting the Ideas



## Students Presenting the Ideas





**Prize Distribution**





**Prize Distribution**







**Winner Team Group PIC**



Students Participation	90
Faculty Participation	02
External Participants	01
Total Budget	Rs. 5000/-
Social Media Link	<a href="https://www.instagram.com/p/C84uA9TM9Y2/?img_index=1">https://www.instagram.com/p/C84uA9TM9Y2/?img_index=1</a>

# Celebration of “World Creativity and Innovation Day” 21<sup>st</sup> April 2024

Institution’s Innovation Council (IIC-BIT) in collaboration with AICTE IDEA (Idea Development, Evaluation & Application) LAB organized a celebration of “World Creativity and Innovation Day” on 21<sup>st</sup> April 2024 at AICTE IDEA lab BIT Mesra Ranchi near university polytechnic BIT Mesra Ranchi. The program included Innovation and creativity design contest for students of BIT Mesra. The objective of the event is the focus of innovation is on how to apply the idea and gauge societal acceptance, while problem-solving involves coming up with ideas. The students were required to address the pressing real-world problems and suggest creative and innovative solutions. The design competition was for 2 hour duration and then students had to present and explain their ideas for 10-15 minutes subsequently. The jury members comprised of the coordinator members of the program. The participants included 33 Post Graduate & BTech students from various disciplines like Mechanical Engineering Biotechnology, Civil and Environmental Engineering and Electronics & Communication Engineering. Following students bagged prizes in the Creativity and Innovation Competition. *Phuleswar Baitha* Doctoral scholar from Mechanical Engineering Department received the *first prize* while *Madhubala Kumari*, Doctoral student from Biotechnology and Bioengineering Department received *second prize* and *Nandini Singh*, MSc. Student from Biotechnology and Bioengineering Department received *third prize* respectively.

**INSTITUTION'S INNOVATION COUNCIL, BIT MESRA**  
**CELEBRATES**

**World Creativity and Innovation Day**  
**21ST APRIL 2024**  
**Timing : 10:00AM**  
**Venue :: BIT Mesra- AICTE IDEA LAB**

## Students participated in Innovation and Creativity Design



Many faculty members from various disciplines co-ordinated to make the successful happening of the event . Prizes and certificates were distributed to the participants by Dr. Richa Pandey, Assistant Professor, Mechanical Engg. BIT Mesra. The coordinator of the workshop was Dr. Richa Mishra, Assistant Professor, E&ECE Department.

Coordinators & Co-coordinator Name mentioned below.

- Dr. Richa Pandey, Assistant Professor, Mechanical Engg. BIT Mesra
- Dr Neeta Kumari, Co-Convener, IIC-BIT Mesra.
- Dr. Koel Mukherjee, Assistant Professor, Bioengineering and Biotechnology dept. BIT, Mesra
- Dr. Muthu Kumar, Assistant Professor, Bioengineering and Biotechnology dept. BIT, Mesra
- Dr. Anand Pd. Sinha. Convener IIC-BIT Mesra Ranchi.
- Dr. Dilip Singh, Co-Convener, IIC- BIT Mesra
- Dr. Richa Mishra, Co-Convener, IIC- BIT Mesra



**Prize distribution for Innovation and Creativity Design Event**







Students Participation	33
Faculty Participation	07
External Participants	01
Total Budget	Rs. 5000/-
Social Media Link	<a href="https://www.instagram.com/p/C844z7Uy2Pu/?hl=en">https://www.instagram.com/p/C844z7Uy2Pu/?hl=en</a>

**Celebration of**  
**National Technology Day**  
**08.05.24**

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education, Government of India)

**Viksit Bharat**  
@2047 Utsav

**Chief Mentor**

**Institution's Innovation Council**  
**BIT Mesra**  
**Celebrates**  
**NATIONAL TECHNOLOGY DAY'24**

*From School to Startups - Igniting Young Minds to Innovate*

**8th May 2024**

**Chief Guest**  
**Dr. Monojit Dutta**  
Chief, Product Development  
Research Group, R&D  
Tata Steel, Jamshedpur

**Chief Mentor**  
**Prof. Indranil Manna**  
Vice -Chancellor  
BIT Mesra Ranchi

**Timing : 10:00 am**

**Venue :**  
**CAT HALL, BIT Mesra, Ranchi**

Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of National Technology Day'24 on 08.05.24 at CAT Hall BIT Mesra Ranchi. Due to summer vacation of school and BIT (**starting from 11<sup>th</sup> May**) this event has been preponed and organized on **08.05.24** in BIT Mesra campus.

The theme of the event is ***“From School to Startups -Igniting Young Minds to Innovate”***. During this event, an Innovative Product Exhibition and Competition was organized and students from BIT Mesra, Xavier Institute of Polytechnic and students from various school namely DAV, Gandhi Nagar, DAV Hehal, St. Thomas, Ascot International, Cambrian Public School, Sarla Birla Public School, Jawahar Vidya Mandir Shyamali and Surendranath Centenary School has participated. The two groups (i.e., BIT students and School students) has received a Best Three Model Prizes with certification of Merit & Participation. The total 45 Model has been displayed in this event.

## Delegates for National Technology Day



**Prof. Sudip Das**, Dean, DAAC & Director IQAC welcome to Chief Guest **Dr. Monojit Dutta**, Chief, Product Development Research Group, R&D, Tata Steel, Jamshedpur.





### Lighting of Lamp by Chief Guest



The ceremony was inaugurated by the honorable chief guest **Dr. Monojit Dutta**, Chief, Product Development Research Group, R&D, Tata Steel, Jamshedpur. The inauguration of this ceremony has started at 10.00 am in CAT Hall, BIT Mesra Ranchi. The welcome address was given by Dr. Sumit Mishra, Organizing Secretary, National Technology Day.

### Dr. Sumit Mishra, Organizing Secretary, National Technology Day



Dr. Sumit Mishra discussed about the history of national technology day. She talked about, on 11 May 1998, a nuclear test was held in Pokhran and based on these tremendous achievements of our scientists, engineers etc., Atal Bihari Vajpayee declared 11 May as the National Technology Day. Dr. Bhaskar Karn, Dean Students Affairs address to all the participants.

**Address by Dr. C. Jeganthan, Dean, RIE & President, IIC BIT Mesra**



Dr. C. Jeganthan address all the participants regarding important of Technology and how its work through proper scientific knowledge. Prof. Sudip Das, Officiating Vice-Chancellor & DAAC has preside over the function.

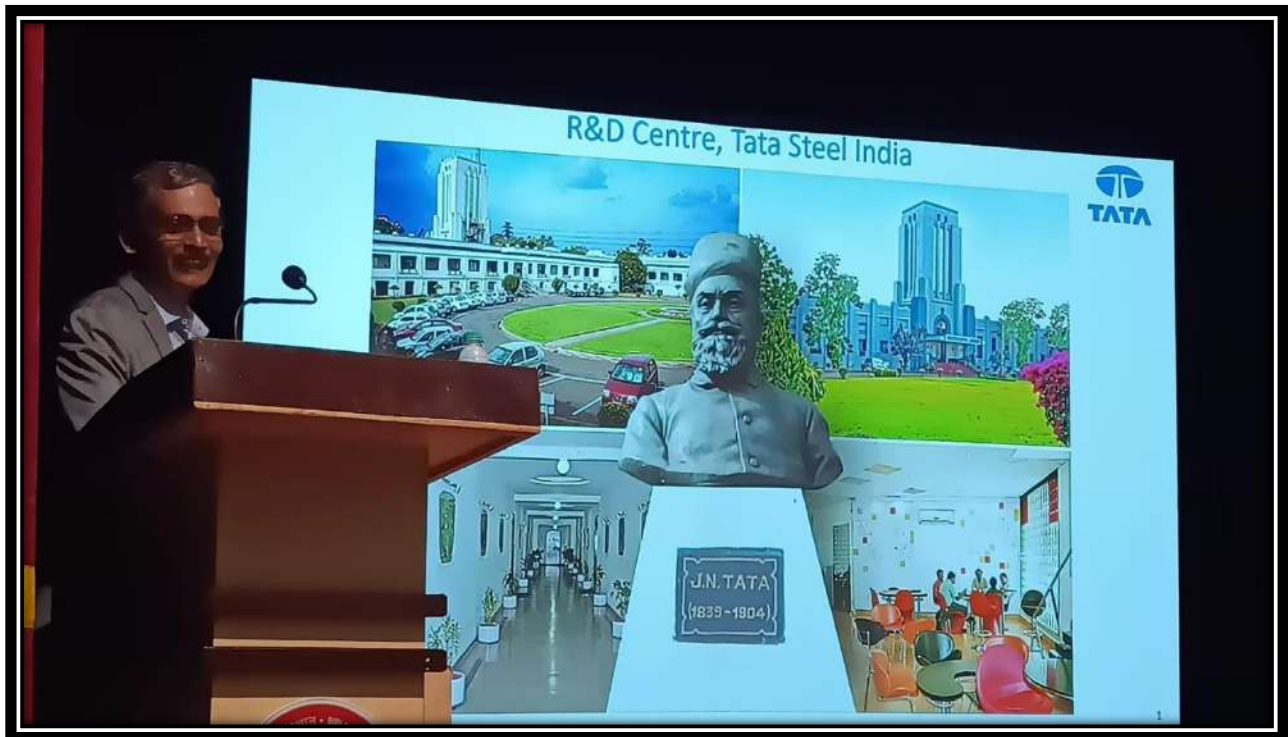
**Address by Prof. Sudip Das, Dean, DAAC & Director IQAC**



**Address by Dr. Bhaskar Karn, Dean Students Affairs**

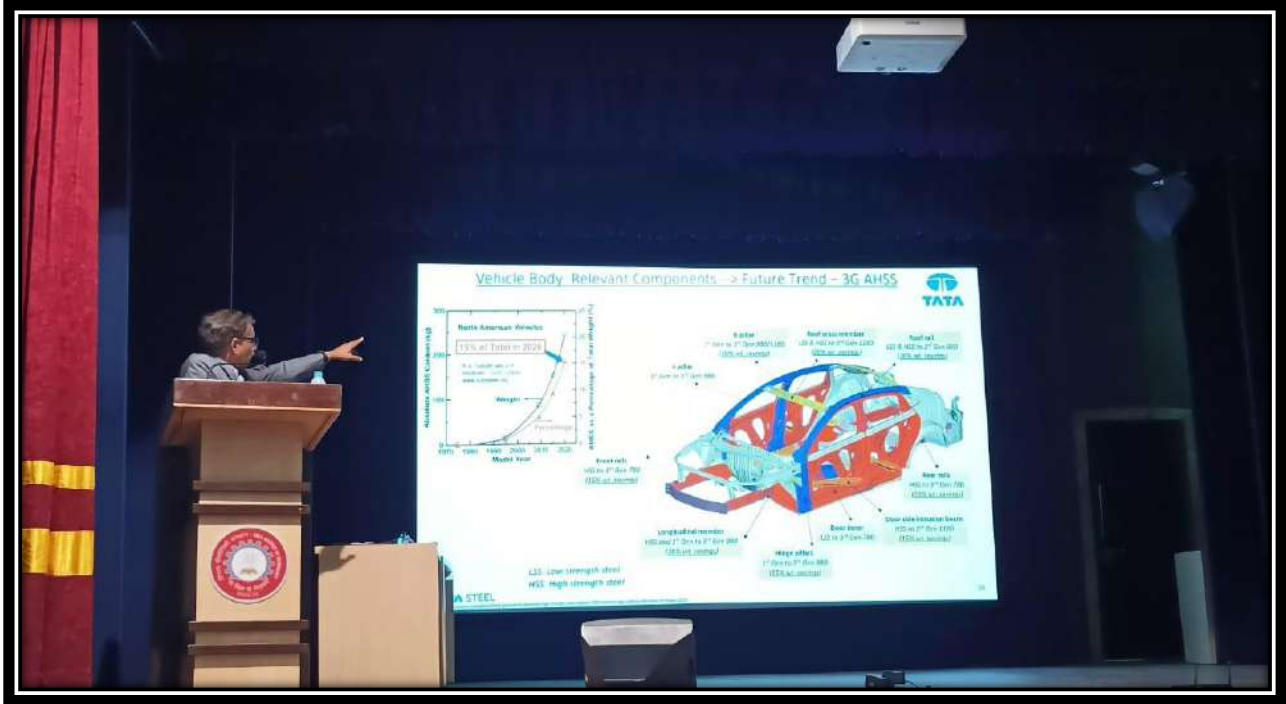


**Dr. Monojit Dutta, Chief, Product Development Research Group, R&D, Tata Steel, Jamshedpur.**



Dr. Monojit Dutta gave a presentation on technology innovation and also shared a PowerPoint about the community, procedures, and significance of the technology used by Tata Steel. Dr.

Monojit Dutta also spoke about the components of the vehicle body that are important for the upcoming trends (3GAHSS).





After the inauguration school students participated in this National Technology Day event by bringing their operational Innovative prototype models and showcasing their innovative product. The prototype product was reviewed by the IIC Faculty members. The pupils received participation and merit certificates for presenting their creative work. Prizes for the best models were given to the top three teams.

### **Innovative Prototype Model Display by Students**

















In closing ceremony, Honorable Vice Chancellor Prof. Indranil Manna delivered his speech and motivated all the participants during this technology day celebration. The vote of thanks was given by Dr. Sukalyan Chakraborty.

**Prof. Indranil Manna, Vice Chancellor, BIT Mesra Addressed - all the participants through online.**



## Award Ceremony

### For School Category

First Prize – DAV Gandhi Nagar  
Second Prize - JVM Shyamali  
Third Prize – DAV Hehal

### The consolation prizes

1. St. Thomas School,
2. Ascot International School
3. Sarla Birla School
4. Cambrian Public School Ranchi.

### For Colleges Category

First Prize – ECE Dept. BIT Mesra  
Second Prize - Production Dept, BIT Mesra  
Third Prize – Mechanical Dept. & Xavier Institute of Polytechnic

## Prize Distribution







## Winners of National Technology Day Competition Group PIC



Students Participation	175
Faculty Participation	35
External Participants	15
Total Budget	Rs. 80,000/-
Social media	<a href="https://www.instagram.com/p/C7FKxubytyk/">https://www.instagram.com/p/C7FKxubytyk/</a>



# **Celebration of** **WORLD ENVIRONMENT DAY' 2024** **(5<sup>th</sup> June 2024)**



Institution's Innovation Council BIT Mesra, Ranchi has organized a celebration of "World Environment Day' 2024 on 5<sup>th</sup> June 2024. The theme of this celebration was "Our Land, Our Future - We are # Generation Restoration". The Vice-chancellor, BIT Mesra Prof. Indranil Manna has Inaugurated the planting saplings behind Hostel 9 at 11am. The World Environment Day aims to increase global awareness and encourage action for environmental preservation and conservation. It provides a forum for inspiring people, groups, governments, schools, and colleges to pursue environmentally beneficial acts that can have a long-lasting effect on the environment. The total 30 Trees planted Near Hostel No. 9, Hostel No.1 Hostel No. 2, Hostel No. 3 & Hostel No. 4.

We Are # Generation Restoration: Honorable Vice Chancellor, BIT Mesra Professor Indranil Manna along with faculty and staff members has planted a total 30 different trees which was 1. Ficus religiosa (Peepal), 2. Indian Fig (Bargad), 3. Lemon Tree, 4. Saraca Indica (Ashoka), 5. Cassia fistula (Amaltas), 6. Royal Poinciana (Gulmohar). Dean, RIE & President IIC-BIT Prof. C. Jeganathan, Dean, Students Affairs, Dr. Bhaskar Karn, World Environment Day Coordinator Dr. Kirti Avishek, Dr. Sumit Mishra, Dr. Sukalyan Chakraborty, Dr. Praveen Srivastava, Dr. Yogendra

Agarwal, Dr. Anand Pd Sinha, Convenor IIC BIT Mesra and other staff Members from BIT Mesra has participated and supporting for plantation of trees.

**BIT Mesra Green Environment PIC**



**Professor Indranil Manna, Honorable Vice Chancellor along with faculty and staff members**



**Tree Plantation: Lemon Tree being planted by Vice Chancellor-Prof. Indranil Manna.**



**Faculty and Staff Members**



**A degraded patch of land being restored within the Campus**



**Tree Planted: Indian Fig (Bargad)**



**Tree Planted: Indian Fig (Bargad)**



**Tree Planted -Saraca Indica (Ashoka),**



**BIT Mesra Garden Dept. Supporting Water supply and Logistic.**



## Faculty and Staff Members



## The Student Organizing Committee



## Students planting Trees







Students Participation	48
Faculty Participation	66
External Participants	03
Number of trees planted	30
Total Budget	Rs. 8000/-
Social Media Link - Instagram	<a href="https://www.instagram.com/p/C7uQCYwytA2/">https://www.instagram.com/p/C7uQCYwytA2/</a>



# OFFICE OF THE DEAN OF RESEARCH, INNOVATION & ENTREPRENEURSHIP



BIRLA INSTITUTE OF TECHNOLOGY  
MESRA, RANCHI, 835 215, INDIA  
(Deemed University u/s 3 of UGC Act 1956)

## Expert Talk on

# “Perspectives on Research and Innovation”

Value Proposition Fit & Business Fit

By Prof. C. Jeganathan

Dean, RIE & President, IIC-BIT, Mesra, Ranchi

05.06.2024

Institution’s Innovation Council BIT Mesra, Ranchi has organized an expert talk on “*Perspectives on Research and Innovation*” on 5<sup>th</sup> June 2024 from 3:00pm onwards in online mode through MS team. The keynote speaker of this session was Prof. C. Jeganathan has delivered a talk on Perspectives on Research and Innovation at BIT Mesra, Ranchi. The faculty members from the various departments as well as PhD Scholars has joined online through MSteam platform. The main objective of this sensitization workshop talk was to create awareness about importance of research, role and efforts at BIT, achievements, facilities available at BIT and opportunities for research funding from the various Govt. & Private agency and also to reveal current trends in research and innovation, and future developmental areas of potential growth. A total of 30 faculty members attended seminar and 15 PhD Scholars attended a seminar session.

**Birla Institute of Technology, Mesra, Ranchi**

**Prof.C. Jeganathan**

**Expert Talk on**

**“Perspectives on Research and Innovation”**

“Value Proposition Fit” & “Business Fit”

Organized by Institution’s Innovation Council, BIT Mesra

**5th June 2024**

**Time : 3:00 PM onwards**

**Online Mode -MS Team**

Dean, RIE & President, IIC-BIT Mesra

**Perspectives on Research & Innovation**

**C. Jeganathan**, PhD, PostDoc (UK), MS (Netherlands), Ex-ISRO Scientist

Professor (Remote Sensing) &  
Dean (Research, Innovation & Entrepreneurship)  
Birla Institute of Technology (BIT), Mesra  
Ranchi, Jharkhand, India

**Sensitization Workshop on BIT, Mesra**  
5th June 2024

**Dr. C. Jeganathan, Dean Research Innovation & Entrepreneurship, BIT Mesra, Ranchi**

Meeting in "General"

30:52

Take control Pop out Chat People Raise React View Apps More Camera Mic Share Leave

**PREAMBLE OF RESEARCH**  
Research → Truth → Wisdom → Happiness

Higher Education inculcating **Ethics, Research, Innovation & Entrepreneurship** will empower Nation with **Technology, Economy, Sustainability and Happy Society.**

**Think Critically, Rationally & Act Efficiently**  
**Think Global & Act Local**

*Sa Vidya Ya Vimuktaye*  
It is Wisdom That Liberates

Participants

- Anand Prasad Sinha
- ABHINAV TANDON
- ANIRBAN PRADHAN
- AD ANJANA DWIVEDI
- A ANKIT (Unverified)
- AP Krishna
- AM Arideeb Mukhopadhyay
- AR Arun Kumar Kadian
- AR Assistant Registrar Sponsored ...
- Bapi Gorain
- BISWATRISH SARKAR

Meeting in "General"

## Fundamental Terminologies

- Science:** Pursuit of knowledge through enquiry - What, How, Why? about any natural phenomena so as to understand, and Predict. (Eureka Moment!) (Knowledge Creation). (Scientists were called Natural Philosophers in early days. Only from 1830s the word Scientist came into picture after Willion Whewell, 1834.)
- Research:** Re+Search – Smart & Systematic enquiry - Dig existing knowledge, Understand gaps and challenges, and Provide explanation or new solutions or futuristic path way.
- Innovation:** Improve Efficiency & Effectiveness - Utilising/Converting Scientific /Business Idea/knowledge into a materialistic entity, or services. (New or Improvement – Early Stage Inventions or add-on interventions)
- Technology:** Well Tested Scientific Knowledge/Idea which are converted into a Product(s) for Human Use in their daily/scientific requirements. (Mass Use – End Use)
- Entrepreneurship:** Converting Innovation/Idea/Technology into a commercial product/ service/venture.

Meeting interface showing a video feed of JEGANATHAN CHOCCALINGAM and a list of participants: ANKIT Bhr..., Dr. Dinesh..., SR, Sangram B., and View all.

## Journey from Caveman → Gentleman → Spaceman →??

Source: <https://medium.com/@rashmi.singh1785/the-one-about-human-evolution-775f2793336f>

Source: <https://www.pngegg.com/>

Source: <https://www.123rf.com/>

**Environmental Limitation → Survival → Adaptability → Skills → Tools → Smart Thinking**  
**Smart Thinking = Research**

Meeting in "General"

33:18

Take control Pop out Chat People 40 Raise React View Apps More Camera Mic Share Leave

ANKIT (Unv... Dr. Dinesh... Sengram R... Assistant R... SANTOSH... View all

### Blooms Taxonomy from Research Perspective

Level	Verb	Description	Domain
PG, PHD	Create	Produce new or original work Design, assemble, construct, conjecture, develop, formulate, author, investigate.	Technology & Entrepreneurship
	Evaluate	Justify a stand or decision Appraise, argue, defend, judge, select, support, value, critique, weigh.	Research & Innovation
UG	Analyze	Draw connections among ideas Differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test.	Research & Innovation
	Apply	Use information in new situations Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch.	Research & Innovation
	Understand	Explain ideas or concepts Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate.	Science
School	Remember	Recall facts and basic concepts Define, duplicate, list, memorize, repeat, state.	Science

REGANATHAN CHOUDALINGAM

3:27 PM 6/5/2024

Meeting in "General"

33:42

Take control Pop out Chat People 40 Raise React View Apps More Camera Mic Share Leave

ANKIT (Unv... Dr. Dinesh... Sengram R... Assistant R... SANTOSH... View all

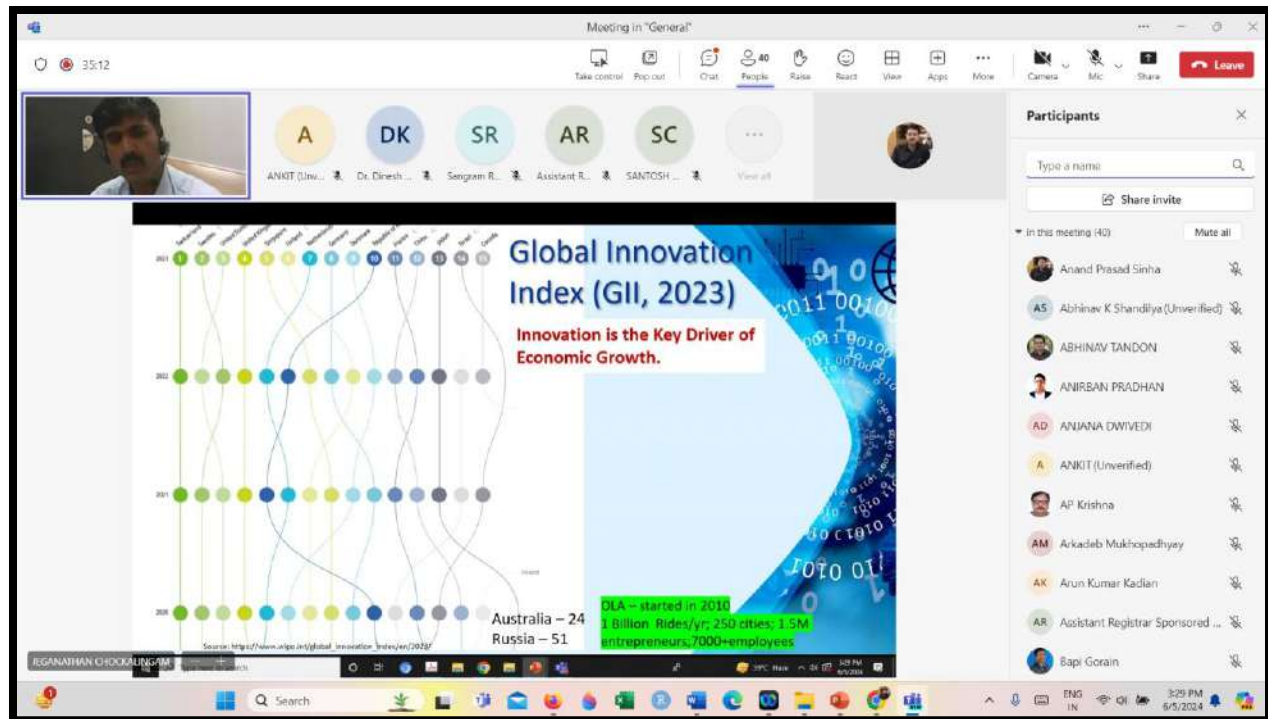
### TRL – Technology Readiness Levels

Level	Definition	Stage
1	Basic principles observed and reported.	Proposal Stage
2	Technology concept and/or application formulated.	
3	Analytical and experimental critical function and/or characteristic proof of concept.	
4	Component and/or breadboard validation in laboratory environment.	Experimental Stage
5	Component and/or breadboard validation in relevant environment.	
6	System/subsystem model or prototype demonstration in a relevant environment.	Validation/ Engg. Feasibility Stage
7	System prototype demonstration in an operational environment.	
8	Actual system completed and qualified through test and demonstration.	Implementation / Production Stage
9	Actual system has proven through successful mission operations.	

Source: Technology Readiness Assessment Deskbook, USA  
<https://www.acqnetex.com/Attachments/Technology%20Readiness%20Assessment%20Deskbook.pdf>

REGANATHAN CHOUDALINGAM

3:27 PM 6/5/2024



## Research Strategy@BIT

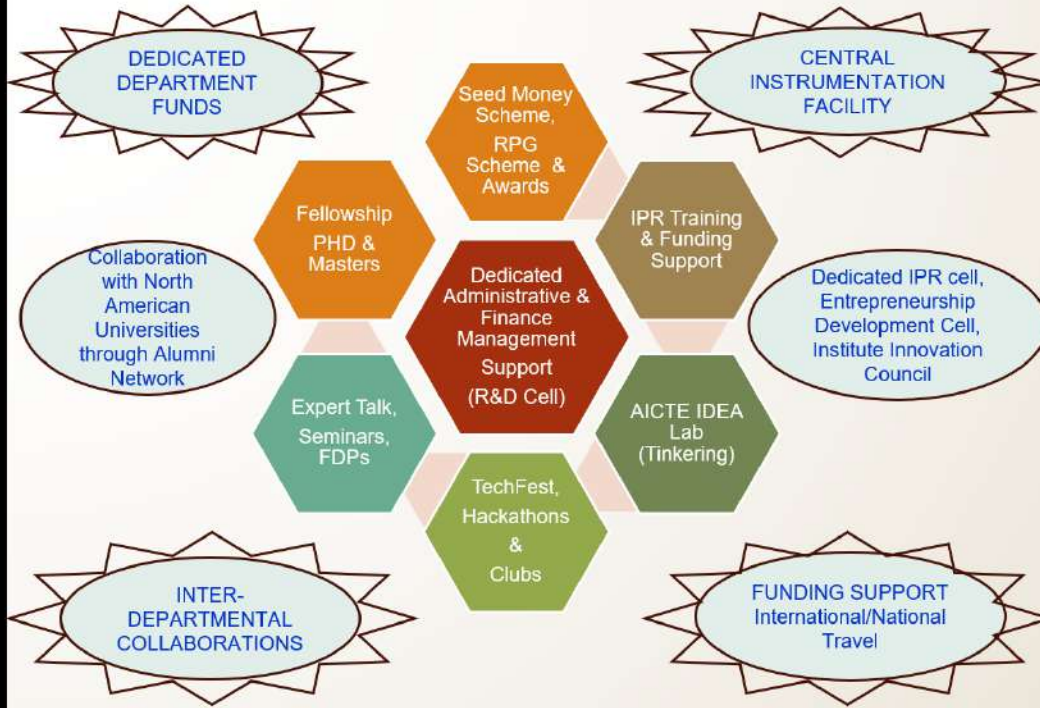
### Internal Aspects

- Inculcate mindset towards Quality Research and Ethics amongst Faculty and students.
- Provide State of the art Scientific Infrastructure and Funding Support for carrying out Impactful Research.
- Recruit quality academicians, researchers, technocrats to accelerate research outcome and outreach.

### External Aspects

- Integrate Academia-Industry Collaboration for addressing industry related problems, carry out consultancy, and provide sustainable solutions.
- Enhance National and International Collaboration for interdisciplinary research.
- Provide an ecosystem for nurturing innovative idea and entrepreneurship, and to attract funding from external sources.
- Deliver solutions to real-life challenges and societal issues through technological interventions.

# Efforts to enhance & promote research



Meeting in "General"

23:00

Take control Pop-out Chat People Raise React View Apps More Camera Mic Share Leave

DP ANKIT (Unv... Vishal H Sh... Sangram R... Dr. Dinesh ...

Participants

Type a name

Share invite

In this meeting (42)

Mute all

Anand Prasad Sinha

ABHINAV TANDON

ANIMESH GHOSH

ANIRBAN PRADHAN

ANJANA DWIVEDI

ANKIT (Unverified)

AP Krishna

Arkadeb Mukhopadhyay

Arun Kumar Kodion

Assistant Registrar Sponsored ...

Bapi Gorain

## Trend in Research Grants

### Sponsored Research Projects and Grants

Fiscal Year	New Projects	Sanctioned (in Cr)	Total Received (in Cr)
FY 20-21	10	2.23	2.44
FY 21-22	23	8.31	6.76
FY 22-23	47	28.78	11.55
FY 23-24	33	11.55	18.26

**FY 20-21**  
 New Projects: 10 (+6)  
 Sanctioned Amount: 2.23Cr  
 Total Grant Received: 2.44Cr  
 TEQIP-II Grant Received: 5.83Cr

**FY 21-22**  
 New Projects: 23 (+13)  
 Sanctioned Amount: 8.31Cr  
 Total Grant Received: 6.76Cr  
 TEQIP-II Grant Received: 1.57Cr

**FY 22-23**  
 New Projects: 47 (+24)  
 Sanctioned Amount: 28.78Cr  
 Total Grant Received: 11.55Cr  
 TEQIP-II Grant Received: 10.47Cr

**FY 23-24**  
 New Projects: 33 (+20)  
 Sanctioned Amount: 11.55 Cr  
 Total Grant Received: 18.26 Cr

\*051 PRS (4) + PURSE (1): 14.44Cr  
Fund Sp: 75.25

EGANATHAN CHOCCOLINGAM

3:15 PM 6/5/2024

Meeting in "General" 23:22

DP A VS SR DK

DR RAJU P., ANGT (Unv... Vishal H.Sh., Sangram R., Dr. Dinesh ...

### Seed Money for New Faculty (2021 to 2023\*)

(Seed Fund was 2 Lakhs (till 2020), and 5 Lakhs from 2021 onwards)

Department	2020-21	2021-22	2022-23	2023-24*	Total
ARCHITECTURE & PLANNING	4	1		1	6
BIOENGINEERING AND BIOTECHNOLOGY				1	1
CHEMICAL ENGINEERING		1			1
CQEDS			1		1
CIVIL & ENV. ENGG.	2				2
CHEMICAL ENGINEERING				1	1
CHEMISTRY		2	1		3
ELEC. & ELECTRONICS ENGG.			2	2	4
ELECTRONICS AND COMMUNICATION ENGG.		1			1
MATHEMATICS		5			5
MECHANICAL ENGINEERING	4	2	1		7
PHARMACEUTICAL SCI & TECH.		2		1	3
PHYSICS			1	2	3
MANAGEMENT		1			1
PRODUCTION AND INDUSTRIAL ENGINEERING		1			1
<b>Grand Total</b>	<b>10</b>	<b>16</b>	<b>6</b>	<b>8</b>	<b>40</b>

Participants: Anand Prasad Sinha, ABHINAV TANDON, ANIMESH GHOSH, ANIRBAN PRADHAN, ANJANA DWIVEDI, ANGT (Unverified), AP Krishna, ArkaDeb Mukhopadhyay, Arun Kumar Kodion, Assistant Registrar Sponsored..., Bapi Gorain

23:26

Meeting in "General" 24:26

DP A VS SR DK

DR RAJU P., ANGT (Unv... Vishal H.Sh., Sangram R., Dr. Dinesh ...

### Equipments Purchased (2020 to 2023)

Financial Year	No. of Items	Cost in INR	No. of Items >10 lakh	No. of Items >5 lakh	No. of Items >1 lakh
20-21	25	0.5 Cr	1	2	7
21-22	163	2.6 Cr	5	11	22
22-23	78	3.28 Cr	11	7	24

- 50+ MOUs were signed between 2021-24.
- AICTE-IDEA (Idea Development, Evaluation & Application) Lab was established in BIT with the contributory funding (50% AICTE + 50% BIT = 1 Cr). It is running successfully. Positively Utilised the long-time unused space near Polytechnic.
- Digital Innovation Lab is being established at CQEDS with the full funding support (~3.1Cr for 5 yrs) from Adrosomics Pvt. Ltd., Mumbai.

Participants: Anand Prasad Sinha, ABHINAV TANDON, ANIMESH GHOSH, ANIRBAN PRADHAN, ANJANA DWIVEDI, ANGT (Unverified), AP Krishna, ArkaDeb Mukhopadhyay, Arun Kumar Kodion, Assistant Registrar Sponsored..., Bapi Gorain

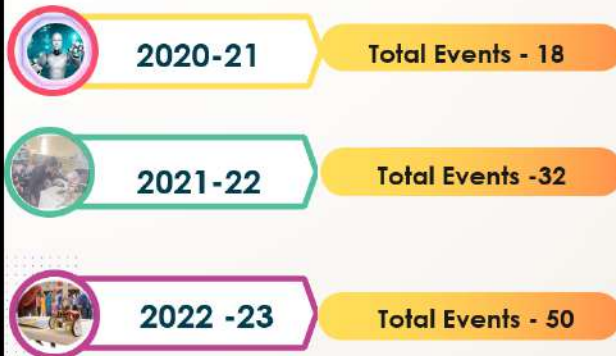
24:26



# Institute Innovation Council – IIC Activities

(as per Ministry of Education & AICTE Mandate)

## Webinar/ Workshop/ Innovation Competition/ Hackathons



## Flagship Events

- Business Plan Competition
- BIT NIHSAN Innovation Contest
- ENIGMA Case Study Technical Event
- National Technology Day



Meeting in "General"

26:08

Take control Pop out Chat 45 People Raise React View Apps More Camera Mic Share Leave

DP A SR DK ANKOT (Unverified) ANIMESH ... View all

### Research & Funding Schemes and Opportunities

- Department of Science and Technology (DST), ISRO, DRDO, ICMR, ICSSR, etc.
- All India Council for Technical Education (AICTE)
- University Grant Commission (UGC) & many Ministries
- CSR fund (Companies net worth 500 Crore or turnover 1000 crore or net profit Score: 8000+companies 1500crore CSR fund)
- Research and Development | India Science, Technology & Innovation ([indiascienceandtechnology.gov.in](https://indiascienceandtechnology.gov.in))

European Science Funding (<https://www.esf.org/>)

National Science Funding- USA <https://www.nsf.gov/>

Canadian Science and Research <https://www.canada.ca/en/services/science.html>

Germany Research <https://www.research-in-germany.org/en.html>

Australian Research <https://www.arc.gov.au/>

UK-INDIA Education and Research Initiative <http://ukieri.org/>

Indio-US Science and Technology Forum <https://www.iustf.org/>

Participants

Type a name

Share invite

In this meeting (45)

Mute all

- Anand Prasad Sinha
- ABHINAV TANDON
- ANIMESH GHOSH
- ANIRBAN PRADHAN
- AD ANJANA DWIVEDI
- A ANKOT (Unverified)
- AP Krishna
- AM Arkadeb Mukhopadhyay
- AK Arun Kumar Kadian
- AR Assistant Registrar Sponsored ...
- Bapi Gorain

JEGANATHAN CHOCKALINGAM

3:20 PM 5/5/2024

Meeting in "General"

37:54

Take control Pop out Chat People Raise React View Apps More Camera Mic Share Leave

Participants

Type a name

Share invite

In this meeting (41) Mute all

- Anand Prasad Sinha
- AS Abhinav K Shandilya (Unverified)
- ASHINAV TANDON
- ANIRBAN PRADHAN
- AD ANJANA DWIVEDI
- A ANKIT (Unverified)
- AP Krishna
- AM Arkadeb Mukhopadhyay
- AK Arun Kumar Kadian
- AR Assistant Registrar Sponsored ...
- Bapi Gorain

### Research Leadership & Diversity

Country/Region	Research Leadership Index (RLI)	Number of Research Fronts
USA	207.71	128
China	131.12	125
UK	89.41	127
Germany	81.58	127
France	66.45	127
Italy	49.30	127
Canada	48.57	127
Spain	47.25	127
Australia	46.77	127
Japan	35.67	125
South Korea	35.67	125
India	25.69	126
Sweden	23.65	126
Belgium	22.27	126
Israel	21.06	124
Russia	20.40	124
Poland	16.75	125
China Hong Kong	14.92	125

Source: Clarivate 2023 Report on "Research Fronts: Action Fields, Leading Countries/Regions"

Meeting in "General"

42:54

Take control Pop out Chat People Raise React View Apps More Camera Mic Share Leave

Participants

In this meeting (41) Mute all

- Anand Prasad Sinha
- AS Abhinav K Shandilya (Unverified)
- ASHINAV TANDON
- ANIRBAN PRADHAN
- AD ANJANA DWIVEDI
- A ANKIT (Unverified)
- AP Krishna
- AM Arkadeb Mukhopadhyay
- AR Assistant Registrar Sponsored ...
- Bapi Gorain
- BIDHAN RUIDAS
- BISWATRISH SARKAR
- DM Dr Sumit Mishra (Unverified)

### Top Research area in Information Technology

Rank	Hot Research Fronts	Care Papers	Citations	Mean Year of Care Papers
1	Federated learning for edge computing	22	3082	2020.2
2	Broad learning systems	6	1353	2020.0
3	Reconfigurable intelligent surfaces	32	9372	2019.7
4	Next-generation real-time holographic near-eye display method for VR/AR	3	457	2019.3
5	Explainable Artificial Intelligence	4	2908	2019.0
6	Spiking neural networks and their neuromorphic chips	13	2931	2018.6
7	Deep learning in physical layer communications	13	2949	2018.5
8	Generative Adversarial Networks	8	15051	2018.4
9	MuZero reinforcement learning algorithm	5	3607	2018.3
10	Convolutional neural networks for EEG analysis	9	2531	2018.2

Meeting in "General"

46:44

Take control Pop out Chat People 43 Raise React View Apps More Camera Mic Share Leave

In this meeting (43) Mute all

ANKIT (Unverified) Dr. Dinesh Sangram R. Assistant R. SANTOSH

## Acting Fast to be the Leader in Research

Rank	Emerging Research Front	Core Papers	Citations	Mean Year of Core Papers
1	Global Impact of the Tonga volcanic eruption	17	328	2022.0

Tonga eruption in January 2022 was the world's largest in the 21st century, and possibly the most powerful since Krakatoa in 1883.

The volcano is mostly underwater with just the top of its crater visible above the ocean surface.

The eruption rained ash down on Tonga and triggered a tsunami.

Tonga is made up of about 170 islands, many uninhabited, about 3,300km east of Australia.

ANKIT (Unverified) AP Krishna Arkadeb Mukhopadhyay Assistant Registrar Sponsored Bapi Gorain BIDHAN RUIDAS BISWATRISH SARKAR Dr Sumit Mishra (Unverified)

4:40 PM 6/5/2024

Meeting in "General"

47:21

Take control Pop out Chat People 44 Raise React View Apps More Camera Mic Share Leave

In this meeting (44) Mute all

ANKIT (Unverified) Dr. Dinesh Sangram R. Assistant R. SANTOSH

## INDIA TECHNOLOGY VISION 2035 (TIFAC)

- Clean air and potable water;
- Food and nutritional security;
- Universal healthcare and public hygiene;
- 24x7 energy;
- Decent habitat;
- Quality education, livelihood and creative opportunities;
- Safe and speedy mobility;
- Public safety and national security;
- Cultural diversity and vibrancy;
- Transparent and effective governance;
- Disaster and climate resilience; and
- Eco-friendly conservation of natural resources.

★ FUTURE TECHNOLOGY

ANKIT (Unverified) AP Krishna Arkadeb Mukhopadhyay Assistant Registrar Sponsored Bapi Gorain BIDHAN RUIDAS BISWATRISH SARKAR Dr Sumit Mishra (Unverified)

4:41 PM 6/5/2024

Meeting in "General"

52:09

Take control Pop out Chat People Rate React View Apps More Camera Mic Share Leave

A DK SR AR SC ...

ANKIT (Unv... Dr. Dinesh... Sangram R... Assistant R... SANTOSH... View all

In this meeting (40) Mute all X

Anand Prasad Sinha

AS Abhinav K Shandilya (Unverified)

ANRBAN PRADHAN

AD ANJANA DWIVEDI

A ANKIT (Unverified)

AP Krishna

AM Arka Deb Mukhopadhyay

AR Assistant Registrar Sponsored ...

Bapi Gorain

BIDHAN RUIDAS

BISWATRISH SARKAR

DM Dr Sumit Mishra (Unverified)

DD Dr. Aniruddha Deb (Unverified)

### MoE: All India Survey on Higher Education

#### AISHE 2021-22

No. of Universities <b>1168</b>	No. of Colleges <b>45473</b>	No. of Stand alone Institutions <b>12002</b>	No. of Students <b>4.33 Crore</b>	No. of Teachers <b>15.98 Lakh</b>
Gross Enrollment Ratio <b>28.4</b>	Gender Parity Index <b>1.01</b>	Peer/Teacher Ratio <b>26</b>		

Source: AISHE Report 2021-22. Website: <https://aishe.gov.in/>

REGANATHAN CHOUDHURY

Search

3:46 PM 6/5/2024

## HIGH-END RESEARCH FACILITIES - I

**4"x6" Supersonic Wind Tunnel**  
Sponsor: ARDB, Designed by BIT-M



Designed by BIT Mesra



400 MHz NMR



2ft x 2ft Subsonic Wind Tunnel



X-Ray Diffraction  
(Powder and single crystal XRD)



Fujitsu High Performance Computer (HPC)



RENISHAW  
Raman Spectrometer  
FIST-2010

Raman Spectrometer

## HIGH-END RESEARCH FACILITIES - II



Powder XRD



FESEM

### Spectroscopy

NMR, FTIR, UV-Visible Spectrophotometer, SFP, ICPOES, ICPMS, Particle Size Analyzer, Color measurement system

### Microscopy

SEM, FESEM

### Thermal Analysis

TGA/DTA, TGA/DSC, DSC, Thermal Conductivity Analyzer



LCMS



UTM

### Chromatography

Flash Chromatograph, HPTLC, HPLC, Prep HPLC, IC, GPC, LCMS, HPTLC MS Interface

### Static Hybrid Rocket Test facility



## IMPORTANT LABORATORY FACILITIES - II



Cyclic triaxial testing machine



Speciation Aerosol Smart Sampler



UV Photocatalytic Reactor



Fuel Test Station



Soil Moisture Probe



UAV



Ground Penetrating Radar



Language Laboratory & MQOC

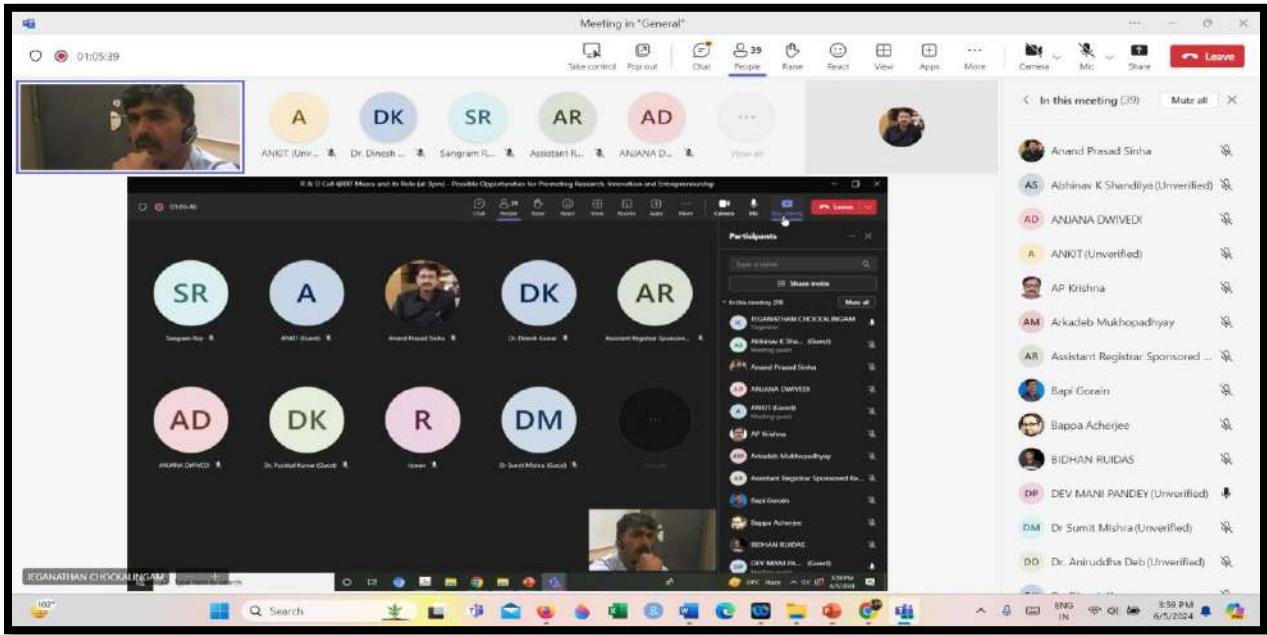
# INNOVATION & ENTREPRENERUSH PROMOTION ACTIVITIES (2020-21)

### 2020-21 Events

# INNOVATION & ENTREPRENERUSH PROMOTION ACTIVITIES (2021-22)

### 2021-22 Events

### Training Programme



Students Participation	14
Faculty Participation	30
Budget	Rs 1000
Social Media Link - Instagram	<a href="https://www.instagram.com/p/C7uQCYwytA2/">https://www.instagram.com/p/C7uQCYwytA2/</a>

# Workshop on Mastering UAV Design from Concept to Creation' 2024 22<sup>nd</sup> to 26<sup>th</sup> July 2024

**BIRLA INSTITUTE OF TECHNOLOGY MESRA**

**WORKSHOP ON**

**MASTERING UAV DESIGN FROM CONCEPT TO CREATION (UAVDW-2024)**

July 22<sup>nd</sup> to July 26<sup>th</sup>, 2024

**Key Highlights**

- Hands-on Learning
- Expert Instructors
- Comprehensive Curriculum
- Final Project

**Industry Partner**  
Specialty Products & Services (SPS), LLP

**Certificate**  
The certificate will be issued jointly by BIT Mesra and SPS India upon successfully completing the course.

**Last Date of Registration**  
**JULY 18<sup>TH</sup>, 2024**

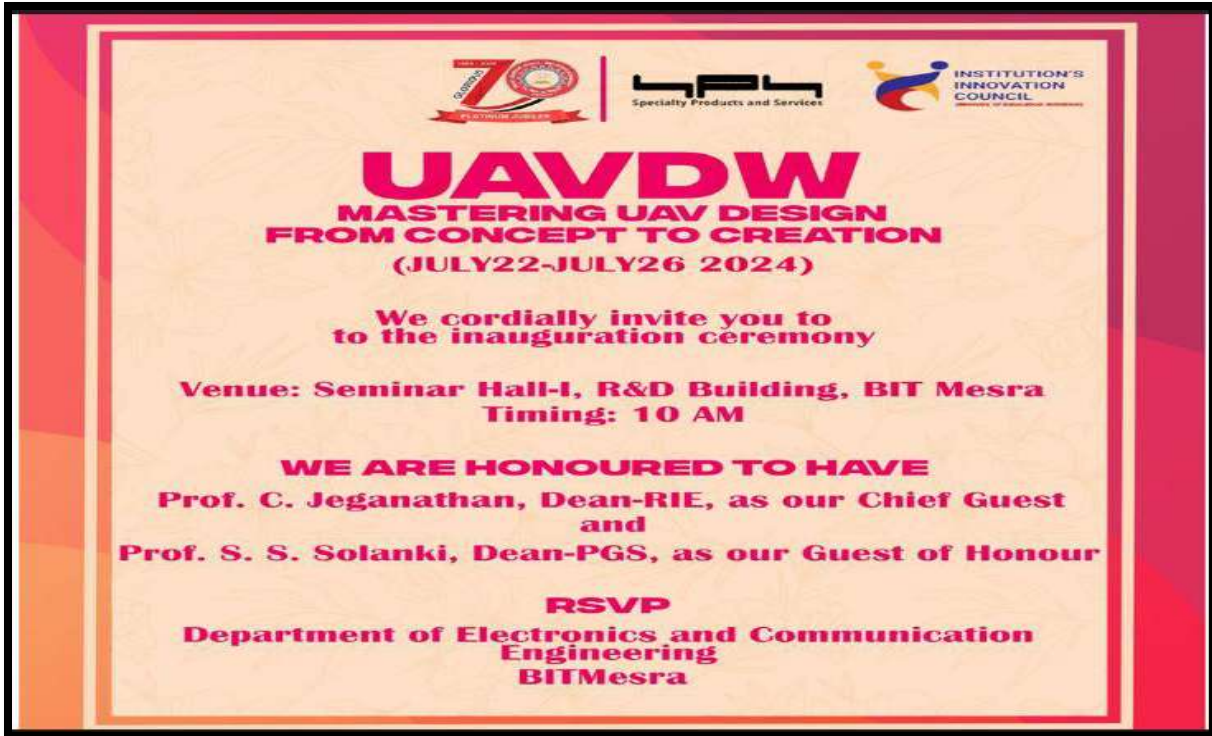
**Payment for Registration**  
(Select 'UAVDW-2024')

**Registration**

**+91 72505 57586**

Department of Electronics and Communication Engineering and Institution's Innovation Council, Birla Institute of Technology, Mesra in association with Specialty Products and Services (India) LLP organized One-Week Workshop on “**Mastering UAV Design from Concept to Creation - 24**” (UAVDW-2024) from 22<sup>nd</sup> July to 26<sup>th</sup> July 2024. The inaugural ceremony has started at 10:00 am in seminar Hall-1 R&D building BIT Mesra Ranchi. Prof. C. Jeganathan, Dean of Research Innovation & Entrepreneurship & President of IIC-BIT Mesra, was the Chief Guest of this inaugural ceremony. Dr. Priyank Saxena, Assistant Professor, the workshop coordinator, gave a warm welcome and briefed about the workshop. Dr. Sanjay Kumar, Head, ECE department, and Guest of Honour, Prof. Sandeep Singh Solanki, Dean-Post Graduate Studies, also gave insightful talked during the inaugural ceremony.





**Dr. Sanjay Kumar presenting a Boquete to Chief Guest Dr. C. Jeganathan, Dean RIE**



**Dr. Sanjay Kumar presenting a Boquete to Guest of honour Dr. Sandeep Singh Solanki  
Dean-Post Graduate Studies**



**Dr. Priyank Saxena presenting a Boquete to Dr. Sanjay Kumar, Head of Department, ECE**



**Lighting a Lamp by Chief Guest Dr. C. Jeganathan, Dean RIE BIT Mesra Ranchi**



**Address by Dr. C. Jeganathan, Dean RIE BIT Mesra Ranchi**



**Address by Dr. Sanjay Kumar**



**Address by Dr. Sandeep Singh Solanki**



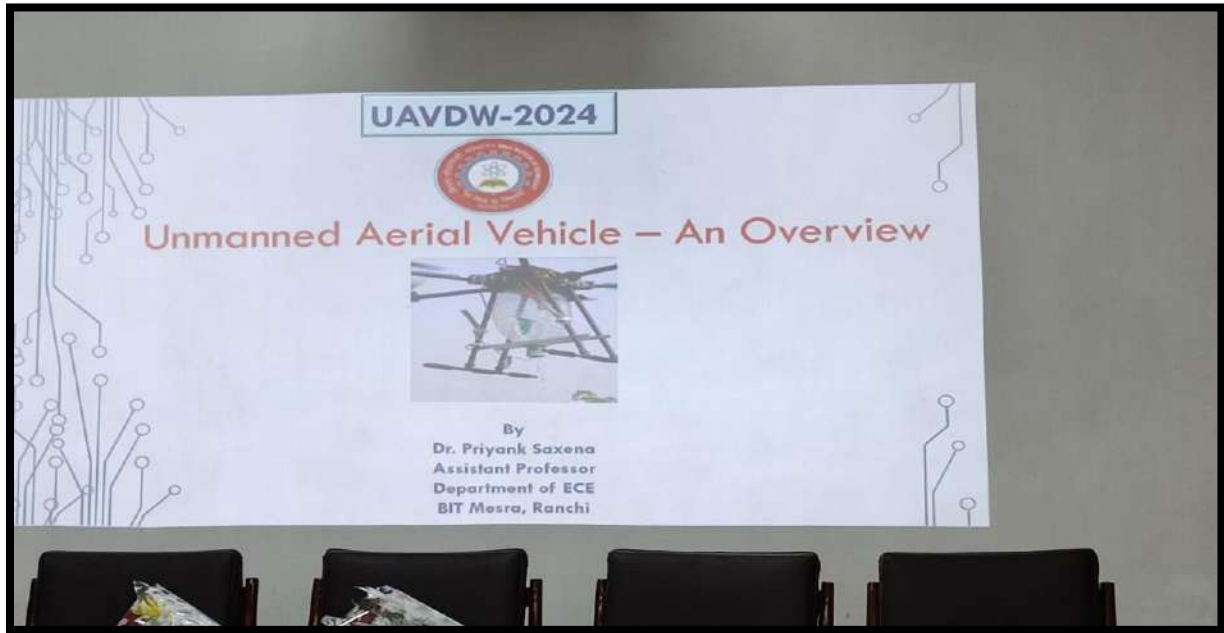
The one-week training was very interesting and effectively combined theory and practical application. The highlight of the workshop was seeing the drone take off, which was quite exciting and provided a lot of delight!

### **Day 1, ( 22.07.24)**

The morning session began with an engaging Overview of UAV by Dr. Priyank Saxena and he talked about the UAV components and the basics of Ardupilot software with mission planning.

Dr. Saxena gave a training to picked up valuable skills like soldering and using various hardware tools to assemble the drone. The day 1 experience was enhanced by working alongside a passionate and enthusiastic by the participant and team members of the workshop.

**UAV Workshop Coordinator & Resource Person:  
Dr. Priyank Saxena, Assistant Professor, ECE Department**





## Day 2 ( 23.07.24)

UAV workshop had enriching sessions and hands-on experiences! The day kicked off with an insightful lecture on the Flight Dynamics of UAVs by Dr. Priyank Kumar, Professor In charge of the Space Engineering & Rocketry Department at Birla Institute of Technology, Mesra. This was followed by a thought-provoking talk on the Preliminary Design of UAVs by Prof. Abhishek from IIT Kanpur. In the afternoon, participants enjoyed an enlightening tour of the Aerospace. The tour by PhD students including Arpit Dubey provided a deeper understanding of the state-of-the-art facilities and ongoing research. A workshop discussion on design trade-offs and propulsion systems took place in the UAV lab as the day came to an end. Under the guidance of Dr. K. Mahto and Dr. Priyanka Saxena, the SPS Team, and student volunteers, participants also took part in hands-on activities, designing and constructing UAV components.

## Dr. Priyank Kumar, Professor In-charge Space Engineering & Rocketry Department, BIT Mesra



**Dr. Priyank Kumar, Professor In-charge Space Engineering & Rocketry Department, BIT Mesra**



**PhD Students : Arpit Dubey**



### Day 3 (24.07.24)

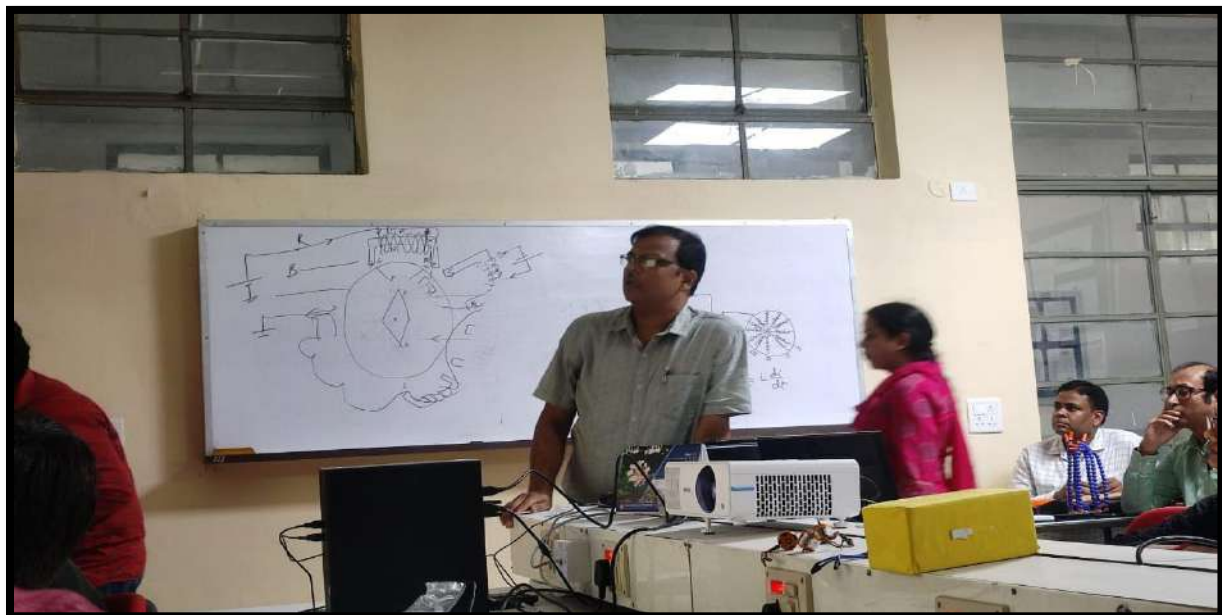
Dr. Aftab Alam opened the program with a presentation on the mathematical modelling of flight controllers. Prof. S. S. Solanki then gave an insightful talk on sensors for stability and navigation. Practical knowledge of RC communication and protocols occupied the second half of the day. The exciting beginning of drone assembly was marked by practical exercises in the design and construction of UAV components, guided by Dr. Sanjeet Kumar, Assistant Professor, ECE Dept.

The team members from SPS who participated were excited to put their newly acquired knowledge into practice when they were given the challenge of building a hex copter.

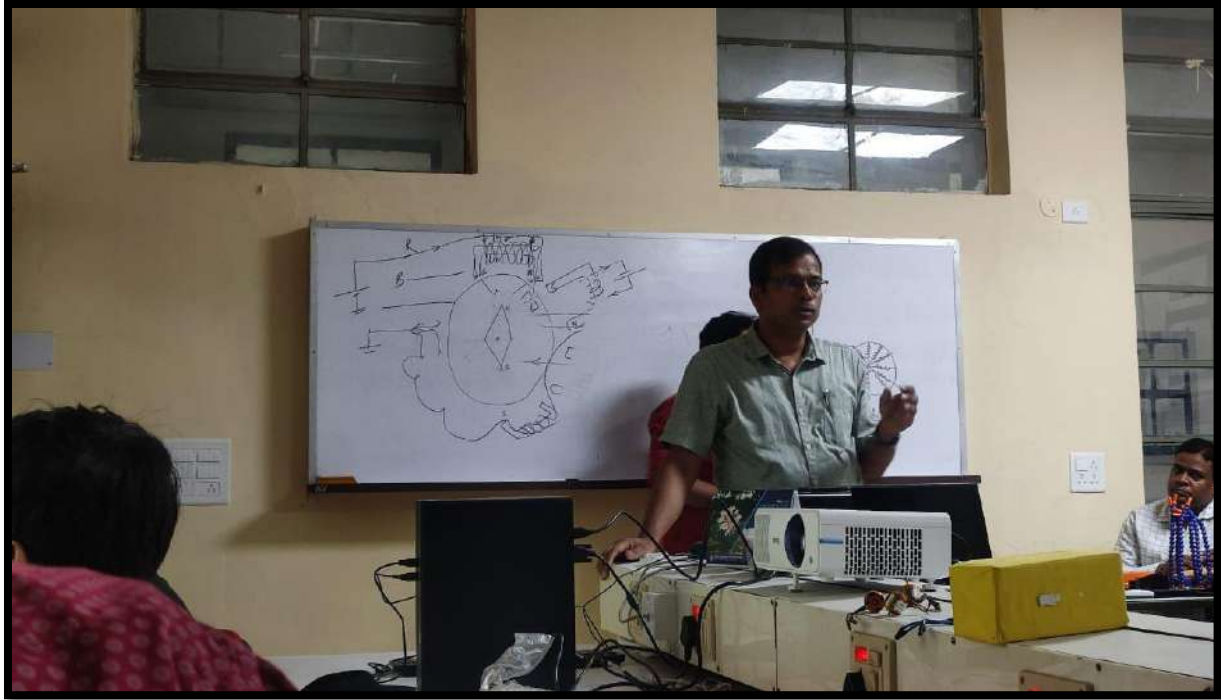
#### Session delivered by Dr. Sandeep Singh Solanki, Dean, Dean-Post Graduate Studies



#### Session delivered by Dr. Sanjeet Kumar, Assistant Professor, ECE Dept.







**Workshop design and construction of UAV components through training attended by Student's participants**



**Student's Participants**



**Workshop training attended by Student's participants**



## Drone assembly marked by practical exercises



### Day 4 (25.07.24)

Advanced knowledge and practical instruction were abundant in this workshop! IIT Roorkee's Prof. P. K. Garg gave an enlightening talk on Precision Remote Sensing Applications to start the day. The next event was an expert discussion by Rohit Mahajan from SPS on GNSS-based UAV navigation: Basic Principles and RTK.

Participants in the afternoon continued assembling their drones through hands-on training. Constructing UAV parts and adjusting their calibration for flight readiness was the main focus.





From lectures on aerodynamics, and electronic devices used in a drone to assembling a drone from scratch, this workshop had it all satisfactory. This workshop Special thanks to Dr. Priyank Saxena, workshop coordinator for spearheading and Ankit Mandal for guiding with the assembly of the hex copter throughout the practice sessions in the UAV Lab. The valedictory session was held on 26.07.24 at 4.30 pm in seminar Hall-1, R&D building BIT Mesra Ranchi.



Students Participation	33
Faculty Participation	20
External Participants	05
Total Budget	130000
Social Media Link	<a href="https://www.instagram.com/p/C9ITHS1y9iA/">https://www.instagram.com/p/C9ITHS1y9iA/</a>



# OFFICE OF THE DEAN OF RESEARCH, INNOVATION & ENTREPRENEURSHIP



BIRLA INSTITUTE OF TECHNOLOGY  
MESRA, RANCHI, 835 215, INDIA  
(Deemed University u/s 3 of UGC Act 1956)

## Workshop on Mastering UAV Design from Concept to Creation' 2024 22<sup>nd</sup> to 26<sup>th</sup> July 2024

**BIRLA INSTITUTE OF TECHNOLOGY MESRA**

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education Initiative)

**WORKSHOP ON**  
**MASTERING UAV DESIGN FROM CONCEPT TO CREATION (UAVDW-2024)**

July 22<sup>nd</sup> to July 26<sup>th</sup>, 2024

**Key Highlights**

- Hands-on Learning
- Expert Instructors
- Comprehensive Curriculum
- Final Project

**Industry Partner**  
Speciality Products & Services (SPS), LLP

**Certificate**  
The certificate will be issued jointly by BIT Mesra and SPS India upon successfully completing the course.

**Last Date of Registration**  
**JULY 18<sup>TH</sup>, 2024**

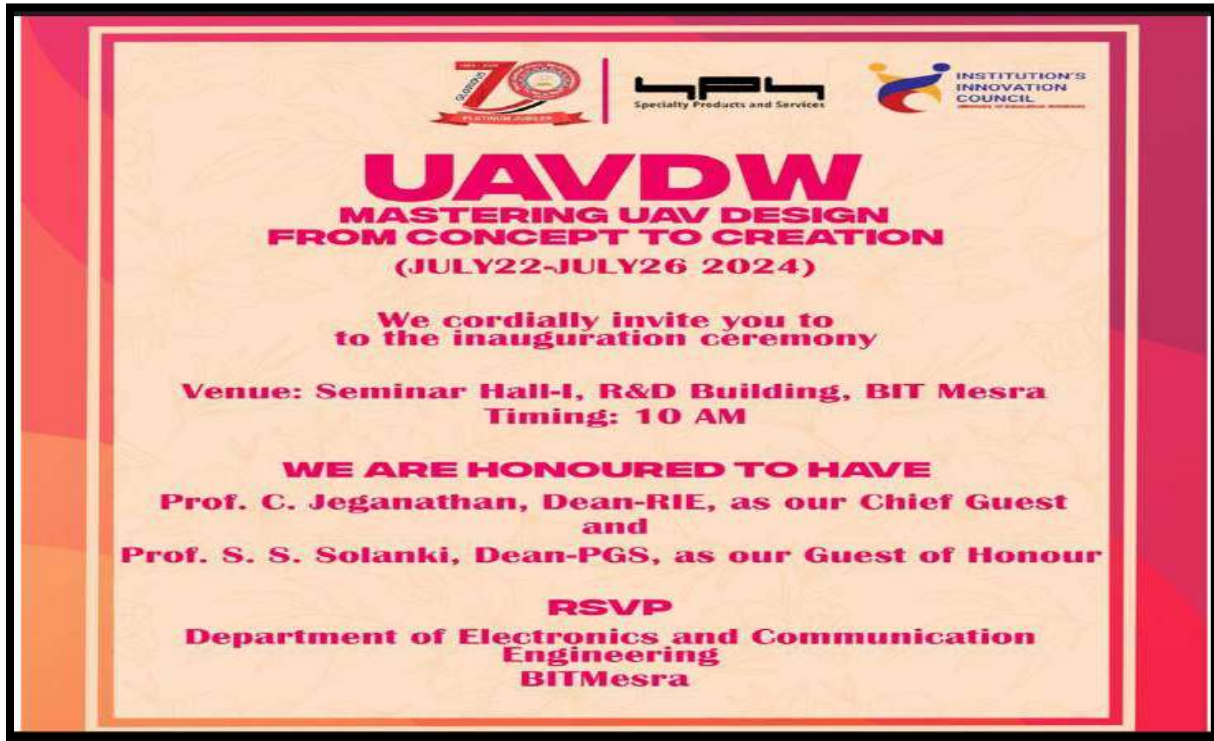
Payment for Registration  
[QR Code]

Registration  
[QR Code]

+91 72505 57586

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**Dr. Sanjay Kumar presenting a Boquete to Chief Guest Dr. C. Jeganathan, Dean RIE**



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**Dr. Priyank Saxena presenting a Boquete to Dr. Sanjay Kumar, Head of Department, ECE**





**Lighting a Lamp by Chief Guest Dr. C. Jeganathan, Dean RIE BIT Mesra Ranchi**



**Address by Dr. C. Jeganathan, Dean RIE BIT Mesra Ranchi**



**Address by Dr. Sanjay Kumar**



**Address by Dr. Sandeep Singh Solanki**



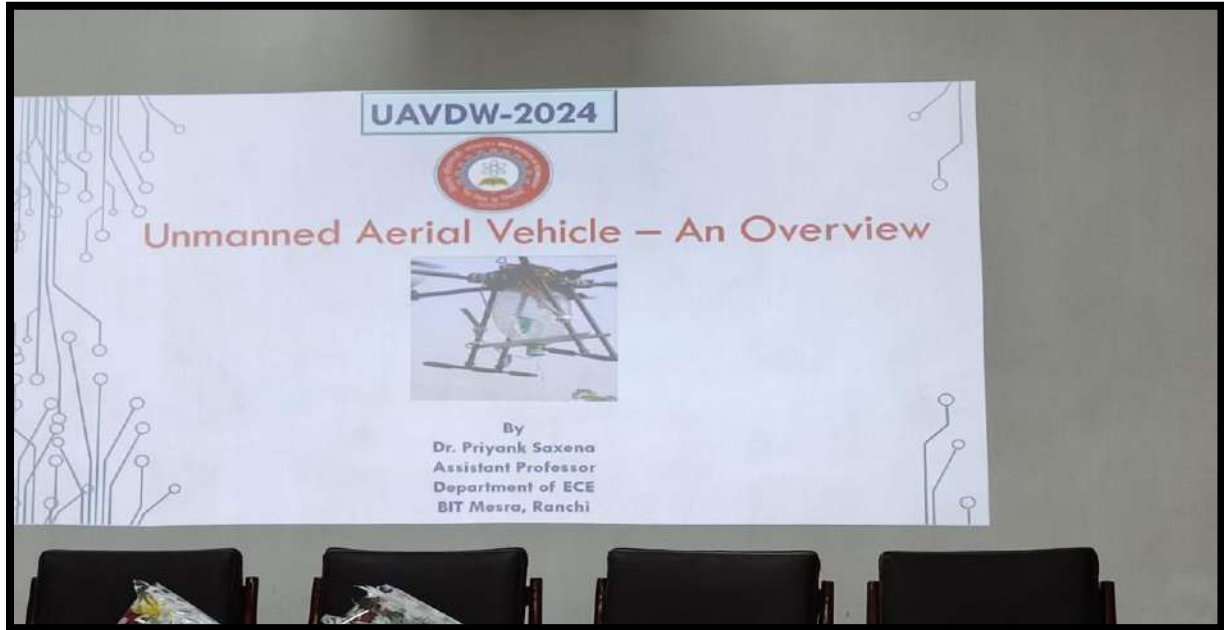
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**Dr. Priyank Kumar, Professor In-charge Space Engineering & Rocketry Department, BIT Mesra**



**PhD Students : Arpit Dubey**



### Day 3 (24.07.24)

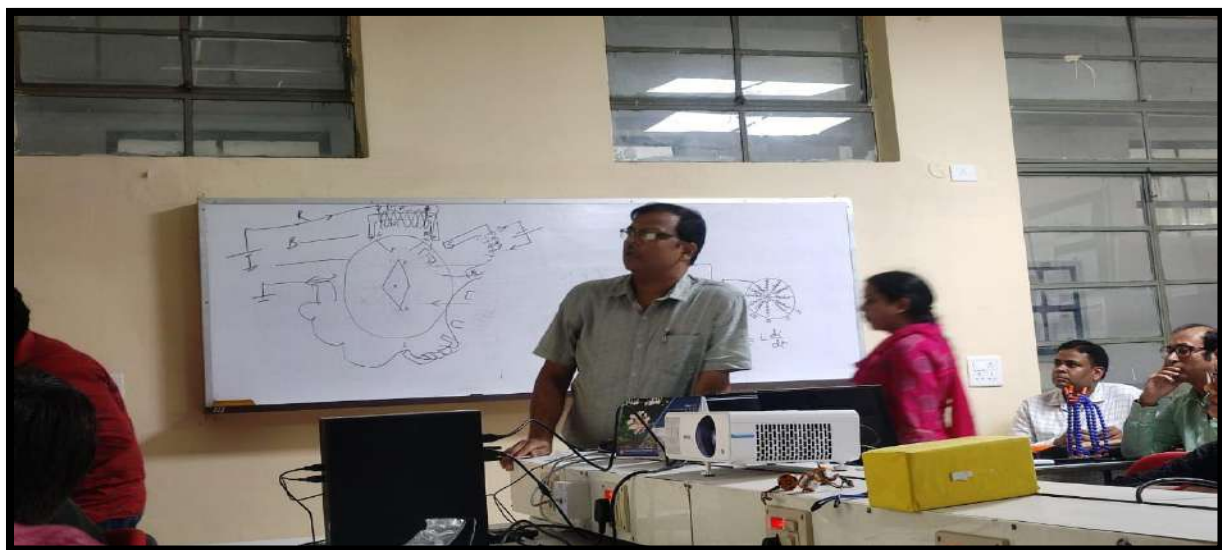
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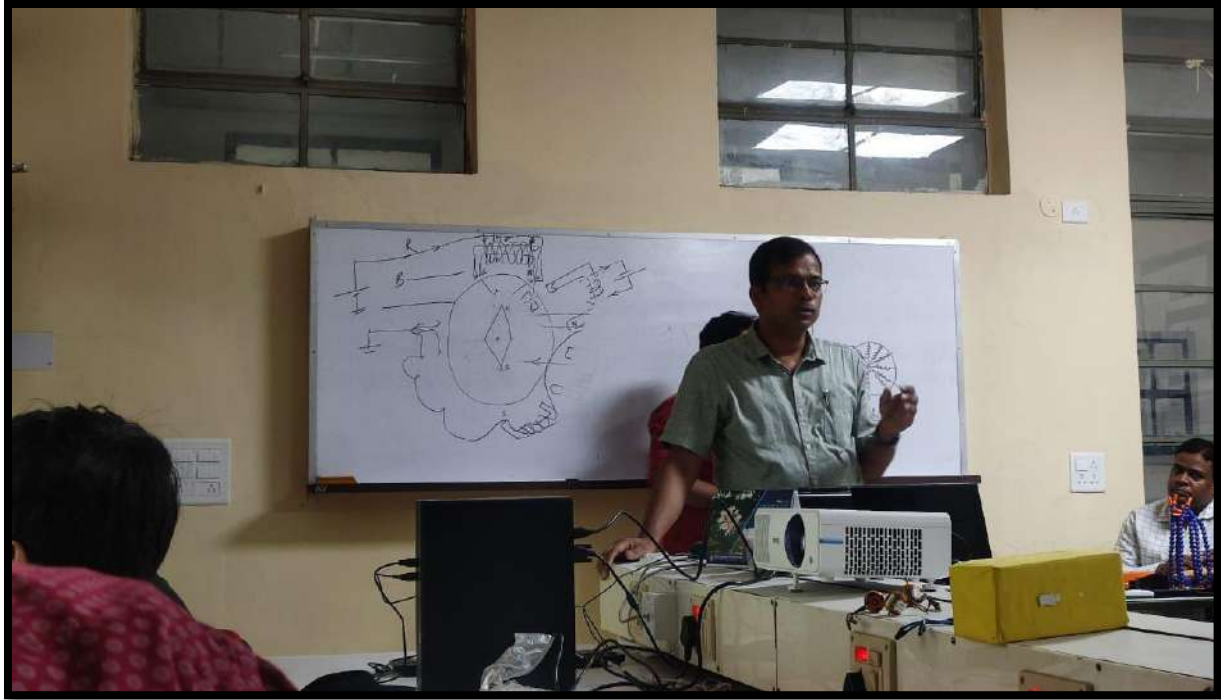
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**Workshop design and construction of UAV components through training attended by Student's participants**



**Student's Participants**



**Workshop training attended by Student's participants**





## Drone assembly marked by practical exercises



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Students Participation	47
Faculty Participation	20
External Participants	05
Total Budget	130000
Social Media Link	<a href="https://www.instagram.com/p/C9ITHS1y9iA/">https://www.instagram.com/p/C9ITHS1y9iA/</a>

**Celebration of**  
**4th Anniversary of National Education Policy**  
**(NEP) – 2020**  
**29<sup>th</sup> July 2024**

**Institution's Innovation Council  
BIT Mesra**

**Celebrates**

**4TH ANNIVERSARY OF  
NATIONAL  
EDUCATION POLICY"  
(NEP)- 2020**

**Resource Person**

**Guest of Honour**  
**Prof. Asheesh Srivastava**

**Dr. Sanjay Kumar**  
Associate Professor and Head  
ECE, Department

**Prof. Asheesh Srivastava**  
Professor  
Higher Education Policy,  
IUCTE, Banaras Hindu  
University

**29TH JULY 2024**

**Timing : 10:00AM**

**Venue : Seminar Hall-1, R&D Building BIT Mesra, Ranchi**

Institution's Innovation Council, BIT Mesra (IIC-BIT), organized a celebration of 4<sup>th</sup> National Education Policy” (NEP -2020) on 29<sup>th</sup> July 2024 at 10:00 am in Seminar Hall-1 R&D Building BIT Mesra Ranchi. The main objective of this National Education Policy (NEP-2020) offering a well-rounded education. NEP-2020 seeks to foster students' creativity, critical thinking, and problem-solving abilities. The goal of NEP 2020 is to establish a learning atmosphere that encourages creativity, curiosity, and lifelong learning. The ceremony began with the institute prayer and lighting of the ceremonial lamp. In this celebration Professor Asheesh Srivastava, Higher Education Policy, IUCTE, Banaras Hindu University was the Guest of Honor and Dr. Sanjay Kumar, Head, ECE department, BIT Mesra was the resource person. Dr. Sukalyan Chakraborty, Organizing Secretary NEP, gave an introduction of the event and welcomed to Guest of honor and all the faculty members who are participated of this workshop. This was followed by Dr. Sanjay Kumar Jha, Dean of Undergraduate Studies, BIT Mesra, addressing the policies of NEP being incorporated into the bachelors’ programs of the institute. Dr. Sanjay Kumar, Head, ECE department addressed the need for more such education policies. The Guest of Honor Professor Asheesh Srivastava addressed the need to emphasize the development of both hard and soft skills, integrating vocational training and experiential learning opportunities into the Bachelor’s programs to better prepare students for the workforce.

**Dr. Sanjay Kumar Jha, Dean of Undergraduate Studies, welcomed and presented a bouquet to Guest of Honor Professor Asheesh Srivastava**



**Dr. Sukalyan Chakraborty, Organizing Secretary NEP-2020 welcomed to Dr. Sanjay Kumar Jha, Dean of Undergraduate Studies**



**Dr. Anand Pd Sinha, Convenor, IIC -BIT welcomed to Dr. Sanjay Kumar, Head, ECE Department & Resource person of NEP-2020**



**Delegates of 4th National Education Policy” (NEP -2020) during Inauguration Ceremony**



**Welcomed addressed by Dr. Sukalyan Chakraborty, Organizing Secretary NEP-2020**



**Addressed by Dr. Sanjay Kumar Jha, Dean of Undergraduate Studies**



**Addressed by Dr. Sanjay Kumar, Head, ECE Department & Resource person of NEP-2020**



After the inauguration programme the faculty members went for the High Tea and join the workshop again at 11:00 am.

The Guest of Honor Professor Asheesh Srivastava, Higher Education Policy, IUCTE, Banaras Hindu University presented an interactive session on the implicational undercurrents of NEP - 2020 and stressed on the fact that effective implementation is crucial for enhancing teaching standards and ensuring that educators are well-equipped to adapt to new pedagogical approaches according to him.

**Addressed Guest of Honor Professor Asheesh Srivastava, IUCTE, Banaras Hindu University**







**Workshop Session Chair by Professor Asheesh Srivastava, IUCTE, Banaras Hindu University**





After the first session was ended that Dr. Sanjay Kumar also presented a session on the measures to implement NEP - 2020 in higher educational systems. He focused on the development and implementation of modular curricula that allows interdisciplinary studies and flexible credit systems, enabling students to choose courses across various disciplines.

**Session Chair by Dr. Sanjay Kumar, Head, ECE Department & Resource person of NEP-2020**



During this celebration of 4<sup>th</sup> National Education Policy” (NEP -2020), Professor Indranil Manna, Vice Chancellor, BIT Mesra interaction with faculty members and Guest of honor through online and pointed out the celebration of NEP-2020 i.e. immediate but sensible implementation of NEP - 2020 to be at par with the western and European countries and he said that this NEP-2020 policy promotes a more flexible curriculum that can be adapted to local needs and individual student interests, allowing for a more personalized learning experience.

**Addressed by Prof. Indranil Manna, Vice Chancellor, BIT Mesra Ranchi**



During the workshop's valedictory session, Dr. C. Jeganathan, the Dean of Research Innovation & Entrepreneurship and President of IIC-BIT Mesra, gave a memento as a loving gesture to the NEP-2020 Guest of honor, Professor Asheesh Srivastava and Resource Person and Dr. Sanjay Kumar, Head, ECE Department, BIT Mesra Ranchi.

**Dr. C. Jeganathan, the Dean of Research Innovation & Entrepreneurship and President of IIC-BIT Mesra, present a Memento to Guest of Honour Professor Asheesh Srivastava**



**Dr. C. Jeganathan, the Dean of Research Innovation & Entrepreneurship and President of IIC-BIT Mesra, present a Memento to Dr. Sanjay Kumar, Resource Person-NEP-2020**



The one-day workshop concluded at 1:15 P.M. with a vote of thanks by Dr. Anand Prasad Sinha, Convenor IIC-BIT Mesra Ranchi.

**Vote of thanks given by Dr. Anand Prasad Sinha, Associate Dean, RIE and Convenor IIC - BIT Mesra Ranchi**



## **Group Pic of Celebration of 4th Anniversary of National Education Policy (NEP) – 2020**



Students Participation	18
Faculty Participation	63
External Participants	01
Total Budget	Rs. 25000/-
Social Media Link - Instagram	<a href="https://www.instagram.com/p/C-SFVZXzjCi/">https://www.instagram.com/p/C-SFVZXzjCi/</a>



# OFFICE OF THE DEAN OF RESEARCH, INNOVATION & ENTREPRENEURSHIP

BIRLA INSTITUTE OF TECHNOLOGY

MESRA, RANCHI, 835 215, INDIA

(Deemed University u/s 3 of UGC Act 1956)



## Workshop on **Innovative Model of Flying Machine**

10<sup>th</sup> -12<sup>th</sup> August 2024

The poster features a dark background with several circular images. The top left shows logos for Birla Institute of Technology, Institution Innovation Council, and AICTE Idea Lab. The main text reads "WORKSHOP & Flying Session". Below this, it says "We are ready for an amazing workshop, flying session and showcasing of models." The bottom section contains the dates "10th -12th August 24" and the venue "Venue : AICTE Idea LAB, BIT Mesra Ranchi" along with the time "Time : 10:00 am". The circular images depict a model airplane in flight, a close-up of a mechanical component, and a person working on a model.

The Institution’s Innovation Council of Birla Institute of Technology (BIT) Mesra in collaboration with AICTE Idea Lab and AEROSPACE SOCIETY organized a two-day workshop on Innovative Model of FLYING Machine from 10th to 12th August 2024 in AICTE IDEA Lab. The workshop, led by Mr. Vibhu Mathur, AEROSPACE SOCIETY was an immersive and enlightening experience that combined theoretical knowledge with hands-on practice. Participants gained a comprehensive understanding of aviation concepts, including aerodynamics, aircraft design, and flight control. The interactive sessions, featuring presentations, videos, and group discussions, kept attendees engaged and curious.

Mr. Vibhu Mathur, Aerospace Society a renowned aviation enthusiast and expert pilot, conducted a highly engaging and interactive workshop that offered participants a unique opportunity to fly sky-suffers and gain comprehensive knowledge about their design, mechanics, and functionality. The hands-on experience of flying these innovative devices allowed attendees to grasp complex

concepts in a practical and immersive manner. The flying session was a highlight, where participants got to operate remote-controlled planes, applying their newfound knowledge in a practical setting. This hands-on experience not only reinforced their understanding but also sparked excitement and enthusiasm for aviation.

**Mr. Vibhu Mathur, Aerospace Society Delivered a session**





The visit to the Idea lab was another fascinating aspect, showcasing different technology and innovative tools like 3D printing and laser cutting machines. This exposure inspired participants to think creatively and explore new possibilities in aviation.

Following the skysufer flying session, the group visited the idea lab, a hub for innovation and creativity. There, they delved into the fascinating worlds of aerodynamics and avionics, exploring the fundamental principles and technologies that govern flight. Through interactive sessions and simulations, participants gained a deeper understanding of the science behind flying and the intricacies of remote-controlled planes.

### **Workshop Training attended by Students -AICTE Idea Lab**



AERODYNAMICS- Here are some basic terminologies of aerodynamic:

- 1.Lift
- 2.Drag
- 3.Thrust
- 4.Airfoil
- 5.Chord
- 6.Angle of Attack
- 7.Stall
- 8.Control Surfaces

Avionics Motors: Avionics motors are electric motors used to power various aircraft systems, such as:

1. Flight control surfaces (e.g., ailerons, elevators, rudder)
2. Landing gear extension/retraction
3. Fuel pumps
4. Hydraulic systems
5. Electrical generators

Selection Criteria: When selecting avionics motors, consider the following factors:

1. Power output
2. Weight and size
3. Reliability
4. Efficiency
5. Environmental factors

ESC(Electronic Speed Controller)

Key Components:

1. Motor drivers
2. Power distribution units
3. Sensors.
4. Software

FLYING SESSION –

Some brief overview of some common manoeuvres can perform with RC planes, along with tips on how to execute them:

1. Straight and Level Flight
2. Stalls and Recovery
3. Loops
4. Rolls
5. Touch and Go
6. Aerobatic Sequence
7. Stalling
8. Diving
9. Climbing
10. Landing-

Prepare for Landing:

- Assess wind conditions and identify a clear landing area.
- Plan your approach and gradually reduce throttle.
- Final Approach:
  - Establish a gentle glide path toward the runway, maintaining alignment with the landing spot.
  - Keep a safe airspeed above stall speed.
- Flare:
  - Just before touchdown (1-3 feet above ground), gently pull back on the elevator to raise the nose slightly. This helps reduce the descent rate.
- Touchdown:
  - Aim to touch down on the main wheels first.
  - Reduce throttle to idle just before landing to prevent bouncing.
- After Touchdown:
  - Maintain control using rudder and ailerons.
  - If equipped, apply brakes gently to slow down.



Throughout the workshop, Mr. Vibhu Mathur passion and expertise shone through, motivating participants to pursue their interests in aviation. His innovative ideas and insights encouraged attendees to think outside the box and explore new frontiers in the field. Overall, the workshop was an enriching experience that combined learning, excitement, and inspiration, leaving a lasting impact on participants. During this two day workshop the total 45 students were attended and get a lot of knowledge & experience for making flying Machine terminologies of aerodynamic.

Students Participation	45
Faculty Participation	03
External Participation	01
Budget	Rs 1,00,000/-
Social Media Link -Instagram	<a href="https://www.instagram.com/p/C_Yv4oIIsWi/">https://www.instagram.com/p/C_Yv4oIIsWi/</a>

# ONE DAY SEMINAR

## “Angel Investment/VC Funding Opportunity for Early-stage entrepreneurs”

### 13.08.2024

The Institution’s Innovation Council of Birla Institute of Technology (BIT) Mesra organized a one day seminar on “*Angel Investment/VC Funding Opportunity for Early stage entrepreneurs*” on 13th August 2024 in Seminar Hall 2 R&D Building. The seminar was designed to focused on providing aspiring entrepreneurs with crucial knowledge and insights into managing the financial aspects of a start-up. The program started at 3:30 pm by welcoming the Guest of Honour & Key Note Speaker Ms. Anshu Gupta, Chartered Accountant, Agarwal & Mantri (Partner -Chartered Accountancy Firm) by Dr. Sumit Mishra, Head, Department of Chemistry, BIT Mesra Ranchi.



**Birla Institute of Technology,  
Mesra, Ranchi**

**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education initiative)

**SEMINAR ON**

**“Angel Investment/VC Funding  
Opportunity for Early-Stage  
Entrepreneurs”**

**Organized by IIC-BIT Mesra**

**13th August 2024**

**Time : 3:30 PM onwards**

**Venue :**  
**Seminar Hall-2 R&D Building, BIT Mesra**

**Ms. Anshu Gupta**  
**Chartered Accountant**  
Agarwal & Mantri (Partner -Chartered  
Accountancy Firm)

The seminar attracted participants, including budding entrepreneurs, business students, and faculty members.

**Dr. Sumit Mishra, Head, Chemistry Dept. welcoming to Ms. Anshu Gupta, Chartered Accountant**



**Guest of Honor & Key Note Speaker Ms. Anshu Gupta, Chartered Accountant, delivered a talk on "Angel Investment/VC Funding Opportunity for Early-stage entrepreneurs"**



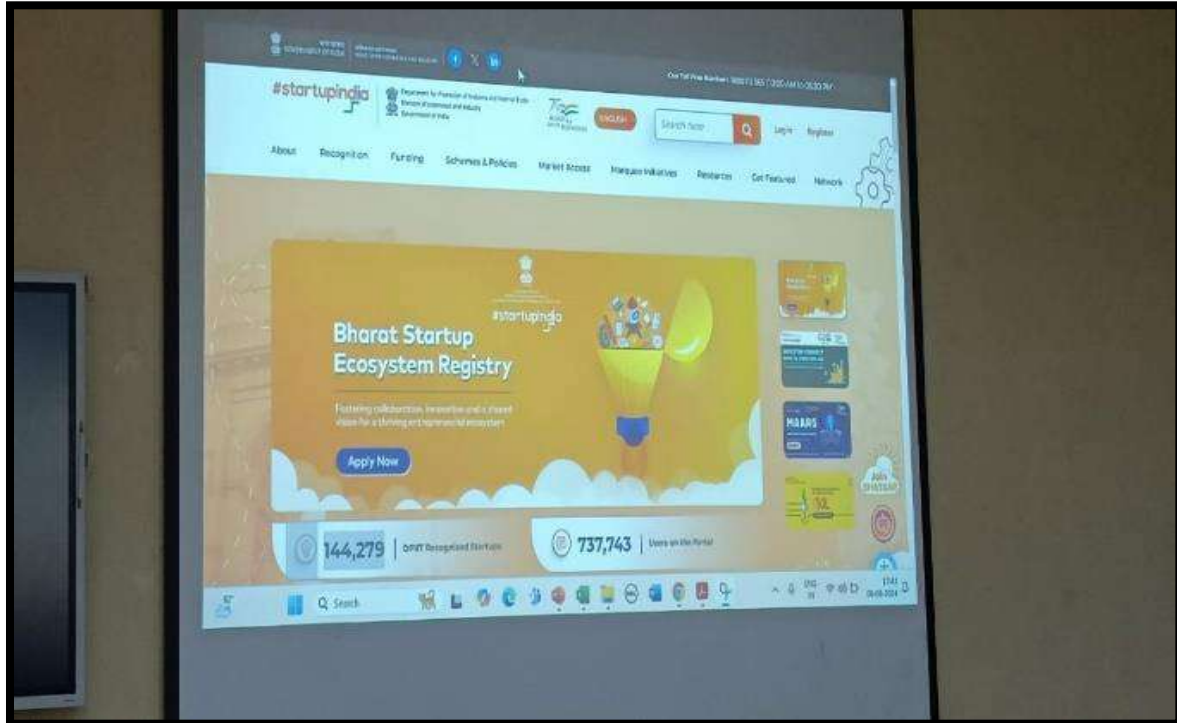
## Ms. Anshu Gupta, Chartered Accountant



The session started with the start-up saga focussing on the various funding options available to start-ups. She covered bootstrapping, angel investors, venture capital, and crowdfunding, tackling problems discussing the pros and cons of each. She talked about the lifestyle of start-up emphasizing on ideation, planning, commitment, validation, growth and establish/exit. She emphasized the importance of financial planning and maintaining accurate financial records from the outset. Gave deep insight on starting start-up funding at the pre stage. Highlighted the importance of choosing the right financing option based on the start-up's stage of development and growth potential. She presented real-world examples of start-ups that thrived using different financing models. Discussed the Oculus Rift success story which was founded by Palmer Lucky with the idea of bringing VR experience to passionate gamers. Followed by, the session talked about government start-up, schemes and Indian accelerator program for start-up that every entrepreneur should know including Supreme incubators, Electroporate Park, India Accelerator.



The session explored crowdfunding platforms like Kickstarter and Indiegogo. Addressed the benefits of validating business ideas and building a customer base early on. At last the session concluded with some start-up success stories from Jharkhand which included start-ups like Herbino Founded by Ankit Prarap Singh, Goat AI founded by Aditya Tiwary, Portal Learn and KARLOSI Technologies.





The seminar was highly informative and provided participants with practical knowledge and tools to manage the financial aspects of their start-ups. Dr. Anand Prasad Sinha, Associate Dean, RIE & Convenor, IIC-BIT Mesra, gave a Momentous as a symbol of affection to Ms. Anshu Gupta, Chartered Accountant, following the session. The vote of thanks given by Ms. Anshu, students of Entrepreneur development.



**Dr. Anand Prasad Sinha, Convenor IIC-BIT Presented a memento to Ms. Anshu Gupta**



Students Participation	75
Faculty Participation	03
External Participation	01
Budget	Rs 6500/-
Social Media Link - Instagram	<a href="https://www.instagram.com/p/C-cTezOzxDm/">https://www.instagram.com/p/C-cTezOzxDm/</a>



**OFFICE OF THE DEAN OF RESEARCH,  
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(Deemed University u/s 3 of UGC Act 1956)**

Seminar on  
***“Accelerators/Incubation-Opportunities for  
Students: Early-Stage Entrepreneurs”***  
**27<sup>th</sup> August 2024**

**Birla Institute of Technology, Mesra  
Ranchi, Jharkhnad-835215**

**Seminar on  
“Accelerators/Incubation - Opportunities  
for Students – Early-Stage  
Entrepreneurs”**

**27th  
August  
2024**

**Time : 3:30 pm  
onwards**

**Key Note Speaker**

**Dr. Sanjeev Kr. Shrivastava**  
Director, Skilling Programs  
AI & Robotics Technology Park (ARTPARK)  
Indian Institute of Science, Bangalore

**Dr. Viswanadham Duppatla**  
VP - Biopharma Innovation &  
Biomanufacturing  
IKP Knowledge Park, Genome  
Valley, Hyderabad

**Mr. Prakash Kumar**  
Deputy Director  
Software Technology Parks of India  
Namkum Industrial Area STPI-Ranchi

**Seminar Hall-1 R&D Building, BIT Mesra**

Institution’s Innovation Council (IIC-BIT) organized a Seminar on “*Accelerators/Incubation-Opportunities for Students: Early-Stage Entrepreneurs*” on 27th August 2024 in Seminar Hall-1 R&D Building, BIT Mesra Ranchi. The main objective of this seminar was acquiring the foundational skills and knowledge necessary to turn innovative ideas into viable business ventures and develop a solid business model that outlines how the start-up will create, deliver, and capture value. For this seminar, Three Resource Person have taken a session from 3:30pm to 6:00pm in seminar Hall-1 R&D Building, BIT Mesra Ranchi. Dr. Sanjeev Kumar Shrivastava, Director,

Skilling Programs, Bangalore and Dr. Viswanadham Duppatla VP - Biopharma Innovation & Biomanufacturing, Hyderabad delivered a session online and Mr. Prakash Kumar, Deputy Director, Software Technology Parks of India, Namkum Industrial Area STPI-Ranchi delivered a session offline.

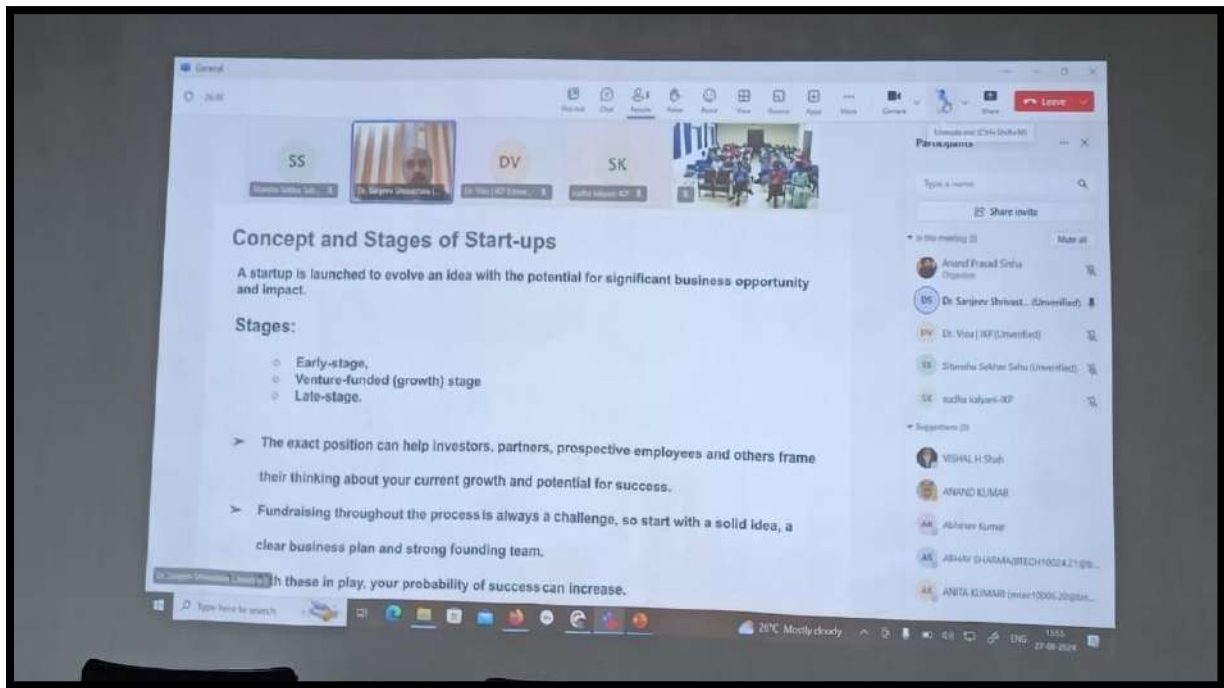
### Three Resource Person-“Accelerators/Incubation-Opportunities for Students: Early-Stage Entrepreneurs”



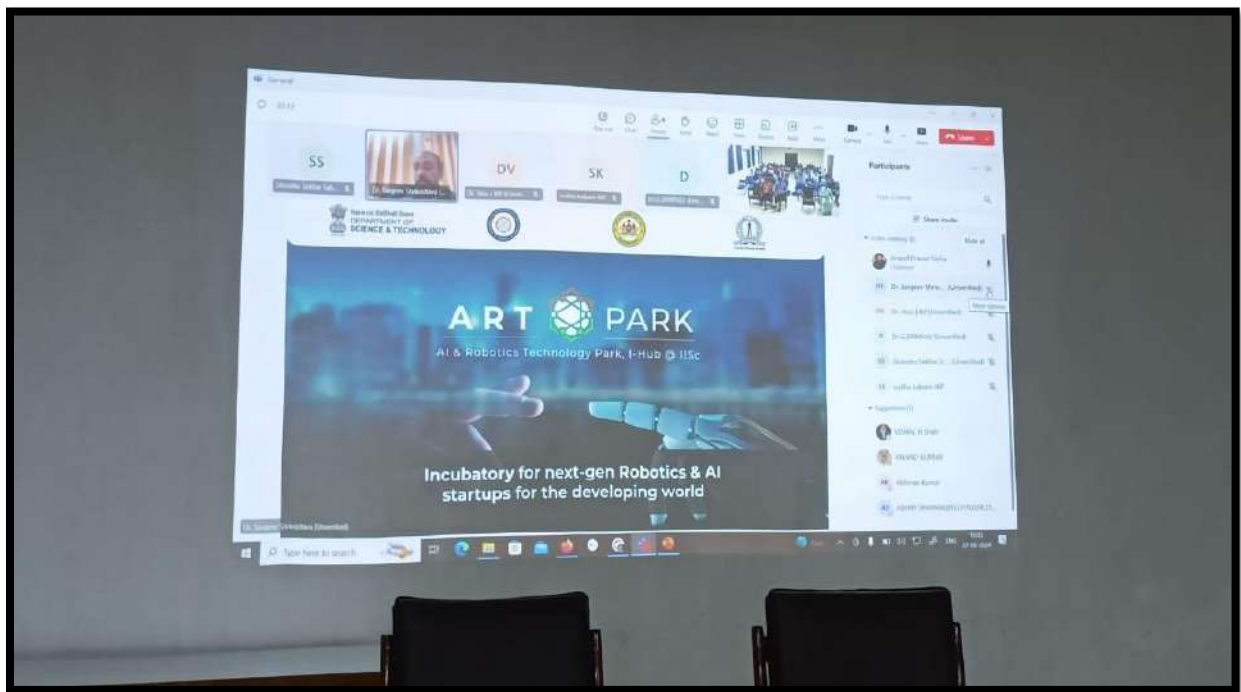
### Dr. Sanjeev Kumar Shrivastava. Director, Skilling Programs, AI & Robotics Technology Park (ARTPARK)

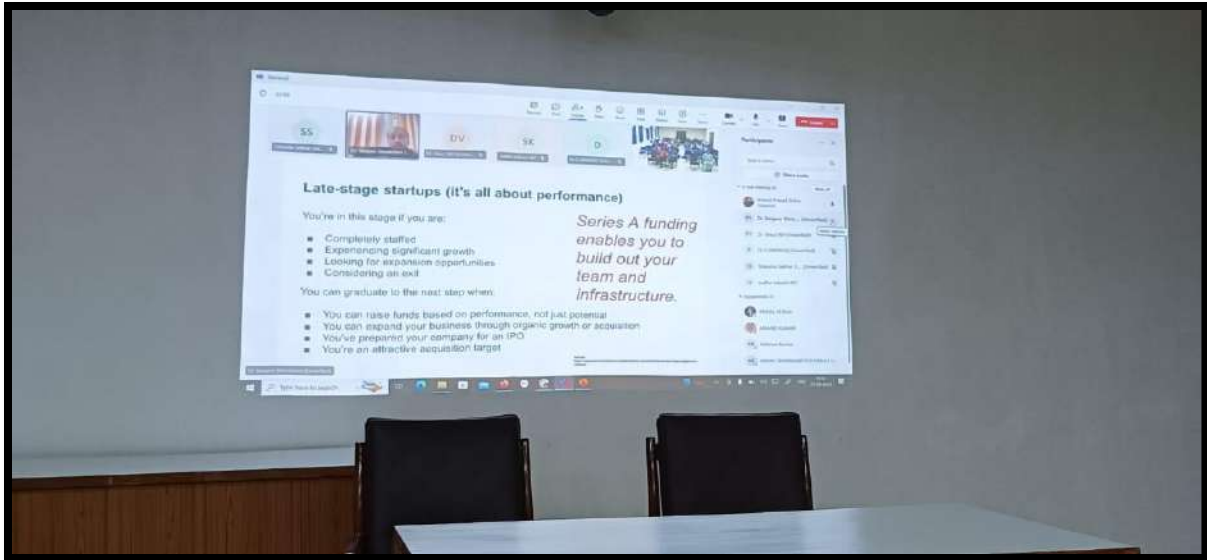


First Speaker Dr. Sanjeev Kumar Shrivastava discussed about the early-stage startup and introduction of AI and Machine learning. Dr. Sanjeev also explain all the High-Tech venture building program for deep -tech startups and late-stage startups performance.



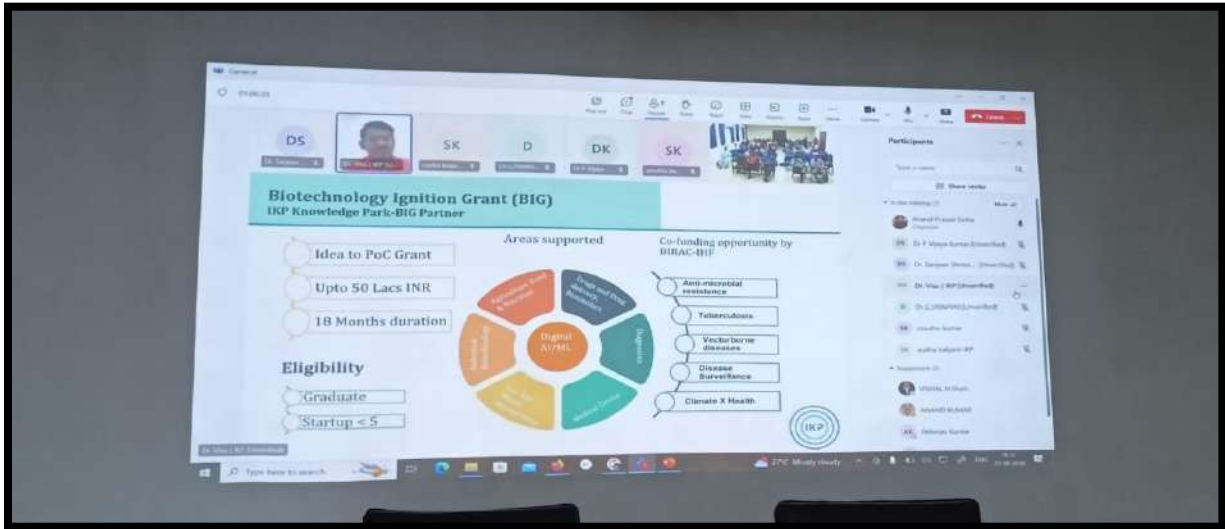
**Dr. Sanjeev Kumar Shrivastava, delivered a talked online**





**Second speaker** of the event was Dr. Viswanadham Duppatla, VP - Biopharma Innovation & Biomanufacturing, IKP Knowledge Park, Genome Valley, Hyderabad. The topic of his talk was “Nurturing Innovation Ecosystem – Grant Writing – TRLs & Milestones”. He browsed the audience through the different TRL levels in entrepreneurial journey of students. He presented to the students the handholding provided to entrepreneurs provided by Biotechnology industry research assistance council (BIRAC) and IKP Knowledge Park from ideation to commercialization. He also shared tips to successful grant writing. He concluded his talk with different facilities offered by IKP knowledge park in terms of shared working spaces and lab equipment, R&D equipment and analytical services, incubation, mentoring and support, life science incubator and Agri innovation center.

**Dr. Viswanadham Duppatla, VP - Biopharma Innovation & Biomanufacturing, Hyderabad**





### **Speaker-3 (Offline)**

**Mr. Prakash Kumar**

Deputy Director,  
Software Technology Parks of India  
Plot -8 Part, Namkum Industrial Area STPI-Ranchi

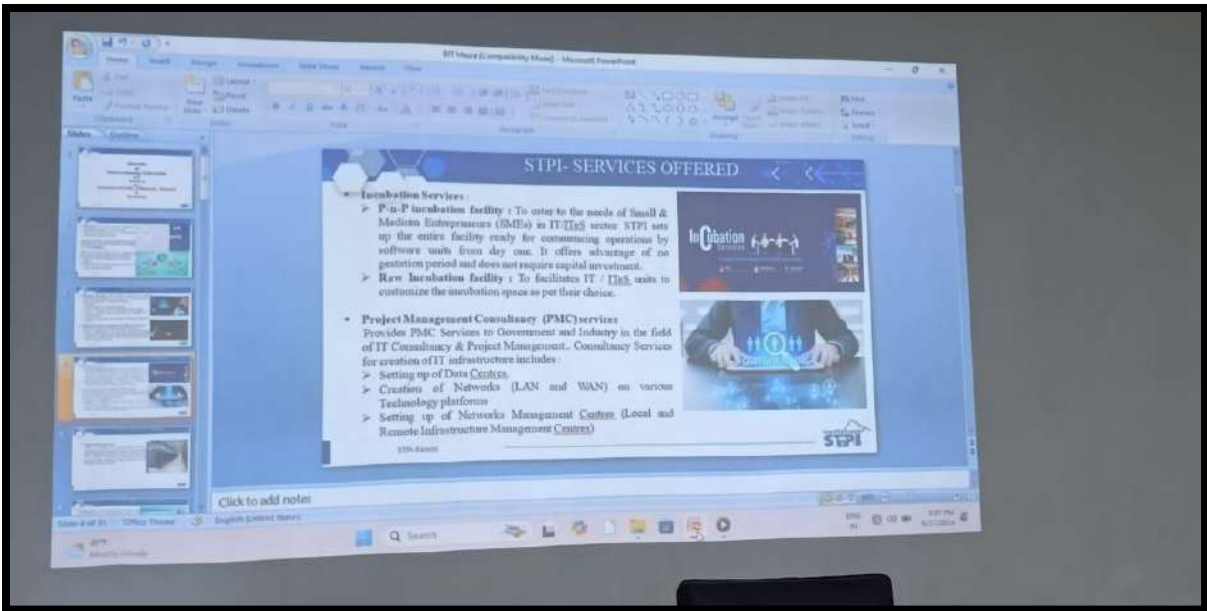
**Dr. C. Jeganathan, Dean RIE and President, IIC -BIT Mesra welcomed to Mr. Prakash Kumar, Deputy Director, Software Technology Parks of India**



**Dr, Amit Tiwari presented a bouquet to Mr. Shubh Mishra, Assistant Director, STPI**



Mr. Prakash Kumar, Deputy Director, Software Technology Parks of India, delivered a session offline and he talked about the initial startup support funding and how entrepreneurs will success in their society. He also briefed about the function & process of STPI which is supporting the young entrepreneur development.





(Q& A Session)





**Vote of thanks given Dr. Richa Mishra, Co-Convenor of IIC -BIT Mesra**



Number of Students Participants	70
Number of Faculty Participants	04
Number of Expert Participants if any	4
Budget	Rs. 2500/-
Instagram	<a href="https://www.instagram.com/p/C_GpsyEo4Sh/">https://www.instagram.com/p/C_GpsyEo4Sh/</a>