







# **Institute Updates**









- 1. The 13th Convocation Ceremony of IIT (BHU), Varanasi, was held on 28 October 2024, in the gracious presence of Hon'ble Union Minister for Education, Sh. Dharmendra Pradhan as the Chief Guest. A total of 1,959 graduates were awarded degrees, and 60 students were honored with medals. The Hon'ble Minister also laid the foundation stone for six projects worth Rs. 400 crore to advance the infrastructure of the Institute. The ceremony recognized top achievers, including Sh. Aditya Kumar Nayak (CHE '24) with the President's Gold Medal, and Ms. Bhavya Malhotra (EEE '24) with the Director's Gold Medal. Further, the Distinguished Alumnus/Alumna Awards 2024-25 were presented to eight alumni across six categories during the event. Watch out for the complete story in the next issue of the newsletter!
- 2. The Department of Electrical Engineering, IIT (BHU), Varanasi, successfully completed a five-day short-term course on Emerging Trends in Electric Vehicles from 21 to 25 October 2024. More than 60 participants, including students, faculty members, and professionals from different institutions, actively participated in the event. Prof. Amit Patra, Director, IIT (BHU), inaugurated the event and delivered a captivating session on Battery Management Systems. Participants had the opportunity to discuss the evolving role of electric vehicles (EVs) in energy systems, and also explore the outstanding research being conducted at various IITs.
- 3. The Department of Pharmaceutical Engineering & Technology at IIT (BHU), Varanasi hosted the seven-day 'IIT (BHU) Neuroscience & Pain School 2024,' supported by the International Brain Research Organization (IBRO) and organized by Dr. Vinod Tiwari, Associate Professor at the department. This program featured 18 keynote lectures, delivered by distinguished neuroscientists from various countries, and provided participants with hands-on training in advanced neuroscience techniques. Prof. Amit Patra, Director, IIT (BHU) and Dr. Vinod Tiwari, Organizing Secretary, expressed appreciation to the IBRO for funding this competitive program and fostering scientific collaboration in the field of Neuroscience and Pain Research.
- 4. The National Lubricating Grease Institute (NLGI) India Chapter coalesced with IIT (BHU) to conduct their 25th Grease Education Course from 18 to 19 October 2024 on 'Bio-Greases and Lubricants'. This provided participants with the opportunity to interact with industry experts, put forward their grease related issues and collect a solution to implement in their plants.



# Connect back with your Alma Mater

Alumni can now connect with their fellow batchmates by registering themselves on the official alumni portal created by the Office of Dean (Resource & Alumni Affairs). It will keep the alumni updated about the various developments in the Institute.



## **Research and Development**

Between 1 October 2024 and 31 October 2024, 14 patents were filed, three were granted, and 37 were published.

#### Patents granted in October

Title	Filing Date	<b>Granting Date</b>
A Multifunctional Diarylurea-Hydroxyamidine Based Compound for Treatment of Alzheimer Disease	12/01/2021	07/10/2024
Mesoporous Nano-Inorganic Antibiotic Compositions and Method of Preparation Thereof	21/03/2022	17/10/2024
A System and Method for Embedding Voice Biometric Based Security Mark for Intellectual Property Cores Protection	08/02/2023	21/10/2024

A total of 72 testing and consultancy projects were undertaken this month, securing a total funding of Rs. 1,56,37,918. Additionally, 10 projects were officially sanctioned, with a cumulative funding of Rs. 7,37,64,909.

#### Projects sanctioned in October

Title of Project	Funding Agency	Period of the Project	Total Cost of Project in Rs.
Smart Laboratory for Clean Rivers (SLCR)	DANISH	03 years	5,00,00,000
Revolutionizing Healthcare waste for Artificial Intelligence-Infused 5G substrate with safe & Eco-friendly microwave technology	CST-UP	03 years	15,08,000
Fabrication and Characterization of Hybrid Carbon-based Nanomaterial-Polymer Thin Film Transistors for Poisonous Gas Sensing Application	CST-UP	03 years	15,08,000
Development of Prototype assistive listening device by incorporation of a microphone array and haptic stimulation	DBT	02 years	2,09,000
Production, characterization and combustion studies on sustainable aviation fuel	SERB	03 years	45,65,264
Study on the various testing methods used for determination of the concentration of suspended particulate matter in air	BIS	01 year	9,60,000
Ultralow power negative capacitance field effect transistors with amorphous oxide semiconductors for display backplane	DST	03 years	84,76,752
Vacuum cum Ultrasonic assisted Warm Incremental Sheet Forming of Titanium Alloys: Process Development and Experiments	SERB	02 years	35,75,088
KEEPALIVE: LoRa enabled Secure Long Range Communications	TII	03 years	21,62,805
Integrated sensing and communication for V2X Networks in Sub- THz band: Analytical modelling and prototype implementation of Air Interface	DST	02 years	8,00,000

Furthermore, between 1 October 2024 and 31 October 2024, a total of 2 MoUs were signed with the Institute.

#### List of National Collaborations for October

Agency	Signing Date	MoU Tenure 05 years	
CSIR Indian Institute of Chemical Technology, Hyderabad	04/10/2024		
Jalnidhi Bitumen Specialities Pvt. Ltd.	10/10/2024	05 years	

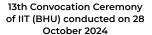
#### **Innovation**

## **Precision Engineering Hub**

The Precision Engineering Hub (PEH) at IIT (BHU) is a 24/7 central facility supported by the Defence Industrial Corridor (DIC), the Design Innovation Centre (DIC), and the Technology Innovation Hub (TIH). This initiative aims to assist students, faculty, and industry professionals in developing new products and improving existing ones. The PEH houses state-of-the-art CAD and CAM tools with the latest capabilities in shape acquisition, modeling, and prototyping through its unique digital environment. Machines include HP Color 3D printer, Metal 3D printer, FDM 3D printer, Prototype Multilayer PCB, Sand Blasting Machine, and more.

### **Media Section**







Hon'ble Education Minister graced the 13th Convocation Ceremony of IIT (BHU)

## **Student Updates**

E-Cell IIT (BHU) cordially conducted Novice Fiesta, a fest exclusively for freshers, with three engaging events to spark their interest in innovation and entrepreneurship. The cell also launched the Build With Us Cohort, a program that enables resources and structured guidance to a young startup idea as it transitions into a



viable project. On a similar foot is the ongoing E-Mentorship program, providing valuable advice through engaging sessions. Further, the Campus Ambassador Program was launched this month, bringing student ambassadors on board to broaden E-Cell IIT (BHU)'s influence across colleges.



The Students' Parliament of IIT (BHU) launched a comprehensive plantation and plastic cleanup drive within the Institute, on the occasion of Gandhi Jayanti. The initiative witnessed active participation from esteemed members of the administration, including Prof. Amit Patra, Director, IIT (BHU), Prof. Rajesh Kumar, Dean

(Students' Affairs), Dr. Sanjay Singh, Chief Proctor, and Prof. Rajesh Kumar Upadhyay, CoW Chairman, alongside faculty members, parliamentarians, and students. During the drive, participants planted saplings in key areas of the campus, and volunteers cleaned up plastic waste and other litter.

The Cultural Council brought great pride to the Institute with outstanding performances at Thomso '24 (IIT Roorkee), Antaragni '24 (IIT Kanpur), and OASIS '24 (BITS Pilani). The Fine Arts Club excelled, winning 1st place in both face painting and costume design. The Literary Club secured 1st place in the Asian



Parliamentary Debate, and also grabbed the 1st and 3rd positions as Best Speaker in the ALD Tournament. The DFZ Dance Club and Masquerades Club both claimed 3rd place in their respective competitions, while the Western Music Club earned 3rd place in the Guitar Solo.



At the Games and Sports Council, various teams excelled at the state championship and outfests such as Udghosh '24 (IIT Kanpur) and OASIS '24 (BITS Pilani), while setting new records. Further, meritorious students at the council during the previous session, were presented with the Gymkhana Awards 2023-24.

## Events @ IIT (BHU)

#### Spardha '24

The 39th edition of Spardha, the annual sports fest of IIT (BHU), Varanasi, was held from 18 to 20 October 2024, witnessing around 2000 participants from 40+ esteemed institutions. The fest commenced with a prominent opening ceremony, decorated by Brigadier Anirban Dutta, SM and former World Cup winning



Indian cricketer Munaf Patel, in the gracious presence of Prof. Amit Patra, Director, IIT (BHU).



Athletes from top-tier institutes competed across a wide range of sports including athletics, basketball, boxing, chess, football, hockey, kabaddi, etc. While IIT (BHU) was declared the overall winner, the Best Outstation Award was given to IIIT Delhi. The fest concluded with a starspangled closing ceremony, graced

by Mr. Surender Nada, a renowned Kabaddi player, and Mr. Manoj Sarkar, an accomplished para-badminton player. Inspiring speeches by the dignitaries fueled the participants of all 18 sports contingencies, further fortifying Spardha as a gala of talent, camaraderie and sportsmanship.

## Alumni Updates

#### Student Alumni Interaction Cell

SAIC commenced with its placement drive of the Alumni-Guided Mock Interviews initiative this month, witnessing 420 student and 90 alumni registrations. In collaboration with the Student Alumni Relations Cell, IIT Bombay, the cell conducted SARCathon, a series of Pan-IIT competitions focused on business



strategy, financial modeling, entrepreneurship, and market analysis. As part of the Beyond the Degree initiative, a session on 'Emotional Intelligence in Professional Life', led by Sh. Sri Mirle (CHE '81) was also conducted in collaboration with the Wellness Council, Student Counselling Services.

#### Golden Jubilee Reunion of 1974 batch



The 'Swarnim Milan', the Golden Jubilee Reunion of the 1974 batch, was conducted from 22 to 24 October 2024, with 100+ alumni, accompanied by their families. The welcome event at ABLT-4, commencing with the *kulgeet*, was graced by Prof. Amit Patra, Director, IIT (BHU), and Prof. Hiralal Pramanik, Dean (Resource and

Alumni). The event also included an interactive session between the alumni and the Hon'ble Director. After the official program, the alumni ventured out on a boat ride, and witnessed the Ganga Aarti. With a musical night, the reunion ended on a memorable note, enabling everyone to cherish their college days once more.

#### Alumni Achievements

Sh. Harsh Singh (MET '24) has been selected for the 2024 IIM - Dr. AK Bose Gold Medal for his thesis 'Investigating Thermal Expansion Behavior of High Entropy Alloy Designed via Machine Learning'. He will be honored at the IIM Awards Function on 20 November 2024 at Gandhi Krishi Vignan Kendra, University of Agricultural Sciences, Bengaluru.

#### Distinguished Alumnus/Alumna Awards 2024-25



Prof. Anuj Srivastava (ECE '90), Professor and Distinguished Research Professor, Department of Statistics, Florida State University USA, was honored for his work in the field of his academics.

Sh. Anil K Sachdev (MET '71), Former Principal Technical Fellow, General Motors Research and Development, USA, received this award for his contribution to the interest of Industry/Entrepreneurship.





Shri. Devavrata Goswami (MEC '74), Chairman and CEO of IPS Enterprise (A Berkshire Hathaway Company), was honored with the award in the field of Industry/Entrepreneurship.

Dr. Virindra K Raina (CIV '61), Senior Expert and Consultant to the World Bank, was awarded for his achievements under the Profession category.





Dr. Awdhesh Kumar Singh (MEC '87), Director, Awdhesh Academy, was honored with the award for his exceptional contribution to the field of Public Life.

Dr. Hema Singh (ECE '00), Chief Scientist Centre for Electromagnetics, National Aerospace Laboratories Bangalore, India, was honored for her contribution in the field of Research and Innovation.





Dr. Sudipta Dutta (EEE '07), Senior Team Lead, California Transmission Operation & Planning, EPRI, California, received the Young Alumnus Achiever Award.

Sh. Shubham Paliwal (ECE '13), Founder-Siliconch Systems Private Limited, Bengaluru, Karnataka, received the Young Alumnus Achiever Award.



# IIT (BHU) Trip to USA

A team from IIT (BHU), Varanasi, led by the Hon'ble Director Prof. Amit Patra and comprising two deans, Prof. Rajnesh Tyagi, Dean (Faculty Affairs), and Prof. Hiralal Pramanik, Dean (Resource and Alumni) visited the United States of America in September. It was a multi-fold visit including events from alumni meet-ups to exploring collaborations with leading universities.



The visit began on 10 September with Sh. Anil Singh (ECE '95) hosting the team and 15 other alumni at his residence in Hillsborough, New Jersey. The members shared their invaluable insights on diverse topics, including encouraging entrepreneurship among students, creating relevant coursework at the undergraduate level, and many more.

They also discussed the possibilities of partnerships and collaborations with the industry. On 11 September, the team met Sh. Sudeep John (CSE '96), Head of Americas Financial Services Technology business at Amazon Web Services, where he presented everything that his business has to offer in cloud computing for educational institutions. He also explained how participation in the Amazon sponsored research competition will benefit the Institute. A dinner meeting was also held with Sh. Chandrakant Trivedi (PHE '79), Sh. Ashok Rakhit (PHE '79) and Sh. Vinod Shah (PHE '79).



On the next day, Sh. Soumyo Sarkar (MEC '79) hosted the team at his building in New York City along with Sh. Subhas Khara (MEC '79). With a total of 19 alumni attending the event, varied topics were discussed, from creating partnerships and collaborations with industry and guiding multiple projects on campus to organizing more such

visits in the future. On 13 September, Prof. Patra attended the board meeting with other Foundation members: Sh. Naresh Jain (MEC '67), Sh. Soumyo Sarkar (MEC '79), Sh. Vikash Agarwal (CHE '95) and Sh. Sagar Bhimavarapu (ECE '88). The members ideated on various projects, including infrastructural projects on campus and the possibilities of AI/ML MoUs with multiple alumni-owned entities.



The team was invited by Sci-ROI, a U.S.based non-profit organization, for its 9th annual event scheduled from 14 to 15 September at St. Jude Children's Research Hospital, Memphis, Tennessee. The event provides a platform for young Indian STEM professionals in the US who aspire to return to India and contribute to the Indian knowledge economy. The day one started with an address by Dr. Aseem Ansari, Founder of

Sci-ROI, followed by a talk (online) by Dr. Sanjay Mishra, DBT, New Delhi. Further, presentations were made on the institutional perspectives and opportunities available for young professionals by Prof. Patra, as well as deans and professors from other renowned institutes. The day ended with a panel discussion, with the team and the faculties from other institutes as panelists. Day two started with a talk (online) by Dr. Saumya Swamithan, former Chief Scientist at the World Health Organization, who provided tips to aspirants on the different challenges of transitioning back to India. The Sci-ROI team shared the CVs of candidates who were interested in joining IIT (BHU) with the team, and they also interacted one-on-one with a couple of prospective candidates. The organizers also arranged an open house for other professionals which was addressed by Prof. Patra and was attended by about half a dozen candidates.

The team visited the Electric Vehicle (EV) Center at the University of Michigan and met Prof. Alan Taub, Director of the Center, and Dr. Christopher G. E. Mangin, Managing Director EV Center. The meeting featured a presentation by Prof. Taub, highlighting the present stateof-the-art research facilities at the EV Center.

Prof. Patra also presented the main objectives and goals of the Centre for Safe and Sustainable e Mobility (CSSeM) to be established at IIT (BHU), Varanasi. The team attended another meeting with Dr. Neill Dasgupta, Associate Professor, Dept. of Materials Science and Engineering, focusing on battery degradation. The team also met with Dr.



David Brophy, Director of the Office for the Study of Private Equity Finance and Professor Emeritus of Finance at Ross School of Business, University of Michigan, to seek his advice on boosting the entrepreneurship ecosystem at the Institute.

On 17 September, an alumni gettogether was organized at the house of Sh. Vish Narayanan (EEE '83), in Michigan. The event was attended by over 20 alumni representing batches from 1979 to 2024. During the meetup, Prof. Patra emphasized the upcoming improvements to laboratory facilities, campus safety, and infrastructure



upgrades, and outlined plans to build additional research towers, thus contributing to an enhanced research ecosystem at IIT (BHU).

The team visited the Department of Agriculture and Biological Engineering, Purdue University, on 18 September to set up the Agri Tech Park at IIT (BHU) through collaborative support between the two Institutions. In view of this, the first meeting was held with Prof. Nathan Mosier, Head of Department, Agriculture and Biological Engineering. Subsequent meetings were held with Prof. Michael Ladisch, Director of Laboratory of Renewable Resources and Engineering, and Prof. R.P. Kingsly Ambrose to talk about innovative uses of agri-based renewable resources and the safety of food storage. The day concluded with a dinner in the gracious presence of the Hon'ble Director Prof. Patra and the Purdue faculty and leadership.

On 19 September, a meeting was held with the Dean of Agriculture, Dr. Bernie Engel, where he highlighted the startup companies in agri-related products. The team had a joint meeting with the Dean of Engineering, Dr. Arvind Raman, and Dr. Marisol Kowoloski, to discuss how the Engineering faculty contributes to the Agri Engineering field. A third



meeting was held with Ms. Heidi Arola, Assistant Vice President, Global Partnerships and Program Director, Purdue-India Partnership, and Prof. Vijay Raghunathan, leading strategic partnership with India. During the fourth meeting with Prof. Rakesh Agarwal, Professor of Chemical Engineering at Purdue University, the attendees visited the Agri-Voltaic Farm and had a tour of his research laboratory. The final meeting was held with Prof. Margaret Gitau to explore research collaboration opportunities on water resource management.

On 20 September, Prof. Amit Patra visited the Global Initiatives and Strategy Office, and met with Ms. Katie Hrinyak, Associate VP, Prof. Pedram Hassanzadeh (online), and Prof. David Uminsky (online). The University of Chicago has already set up a Center in New Delhi and they have started collaborating with some of the IITs and are looking for further collaborations, especially in the areas of Data Science and Al, Climate Change, and more. They are also interested in faculty exchange/sabbaticals, students exchange as well as joint supervision of PhD students. Prof. Patra also met Prof. Supratik Guha, the Faculty Director of the UChicago Center in Delhi, who agreed to visit IIT (BHU) during his next visit to India.

SAIC is grateful to the Director, Dean (Resource & Alumni), Alumni Associations, and the entire IIT (BHU) fraternity for their constant support and blessings. We look forward to your valuable feedback. To share information for future editions, reach us at alumnicell@iitbhu.ac.in.

#### CONTACT

Prof. Hiralal Pramanik, Dean (Resource & Alumni) dora@iitbhu.ac.in, alumnicell@iitbhu.ac.in

## CONNECT WITH US











# **NEWSLETTER TEAM, SAIC**

Aditya Bhardwaj, Nagmani Jha, Pentyala Abhishek Preetham, Shrawasti Bhaware, Anjaneya Raj Garg, Shreyash Arya