3,500 drones to light up the sky over Raisina Hills for 'Beating the Retreat' ceremony

This year’s ‘Beating the Retreat’ ceremony will be graced by the President and Supreme Commander of the Armed Forces Droupadi Murmu, at the historic Vijay Chowk, New Delhi on January 29, 2023.

Glimpse from the Beating Retreat Ceremony

The Beating Retreat ceremony this year will bring the biggest collection of indigenous drones within the country enthralling the audience with the drones configuring myriad forms of national figures and events through smooth synchronisation.

This year’s ‘Beating the Retreat’ ceremony will be graced by the President and Supreme Commander of the Armed Forces Droupadi Murmu, at the historic Vijay Chowk, New Delhi on January 29, 2023. The first such show was made a part of the ceremony last. Other dignitaries, including Prime Minister Narendra Modi and Defence Minister Rajnath Singh, will witness the show.

Martial musical tunes with Indian fervour will be the flavour of the ceremony. Performances and music will be played by the bands of the Indian Army, Navy, Air Force and Central Armed Police Forces (CAPF).
The drone show, like the previous year, has been organised by a startup ‘Botlab Dynamics’ and supported by the Indian Institute of Technology (IIT) Delhi and the Department of Science & Technology. The depictions of the different themes and formations will include those on start-up ecosystems, the technological prowess of the country’s youth.

‘Beating the Retreat’ is a centuries-old military tradition dating from the days when troops disengaged from the battle at sunset. As soon as the buglers sounded the retreat, the troops ceased fighting, sheathed their arms and withdrew from the battlefield. It is for this reason that the custom of standing still during the sounding of retreat has been retained to this day. Colours and standards are cased and flags are lowered at retreats.

Also, for the first time, a 3-D anamorphic projection will be organised during the Beating Retreat Ceremony 2023 on the façade of North and South Block.

Drumbeats recall the days when troops, billeted in towns and cities, were recalled to their quarters at an appointed time in the evening. Based on these military traditions, ‘Beating the Retreat’ ceremony creates a mood of nostalgia for the times gone by.

Soon, Delhi’s air pollution sources to be available in real time


Chief Minister Arvind Kejriwal to inaugurate a ‘super site’ and mobile lab used for the study coming week
Delhiites would soon be able to know the different sources of air pollution in Delhi and their percentages on a real-time basis with the Aam Aadmi Party (AAP) government all set to put the data in the public domain through a new website, an official source told The Hindu.

This coming week, Chief Minister Arvind Kejriwal is scheduled to inaugurate a ‘super site’ and mobile laboratory (a lab-on-van capturing air pollution readings and sources from different parts of the city) used for the “real-time source apportionment study”, under which data on Delhi’s air were collected and a model (software) created giving sources of air pollution by using air from the surroundings as input.

The source said the new website will be launched after initial monitoring of real-time data.

The source apportionment study is being done by IIT Kanpur, IIT Delhi, The Energy and Resources Institute (TERI), and the Indian Institute of Science Education and Research (IISER), Mohali at a cost of around ₹12 crore for the Delhi Pollution Control Committee. The Delhi Cabinet had approved the study in July 2021 and an MoU was signed in October that year.

Clear causes
The real-time data could set at rest the frequent tussle between the Delhi and the Central governments over what causes pollution in the Capital and National Capital Region, especially in winter when it spikes.

The Delhi government has been stating that stubble burning is the major cause of air pollution while the Centre had on several occasions cited local pollutants as the main reason. With AAP coming to power in Punjab, the Bharatiya Janata Party last year also blamed the Bhagwant Mann government for air pollution in Delhi.

The data will help the government accurately identify the sources of air pollution and take actions to curb them more effectively.

Until now, though different studies have been done to identify the sources of air pollution and give their percentages, none are on a real-time basis.

Second attempt
In July 2018, the Delhi Cabinet headed by Chief Minister Arvind Kejriwal had approved a source apportionment study to be done by University of Washington in St. Louis.

The study was allotted on a “nomination basis” without an open tender and was supposed to be completed by March 2020. However, in July 2021 the Cabinet terminated the study despite paying ₹88.9 lakh to the university.
Innovation Hub at IIT Delhi to train students from over 100 schools in robotics

January 24, 2023  https://www.newdelhitimes.com/innovation-hub-at-iit-delhi-to-train-students-from-over-100-schools-in-robotics/

IIT Delhi’s Technology Innovation Hub will train class 9 and 10 students from more than 100 schools in Delhi in robotics.

IHFC (I-Hub Foundation for Cobotics), the technology innovation hub of Indian Institute of Technology (IIT) here will conduct the bootcamps which will be supported by its incubated startups — Rancho Labs and The Innovation Story.

“So far, over 800 students have benefited from 26 such bootcamps conducted during the last couple of weeks.

The focus of these bootcamps is to encourage young minds to apply their skills and develop robots in teams. The bootcamps will train students not only on the basics of robotics but also how to use robotics in everyday life,” said SK Saha, Project Director at IHFC.

“It’s incredible to see the overwhelming response from Delhi schools to the bootcamps, as well as the interest generated among students for the league.

“These young minds are our future, and we need to direct their brilliance in the right direction of ideation, conceptualisation, and creation of robots and their future possibilities at this age,” Saha added.

Ahmedabad Based NavTech Signed An Agreement With IIT-Delhi For Co-Research On The Development Of Futuristic LiFi Technology


Pioneer in Light Fidelity (LiFi) technology, Nav Wireless Technologies Pvt Ltd (NavTech) has signed an agreement with the Indian Institute of Technology-Delhi through its Technology transfer body- Foundation for Innovation and Technology Transfer – to transfer the developed LiFi technology to the Ahmedabad based company.

The agreement was signed by Mr. Hardik Soni, Co-Founder and CTO, Nav Wireless Technologies Pvt Ltd and Dr. Anil Wali, Managing Director, Foundation for Innovation and Technology Transfer-, IIT-Delhi at New Delhi in the presence of Prof. Abhishek Dixit (Principal Investigator) who has expertise in the area of optical wireless communication.

Elaborating the details, Mr. Hardik Soni from NavTech said “NavTech is the pioneer and leading technology company in India working on Optical Wireless Communications – LiFi | FSO technologies and developed products. We are glad to join hands with one of India’s premier technology institutions for further development of LiFi technology.”
IIT-D with support of NavTech will design an indigenous LiFi network based on visible lights. This solution will be energy efficient as the same transceivers will be used both for illumination and communication. The development of LiFi networks on visible light is rare. The developed solution will aim to deliver high bit rates to mobile users – a challenging task due to the highly directional light beams.

Commenting on the development, Prof. Abhishek Dixit, Department of Electrical Engineering, IIT-Delhi said, “We are glad to partner with NavTech for the development of indigenous LiFi network, targeting the demands of future 6G technology. We envision a health-safe indoor system with high throughput, low latency, and high security. As 6G research has picked up globally, our LiFi network can build upon our country’s ecosystem with its inherent energy efficiency and can satisfy some of its use cases. Our system will address three goals: Scalable, intelligent, and affordable.”

**Mobility For All: Continental With IIT Delhi Develop A Solution For Visually Impaired To Access Public Buses**

**January 19, 2023** [https://indiaeducationdiary.in/mobility-for-all-continental-with-iit-delhi-develop-a-solution-for-visually-impaired-to-access-public-buses/](https://indiaeducationdiary.in/mobility-for-all-continental-with-iit-delhi-develop-a-solution-for-visually-impaired-to-access-public-buses/)

Technology company Continental, Indian Institute of Technology (IIT) Delhi, and non-profit technology start-up Raised Lines Foundation (RLF) have come together for the deployment of “OnBoard”, a technology solution for assisting visually impaired people to board public transport buses. RLF was incubated at IIT Delhi, supported by the Ministry of Electronics and Information Technology (MeitY), and OnBoard development was sponsored by the Department of Science & Technology (DST), Govt of India.

Societies around the world recognize the link between the movement of people and goods with economic growth, although traveling for the disabled is still difficult, reducing their life opportunities. With the introduction of OnBoard, visually impaired individuals will have the advantage of easy access to public buses, making their mobility to a larger geographical area a possibility. OnBoard is a technology that is symbolic of inclusivity and freedom of movement.

“Mobility has to be accessible for all, and technology is the key. Even as we discuss the future of mobility as being connected, autonomous, shared, and electric, often inclusivity is overlooked. Modern technology has created a range of possibilities, but there is room for more. As part of our social responsibility, Continental is glad to partner with IIT Delhi and Raised Lines Foundation to support further development and trials of the OnBoard solution”, says Prashanth Doreswamy, President & CEO of Continental India.
“IIT Delhi has been a hotbed of innovation, and we believe in the power of technology to make a difference in the lives of people. Industry academia partnership can further strengthen such R&D initiatives.” according to Prof. P.V. Madhusudhan Rao, Mechanical Engineering Department, IIT Delhi. “OnBoard helps take one step forward towards making public transport in India more inclusive,” he added. Public Transport becomes more userfriendly through OnBoard

OnBoard addresses specific challenges associated with access of public buses by the visually impaired in India.

The OnBoard solution helps a visually impaired person independently board a public bus by solving two challenges they face, viz. identifying the route number of the bus, and identifying the location of the door of the bus using an audio cue generated by a speaker on the bus. The device consists of three separate units – A bus unit that contains a controller and speaker and is connected to the electrical system in the bus; a user device that allows users to query all bus numbers in the vicinity and select the desired bus for audio response; a programming and diagnostic unit at the bus depot that helps program a set of numbers in a bus device from which the driver can select the specific route number the bus is operating on. This device also helps in diagnostics.

Incubated at IIT Delhi, the solution also has completed preliminary testing. The first set of testing was successfully done first in Delhi (5 DIMTS coordinated cluster buses) and in Mumbai (25 BEST buses) and again in Delhi (23 DIMTS coordinated cluster buses). Though these pilot trials have established the effectiveness of the device, a larger-scale deployment is necessary for the launch of this solution, which will benefit thousands of people. The next phase of the project will focus on wider-level testing.

According to Prof. M. Balakrishnan, Honorary Professor, CSE Department, IIT Delhi, and the primary force behind the project, “Mobility is a human right. Society has the responsibility to enable people with disabilities to live independently and participate in all aspects of life. Public-private partnerships can solve several of their existing challenges of sustainable and inclusive mobility, and we are excited to partner with Continental.” Prof. M. Balakrishnan and Prof. P.V. Madhusudhan Rao were awarded the National Award by Dept of Science & Technology, under the category “scientists/technologists who have developed technologies/assisted devices/tools for the disabled for improving accessibility for the disabled”.
PhD scholar killed by car near IIT-Delhi gate


A 30-year-old research scholar from IIT was killed and his friend injured on Tuesday night when they were hit by a car while crossing Outer Ring Road.

The deceased, Ashraf Nawaz Khan, from Siwan in Bihar, was pursuing Ph.D at the textile and fibre engineering department and stayed at the hostel. His friend, Ankur Shukla, 29, too is doing his Ph.D from the same department.

The two men were hit by a car coming from the direction of Chirag Dilli near Gate No. 1. Police said the car was found abandoned a little distance away. The driver of the car has been arrested. He has been identified as one Avihant, 30, a resident of Mahipalpur.

Khan's friends told TOI he had got selected for a post-doctoral fellowship at a university in England and was to leave in February.

Ashraf Nawaz Khan was to leave for England in February for his post-doctoral studies. The 30-year-old scholar from Indian Institute of Technology, Delhi, had arranged a small celebration with friends and seniors on Wednesday. Instead, his friends and family gathered at the JP Narayan Apex Trauma Centre at AIIMS on Monday to receive his body.

“I can’t forget the bright smile when he told us about being admitted to a university in England,” said friend Puspender Kumar.

Abhishek, another friend, said Khan was a bright student and had two patents in his name. “He asked us to gather at the campus canteen on Wednesday to celebrate his achievement, but it didn’t happen,” said Abhishek as another friend, Nikita, said in a choked voice, “His career was about to start, but all his dreams have been crushed.”

Khan got admission in IIT in 2015, completed his MTech course and got enrolled in the PhD programme. He was so dedicated to his studies that a friend said he often skipped dinner if he was engaged in work. He was the sole income earner for his family back in Bihar and sent home a portion of his scholarship money.

“Ashraf’s father recently suffered a brain haemorrhage. His mother is a heart patient. He was the only son among their four children,” revealed Jafeer Khan, a relative. The father, before his debilitating condition, was a
small-time farmer who laboured to send his son to IIT. “His father wanted to live with his son in Delhi and wanted to buy a house once Khan got a job,” added Jafeer.

According to kin, Khan had returned from England two months ago after participating in a conference. He was scheduled to visit Saudi Arabia and Dubai to participate in some conferences before making his way to university in England. “This is the sad ending of a bright future,” one of the relatives mourned.

Wanting the strictest punishment meted out to the driver who hit Khan and caused his death, one of his friends said no one should be allowed to drive at high speed in the proximity of an academic institution.

In a statement on Wednesday, IIT Delhi said that the institute community mourned the loss of its student. “We are also praying for the quick recovery of Ankur Shukla. The institute is providing all necessary support to the families of both students,” the statement said.

**From IIT in Abu Dhabi by 2024, Funding for Students' Start-Ups to Jobs, IIT-Delhi Director Shares Roadmap**


Prof Rangan Banerjee said over the past five years, IIT-Delhi had moved from being a purely science and engineering institute to being truly multi-disciplinary with courses like humanities and social sciences. (Official Website)

In an interview to News18, Rangan Banerjee said the institute had received its highest-ever job offers in 2022-23, with students receiving 1,300 job offers till December 15.

From offering new programmes in humanities, design and management in 2023, taking up a complete curriculum review, enhancing overall student experience, bettering societal impact, boosting campus infrastructure and innovation ecosystem to a major thrust in providing technological solutions for better healthcare services and setting up IIT Abu Dhabi by 2024, IIT-Delhi director Rangan Banerjee has his hands full.
In an interview with News18.com, Banerjee speaks at length about his vision for the institute, internationalisation and new NEP. Edited Excerpts:

You had earlier said being “multidisciplinary” is the key to a good institute. How is IIT-Delhi moving in this direction? Any new programmes on the anvil?

Over the past five years or so, we have moved from predominantly being a purely science and engineering institute to being truly multi-disciplinary with courses like humanities and social sciences, masters in economics and public policy being offered on campus.

Last year, we started a new course — Bachelors in Design — and we now plan to offer a BTech in Design from the new financial year. Also, we are planning to offer new academic programmes such as masters in humanities, which are yet to be formulated. Besides, we are also going through a complete curriculum review.

What is your vision for the institute over the next four years as its head? Any reforms you plan to bring?

The challenge for us is the young undergraduates — to excite them and get them involved in their core discipline and sustain it through the course. This is a challenge faced in all engineering and science institutes across the world. We are looking at ways in which we can provide opportunities for our students for ‘learning by doing’, to create possibilities of immersion looking at real-life problems.

We have the Unnat Bharat Abhiyan, which IIT-Delhi leads, where we are connected with over 16,000 villages and have opportunities for people to do internships by spending two months in the village and identifying problems. We also want to see that we encourage and enhance the possibilities for students to turn their ideas of entrepreneurship and incubation into real start-ups. For this, we created a scheme with alumni entrepreneurs to help fund start-ups of final-year students who are working on such projects. So, we want to see that we enhance the overall student experience.

Also, even though we have one of the best innovation ecosystems in the country, there is still a lot more that could be done. We also plan to reimagine the infrastructure as we are a 60-year-old institute. We have plans to expand our hostel capacity. Currently, we have over 12,000 students on campus while the total hostel capacity is only 7,000.
Can you elaborate on the recent IIT-Delhi collaboration with AIIMS and other healthcare facilities, in terms of what it aims to achieve and how it is progressing.

We are trying to get groups of faculty together to work in different areas where we can enhance our societal impact. This synergy with AIIMS as well as the National Cancer Institute is one such step. This coming together of technology and medicine aims to plug the gaps in the healthcare services by offering better and low-cost technological solutions. We plan to make AIIMS-Jhajjar a healthcare hub with personalised medicine and digital facilities. We plan to set up an organoids facility here. There are only a few such facilities the world over.

We are also looking at technological solutions for sports performance, injury prevention and assistive technology. We have a lot of work on biomechanics, censors and monitoring. We would like to give Indian sportspersons that additional edge through technology. It is a new domain that we are going to start where we also plan to offer some post-graduate programmes. In November 2022, we made a presentation to the Haryana chief minister and he seemed to like it very much. Now, we just need the go ahead and the funding required for infrastructure and research. In the next three to four years, this will be a major thrust area.

What is your view on internationalisation of higher education with the recently released UGC regulations that allow top foreign universities to open branch campuses in India?

I would not like to comment on the regulations. However, when we say internationalisation, our priority for all kinds of collaborations is a two-way process. IIT-Delhi is helping set up an IIT in Abu Dhabi, which will start its academic programmes from 2024.

The new National Education Policy (NEP) 2020 lays emphasis on teaching in the mother tongue or home language. Engineering books have been launched in regional languages such as Marathi and Odia and will be published in other languages as well. Since IITs have students from every part of the country studying together, how do you plan to implement this?

It’s true. At IITs, we have students from every corner on the country’s map. Diversity of a class is our strength. We provide support to students and have foundational courses to help them out of any kind of language barrier. If there are translations available in regional languages for certain key textbooks, these books can help provide better support. We will ensure that no student has a problem in studying because of a language barrier.

Given the grim global economic outlook for 2023, with major tech firms on a spree of layoffs, how has the placements season been for the institute so far?

It has been reasonably good. The institute has received its highest-ever job offers in 2022-23. Till December 15, students received 1,300 job offers, including international placements. The placements will go on till May, so we are yet to see how the rest of it turns out.
BECon 2023: IIT Delhi’s 3-Day Annual Business And Entrepreneurship Conclave To Start From January 6

January 5, 2023 https://news.abplive.com/education/becon-2023-iit-delhi-s-3-day-annual-business-and-entrepreneurship-conclave-to-begin-january-6-1573780

IIT Delhi Annual Business and Entrepreneurship Conclave will be held from January 6 to 8. Avinash Pandey, CEO, ABP Network, is to be the opening guest for the Business & Entrepreneurship Conclave Pre-Event at IIT Delhi.

The IIT Delhi Annual Business and Entrepreneurship Conclave ‘BECon’ is back with its 2023 edition. The IIT Delhi BECon 2023 will be held on January 6, 7, and 8, 2023. Hailed as India’s largest entrepreneurship conference, the BECon witnesses a footfall of over 50,000 students, faculty and staff, and experts from over 500 institutions. As an innovative platform facilitating the exchange of ideas, BECon brings together and connects the world's top business experts, entrepreneurs, and change-makers, to a larger audience of students and change-makers.

With a plethora of events, competitions, and guest talks exploring a wider horizon of possibilities, the BECon strives hard to bridge the gap between young talented minds and the corporate industry. One of the major highlight events for BECon 2023 is the SharkTank 3.0 wherein innovative and breakthrough business ideas seek mentorship and investment from investors and market leaders.

Besides SharkTank, the BECon 2023 also has several other events, competitions, and speaker sessions lined up under its tray. Competitions like One-Day CEO Challenge, B-Plan 2.0, Biz-E Quiz, Bizz-Art, Startup Debate in collaboration with ABP Live and events like Find your cofounder, Startup Expo ‘Aagaman,’ make the BECon one of the most comprehensive 3-day summits of its kind.

With guests like Amit Agarwal (Founder, NoBroker), Sandeep Jain (Founder, Geekforgeeks), Sanyukta Sinha (DPM, Microsoft) and Himeesh Madaan (Youtuber), the plenary sessions of the BECon 2023 are poised at running through the entire length and breadths of entrepreneurship.

Avinash Pandey, the CEO of ABP Network, would be the opening guest for the Business & Entrepreneurship Conclave Pre-Event at IIT Delhi. Moreover, the CEO will also be visiting the IIT Delhi campus to interact with students as part of the pre-fest event. One of the leaders and most sought-after Hindi-language television news industry, ABP has covered a plethora of news related to entrepreneurship and business.