TRUTH IS EVER TO BE FOUND IN THE SIMPLICITY, AND NOT IN THE MULTIPLICITY AND CONFUSION OF THINGS

ISAAC NEWTON
IIT Delhi MTech Admission 2023 last date extended till April 6, apply for PG, PhD admissions on iitd.ac.in

March 29, 2023 https://www.timesnownews.com/education/iit-delhi-mtech-admission-2023-last-date-extended-till-april-6-apply-for-pg-phd-admissions-on-iitd-ac-in-article-99094909

IIT Delhi MTech Admission 2023 last date is extended! IIT Delhi has extended the application deadline for PG and PhD courses till April 6. Check the IIT Delhi admission 2023 application link and other details below.

Indian Institute of Technology, IIT Delhi MTech Admission 2023 last date is extended! IIT Delhi has extended the application deadline for PG and PhD courses till April 6. Students who are yet to apply for the courses offered by IIT Delhi can visit the official website—iitd.ac.in and apply. As per the previous schedule, the application was to end tomorrow, March 30. Check the IIT Delhi admission 2023 application link and other details below.

IIT Delhi MTech Admissions 2023

IIT Delhi invited applications for various PG and PhD courses from March 14 and now the last date to apply is April 6, 2023. "The last date of submission of online applications for PhD and PG admissions extended up to 6th April 2023 (2 pm)," notified IIT Delhi. Candidates can check the steps mentioned below to know how to apply for IIT D admissions online.

IIT Delhi admission 2023 application link

IIT Delhi MTech Admissions 2023: How to apply

Go to the official website-iitd.ac.in

On the appeared homepage, click on the IIT Delhi PG, PhD admission link

A new registration page would open

Register and log in with the generated credentials

Fill in the IIT Delhi admission form

Pay the fees, if applicable, and submit the form

Download and take a print out for future references

Candidates must check the IIT Delhi eligibility criteria before applying for the PG or PhD courses. Each course has a separate eligibility criteria and candidates can check the same from the information handout of IIT Delhi admissions.

IIT-Delhi to offer summer research programme for undergrad students


Indian Institute of Technology (IIT) Delhi will provide a summer research fellowship programme to undergraduate students this year. Students who have completed at least two years of their engineering programme are eligible to apply. The programme is also open to students from other institutes.
It will focus on research and innovation, according to the authorities. "It provides an opportunity for exceptionally good undergraduate students to execute an innovative research and development project under the guidance of IIT Delhi faculty. The students of different engineering institutes except for IITs in India or abroad who are within the top ten ranks of their respective programmes are eligible to apply," an official told TOI. The online application portal will be open till April 10 and the list of selected fellows will be displayed on the website by the last week of April.

The fellowship is expected to start after May 16.

"The fellowship can be done in a period of eight to 12 weeks and will cover the cost of travel to and from IIT Delhi. The fellows will also receive Rs 500 per week apart from boarding and lodging at the institute's hostels. The fellow will register at IIT Delhi as a visiting student and will not be required to pay any institute registration fee," the official said.

Apart from consolidated grade cards and rank certificates, the programme requires the applicants to submit a no objection certificate from the parent institution stating the dates for full-time research work at IIT Delhi, the institute said.

IIT Delhi Convocation: Nominations for Alumni Awards 2023 open; register by April 30

A fellow alumnus can also be nominated for the IIT Delhi’s Distinguished Alumni Award (DAA), Graduates of the Last Decade (GOLD) Award and Distinguished Alumni Service Award (DASA) at the alumni website -- alumni.iitd.ac.in.

The Indian Institute of Technology (IIT) Delhi, during its convocation will also present the alumni awards. The institute has opened the registration window to apply for nominations for the Alumni Awards 2023. The last date to register for IIT Delhi Alumni Awards 2023 is April 30. They can be nominated at the IIT Delhi alumni website -- alumni.iitd.ac.in.

The IIT Delhi alumni awards are presented to recognise the outstanding achievements of alumni in various walks of life.

The IIT Delhi alumni awards will be conferred under three categories -- Distinguished Alumni Award (DAA), Graduates of the Last Decade (GOLD) Award and the Distinguished Alumni Service Award (DASA).

A fellow alumnus can also be nominated for the IIT Delhi’s Distinguished Alumni Award (DAA), Graduates of the Last Decade (GOLD) Award and the Distinguished Alumni Service Award (DASA).

The IIT Delhi nomination form includes filling up of information about the alumni including their names, nominated for award, year of graduation, dates of birth, degrees and diploma earned from IIT Delhi with specialisations and present organisation or affiliation of nominee.
Details including email addresses and websites of the persons nominated will also have to be added in IIT Delhi nomination for alumni award form.

Saying that the nominations for the alumni award are open, IIT Delhi in a social media post said: “Every year at the Annual Convocation Ceremony, IIT Delhi confers the prestigious Alumni Awards on its alumni to recognise their outstanding achievements in various walks of life.”

**IIT Delhi introduces MTech in Robotics; admission through GATE score**


IIT Delhi New Course: Interested candidates can apply for this programme at the official IIT Delhi website — home.iitd.ac.in/pg-admissions.php — before March 30.

The Indian Institute of Technology, Delhi (IIT-D) today launched a new inter-disciplinary academic programme – MTech in Robotics. Interested candidates can apply for this programme at the official IIT Delhi website — [home.iitd.ac.in/pg-admissions.php](http://home.iitd.ac.in/pg-admissions.php)

Interested candidates have time till March 30 to apply for this newly launched programme. The first batch of the programme will start in the academic year 2023–24.

There are 25 seats in this programme to which admissions will be through GATE, programming test, and interview. The programme will provide specialisations in Collaborative Robotics, Industrial Robotics, Rehabilitation and Medical Robotics, and Autonomous and Intelligent Vehicles.

This will be a two year long programme, which will be jointly offered by the Department of Computer Science and Engineering, the Department of Electrical Engineering, the Department of Mechanical Engineering, and the Yardi School of Artificial Intelligence in association with the Center of Excellence on Biologically Inspired Robots and Drones (CoE-BIRD).

The new course will focus on experiential learning, coupled with firm theoretical foundations. It will provide students a multidisciplinary curriculum that will prepare them to create innovative and intelligent products and systems to address today’s challenges in developing Robotics platforms and applications.

**IIT-Delhi among top 50 world institutions for engineering in QS Rankings, DU has most ranked entries**


Other IITs to make the list are Kanpur, Kharagpur, & Madras. Overall, 66 Indian universities cumulatively achieved 355 entries of which 44 courses featured in top 100.
Indian Institute of Technology-Delhi (IIT-Delhi) has entered the list of top 50 institutions for Engineering in the QS World University Rankings by Subject 2023, released Wednesday.

With a ranking of 48, it is up by seven places from last year.

Compiled by global higher education analyst Quacquarelli Symonds, the rankings provide independent comparative analysis on the performance of 15,700-plus individual programmes taken by students at 1,594 universities in 93 locations across the world, across 54 academic disciplines and five broad Faculty Areas.

Also, IIT-Bombay features among the world’s top 100 in Mathematics by clinching 92nd spot, up by 25 places, and IIT-Kanpur ranks among the world’s top 100 in Engineering — Electrical Electronic (87th, up by 21 places) and in Computer Science Information Systems (96th, up by 13 places).

While IIT-Kharagpur occupies 94th spot, up by 15 places, for Computer Science and Information Systems, IIT-Madras jumps up by 50 places to come at 98th spot for Mathematics.

Overall, 66 Indian universities cumulatively achieved 355 entries of which 44 courses in different disciplines featured in top 100 globally. Indian higher education institutions featured in 38 of the 54 narrow subjects and in all the five broad subject areas.

The most represented Indian universities in this edition of the rankings are the University of Delhi (27 entries), IIT-Bombay (25 entries) and IIT-Kharagpur (23 entries).

The QS Rankings are based on various parameters such as research publications, academic reputation, employer reputation and H-Index.

A statement issued by the ranking institution noted that the year-on-year performance of Indian institutions has been improving. It further noted that the courses provided by private institutions, particularly those selected as the Institutes of Eminence.

“The eleven declared Institutes of Eminence (IoE) take 44 per cent of the overall Indian entries (158). The IoE boasts 35 of the 49 top-100 Indian positions across the 54 academic disciplines and the five broad faculty areas featured in this edition,” the statement said.

**World's First Smoking Cessation Filter Developed By IIT Alumnus**


Cigibud, which will be officially launched later on Wednesday, filters up to 80 per cent of tar and nicotine from a cigarette without affecting its taste and smoking experience, and will help a smoker quit in three months.
When IIT alumnus Prateek Sharma watched a no-smoking advisory starring actor Akshay Kumar in a cinema in 2018, an idea struck him that not only matched his line of research but could have a huge social impact as well. Nearly five years later, and after a lot of hard work and dogged perseverance, Sharma is set to launch Cigibud -- the world's first smoking cessation filter.

Cigibud, which will be officially launched later on Wednesday, filters up to 80 per cent of tar and nicotine from a cigarette without affecting its taste and smoking experience, and will help a smoker quit in three months, Sharma claimed.

When the idea of a smoking cessation filter came, Sharma was already on a mission to develop advanced air filtration solutions to curb the detrimental impact of pollution on human health. At the Indian Institute of Technology (IIT) Delhi, he had developed Nanofiber technology with the help of his professors and got it patented. When he graduated in 2015, he undertook efforts to make the technology commercially viable by launching products based on it. His out-of-the-box efforts earned him the Startup National Award 2017 conferred by the President of India.

"We were already working on some products such as Nasofilters, Nanoclean Pollution Net and Nasomask. However, the advisory inspired us to broaden our scope of work and we decided to use the same technology to develop something that can help people quit smoking," Sharma said.

Sharma's team carried out a study which suggested that 63 per cent of smokers want to quit smoking but are unable to do so because of nicotine addiction. They also came to know that even according to the WHO, only four per cent of smokers succeed in quitting without any cessation support.

"We realised there was a void between advising to quit smoking and actually quitting smoking. We worked for four years...and came up with Cigibud - the world's first smoking cessation filter. It will help a smoker to quit smoking in three months," Sharma claimed.

According to him, it works by systematically getting a smoker used to lower levels of nicotine without causing craving for more cigarettes. "Cigibud is based on a three-month scientifically proven therapy to help quit smoking and is inspired by the Nicotine Replacement Therapy recommended by WHO for smoking cessation," Sharma maintained.
He added, “Our primary objective is to help people quit smoking through our...Cigibud variants (Lite, Ultra, Pro). But those who don't want to quit, they can at least start using Cigibud (Lite). The nanofibers of Cigibud (Lite) increase the smoothness of smoke and make it less injurious.” Each packet of Cigibud contains 30 filters and it costs Rs 350. One filter is advised to be used only once but people can use it up to three times because beyond that it loses its effectiveness.

Asked if the cost factor will discourage people from using it with one filter costing around Rs 10 and ideally should be used once, Sharma said that people should think about its long-term benefit, both in terms of heath and money, which they will have after quitting smoking or minimising the frequency of smoking. "We are increasing your per cigarette cost by about 50 per cent for three months to help you eradicate smoking cost from your monthly budget," Sharma said.

Sharma said he is also in touch with cigarette manufacturing companies in order to provide them with bio-safe cigarette filter material. "Littering of cigarette butts is the biggest reason for oceanic pollution at the moment and our technology can provide a solution to produce bio-safe filters,” Sharma said.

**IIT Delhi, NALSAR Hyderabad, Tezpur University pioneer gender-neutral spaces on campuses**


A handful of Indian educational institutions, including IIT Delhi, NALSAR Hyderabad, are among the first to have gender-neutral toilets and spaces.

Although the number is miniscule, Indian institutions of higher education, public and private, have begun embracing the idea of gender-neutral spaces on campus.
In January 2023, the Indian Institute of Technology Delhi inaugurated its first gender-neutral washroom. It was done at the initiative of a lesbian, gay, bisexual, transgender, queer, intersex, asexual (LGBTQIA+) collective named Indradhanu and Office of Diversity and Inclusion at IIT Delhi. Vaivab Das, the IIT Delhi research scholar and member of the collective, said he was prompted by his own experience as a non-binary person on campus.

“In 2020, when I entered the institute, I couldn’t access the washroom considering my gender identity. There were no redressal mechanisms or groups for LGBTQIA+ people on campus. Through the collective, we started identifying the policy gaps to ensure an inclusive campus for its diverse population of students and professors,” they said. IIT Delhi has 14 gender-neutral washrooms on campus now.

Although their number is still miniscule, Indian institutions of higher education, public and private, have begun embracing the idea of gender-neutral spaces on campus. Das explained that there is a lack of institutional mechanisms and policies for higher educational institutes, in both private and public universities, to address the needs of the LGBTQIA+ community.

Vaivab Das, PhD Scholar and a member of LGBTQIA+ collective Indradhanu at IIT Delhi

Hostels and toilets

In co-education institutions, student residences and washrooms are usually the only spaces with gender segregation.

Earlier, in June 2022, Tezpur University in Assam, a central institution, also opened three gender-neutral washrooms. There, the conversation was started by a queer rights activist, Rituparna Neog, based in Guwahati, Assam. Neog, a transgender non-binary person, visited the university for a session in 2022 and was compelled to use a men’s washroom. While the humanities department was already discussing having gender-neutral toilets, her presence on campus pushed it further. Subsequently, a transwoman student was placed in a men’s hostel.
This led the university’s humanities and social work department to recognise the problem and build safe spaces for all genders, including gender-neutral housing.

NALSAR University of Law in Hyderabad, Telangana, introduced gender-neutral washrooms and spaces on their campus in March 2022, becoming the first institution to do so. In January 2023, Whistling Woods International, a private film, communications and arts institute in Film City, Mumbai, also opened a gender-neutral washroom.

Rituparna Neog, a social activist from Assam

“Gender-neutral washrooms are not just toilets. They are symbolic spaces that depict that the university is open to people from all genders, thus making an effort to provide a safe space for people across genders,” said Namami Sharma, professor, Tezpur University.

Similarly, Das added that non-confirming genders or trans people face dysphoria while accessing binary washrooms. “Generally all washrooms are differentiated based on the binary of male and female, and people from non-conforming genders, like transgender people, don’t feel comfortable using them.”

Sharma explained that when a non-binary person enters a general washroom and sees other people claiming that space, it makes the non-binary person feel that they don’t belong. “However, gender-neutral spaces and washrooms give them the freedom to claim it rightfully. She added that these spaces have different signage that goes beyond the two genders.

**Student collectives, campaigns**

During Neog’s college days in 2015, Tata Institute of Social Sciences (TISS) Guwahati had a common washroom for male and female students in 2015 but despite that, she found using it challenging. “It was difficult for me to
access the whole infrastructure of the institute,” she added. However, as a grassroots social worker, she met many who were forced to wait for hours until they could find a safe space to relieve themselves. “As an activist, I started visiting universities to spread awareness on gender-neutral spaces in the North East,” she said. Neog also started a campaign to make educational spaces gender-neutral in Assam in June 2022 during the Dibrugarh Pride March.

Many universities in tier-two and three towns have started their gender champion collective groups which have now become a movement, she added.

Similarly, Indradhanu, which came into existence as an informal group in 2013 and was formally recognised in 2021, is on a similar mission. “We are engaging with the students where we discuss empathy as a holistic practice and assist the administration to take care of the diverse needs of the marginalised students on campus,” Das said. The student collective also participated in the pan IIT petitioner’s group that challenged the constitutional validity of Indian Penal Code 377.

In law schools
Vaibhav Gaur, a fifth-year law student at Ram Manohar Lohiya National Law University [RMLNLU], Lucknow, Uttar Pradesh also started a gender champion student collective in 2020. There was little discussion on the subject of gender inclusivity earlier but after the collective organised students, the administration is more responsive.

NALSAR’s step towards gender inclusivity has inspired all the law universities. “This is a huge step towards accepting other genders and has initiated the discussion at a big level,” added Gaur.
But a major hiccup is the lack of awareness among policymakers. “While higher education institutions have gender sensitisation sessions under Saksham guidelines issued by University Grants Commission for women’s safety, the same policy cannot fit into diverse groups who also exist on the campus,” stated Das.

**Lip service, dignity**
The National Assessment and Accreditation Council (NAAC), which grades institutions, has “gender sensitive quality indicators” but this is “more of a lip service”, said a professor from a private university in Andhra Pradesh who didn’t want to be named.

She also added that there are many universities that don’t even allow gender sensitisation sessions in the universities. “So imagine if they are not even considering this, discussing LGBTQI is far-fetched,” she added.

Das thinks that this is the reason for the lack of awareness. “Even in the education system there are a lot of gender stereotypes, gender notions and segregation which impacts students passively,” they added. In consequence, students hesitate to engage in these discussions critically, accepting whatever is taught in the name of academic discipline and rigour. “In this way, many students easily compromise their right to life with dignity, which is a basic fundamental right,” he added.

The new National Education Policy includes transgender people among the “socio-economically disadvantaged groups”, recommends a gender inclusion fund and support for them.

However, Das questioned the relevance of such recommendations. “For instance, if any trans person is given any special consideration, what is the significance if the institute, including faculty, staff or students do not have a basic understanding of issues a trans person faces in the institute? Many universities have no level of gender sensitisation to engage with transgender peers,” he added.

**Planning and policy**
Sharma believes having more humanities and social science departments would have helped. “Because we are in the humanities department, we could discuss gender inclusivity. But in many departments, such as engineering and sciences, where gender is not even a part of the curriculum, it gets difficult to spread awareness,” said Sharma.

For Das, there is a glaring systematic loophole as UGC and All India Council of Technical Education (AICTE) issue many circulars to ensure student protection in the universities with a vague mention of LGBTQIA+ persons. “These circulars do not have much related to bullying of LGBTQIA+ persons or transphobia and homophobia. Further, there is no institutional mechanism for private or public colleges or universities to address these problems,” said Das. He added that supporting the LGBTQIA+ community in universities is more of a promise or principle that has never been fulfilled in practice or through policy mechanisms.

In 2015 the ministry of women and child development issued a circular asking universities to set up “gender champion” in their colleges and universities. “Gender champion clubs are essential to spread awareness because
it’s not just about giving facilities but also to keep the conversation alive around inclusion in the campus,” said Neog.

Also, India has the Transgender Persons (Protection of Rights) Act, 2019 but nothing from the act has been translated into any university guideline. “For now, there is no institutional mechanism to identify, address and understand and redress the complaints around identity-based discriminations against LGBTQIA persons,” added Das. “At the planning level, many diversity and inclusion policies fail because the ones who are writing these policies do not have a situated understanding of what it means to be a trans or a queer person in society and what kind of barriers people face in an educational institution.”

Few takers for PhD at IIT-D from reserved categories


While there is an increasing emphasis on research, especially with the implementation of the National Education Policy, participation of students from reserved categories in higher education continues to be skewed in premier institutions like Indian Institute of Technology (IIT) Delhi. The information received in response to an RTI query filed by TOI revealed that only 6% of the total number of SC and ST category seats for the PhD programmes were filled by the institute in the 2022-23 academic session. Out of the 589 SC seats and 313 ST seats, the institute admitted 50 students and 10 students, respectively, for the academic session.

Similarly, in the 2021-22 academic session, out of a sanctioned strength of 543 SC seats, IIT Delhi admitted 32 students while against 294 ST seats, there were only five admissions. In the past five years, the highest number of PhD admissions under the two categories took place in the 2020-21 academic session when 74 out of the 844 seats – around 8% – of the seats got filled.

The scenario, however, is not the same for undergraduate programmes where not only were all seats filled, there were overadmissions as well in some of the academic years. For instance, in 2021, out of a sanctioned strength of 182 for SC students, the institute admitted 187 students while in 2018, out of a total of 127 seats for the category, 137 students were enrolled for the various undergraduate programmes. Similarly, under the ST category, in 2022, there were 101 enrolments against 91 seats while in 2021, there were 93 enrolments against 91 seats under the category.

The corresponding data for the postgraduate programmes and subsequently for the PhD programmes reflect that with every progression towards higher education, the numbers have been reducing.

Representation of students from the ST category in the various postgraduate programmes is especially skewed with the percentage of seats filled in the past five years ranging between 50 and 60% with the lowest being in 2019-20 when only 37% of the seats were filled.

A former IIT director said that due to a growing trend of students opting for job opportunities post a BTech degree, it had been a challenge to fill seats in higher education at these institutes.
“With so many job opportunities present, not many are willing to pursue a PhD. For some reason, it has become a trend and a norm to take up jobs right after BTech, which is leading to this challenge. This is the case for the general category as well. With placement figures at a high, it is difficult to fill research seats with the leftover candidates,” the official said.

The former director added, “This reflects on faculty appointments too. In so many IITs, it is difficult to fill positions as good candidates with research background are few in number. Less than 5% of the students are going for higher education and it is definitely worrying. This was not the case earlier.”

**IIT-Delhi constitutes SC/ST-OBC Cell, notifies mandate, terms of reference**


Notification gives the Cell powers to implement, monitor, and evaluate reservation policies in the institute for admissions at all levels; it will also implement measures to achieve objectives and targets of the government’s reservation policies

With a spate of recent student suicides at Indian Institute of Technologies (IITs) reigniting the debate on caste-based discrimination at the premier institutes, the IIT-Delhi on Thursday passed and notified the official mandate for its SC/ST (Scheduled Castes/Scheduled Tribes) and OBC (Other Backward Classes) Cell. There were three suicides at IIT-Bombay and IIT-Madras in the past one month, with at least two of the victims being Dalit students.

The notification issued by the Registrar’s Secretariat gives the Cell teeth to implement, monitor, and evaluate continuously, reservation policies in the institute for admissions at all levels and recruitment of both teaching and non-teaching staff. It also gives the Cell power to address academic and administrative grievances that any SC/ST/OBC student, faculty or staff might have.

According to the notification, the Cell has been constituted with nine members, led by Professor Pravin P. Ingole of the Department of Chemistry, who will be serving as the SC/ST Liaison Officer. The Cell has been given the mandate to take necessary follow-up measures to achieve objectives and targets of the government’s reservation policies with respect to SCs, STs, and OBCs.

The Cell has been tasked with collecting and circulating orders and decisions of the Union government and the University Grants Commission (UGC) on various aspects of education, training and employment of SCs/STs/OBCs for “evolving or modifying existing policy by the Commission”.

The Cell is also tasked with preparing reports and digests from analysing the above-mentioned information and sending it to the Union Ministry of Education. The Cell will also deal with representations from SC/ST/OBC candidates regarding admissions, recruitment, promotion and other similar matters.
The Cell will also maintain a register for employment of SC/ST/OBC candidates for various positions at the institute. The Registrar’s Secretariat said that the Cell was being constituted in “continuation of the Institute’s resolve to establish a SC/ST Cell in accordance with the UGC Mandate”.

Dheeraj Singh, an IIT alumnus who is mobilising pan-IIT alumni and faculty for Dalit and Adivasi welfare, said that the notification was “confusing”. “UGC guidelines for SC/ST Cell are exclusively meant for SC/ST only due to underlying statutory reasons as this Cell reports to Parliament via Standing Committee on Welfare of SC/ST. There are separate UGC guidelines for OBC and hence wondering why IIT-D is creating confusion at the outset by including OBC under SC/ST Cell,” Mr. Singh said.

“It must be investigated how IITs manage to not follow the Cell guidelines prescribed to report to the Parliament Committee. SC/ST Students Cell in IIT Bombay, for example, mentions on its webpage that the Cell is for students only whereas UGC prescribes Cell for students, faculty and staff. IIT-Bombay Cell does not even have a Liaison Officer and it reports to the Director, thereby implying it is an institute arm whereas it must be an independent body to ensure compliance with affirmatives,” Mr. Singh added.

This comes even as the IIT-Bombay, where 18-year-old Dalit student Darshan Solanki allegedly died by suicide in February this year, is yet to pass the mandate for its own SC/ST Students Cell, which has been pending since at least 2020.

Various student collectives have been pushing for the mandate to be passed and notified so that the terms of reference for its functioning is codified. Internal surveys conducted by the SC/ST Students Cell of IIT-B in 2022, had revealed widespread caste-based discrimination on campus, as reported by The Hindu in the wake of Mr. Solanki’s alleged suicide.

With demands from students to get the mandate passed only getting louder since Mr. Solanki’s death, sources aware of developments said the institute might be looking to pass it soon.

Reacting to the mandate being passed by IIT-Delhi, the Ambedkar Periyar Phule Study Circle (APPSC), a student body of IIT-B, issued a statement demanding that IIT-B pass the mandate as well, adding, “All IITs should.”

IIT Delhi and IIT Bombay Researchers Develop Spintronics-based Neuromorphic Hardware
March 14, 2023  https://www.eetindia.co.in/iit-delhi-and-iit-bombay-researchers-develop-spintronics-based-neuromorphic-hardware/
A research team from IIT Delhi and IIT Bombay has built a new neuromorphic hardware using magnetic materials.

These days, interactive voice assistants like Alexa and Siri have made it very easy to obtain a response to a query or get some tasks done online. However, the procedure that occurs in the background is quite intricate. It involves delivering the speech data to the cloud over the internet, processing the data in the cloud, and then providing the response to the device.

But due to slow internet speed, power outages, and other factors, speech data is frequently lost. This may change with the advent of neuromorphic computing, where local hardware with built-in memory executes all operations, hence preventing data loss while simultaneously reducing power consumption.

A research team led by Prof. Pranaba Kishor Muduli at IIT Delhi and Prof. Debanjan Bhowmik at IIT Bombay has built a new neuromorphic hardware using magnetic materials. The device is capable of storing data even when the power is off. It functions similar to a synapse in the neurological system.


The device consists of an ultrathin layer of cobalt, fabricated using state of art facilities at IIT Delhi. Thickness of the layer used are in nano-meter range, which is 80,000-100,000 times smaller than human hair. The fabrication needs enormous precision; hence it is carried out in an ultra-high vacuum chamber containing nearly no air molecules.

The experimental work has been carried out mainly by Ram Singh Yadav, a PhD student at the Department of Physics, IIT Delhi, and jointly supervised by Prof. Pranaba Kishor Muduli and Prof. Debanjan Bhowmik. This is the first experimental demonstration of neuromorphic device using magnetic materials from India.

“We have high hopes that the study contributes significantly to both the India Semiconductor mission as well as Make-in-India mission of the government of India,” Prof. Muduli said.
The work is supported by “Scheme for Transformational and Advanced Research in Sciences (STARS)”, which is funded by the Ministry of Education, Government of India.

Staqu partners with IIT Delhi, FITT to promote Indian innovative sphere

The aim of this collaboration is to make use of the research-supported data available at IIT Delhi and enhance the quality and effectiveness of real-time data collected by JARVIS, an AI-powered video analytics platform.

**FITT appointed Chetan Arora as the project in-charge (PI) for this research collaboration**


Staqu, an AI implementation enabler headquartered in India, has entered into a partnership with the Foundation for Innovation and Technology Transfer (FITT) at the Indian Institute of Technology (IIT), Delhi. The aim of this collaboration is to make use of the research-supported data available at IIT Delhi and enhance the quality and effectiveness of real-time data collected by JARVIS, an AI-powered video analytics platform, according to an official release.

Staqu aims to revolutionise the innovation landscape in India by incorporating research-supported data. Through collaboration with IIT Delhi’s researchers and FITT’s technology transfer expertise, Staqu intends to develop a unique platform that combines real-time capabilities with research-based data, the release mentioned. “This collaboration aims to help us in integrating research-backed data with JARVIS to make it more reliable and effective,” Atul Rai, CEO, co-founder, Staqu, said.

Furthermore, FITT appointed Chetan Arora as the project in-charge (PI) for this research collaboration, the release mentioned. “By collaborating with Staqu, we are excited to leverage our research-backed data and technology transfer capabilities to help create a platform that can revolutionise the Indian innovation sphere. We believe that this collaboration will help in maximising the utility and functionality of our research-backed data and make it more accessible to the industry,” Arora said.

Staqu and FITT at IIT Delhi, have joined forces to ensure the optimal utilisation of research-based data to enhance JARVIS’s capabilities. Through this collaboration, JARVIS will be better equipped to analyse data gathered from a variety of sources, including CCTV cameras, mobile phones, and social media, and provide crucial real-time insights to stakeholders, the release added.

**Australian prime minster visits IIT Delhi to interact with students, faculty**


Anthony Albanese interacted with students and faculty at IITD and witnessed the new technologies and projects developed by IIT Delhi scientists.
Australian prime minister, Anthony Albanese visited the Indian Institute of Technology Delhi (IITD) and addressed students, faculty and staff members. The minister also witnessed research projects and technologies being developed by IIT Delhi scientists.

Prime minister, Albanese also interacted and answered questions by students and faculty in a fireside chat. The minister announced the appointment of Tim Thomas as the inaugural chief executive officer of the centre for Australia-India relations. He further spoke about the progress of Deakin University's campus at Gujarat's GIFT City along with the negotiations for a full comprehensive economic cooperation agreement between India and Australia being underway.

The entire session was moderated by Observer Research Foundation (ORF), president, Samir Saran. IIT Delhi showcased four of their developed technologies during the Australian prime minister's visit.

Robotic Exoskeleton Device for Upper Limb Rehabilitation
Smart Solutions for Building Energy Management
Lignocellulosic Biomass Valorisation for Sustainable Biorefineries
Vanadium Redox Flow Battery

While speaking about the Deakin University's campus in Gujarat, Australian prime minister, Anthony Albanese, said: "I very much want to see growing numbers of Australian and Indian students to have the experiences of living and studying in our respective countries, and to bring those experiences home. Think of it as human cross-pollination. Through it we draw from each other’s strengths and add to our own – and in the process, each of us
becomes something greater. Of course, joining up our best minds is not just desirable. It’s a necessity — especially where the globe’s biggest challenges are concerned."

The minister also met president Droupadi Murmu and prime minister Narendra Modi to build a partnership in trade, education, defence and culture on his visit to India. Previously Australian education minister Jason Clare visited India to sign agreements to promote research, academic collaborations between Australia and India.

**Annual IIT Delhi science and technology festival 'Tryst 2023' kicks off, end on March 6**


The IIT Delhi students' annual 'Tryst' festival for science, technology, and management is set to take place from March 4 to 6.

The IIT Delhi students' annual 'Tryst' festival for science, technology, and management is set to take place from March 4 to 6.

On Saturday, the IIT Delhi students' annual 'Tryst' festival for science, technology, and management got underway. It is organised by the Co-Curricular and Academic Interaction Council (CAIC), which is made up completely of IIT Delhi students, and is widely regarded as North India's greatest technology festival. Since it began 30 years ago, the event has become incredibly well-known. The festival concept for this year centres on a mascot from the year 1804, who travels through time to the year 2023 to study cutting-edge technology. Participants can demonstrate their technical expertise and creative abilities through an exploration of the concept of time travel.
A showcase by the Indian Space Research Organization (ISRO), an auto show with manufacturers like Lamborghini, Aston Martin, Ducati, and Mercedes, the Startup Expo, the India 2047 Ideation Challenge, robotics competitions, a drone workshop, etc. are some of the main elements of the Tryst 2023.

This year's festival, which will feature more than 75 events, anticipates the attendance of close to 60,000 people and participation from close to 20,000 students from more than 700 colleges around the country.

"From enchanting guest lectures to learning hands-on skills through workshops, from exciting departmental activities and competitions to mesmerising techno-cultural nights, from meeting eminent personalities to discovering science as never seen before, team Tryst ensures there is something fun for everyone. There are exciting prizes worth 12 lacs INR to be won during the fest," said Sahil, General Secretary, CAIC, IIT Delhi.

An event called ‘Vision of India 2047’ is being organised by the Technology Information, Forecasting and Assessment Council (TIFAC) of the Indian Department of Science and Technology in association with Tryst IIT Delhi.

Students are encouraged to envision the innovations and technology that will influence the future and to describe their vision for India in 2047 as a result of the event.

"Tryst events can serve as a catalyst for innovation and progress. Through these events, participants will have the opportunity to explore their own creativity, come up with crazy ideas, and contribute to the betterment of India's future," said Professor Ashok Patel, Chairman, Tryst 2023, IIT Delhi.

Robosoccer, AquaRobots, and CosmoClench are three robotic events that are sponsored by IHFC, the Technological Innovation Center of IIT Delhi, and are a part of Tryst 2023.