



## MONTHLY NEWS CLIPS

**1-30 November, 2019**

### **GATE 2020 Exam Date Sheet Released: IIT Delhi to Conduct Entrance Test from February 1, Check Schedule Online at [gate.iitd.ac.in](http://gate.iitd.ac.in)**

**November 28, 2019** <https://www.latestly.com/india/education/gate-2020-exam-date-sheet-released-iit-delhi-to-conduct-entrance-test-from-february-1-check-schedule-online-at-gate-iitd-ac-in-1367473.html>

The Indian Institute of Technology (IIT) Delhi has released the exam schedule for Graduate Aptitude Test in Engineering (GATE) 2020. According to the GATE 2020 exam date sheet, IIT Delhi will conduct the entrance test from February 1, 2020. The entire GATE 2020 schedule can be accessed online through the official website; [gate.iitd.ac.in](http://gate.iitd.ac.in). The institute will conduct the examination in eight sessions, the entire schedule of which is provided in this article below for the benefit of the candidates. They are further advised to go through the whole GATE 2020 exam date sheet and begin their entrance test preparation.

[The application for GATE 2020 was held in September, and the correction process was done in October, 2019.](#)

According to media reports, this year, about 8.6 lakh candidates have registered for GATE 2020. The admit cards for the entrance exam will be made available on January 3, 2020. After the examination, the GATE 2020 result is expected to be declared on March 16.

#### **GATE 2020 Exam Date Sheet:**

February 1 (9.30 am to 12.30 pm): IN, ME1, MT, PE, PH

February 1 (2.30 pm to 5.30 pm): CY, ME2, PI

February 2 (9.30 am to 12.30 pm): AR, BM, BT, CH, MA, MN, ST, XE, XL

February 2 (2.30 pm to 5.30 pm): AE, AG, EC, GG

February 8 (9.30 am to 12.30 pm): EE, EY, TF

February 8 (2.30 pm to 5.30 pm): CS

February 9 (9.30 am to 12.30 pm): CE1

February 9 (14.30 pm to 5.30 pm): CE2

GATE is conducted jointly by the Indian Institute of Science (IISc) in Bangalore and the seven Indian Institutes of Technology -- Delhi, Guwahati, Kanpur, Kharagpur, Bombay, Madras and Roorkee. The exam score would reflect the relative performance level of the candidate in a particular subject, which is quantified based on the several years of exam data.

### **IIT Delhi to start Bachelor in Design soon**

**November 27, 2019** <https://indianexpress.com/article/education/jee-main-2020-iit-delhi-to-start-bachelor-in-design-soon-6135819/>

Admission process for the course is yet to be finalised. Other IITs enrol students in B.Des through UCEED. IIT-Delhi might consider the same along with JEE. Over 20 seats will be offered under the new course. The institute already offers master's level programme in design.

The Indian Institute of Technology (IIT), Delhi is likely to start a four-year Bachelor in Design (B.Des) course from the academic session 2020-21. An expected, a total of 20 seats will be offered under the course. PV Madhusudhan Rao, head, Department of Design, IIT-Delhi confirmed that the process to offer a bachelor's course in design has begun and enrolments are likely to commence from the next academic year.

Rao said that the course is being drafted considering the increasing demand for design education. "There has always been an interest in studying design among students but it has remained lesser than engineering. However, now, the demand for design courses is increasing more than ever."

The IIT-Bombay, IIT-Guwahati and IIITDM-Jabalpur already provide a B.Des course. IIT-Delhi also offers master's level courses in design. Admission to these courses is conducted through the Undergraduate Common Entrance Examination for Design (UCEED). However, IIT-Delhi is yet to decide the selection process. IIT-Delhi might also consider enrolment through Joint Engineering Examination (JEE), as informed by the officials.

Rao said that the proposal has been floated and details will soon be finalised by the authorities. Including the selection process, the authorities are yet to finalise the fee structure, admission process, hostel facility and recruitment of new faculty.

While Rao said that the number of faculty members for design courses is lesser, he did not specify if there would be any new hiring for the undergraduate course. Deeksha Gupta, student co-ordinator, B.Des at IIT-Delhi, informed that in the last two years, two full-time faculty members and one guest faculty have been recruited in the department. She confirmed that more teachers will be hired soon.

### **India has 96 universities ranked, including 20 brand new entries in QS World University Rankings: Asia 2020**

**November 27, 2019** <https://economictimes.indiatimes.com/industry/services/education/india-has-96-universities-ranked-including-20-brand-new-entries-in-qs-world-university-rankings-asia-2020/printarticle/72252255.cms>

India has 96 universities ranked, including 20 brand new entries in the QS World University Rankings: Asia 2020. The Indian Institute of Technology Bombay (IITB) leads nationally at overall 34th place, and it is followed by IIT Delhi (IITD) in the 43rd place and by IIT Madras (IITM) in the 50th position.

The country has 31 institutes among the top 250. Of these, 18 dropped compared to last year, 12 gained ground and one remained stable.

Only Mainland China is more represented than India, with 118 featured universities, including four in the top 10 this year. By contrast, India does not yet have a university among the top 30. The top national general university in this table, the University of Delhi, is down five places from last year, and now places 67th regionally.

In the Employer Reputation indicator, which utilises the insights of over 44,000 employers regarding the quality of a university’s graduates, IITB ranks 21st regionally. There are other four local universities among the top 50 (IITD, IITM, University of Delhi and IITKGP).

India dominates the Staff with PhD indicator with seven institutions achieving the perfect 100.00 score and ranking No 1 and tied in this metric (IITM, IITKGP, IITK, IIT BBS, IIT Indore, IIT Patna, IIT Ropar).

In the research indicators, India has five universities among the top 50 in the Citations per Paper metric, and six among the top 50 in the Papers per Faculty metric.

QS World University Rankings: Asia 2020 ( Indian Universities in Top 200)		
2020	RANK	Institution Name
34	33	INDIAN INSTITUTE OF TECHNOLOGY BOMBAY (IITB)
43	40	INDIAN INSTITUTE OF TECHNOLOGY DELHI (IITD)
50	48	INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IITM)
51	50=	INDIAN INSTITUTE OF SCIENCE (IISC) BANGALORE
56	53	INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR (IITKGP)
65	61	INDIAN INSTITUTE OF TECHNOLOGY KANPUR (IITK)
67	62	UNIVERSITY OF DELHI
90	86	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE (IITR)
112	107	INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI (IITG)
114	106	UNIVERSITY OF HYDERABAD
136	137=	JADAVPUR UNIVERSITY
139	134	UNIVERSITY OF CALCUTTA
152	167	INSTITUTE OF CHEMICAL TECHNOLOGY (UDCT), MUMBAI
169	169	ANNA UNIVERSITY
175	180	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE
177=	156=	BANARAS HINDU UNIVERSITY
177=	187	UNIVERSITY OF MUMBAI
188	241=	INDIAN INSTITUTE OF TECHNOLOGY INDORE (IIT INDORE)
191	237	SAVITRIBAI PHULE PUNE UNIVERSITY
192	177	JAMIA MILLIA ISLAMIA, NEW DELHI

© QS Quacquarelli Symonds 2004-2019 <http://www.TopUniversities.com/>

Ben Sowter, Director of Research at QS, said: “The Indian higher education system has grown exponentially over the past decade. Nevertheless, the domestic demand for tertiary education of its young population - which is estimated to become the world’s largest by 2030 - is growing more

rapidly than the expanded provision. India's higher education system plays a vital role in driving the nation's competitiveness. This edition of the QS World University Rankings: Asia reflects the growth of the higher education sector in India with a broader representation of Indian universities. However, it also shows that sustained investment in research funding, teaching, and internationalization is paramount to enhance India's competitive edge."

Overall for the second consecutive year, the National University of Singapore is named Asia's best university. It is followed by Nanyang Technological University, which has risen from 3rd to 2nd; and the University of Hong Kong.

## **CSIR & IIT Delhi scientists develop method to manufacture 'freeform' optical components**

**November 26, 2019** <https://indusdictum.com/2019/11/26/csir-iit-delhi-scientists-develop-method-to-manufacture-freeform-optical-components/>

Freeform optics is an emerging field of optics and it has great potential in many fields. A group of researchers from Council for Scientific and Industrial Research-Central Scientific Instruments Organization (CSIR-CSIO) Chandigarh and Indian Institute of Technology (IIT) Delhi have developed a method that would help in the manufacturing of optical components including simple shape optics to freeform optics by ultra-precision machining process and various related issues.

Currently manufacturing of complicated optical components such as freeform optics is very difficult due to its complicated shape and required high precision. Many other components are imported from other countries due to lack of research in optics fabrication domain in India. Ultra-precision machining is one of the optics fabrication techniques.

"This research work would help in understanding the various issues affecting the performance of ultra-precision machining process. The work is helpful to develop the freeform surface with nanometric surface finish and sub-micron profile accuracies," said Dr Vinod Mishra, researcher from CSIR-CSIO.

With the help of the developed process, precision moulds can be fabricated which can be utilized for mass production (moulding is the process to develop the large quantities) and to cater the future needs of indigenous development of such optical components.

Where ultra-precision machining process is used to make optical components, the material is removed from the surface in a very controlled manner usually of micrometre scales.

"The material is removed with very sharp diamond cutting tools. Various parameters like vibrations, thermal issues, environmental conditions, machining conditions etc. are affecting the surface quality. We have to minimize the effect of all these factors while we are targeting the nanometric surface quality," said Mishra.

Freeform optics is a technique that is used in the development of high quality optical systems. Conventional lenses and mirrors have a simple shape that is either concave or convex and they have their limitations too. They cannot produce certain light-beam paths, so lenses and mirrors with a

more complex aspherical or freeform surface are needed. These shapes could be a lens shaped like a saddle or a banana.

These are also used in various other fields like medical, Defense, data storage, and aerospace industries. Freeform optics are an advanced version of optical fibres. The basic difference between freeform optics and optical fibres is that optical fibre is a cylindrical shape dielectric waveguide (nonconducting waveguide) that transmits light along its axis by the process of total internal reflection, whereas freeform optics have asymmetrical shapes and they have no translational or rotational symmetry.

Optical fibres are used by many telecommunications companies to transmit telephone signals, Internet communications and cable television signals. They are also used in a multitude of other industries, including medical, Defense, government, for data storage, and industrial or commercial use.

The freeform optics method can also be used to develop smaller, lighter, high-resolution lenses and mirrors. New systems containing these components can be made smaller and lighter, which is a big plus for aerospace instruments, medical instruments and other fields.

### **Sample size too small, Gurugram needs more air monitoring stations**

**November 24, 2019** <https://timesofindia.indiatimes.com/city/gurgaon/sample-size-too-small-gurgaon-needs-more-air-monitoring-stations/articleshow/72203840.cms>



Last Friday, air quality in Delhi-NCR towns was 'very poor'. The only exception was Gurugram, with a 'poor' air quality index (AQI) of 288. Gurugram had frequently been an outlier in the worst air weeks after Diwali and this was no exception. The data on which this was based, however, came from just one air quality monitoring station.

While this is how Gurugram's AQI bulletin has been prepared over the past four days, the air quality

updates would not be reliable even if the city's entire data set were available. To put things in perspective, Delhi, with an area of 1,484 sq km, has 38 air quality monitors. Gurugram effectively has only two.

To cover its 732-sq km area, one is at Gwalpahari, run by the India Meteorological Department, and the other is at Vikas Sadan, run by the Haryana State Pollution Control Board (HSPCB). Data from a third station at Manesar, also under HSPCB, is not considered while calculating the city's AQI.

"Gurugram needs more monitors. It may not be possible to get as many as Delhi has, or even half, but it is important to cover more of the city. The variations between different areas of the city need to be factored in. As of now, the two stations are on two ends (18 km from each other) while several areas are not being monitored at all," said Sagnik Dey, professor at IIT-Delhi and coordinator for the Centre for Excellence for Research for Clean Air.

For analysis, data from just two stations is too small a sample size.

"There are already large variations between the data from the two Gurugram stations, which may be turning the average readings inaccurate," said Aarti Khosla, director, Climate Trends, a Delhi-based climate research and communications agency.

"We analysed data from both stations between November 1 and 15 and found a difference of more than 100 microgram per cubic metre between the two. The average PM2.5 reading for Gwalpahari was 314 microgram per cubic metre. At Vikas Sadan, it was 203 microgram per cubic metre," she added. On November 3, the difference was particularly stark – 562 microgram per cubic metre in Gwalpahari and a much lower 343 microgram per cubic metre in Vikas Sadan.

"In fact, Gwalpahari records wide variations during a day. On November 15, the eight-hourly PM2.5 reading fell from 745 micrograms per cubic metre to 658 and, eventually, to 358 by the third part of the day," Khosla said.

CPCB officials said they are "in the process" of adding more stations in both Gurugram and Faridabad. "The two cities will eventually have five stations. We have placed the other and hope to get them functioning by the end of the year," a senior CPCB member said.

A Haryana State Pollution Control Board (HSPCB) official said that while they consider the Manesar station as part of the Gurugram area, the CPCB's daily index only considers readings from the Vikas Sadan and Gwalpahari stations. "Two more stations could be functioning by next month. Calibration does not take too long," the official added.

### **IIT-Delhi director seeks funds from alumni**

**November 24, 2019** <https://timesofindia.indiatimes.com/city/delhi/iit-delhi-director-seeks-funds-from-alumni/articleshow/72205009.cms>



IIT Delhi director V Ramgopal Rao has written to the IIT alumni, asking them to fund the institute's endowment fund.

The fund was started after the approval of the President of India where IIT Delhi collected Rs 250 crore. The director informed the alumni that the institute is keen on getting a thousand-crore fund for its infrastructure development.

In his letter, Rao said, "Our dream of starting India's first endowment fund has finally turned into a reality."

### **IIT Delhi reaches out to its alumni to help students learn interview tricks**

**November 22, 2019** <https://timesofindia.indiatimes.com/home/education/news/iit-delhi-reaches-out-to-its-alumni-to-help-students-learn-interview-tricks/articleshow/72182496.cms>



Under the new Office of Career Services a plethora of services including training on resume writing, interview skills and soft skills will be offered to students

The newly-formed 'Office of Career Services' (OCS) at the Institute of Technology (IIT) Delhi is expected to boost student placement through myriad activities. "Right from enlisting alumni from across industries to provide career counselling and help students make informed career choices, to conducting resume writing workshops and soft skills training, the Office of Career Services will play a

holistic role as it replaces the institute's Training and Placement unit," says V Ramgopal Rao, director, IIT Delhi.

The aim of the career services unit, says Rao, would be to go beyond the traditional role of helping students with placements. They would be 'groomed' for recruitment almost a year in advance. With activities planned throughout the year, the OCS-- constituting of 10 staff members with experience in industrial relations, training and placement - will arrange industry talks to familiarise students with the career opportunities in the sought-after sectors. AI, data science, ML, decision analytics etc appear to be upcoming sectors in the age of industry 4.0.

"The OCS will provide training and value-added services to the student community which would include resume making workshop, interview skills workshop, GD preparations, practice test series for online tests," says S Dharmaraja, head, OCS, IIT-Delhi. Experts from the industry would be roped in for the purpose to make the students more job-ready.

With the placement season at the institute set to commence on December 1, 2019, OCS will help recruit students from UG, PG and PhD programmes. Over 400 organisations from India and abroad will be offering 600+ job profiles in electrical, civil, mechanical and chemical engineering sectors in the upcoming placement season.

The OCS system of rostering will take into account the company domain and the job profile being offered, besides students' preferences. It will also ensure that different kinds of job profiles get a fair representation in the roster and each student gets a chance to be interviewed.

Summer training/internships will also be an important part of OCS'scope of work. "For the 2020 summer training, over 300 students have already been selected," Dharmaraja says.

In 2019, around 399 students received internship offers through summer training. Post the training, over 160 students have received pre-placement offers. Currently, over 110 students have accepted these offers, said an official statement from IIT-D.

## **IIT-Delhi PhD scholars object to increase in fees**

**November 21, 2019** <https://timesofindia.indiatimes.com/city/delhi/iit-delhi-phd-scholars-object-to-increase-in-fees/articleshow/72152501.cms>





The PhD students of IIT-Delhi have spoken out against the Indian Institute of Technology's council recommendation to increase the MTech tuition fees.

The students have issued a statement stating: "We reject the IIT council's recommendation to increase the MTech tuition fee and stopping of the monthly stipend. The decision will open up a channel for fee hike across the country, and any steps to implement this without student consultation will call for protests. We request MHRD to reject the proposal."

## **GATE 2020: Correction window open to change Exam Paper, Login at [gate.iitd.ac.in](http://gate.iitd.ac.in)**

**November 20, 2019** <https://www.jagranjosh.com/news/gate-2020-correction-window-open-to-change-exam-paper-login-at-gate-iitd-ac-in-152319>

**GATE 2020**  
Graduate Aptitude Test in Engineering 2020

**IIT Delhi**  
Organising Institute

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> Login, If Already Registered

Enrollment ID / Email Address

Enter Enrollment ID sent during registration / Email ID

Password

Enter your GOAPS password. (Case Sensitive)

$5 - 3 =$

Evaluate this arithmetic expression and place the value below

Evaluate this arithmetic expression and place the value here

Submit Forgot Enrollment ID or Password?

GATE 2020 Application Correction: Indian Institute of Technology, Delhi has opened the application correction window for GATE 2020 candidates to make changes in the examination paper field in the application form. Students who have applied for GATE 2020 examination and wish to make changes in the examination paper field in the form can visit the official website of GATE 2020 to make the necessary changes.

As per the official notification, the application correction window was opened earlier for candidates to make the necessary changes in the Exam City, Names and Colleges sections in the GATE 2020 application form. To make the changes in the Exam paper field candidates are required to visit the official website and log in through the application portal to make the corrections in the exam paper field on the GATE 2020 application form.

To make the changed candidates can visit the official website [gate.iitd.ac.in](http://gate.iitd.ac.in) and click on the GATE 2020 online portal link provided on the home page. Candidates can also make the corrections in the application form through the direct link provided below.

[GATE 2020 application login Direct Link](#)

Steps to make corrections in GATE 2020 applications

Step 1: Visit the GATE 2020 official website

Step 2: Click on the GATE Online Portal Link

Step 3: Enter the Enrollment ID and password in the login portal

Step 4: Make the changes in the required filed

Step 5: Review the changes made and submit the application

IIT Delhi will release the admit card for GATE 2020 on January 3, 2020. The GATE 2020 admit card will be released online on the official website. Candidates who have completed the registration process for GATE 2020 can download the admit card from the official website.

GATE 2020 will be conducted on February 1, 2, 8 and 9, 2020, in two sessions. The morning session of the examination will be conducted from 9:30 AM to 12:30 PM, while the afternoon session will be conducted from 2: 30 PM to 5: 30 PM.

## **IIT Delhi rebrands its Training & Placement Unit as Office of Career Services; Hiring season in the Institute to commence on Dec 01, 2019**

**November 20, 2019** <https://indiaeducationdiary.in/iit-delhi-rebrands-its-training-hiring-season-in-the-institute-to-commence-on-dec-01-2019/>



Indian Institute of Technology (IIT) Delhi has rebranded its Training & Placement (T&P) unit as Office of Career Services (OCS). Prof. V. Ramgopal Rao, Director, IIT Delhi inaugurated the Office of Career Services on Monday.

Giving his insights of what is expected from the new entity, Prof. Rao said: “Training & Placement (T&P) cells in IITs have traditionally been helping students find a job. At IIT Delhi, we believe that these cells need to be much more than that. As Office of Career Services (OCS), we want these units to have year-long activities to provide students career counselling services in addition to arranging invited talks by professionals in order to expose students to different career opportunities. OCS will also help students in resume preparation and other aspects of facing interview committees.”

Placement season in IIT Delhi will commence on December 01, 2019 under the aegis of this new entity to recruit students from various Undergraduate, Postgraduate and PhD programmes.

There will be 400+ organisations from India and abroad offering 600+ job profiles in core engineering sectors like electrical, civil, mechanical and chemical engineering in the upcoming placement season. With this, the students graduating in 2019-20 will be having ample choices during the campus placement. The Institute is looking forward to a robust hiring season that will span from Dec 2019 to May 2020.

Apart from the placements, summer training was also effectively conducted in the year 2019 with 399 students getting internship opportunities so far. Post summer training, so far 160+ students have received pre-placement offers. As of now over 110 students have accepted these offers. Moreover, for summer training to be held in the year 2020, 300 plus students have already been selected.

The Institute also encourages its students to pursue their passion for startups with deferred placement facility being provided to them in their final year. Quite a few students have opted for this facility as well.

Welcoming the organisations on the campus, Prof S. Dharmaraja, Head, Office of Career Services, IIT Delhi said, “We are optimistic and geared up for setting up new records of placements this year as well despite a downfall in the economic growth. We expect more core companies”.

Artificial intelligence, data science, machine learning, stochastic modelling and decision analytics look to be upcoming sectors as industry gears up for Industry 4.0.

There is a focus on recruitment of PhD scholars this year. A lot of university recruiters and companies from various domains with highly specialised job profiles have registered for recruiting PhD scholars.

From the period of initiation to execution of placement processes, several factors are taken into consideration by the Office of Career Services, IIT Delhi. OCS’ system of rostering takes into account the domain of the company as well as the job profile being offered by the company. In addition, departmental or student preference is also taken into account. OCS also ensures that that all kinds of job profiles get a fair representation in the roster and each and every student gets a chance to be interviewed.

The Institute hopes that like previous years this year also most of its students will be able to bag offers in the companies of their choice.

## **IIT Delhi Placements 2019 to begin from December 1, more than 400 companies to offer 600+ job profiles**

**November 19, 2019** <https://www.timesnownews.com/education/article/iit-delhi-placements-2019-to-begin-from-december-1-more-than-400-companies-to-offer-600-jobs/517165>

IIT Delhi would begin the campus placements for this year from December 1, 2019. More than 400 companies - both national and international are lined up for this session's placements. Report.



IIT Delhi Placements 2019 to begin from December 1.

It's time for Campus Placements at the various IITs. The top engineering and technological institutes of the country are known for the excellent placement records. Indian Institute of Technology, Delhi will start its placements from December 1 onwards. This year, more than 400+ organizations from India and abroad are lined up. As many as 600+ job profiles in various engineering disciplines of core engineering to consultancy would be offered to the undergraduate, postgraduate and Ph.D. students at the institute. The process would be overseen by the newly re-branded training and placement unit or the Office of Career Services, OCS.

Erstwhile training and placement unit of the Institute was responsible for managing and organizing the placements at the campus. The new avatar of the cell or the OCS is, on the other hand, is a much wider cell that would extend its support to preparing the students for placements.

Prof. V. Ramgopal Rao, Director IIT Delhi has inaugurated the Office of Career Services on Monday with the aim of improving the overall employability of the students as well as assisting them in the multi-faceted aspects of career building. The new entity will help companies to recruit students from various Undergraduate, Postgraduate and Ph.D. programs.



[IIT Delhi](#)

[✓@iitdelhi](#)

[Nov 18, 2019](#)

IIT Delhi has rebranded its Training & Placement (T&P) unit as Office of Career Services (OCS). Prof. V. Ramgopal Rao, Director, IIT Delhi inaugurated the Office of Career Services on Monday.



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Placement season in IIT Delhi will commence on December 01, 2019 under the aegis of this new entity to recruit students from various Undergraduate, Postgraduate and PhD programmes.



In the official statement issued by the IIT Delhi, OCS was defined as a cell that will have organize year-long activities to provide students career counseling services in addition to inviting talks by professionals. The purpose is to expose students to different career opportunities. OCS also aims to help students in resume preparation and other aspects of facing interview committees.

OCS will look into several factors involved in the placement processes. The domain of the company, as well as the job profile being offered by the company, will be taken into account by OCS along with departmental or student preference. OCS will also ensure that all kinds of job profiles get a fair representation in the roster and each and every student gets a chance to be interviewed.

### **IIT-Delhi predicted pollution spike a month ago**

**November 13, 2019** <https://www.hindustantimes.com/delhi-news/iit-delhi-predicted-pollution-spike-a-month-ago/story-lh6UQygCF91DlkUZgw5rrJ.html>

Scientists at IIT-Delhi said that stubble burning in the neighbouring states of Punjab and Haryana was forecasted as a “background concentration” to the ultra-fine PM2.5 particulate matter in the city.



According to IIT-D's analysis, if pre-emptive measures were effectively implemented, the pollution levels in Delhi could have been brought down by about 20%. (PTI Photo )

The Indian Institute of Technology (IIT), Delhi, in its bimonthly forecast meant to allow authorities to prepare an effective action plan to combat air pollution in the national capital, warned the Union and Delhi governments in the first week of October that an increase in stubble-burning would push the air quality in the region to hazardous levels between November 1 and November 15.

In the report to the Central Pollution Control Board (CPCB) accessed by HT, the IIT scientists said, "Stubble burning will remain a primary pollution contributor, along with Delhi's own sources. Control of unpaved roads, industrial emissions and plying of heavy commercial vehicles (HCVs) in sensitive zones will be important."

Scientists at IIT-Delhi said that stubble burning in the neighbouring states of Punjab and Haryana was forecasted as a "background concentration" to the ultra-fine PM2.5 particulate matter in the city.

This means that even if all the local sources of pollution in Delhi are completely shut down, emission from crop residue burning in the neighbouring states will keep the city's air quality in the "poor zone".

But with the Centre, and the state governments of Delhi, Punjab and Haryana unable to act on the warning to control farm fires, data from System of Air Quality and Weather Forecasting and Research (SAFAR), affiliated to the Union ministry of earth sciences, shows that the contribution from stubble-burning in Delhi's air on November 1 was 46%. On Tuesday, when the Air Quality Index (AQI) of Delhi was 425, according to the CPCB's 4pm bulletin, the share of farm fires on Delhi's PM levels was nearly 25%.

Till Monday, 48,155 cases of stubble burning were reported from Punjab, and 5,920 from Haryana. Along with the slow speed of winds at the ground level in Delhi, the change in wind direction from easterly to northwesterly has been carrying the toxic smoke from parts of Punjab and Haryana to the Capital.

IIT-Delhi's Centre of Excellence for Research on Clean Air was mandated this January to create bimonthly action plans for CPCB to help the agency - and by extension the Union and state governments - to identify the most polluted areas and the key sources likely to cause air quality to worsen over the fortnight, so that pre-emptive action can be taken.

Mukesh Khare, professor at IIT-Delhi and coordinator of the Centre of Excellence for Research on Clean Air, said that even though CPCB was being informed of the air quality forecast in advance, effective action was not possible on ground mainly because of the lack of coordination between the agencies.

"The effectiveness of this is ultimately on the implementation. Even CPCB has to depend on enforcement agencies to act on time. For instance, to control road dust (water) sprinkling has to happen at the right time but that is the job of the municipalities," Khare said.

According to IIT-D's analysis, if pre-emptive measures were effectively implemented, the pollution levels in Delhi could have been brought down by about 20%. The Environment Pollution (Prevention and Control) Authority (EPCA) had also implemented a slew of measures under the Graded Response Action Plan (Grap) from October 15 this year. However, despite these plans, there has been no major improvement in the air this year -- leading to several experts questioning the effectiveness of Grap and describing it as "reactive" rather than "pro-active"

A senior CPCB official, who asked not to be named, said that, being a central body, it has to rely on state governments and local civic bodies to implement the action plan.

"CPCB cannot go around every road with water tankers and sprinkle water. We need cooperation from agencies, only then the forecast system will yield the desired results," the official said.

Delhi's environment minister Kailash Gahlot said that the Centre and the state governments of Punjab and Haryana are not serious about controlling the problem of farm fires.

"Even if they did not pay heed to warnings, at least they could have done something when the fires actually began. They are not doing anything. I have written letters to the Union environment ministers and the chief ministers of Punjab and Haryana to help distribute harvesting machinery to farmers, which will automatically control this problem," said Gahlot.

"Everything that was advised under IIT's action plan was communicated to respective governments and a lot of work was done on the ground. The issue of air pollution should not be politicised," said Bhure Lal, chairperson EPCA.

D Saha, former head of the air quality lab of CPCB, said Delhi-NCR was receiving around 37% transported dust, apart from local dust generated due to poor land use planning, congestion and improper traffic management. "The administrative and regulatory measures are not uniform. Nothing can be achieved in isolation. Experts, government agencies and people — everyone has a role to play," Saha said.



November 13, 2019 <https://www.aninews.in/news/national/general-news/delhi-drdo-organises-workshop-to-leverage-academic-expertise-increase-synergy-with-academia20191113165651/>



*DRDO has already established eight technology centres in various universities in order to undertake targeted advanced research.*

## **Delhi: DRDO organises workshop to leverage academic expertise, increase synergy with academia**

ANI | Updated: Nov 13, 2019 16:57 IST

New Delhi [India], Nov 13 (ANI): With an aim to leverage academic expertise from across the country and increase synergy with academia, a workshop titled 'DRDO-Academia Interaction for Achieving Leadership in Future Technologies (/search?

query=DRDO-Academia Interaction for Achieving Leadership in Future Technologies)' was held at DRDO Bhawan (/search?query=DRDO Bhawan) here on Wednesday.

"Defence R&D (research and development) has a huge potential to absorb innovation, which is not limited to R&D organisations alone but can sprout from any corner of the country. This workshop is one of the multi-pronged approaches, where defence R&D should obtain a special status in the overall scheme of things," said DRDO in a statement.

Speaking on the occasion, Secretary Department of Defence Research & Development (DDR&D) and Chairman DRDO Dr G Satheesh Reddy, stressed the need for directed research in specialised defence areas like advanced propulsion, terahertz technologies, advanced robotics, cyber technologies, quantum technologies, smart materials, etc., for future preparedness.

"He said the DRDO is ready to bring out more models of engagement for enabling academia participation in mainstream defence R&D. He also proposed that models of engagement need to be worked out with accountability from both sides for increased technological output and its utilization into defence products," the statement said.

Defence Minister Rajnath Singh also conveyed his appreciation to the DRDO for the effort to strengthen ties between academia and defence R&D and stressed that sustained efforts are required for utilising academic expertise for futuristic defence applications.

Various ideas were discussed during the workshop to explore new horizons of collaboration so that research directly contributes towards the defence products and applications.

Also present at the event, Human Resource and Development (MHRD) Ministry Secretary (Higher Education) R Subramanyam stressed the need for an eco-system and effective synergy between all stakeholders for accelerated development of critical technologies and proposed a joint task force to evolve a way ahead.

Additional Secretary at MHRD Rajesh Sarwal, Directors of IIT Delhi, Jodhpur, Varanasi, Palakkad, Guwahati; Directors of NIT Jaipur, Bhopal, Calicut, Delhi and Kurukshetra; Vice-Chancellors of UoH, Jadavpur University, Mizoram University, Bharathiar University attended the function.

Several senior officials from DRDO and representatives of heads of other eminent academic institutes were also present during the deliberations.

DRDO has already established eight technology centres in various universities in order to undertake targeted advanced research on the topics of special interest for conceiving and realising futuristic defence applications. (ANI)

## **GATE 2020 application correction for specific sections to begin after November 20**

**November 13, 2019** <https://www.jagranjosh.com/news/gate-2020-application-correction-for-specific-sections-to-begin-after-november-20-152236>

**GATE 2020**  
GRADUATE APTITUDE TEST IN ENGINEERING

**GATE Online Application Processing System (GOAPS)**

Home GATE 2020 FAQs Login

**Register Here**

Information Brochure

Documents For Application

Important Dates

Eligibility

FAQs

Important Notice

**Login, If Already Registered**

Enrollment ID / Email Address

Enter Enrollment ID sent during registration / Email ID

Password

Enter your GOAPS password. (Case Sensitive)

$1 + 6 =$

Evaluate this arithmetic expression and place the value below

Evaluate this arithmetic expression and place the value here

Indian Institute of Technology, Delhi will be opening the web portal for candidates to make changes in the GATE application form soon. As per the notification provided on the official website of GATE

2020, the web portal to make the necessary changes will be opened after November 20, 2019. Candidates, however, must note that the correction window for making minor corrections in sections like name, father's name, college name, etc is already live and the same can be accessed through the login portal.

According to the notification provided on the official website, the candidates who have applied for GATE 2020 will be able to make the changes in the examination city, examination paper, gender and category sections of the GATE 2020 application form.

Candidates who have applied for GATE 2020 and wish to make the above-mentioned changes in the GATE 2020 application form can visit the application portal for GATE 2020 to make the requisite changes. The application correction link will be provided on the official website [gate.iitd.ac.in](http://gate.iitd.ac.in). A direct link will also be provided when the web portal for the application corrections are open online.

In order to make the changes in the different categories of the GATE 2020 application form candidates are to login using the login credentials in the application correction link. It must also be noted that an additional fee will be applicable for the corrections made.

IIT Delhi recently released the mock test link for GATE 2020 candidates. The students appearing for GATE 2020 can visit the official website and click on the mock test link provided to take the GATE 2020 mock test. The mock tests are available for the different GATE 2020 subjects. Candidates can take the GATE 2020 mock test through the direct link provided below.

[Direct Link for GATE 2020 Mock Test](#)

As per the official schedule provided, GATE 2020 will be conducted on February 1, 2 8 and 9, 2020. The admit card for the GATE 2020 February Examination will be released online on January 3, 2020.

### **How bad is indoor air? IIT Delhi to study 10 public spaces**

<https://www.hindustantimes.com/education/how-bad-is-indoor-air-iit-delhi-to-study-10-public-spaces/story-QnKsea86wCC5jebw6YX6VJ.html>

People spend at least 60% of their time indoors, increasing exposure to particles and risk of respiratory illness.



Potential threat of high indoor pollution levels is mainly owing to poor ventilation and lighting, high ambient air pollution, among others.

Soon, the national capital will have an estimate of pollution levels in indoor public places with a high concentration of people such as schools, colleges, residential colonies, hospitals, Metro stations, malls, markets and multiplexes, among others.

The Indian Institute of Technology (IIT)-Delhi's Centre of Excellence for Research on Clean Air (CERCA) has started a pilot study of 10 such micro-environments across the city to measure real-time concentration of particulate matter (PM)<sub>2.5</sub> – the most harmful pollutant — prolonged exposure to which could lead to respiratory illnesses.

“We have identified six sites under each micro-environment, which means levels of different pollutants will be measured across 60 different locations across the city. We will examine outdoor/indoor ratio of pollution levels in these micro environments, so that based on the outdoor pollution level, we can predict the indoor concentration. The sites have been chosen keeping in mind their high footfall, and are mostly in low and middle-income group areas. There will be a mix of government and private institutions,” Sagnik Dey, associate professor, Centre for Atmospheric Sciences, and coordinator, CERCA, said.

The other parameters that will be studied include PM<sub>10</sub>, carbon dioxide and volatile organic compounds (VOCs). Pollutants like CO<sub>2</sub> and VOCs are mostly higher indoors, he said.

Until now, no such assessment has been done in places where people spend at least 60%-70% of their time and, therefore, have heightened exposure. The study has already started at two sites.

“In the first phase, we will just study the PM levels through calibrated portable remote sensors to get a snapshot on how these places fare in terms of PM concentrations. In the second, we will probe deeper into the reasons behind these concentrations and make suggestions on what could be done,” Dey said.

The potential threat of high indoor pollution levels is mainly owing to poor ventilation and lighting, high footfall, high ambient air pollution, use of carpets, cleaning agents and lack of good sanitation practices, experts said.

The project proposes to collect data from each of the 60 sites by monitoring air quality during two peak pollution windows in the capital — from mid-October to mid-November, and mid-December to mid-January.

A model will be developed to estimate indoor pollution. This estimate could be used to advise people to vacate such places, if needed, for a particular duration.

“Based on the analysis, we will present our suggestions to the government as well as the CPCB (Central Pollution Control Board),” Dey said. The study is being taken up in collaboration with Society for Indoor Environment and is part of the overall projects being taken up by IIT-D for devising effective solutions to air pollution.

D Saha, former head of CPCB air laboratory, said, “Indoor air quality is much more important in comparison to outdoors, as the level of concentration, in particular of VOCs, is higher, as there is no

exchange with the natural air. Outdoors, the air is constantly renewed and the pollutants keep getting dispersed.”

## **IIT Delhi bags Rs. 765 crore of research projects**

**November 7, 2019** <https://www.livemint.com/education/news/iit-delhi-gets-research-projects-worth-rs-765-crore-in-two-years-11573109168241.html>

According to IIT Delhi, the growth in research projects and its value is much higher than what it used to be a few years back

One of the biggest research projects it is pursuing is in the field of enhancing India's science, technology and innovation policy

Leave aside the Rs. 250 crore endowment fund it announced last week, the Indian Institute of Technology in Delhi (IIT Delhi) has bagged Rs.765 crore of research projects in last two years.

This is a significant jump than what it used to get earlier. As per official data of the institution, the research and consultancy projects of IIT Delhi have been on a rise. For example, while it took up 158 research projects in 2016-17, in 2017-18 the elite engineering school undertook 282 projects. In 2018-19 this number of research projects went up to 317 research and consultancy assignments. The same year, the school did some 290 consultancy projects too.

The research and consultancy projects are either received from different government bodies or industries on issues that they seek a solution to.

“We are doing good and our research output is significantly higher. We shall continue to increase research individually and with like minded institutions like All India Institute of Medical Science (AIIMS),” said IIT Delhi Director V. Ramgopal Rao.

According to IIT Delhi, the growth in research projects and its value is much higher than what it used to be a few years back. For example in 2015-16 the school did 136 research projects worth only Rs. 72.4 crore.

Rao said the school is going for interdisciplinary research within the campus as well as outside its boundary. While IIT Delhi is now pursuing 59 interdisciplinary researches within its campus, it is pursuing 47 projects in collaboration with AIIMS in the field of medicine and bio medicine. Similarly, some 10 research projects are going on in agriculture space in collaboration with Indian Council of Agricultural Research.

One of the biggest research projects it is pursuing is in the field of enhancing India's science, technology and innovation policy at a cost of Rs. 50 crore funded by the Tata Education and Development Trust. Research projects on nano-electronic network, and 5G telecom service are other two key projects it bagged from government of India.

Even on academic side, the IIT Delhi is now focusing more on post graduate and doctorate course than undergraduate courses. In the last three years more than 1000 Ph.D scholars have passed out of IIT Delhi. At present 2,833 research scholars are pursuing their Ph.D degrees at IIT Delhi as per official data which is nearly 30% of the total enrollment in the institution, as per official data.

## How IIT-Delhi is trying to combat air pollution with tech solutions

November 5, 2019 <https://indianexpress.com/article/education/how-iit-delhi-with-its-technological-solutions-trying-to-combat-air-pollution-iitdelhi-ac-in-6104600/>

**With the establishment of Centre of Excellence for Research on Clean Air (CERCA) in February, 2018, the institute has come up with devices to combat polluted air.**

The Indian Institute of Technology, Delhi (IIT-Delhi) has devised technological solutions to combat air pollution in the country. With the establishment of Centre of Excellence for Research on Clean Air (CERCA) in February 2018, the institute has come up with devices to control polluted air.

The cost-effective devices, as per a release by IIT-Delhi, can provide temporary relief from air pollution in the national capital and other states of north India. One such device, the Chakr Shield, helps to convert pollutants to ink that can be used for drawings. The retrofit device by the IIT Delhi alumni can trap 90 per cent of particulate matter in the exhaust, thus reducing the pollution caused by the diesel generators.

Meanwhile, the Nasofilter, which was designed in 2017, can protect users from air pollutants, including PM 2.5 particles, and reduce the risk of respiratory diseases.

The start-ups by the alumni, students and teachers received the 'Startup National Award' 2017 by former President Pranab Mukherjee, and also made it to the South Korean government's list of 'Top 50 technical startups in the world'.

## IIT Delhi holds its 50th Annual Convocation; More than 2000 graduating students awarded degrees

November 3, 2019 <https://indiaeducationdiary.in/iit-delhi-holds-its-50th-annual-convocation-more-than-2000-graduating-students-awarded-degrees/>



Indian Institute of Technology (IIT) Delhi held its 50th Annual Convocation Ceremony on 02nd November 2019. Dr. K Sivan, Chairman, ISRO was the Chief Guest on this occasion.

To mark the 50th Convocation Ceremony of IIT Delhi, a commemorative postage stamp and a special cover was released today.

The Convocation 2019 witnessed award of degrees to 2042 graduating students (1217 Post Graduate and 825 Under Graduate).

<b>S. No</b>	<b>PG Programmes</b>	<b>UG Programmes</b>
1.	Ph. D 331	5-Year Dual Degree Programme (B. Tech and M. Tech) 102
2.	M.S. (Research) 31	5-year Integrated M. Tech in Mathematics and Computing 04
3.	M. Tech 505	4-Year B. Tech 704
4.	M. Des 15	Undergraduate Diploma 06
5.	MBA 162	M. Tech (Under Advance Standing) 09
6.	PG Diploma (Naval) 31	
7.	M.Sc. 138	
8.	DIIT 04	
	<b>Total 1217</b>	<b>Total 825</b>

Addressing the graduating students on the occasion, Dr. K Sivan, ISRO, Chairman said, "I am an alumni of IIT-Bombay and from my own personal experience, I can say that IITs are the holy grail of technical education in India. And I am sure that you all will continue the glorious tradition of Delhi as well as that of IIT-ans who have excelled in every field they have worked."

He added, "When I graduated, more than 3 decades back, the job scenario was not as vibrant as today. Area of specialization limited the career options. Today, the options are many. There is an added volatility, uncertainty, complexity, and ambiguity about the global economy. However, you all are much smarter and aware about these scenarios than the older generations. Nevertheless, remember, you are unlikely to fall into your dream career or create a successful business simply by wishing for it. Here you have to be pragmatic in your approach and learn from the experience of the older generation.

Keep in mind that, there is only one life and there are many career options. You all need to identify your passion & natural talent and align your career. Choose an industry that reflects your passion and interests. Rather than choosing a job for money, choose it for your happiness. Be good at what you do. Remember, passion is not the only ingredient needed for success. You also need skills and strengths."

Prof V. Ramgopal Rao, Director, IIT Delhi while presenting the Director's report said, "On the inter-disciplinary research front IIT Delhi has entered into MoUs with All India Institute of Medical Sciences (AIIMS), National Institute of Immunology (NII), Indian Council for Agriculture Research (ICAR), five CSIR labs and the All India Institute of Ayurveda. 95 new funded projects under the faculty interdisciplinary research programme have been sanctioned between faculty within the Institute and with the faculty from AIIMS, ICAR, and NII etc. IIT Delhi is also taking major steps to connect with the Industry."

Prof Rao added, "The research output of the Institute has shown significant enhancement due to



different initiatives fostering interdisciplinary collaborations within the Institute as well as with other institutions. In comparison to the average research funding of about Rs 100 Cr per year in the period from 2014-16, the research funding has shown four times increase to about Rs 380 Cr per year in the period 2017-18 and 2018-19. About 300 new research projects and 290 industry consultancy projects have been undertaken in the year 2018-19 alone. The number of new research projects initiated per year has increased two times. We are expecting our sponsored R&D funding per year to cross Rs 500 cr in the next one or two years.”

On the occasion of the 50th Convocation of the Institute, IIT Delhi and ISRO have signed an MoU to jointly set up ISRO Space Technology Cell at IIT Delhi. The MoU was signed today by Dr K Sivan, Chairman, ISRO and Prof V. Ramgopal Rao, Director, IIT Delhi.

Dr Sivan, Chairman, ISRO said, “I am very happy to be here in IIT Delhi to sign the MoU for establishing a new Space Technology Cell. I appreciate the interest taken by IIT Delhi for establishing the Cell here.”

Prof Rao, Director, IIT Delhi said, “IIT Delhi and ISRO have signed an MoU for the creation of a Space Technology Centre at IIT Delhi for strengthening research collaborations between the two organisations. With this collaboration IIT Delhi would like to be part of some of the key initiatives by the ISRO. We would like to work with ISRO closely. All of us working together will only put our nation ahead of others in space technologies.”

The Cell will work for carrying out focused research projects in the space technology domain with specific deliverables. It is also proposed that IIT Delhi as an Institute becomes academic partner of ISRO in research areas for example AI, nanotechnology, functional textiles, smart manufacturing or any area of joint interest.

On the occasion of the Convocation Ceremony 2019, President’s Gold Medal was awarded to Mr Kacham Praneeth (B. Tech in Computer Science & Engineering).

Director’s Gold Medal was awarded to Ms Mallika Singh (B. Tech in Biochemical Engineering & Biotechnology) and Dr Shankar Dayal Sharma Gold Medal to Ms. Himakshi Barsiwal (M. Tech in Chemical Engineering).

**List of Perfect Ten Gold Medalists:**

1. Mr Arka Mukherjee – MS (R) in Bharti School of Telecommunication Technology & Management
2. Mr Deepesh Kumar Gautam – M. Tech in Industrial Tribology & Maintenance Engineering
3. Ms Ankita Pramanick – M. Tech in Fibre Science & Technology
4. Ms Diksha Gupta – M. Tech in Water Resources Engineering

**List of Silver Medalists:**

1. Mr Utkarsh Sinha – B. Tech and M. Tech in Chemical Engineering
2. Mr Abhinav Kumar Shukla – B. Tech and M. Tech in Biochemical Engineering and Biotechnology
3. Mr Vaibhav Bhagee – B. Tech and M. Tech in Computer Science & Engineering
4. Mr Raunak Lohiya – B. Tech and M. Tech in Mathematics & Computing
5. Mr Rahul Khetan – B. Tech in Biochemical Engg & Biotechnology

6. Mr Harman Singh – B. Tech in Civil Engg.
7. Ms Urvashi Gupta – B. Tech in Chemical Engg
8. Ms Narayani Bhatia – B. Tech in Electrical Engg
9. Ms Prakhar Agrawal – B. Tech in Electrical Engg, Power Automation
10. Mr Paras Gupta – B. Tech in Mechanical Engg.
11. Mr Krishnaanu Syal – B. Tech in Production & Industrial Engg
12. Mr Summet Khandelwal – B. Tech in Mathematics & Computing
13. Mr Vishnu Raghuraman – B. Tech in Engineering Physics
14. Ms Jessica – B. Tech in Textile Technology

The 50th Annual Convocation ceremony also witnessed IIT Delhi honouring its esteemed alumni with Distinguished Alumni Award 2019 and Distinguished Alumni Service Award 2019.

**Distinguished Alumni Awards were presented to:**

1. Prof. Srinivasan Keshav, Cheriton School of Computer Science at the University of Waterloo for his outstanding contributions in Teaching & Research.
2. Dr. Mohit Aron, Founder and CEO of Cohesity for outstanding contributions made in Entrepreneurship.
3. Mr. Binny Bansal, Co-Founder, Flipkart for outstanding contributions made in Entrepreneurship.

**Distinguished Alumni Service Award 2019 were presented to:**

1. Mr. Arun Duggal, currently Chairman of ICRA Ltd., Mangalore Chemicals & Fertilizers Limited and International Asset Reconstruction Company for significant efforts and contributions made towards the development and progress of the institute.
  2. Founder, Chairman and Managing Director of the Bakshi Group, Mr. Amarjit Singh Bakshi, who is a Delhi based business conglomerate and a first-generation entrepreneur for significant efforts and contributions made towards the development and progress of the institute.
- There were also eight Guests of Honour who graced the Convocation Ceremony 2019 with their presence.

Guests of Honour include: Mr Raghu Hari Dalmia, President, OCL India Ltd.; Dr Seema Vinayak, Director, SSPL, DRDO; Mr Sunil Bhaskaran, CEO, Air Asia; Shri MS Unnikrishnan, CMD, Thermax; Mr Thomas Varghese, Business Head-Textiles, Acrylic Fibre, Overseas Spinning, Aditya Birla Group; Dr Ashvini Kumar, Sr Director, Former MD, Solar Energy Corporation of India Ltd; Dr Manish Gupta, Head, AI Lab, Google India; Prof Ritabrata Munshi, Indian Statistical Institute, Kolkata.

## At the age of 77, retired engineer gets PhD from IIT-Delhi

November 3, 2019 <https://www.hindustantimes.com/education/at-the-age-of-77-retired-engineer-gets-phd-from-iit-delhi/story-iKIZCb3yuelcTszbbsGGuN.html>

Sushil Kumar Dhawan was among the 2,042 students who were awarded degrees during the convocation on Saturday, where ISRO Chairperson K Sivan was the chief guest.



Sushil Kumar Dhawan , a visiting professor at IIT-D's department of civil engineering, is one of the eldest persons to get a PhD from the institute in the recent past.(Sourced)

The air filled with enthusiasm when 77-year-old Sushil Kumar Dhawan was awarded with his PhD degree. The occasion was the 50th annual convocation of the Indian Institute of Technology in Delhi (IIT-D) on Saturday.

Dhawan, a visiting professor at IIT-D's department of civil engineering, is one of the eldest persons to get a PhD from the institute in the recent past.

A former chief engineer at the central public works department (CPWD), Dhawan wrote his thesis on "Expected remaining life of existing reinforced concrete building structures". "After retiring from CPWD in 2003, it took me 10 years to think what to do next. I did not want to sit at home. I wanted to enhance my knowledge. I then joined PhD at IIT-D in 2013. And, now finally I have earned the prefix 'doctor' for my name. It's like a dream comes true," he said.

During his tenure at CPWD, he worked on several important construction projects, including Delhi Police Headquarters at ITO, Maulana Azad Medical College and Ministry of Environment building, he said.

Dhawan was among the 2,042 students who were awarded degrees during the convocation on Saturday, where ISRO chairperson K Sivan was the chief guest.

Born in 1942 in a small village of the Punjab province in Pakistan, Dhawan's family migrated to India during Partition. "I had to take the job at very early age due to financial problems. After schooling, I

could not join a good college and that's why I did vocational diploma course from Industrial Training Institutes (ITI) Pusa in Delhi. In 1961, I started working as draughtsman with CPWD. But the dream of studying from a better college was still unfulfilled," he said.

Dhawan wanted to enhance his knowledge and did multiple graduate and postgraduate degrees during his journey to become a PhD scholar. "I did not give up. I wanted to learn more and that's why started preparing for Associate Member of The Institution of Engineers (AMIE) exam along with my work. I cleared the exam and became graduate junior engineer in 1965. I cleared the Indian Engineering Services of Union Public Service Commission exam in 1971 to become Class 1 officer," he said.

He did Masters in Management of Urban Development from Birmingham University (United Kingdom) with the help of a Commonwealth scholarship in 1987-88.

IIT-D signed a memorandum of understanding (MoU) with ISRO on Saturday for the creation of a Space Technology Centre at its campus.

Speaking on the occasion, IIT-D Director V Ramgopal Rao said, "IIT Delhi and ISRO have signed an MoU for strengthening research collaborations between the two organisations. With this collaboration, IIT Delhi would like to be part of some of the key initiatives by the ISRO and together will only put our nation ahead of others in space technologies."

## **IIT Delhi Selects Cohesity Founder and CEO Mohit Aron for the 2019 Distinguished Alumni Award**

**November 2, 2019** [https://m.oaoa.com/news/business/article\\_b493b79a-5102-5414-a68b-eae6140d4512.html?mode=jgm](https://m.oaoa.com/news/business/article_b493b79a-5102-5414-a68b-eae6140d4512.html?mode=jgm)

Cohesity today announced that Dr. Mohit Aron, founder and CEO of Cohesity, has received the Distinguished Alumni Award from the Indian Institute of Technology Delhi (IIT). Aron was selected for the award based on outstanding contributions made in entrepreneurship, including founding Cohesity, co-founding Nutanix, and being recognized as "the father of hyper convergence."

IIT Delhi is a leading technology university in India and the excellence of its coursework, faculty, and alumni are recognized globally. Aron received his Bachelor of Science in computer science from IIT Delhi in 1995 and continued his studies at Rice University where he received a Ph.D. in computer science with a focus on distributed systems. Aron went on to serve as one of the lead developers on the Google File System. He co-founded Nutanix in 2009 and started Cohesity in 2013.

Under Aron's leadership, Cohesity is disrupting the data management market, employs more than 1,300 people globally, is recognized as a Leader by independent research firms and organizations globally, and was recognized as a "technology pioneer" by the World Economic Forum.

"I am honoured to be recognized by IIT Delhi for such a distinguished award. My experience at IIT Delhi has shaped who I am today. I continue my relationship with the IIT community as a way of giving back and hoping to inspire students to take on the big challenges that can help change the world," Aron said. "IIT Delhi is a tremendous asset to India and the world as a foundation for

innovators and entrepreneurs. At IIT, I learned to persevere in the face of challenging work. I also realized how important it is to keep learning throughout life, and that is why I introduced a cultural guideline for all employees at Cohesity: be humble, keep learning.”

“Dr. Aron was selected because of his impressive accomplishments as an entrepreneur and innovator, founding two successful companies, Nutanix and Cohesity,” said Prof V. Ramgopal Rao, director, IIT Delhi. “His drive, vision, and focus on taking on big challenges that can improve our lives set a stellar example for our students, alumni, and entrepreneurs everywhere.”

“This year’s recipients of the Distinguished Alumni Award continue to represent the rich tradition of entrepreneurship that exists among IIT Delhi alumni,” said Professor Sanjeev Sanghi, dean of alumni affairs and international programmes, IIT Delhi. “Over 50 percent of the Indian or Indian-origin unicorn founders are graduates of IIT Delhi.”

## **IIT-Delhi turns 50: Chandrayaan-2 not end of story says ISRO chief K Sivan**

**November 2, 2019** <https://www.hindustantimes.com/education/iit-delhi-turns-50-chandrayaan-2-not-end-of-story-says-isro-chief-k-sivan/story-e0emNq38PwMKxjb1q5HtaK.html>

The Indian Space Research Organisation will put in all efforts to demonstrate soft landing in space in the near future and Chandrayaan-2 is not the end of story, ISRO Chief K Sivan said on Saturday.



ISRO Chairman D Sivan addresses at the 50th convocation of Delhi IIT, New Delhi(PTI).

The Indian Space Research Organisation will put in all efforts to demonstrate soft landing in space in the near future and Chandrayaan-2 is not the end of story, ISRO Chief K Sivan said on Saturday.

He said a large number of advance satellite launches are planned in the coming months.

“You all have heard about Chandrayaan-2 mission. On the technology part – yes, we could not achieve soft landing, but all the systems functioned until 300m from Moon’s surface. Very valuable data is available to set things right. Let me assure that ISRO will pull all its experience, knowledge and technical prowess to set things right and demonstrate soft landing in near future,” Sivan said in his address at the golden jubilee convocation of IIT Delhi.

“Chandrayaan-2 is not the end of story. Our plans on Aditya L1 solar mission, human spaceflight programme are on track. A large number of advance satellite launches are planned in the coming months. SSLV will make its maiden flight sometimes in December or January. Testing of 200 ton semi-cryo engine is expected to begin shortly. Work is on to provide NAVIC signals on mobile phones, which will open the path to develop large number of applications for societal needs,” he added.

Asserting that IITs are the “holy grail” of technical education in India, Sivan said when he graduated from IIT Bombay more than three decades ago, the job scenario was not as vibrant as today.

“Area of specialisation limited the career options. Today, the options are many. There is an added volatility, uncertainty, complexity, and ambiguity about the global economy. However, you all are much smarter and aware about these scenarios than the older generations,” he said.

The ISRO chief advised the students to chose the career options wisely.

“Keep in mind that, there is only one life and there are many career options. You all need to identify your passion and natural talent and align your career. Choose an industry that reflects your passion and interests. Rather than choosing a job for money, choose it for your happiness. “Be good at what you do. Remember, passion is not the only ingredient needed for success. You also need skills and strengths. You might be passionate about music or cricket. But, do you have the talent and skill set to become successful in extremely competitive fields like music or sports?,” he said.

One does not need to be a topper, super genius or have excellent grades to achieve a successful career, Sivan said.

“To be successful in your career, academics or business, you need not be super intelligent or a genius. You need not be the topper, you need not have excellent grades. All you need is focus by eliminating distractions and time-wasting activities,” he said.

“And for god’s sake, don’t be a copycat. Just because, it is fashionable to be a stand-up comedian, can you be a comedian? The trick is to strive the right balance between what you love and what you are good at. You can always be passionate about music and be a competent engineer, together ,” he added.

Before the convocation address, the ISRO chief signed an MoU with IIT Delhi for setting up a Space Technology Cell (STC) at the institute.

With this, IIT Delhi will join the league of other premiere institutions like IISc Bangalore, IIT Bombay, etc. where the STCs have been set up to play a major role in taking up the space technology research and applications to the newer heights.

A total of 1,217 postgraduate and 825 undergraduate students were awarded degrees at the convocation besides the distinguished alumni awards.

## President launches IIT Delhi's Rs.250 crore alumni endowment fund

November 2, 2019 <https://www.thehindu.com/news/cities/Delhi/president-launches-iit-delhis-250-crore-alumni-endowment-fund/article29861354.ece>



The initial endowment amount for IIT Delhi's fund have been collected from around two dozen alumni.

### Nearly half of the amount will come from Flipkart co-founders

President Ram Nath Kovind launched the Indian Institute of Technology Delhi global alumni endowment fund on Thursday that will have an initial commitment of more than ₹250 crore, nearly half of which will come from Flipkart co-founders.

For the fund with an initial seed capital of ₹255 crore, IIT Delhi has set an aggressive target of raising ₹1,000 crore by 2020 and ₹7,000 crore by 2025, according to IIT officials.

“Endowments globally have become integral to the financial health of educational institutions overtime. While we are still far from the size and importance of endowment funds of institutions such as Harvard, Yale or Columbia, it is the right first step in this direction. By giving through endowments, alumni are not just giving to their institution but also supporting and nurturing future generations of learners,” President Kovind said while launching the fund at Rashtrapati Bhavan.

The President said the best way to honour a gift is to make the most of it.

“In the latest QS World University ranking 2020, IIT Delhi was ranked at 182. There is a lot of scope for improvement if it aims to be one of the top institutes in the world. It needs to increase the number of faculty, particularly faculty with international experience. Additionally, it needs to upgrade its infrastructure to ensure its campus, course content and research facilities are completely world class,” he said.

The initial endowment amount and commitments have been collected from around two dozen alumni, who are committing between ₹5 crore and ₹25 crore each, except Flipkart co-founders Binny Bansal and Sachin Bansal who have contributed ₹125 crore, the IIT officials said.

## **IIT-Delhi to partner Isro for setting up a space research cell**

**November 2, 2019** <https://timesofindia.indiatimes.com/city/delhi/iit-delhi-to-partner-isro-for-setting-up-a-space-research-cell/articleshow/71861797.cms>

IIT-Delhi is all set to start a space research cell in collaboration with Isro. The institute has also sent a proposal to Isro to become its academic partner. Isro is expected to give grants every year for research in space programme for the next five years.

The institute will be conducting its 50th convocation on November 2 in which 1,217 postgraduate and 825 undergraduate students will be awarded degrees. A commemorative postal stamp will also be launched on the day.

V Ramgopal Rao, IIT-Delhi director, said, "Our Billion Dollar Endowment drive was inaugurated by the President on October 31 at Rashtrapati Bhavan with an initial commitment of Rs 255 crore by our alumni. We are also in the process of building professional teams for raising funds. The endowment fund board and alumni will decide on the utilisation of the funds."

Rao said the endowment fund board is a first of its kind in the country. "By the end of next year, we expect to generate Rs 1,000 crore. We will invest the money and rope in the government for the purpose. Our target is a billion dollars (Rs 7,000 crore) by 2025," the director said. IIT will be starting two new masters courses in cognitive science and economics, a bachelor's course in design and an MSc in electric vehicles. "We have started six new academic entities in the last two years to realign our research focus with modern trends and national requirements," Rao said.

BR Mehta, dean of research and development, said, "We have 45 student start-up projects and industry has been involved to give technical support."

## **From next year, NIT students to get direct admission for PhD in IIT Delhi**

**November 1, 2019** <https://theprint.in/india/education/from-next-year-nit-students-to-get-direct-admission-for-phd-in-iit-delhi/314705/>

NIT students will have to score a CGPA of 8 by the end of their third year to sit for an interview at IIT-Delhi.

Students from the National Institutes of Technology (NIT) will soon be able to join the Indian Institute of Technology (IIT), Delhi, in the final year of their B.tech course and continue studying there for their PhD. The new admission policy of IIT-Delhi will be implemented from the academic session 2020-21.

While the students will get their B.Tech degrees from the respective NITs, they will be enrolled for a PhD in the IIT. The announcement was made Friday by IIT-Delhi Director V. Ramagopal Rao.

NIT students will have to score a CGPA (cumulative grade point average) of 8 by the end of their third year to be able to sit for an interview, which will be the deciding factor for admission into the PhD course. Selected students will be able to take admission in PhD directly without a GATE score.

CGPA is the average of grade points obtained for all semesters and courses completed up to a given academic term.



Explaining the procedure, Rao said, “NIT students, who have a CGPA of 8 and above in their third year and are interested in research will be able to get direct admission in IIT Delhi for completing their final year here. After that, they can continue to pursue their PhD in the institute.”

### **For an improved culture of research**

The idea of getting NIT students into IITs has been discussed for the past one year. In one of the recent meetings of the IIT Council, the initiative was again debated, following which IIT-Delhi decided to implement the new admission policy.

Other IITs are also likely to integrate NIT students soon. MoUs will have to be signed between IITs and NITs to facilitate this exchange of pupils.

“The idea behind getting NIT students into the IIT is to improve the research culture. We want students who have the potential for research to join our institute. The NITs also get benefitted from this because their students get direct admission in PhD,” said Sandeep Chatterjee, registrar of IIT-Delhi.

Students will be required to spend a minimum of six months or complete a project with the IIT during their last year of B.Tech before they can start with their PhD programmes.

There are 31 NITs across India, which are often considered to be a rung lower to the IITs when it comes to quality research and infrastructure.

### **IIT Delhi researchers developing technology for rapid diagnosis by reducing antibacterial resistance**

**November 1, 2019** <https://www.indiatoday.in/education-today/news/story/iit-delhi-researchers-developing-technology-for-rapid-diagnosis-by-reducing-antibacterial-resistance-1614642-2019-11-01>

***The research team will focus on 4 major pathogens (Staphylococcus aureus, Klebsiella pneumonia, Acinetobacter baumannii, Pseudomonas aeruginosa) that are often resistant to antibiotics in Indian clinical settings.***

Researchers at IIT Delhi are working on a technology to devise diagnostic solutions for combating the problem of antimicrobial resistance to enable rapid diagnosis of bacterial infection and guide clinical decision making.

According to the team at IIT, the research will greatly reduce the unnecessary use of antimicrobials in diagnostic tests and minimise the development of resistance as currently there is a big knowledge gap in microbial resistance biology and the availability of biomarkers and technology for rapid diagnostics.

#### **Here's what IIT professor Vivekanandan Perumal said:**

*"Antibacterial resistance is now widely recognised as the biggest healthcare problem of this century. Due to limitations in the current microbiological methods, it is estimated that more than two-thirds*

*of antibiotic prescriptions are unnecessary and are empirical in nature. This practice is a major cause of the emergence of AMR and its rapid spread in the last decade," said IIT professor Vivekanandan Perumal, who is the Principal Investigator (PI) of the project.*

*"Although the requirement of rapid pathogen identification and methods for antimicrobial susceptibility testing (AST) are well recognized, major limitations include the knowledge gaps in understanding the genomic signatures and their correlation with Antimicrobial Resistance (AMR)," he added.*

#### **Antibacterial resistance:**

The research team will focus on 4 major pathogens (Staphylococcus aureus, Klebsiella pneumonia, Acinetobacter baumannii, Pseudomonas aeruginosa) that are often resistant to antibiotics in Indian clinical settings.

#### **Objectives of the research project:**

The main objectives of the research project include -- characterization of AMR among Indian isolates using whole-genome sequencing of clinical isolates and optical genome mapping for pathogen identification using a unique genome-based signature for microbial typing with the optical mapping of DNA fragments.

*"The research will also look into development of methods for rapid antimicrobial susceptibility testing by carrying out the pH measurements inside spherical microgels microreactors with embedded pH-sensitive carbon dot nanosensors and identification of bacteria species and spread of AMR using clothes worn by HCWs (healthcare workers) with a rapid culture-independent method based on bacterial 16s RNA," Perumal said.*

### **Flipkart founders Binny, Sachin Bansal to invest Rs 125 crore in IIT-Delhi fund**

**November 1, 2019** <https://www.businesstoday.in/current/economy-politics/flipkart-founders-sachin-binny-bansal-to-invest-rs-125-crore-in-iit-delhi-fund/story/387607.html>

HRD minister Ramesh Pokhriyal said that such an endowment fund could be used for development work, student scholarships and research, which would put IIT-D in the same league as the leading institutions globally



Sachin Bansal, Binny Bansal to invest in IIT-Delhi's endowment fund

Flipkart founders Sachin Bansal and Binny Bansal have committed an amount of Rs 125 crore in the endowment fund of Indian Institute of Technology (IIT) Delhi. The 'IIT-Delhi Global Alumni Endowment Fund' will be launched by the institute on Thursday at the Rashtrapati Bhavan. IIT-D has received a launch commitment of Rs 255 crore and plans to target Rs 7,000 crore by 2025.

Out of the Rs 255 crore, Rs 125 crore has been committed by Sachin and Binny Bansal, who are alumni of the institute. V Ramgopal Rao, Director of IIT-D said that Rs 100 crore has been committed by Binny while Sachin invested Rs 25 crore. "In fact, Sachin Bansal has also given his commitment for more in future," he said, as mentioned in a report in The Times of India.

HRD Minister Ramesh Pokhriyal said that such an endowment fund could be used for development work, student scholarships and research, which would put IIT-D in the same league as the leading institutions globally.

With the seed fund, IIT-D has set a target of Rs 1,000 crore by 2020 and Rs 7,000 crore by 2025. The endowment fund is similar to the one in Harvard University. Rao said that the endowment fund will be managed by an alumni board like in Harvard. The interest from the fund will be used for developmental activities and innovations. He said they will also look at other investment opportunities to create more revenue sources out of the endowment fund.

Endowment funds are a huge source of income for universities across the world. Harvard and Stanford have an endowment corpus of more than \$39 billion and nearly \$28 billion, respectively.