Newspaper Clips
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IIT Kharagpur introduces nine-day induction program
http://timesofindia.indiatimes.com/city/kolkata/iit-kharagpur-introduces-nine-day-induction-program/articleshow/59367709.cms

KOLKATA: Indian Institute of Technology Kharagpur is going to introduce a nine-day induction program for freshers who would be joining the Institute in July this year. The program will involve a session on learning about the departments, halls of residence, gymkhana - the students' nerve centre and overall student life at the Institute. It will also include an interactive session with the students, where they can talk about their aspirations, career choices, academic choices etc.

"Students usually come with preconceived notions about the discipline which they have enrolled in and its scope. This causes some initial misconceptions regarding career opportunities available in those disciplines. They are also not aware of the flexibility available in IIT Kharagpur to learn other subjects of their choice even if it is not in their major discipline but in which they have talent and interest in. We would like to interact with them, understand their preferences and may be able to guide them towards opting for flexible courses like minors, microspecializations or micro-credit in their preferred disciplines. This would not only give the students a satisfaction that they could pursue their choice but also hold their interest in the program in which they enrolled. They would also get a better idea of the broad based programme available at IIT Kharagpur that transcends disciplines and produces a true IITian" said Partha Pratim Chakrabarti, director of the institute.

IIT Kharagpur already has the system of flexible academics for students through discipline change and opportunity to acquire multidisciplinary knowledge during their course of study. Eventually these help students in their career path developing talent, aspirations and training.

The program will also serve as platform to introduce the freshers to their classmates and hall mates to initiate the bonding right after they join the Institute. "First year is critical transitional time, when students feel the emotional void of being away from home, introduction to IIT academics and campus. Making new friends is the best alternative they would have which would become for them a home away from home" added Chakrabarti.

The program includes the aspect of finding out the strength and weakness of the new joinees and focus on their needs right from their first year. The students will be encouraged reflect on their strengths and ambitions. They will learn to focus on collaborative approach instead of competition to achieve academic excellence. In addition to academics, emphasis will be given on communication skills through group discussion, as it impacts interpersonal skills, academic communication, placement and internship.

Instead of one-time induction, refurbishing programs have been planned round the year. For students of second year, an assimilation program to departments and academics will be introduced. For third year students a reorientation program for pathway choices have been developed. In fourth year, the students will undergo a de-induction program which will make them ready to face the world beyond the realms of family and educational institutions.

Joint seat allocation: 176 students opt for IIT-Madras

http://timesofindia.indiatimes.com/city/chennai/joint-seat-allocation-176-students-opt-for-iit-m/articleshow/59377309.cms

CHENNAI: On the first day of the joint seat allocation acceptance round, a total of 3,976 seats were accepted by students across 57 institutes.

The first round of seat acceptance for admission to IITs, NITs and other government-funded technical institutions (GFTIs) is being conducted through Joint Seat Allocation Authority (JoSAA) from June 29 to July 3. A total of 1.5 lakh candidates had filled their preferences among choices across these institutes.

Close to 18,000 candidates had been allotted seats in NITs, about 3,000 in IIITs and about 4,000 candidates in other GFTIs. A total of 1,804 candidates have confirmed seats across the IITs, of which 176 candidates have confirmed their seats in IIT-Madras, IIT officials said. Sstudents will now have to choose from among three options among the confirmed seats — freeze, float and slide. The freeze option indicates that the candidate will not go for any other institute once he/she has accepted the seat and will not be considered for the next rounds of allocation.

The float allows students to move to another academic programme across any institute of a higher preference; the slide gives candidates the option to shift academic programmes of a higher preference within the same institute.

JoSAA will continue to allocate seats for seven rounds over three weeks. While 9% female candidates - 994 - have been shortlisted for the first round across various IITs, only two foreign students candidates have been offered seats in IITs.

"Five candidates have been offered seats in IITs through DS category wherein the children of defence/paramilitary personnel killed or permanently disabled in action during war or peacetime operations get preferential seat allocation," said IIT-M officials.

Australia-India Strategic Research Fund to open fellowship call on July 3

http://timesofindia.indiatimes.com/city/chennai/australia-india-strategic-research-fund-to-open-fellowship-call-on-july-3/articleshow/59357634.cms

CHENNAI: The Australian Academy of Science, which manages the Australia-India Strategic Research Fund's Early and Mid-Career Researcher (EMCR) fellowships, will open its next call for applications on July 3.

The EMCR fellowships offer up to AUD 40,500 for Australian researchers to travel to India and work with researchers at leading Indian science and technology institutions and universities, for a period of between three to nine months.

The fellowships are intended to facilitate long-term science, technology and innovation collaboration between the two countries. The fellowships are a component of the AISRF (Australia-India Strategic Research Fund), a platform for bilateral collaboration in science jointly managed and funded by the governments of Australia and India.

Researchers working in natural science (basic and applied), engineering science, mathematics, statistics and health are eligible to apply.

A reciprocal fellowships scheme funded by the Government of India will support Indian scientists chosen to visit Australia.

Chennupati Jagadish of , department of electronic materials engineering at the Australian National University in Canberra, has been visiting leading universities such as IITs, Anna University, IISc, JNCASR, and TIFR since last year to interact with students and also to discuss the fellowships. Most recently he visited colleges in Guntur.

The fellowship programme began in 2012-13, during which16 fellows from Australia visited India and similar number from India went to Australia. The same year, 33 senior scientists from Australia also visited India and similar number from India to Australia. In 2016-17, four scientists from Australia were chosen to visit India, and 33 Indian scientists were selected to visit Australia. These include researchers from IIT-Madras, IIT-Delhi, and IISER Mohali, among other leading institutions.

"The main purpose of the Australia-India Strategic Research Fund is to strengthen research links between both the countries and to exchange scientists between both the countries to develop better understanding of each other's strengths and to develop long term research relations between researchers and research institutions. By working together we can address major societal challenges such as energy security, food security, environment, climate change, health and ageing population," he told TOI, over email.

He added that the Australian government has committed an additional $20 million to the AISRF over four years from the 2015-16 financial year.

June 29

994 girls shortlisted for IIT in first round

http://timesofindia.indiatimes.com/city/chennai/994-girls-shortlisted-for-iit-in-first-round/articleshow/59362473.cms

CHENNAI: The first round of seat acceptance for admission into IITs, NITs, and other government-funded technical institutions conducted through Joint Seat Allocation Authority (JoSAA) is set to begin on Thursday and will continue till July 3.

JoSAA will allocate seats for seven rounds over three weeks to minimise vacancies in these institutes.

Around 1,50,000 successful candidates filled their choices through JoSAA, a statement from IIT-Madras said. Of these candidates, 36,114 have been offered seats in the first round in 97 institutes and 11,000 candidates were offered seats in the IITs. Close to 18,000 candidates have been allotted seats in the NITs, about 3,000 in the IIITs and about 4,000 in other GFTIs.

Students will now choose from among the seats that have been allotted.Of 11,000 candidates with offers from IITs, 994 female candidates were shortlisted in the first round for admission in various IITs.

The opening and closing ranks of the institutes can be found at the following links: http://josaa.nic.in/result/result/openingclosingrank.aspx.

Top 100 rank holders of JEE exam 2017 got into IIT Bombay

https://www.brainbuxa.com/education-news/top-100-rank-holders-of-jee-exam-2017-got-into-iit-bombay-6676

The admission process for the Indian Institute of Technology is underway for the academic session 2017.

The first allotment was result was declared by the Joint Sat Allocation Authority (JoSAA) on June 28, 2017.

JoSSA is an authority, which has been set up by Human Resource Development Ministry (MHRD), whose main purpose and function is to regulate the seat allocations for the 87 institutes for the session 2017-18.

After the release of the first list it was reported by the HT that first 100 rank holders have applied for the IIT Bombay as their top preference and they have been allotted the same by the authority.

What students have to say?

"I had mentioned Computer Science in IIT-B as my first preference and managed to get through. I couldn't be happier," said 17-year-old Rahul Bharadwaj, who got AIR 20 in JEE-Advanced 2017, according to HT.

The results for this years' JEE mains and JEE advanced exams were declared on April 27 and June 11 respectively.

For the first time, a 17 year old boy from Udaipur managed to score360 out of 360 marks in the JEE mains 2017 exam.

In JEE advanced, Sarvesh Mehtani from Chandigarh (Panchkula) obtained AIR 1, followed by the Pune's Akshat Chug and Delhi's Ananya Agarwal in second and third position respectively.

Computer science rules at IITs, 60 of Top 100 get Powai

http://timesofindia.indiatimes.com/city/mumbai/comp-sc-rules-at-iits-60-of-top-100-get-powai/articleshow/59359110.cms

MUMBAI: The composition of the elite technological club is altering. Around 60 students of the Top 100 club have been allotted seats in IIT-Bombay, largely in the computer science stream. The count is a tad lower than last year's 67, though. The Top 100 club also saw a few candidates pick electrical engineering and engineering physics.

The computer science stream, though, was the dominant favourite and the four-year course at IIT-B closed at Rank 62. At IIT-Delhi, admissions opened at Rank 3, again in computer science. But the choice for the Top 100 rankers was clear: Seats in three colleges, IIT-Bombay, IIT-Madras and IIT-Delhi were lapped up by them.

Computer science (CS) in IIT-Kanpur took Rank 104 after IIT Delhi closed admissions to CS at Rank 103. Among the younger IITs, Hyderabad was the hot pick among candidates and computer science admissions there opened at Rank 522.

Mechanical engineering opened at Rank 163 in IIT-Madras and IIT-Bombay was opted for by Rank 297.

Data from IIT-Madras revealed that around 1.5 lakh candidates filled their choices through the Joint Seat Allocation Authority (JoSAA) and their total number of choices hovered around 1.7 crore. Of these, 36,114 candidates got seats in the first round across 97 institutes and 11,000 were offered seats in IITs. Close to 18,000 candidates got seats in NITs, around 3,000 in IIITs and 4,000 in other government-funded technical institutes.

Out of the 11,000 candidates with seat offers from IITs, 994 female candidates were shortlisted in the first round for admission to various IITs. Also, five qualified candidates have been offered seats in various IITs through the defence services (DS) category where the children of defence and paramilitary personnel killed or permanently disabled in action during war or peacetime operations get preferential seat allocation. Another 46 candidates were offered a preparatory course in the first round for admission to IITs. Two foreigners were allotted seats too.

Allotment will go on till July 3. JoSAA will allocate seats for seven rounds over three weeks to minimize vacancy in these elite institutes.

This year, IITs awarded 18 grace marks to all students for a series of erroneous or confusing questions asked in the JEE-Advanced paper. These marks boosted the overall performance of a majority of students, making way for 50,455 eligible students for admission this year compared to 36,500 in 2016.

June 28

JoSAA 2017 First Allotment Result Declared

http://www.ndtv.com/education/josaa-first-allotment-released-check-at-josaa-nic-in-1717801

First allotment result has been declared for Joint Seat Allocation Authority (JoSAA) 2017.

NEW DELHI: First allotment result has been declared for Joint Seat Allocation Authority (JoSAA) 2017. First round reporting for seat acceptance will begin from 29 June till 3 July. Online registration and choice filling for JoSAA was open till 26 June. The Joint Seat Allocation Authority (JoSAA) 2017 has been set up by Human Resources Development Ministry (MHRD) to manage and regulate the joint seat allocation for admissions to 97 institutes for the academic year 2017-18.

The institutes include 23 IITs, 31 NITs, 23 IIITs and 20 Other-Government Funded Technical Institutes (Other-GFTIs).

Admission to all the academic programs offered by these Institutes will be made through a single platform.

JoSAA 2017 is open for those candidates who have qualified the JEE Advanced 2017.

Candidates who will be reporting at NIT Sikkim should note that for BTech admission another venue has been arranged by the authority at Siliguri, West Bengal. Hence candidates can choose either of the locations to report.

In another update available at JoSAA web portal, National Institute of Foundry and Forge Technology (NIFFT Ranchi) has withdrawn Mechanical Engineering programme.

How to check JoSAA first seat allotment result?

Image credit: josaa.nic.in

Go to the official website of JoSAA

Enter JEE Main 2017 roll number

Enter the password

After entering the security pin, submit the details and login to check the result

JEE advanced result 2017 was declared on 11 June. Based on JEE Main rankings, about 2.20 lakh top scorers given chance to appear in JEE Advanced 2017, out of which only 1.7 lakh aspirants registered for the exam. 10.20 lakh students had appeared in the JEE main exam this year.

First round of IIT seat allotment completed

https://telanganatoday.com/first-round-iit-seat-allotment-completed

Hyderabad: The first round of seat allotment for admissions into Indian Institutes of Technology (IITs), National Institutes of Technology (NITs), Indian Institutes of Information Technology (IIITs) and Government Funded Technical Institutes (GFTIs) has been done by the Joint Seat Allocation Authority (JoSAA) on Wednesday.

More than 50,455 candidates had qualified in the JEE Advanced of the 1.59 lakh who took the examination. The total of number of seats in all institutes was pegged at 36,208 for this year including 10,962 in IITs. About 1.49 lakh aspirants had registered for the admissions in the IITs, NITs, IIITs and GFTIs.

Candidates who have been allotted seats have to accept the same between June 29 to July 3 by reporting at a reporting centre.

The JoSAA will display the seats filled and vacant on July 4 and will allocate the same seats in the second round of allotment on the same day. Candidates have to accept seat on July 5 and 6.

For reporting for IITs, the JoSAA has arranged 17 centres and for NITs, IIITs and GFITs 40 reporting centres have been made available across the country.

The third round of seat allocation will be done on July 7 and candidates have to accept seats on July 8 and 9. A total of seven rounds of seat allocation will be done by the JoSAA till July 18.

Paradip to get sewage treatment plant soon

http://www.newindianexpress.com/states/odisha/2017/jun/28/paradip-to-get-sewage-treatment-plant-soon-1621688.html

PARADIP: Infrastructure work on the proposed sewage treatment plant in Paradip has been started at Bhitragada by the civic authorities.
While the project is being funded by World Bank under the Integrated Coastal Zone Management Programme (ICZMP), 50 acres of land at Bhitragada was provided by the Paradip Port Trust (PPT) to the State Government for the purpose last year.

This apart, the Paradip Municipality has identified five landfill spots in the town where solid waste from the town and industries will be dumped before being taken to the treatment plant. Over the years, generation of solid waste from

Paradip, also an industrial hub, has increased. Currently, 50 MT of solid waste is generated every day.

Of the 50 acres of land provided by the PPT, 20 acres would be used for setting up of the solid waste treatment plant. Construction of boundary wall of the site is already in progress.
Executive Officer of Paradip Municipality Dillip Kumar Mohanty said the plant would be constructed at an estimated cost of `42 crore and the waste would be treated through modern technology to avoid pollution.

“Solid waste would be collected from households and industries and dumped at landfill sites. They would be collected from these five landfill sites and taken to the waste treatment plant,” he said.
Polluted zone

The Indian Institute of Technology (IIT), Delhi, has identified Paradip industrial hub as one of the country’s most polluted places.

The Central Pollution Control Board (CPCB) had entrusted IIT-Delhi for preparation of a comprehensive environmental pollution index (CEPI) of Paradip recently.
The survey, that was a composite measurement of air and water pollution and land degradation, found the level of pollution to be 69.6 per cent, which indicates that Paradip is on the verge of becoming a critically polluted zone.The CEPI for critically polluted zone stands at 70.

Why even early rain has failed to clean Delhi air

http://timesofindia.indiatimes.com/city/delhi/why-even-early-rain-has-failed-to-clean-delhi-air/articleshow/59343882.cms

NEW DELHI: Pre-monsoon showers have been lashing Delhi for almost a month, but they have little impact on air pollution so far. In fact, until June 27, the capital witnessed a monthly average PM 2.5 level of 132 micrograms per cubic metres (g/m³) — about 2.2 times the 24-hour safe standard — which shows that Delhi's base or background emissions are quite high even when meteorological conditions are favourable.

Delhi also recorded the highest pollution levels in June among major cities like Bengaluru, Chennai, Mumbai, Pune and Hyderabad.

Though a direct comparison cannot be made with these cities simply because the geographical and meteorological conditions are vastly different, it underlines the fact that Delhi needs stringent enforcement of long-term action plans as well as the Supreme Court-mandated graded response plan, which came into force in January this year. Air pollution levels will fall further once monsoon arrives.

The good news though is Delhi's average air quality index (AQI) for June is 164 (moderate). The same was 189 (moderate) and 209 (poor), respectively, in the corresponding period of 2015 and 2016.

Another worrying trend is that many stations are breaching the 24-hour safe standard for nitrogen dioxide (NO2)—80 g/m³. This is an indication that combustion sources are contributing to air pollution. The SC-mandated Environment Pollution Control Authority (EPCA) and CPCB had submitted a "comprehensive action plan on air pollution control in NCR" to SC in April.

The draft plan prepared by CPCB, Delhi Pollution Control Committee (DPCC) and air quality experts says that annual average PM 2.5 concentrations need to be reduced by roughly 70% in Delhi to meet the annual standard of 40 g/m³. It recommended source-wise plans like expanding the CNG network in NCR, closure of the Badarpur power plant, conversion of other thermal plants to natural gas-based ones, BRT or light rail transit (LRT), a common ticketing system and a traffic clearance process for every big project in the city.

For non-motorised transport, it recommended implementation of bicycle master plan, walkability audits, among others. SC will hear the matter on July 20. "It's very clear that during monsoon, the meteorology is most favourable for dispersal of pollutants. So, logically we can say that emissions are continuing to be high, which is why we are still seeing high PM 2.5 levels. If NO2 levels shoot up, they can also contribute to formation of secondary particulate matter (PM) through nitrates," said Sagnik Dey, associate professor, IIT-Delhi.

According to Anumita Roychowdhury of CSE, Delhi needs to stringently implement both the graded response plan and the comprehensive action plan for NCR. "Inter-regional comparison of Delhi with other cities is not always fair because the north Indian belt is quite different. It is land-locked. The air pollution levels here are always higher than other regions," she said. "However, NCR needs very stringent implementation of action plans. Just like California has special powers and more stringent standards because it has a locational disadvantage due to the valley effect...NCR too needs a hotspot approach."

She added that combustion sources like transport, industry, power plants needed to be dealt with too.

IIT Kharagpur's new innovation could be the answer to the frequent train and flight delay problems India is facing

http://www.businessinsider.in/IIT-Kharagpurs-new-innovation-could-be-the-answer-to-the-frequent-train-and-flight-delay-problems-India-is-facing/articleshow/59338438.cms

IIT Kharagpur has just devised a technology 'called Real Time Fog And Rain Removal from Videos' - it can help clear up hazy visuals caused by rain, fog or smog which often leads to delays and cancellations of flights and trains.

In times when scientists need to track the trajectory through cameras mounted in ground stations, the video often gets degraded due to weather conditions. It is in these circumstances, the institute says, the new technology can prove immensely helpful.

How it works is the fog algorithm estimates the distance of objects from the camera in the form of a depth map. The depth map is further refined using anisotropic diffusion to smooth depth map and identify clear boundaries of the object. Based on the refined depth, the image is restored to give clean images.

The algorithm has been developed under the leadership of Sudipta Mukhopadhyay from the department of electronics and electrical communication at IIT Kharagpur.

Finding value in this innovation, the Railways and Defence Research and Development Organisation have initiated talks for acquiring the technology from the institute. The institute is also in talks with the railways for deploying it.

For now, DRDO finds its value during rocket launches and missile test fires done by Integrated Test Range.

Solar panel output is affected by air pollution - Duke University and IIT-GN study finds

https://www.crazyengineers.com/news/solar-panel-output-is-affected-by-air-pollution-duke-university-and-iit-gn-study-finds.96292/

Globally, efforts are being made to harness the solar energy to its fullest. However, there are several challenges involved in it. One of the major problems in tapping solar energy is air pollution. Recently, Duke University professor Michael Bergin was shown the solar panel installations in India and he was blown away by how dirty they were. He found out that there was no study to find out how the air pollution affected solar cells. He and his colleagues at IIT-Gandhinagar (IIT-GN) decided put together a comprehensive model to do that.

The team then began monitoring the output of the solar panels at the IIT-GN campus as it gathered dust over time. The results revealed that every time the solar panels were cleaned, they showed almost 50% efficiency improvement. The

grime was sampled and analyzed. It was found out that about 92% of it was natural dust while the rest was carbon and ion pollutants from human activity.

While 8% might look like a small amount, it's worth noting that man-made particles block light more efficiently than the natural dust. The team concluded that the decrease in efficiency of solar cells was more because of human activity than the natural dust. These particles are so small and sticky that it's often difficult to clean them off the solar panels. However, cleaning the panels often isn't the right solution because that might just damage the panels.

Bergin had earlier worked on how the pollutants affected the color of the Taj Mahal. He had a good knowledge of how the tiny particles react to sunlight. Bergin created an equation to calculate the amount of sunlight blocked by varying composition of dust and pollution.

Bergin worked with Drew Shindell, an expert in using NASA GISS Global Climate Model to figure out amount of Sun's energy blocked by airborne particles. All the data was then computed to estimate the total loss of solar energy production in various parts of the world. The regions with higher migratory dust had about 17 - 25% of loss. China, for example is estimated to be losing several billions of dollars only because of air pollution and India isn't far behind.