NEWS CLIPS

December 22-28, 2018

Highlights of the Week@IITD

IIT Delhi wins Overall Championship trophy at Inter IIT Sports Meet 2018

December 28, 2018 https://news.careers360.com/iit-delhi-wins-overall-championship-trophy-inter-iit-sports-meet-2018

IIT Delhi has won the coveted Overall Championship at the 53rd Inter IIT Sports Meet held at IIT Guwahati recently.

Apart from the Overall Championship, the team also bagged the General Championship trophy for Men and the March Past Trophy. The record this year has been nothing less than spectacular with the students from IIT Delhi bringing home 4 Gold, 2 Silver, 3 Bronze medals in the individual games along with the athletics championship for the men and the women.

Speaking about this achievement, Prof V. Ramgopal Rao, Director, IIT Delhi, said: "I am sure this streak would continue. My hearty congratulations to everyone, particularly the coaches and the players, who have contributed to this. A brand new Sports facility is also coming up at IIT Delhi, which will augment our sports facilities further. Our Distinguished alumnus Mr. Saurabh Mittal, Founder and Chairman of Mission Holdings has given a generous donation of Rs. 10 crores for this new sports complex."

Out of the total number of medals won by the IIT Delhi players in the team and individual events, the boys won the athletics championship (Men), 4 Gold and 3 Bronze medals while the girls won the athletics championship (Women) and 2 Silver medals.

Adhhayan Bhanu, who led the IIT Delhi contingent, said: "I am feeling very proud of the fact that IIT Delhi has won the Overall Championship trophy. The last time we had won it, was at home. So, this one is a bigger achievement. We had prepared really hard for the Guwahati Sports Meet and each of our teams were Gold medal contenders. It happened for the 1st time that every IIT Delhi team reached the quarterfinals and on any other night they could have won their respective events. It was an honour to lead such a dedicated group of athletes."

The Inter IIT Sports Meet 2018, which was held from December 11 – 21, 2018 at IIT Guwahati, witnessed the participation of 123 male and 42 female students from IIT Delhi.

In addition to this, an inter IIT aquatics meet was held in the first week of October 2018 at IIT Guwahati, where the men's swimming team from IIT Delhi achieved the 3rd position.

The Overall Championship also includes points based on the performance in the aquatics meet.

With over 3500 participants, more than 50 events and over 500 matches, the Guwahati edition was one of the biggest events throughout the history of the Inter IIT Sports Meet.

The first Inter IIT Sports Meet was organised in 1961 at IIT Bombay with only five existing IITs participating (namely IIT Bombay, IIT Madras, IIT Kharagpur, IIT Kanpur and IIT Delhi), whereas in the 53rd edition of the Sports Meet 23 IITs participated.

IIT Delhi launches LICS technology and a research portal for Indian Medicinal Plants

December 24, 2018 https://news.careers360.com/iit-delhi-launches-lics-technology-and-research-portal-indian-medicinal-plants

To solve the challenges of power, space and compute requirements in the age of big data storage and analysis, IIT Delhi has launched the Green Data Centre. The machine, which has been hosted inside the Data Centre is based on Liquid Immersion Cooling system (LICS) developed by Fujitsu Japan and is first of its kind in Asia outside Japan.

The LICS machine at the supercomputing facility was launched by Dr. Renu Swarup, Secretary, Department of Biotechnology, Govt. of India and Prof V. Ramgopal Rao, Director, IIT Delhi. Along with LICS, a web portal on Bioactivity Information of Indian Medicinal Plants was also launched.

The web portal will be used to publish and discuss recent research on the effectiveness of the extracts of Tulsi, Turmeric, Neem and other Indian plants of medicinal value in a multitude of diseases and disorders. The main benefits of LICS machine as compared to conventional systems include 40% less Power consumption, 50% space saving, Installable anywhere (no need for a well-designed Data Centre), No Noise generation from the system because there are no moving parts and Easy to maintain.

Dr. Renu Swarup, Chief Guest on the occasion, was pleased to note that the new LIC technology would not only reduce the burden of maintaining a complex Data centre, but also the associated expensive air conditioning. She emphasized on the importance of sharing the resources with the student and scientific community across the country, which the SCFBio has been practising for more than a decade now.

Launching the web-portal on Informatics of Indian Medicinal Plants, she noted with appreciation the efforts of the Biocomputing group headed by Prof. Jayaram at SCFBio and wished that a collaborative model across the
various Institutes in the country would accelerate drug discovery from within the country.

Prof. V. Ramgopal Rao, Director, IIT Delhi, who presided over the function, called the LIC technology as a disruptive technology, which has the potential to revolutionize the HPC industry. While adverting to the collaboration between IIT Delhi and AIIMS, he appreciated the efforts of the SCFBio team for exploring various aspects of different medicinal plants in drug discovery.

Dr. Anil Srivastava, President, OHSL, USA, a Guest of Honour on the occasion, projected that India would take lead in the science and technology of drug discovery as it did in software industry three decades ago.

Prof Bodh Raj Mehta, Dean (R&D); Prof James Gomes, Head, Kusuma School of Biological Sciences; Prof B. Jayaram, Coordinator, SCFBio; Mr Yasuhide Ishihara, President & Head, TCSU, Fujitsu Limited, Japan; Mr Takashi Yamamoto, Vice President, AI Platform Business Unit, Fujitsu, Japan were present on the occasion. The function was attended by several dignitaries, scientists and students from across the country.

December 28

Researchers Explore Emerging Memories for AI
https://www.eetimes.com/document.asp?doc_id=1334122

Resistive random access memory (ReRAM) and other emerging memory technologies have been getting a lot of attention in the past year as semiconductor companies look for ways to more efficiently deal with the requirements of artificial intelligence and neuromorphic computing.

At the International Electron Devices Meeting (IEDM) in San Francisco earlier this month, there were several papers presented that dealt with using emerging memory in neomorphic computing from companies the likes of IBM and various universities.

"The neuromorph crowd is excited about this type of thing," said Jim Handy, a veteran memory market watcher who is principal analyst at Objective Analysis. "I wouldn't say that any [the emerging memory technologies} stands out. They all have something. The question is who is going to get something meaningful to the market first."

Neuromorphic applications are designed to specifically mimic how the human brain learns and processes information, and ReRAM devices show promise for enabling high-density and ultimately scaled neuromorphic architectures because they are significantly smaller and more energy-efficient than current AI data centers. They also mimic the brain's biological computation at the neuron and synaptic level.

"The real beauty is that it could dramatically reduce the price of an AI system and the power consumption," Handy said.

To that end, Weebit Nano recently partnered with the Non-Volatile Memory Group of the Indian Institute of Technology Delhi (IITD) on a collaborative research project that will apply Weebit's SiOx ReRAM technology to computer chips used for AI.

IITD's Non-Volatile Memory Research Group is led by Professor Manan Suri under the university's Department of Electrical Engineering. He said that the group is driven by a vision of creating an "NVM-centric future" in which the role of NVM goes beyond simple storage. Current research areas include computing, sensing, and security. The university also runs specialized courses on volatile and non-volatile memory, and there are researchers working on NVM-related materials in the university's physics department. It's also collaborating with IBM on AI initiatives.

ReRAM and other emerging NVM devices offer several benefits such as non-volatility, CMOS compatibility, ultra-high density, simple integration and fabrication, and low cost, said Suri, and NVM devices are important for realizing AI hardware, accelerators, and neuromorphic hardware applications. "Memory can pretty much make or break a dedicated neuromorphic AI hardware system," he said. "It's important to choose state of the art."

Professor Manan Suri of the Non-Volatile Memory Research Group of the Indian Institute of Technology Delhi.

IITD often partners with industries and startups for applied and exploratory research. Suri said that Weebit is among the few companies that is consistently progressing with its ReRAM and is open to collaboration with universities. In the short term, IITD expects the research to lead to effective

realization of high-density non-volatile neuromorphic circuits. Longer term, there will be a need for more and more dedicated AI/neuromorphic chips due to the ever-increasing amount of data, he said. "Dedicated neuromorphic/AI hardware holds the promise of tackling the enormous data problem in a more energy-efficient and sustainable way compared to general-purpose CPUs."

Weebit's research efforts don't change its commercialization plans for its SiOx ReRAM technology, but it wants to make sure that it leverages its full capability across advanced applications, said CEO Coby Hanoch. Collaborating with IITD is a cost-effective way of keeping its technology on the leading edge, and he sees other similar partnerships as an important element of the company's future going forward. Having technology that can be sampled was an important first step. "This is the first real project that we're engaging with but definitely not the last one," said Hanoch. "We're already talking to others."

Weebit CTO Amir Regev said that with AI starting to permeate the everyday lives of the average person, it's essential to have technologies that can help it scale more quickly. ReRAM, in particular, makes sense for AI applications because it can stay small, and from a power consumption perspective, it works well because it accommodates the human-brain–like spikes that occur in neuromorphic applications. And because it's early days for ReRAM in AI, he said, there are no set standards yet. "It's kind of a green field. It's very innovative, and many researchers are doing other, different stuff."

New AI-Based App Developed By IIT-Ropar Students Can Tell How Drunk You Are By Just Looking At Your Videos

https://www.analyticsindiamag.com/new-ai-based-app-developed-by-iit-ropar-students-can-tell-how-drunk-you-are-by-just-looking-at-your-videos/

In an interesting development, the far-sighted members of Indian Institute of Technology (IIT), Ropar, have been working on developing an artificial intelligence-based application for smartphones that can help analyse if a person is drunk or not. It would be able to do so by analysing the blood alcohol content (BAC) legal limit.

India has become quite notorious for its drunk-driving cases, with reports suggesting that in Goa alone more than 4,920 cases were booked in 2018 compared to 2,760 cases in 2017. Whereas in Hyderabad, more than 20,000 cases of drunk-driving have been filed this year.

The Project by IIT Ropar

In a report, the assistant professor named Dr Abhinav Dhall from the Department of Computer Science and Engineering at IIT Ropar said that he and his team are developing an Android-based application which can help a person to check how much alcohol is consumed and will be able to drive or not without being analysed by a breathalyzer or some medical tests. The working of the app will be based on the videos of people at different intoxicated stages that will be fed while programming it. The fully developed app will be available in the Google play store and can be downloaded without spending a penny.

Dr Dhall has been involved with intense research in the space of computer vision, affective computing, machine learning, automatic driver monitoring and advanced driving assistance systems, over the last few years.

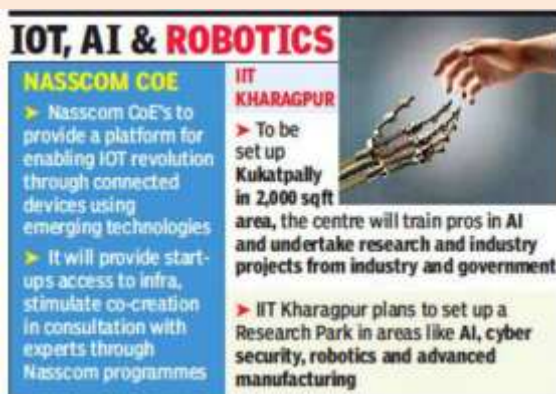**What have IITians done in the past to help society?**

This is not the first time that the ingenious IIT-ians are doing something fruitful to help the society. Previously, Dr Dhall, along with his two students, had developed an AI-based application for selfie-accident awareness that is free of cost and also available on Google play store.

In another development by IIT, the students at IIT Hyderabad earlier this year developed an AI-based programme to detect motorists on the road who are not wearing helmets. This development by C Krishna Mohan, an associate professor along with two other research scholars caught the attention of Hyderabad traffic police and they signed a memorandum of understanding (MoU) with an aim of reducing fatalities of the bike riders and catching hold of the offenders.

IIT Kharagpur to set up off campus centre, Research Park in Hyderabad

https://timesofindia.indiatimes.com/city/hyderabad/iit-kharagpur-to-set-up-off-campus-centre-research-park-in-hyderabad/articleshow/67280331.cms

In yet another feather in the city's cap, IIT Kharagpur is not only setting up an off campus centre in Hyderabad where it plans to offer programmes in artificial intelligence, advanced manufacturing, robotics and cyber security, it is also mulling a 15-20 acre research park in the long run to sharpen focus on training of professionals as well as research and industry projects.

While its Centre of Excellence (CoE) in AI is slated to open in March 2019 in Kukatpally, IIT Kharagpur is also in talks with the Telangana government for land for the research park, IIT Kharagpur's programme manager in Hyderabad, Utkarsh Prasad, disclosed.

"The research park will focus on areas like AI, cyber security, defence and aerospace, advanced manufacturing and robotics, in which we want to train professionals and carry out research and industry projects. We are in talks with the Telangana government for land for the park," said Prasad.

IIT Kharagpur centre, Nasscom CoE in the same building

Telangana IT principal secretary Jayesh Ranjan said the state government has identified 2,000 sft space for the IIT Kharagpur's centre at Kukatpally. "IIT Kharagpur is in one corner of the country so they don't get too many guest faculty and industry connect so easily. So, they were scouting around for establishing their centre in a city that is much more accessible, central and happening from the tech point of view, which is why they came to Telangana," said Ranjan, adding that an MoU will be inked soon by the government with IIT Kharagpur. When contacted, IIT Hyderabad director Prof U B Desai said he was not aware of the development.

Ranjan said the IIT Kharagpur centre will be set up in the same building that will also house Nasscom's CoEs on AI and data science as well as one on cyber security. The boards for these two CoEs have already been constituted and the first meeting of the AI&DS CoE has also been conducted. While NIIT co-founder Rajendra Singh Pawar has been appointed chairman of the governing council for the cyber security CoE, Mindtree chairman Krishnakumar Natarajan has been appointed chairman of the governing council of the CoE on AI&DS. The MoUs for the CoEs on cyber security and AI&DS were inked by Nasscom with the Telangana government during the World Congress on Information Technology that was held in Hyderabad in February 2018.

IIT-R warning system to alert people before earthquake strikes

https://www.thehansindia.com/posts/index/Young-Hans/2018-12-28/IIT-R-warning-system-to-alert-people-before-earthquake-strikes/465658
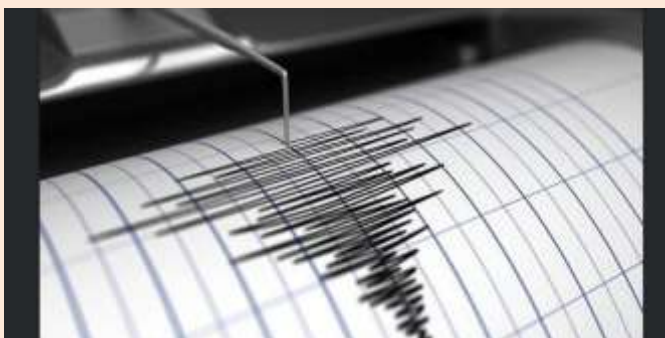
IIT-R warning system to alert people before earthquake strikes

Scientists at IIT Roorkee claim to have developed an earthquake early warning system that can alert people up to a minute before the quake strikes. The system, already deployed in some areas of Uttarakhand, consists of a network of sensors that detect different types of seismic waves travelling through the layers of the Earth after a quake.

"Current techniques of earthquake prediction do not really work. People try to predict it using statistical methods, but none of the methods known yet are accurate enough," Mukat Lal Sharma, a professor at Indian Institute of Technology (IIT) Roorkee, told PTI. However, the earthquake early warning system can give people a lead time ranging from 10 seconds to a minute. Sharma said that for a quake originating due to tectonic plate movements in the Himalayan region, people in Dehradun will get a warning 11 seconds before the tremors, while those in New Delhi will have a longer lead time of about a minute.

While this may not be enough to completely evacuate buildings, such warnings can at least allow people to take cover and protect themselves from fatal injuries, Sharma said on the sidelines of the 16th Symposium of Earthquake Engineering held at IIT Roorkee. Other precautions like switching off nuclear power plants, stopping metro trains, and cutting off gas supply etc, can be taken care of with a minute's warning. "We cannot save buildings, but perhaps we can save a few more lives," Sharma said.

"We have deployed over 100 sensors -- between Uttarkashi and Chamoli districts of Uttarakhand -- which send real time data from various stations to our lab. We are analysing these data in real time and separating the data related to earthquake magnitude," Sharma said. "The earthquake warning system will be activated if the tremor has a magnitude of more than 6," he said.

After conducting the research with the sensors for over two years in Uttarakhand, a system of sirens too have been deployed in the area last year that can alert people up to 200 metres away. Sharma said that he has approached the National Disaster Management Authority (NDMA), Ministry of Earth Sciences as well as the Ministry of Telecommunications over the last one year or so to deploy the system in other states in North India.

However, he said, he has not received any positive response so far. For the entire 2,600 km Himalayan zone, there are thirteen states which are at the risk of earthquakes. A number of research studies, including a recent one from the Jawaharlal Nehru Centre for Advanced Scientific Research in Bengaluru, have warned that the Himalayas are at the risk of an earthquake of the magnitude of 8.5. Such an earthquake would put at least one million people in the gangetic plains at risk.

Sharma said that the sensors can be deployed on communication towers and the systems to analyse these signals can be placed in existing State Disaster Management Authority (SDMA) offices. While the sensors, costing Rs 1.5 lakh each, are being currently imported from the US, Sharma's lab has successfully developed an indigenous version that could be made available for Rs 50,000. At least 6,000 sensors would be required to set up the system across north India -- a region that is at maximum risk of quakes from the Himalayan region. However, since no major earthquake has yet affected the region since the warning system was deployed, it is not clear how beneficial it will be in a real disaster scenario. More time is needed to ascertain the system's effectiveness.

SMVDU, IIT Jammu sign MoU for collaboration
http://news.statetimes.in/smvdu-iit-jammu-sign-mou-for-collaboration/

Two top institutes of Jammu and Kashmir region, Shri Mata Vaishno Devi University (SMVDU) and IIT, Jammu signed an MoU to affirm the value of collaboration and to exchange information related to research activities. Dr. Sanjeev Jain, Vice-Chancellor, SMVDU, and Prof. Manoj Singh Gaur, Director, IIT Jammu signed the MoU in the presence of Prof. V. K Bhat, Registrar, SMVDU, Naresh Kumar, OSD, IIT Jammu, Dr. Rahul Salunkhe, MoU Coordinator, IIT Jammu and Vinod Sharma, Administrative Officer, SMVDU. Both institutes agreed to promote joint research projects, joint consultancy, with particular emphasis on national and internationally funded projects and joint supervision of postgraduate and Ph.D. students, while sharing infrastructure for facility members and students. The institutions also agreed to promote expert lectures by faculty members for B.Tech/M. Tech students of both institutes. A consensus was also made on conducting joint conferences/ short term courses/workshop/seminar on topics of mutual interest. The aim of the MOU is to enable co-operations in the research fields and to mutually benefit each other. The periodic implementation of this agreement would be coordinated by Dr. R.K. Jha, Associate Dean, R&D, SMVDU; Dr. Uday Pratap Singh, Associate Professor, School of Mathematics of SMVDU and Dr. Shivnath Majumdar, Associate Dean (R&C), IITJammu.

December 27

NHPC partners with IIT Roorkee for R&D collaboration & also establishes NHPC Professorial Chair

http://indiaeducationdiary.in/nhpc-partners-iit-roorkee-rd-collaboration-also-establishes-nhpc-professorial-chair/

NHPC partners with IIT Roorkee for R&D collaboration in various fields including hydropower, hydrology, water resources, geology, earthquake, renewable energy and environmental management and establishes a NHPC Professorial Chair at IIT Roorkee.

On 26th December' 2018, IITR and NHPC signed a Memorandum of Understanding (MoU) for establishing a NHPC Professorial Chair and a Memorandum of Agreement (MoA) for R&D collaboration. The agreements were signed by Sh Govind Baidya ED-NHPC and Prof M Parida, Dean

of Sponsored Research and Industrial Consultancy-IIT Roorkee in the presence of Prof Ajit Chaturvedi, Director IIT Roorkee, Sh Janardhan Chaudhary, Director (tech) – NHPC, Prof BK Mishra, Dean of Faculty Affairs – IITR and Prof. Arun Kumar – IITR.

The MoU was signed to create a NHPC Professorial Chair with a one-time contribution of Rs. 2 crores. The NHPC Chair Professor will act as an ambassador of hydropower development in the country to catalyze innovation, research and development in hydropower sector in IITR and Indian academia, as well as to facilitate or undertake studies in IITR and Indian academia on environment and social impacts of water resources and hydro power development projects, including study and application of climate change protocol for promoting clean energy.

Speaking about the importance of this collaboration, Sh Janardhan Chaudhary, Director (tech) – NHPC, said, "We are entering into the partnership in the research area, in the capacity building and particularly in the area of development of hydro sector, this sector's requirement is very much felt in today's energy market in the augmentation of renewable energy. We are looking forward how this sector can get a place in system stability or to integrate and improve the stability and the requirement of variability and limitation that will be coming out of integration of lot of renewable energy options."

Further, Sh Janardhan Chaudhary said, "We appreciate IIT Roorkee alumni's significant presence and the impact of Department of Earthquake Engineering. NHPC can share field experience to improve to optimize performance and forecasting as forecasting is very very important in today's environment "

Speaking about the MoU & MoA, Prof. Ajit Chaturvedi, Director, IIT Roorkee, said, "I am very happy that NHPC has come with the shared vision, this collaboration will help find solutions to the practical problems of hydropower through scientific research by NHPC and IITR and Indian academia."

December 26

GATE 2019 exam result will be out on March 16, 2019

https://www.business-standard.com/article/education/gate-2019-iit-madras-release-exam-schedule-admit-card-to-be-out-on-jan-4-118122600436_1.html

IIT-Madras has released the the schedule for the Graduate Aptitude Test in Engineering (GATE) 2019 exam. The IIT-M will be conducting the exam on February 2, 3 9 and 10. The exam will be held in two sessions-Forenoon session from 9.30 am to 12.30 pm and afternoon session from 2.30 pm to 5.30 pm.

The admit cards for GATE 2019 will be relased on January 4 and the result will be out on March 16.

This time, Statistics subject has been added in GATE 2019, reports DNA India.

Click here to know the detail of exam schedule for GATE 2019

Date & Day	Session No.	Time (IST)	Test Paper Code
02nd February 2019 (Saturday)	S1	09:30 - 12:30 Hrs. (Forenoon Session)	CY, ME-1, MN
	S2	14:30 - 17:30 Hrs. (Afternoon Session)	ME-2, XE, XL, TF
03rd February 2019 (Sunday)	S3	09:30 - 12:30 Hrs. (Forenoon Session)	CS, CH
	S4	14:30 - 17:30 Hrs. (Afternoon Session)	AE, AG, AR, BT, EY, GG, IN, MA, MT, PE, PH, PI, ST
09th February 2019 (Saturday)	S5	09:30 - 12:30 Hrs. (Forenoon Session)	EC
	S6	14:30 - 17:30 Hrs. (Afternoon Session)	EE
10th February 2019 (Sunday)	S7	09:30 - 12:30 Hrs. (Forenoon Session)	CE-1
	S8	14:30 - 17:30 Hrs. (Afternoon Session)	CE-2

Multi-Session Papers (Exams in two different sessions)			
CE	Civil Engineering	ME	Mechanical Engineering
Single-Session Papers			
AE	Aerospace Engineering	GG	Geology and Geophysics
AG	Agricultural Engineering	IN	Instrumentation Engineering
AR	Architecture and Planning	MA	Mathematics
BT	Biotechnology	MN	Mining Engineering
CH	Chemical Engineering	MT	Metallurgical Engineering
CS	Computer Science and Information Technology	PE	Petroleum Engineering
CY	Chemistry	PH	Physics
EC	Electronics and Communication Engineering	PI	Production and Industrial Engineering
EE	Electrical Engineering	ST	Statistics
EY	Ecology and Evolution	TF	Textile Engineering and Fibre Science
Sectional-Single Session Papers			
XE Sections	Engineering Sciences	XL Sections	Life Sciences
A	Engineering Mathematics (Compulsory)	P	Chemistry (Compulsory)
B	Fluid Mechanics	Q	Biochemistry
C	Materials Science	R	Botany
D	Solid Mechanics	S	Microbiology
E	Thermodynamics	T	Zoology
F	Polymer Science and Engineering	U	Food Technology
G	Food Technology		
H	Atmospheric and Oceanic Science		

IIT Bombay Alumni pledge Rs. 25 crores to the institute for research initiatives and infrastructure

https://www.timesnownews.com/education/article/iit-mumbai-alumni-pledge-rs-25-crores-to-the-institute-for-research-initiatives-and-infrastructure/336610

IIT Bombay Alumni (1993 batch) have donated 25 crores for completing 25 years of their graduation. This is the first time that a batch has donated such a large amount of money.

The students of 1993 batch Indian Institute of Technology, IIT Bombay have donated 25 crores on completing 25 years of their graduation. This is the first time that a batch has donated such a large amount of money. The pledged amount would be used by IIT Bombay to fund its various research projects and for infrastructural development. This is also one of the largest corpus donated by alumni to any alma mater in India.

IIT Bombay is one of the oldest and most prestigious engineering institutes of the country. IIT Bombay is also one of the Top three Institutes from India to be ranked in the Top Universities in Asia

in various International Rankings. While alumni donations is not uncommon, the corpus of Rs. 25 crore is one of the largest recorded in the country. Alumni donate or pledge funds to their alma mater usually on their 10, 15 or 25 year reunions. For IIT Bombay, donation is almost customary after completion of 25 years of graduation.

This amount is used to create laboratories, the creation of new buildings and most importantly, scholarships for uunderpriveledged students. The 1992 batch gave donations worth 9 crores and the batch of 1998 announced that it will now give 1.6 crores.

The students of 1993 batch have set a record to give Donation of 25 crores. Out of 850 student 140 student have contributed to this donation. Abhay Pandey, the founder of A9 1 Solutions and Ex Student has been the largest contributor with her 10 crore donation. Alumni have expressed a desire that the money should be used well and feel that students in India deserve the same kind of quality education which they were lucky to get from their institutes.

December 25

PM Modi dedicates IIT campus to nation
https://www.dailypioneer.com/2018/state-editions/pm-modi-dedicates-iit-campus-to-nation.html

Prime Minister Narendra Modi dedicated a new 936-acre permanent campus of the IIT Bhubaneswar to the nation and laid foundation-stone for a host of projects, together worth Rs 14,523 crore, through a videoconferencing held at Argul on the city outskirts on Monday.

"I got the opportunity to dedicate IIT Bhubaneswar to the youth. Around Rs 1,260 crore has been spent on its construction. This grand campus will not only be a center of dreams for the youth of Odisha but also spur its industrial development. It will provide employment opportunities and improve the lives of people," the Prime Minister said.

He said his Government is following the notion of 'Sabka Saath, Sabka Vikas' in which Odisha is a focused State.

Modi laid the foundation-stone for the Indian Institute of Science Education and Research (IISER), Brahmapur. The institute will be built on 200 acres of land located at Laudigam in Ganjam district before December 2021 at a project cost of Rs 1582.78 crore.

Established in 2016, IISER Berhampur is currently functioning from the building of the Industrial Training Institute (ITI) in Berhampur.

As a part of the 200th year celebration of the historic Paika Rebellion, the Prime Minister released commemorative coins, commemorative Rs 5 postage stamps and inaugurated the Buxi Jagabandhu Research Chair of the Utkal University.

Foundation stones of Indian Oil Corporation's gas pipeline from Paradip oil refinery to Hyderabad at a project cost of Rs 3,800 crore and Bokaro-The Angul section of the Pradhan Mantri Urja Ganga project at an estimated cost of Rs 3,437 crore were also laid by the PM.

He also conducted groundbraking for six-laning of Chandikhole-Bhadrak section of NH-16, Khandagiri flyover in Bhubaneswar of NH-16, four-laning of Cuttack-Angul section of NH-55 and 6/4 laning of Tangi-Puintola section of NH-16.

This apart, Modi inaugurated an Archaeological Museum in Lalitgiri and dedicated 50 additional beds of the ESI Hospital here to people. A total of Rs 73.5 crore has been spent for upgrading the hospital.

Among others, Governor Prof Ganeshi Lal, Chief Minister Naveen Patnaik, Bhubaneswar MP Prasanna Kumar Patasani and Union Ministers Jual Oram and Dharmendra Pradhan were present.

Foreign companies make beeline to IIT-Hyderabad for placement drive

https://timesofindia.indiatimes.com/city/hyderabad/foreign-companies-make-beeline-to-iit-hyderabad-for-placement-drive/articleshow/67238801.cms

The Indian Institute of Technology, Hyderabad (IIT-H) received 22 placement offers from international companies during the first phase of placements which concluded on December 22. This is a huge leap compared to the count of last academic year, which was a mere eight.

Top five international recruiters (in terms of job offers) this year were TSMC (Taiwan Semiconductors), Mercari, Yokogawa, Softbank and Toyota Research Institute Advanced Development (TRI-AD). According to figures released by the institute on Monday, a total of as many as 213 offers were made by 80 companies during phase 1 of placement drive this year. In the academic year 2017-18, 191 students were placed in 68 companies.

"Many students including the PhDs received offers from companies within the country as well as abroad. Among them was TSMC which offered jobs to many PhD research scholars from IIT-H. More than 10 Japanese companies visited the campus this year," said Amit Acharyya, acting faculty-incharge of placements, IIT-H.

The rise in recruitment from Japanese firms has been attributed to long collaboration of Japanese institutes with IIT-H. "This year has seen a huge increase in students getting placed in international, especially Japanese companies. It is a good change that IITH has seen, and it is a fruit bore out of the exchange of culture and talent between countries and has thereby strengthened global bonding," said Abhijeet Sanjay Bhure, BTech student at computer science engineering department, who received an offer from Mercari .

According to figures released by IIT-H, some pre-placement offers from PSUs were also accepted by the students. "As many as 17 pre-placement offers were made by the public sector during the first phase. Two students were also recruited by ISRO. While defence firms continue to recruit our students, this year we observed a rise in number of companies recruiting from the design department," said Acharyya.

IIT-H students received preplacement offers from such as companies such as Amazon, Microsoft, Schlumberger, Qualcomm, Goldmansachs, Swiggy, Electronic Arts and DeShaw. Of the 418 students who had registered for phase 1 of placements, 213 were offered jobs. Prominent first-time recruiters that came for Phase I placements include Softbank, Mercari, Toyota Research, Toshiba Inc, Taiwan semicondcutors, Yokogawa electric corporation, Annotation Inc, Denso, Barclays and Oppo.

This is how our college campuses say no to plastic

https://timesofindia.indiatimes.com/life-style/spotlight/this-is-how-our-college-campuses-say-no-to-plastic/articleshow/67243148.cms

Following the directive from the state government to completely ban single-use plastics from January 2019, many colleges have already taken steps and some are in the process of finding ways to totally banish plastic from the campus, and also advising students to say no to plastic outside college as well. Awareness programmes, recycling plastics into reusable materials that do not harm the planet, alternatives to go plastic free... are all afoot in Tamil Nadu campuses...
Amrita canteen went plastic-free a year ago

Dr S Mahadevan, Deputy Dean, Amrita University says that the plastics on their campus comes from the small shops and units that sells daily commodities and food items like biscuit packets and snacks outside the campus. "In our canteen, even before this initiative was announced by the state government, we decided to go plastic-free — almost a year ago, in fact. There are no paper cups, plastic plates and spoons or straws used in our canteen. We are using only steel glasses, plates and spoons. Even during the recently held three-day international conference, we had zero plastic usage. The conference kit was made of jute, stationeries like pencils and papers were the recycled ones. Steel straws are the next item that we are going to introduce in the canteen. We don't use plastic bags even for food packaging, instead, we have recycled paper and cloth bags manufactured by us. But I still wouldn't say that we are cent per cent plastic-free, because we still have a lot of work to do. The next plan is to sensitise students and staff on ways to avoid plastic in any form; it's not going to be easy, but we have to start anyway."

IIT Madras Researchers develop technology to convert non-degradable plastic waste to fuel oil

Indian Institute of Technology, Madras has developed a technology to address the problem of plastic waste generated in the country. The Team Enviro has developed a thermo-chemical converter that converts plastic to usable fuel oil. The machine is called 'Decentralized Mobile Solar Powered Waste

Plastic Pyrolysis Unit.' It can covert 1kg plastic to 500 to 700 ml of oil (this can be used in agricultural pumps and other engines) depending on its material, characteristics and quality. The team was also invited to showcase their product at the United Nations World Environmental Day exhibition held at Vigyan Bhawan, New Delhi and they also presented it to PM Modi. Their team mentor, Dr Indumathi M Nambi, Professor, Environmental and Water Resources Engineering Division, Department of Civil Engineering, IIT-M, says, "A decentralised pyrolysis unit is the need of the hour since we install the units nearer to source or even better make it mobile. The product can produce fuel oil and this can also be utilised at source for generators."

This project won Innovation Excellence Award and received incubation seed funding in Carbon Zero Challenge, South India renewable energy contest conducted by IIT-M and industrial waste management association in collaboration with the US Consulate General Chennai and Polaris. The team received 8,00,000 rupees funding to develop the initial working prototype and to experiment and validate the research ideas and a seed funding of 10,00,000 rupees to incubate a startup in IIT-M research park. They're also selected for I-NCUBATE programme organised by Gopalakrishnan Deshpande Centre for Innovation and Entrepreneurship, Industrial Consultancy & Sponsored Research, IIT- M in collaboration with the George Washington University, to participate in a 7-week programme that helped the transformation of their research. They got initial direct market feedback from waste plastic processing unit at Puducherry and conducted market survey of around 10 prospective customers including municipal corporation of Chennai and Thottukudi. The team members who worked together on this are — Dr Sivagami K, Dr Divyapriya G, Ramya Selvaraj, Aravind ES, Keshav V Kumar and Thileepan P and the industry mentor was Sriram Narasimhan, Director, Sammridhi Foundation.

WCC banned single-use plastics on the campus in august this year

The supply of single-use plastics like forks, straws, spoons, cups and styrofoam plates were banned on all the food outlets on the WCC campus effective August 1, 2018. Students are encouraged to carry their own forks and spoons, informs Dr Sherrie Jesulyn David, Dean, Centre for Environmental Studies (CES), WCC.

The college has also installed 'UrBins' on campus. "We signed a letter of intent in August 2018 with Kabadiwalla Connect, a city-based plastic waste management company committed to effectively recycling plastic and helping in waste segregation. We have installed two smart bins on the campus," she adds.

The college has also started 'plogging', a combination of jogging and picking up litter. "It started as an organised activity in Sweden around 2016 and spread to other countries in 2018, following increased concern about plastic pollution. We are the pioneers of plogging on campus in Chennai. Thirty-nine students from eco-club shift participated in this activity on November 23," says Dr Sherrie.

Earlier this month, CES also organised two completions — an intra-collegiate Christmas Wreath-making competition, to encourage students to use biodegradable materials, and a poster designing competition on the theme 'Plastic-proof World'. They also organised 'no to plastic bag' awareness campaign in Mylapore and distributed pamphlets and 2400 paper bags to the shops there.

December 24

Scientists at IIT Kharagpur developing city-level maps to help cut damage from earthquakes
https://www.hindustantimes.com/india-news/scientists-at-iit-kharagpur-developing-city-level-maps-to-help-cut-damage-from-earthquakes/story-B4z3myokaP9UNzZTZNkLdK.html

The research will help state governments quickly identify areas with high hazard risk and send in rescue and relief teams when a disaster strikes, without losing precious time manually surveying the affected region.

Scientists at IIT Kharagpur are developing detailed city-level maps that can help identify areas likely to experience maximum damage in the event of an earthquake.

The research will help state governments quickly identify areas with high hazard risk and send in rescue and relief teams when a disaster strikes, without losing precious time manually surveying the affected region.

"Saving time during a disaster is important, because time is life," said Professor Sankar Kumar Nath from Indian Institute of Technology (IIT) Kharagpur, West Bengal.

Nath presented his research, which he says encompasses 25 years of his work, at the 16th Symposium on Earthquake Engineering organised at IIT Roorkee, Uttarakhand in collaboration with the Indian society of Earthquake Technology.

Seismic microzoning is a technique that involves mapping the different factors such as plate tectonics, soil quality, ground motion equations, topography, type of buildings etc to understand which areas within a city may get most affected by an earthquake.

It also takes in to account secondary hazards such as the landslides or floods that may be triggered by quakes.

"You can also know which places the road may be closed, from which route rescue should be taken and what kind of relief material is required immediately after the earthquake strikes, without having to waste time to do a manual survey of the damage first," Nath told PTI.

The system can also help state governments estimate the funds required for rescue and rehabilitation after disaster strikes.

For example, using his model Nath estimates that the city of Kolkata may bear losses of up to 231 million in the event of an earthquake.

"But this is not taking into consideration the essential facilities (hospitals, schools etc) -- if you take essential facilities into consideration it will be about 500 million," Nath said.

According to Nath, at least one million people in India are at risk of being severely affected by quakes in the Himalayan region.

IIT Kharagpur is among the list of institutes included in the Ministry of Earth Sciences' Expression of Interest for seismic microzonation of eight 'priority cities' like Patna, Meerut, Amritsar, and Agra.

The institute is planning to bid for microzonation of a number of cities, Nath said.

IIT Roorkee, IIT Delhi and Indian Institute of Science (IISc) Bangalore are among the other institutions that have been mentioned in the limited tender for seismic microzonation. The bidding for the tender closes on January 15.

December 22

53rd Inter IIT Sports Meet Concludes followed by Closing Function in Guwahati

https://www.sentinelassam.com/news/53rd-inter-iit-sports-meet-concludes-followed-by-closing-function-in-guwahati/

The 53rd Inter IIT Sports Meet concluded on Friday. Finals of various sports events were held on the final day of competition and it was followed by closing function.

In Badminton, Samar Singla of IIT Delhi grabbed the title of Best Player after IIT Delhi beating IIT Roorkee by 3-0 for 3rd place match. IIT Kharagpur emerged champion beating IIT BHU by 3-0. In the women category, Roshni Shetty of winning team IIT Madras grabbed the best player title.

In Hockey, Sumit Yadav of IIT Roorkee collected best player award whereas Danish and Samarth of IIT Delhi emerged as the highest goal scorers. *In Basketball, IIT Delhi won the title defeating IIT Kanpur by 63-57.* In the women category, IIT Roorkee defeated IIT Delhi 49-30 on way to win gold. *Cricket witnesses some breathtaking matches where IIT Delhi won the gold medal.* They defeated IIT Kanpur in finals and IIT Bombay finished third. In Football, host IIT Guwahati settled for bronze after defeating IIT Kanpur by a mere score of 1-0. In a nail-biting final match between IIT Roorkee and IIT Delhi, the latter grabbed gold with a score of 1-0. In Lawn Tennis, Aman Deo of host team IIT Guwahati received the best player award. In the team event final between IIT Guwahati and IIT Madras, the host defeated the latter and grabbed gold. In Table Tennis, IIT Bombay won gold by defeating IIT Kharagpur 3-1. IIT Roorkee had to settle for bronze. In Women category, IIT Delhi defeated IIT Guwahati in finals and grabbed gold. *In Volleyball, IIT Delhi defeated IIT Roorkee by 3-0 in the heated final match and grabbed the gold medal.*

In Women category, IIT Roorkee defeated IIT Madras in finals and grabbed gold.