NEWS CLIPS

April 20-26, 2019

Highlights of the Week@IITD

IIT-D alumnus promises Rs 20cr for research facility

April 26, 2018 https://www.hindustantimes.com/delhi-news/iit-d-alumnus-promises-rs-20cr-for-research-facility/story-ADhXrIfGSbxuCqCqHs2WGP.html

The centre, meant exclusively for research and education, will house "sophisticated analytical and other instruments in one building," the institute said.

IIT-Delhi alumnus and hotelier Patanjali G Keswani will provide Rs 20 crore for construction of the central research facilities building in the campus, the institute said on Thursday.

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The centre, meant exclusively for research and education, will house "sophisticated analytical and other instruments in one building," the institute said.

"Giving back to our alma mater is just a belated thank you and something every one of us should consider doing," Keswani said, adding that the institute contributes towards personal and professional development of those who study there.

The statement added in the memorandum of understanding (MoU) between the two parties was signed in February 2012 to accomplish this objective and the foundation stone of was laid down in March 2012.

"Institute is very pleased with the generous contribution made by Mr. Patanjali Keswani in establishing this research facility," Professor V Ramgopal Rao, Director, IIT Delhi said.

IIT Delhi Alumnus Mr Patanjali G. Keswani to bear up to Rs 20 Cr of the total construction cost of Central Research Facilities Building in IIT Delhi campus

April 25, 2019 https://indiaeducationdiary.in/iit-delhi-alumnus-mr-patanjali-g-keswani-bear-rs-20-cr-total-construction-cost-central-research-facilities-building-iit-delhi-campus/

Mr Patanjali G. Keswani, a 1981-Batch alumnus of Indian Institute of Technology (IIT) Delhi, and Chairman & Managing Director of Lemon Tree Hotels, has pledged to bear the construction cost (now up to Rs 20 Cr of the total) of the proposed central research facilities building in IIT Delhi campus.

The building to be known as the 'Golden Jubilee Gope & Lila Keswani Research Centre' will be exclusively for research and education and will house sophisticated analytical and other instruments in one building.

An MoU regarding setting up the Research Centre was first signed between IIT Delhi and its distinguished alumnus Mr Keswani in 2010. Under the said MoU, the IITD alumnus had donated Rs 25 Lakhs to his alma mater for the said purpose.

After having due deliberations on the subject matter, a fresh MoU was signed between both in Feb 2012 to accomplish the objective. Subsequently, in March 2012 the foundation stone of the Centre was laid down.

The Lemon Tree Hotels' CMD has now expressed his willingness to bear Rs 20 Cr of the total construction cost.

The RCC frame structure of the Research Centre, admeasuring 1,30,000 sq ft (approx) with ground to 6th floor, will be constructed by Mr Keswani and the same will be donated to IIT Delhi for the noble cause.

Speaking about his initiative to help in setting up the Research Centre, Mr Patanjali G. Keswani said, "At some stage I am sure all alumni of IIT Delhi realise how important their years at the Institute were for their development both personally and professionally as well as how much they owe to the faculty there. In that context, giving back to our Alma Mater is just a belated thank you and something every one of us should consider doing".

He added, “The Gope & Lila Keswani Golden Jubilee Research Center is my tribute both to IIT Delhi and to my parents and an acknowledgement of their joint contribution to my life.”

The ‘Golden Jubilee Gope and Lila Keswani Research Centre’ will come up behind the academic block in IIT Delhi campus. The 6-storey Centre will be built with an aim to provide all the research related required facilities to the students and faculty. The building will be completed within 18 months from the date of start of construction.

Speaking about the contribution made by Mr. Patanjali Keswani, Prof. V Ramgopal Rao, Director, IIT Delhi, said: “Institute is very pleased with the generous contribution made by Mr. Patanjali Keswani in establishing this research facility. This will greatly help our faculty and students in accessing state of art research facilities on the campus. We greatly value Mr. Keswani’s contribution and welcome alumni involvement in our pursuit of excellence.”

Mr Patanjali G. Keswani received his B. Tech degree in Electrical Engineering from Indian Institute of Technology (IIT) Delhi in 1981 and subsequently his Post Graduate Diploma in Business Management from Indian Institute of Management (IIM) Calcutta in 1983.

He was presented the Distinguished Alumni Award by IIT Delhi in 2011 and by IIM Kolkata in 2012. He was also a Member of the Board of Governors of IIT Delhi during 2011-12. National Stock Exchange listed Lemon Tree Hotels, which is promoted by Mr Keswani, owns and operates 54 hotels in 32 cities with over 5400 rooms and over 5000 employees.

At present, Mr Keswani is also the Chairman of the Skill Council for Persons with Disability and a founding member of the Sector Skill Council for the Hospitality, Travel and Tourism industry.
Mr Keswani worked for 17 years in the Tata Administrative Services, including as the Senior Vice President – Special Projects. Subsequently he has also worked with A.T. Kearney Limited, as its Associated Consultant and Director in their India Office.

Exhibition of innovative research and product development at IIT Delhi

April 23, 2019 https://news.careers360.com/exhibition-of-innovative-research-and-product-development-at-iit-delhi

IIT Delhi had organised the 15th Open House exhibition for demonstration of new and ongoing research work to the school & college students and other citizens recently.

The idea was to inspire and motivate especially the young students towards science and provide them with exposure to the latest research and innovation activities at IIT Delhi, which is impacting the society and industry.

The one-day event provided an insight into path-breaking research work, new initiatives, student projects and the advanced facilities and laboratories, which have been established at IIT Delhi. This year more than 3500 students from about 100 schools attended the Open House.

Speaking on the occasion of Open House 2019, Prof V. Ramgopal Rao, Director, IIT Delhi, said: "It is important to expose children to some of these research activities early on. They may not understand everything, but they will have life long memories of what they see or hear during their day-long interactions and visits to the research labs. Sometimes it is these small triggers or casual interactions that shape one's future career. Open House organized by IIT Delhi is designed to trigger this imagination and give children these life-changing moments. The entire campus comes together to organize this event. Our students and Faculty also learn from the probing questions the young and the unconditioned minds ask. It is a win-win for all".

The students witnessed more than 60 demonstrations presenting the ongoing research from the various departments of IIT Delhi and about 300 posters in the area of health, energy, clean air & water, artificial intelligence, robotics, and nanotechnology.

One of the major highlights was the Boeing-IIT National Aeromodelling Competition, where 12 best light-weight aircraft designs were displayed. The students were mesmerized by the manoeuvres and tricks that were performed by the budding designers and aeroplane enthusiasts.

IIT Delhi Alumni Association has declared a cash reward of Rs.1.8 lakhs to be given to the best-selected research posters and demonstrations evaluated by the alumni committee. The visitors found the lectures on “Nanotechnology”, “The science of mind and intelligence”, “Why should I study a Bachelor’s degree in Design from IIT Delhi?”, and “Why should you become an Engineer?” very interesting and motivating.

Recently, two organisations released the list of 300+ unicorns (start-ups valued more than 1 Billion US $) of the world. As per this data, from the 21 unicorns founded in India or by Indians abroad, 11 unicorns are founded by IIT Delhi Alumni.

Institute also initiated a new programme of Multi-Institutional and Faculty Interdisciplinary Research Programme with faculty within the institute and with other institutes viz. All India Institute of Medical Sciences (AIIMS), Indian Council of Agriculture Research (ICAR), and National Institute for Immunology (NII). About 80 such projects are in progress.

Boeing and IIT Announce Winners of the Sixth National Aeromodelling Competition

April 22, 2019 https://www.businesswireindia.com/boeing-and-iit-announce-winners-of-the-sixth-national-aeromodelling-competition-62938.html

Finalists of the Sixth Boeing-IIT National Aeromodelling Competition with Salil Gupte, President, Boeing India and other members of the Boeing Team at the competition finals held at IIT Delhi.

Leading aerospace competition in India provides a platform for students to innovate and showcase their skills in flying and engineering

Over 1,094 students across India participated in the competition

Highlights Boeing's commitment to nurturing aerospace engineering talent in India

Boeing [NYSE: BA] and the Indian Institute of Technology (IIT) announced the winners of the sixth annual Boeing-IIT National Aeromodelling Competition, one of India's largest and most popular aeromodelling programs. This year's competition featured 1,094 students from over 250 institutions across India. The competition also saw a 30% increase in the number of girls participating in the zonal rounds.

34 finalists from 12 teams were selected to the final round held at the IIT Delhi Hockey grounds. Disha Bawale, Indraneel Mane Deshmukh, Apoorv Mathakari, Pruthwiraj Kothavale from MIT College of Engineering were declared winners of the competition.

"The Boeing-IIT National Aeromodelling Competition is an excellent platform that gives young aviation enthusiasts in India a chance to hone their skills," said Salil Gupte, president, Boeing India. "I want to thank all the students for their participation. The prospect of these students in India creating the next big disruption in aerospace excites us. We are proud to be part of an ecosystem that inspires young minds to innovate," added Gupte.

The zonal level rounds of the competition were held at IIT Kanpur, IIT Bombay, IIT Kharagpur and IIT Madras. The top three teams from each zone came to IIT Delhi to participate in the finals. In the run-up to the competition, Boeing conducted aeromodelling workshops across the IIT campuses, training

students on designing and building radio-controlled airplanes.

Through initiatives such as the Boeing-IIT National Aeromodelling Competition, the Boeing HorizonX India Innovation Challenge and the Accelerated Aircraft Maintenance Engineers (AME) Apprenticeship program, Boeing is actively developing an ecosystem that encourages innovation and skill development for aerospace in India.

Boeing's partnerships with academia and the industry have resulted in the establishment of two research centers —Aerospace Network Research Consortium (ANRC) at Bangalore and National Centre for Aerospace Innovation and Research (NCAIR) with IIT Bombay. NCAIR has spurred technology entrepreneurship in aerospace manufacturing for the industry. Boeing has been able to promote cutting-edge research and technology in wireless networks, developing patents and several research papers at ANRC.

Details of winners:

Position	Institute	Team Members
Winner	MIT College of Engineering	Disha Bawale
	MIT College of Engineering	Indraneel Mane Deshmukh
	MIT College of Engineering	Apoorv Mathakari
	MIT College of Engineering	Pruthwiraj Kothavale
1st Runner-Up	Centre Point School, Nagpur	Zaosh Khambata
	Centre Point School, Nagpur	Akshat Vishwakarma
	Vincent Palloti School, Nagpur	Aaryan Vasu
	Government College of Engg, Nagpur	Chaitanya Patil
2nd Runner-Up	ACS College of Engineering	Rajeshwari R
	ACS College of Engineering	Keshav S
	ACS College of Engineering	Sanjay B
	ACS College of Engineering	Sumanth R

About Boeing

Boeing is the world's largest aerospace company and leading manufacturer of commercial jetliners, defense, space and security systems, and service provider of aftermarket support. Providing the mainstay of India's civil aviation sector for more than 75 years, Boeing's performance-driven aircraft are also playing an important role in mission-readiness for the Indian Air Force and Indian Navy.

Boeing is focused on delivering value to Indian customers with advanced technologies and is committed to creating sustainable value in the Indian aerospace sector – developing local suppliers, and shaping academic and research collaborations with Indian institutions. Boeing has strengthened its supply chain with over 160 partners in India, and a JV to manufacture fuselages for Apache helicopters. Annual sourcing from India stands at $1 billion. Boeing currently employs 3000 people in India, and more than 7000 people work with its supply chain partners. Boeing's employee efforts and India country-wide engagement serves communities and citizenship programs to inspire change and make an impact on more than 200000 lives.

IIT-Delhi wows with innovations on Open House Day

April 21, 2019 https://www.hindustantimes.com/india-news/iit-delhi-wows-with-innovations-on-open-house-day/story-KiuUSOsERmsUP4NmQVi2kK.html

Among the other innovations put up on display during the event, its 15th Open House Day attended by 5,000 students from 100 schools of Delhi-NCR, was a technology to "remote-control" the nervous system. (Hindustan Times)

From security system that detects changes in pressure to ring an alarm, to a device that could help the paralysed to move again, the IIT-Delhi showcased around 60 innovations by its students and faculty on Saturday.

Naga Jayant, an M Tech student and a co-inventor of the security system, said users can activate the system using their mobile phones."Users can fix these activated pressure sensors on valuables such as gadgets, vehicles and jewellery. If there is any pressure built on them, the burglar alarm will start beeping immediately and the user will also get a message on her or his mobile phone,"

With the "intelligent vehicle monitoring system", developed by postgraduate students Anshuman Singh and Pardhi Chandan, any monitoring body can detect drivers who use the mobile phones while on the move.

"It is based on Global System for Mobile (GSM) communication technology. If it's installed in a vehicle it will automatically send signals to the authorised person whenever the driver is using the phone while the vehicle in motion," said Singh.

Among the other innovations put up on display during the event, its 15th Open House Day attended by 5,000 students from 100 schools of Delhi-NCR, was a technology to "remote-control" the nervous system.

"The technology can be application in case if the lower body of a person is paralysed by some accident or in early stage of motor neuron diseases but the brain in intact. Using this technology, one can send signals from the brain using EEG (Electroencephalography) to stimulate the muscle and can help initiate some movement in the limbs like lifting and twisting an arm or leg a little and clenching fists," said Tapan K Nayan, an assistant professor at IIT-D's school of biological sciences.

Some of the other major projects developed by students and faculty included a foldable bed for "bed-ridden" patients, a height-adjustable wheelchair, a staircase climbing aide for disabled people and foldable bicycle.

IIT-D director V Ramgopal Rao on Saturday said that the institute is focusing on developing technologies having some social impact. He has also announced to introduce "professors of practice" initiative at the institute. "The IIT-D senate has already approved the programme under which experts from the industries having more than 10-years of experience will be encouraged to come and teach students at the institute. They will be participating in researches as well. Most importantly they will not need any PhD for this," he said.

IIT-D to introduce variety of new degree and short-term courses

April 21, 2019 https://www.thehindu.com/news/cities/Delhi/iit-d-to-introduce-variety-of-new-degree-and-short-term-courses/article26901563.ece

Institute will also start a programme called 'Professors of Practice'

The Indian Institute of Technology (IIT) Delhi is set to introduce a variety of new degrees and short-term certificate courses in the upcoming academic session, said Director of IIT-D V. Ramgopal Rao on Saturday.

In a bid to enable working professionals teach at the institute, IIT-D will also start a programme called "Professors of Practice."

"This programme will be started to encourage people working in various industries to come and teach our students. There will be selection committee to assess whether they are experts in their fields and if so, they will get the opportunity to teach at IIT-D," said Mr. Rao.

Speaking about the short-term courses, Mr. Rao said, "This course is for working professionals. Through these short-term certificate courses, students can move up and finally get a degree if they

crack the examinations held. We are not lowering the quality but simply broadening our base, to enable working professionals obtain a degree from IIT-D."

Mr. Rao also said that a minor degree programme will be introduced for students to be trained in entrepreneurship. A Ph.D incubator is also in the pipeline through which students will be offered fellowships and resources for developing start-ups.

Under same umbrella

"Our motive is to bring good institutions in Delhi under the same umbrella and use each others' resources for projects that have social relevance. Now our research is focused on the needs of the industry which have social relevance," Mr. Rao added.

On Saturday, IIT-D also held the 15th Open House where over 60 demonstrations on ongoing research by various departments were showcased. Over 4,000 students from 100 schools paid a visit to the exhibition, the institute said.

Various research projects ranging from intelligence vehicle monitoring systems to foldable bicycles and footwear dryers were on display at the Open House.

The "Foldable Bicycle with Chainless Drive" developed by IIT students Arpit Singhvi and Hemant Kumar Nama has collapsible wheels and a foldable frame to enable people to carry the cycle easily on public transport and so on.

Mr. Rao said, "The idea of the open house is to inspire and motivate students towards science and provide them exposure to the latest research and innovation activities at IIT-D."

April 26

New IIT-B director lists priorities: 'Looking to diversify courses, draw more woman students'

https://indianexpress.com/article/education/iit-bombay-director-subhasis-chaudhary-indian-institute-of-technology-kharagpur-5695305/

Chaudhari took over as the director last week, succeeding Devang Khakhar, who served in the post for two consecutive terms. He has been a professor and artificial intelligence researcher in IIT-B's department of electrical engineering for the past 29 years.

Subhasis Chaudhari is an alumnus of IIT-Kharagpur.

IIT-Bombay's standing committee is exploring the possibility of adopting the "liberal education" system — a multi-disciplinary approach focused on bringing more diversity to programmes — and applying it to STEM (Science, Technology, Engineering, Mathematics) courses in a bid to draw more female students, the institute's newly-appointed director Subhasis Chaudhari said on Thursday.

Chaudhari took over as the director last week, succeeding Devang Khakhar, who served in the post for two consecutive terms. He has been a professor and artificial intelligence researcher in IIT-B's department of electrical engineering for the past 29 years. An alumnus of IIT-Kharagpur, Chaudhari had earlier held several administrative positions in IIT-Bombay.

The new director said that while gender ratio remains a concern, the institute's staff are trying to tackle it through new ideas. "Our standing committee has decided to offer postdoctoral fellowships to women scientists. We are also exploring providing liberal education in STEM courses," he said. He cited music and art appreciation as examples of adding more diverse modules to courses.

"Last year… we invited high school girl students to the campus, who were trained by senior members of our institute. When you're young, you need somebody…you can identify with," he said, adding that the institute has two women deans aside from those acting as heads of departments and professors.

IIT-Madras launches free course to train primary teachers to support dyslexic children

https://indianexpress.com/article/education/iit-madras-launches-free-course-to-train-primary-teachers-to-support-dyslexic-children-5694491/

The course consists of modules such as Introduction to dyslexia, child development, screening, reading, spelling, writing, Math, study skills and Multiple Intelligence. It will be free of cost and be available on the NPTEL website.

The Indian Institute of Technology (IIT), Madras is collaborating with Madras Dyslexia Association (MDA) to launch 'e-Shikshanam,' a free online teacher training program to provide remedial support to children with specific learning difficulties. e-Shikshanam will train teachers and other stakeholders who work with a child with dyslexia. The training programme aims at providing remedial instructions to children up to class 5.

The course is open to primary school teachers (up to class 5) across the country through the National Programme on Technology Enhanced Learning (NPTEL) — an online platform where several courses from across the IITs are available (nptel.ac.in).

A structured multi-modal teaching, done in the way the child learns, is the best way forward to enable these children to bridge the gap between their potential and their actual performance, according to MDA – a non-profit organisation that works on nurturing children with Dyslexia. MDA has evolved simple methods of identifying and remediating these young children. The online course will impart these strategies to teachers.

The course consists of modules such as Introduction to dyslexia, child development, screening, reading, spelling, writing, Math, study skills and Multiple Intelligence. The course is being provided free of cost and will equip the learner with strategies to cope with difficulties in reading, spelling, writing and mathematics.

The course can be pursued at one's own pace. The understanding of the content is evaluated at the end of each module through assignments and quizzes. On completion of the course, to earn certification a trainee. At the end of the course, one has to view Case studies, analyse them, and answer related questions.

President, MDA, D. Chandrasekhar said, "There are about two million children with dyslexia in Tamil Nadu alone and there are simple remedial measures to help them. Empowering the teachers is a very important step. This is going to every school in India and in Sri Lanka and other countries where English is the medium of instruction."

April 25

JNU MBA 2019: Result is expected to be declared tomorrow on official website

https://www.jagranjosh.com/news/jnu-mba-result-2019-declared-at-official-website-jnu-ac-in-148679

JNU MBA 2019: The Atal Bihari Vajpayee School of Management and Entrepreneurship in JNU offers management programme. The result is to be declared tomorrow i.e. 26 April on the official website of the university. The candidates who have appeared in the exam can visit the official website to check the result once it gets released. The result of the selected candidates will be available on the official website of the university jnu.ac.in.

It is important to know that the university offers the MBA programme for 50 seats only. There is always a tough competition in the exam. To get admission in MBA programme, the students have to appear in CAT and then they have to face a personal interview. The CAT marks counts for 70 per cent of the weightage and the interview is for 30 per cent weightage. The result of CAT has been declared and the interviews were conducted on 15, 16 and 18 April.

The result of the JNU MBA will be declared that comprises the combined marks of the entrance exam and the interview both. The result will be released on the official website of the university

soon. The candidates need to visit the official website of the university so that they can get their result.

Jawaharlal Nehru University conducts entrance exams also called as JNUEE every year for admissions to its UG and PG programmes. This year, however, for the first time the National Testing Agency (NTA) has taken up the responsibility to conduct the entrance test. The entrance test will be held from May 27 to 30, 2019 in online mode. The exams will be held for a duration of 3 hours across different centres.

Flourescent nanodots may help detect cancer, says IIT scientists

https://www.newsnation.in/science-news/flourescent-nanodots-may-help-detect-cancer-says-iit-scientists-article-221823.html

Scientists from IIT Mandi have found light-emiting carbon nanodots can help detect cancer cells in the body, paving the way for easier diagnoses of the deadly disease.

Flourescent nanodots may help detect cancer, says IIT scientists

Scientists from IIT Mandi have found light-emitting carbon nanodots can help detect cancer cells in the body, paving the way for easier diagnoses of the deadly disease.

The research, published in the Journal of Physical Chemistry C, shows that fluorescent nanodots can reveal how water is distributed inside biological cells. The team from Indian Institute of Technology, Mandi showed that water distribution inside cancer cells differ from the normal ones.

The human body is composed of trillions of cells, with their own specialised functions. Cells have multiple constituents, of which water amounts to 80 per cent. Water molecules close to one another, are weakly attached to each other through feeble bonding forces called hydrogen bonds.

The hydrogen bonds are dynamic and change according to the interactions of water with the surroundings. The subtle changes in intracellular water, governing the cellular functionality, may initiate a series of biomacromolecular dysfunction that can lead to cancer or neurological disorders, researchers said.

The team led by Chayan K Nandi, an associate professor at IIT Mandi synthesised a fluorescent nanodot, a material that is in the scale of nanometres—about 80,000 times smaller than the width

of human hair. The nanodot is made of carbon and contains both hydrophilic (water loving) and hydrophobic (water hating) parts.

The presence of water repellent and water attracting parts within the same nanodot make them organise themselves according to the nature of the hydrogen bonding caused by the water molecules, like the formation of soap micelles around grease.

In addition, the nanodot can emit light in the far ultraviolet wavelengths when illuminated with near ultraviolet light, and the time taken before it fluoresces depends upon the micellar arrangement of the nanodots around the hydrogen bonding network.

By introducing these nanodots into cells, the research team showed that the hydrogen bonding network is different in cancer and normal cells. The research provides the first evidence that the nuclei of cancer cells contain more free water than normal cells.

“It has been difficult to understand and experimentally analyse the extent of hydrogen bonding in intercellular water. This is the first probe to provide direct evidence of the hydrogen bonding network in an entire cell,” Nandi said in a statement.

Given the difference in water distribution in different types of cells, future research would enable the utilisation of these nanodots for detecting dysfunctional and diseased cells.

IIT Roorkee submits pollution report to GDA

https://timesofindia.indiatimes.com/city/noida/iit-roorkee-submits-pollution-report-to-gda/articleshow/69033425.cms

The Indian Institute of Technology (IIT), Roorkee, which was hired by the Ghaziabad Development Authority (GDA) to prepare an environmental plan for the city, has submitted its report to GDA.

The report has been sent to UP Pollution Control Board to ascertain its viability because the earlier report which the institute had submitted was rejected by the board saying it was ‘un-implementable’.

The content of report however was not divulged by either GDA or the board saying that it would be released officially after being assessed. “Even though we are the nodal agency and we hired IIT Roorkee to prepare environmental plan for the city it is UP Pollution Board which has the expertise to assess it and therefore we have forwarded it to them” said Ishtiaq Ahmed, chief architect and town planner, GDA.

The Pollution Board official on the other hand first feigned ignorance of the report but later said that they are still going through it.

But it has been learnt through sources that the report attributes high pollution level to industrial and vehicular pollution.

IIT Kharagpur Students Win EXL Excellence Quotient 2019

https://indiaeducationdiary.in/iit-kharagpur-students-win-exl-excellence-quotient-2019/

Two teams from IIT Kharagpur swept 3 out of 4 awards at the final round of EXL Excellence Quotient 2019. Team Ninety Degrees of Anmol Thakkar & Ayush Bansal from IIT Kharagpur secured the 1st position and Team Tesseract of Ayush Patnaik & Prakhar Prakash secured 2nd position thereby bringing laurels to the Institute.

EXL Excellence Quotient (EQ) is an annual case study contest structured to test skills like problem identification, logical thinking, structured and methodical approach and efficient analysis amongst its participants. Students from 20 premier academic institutes across the country including 8 IITs and 7 NITs participated in the competition. A total of 698 teams registered out of which 38 qualified through 1st Round and only 6 teams made it through the 2nd Round to the National Finals.

The challenge pertained to designing improved fraud detection methodologies & optimize the cost of the investigation in the insurance industry. They were asked to suggest ways to improve the fraud detection process in terms of accuracy as well as the time taken for the entire process.

“Trust is an important aspect for an insurance company because it is selling a promise. Taking advantage of the holistic dataset provided in the competition, we gained insights into the entire value chain and created data features around metrics of trust,” explained Anmol Thakkar, student from the IIT Kharagpur’s winning team. The insurance claims were then analysed using these metrics and fraudulent claims were identified. “We built an algorithm that supported all offerings that an insurance company has on its roadmap and presented fraud prevention methodologies like telematics plug, that can help a company turn around their revenue numbers,” he added.

The winning team, Team Ninety Degrees from IIT Kharagpur received a cash prize of Rs. 1.25 Lakhs along with certificates and winning trophy. The runner ups, Team Tesseract from IIT Kharagpur received a cash prize of Rs. 60 thousand. Pre-placement offers were extended to the winning teams.

The case study contest provides participants platform to learn and experience real life consulting problems faced by organizations and how they can apply their academic learning and business acumen to offer solutions to such problems. EXL EQ 2019 offered participants an opportunity to engage in decision analytics using various data handling tools.

IIT Kharagpur collaborates with Jindal Stainless to introduce 3-credit course on stainless steel

https://economictimes.indiatimes.com/industry/services/education/iit-kharagpur-collaborates-with-jindal-stainless-to-introduce-3-credit-course-on-stainless-steel/articleshow/69043925.cms

Jindal Stainless Limited (JSL), one of the largest stainless steel manufacturers in India has tied-up with IIT Kharagpur to introduce a 3-credit course on stainless steel and advanced ferrous alloys as a part of the institute’s undergraduate and post-graduate curriculum in Metallurgical and Materials Engineering.

The course will comprise study of stainless steel and the uniqueness of its various grades, behavioural and forming characteristics, determination of life-cycle cost, and an understanding of the entire gamut of applications; along with the study of advanced ferrous alloys. It will commence

as an elective from the autumn semester (July-November 2019) of the institute, with an initial batch of around 50-60 students, a joint statement from JSL and IIT Khargpur said.

Commenting on the development, IIT Kharapgpur's Head, Department of Metallurgical and Materials Engineering and School of Nano-Science and Technology, Rahul Mitra said: "The curriculum shall focus on detailed study of different aspects of stainless steel and ferrous alloys. We thank Jindal Stainless for their efforts and look forward to a healthy industry-academia relationship."

Managing Director, JSL, Abhyuday Jindal said: "With IIT Kharagpur's support, this course will instil a sense of innovation in the students and motivate them to embrace sustainable solutions in the future."

Stainless steel it is still at the nascent stage in India, with a per capita consumption of around 2 kg, as compared to the global average of about 6 kg, JSL director S Bhattacharya said adding, "this provides immense opportunities to tap stainless steel efficiently in architecture-building-construction, automobile-railway-transport, and process industries, among other industrial applications."

April 24

IIT Madras hosts colloquium on 'Artificial Intelligence - A Priority for India'

https://www.indiatoday.in/education-today/news/story/iit-madras-hosts-colloquium-on-artificial-intelligence-a-priority-for-india-1509223-2019-04-24

IIT Madras explains why 'Artificial Intelligence - A Priority for India' is the need of the hour in India.

Indian Institute of Technology Madras Robert Bosch Centre for Data Science and Artificial Intelligence (RBC DSAI) hosted a Colloquium on 'Artificial Intelligence - A Priority for India' on April 22, 2019, bringing together leading researchers, academics, policymakers and industry leaders in India to understand and deliberate on the state of research and innovation in AI and Machine Learning in the country. It also focused on arriving at actionable programmes for the Indian AI ecosystem to contribute, collaborate and co-create.

The Colloquium was anchored by RBC DSAI, IIT Madras, a premier multi-disciplinary AI Centre in India, along with itihaasa research and digital, a non-profit organization which studies the evolution of technology domains in India.

Addressing the event, S. Kris Gopalakrishnan, Chairman of itihaasa Research and Digital and Axilor Ventures, said, "Artificial Intelligence is an important technology driving global economic growth in the 4th industrial revolution and in which India should develop national capability and global leadership. This is essential to meet our aspirations of becoming a USD 5 trillion economy in the next five years. At itihaasa Research and Digital, we published the first-of-its-kind report on the landscape of AI research in India that sets the agenda for how we can build a strong capability in AI. We have co-anchored the IIT Madras AI Colloquium to spark a meaningful dialogue among researchers, industry, and policy makers. I am optimistic about AI making a positive impact on India's growth."

Delivering the inaugural address, Prof Bhaskar Ramamurthi, Director, IIT Madras, said, "There is a lot of excitement surrounding AI and it is our job in the university to figure out the way forward in such a way that its benefits and potential for misuse are clear. We should not discover security issues too late, as was the case with Internet."

Speaking about the importance of this Colloquium, Prof Mahesh Panchagnula, Dean (International and Alumni Relations), IIT Madras, said, "Events like this colloquium that bring together people from a cross-section of stakeholders are crucial to the evolution of AI in a direction that benefits the society at large. Institutions like IIT Madras have to take a lead role in organizing such colloquia."

Around 30 speakers delivered lectures during the Colloquium, which attracted more than 200 participants, with 65% from industry and the rest from the academic and student community.

Commenting on the design and intent of the Colloquium, Prof. B. Ravindran said, "The themes of the roundtables were chosen to reflect the key challenges that need to be addressed for wider adoption of AI, particularly in India. The deliberations in the colloquium would lead to greater awareness of these issues, and hopefully, result in more sustained dialogues between the different stakeholders in evolving India's AI policy."

During the event, a MoU was also signed between IIT Madras and itihaasa research and digital on research and innovation collaboration around AI and ethics, fairness, and explainability. The key objective of this collaboration is to bring together global academic researchers, policy makers, and industry leaders to understand the relevance and implications of ethical considerations in Indian AI implementations.

Several announcements were also made on new initiatives from RBC DSAI, IIT Madras, taking forward the themes discussed during the event.

Scientists work out ways to minimise chemo side effects

https://www.thehansindia.com/news/cities/hyderabad/scientists-work-out-ways-to-minimise-chemo-side-effects-523565

Chemotherapy is one of the most widely used treatments for cancer. It involves single or combination of drugs that prevent cancer cells from dividing and growing. Most cancer patients who have to undergo chemotherapy treatment worry about the associated adverse side effects caused to healthy cells.

Scientists have been working to find ways to minimise side effects while maintaining effectiveness of chemotherapy. A group of Indian researchers have now developed a hydrogel-based cancer treatment method.

In conventional chemotherapy, drugs being administered get diffused immediately resulting in an uncontrolled and unpredictable pattern of drug release. This burst of drug causes damage to surrounding healthy cells. To overcome this problem, researchers have developed a superstructure of cyclodextrin and polyurethane polymer. It acts as a drug depot and releases drug in a slow and controlled manner, increasing its efficiency.

This superstructure has been found to be friendly to biological tissues when tested in animals with anti-cancer drug, paclitaxel. It could treat skin cancers much better when compared to pure drug as given in chemotherapy. No side effects were observed in various biochemical parameters and histopathological tests.

"We have designed three generation of hyperbranched structure of polymer using hydrophilic cyclodextrin and wrapped up using hydrophobic polyurethane through grafting. This special architecture handles drug release in a controlled manner. Drug is available for its action even after three days of administration into blood stream as opposed to burst release of drug in conventional chemotherapy," explained Professor Pralay Maiti of IIT (BHU), Varanasi, who led the research, while speaking to India Science Wire.

Injectable hydrogel solution once injected inside body turns into solid which enhances its efficiency by localising at tumour site. The drug and polymer superstructure interact and the balance between actions of its hydrophilic and hydrophobic layers ensures slow drug release, researchers said.

"We would like to apply this knowledge for patient care and have already filed patents. We are also trying to cure other cancers like breast, colon and other vital organ tumours," said Prof Maiti. The research team included Prof Pralay Maiti, Aparna Shukla, Akhand Pratap Singh, Tarkeshwar Dubey and Siva Hemalatha from IIT (Banaras Hindu University). The results of their research have been published in journal ACS Applied Bio Materials.

April 22

IIT-Mandi invites applications from startups for innovation challenge, grant up to Rs 16 lakh

https://indianexpress.com/article/jobs/iit-mandi-invites-applications-from-startups-for-innovation-challenge-grant-up-to-rs-16-lakh-5688215/

IIT-Mandi's Catalyst will support and enable willing innovators, entrepreneurs or aspiring/ set-up startups to develop prototypes, test and take them to the market in the Himalayan region with a viable business plan. Individual price up to Rs 1 lakh and grant up to Rs 16 lakh will be bestowed.

Individual, group, startup entries allowed. (Thinkstock.com)

The Indian Institute of Technology (IIT) Mandi's Technology Business Incubator 'Catalyst' is inviting applications from startups, innovators and aspiring entrepreneurs for Himalayan Innovation Challenge (HIC), which aims to encourage entrepreneurs to develop technology solutions for problems unique to the Himalayan region. The event will be held on May 25 and 26, 2019. The last date to apply through the website, iitmandi.ac.in/Catalyst/HIC/ is May 10, 2019.

A total prize money of Rs 1 lakh will be distributed to top ideas and incubation support will be offered that will include Rs 16 lakh worth of grant and investment from IIT-Mandi Catalyst.

The HIC is an initiative of IIT Mandi Catalyst to actuate a series of innovative technology-based solutions designed specifically to solve social and economic problems in the Himalayan region.

According to faculty in-charge, Catalyst, Dr Puran Singh, in the last two years, Catalyst has supported more than 30 startups of which 16 have been from Himachal Pradesh. Of these, four startups have progressed into the commercialisation phase. These startups have generated employment and internship opportunities for more than 80 individuals. Catalyst has disbursed over Rs 1 crore grant and investments to startups in the past two years, he informed.

Entries are accepted in individuals, teams, as well as startups form. Innovators and to-be entrepreneurs or established entrepreneurs can find the missing partners and collaborators to build the solutions relevant to the Himalayan region.

IIT Mandi Catalyst will commit financial and active mentoring support to individuals/teams/startups that bring forth promising ideas and commit to implementing them on the ground.

Catalyst aims to create an impact in a range of relevant areas that bear importance for the Himalayan region. There are three tracks in which ideas can be submitted:

Track I: Resources and Sustainability: Natural resource management, Renewable and clean energy, Climate change, Waste management, other relevant themes

Track II: Disaster Management and Safety: Disaster prevention, mitigation and management, Road safety, other relevant themes

Track III: Agriculture, healthcare and inclusive growth: Agriculture, biotechnology, Inclusive healthcare, Financial inclusion, any other area with strong application in the Himalayan region.

IIT-Hyderabad launches master's programme in development studies

https://indianexpress.com/article/education/iit-hyderabad-launches-masters-program-in-development-studies-iith-ac-in-5688179/

The last date to apply for the two-year course is June 4, 2019. Internship and dissertation to be part of the course along with 16 courses across 48 disciplines including anthropology, development studies, economics, psychology and the humanities.

The Indian Institute of Technology (IIT), Hyderabad has announced to launch a two-year courses master's program in development studies. The course is being offered by the Liberal Arts Department and the applications will be available on the institute website, iith.ac.in from May 4 and it will conclude on June 4. Students will do 16 courses over three semesters, each course worth three credits.

A total of 48 credits of taught courses and 12 credits for a dissertation which the students will focus exclusively on, in their final semester. As part of the course, students will also have to pursue an internship in the summer after one year of course work.

Faculty coordinating the different courses in this program come from disciplines of anthropology, development studies, Economics, Psychology and the Humanities.

Head, department of liberal arts, IIT Hyderabad, Dr Haripriya Narasimhan, said, "The concern with development encompasses all aspects of human life – physical, psychological, cultural, political, economic and ecological. How can we address each of these while simultaneously appraising their interdependence? The challenge is to train and conceive of professionals and roles that can critically inform ways in which these different areas of life affect one another. The Development Studies program at the Department of Liberal Arts, IIT Hyderabad, does just that."

He added that through its interdisciplinary approach, the course will offer a plurality of ways in which the discourse of development can be innovatively adapted to the ever-changing fabric of human life.

IIT Hyderabad launches Master's Program in Development Studies

https://www.indiatoday.in/education-today/news/story/iit-hyderabad-launches-master-s-program-in-development-studies-1507419-2019-04-22

Application for the Master's Program in Development Studies will begin from May 4, 2019 and will close on June 4, 2019.

Indian Institute of Technology Hyderabad is launching a Master's Program in Development Studies, which will adopt an inter-disciplinary approach to study development. The course is being offered by

the Liberal Arts Department and the applications will be available on the Institute website (https://www.iith.ac.in/) from May 4, 2019. Applications will close on June 4, 2019.

A Master's in Development studies opens up several career paths such as development practice in grassroots organizations, employment in national and international non-governmental organizations (NGOs), donor agencies and corporate sector (corporate social responsibility). It will also aid students interested in pursuing a career in Civil Services or the academia.

Speaking about the importance of this new course, Dr. Haripriya Narasimhan, Head, Department of Liberal Arts, IIT Hyderabad, said, "The concern with development encompasses all aspects of human life - physical, psychological, cultural, political, economic and ecological. How can we address each of these while simultaneously appraising their interdependence? The challenge is to train and conceive of professionals and roles that can critically inform ways in which these different areas of life affect one another. The Development Studies program at the Department of Liberal Arts, IIT Hyderabad, does just that."

Further, Dr. Haripriya added that through its interdisciplinary approach, the course will offer a plurality of ways in which the discourse of Development can be innovatively adapted to the ever-changing fabric of human life.

Faculty

Faculty coordinating the different courses in this program come from disciplines of Anthropology, Development Studies, Economics, Psychology and the Humanities. With courses offered in fields of Health, Gender, Technology Studies, Economics, Urban Settlements and Disease Management, and a dedicated Internship component, this two-year program offers students a formidable platform to engage with contemporary research in India and globally.

Syllabus

Students will do sixteen courses over three semesters, each course worth three credits. A total of 48 credits of taught courses and 12 credits for dissertation which the students will focus exclusively on, in their final semester. They will do internship in the summer after one year of course work.

The Department of Liberal Arts at IIT Hyderabad is the first of its kind in the country. Besides rigorously focusing on research and teaching across all fields of Humanities and Social Sciences, the Department also pushes its traditional discplinary boundaries.

IIT Roorkee & TERI sign MoU to Address Energy and Sustainability related Challenges

https://news.careers360.com/iit-roorkee-teri-sign-mou-address-energy-and-sustainability-related-challenges

Indian Institute of Technology (IIT) Roorkee has signed an MoU with TERI - The Energy and Resources Institute, New Delhi.

Indian Institute of Technology Roorkee (IITR) and TERI have agreed to collaborate in the areas of mutual interest with special focus on the thematic areas of Energy, Renewable Energy, Water Management, climate change, food, environment, sustainable habitat and sustainable transport.

The MoU will also facilitate capacity building activities and joint events focusing on public policy and public action in the areas of Energy Transition, Energy Access, Energy Efficiency, Renewable Energy, Green Buildings, Sustainable Cities, Sustainable Transport, Air Quality, Sustainable Land Use, Waste management, Climate Science & Policy, Resource Efficiency and Security.

“We are delighted to tie up with TERI. The partnership with TERI will faciliate increased usage of the intellectual resources of IITR i.e. its faculty and students, for addressing energy and sustainability related challenges faced by developing countries, in general, and India, in particular” said Prof Ajit Kumar Chaturvedi, Director IITR.

Speaking about the collaboration Dr. Ajay Mathur, Director General of TERI said "It is a matter of pride that TERI is further strengthening its ties with IIT Roorkee as both the institutions enter in to a MoU. This formal arrangement would help leverage respective strengths to further research and academic collaborations given natural synergies in the areas of energy, environment, and natural resources."

April 20

IIT Bhubaneswar collaborates with foreign institutes for 11 research projects

https://digitallearning.eletsonline.com/2019/04/iit-bhubaneswar-collaborates-with-foreign-institutes-for-11-research-projects/

IIT Bhubaneswar, in a fine example of leading from the front, has collaborated with several foreign universities for 11 research projects, under the SPARC program introduced by the MHRD.

Out of the twenty five proposals submitted by the institute, eleven have been approved whereas the review process is going for the other projects. As per the reports, the approved projects have received a technical consent and sanction of Rs. 6, 18, 37,534.

For the uninitiated, the Ministry of Human Resources Development recently embarked upon an ambitious program, “The Scheme for Promotion of Academic and Research Collaboration” (SPARC).

The program is aimed at further improving the academic and research collaborations between Indian Institutions and the best of institutions in the world to jointly solve problems of national and/or international relevance.

Under the scheme, IIT Kharagpur has been given the responsibility to discharge the duty of national co-coordinator with other reputed institutes of India. It has invited a number of proposals from all IIT’s across India.

With a total budget of Rs 418 Crores, SPARK plans to aid nearly 600 such joint collaborations across 100 Indian Institutions over the span of two years. The distinguish features of SPARC initiative are visits and long-term stay of top international faculty / researchers in Indian institutions to pursue teaching and research and visits by Indian students for training and experimentation in premier laboratories worldwide.

Appreciating the government’s initiative, Prof. R.V Raja Kumar, Director, IIT Bhubaneswar, said, “The objective of the SPARC program is very noble, it will certainly enable us in forging new relationships with reputed research groups across the globe and I complement the Ministry for providing this kind of an opportunity to the Institutions. As you may be aware, MHRD has been constantly encouraging the IIT’s to further progress to find place in the top global class of Institutes.”