NEWS CLIPS

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Highlights of the Week@IITD

'The aim is to get IIT-Delhi in the world Top 100'

November 23, 2018 https://www.thehindubusinessline.com/news/education/the-aim-is-to-get-iit-delhi-in-the-world-top-100/article25580190.ece

Armed with the 'Institute of Eminence' tag, which it received about five months ago, the Indian Institute of Technology (IIT)-Delhi is on a new mission. To overcome its shortcomings such as lack of foreign faculty and foreign students, the management is now planning to focus on its weak areas in a bid to be among the top 100 institutes globally.

IIT-Delhi Director V Ramgopal Rao, in an interview with *BusinessLine,* shares the institute's plans to improve its global ranking and also talks about the IIT's 'socially relevant' research work. Excerpts:

What has changed for IIT-Delhi after it was awarded the status of 'Institute of Eminence' (IoE)? What is now going to be the focus area for the institute?

We are in the process of analysing our rankings. Right now it holds the 172th position in the QS World Ranking, but the aim is to get into the top 100 in the next three years.

The focus of the institute is to figure out what are the factors that are holding it back.

In QS Ranking, the institute scored zero on three parameters: foreign faculty, foreign students and faculty-student ratio.

So, there is a need to work on these parameters to improve the rankings.

The IoE branding will help us in it. Keeping this in mind, in a few months, IIT-D will announce 500 Ph.D. fellowships for foreign students.

In the fourth parameter, which is perception, the institute scores 45 out of 100. In research impact, which is the fifth parameter, IIT-D is ranked 39th in the world.

Could you spell out what kind of research the institute is doing and with what objective?

The institute is faring well in research globally, but it is lagging in research relevant to society at large.

Generally, a student takes up a project, publishes a paper which eventually gets cited.

So, when one counts those numbers, it looks good but what is missing is the society connect.

For example, solving the problem of air pollution in Delhi also requires research in order to find an affordable solution.

Keeping this in mind, the institute has now started asking faculty and students to focus on real-world problems in India and come up with affordable solutions.

The institute, in 2018, funded projects worth ₹35 crore to solve the many challenges the country is facing.

To bring in foreign students, what are the countries that you are targeting?

The institute is targeting students from the Asean and Saarc countries. Soon, the institute is also going to sign an MoU with a university in Nepal. We can't expect students from the US and Western Europe to come to IIT-Delhi for education for some more time.

We are also looking to hire foreign faculty, but do not plan to lower the standards just to get foreign faculty.

There are a number of students from IIT-Delhi who are launching start-ups. However, the number of women entrepreneurs is minuscule. Is the institute trying to rectify the situation?

The institute realised this problem. According to some studies, amongst people starting their own enterprises, less than 8 per cent are women.

So now, IIT-D has come up with a Women Entrepreneurship and Empowerment (WEE) programme. It happens once in six months.

Under the programme women are asked to pitch their ideas to a panel and on the basis of it, 30 women are selected and mentored for six months.

The institute also helps them in launching their enterprise.

JEE Advanced gets tougher every year but what is the alternative? - IIT Delhi Director shares the way forward

November 29, 2018 https://www.timesnownews.com/education/article/jee-advanced-gets-tougher-every-year-but-what-is-the-alternative-iit-delhi-director-professor-v-ramgopal-rao-interview/323206

IIT Delhi Director shares, in an exclusive interview the reasons why JEE Advanced examinations continue to get tougher, the problem with engineering education in India and the way forward.

JEE Advanced – the engineering entrance examination has become one of the most competitive examinations in the country. As many as 12 lakh students appear for the JEE Main examinations out of which about 2 lakh are shortlisted to appear for the JEE Advanced. Out of these, only about 12,000 students make it to the top engineering colleges – the Indian Institutes of Technology or the IITs. Over the years, these examinations have become tougher and more competitive.

Professor V. Ramgopal Rao, Director, IIT Delhi discusses the present state of engineering education in India and more specifically the JEE Advanced examination, the reason why it gets tougher every year and what is it that IIT's need, India needs today in respect to engineering education.

Thank you for taking out time. Lakhs of students aspire for the IITs. Off late, there has been a lot of criticism regarding the selection process. It is essentially based upon the academic aptitude of the child. Do you think that the selection criteria need to be changed?

Professor Rao: We all want to change but what is the alternative model? For every one seat there are 1000 students. In this scenario, what can be the best exam? If 10 students are competing for one seat then you may have a process of selection but, in this scenario, it will be a process of elimination. As a result, JEE has become tougher simply because of the number of students taking that exam. And we want an objective way of admitting students. There has always been a lot of discussion in the council and everyone wants to admit children who could not clear the JEE but are extra ordinary but how to achieve it? We can perhaps look at, say, the Maths Olympiad for instance. It's not difficult to admit them based on alternate criteria but the day we do that, the number of students taking the Maths Olympiad will go up by at least 100x. Then the problem focus will shift from JEE to the Maths Olympiad.

So the JEE exams have to get tougher?

Professor Rao: The standard needs to get more complicated because if it gets easier, so many students will get a 100 out of 100 and you will have no way to select students. The students come with three years of intense preparation, if you make it easier they will crack it in half the time. Then we cannot select anyone.

Just because some students could do it 15 seconds they came to IIT and those who could do it in 30 seconds went to NIT.

Indeed the demand for IITs and the supply of the same is a concern. But the problem persists.

Professor Rao: The problem is not with the exam, the problem is we don't have good second tier institutions. There are IITs and then there is nothing. The next level institutions are so far below. The students are equally good, if you go to an NIT, the students are exceptionally good, some more so. What divides the students who are in IITs and NITs is not aptitude but perhaps speed. Maybe, our students can solve a problem in 15 seconds and NIT students can solve the same problem in 30 seconds, but in real life what difference does it make? Just because some students could do it 15 seconds they came to IIT and those who could do it in 30 seconds went to NIT. Somebody could do these questions in 2 minutes and they went to some other university - that is what is currently happening. That is not the fault of children. Exams have to be eliminating because beyond IITs there is a void. And the void is not of infrastructure…increasing the number of seats is not difficult. All it would take is perhaps one more building. The problem with NITs and other technical institutes is good quality of faculty.

Could you elaborate?

Professor Rao: Quality of faculty. IIT Bombay and IIT Delhi today have about 500 faculty positions vacant. If the top two institutions are unable to recruit people, what chance do NITs have of getting good talented teachers? Today, if there are good applications, I can offer 300 faculty positions. But, we do not have people at that level who we can be recruited to train the brightest minds, help with research, innovate and motivate. It is basically the quality of faculty which is hurting these institutions. And, the fact that only Indian Nationals can be offered recruitment at IITs and NITs and other government colleges creates further roadblocks. Admissions, yes! With so many students within the country, we should have stuck with Indians, but at least for recruitments, we could have gone global. We could have looked for the best talent all over the world.

IIT Delhi carries out research projects worth about Rs 500 crores every year.

I believe the 'Institute of Eminence' tag allows you to recruit people from all over the world?

Professor Rao: Yes. Policies are changing and today I can recruit a foreign faculty member and keep him on a contract for 5 years without offering a permanent government job. Still, it requires a lot of changes. Imagine, you have done a PhD from Stanford University and you want to come and teach in IITs, but why would I come if I don't even know whether or not I will continue after five years? Even if I do continue after five years, there is no guarantee that I will ever get a regular position. And then there is the question of research. Someone doesn't come just to teach as an IIT Delhi faculty. 1/3rd of our time goes into teaching and 2/3rd of it goes into research. To attract the best talent, I need to create facilities. I need to have PhD students and in turn I need to be able to support them. IIT Delhi carries out research projects worth about Rs 500 crores every year. Most of the research money comes from the government agencies like Department of Science and Technology, DRDO and all other agencies which fund this kind of a research. A foreigner is not even eligible to seek that funding. So, even if you recruit a foreigner, you cannot offer that individual a regular full time position and the research funding. In such a case, for that person there is no incentive. How will you

build a research career? How will you ever stay here long enough and contribute to the research. That is big challenge.

So what's the solution?

Professor Rao: There are a lot of things that need to change and they are changing. At least now we can recruit them on a five year position. We are going back to the government to change those policies and it will take some more time. We will have to create a system when good people from all over the world can come and teach in our institutions.

IIT Delhi is on the wish-list of a lot of students. What is the wish-list of IIT Delhi when it comes to students?

Professor Rao: My only wish is that when students come here, they must come with an open mind. My biggest challenge is dealing with the students who have already laid down their path that involved a B. Tech degree and then a job…perhaps an MBA along the way. Their minds are closed perhaps because of their parents, the peer pressure, society or lure of a certain salary package. This is hurting the system right now. Such bright students, some of the brightest in the country but how many actually achieve something in life? Very few. In fact, not even 5% because they do not use their potential well enough. If only these bright students decided a little later in life about what they wanted to do, found their passion somewhere. There are so many things happening here, such avenues of research and if they exposed themselves a little, find out what interests them, find their passion, they would surely make a name for themselves. But there is hope for entrepreneurship right now. I think if we do it right, and as an institution, if we support these children, a lot of things will change in the country. We could see the next technical giants like Google and Microsoft starting from India. Students are excited about entrepreneurship. I think our future will be in the startups and in these children, the graduates of these institutions pursuing entrepreneurship. I think we need to support them.

And how does IIT Delhi plan to do that?

Professor Rao: Technology companies need a lot of lead time and that kind of ecosystem does not exist in India. That is where institutional support will help them. IIT Delhi has now announced a platform for harnessing deep technologies where we are trying to create an incubator purely for technology and product based companies. We will make all the resources available. Technology company require resources that are expensive – more in the line of a capital investment of about a 100 crore equipment. These are essential for product based companies…equipment's to characterize your material, create your devices, test them. And you need collaborations that an individual will not be able to gather outside of the institution right now. That is where I believe that IITs need to play a role and we need to provide our institutional resources to these individuals who want to start product based companies. So, we are starting a PHD incubator.

Why PHD?

The reason why we named it PHD is because we want to give the impression that it's not something a B. Tech student will be able to do. If you want to start a company, say in block-chain technology, you need deep knowledge of that area. So, you need to develop some specialization in that area

that will happen through deep learning and through pursuing further education. However, it does not mean that only PhDs can get into that incubator. Where there is a barrier for entry this incubator would help. Nobody even thinks of starting something that can compete with Google because it is based upon a kind of technology platform which for you to develop will take a lot of time and by the time you reach there, Google would have reached the next stage. That is the barrier for entry. We would soon send out a call for proposal for this incubator.

Not many people in India know about the great work being done by IITs. Some say it is because of research that IITs fail to get into the top 100 in World Ranking.

Professor Rao: In reality, IITs are at par with the American institution which is ranked 20. Then why such low ranks? It is because of the parameters where IITs cannot (or could not) compete – not due to talent but a technicality. If you look at the QS ranking for example, there are 5 parameters from which they rank the universities, and out of the 5 parameters there are three parameters where we get a zero. We get a zero for the number of international students but the fact is we never needed International students because there is so much demand from our country itself. With so much talent within, we never consciously tried to admit foreign students. Second parameter would be foreign faculty. Again, since it is a Government of India job, a foreigner could never apply for it. The third parameter where we get a zero is the faculty student ratio and since we are only relying on the faculty of Indian origin, so we were never able to recruit enough people to meet our expansion needs. So in three out of 5 parameters we get a zero without any fault of ours. The remaining two parameters where we score very well are the reason why we are in the Top 200. And among them is Research impact. IIT Delhi is ranked 39th in the world as far as research impact is concerned. If we compare the rank of a USA institute ranked 19th or 20 , IIT Delhi is better than that US University. Final parameter is perception. Even today India is not associated with technology but with elephants and monkeys and Taj Mahal. Beyond that they don't really think much of what is happening in the country but the research impact parameter is the only parameter where we score marks which is based upon actual numbers and not perception.

What's the way forward?

Professor Rao: Things are changing now and I believe that in another Three to Five years by admitting foreign students, foreign faculty, I think things will change I am not too worried about it. Also just the fact that IITs are no longer just an Under Graduate Institutions. 60% of our students today are post graduates. At IIT Delhi, we have 2500 PhD students. It might take maybe one generation but things would definitely get better.

IIT Delhi collaborates with IBM for advance AI research in India

November 30, 2018 https://techobserver.in/2018/11/30/iit-delhi-collaborates-with-ibm-for-advance-ai-research-in-india/

IBM and IIT Delhi are collaborating for advance AI research in India. Under the partnership, IIT Delhi will join the AI Horizons Network of IBM.

IBM and IIT Delhi are collaborating for advance AI research in India. Under the partnership, IIT Delhi will join the AI Horizons Network of IBM as part of a multi-year research collaboration on artificial intelligence (AI). The aim is to discover novel AI techniques which can help organizations take informed decisions by being able to logically reason with their AI systems. AI solutions will be trained to comprehend complex questions using natural language techniques and derive new insights using domain knowledge.

Today, an AI system is not trained to explain its decision making process. IBM researchers will partner with students and professors from the Department of Computer Science and Engineering at IIT Delhi to address this issue and conduct joint research to inculcate in AI systems some key traits like reasoning, comprehension and inferencing. For example, a procurement analyst may not be able to decide the right price for a commodity based on the recommendations shared by a trained AI assistant without knowing why it made those suggestions. The research will benefit sectors such as Healthcare and Medicine, Finance, and Customer support which deal with complex set of questions and require reasoning.

“While working with AI systems, organizations require explicit reasoning and comprehension to reach a particular conclusion. We believe advancement in AI can tackle such problems,” said Michael Karasick, Vice President, Global Labs, IBM Research. “We are excited to collaborate with IIT Delhi to focus on this area of research and empower organizations to make informed decisions by infusing key characteristics like reasoning, comprehension and transparency in their AI systems.”

Prof. V. Ramgopal Rao, Director, IIT Delhi, said “India has immense talent to accelerate innovation in AI and related technologies. We are happy to collaborate with IBM Research scientists and provide opportunities to our students and faculty colleagues to work on some of the complex problems around AI and apply the solutions to real-world scenarios.”

The teams plan to publish their research in peer-reviewed academic journals and release datasets and open challenges to the research community to identify new areas in making AI decisions better.

Universities like IIT Bombay in India and globally, Massachusetts Institute of Technology, Renesselaer Polytechnic Institute, University of Illinois Urbana-Champaign, University of Michigan, University de Montreal, University of Maryland at Baltimore County, UC San Diego and University of Massachusetts at Amherst – are working with IBM in key areas designed to accelerate the development of AI technologies. Focus areas include deep learning, natural language processing, computer vision, and others, as well as their application to big societal challenges, ranging from aiding the understanding of disease to education and cybersecurity.

November 30

IITS, IISC lead race for patents in 2018, says HRD

https://www.hindustantimes.com/india-news/iits-iisc-lead-race-for-patents-in-2018-says-hrd/story-mtNJP9xQT4KPbg0Bj12J2J.html

Among other institutions that have fared well are IIT Kanpur with at least 51 patents, IIT Hyderabad with 20 and IIT Kharagpur with 17, according to figures available with the HRD ministry.

According to latest data available with the human resource development (HRD) ministry, IIT Madras leads the race with 132 patents.

The Indian Institutes of Technology in Bombay, Madras and Delhi, along with the Indian Institute of Science, Bangalore, are at the forefront of centrally funded technical institutes leading in research and innovation this year with three having registered at least 100 patents each and the fourth four shy of the century mark.

According to latest data available with the human resource development (HRD) ministry, IIT Madras leads the race with 132 patents filed by its students and faculty this year. IIT Mumbai is second with

104 patents as on November 25; IISc Bangalore is close behind with 101 patents; and IIT Delhi has registered 96 patents.

Officials familiar with the matter said only three institutes had crossed the century mark last year, with IIT Mumbai registering 185 patents, IIT Madras 132 and IISc Bangalore 106.

However, the figures for this year are likely to climb as there is one more month to go and more data about patents will flow in, a senior official in the Prakash Javadekar-led HRD ministry said. For the first time, there is the possibility that four institutions will have 100 patents against their name in a single year, the official, who did not wish to be named, added.

Among other institutions that have fared well are IIT Kanpur with at least 51 patents, IIT Hyderabad with 20 and IIT Kharagpur with 17, according to figures available with the HRD ministry.

Among the National Institutes of Technology (NITs), the one at Suratkhal has 11 patents while the Calicut institute has 5 patents registered as on November 25 this year.

Other institutions that have registered patents include IIT Bhubaneswar (5); IIT Ropar and IIT Patna (4 each), Motilal Nehru NIT, IIT Dhanbad and IIT Roorkee (3 each); and the NITs at Rourkela, Warangal and Silchar (2 each). The IITs at Mandi, Jodhpur and Tirupati as well as the NIT at Patna have registered at least one patent each this year, according to HRD ministry data.

With the government stressing on high-quality research and innovation, the number of patents registered by centrally funded technology institutions has been rising, officials aware of the matter said. While 358 patents were registered in 2012, the count rose to 410 the following year but dipped to 385 patents in 2014. Another factor was that the patents were filed by only a handful of institutions, the officials said.

In 2015, the number of patents rose to 455. The following year, it jumped to 769 but dropped to 675 in 2017. The number of patents registered so far this year is 571 but is expected to go up by the end of December, a senior official said. Several of these patents have practical relevance, the official added. “IIT Delhi has acquired a patent for a device that detects mosquito eggs and larvae in water and will transmit the findings on a mobile. It can work wonders in controlling the spread of diseases like dengue or malaria. Another patent by Delhi IIT is for a device that can convert biogas into a fuel fit for industrial and commercial use,” he said.

Asked why other institutes were lagging behind the IITs and IISc in research, the official said while the IITs got into research in a big way a decade ago, other institutions focused on teaching and learning. The availability of funds for research is another issue, he added.However, the government is looking into all aspects and there is a conscious effort to improve research in all institutions, the official said.

Ashok Mishra, former director of IIT Mumbai, said, “An important aspect related to patents is also the acceptance. Pure ideas which may not have practical-commercial value may not succeed in the market. For some of the institutions like say, IIT Kanpur, the acceptance rate is quite high. Other institutes like NIT should also catch up with the leading IITs over time. What is needed is high quality research infrastructure, focus on high-end research and also a culture. There should be very good patent officers who are quick to spot that an idea is patentable.”

IIT Madras phase I placement to offer 490 job profiles to fresh graduates

https://news.careers360.com/iit-madras-phase-i-placement-offer-490-job-profiles-fresh-graduates

Indian Institute of Technology (IIT) Madras will start the 2019 placement from December 1, 2018. As many as 326 companies have registered for more than 490 job profiles for Phase I placement season. If compared the figure from the previous year, the Institute has seen a surge in the companies registration. Last year (2017-18), only 270 companies registered in whole placement season

The first phase of campus recruitment for 2018-19 will be held between December 1 and 8, 2018 with a break of one day (5th December 2018).

About 34 percent of the recruiters are from Core Engineering/Research and Development sector, 21 percent from Finance/Analytics/Consulting sectors, and 32 percent from the IT sector with the rest from other sectors. Not only this, the Institute will host more than 50 startups this year.

With 130 Pre-Placement Offers (PPOs) this year (2018-19), the institute recorded a 20 percent increase in PPOs, which comes from internships.

Speaking on the development, Prof. Manu Santhanam, Advisor, Training and Placement, IIT Madras, said, “The number of recruiters coming to campus has seen an upswing this year, which is clearly an indicator of the growing perception about the quality of students coming from IIT Madras, in addition to our consistently top rank in NIRF.”

How many student registered?

More than 1,300 students have registered for placements across different study streams and departments this year. The number is expected to increase as more Research Scholars become eligible (this happens as and when they achieve a specific target in their research programme).

About 30 students have opted for deferred placements as they are either pursuing startup ventures or planning to apply for higher studies.

Who are the recruiters?

Prominent first-time companies this year include Bain & Company, Nomura, Ather Energy, and Jaguar Land Rover.

Traditional recruiters such as Microsoft, Goldman Sachs, BCG, Intel, Citibank, Qualcomm, Bajaj, General Electric are coming to IIT Madras for recruitment this year as well. As many as 23 companies have advertised international profiles, most of which are for positions in Asian countries such as Japan, Singapore, and Taiwan, along with the U.S. as well.

An interesting twist

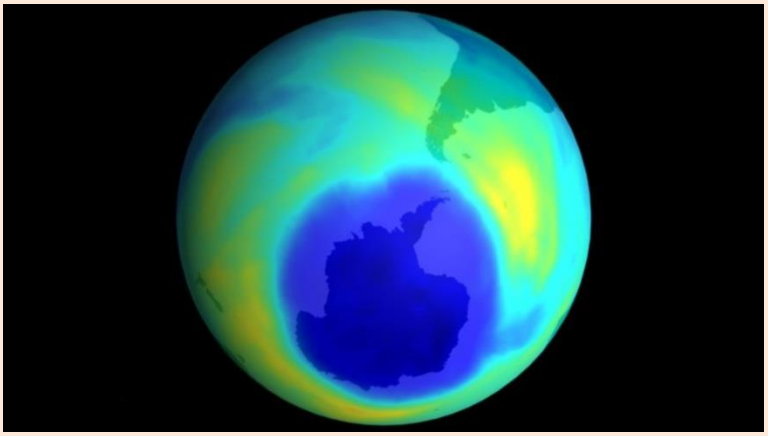
An interesting trend has been witnessed this academic year (2018-19). It has seen that there is an increase in a number of profiles for data analytics, which reflects the current industry. There are around 59 analytics/data science job profiles as of now compared to around 48 in the whole of last year. Similar to last year, IIT Madras will not have the 'Graveyard Slot,' which begins the early hours of Day One (December 1), usually from 12 midnight to 6 am.

Antarctic Ozone Hole Healing Confirmed In New Study By IIT Kharagpur Researchers

https://www.firstpost.com/tech/science/antarctic-ozone-hole-healing-confirmed-in-new-study-by-iit-kharagpur-researchers-5651941.html

Amidst the pressing issue of global climate change, a study conducted by a group of scientists at IIT Kharagpur has come up with new data that they claim confirm "healing' of Antarctic Ozone hole, a statement said on Friday.
"A research team from the Centre of Oceans, Rivers, Atmosphere and Land Science (CORAL) at IIT Kharagpur has come up with new data confirming that the Antarctic Ozone Hole is on a healing path," said an IIT Khragpur statement.

According to the premier institute, the research is the first of its kind, providing detailed long-term (over four decades) analysis of Antarctic ozone loss saturation in terms of its occurrence and timing, using high-resolution ozonesondes - a balloon-borne instrument that measures concentration of ozone - and satellite measurements inside the vortex (a whirling mass of fluid or air) for the said period.



This image of the southern hemisphere generated from data NASA gathered on the ozone hole at the turn of the century shows the size of the ozone hole over Antarctic in 2001. Image credit: NASA

The researchers have collected data from 1979 to 2017. The saturation of loss at 12-21 km has significantly reduced over the period 2001-2017.

"We have observed over the past four decades the Ozone layer depletion peaked during winters each year except the warm winters of 1988 and 2002. However, our analysis shows a clear reduction in the frequency of occurrence of ozone loss saturation over the period 2001-2017 consistently throughout various datasets," Prof Jayanarayanan Kuttippurath said.

Pankaj Kumar, Prijitha J Nair and P C Pandey were also the part IIT Kharagpur CORAL team.

Data were collected for various altitudes from autumn to spring, over the decades, from stations across Antarctica, including measurements from the Indian station Maitri, the statement said.

Also, the reduction of ozone loss saturation in recent years ranged from 20 percent to 60 percent, across the data spread.

Explaining if it will affect the existing protocols and regulations for industrial emissions of ozone-depleting substances, Kuttippurath said: "The recovery indicated in the loss saturation layer, robustly suggests that the Montreal Protocol has definitely saved the ozone layer and climate of the Southern Hemisphere".

The Montreal Protocol is an international treaty to protect the ozone layer.

He further said that since there are already significant changes in the southern hemispheric climate owing to the Antarctic ozone loss, the recovery from loss saturation is very likely to affect that.

"The ozone recovery process is very slow and it will take a few decades to get back to the pre-ozone hole levels. However, the emergence of ozone recovery is very clear even at altitudes where the near-complete ozone loss occurs," said P C Pandey.

November 29

IIT-G scientists publish breakthrough research work on metastatic cancer

https://nenow.in/north-east-news/iit-g-scientists-publishes-breakthrough-research-work-metastatic-cancer.html

Scientists from Indian Institute of Technology-Guwahati (IIT-G) have demonstrated the movement of metastatic cancer cells, a breakthrough in cancer research.
The research work was conducted by IIT-G director Gautam Biswas with his colleagues Siddhartha Sankar Ghosh of biosciences & bioengineering and Amaresh Dalal from mechanical engineering departments respectively and assisted by PhD students Binita Nath and Asif Raza.

The study was carried out in a constricted micro-channel to show movement of cancer cells in viable state, reports TOI.

The research work clearly showed how cancer cells can deform, survive and pass through micro capillaries in the human body.

Multi-cellular aggregates of cancer cells are the initiators of distant organ metastasis and cause spread of cancer in the body.

It was assumed in the past that cancer cells are too large to pass through narrow vessels such as pulmonary capillaries to reach other organs.

The findings of the research work been endorsed in the prestigious Scientific Journal, an online, open-access journal that publishes scientifically valid primary research from all areas of the natural and clinical sciences.

The research work is expected to be helpful for oncologists in devising new methods of cancer treatment.

November 28

IIT Ropar declared national resource centre

https://timesofindia.indiatimes.com/city/chandigarh/iit-ropar-declared-national-resource-centre/articleshow/66838392.cms

Indian Institute of Technology (IIT) Ropar, has been declared national resource centre in manufacturing by the Union government's department of higher education. Professors Harpreet Singh and Dhiraj Mahajan of the department of mechanical engineering have been appointed as coordinators of the resource centre.

"Implementation of state of the art manufacturing technology and development of new science-based manufacturing methods within the country has become strategically important. A free online course will showcase the latest trends in the science, technology, management, and applications of manufacturing to update the in-service teachers about it," said Prof Mahajan.

IIT Ropar has already been working on strengthening industry in its vicinity by establishing 'Career Development and Corporate Relations Centre' (CDCRC) which provides a single window point of contact to industry fulfilling their entire spectrum of requirements.

For an effective approach with industry, IIT Ropar has identified 10 industry clusters covering whole of Punjab and Haryana and Himachal Pradesh partly. Under these clusters, textiles, manufacturing, sports, pharmaceuticals, paper manufacturing, industrial machinery, hand tools and chemicals sectors will be provided solutions.

UGC to Establish 'Consortium' to Weed out Dubious Journals

https://www.news18.com/news/india/ugc-to-establish-consortium-to-weed-out-dubious-journals-1953773.html

The 'Consortium for Academic and Research Ethics' or 'CARE' will be tasked to prepare a "CARE Reference List of Quality Journals".

The University Grants Faced with proliferation of substandard academic journals in the country, the University Grants Commission (UGC) on Wednesday announced forming an association of academic institutions which will compile a list of "credible quality journals" and ultimately replace UGC's own list of journals.

In a meeting held on November 14, the commission had deliberated on establishing a body, naming it 'Consortium for Academic and Research Ethics' or 'CARE', which will be composed of government bodies and statutory councils and will be headed by the UGC Vice Chairman. The body will be tasked to prepare a "CARE Reference List of Quality Journals".

"A problem of dubious substandard journals has become a serious concern all over the world. The percentage of research articles published in poor quality journals is reported to be high in India, which has affected its image," the commission said.

It said that research journals in the field of science, engineering, technology, agriculture, and bio medical sciences, which are accepted in the scientific database like SCOPUS and Web of Science, may be considered for the CARE reference list.

The CARE's task will primarily be to scrutinise and then compile a list of journals for social sciences, humanities, language, arts, culture, Indian Knowledge system etc.

One of the jobs of the body will be to create a process of submission of papers to the new journals it will include in its list.

"All such proposals will be critically analysed using validated protocol by a special cell at the entrusted institution and if found appropriate, would be recommended to CARE for possible inclusion in the "CARE Reference List of Quality Journals".

UGC, which, apart from being the principal funding agency for the universities, holds the responsibility of setting up academic standards and ensuring that they are followed, is battling with poor quality journals which publish academic papers with little or no peer review, a scenario that has led to a general erosion of credibility globally about Indian research, especially in the field of humanities.

A paper published early this year had exposed that 88 per cent of journals from UGC's "approved list of journals" were of dubious credibility.

One of the co-authors of the paper, published in Current Science in March this year, was UGC's current Vice Chairman Bhushan Patwardhan, who was appointed as such in September.

The study "disqualified" 34.5 per cent of the 1,009 journals sampled from the list because of "incorrect or non-availability of essential information such as address, website details and names of editors", and another 52.5 per cent for "incorrect ISSN, false claims about impact factor" and claiming "indexing in dubious indexing databases" or having "poor credentials of editors".

November 27

IIT Kharagpur signs MoU with University of Auckland to foster research programs

https://www.theindianwire.com/education/iit-kharagpur-signs-mou-university-auckland-foster-research-programs-83603/

IIT Kharagpur and the University of Auckland on Monday had signed an MoU (memorandum of understanding) to foster academic exchange and research collaboration, faculty exchange and visiting/adjunct appointments, student mobility.

The pact brings together University of Auckland and the esteemed IIT Kharagpur to explore opportunities for research in healthcare technologies, new materials, cyber security and artificial Intelligence.

In a release by IIT Kharagpur, Jenny Dixon, Deputy Vice-Chancellor, Strategic Engagement at University of Auckland was quoted as saying, “The SPARC program of India is of specific interest to us. There are several research areas which are of mutual interest for both institutions and we would be deciding on the detailed areas of work leading to exchange of faculty and students”.

The MoU also involves the scope of outreach centers at IIT Kharagpur and Auckland representing various prestigious higher educational institutions of both countries.

“We are the nodal institution for New Zealand for the Ministry of Human Resources Development. We can coordinate with other institutions in the country through a joint research center specifically, a New Zealand Centre at IIT Kharagpur and an India Centre at Auckland” said IIT Kharagpur Director P P Chakrabarti.

New Zealand has around 8 similar centers put up in China for eight universities which focuses on teaching programs, research collaborations, students and faculty exchange.

The two institutes are further looking for possibilities of a Dual Masters and Doctoral programmes and a collaborative B.Tech. – M.Tech. Programme.

“At IIT Kharagpur, we have been striving to ensure global exposures to gain in-depth knowledge in core disciplines as well as expertise across disciplines are offered in collaboration with leaders in various areas of academia. The thrust areas in consideration for this collaboration are also in

concurrence with our country to make giant leaps in healthcare, economy and quality of life," said Baidurya Bhattacharya, Dean, International Relations, IIT Kharagpur.

Currently, Indian students have a significant representation in New Zealand which form third largest student community in the country. The students mostly enroll in science, engineering and business.

The land of kiwis also provides international students an opportunity of post-study employment in the country as the students can apply for 3-year work visa after completing their degree.

Samsung plans to hire over 300 engineers from IITs

http://newstrack.com/tech-track/samsung-plans-to-hire-over-300-engineers-from-iits/

The officials of the company three R&D centres located in Bengaluru, Delhi and Noida, will visit the IITs at Delhi, Kanpur, Mumbai, Chennai, Kharagpur, Guwahati, Varanasi and Roorkee starting December 1.

Samsung India has decided to hire over 300 engineers from the Indian Institutes of Technology (IIT) to strengthen its Research and Development (R&D) operations in the country.

The officials of the company three R&D centres located in Bengaluru, Delhi and Noida, will visit the IITs at Delhi, Kanpur, Mumbai, Chennai, Kharagpur, Guwahati, Varanasi and Roorkee starting December 1.

The R&D centres will also hire engineers from the newer IITs at Hyderabad, Dhanbad, Ropar, Indore, Gandhinagar, Patna, Bhubaneswar, Mandi and Jodhpur.

Sameer Wadhawan, Head, Human Resources, Samsung India, said, ""Our R&D centres are focusing on cutting edge technologies, developing innovations for the Indian market as well as for the globe. We will continue to add engineers for research and development in these areas and further our commitment to making a strong research base in India."

Wadhawan added, "There's a tactical shift that we have made to spot talent early and offer PPOs. This year, we had a slightly longer internship period so that students can spend more time in the

company, giving them opportunity to interact with the leaders and managers. This helps us select bright talents amongst them."

Apart from the IITs, Samsung will also be hiring from other top engineering colleges such as BITS Pilani, IIITs, NITs, Delhi Technological University, Manipal Institute of Technology and IISc Bangalore.

Earlier in the year, Samsung has offered over 200 Pre-Placement Offers (PPOs) to students at the IITs.

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Young Scientist award for the professor from IIT Roorkee

https://www.brainbuxa.com/education-news/young-scientist-award-for-the-professor-from-iit-roorkee-8872

Vimal Chandra Srivastava, a professor from IIT Roorkee, was conferred upon the NASI-Scopus Young Scientist Award in 'Environmentally Sound Sustainable Development' category. The main aim of the award is to recognize the efforts of the researcher from the field of earth, oceanographic, environmental and ecological studies, social sciences and ecosystem whose discoveries and inventions can help protect the planet and conserve the natural resources.
Dr. Srivastav is a professor in the Department of Chemical Engineering and received the award for his work on Industrial Wastewater Treatment, Clean Liquid Fuels, and Multi-component Adsorption.

"His work helps in the creation of a cleaner urban environment. He also converts agricultural & industrial wastes to value-added products for the treatment of industrial wastewater and other usages. He has also developed statistical methods and industrial usability indices for use in refineries and other industries," the statement added.

Professor Srivastav is also the recipient of several prestigious awards such as "ProSPER.Net-Scopus Young Researcher Award 2010 - First Runner-up Prize" in Asia-Pacific region, INSA Young Scientist Award, Young Engineer Awards by Indian National Academy of Engineers, Institution of Engineers, Indian Institute of Chemical Engineers, etc. prior to winning this award.