Newspaper Clips
March 17-23, 2018

March 23

Shri Pranab Mukherjee Launches QS I-Gauge - India's First Nationwide Higher Education Rating System

http://www.prnewswire.co.in/news-releases/shri-pranab-mukherjee-launches-qs-i-gauge---indias-first-nationwide-higher-education-rating-system-677716703.html

O.P. Jindal Global University secures the Diamond Rating

Former President of India, Shri Pranab Mukherjee, launched the QS I-Gauge, India's first nationwide higher education rating system for Indian universities and colleges.

Speaking on the occasion, Shri Pranab Mukherjee emphasized the importance of globally-benchmarked quality assurance systems. Referring to the importance of rankings, he said, "It does not create excellence but it recognizes, identifies, and introduces the existing talent to the world and to the larger society, and that brings huge consequential benefits. But you shall have to keep in mind that quality is of primary importance in education."

Reiterating the importance of rankings and ratings, Shri Mukherjee said, "Many of our institutions have these talents but sometimes they do not adopt the system though they are aware of it's importance. It does not add to their capacities or excellence but it helps them to have connections outside. We are living in a globalized world. We cannot live in isolation and we must prepare ourselves to be communicative to the globalised world," he further emphasised.

Recognizing the commitment to academic excellence, O.P. Jindal Global University (JGU) was awarded the Diamond Rating by QS I-Gauge at that event. The announcement was made in the presence of Shri Pranab Mukherjee and Dr. Virander Chauhan, Chairman, National Assessment & Accreditation Council (NAAC) on 21st March. In 2017, JGU was ranked among the Top 10 Private Institutions in India by QS BRICS University Rankings and Top 300 in the BRICS countries.

Referring to the milestones that JGU covered, the Founding Vice Chancellor Prof. (Dr) C Raj Kumar said, "I would like to take this opportunity to congratulate each and every member of the JGU family for being awarded with not one but two laurels on the same day. The autonomous status by the UGC and QS Diamond Rating are remarkable milestones, which will expedite our endeavour to underline India's exemplary contribution to the global higher education and nurturing the leaders of tomorrow. Receiving the recognition from the Former President of India was indeed a matter of great honour for us."

Explaining the practices of the QS I-Gauge ranking system, Mr Ben Sowter, Director, QS Ltd., UK said, "We believe we will be able to surface the excellence that is developing in India in a much broader variety in ways than any existing exercise captures. We hope it will also empower colleges and universities here in India to develop more robust data collection and reporting capabilities that may go well beyond the QS I-Gauge context and help them diagnose their performance and improve in a variety of different ways."

Consisting of seven primary categories and five secondary categories, ranging from Teaching and Learning, Employability and Social Responsibility to Research and Innovation, the QS I-GAUGE rating provides a unique 360-degree perspective of Indian institutions of higher learning.

Each rating produced by QS I-GAUGE is strictly monitored and supervised by the QS Intelligence Unit in London. This is the same team that produces the authoritative rankings as well as the globally recognized QS Stars university ratings system. The rigor and integrity of QS ratings are guided by an International Advisory Board, which comprises of luminaries in the higher education field - from both India and overseas.

Many distinguished academics attend the launch of QS I-Gauge event.

March 22

Sugar residue can fuel tractors, say IIT-M researchers

https://economictimes.indiatimes.com/news/science/sugar-residue-can-fuel-tractors-say-iit-m-researchers/printarticle/63409350.cms

CHENNAI: Researchers at the Indian Institute of Technology, Madras, have developed a method to convert bagasse, the residue left after sugar extraction, into methanol, an alternative fuel that can run tractors and other farm equipment. The technology developed at the National Centre for Combustion Research and Development (NCCRD) within IIT-Madras, if adopted widely, can potentially translate into 15% reduction in the petroleum import bill for the Indian farm sector, according to a senior researcher. “Production of methanol locally would also help with the recovery in the rural agricultural economy,” said SR Chakravarthy, coordinator, NCCRD, and one of the research heads of the project. While there is significant stress by the government on the usage of ethanol also as an alternative fuel ingredient, it competes with the alcohol market, said Chakravarthy.

"The government has a sense that methanol will fly independent of the liquor market unlike ethanol, as it is non-edible. The longer term motivation is that methanol can also be made from carbon dioxide." The university is also working on design modifications in existing farm equipment so that they can run on methanol, said V Raghavan, professor, Department of Mechanical Engineering, IIT Madras, who is the other research head of the project.

IIT Madras is in advanced talks with leading sugar manufacturing companies and farm equipment companies for demonstrations and adoption. Gasification of coal into methanol is prevalent in China. According to the Methanol Institute, United States of America —an industry consortium —up to 15-20% of the fuel used in China is mixed with methanol. While India has an abundant availability of coal that can be converted into methanol, the gasification of coal into methanol emits carbon dioxide which is an undesirable byproduct based on India's current renewable energy and climate protection obligations, said Chakravarthy.

IIT Kharagpur to inaugurate INAE Youth Conclave on March 23

https://indiaeducationdiary.in/iit-kharagpur-inaugurate-inae-youth-conclave-march-23/

IIT Kharagpur will be hosting the first round of the INAE Youth Conclave between March 23-25. This is the first time that the Institute is organizing the conclave, initiated last year by the Indian National Academy for Engineering. The idea behind the contest is to engage engineering students from different engineering disciplines in the task of nation-building and, in the process, give expression to their creative talent.

The contestants are presented a few problems that echo many of the current problems faced by the government and the Indian society. Students are expected to develop new plans, innovative technologies or workable solutions to these problems.

The competition is being held this time in two phases. In the pre-conclave on March 23-25, students will be evaluated for their presentation on the problem statements chosen by them. The finalists chosen in this round will be given time from April to July to work on new assignments and improve upon the existing solutions. The finals are slated for August 10-12 at IIT Kharagpur.

More than 650 students from different colleges in the country, including the premier technological institutes like the NITs and IITs, have registered for the first round. The organizers have received 127 submissions for the three broad categories of problems.

In the Academic segment, where contestants have been asked to devise a new curriculum for engineering colleges, the organizers have received 22 project plans. The largest number of submissions has come for a Swach Bharat Abhiyan plan that asks students to find effective ways to segregate and dispose waste in apartments.

The two other problems in this category, named Product Design and Development, asks students to look at the problems of storing newly harvested crops or plan a township. In the third category, Mobile Application Development, students have been asked to devise mobile applications to help patients and farmers.

Around 71 student teams have been shortlisted for the presentations in the first round. Of this, 12 are from IIT Kharagpur. The conclave will be inaugurated on March 23. The presentations over, March 25 will see a guest lecture by Dr. Manish Gupta, co-founder and CEO of VideoKen, an educational technology startup, and the Infosys Foundation Chair Professor at IIIT Bangalore, and Prof. Shirshendu De, renowned scientist and faculty, Department of Chemical Engineering, IIT Kharagpur. The list of finalists will be announced on March 25 during an awards ceremony.

March 21

JNU, AMU among 62 higher educational institutions granted full autonomy by UGC

https://www.thestatesman.com/books-education/jnu-amu-among-62-higher-educational-institutions-granted-full-autonomy-ugc-1502605573.html

Various universities, including the Jawaharlal Nehru University, University of Hyderabad, BHU, AMU and TERI, were given full autonomy on Tuesday by the University Grants Commission (UGC) after maintaining high standards of excellence.

With the approval of autonomy, the universities may now start new courses, plan their own syllabi and collaborate with foreign institutions.

The decision was taken at a UGC meeting, which was announced by the Union Human Resource Development Minister Prakash Javadekar.

According to the announcement, five central universities, 21 state universities, 26 private universities besides 10 other colleges have been granted autonomy under the Autonomous Colleges Regulation.

Javadekar hailed the UGC move as “historic” which will enable the selected institutes to decide their admission procedure, fee structure and curriculum, among others.

“Today is a historic day for higher education in India. These quality institutions will get complete autonomy by which they can start new courses, new departments, new programmes, off campuses, skill courses, research parks, appoint foreign faculty, take foreign students, offer variable incentive packages, introduce online distance learning,” Javadekar told reporters.

He said these institutes can also get into academic collaboration with top 500 universities of the world.

“And for all of this, they will not have to come to the regulator again and again for seeking permission because they have maintained quality and achieved a benchmark of 3.26 and above NAAC (National Accreditation and Assessment Council) ranking,” he added.

The central universities which have been granted autonomy include – Jawaharlal Nehru University (JNU), Aligarh Muslim University (AMU), Banaras Hindu University (BHU), University of Hyderabad and the English and Foreign Languages University, Telangana.

The state universities which have been granted the autonomous status are Jadavpur University, Andhra University, Algappa University, National University of Law, Utkal University, Kurukshetra University, Osmania University, Guru Nanak Dev University, University of Jammu, University of Mysore, Anna University, Panjab University and University of Madras, among others.

First non-residential post-PhD certificate at IIT

https://timesofindia.indiatimes.com/home/education/news/first-non-residential-post-phd-cert-at-iit/articleshow/63390569.cms

KOLKATA: For the first time an IIT will offer a post-doctoral non-residential certificate programme. IIT-Kharagpur (Kgp) is rolling out the course for candidates holding a PhD under its Certificate of Excellence in Research (CER) programme. It will be open to professionals with doctorate degrees in India and abroad, working in industry or research institutions. In India, all such programmes are residential.

The country's premier technology institute wants to offer the course twice each year, on the lines of doctoral fellowship, in January and July. CER programme faculty in-charge Sunando Dasgupta said, "Candidates will need to complete the post-doctoral certificate programme between two and six years.”Each year, the enrolled students will have to visit IIT-Kharagpur campus only once, to inform us about the progress. Accordingly, the students will be graded." The cost of the course will be Rs 20,000 per semester. The candidates, however, will receive no stipend during the course.

To earn the certificate, students will have to furnish two papers in a very renowned journal co-authored by the mentor from IIT-Kharagpur.

This non-residential programme will be open for research in all domains with faculty experts in the Institute.

PK Das, dean of postgraduate research, said, "Some of the research areas would be digital convergence, advanced manufacturing, medical technology and affordable healthcare, transportation technologies, innovative infrastructure, geoscience for future of earth, information and communication technology."

IIT Kharagpur director Partha Pratim Chakrabarti said, "This is the first of its kind initiative in India, possibly Asia, for any academic institution to facilitate trained researchers with the opportunity to contribute to structured research programme and join back academics."

The engagement will be based on a research proposal prepared jointly by the researcher and a host faculty at IIT Kharagpur and subsequently approved by a technical review panel at the institute. The certification can be availed even if the researcher continues his professional commitments. The candidate will have access to the institute's facilities like experimentation and computation labs and library.

The enrolment for the programme will start in July 2018. The certificate will be conferred at the convocation.

Chakrabarti added this will be a unique platform that will allow the researchers to fulfil the desire to remain connected with advanced research and be recognized while continuing her/his professional commitments. It will also bring in industry knowledge and practical solutions in academic research.

Fourth Industrial Revolution: A boost for manufacturing in India?

https://qrius.com/industry-4-0-a-boost-for-manufacturing-in-india/

Last week, N Sivananda, Joint Secretary in Department of Heavy Industry, said in a statement that the government is making plans to set up four centres in the country which would support the SMEs (Small and Medium Enterprises) take steps to implement industry 4.0. The ministry proposed to set up the centres this year in institutes including IIT Delhi, Central Manufacturing Technology Institute, Bengaluru, and IIT Bombay.

Understanding Industry 4.0

The first industrial development came with mechanised processes that helped our ancestors in few methods of production. Then came electricity and mass production. The third phase was categorised by the advent of automation and computers when machines started replacing the human labour in assembly lines. The fourth industrial revolution, synonymously called industry 4.0, introduces what has been called the “smart factory”, in which cyber-physical systems monitor the physical processes of the factory and make decentralised decisions. The physical systems become the Internet of Things, communicating and cooperating both with each other and with humans in real time via the wireless web. Interoperability is an essential component, whereby machines, devices, sensors and people connect and communicate with one another. Decentralised decision-making is another component, which shows the ability of cyber-physical systems to make simple decisions on their own and become as autonomous as possible.

Leapfrog opportunity for India

For India, the Fourth Industrial Revolution brings tremendous opportunities to leapfrog many stages of development, hastening its journey towards becoming a developed economy. In many ways, the Fourth Industrial Revolution is a leveller. The technologies being used in India will be the same as those in use in the developed world. Robots, AI and IoT, are all technologies transforming the industry in the West and are ready to do the same in India. In many ways, companies in India are ensuring their survival by adopting these technologies. Those who adapt faster and better will be more competitive than others, and definitely in a better position to compete with global entrants. Their survival comes at the cost of jobs. But these can be countered by reskilling and by creating new opportunities. The Indian automotive sector has caught the world’s attention and has attracted many global brands to set up manufacturing units here. The automotive sector alone contributes more than 45 percent to the country’s manufacturing GDP (and about 7.1 percent to India’s GDP) and employs 19 million people. Clearly, there is an opportunity for India to move from a lethargic manufacturing outfit stuck somewhere between Industry 1.0 and 2.0 to Industry 4.0 and beyond.

Is India ready?

The Indian government has implemented various schemes that promote digital penetration in the country. For instance, Digital India initiative started in 2015, which aims at providing access to digital technology and internet to every nook and corner of the country, has been helping the companies in rural areas apart from households. To tackle the job loss, Skill India initiative was started in recent years. However more has to be done to ensure the accessibility along with affordability. Various challenges should be confronted in this process of transformation. Data security issues are greatly increased by integrating new systems and more access to those systems. Additionally, proprietary production knowledge becomes an IT security problem as well. A high degree of reliability and stability are needed for successful cyber-physical communication that can be difficult to achieve and

maintain. Loss of high-paying human jobs is always a concern when new automation is introduced. And avoiding technical problems that could cause expensive production outages is still a concern.

Towards 4.0

Major Indian states are taking initiatives to adapt to Industry 4.0. Andhra Pradesh has taken an initiative to capitalise on the IoT potential in the country. The state government has approved the first-of-its-kind IoT policy with an aim to turn the state into an IoT Hub by 2020 and tap close to 10 percent market share in the country. The Indian government has created Green Energy Corridors to bring in more renewable energies, to make smart grids that will support the variable input of renewable energies and create storage. India has committed over $1 billion in this initiative and has started projects in many states, such as Andhra Pradesh, Rajasthan, Tamil Nadu, Gujarat, and Himachal Pradesh. India's first smart factory, moving from automation to autonomy, where machines speak with each other, is being set up in Bengaluru. It is making progress at the Indian Institute of Science's (IISc) Centre for Product Design and Manufacturing (CPDM) with investment from The Boeing Company. A smart factory, armed with data exchange in manufacturing and the Internet of Things (IoT) is the future and experts are calling it revolution Industry 4.0. Reports peg the smart factory industry to touch US$ 209 billion by 2025, and all major economies are likely to accept it. Various Indian companies are increasing their focus and partnering with other companies for developing new IoT, and M2M solutions, the Digital India initiative from the government of India is expected to enhance the focus on IoT in tackling domestic challenges.

The initiative is a welcome step by the government. However, more has to be done to ensure that India reaps the benefits of the fourth industrial revolution.

March 20

IIT JAM result 2018 declared by IIT Bombay, check at jam.iitb.ac.in

http://indianexpress.com/article/education/iit-jam-result-2018-declared-by-iit-bombay-check-at-jam-iitb-ac-in/

JAM result: JAM is conducted to provide admissions to M Sc (four semesters), joint M Sc -Ph D, M Sc - Ph D dual degree, etc. programmes at the IITs and integrated Ph D degree programmes at IISc for consolidating science.

JAM result 2018: All those candidates who had appeared for the same are required to check their respective results at the official website — jam.iitb.ac.in.

IIT JAM result 2018: The result of the Joint Admission Test for M Sc (JAM) has been released by the Indian Institute of Technology (IIT) Bombay. All those candidates who had appeared for the same are required to check their respective results at the official website — jam.iitb.ac.in. JAM is conducted to provide admissions to M Sc (four semesters), joint M Sc –Ph D, M Sc –Ph D dual degree, etc. programmes at the IITs and integrated Ph D degree programmes at IISc for consolidating science.

The exam was conducted on February 11 and the question papers and answer keys were also released few weeks back.

IIT JAM results 2018, steps to check

Step 1: Log on to the official website mentioned above

Step 2: Click on the link for results displayed inside the pink boz

Step 3: In the provided fields, enter your login credentials

Step 4: Click on submit

Step 5: Your result will be displayed on the screen

Step 6: Download the same and take a printout for future reference

The JAM paper is divided into three sections — Section A, B and C. The syllabus comprises of various topics such as BL (Biological Sciences), BT (Biotechnology), GC (Geology), MS (Mathematical Statistics), CY (Chemistry), PH (Physics) and MA (Mathematics).

Govt moves to undo UGC order shrinking quotas for university faculty

http://indianexpress.com/article/education/government-moves-to-undo-ugc-order-shrinking-quotas-for-university-faculty-5103897/

According to the new formula, first reported by The Indian Express on October 23, 2017, reservation in faculty positions will be calculated department-wise, instead of being based on the total posts in a university.

Two weeks after the University Grants Commission (UGC) notified a new formula for implementing reservation in teaching posts across universities, the government is learnt to be considering legal options to undo the order, including filing a special leave petition in the Supreme Court.

According to the new formula, first reported by The Indian Express on October 23, 2017, reservation in faculty positions will be calculated department-wise, instead of being based on the total posts in a university. The higher education regulator announced the change on March 5.

The rethink on the UGC order stems from the recommendations of the inter-ministerial committee that was constituted this month at the behest of the parliamentary panel on the welfare of Scheduled Castes and Scheduled Tribes. The committee had representatives of the Law Ministry, UGC, Social Justice and Empowerment Ministry and DoPT.

According to UGC sources, the inter-ministerial committee observed that the new order will shrink the number of SC, ST and OBC teachers in higher education. It also urged the HRD Ministry and UGC to take all possible steps to restore the old formula under which reservation in faculty posts was calculated based on aggregate posts in a university.

The government, UGC sources said, is now taking legal opinion on all its options to retract the UGC order, including filing a special leave petition in the Supreme Court against the Allahabad High Court order that struck down the UGC formula of calculating reservation in faculty positions based on the total posts in a university.

In April 2017, hearing a case on teachers' recruitment at the Banaras Hindu University, the Allahabad High Court said that each department, rather than the entire university, should be treated as the "unit" on which reservations are based.

The court was unhappy with the UGC's policy of implementing reservations in a "blanket manner" and advised the regulator to revisit its implementation. "If the university is taken as a 'unit' for every level of teaching and applying the roster, it could result in some departments/ subjects having all reserved candidates and some having only unreserved candidates. Such a proposition again would be discriminatory and unreasonable. This again would be violative of Article 14 and 16 of the Constitution," the Allahadbad High Court had observed in its verdict that cancelled the BHU recruitment and asked it to start afresh.

Subsequently, the UGC's standing committee examined 10 court judgments on the issue and recommended that the Allahabad High Court's ruling should be applied to all universities. The new department-wise formula of implementing reservation was a consequence of that.

The higher education regulator's announcement on March 5 sparked protests from teachers as the new formula was perceived to be hurting the interests of candidates belonging to the reserved categories. The matter was even flagged by the parliamentary committee on the welfare of Scheduled Castes and Scheduled Tribes, headed by BJP's Kirit Solanki, following which the inter-ministerial committee was set up.

However, matters came to a head after Social Justice and Empowerment Minister Thaawarchand Gehlot sent a strongly-worded letter to HRD Minister Prakash Javadekar asking him to rescind the order.

Gehlot's letter, a copy of which has also been sent to the Prime Minister's Office, states that the "spirit of the Constitution should reflect in the representation of these categories in various educational institutions".

Explaining how these communities got a greater representation under the previous system of treating the university as a unit, the letter states, "As per roster, every fourth position is reserved for OBC, seventh for SC, and 14th for ST. If the department is considered as a unit, the representation of these groups would be almost nothing."

Earlier, the number of SC, ST and OBC faculty positions were calculated by treating the university as a "unit". In other words, all posts of the same grade, such as assistant professor, across different departments in a university were grouped or clubbed together to calculate the reserved quota.

Under the new UGC formula, reservation is applied by treating each department in a university as a "unit". For example, the number of reserved posts at the level of assistant professor will be determined separately for each department, calculated based on the total assistant professor posts in each department.

"Take professors, for instance. There are fewer professors in a department compared to assistant professors. If a department has only one professor, there can be no reserved posts as reservation cannot be applied in case of a single post. But if all posts of professors across different departments are clubbed together, then naturally there is a better chance of positions being set aside for SCs, STs and OBCs," P S Krishnan, former secretary to the central government and an expert on the subject, had told The Indian Express last year.

The current representation of SCs, STs and OBCs among teachers in higher education is pretty abysmal. According to a government report released in 2016, seven out of every 100 teachers in colleges and universities are from the disadvantaged sections. In absolute numbers, only 1.02 lakh — or 7.22 per cent — of the 14.1 lakh teachers in 716 universities and 38,056 colleges across the country were Dalits. The tribal faculty was just 30,000 or 2.12 per cent.

March 19

AID UP TO RS 1L CR TO IITS, NITS: UNION MIN

http://www.dailypioneer.com/state-editions/bhubaneswar/aid-up-to-rs-1l-cr-to-iits-nits-union-min.html

Institutes like IITs should find their places in the 100 top global institutes of higher learning, said Union Minister of State for Human Resource Development (HRD) Satya Pal Singh at the 6th IIT Bhubaneswar convocation held here on Sunday.

Congratulating the graduating students, Singh said the country is counting on these bright young minds to help in the nation building for a New India as envisioned by Prime Minister Modi.

Singh said his Ministry is committed to greater quality and excellence in technical education and has launched Revitalising Infrastructure Systems in Education (RISE), which aims to provide financial assistance up to Rs one lakh crore over a period of four years to IITs, NITs and IISERs.

The Minister lauded the research work in IIT, BBS undertaken on a wide range of topics from fundamentals to applied areas of immense importance specifically utilisation of industrial waste for developing environmental friendly geo-polymer concrete which could be useful in making eco-friendly buildings, bridges, roads and other long-lasting physical assets.

No consensus, IIMs go their separate ways on the degree-diploma debate

http://indianexpress.com/article/education/no-consensus-iims-go-their-separate-ways-on-the-degree-diploma-debate-5102924/

Last week three institutes held their convocation ceremony, of which IIM Lucknow and IIM Ranchi granted diplomas to students and IIM Bangalore awarded MBA degrees

With IIM Bangalore taking the plunge, IIM Udaipur, too, has decided to award degrees on March 23. Institute head Janat Shah confirmed this to The Indian Express on Sunday.

Despite efforts to arrive at a consensus, the Indian Institutes of Management (IIMs) seem to be going separate ways on whether students graduating this year should get a diploma or an MBA degree.

IIM Bangalore, IIM Lucknow and IIM Ranchi held their convocation ceremony last week. While IIM Lucknow and IIM Ranchi gave postgraduate diplomas in management or PGDM to its students, IIM Bangalore became the first IIM to give an MBA degree for the postgraduate programme in management.

With IIM Bangalore taking the plunge, IIM Udaipur, too, has decided to award degrees on March 23. Institute head Janat Shah confirmed this to The Indian Express on Sunday.

The directors of all the 20 business schools had held a meeting in the national capital on February 28 to reach a consensus on the issue. As first reported by this newspaper on February 11, IIM Lucknow had even approached the HRD Ministry formally for a clarification on the matter after a section of its students demanded that they be given PGDM at the convocation ceremony this year. At the heart of this dilemma is an established market perception that values a PGDM more than an MBA degree. Moreover, the batch graduating this year was admitted for a diploma programme in 2016, not degree.

At the directors' meeting last month, sources said, 17 IIMs were in favour of maintaining status quo for the current year and awarding degrees from 2019. But IIM Udaipur, IIM Bangalore and IIM Indore were keen on exercising the power to grant degrees from this year itself.

"We were hoping that all of us would agree on one decision to protect brand IIM. Since we have a common admission process, it would have been good if all the institutes awarded the same academic qualification for the same programme," said an IIM director.

"2018 is a transition year and I don't think this (some institutes awarding degrees and others diploma) will impact the IIM brand. We all are heading towards the same destination," said IIM Bangalore director G Raghuram.

The IIM Act was passed by Parliament on December 20, 2017. The law makes each of the 20 IIMs an 'Institution of National Importance', like the IITs, NITs and AIIMS. In other words, it empowers them to grant degrees to students.

Earlier, all IIMs were separate bodies registered under the Societies Act. Since societies are not authorised to award degrees, students admitted to their Masters programme are given a PGDM. Similarly, those pursuing doctoral studies are awarded the title of a 'Fellow' at the end of their research.

Although the PG diploma and 'Fellow' title are recognised by the Association of Indian Universities and the HRD Ministry as being equivalent to an MBA and a PhD degree, respectively, the equivalence is not universally accepted, especially for the Fellow programme, which prompted the government to conceive the Act.

Use GoI schemes while starting own biz: Kovind to IITians

https://kashmirreader.com/2018/03/19/use-goi-schemes-while-starting-own-biz-kovind-to-iitians/

Bhubaneswar: President Ram Nath Kovind Sunday asked the IITians to make use of the GoI schemes that encourage innovation and entrepreneurship when setting up ventures of their own.
"I am sure that many of you would consider setting up your own ventures to give shape to your innovative ideas. In doing so, avail the benefits of Government of India schemes that encourage innovation and entrepreneurship," Kovind said while delivering the sixth convocation address of the Indian Institute of Technology (IIT), Bhubaneswar.

Asking the technocrats to become creators of economic value and jobs through their enterprise, Kovind said "being an IITian, you should aspire to achieve the best not only for yourself and your families but also for society and the nation and world at large".

Noting that there are several challenges facing the young IITians, he said that they should aspire to be the best in all areas that matter, be it teaching, research, social impact or having the best of infrastructure.

"This will not be an easy task but it is not impossible either," the President said.
Kovind also asked the IITians to give back to the society and help the under-privileged and deprived sections to improve their quality of life.

"You as IITians are fortunate to have received world-class education. There is a moral obligation to pay back, and to help those who are less privileged in whichever manner the individual prefers," he said.

The President emphasised that it would be ideal if this process of paying back enriches education and scholarship at the grassroots level of our society and we all must strive to contribute to the society in our own little way.
Noting that IIT-Bhubaneswar has taken some initiatives in this regard, Kovind said the institute has adopted six villages and has undertaken certain technological and educational initiatives to improve the quality of life of the villagers.

Referring to a meeting he had with the directors of the IITs, Indian Institutes of Science Education and Research (IISERs) and the Indian Institute of Science (IISc) two weeks back, the President said "the deliberations reassured me that IITs are taking all necessary steps to augment their capacities in order to further strengthen their position among the world s best institutes of science and technology".

The President also inaugurated the ICT-IOC (Institute of Chemical Technology Indian Oil Corporation) Bhubaneswar campus and laid the foundation stone of the Skill Development Institute of Oil PSUs.
The ICT-IOC campus would offer a five-year integrated M Tech programme after class 12, an executive M Tech programme for industrial personnel, and a PhD programme.

In addition, it will be a hub for high-end research and innovation as well as support skill development

in fields such as chemical engineering, petrochemicals, textiles, pharmaceuticals and energy.
The Skill Development Institute (SDI), on the other hand, will offer youngsters short courses on a spectrum of skills ranging from simple to complex ones related to Artificial Intelligence, 3D printing and Advanced Robotics.

SDI Bhubaneswar will be India s first Skill Development Institute in hydrocarbons. Kovind expressed happiness that the institute aims to train about 50,000 youth over the next 10 years.
The President complimented Union Petroleum Minister Dharmendra Pradhan and Odisha Chief Minister Naveen Patnaik for extending full support to make these two projects possible.

Prez Kovind inaugurates two institutions during his 2-day Odisha visit

https://timesofindia.indiatimes.com/city/bhubaneswar/prez-kovind-inaugurates-two-institutions-during-his-2-day-odisha-visit/articleshow/63361650.cms

BHUBANESWAR: President Ram Nath Kovind inaugurated the state campus of the Institute of Chemical Technology-Indian Oil Corporation (ICT-IOC) here on Sunday. He also laid the foundation of a permanent campus of the Skill Development Institute (SDI), jointly set up by oil public-sector undertakings (PSUs) at Jatani, through video link during the sixth convocation of IIT-Bhubaneswar (IITBBS).

"The establishment of these two institutes shows the Centre's commitment towards developing Odisha," Kovind said.

The ICT-IOC campus here will offer a five-year integrated MTech programme, as well as an executive MTech programme for industrial personnel, and a PhD programme. The programmes would involve active industry participation, Kovind added.

The ICT-IOC campus, set up with an investment of Rs 500 crore, will be the hub of high-end research and innovation. It will support skill development in fields such as chemical engineering, petrochemicals, textiles, pharmaceuticals and energy. "The ICT-IOC's state campus will contribute towards developing Odisha as the hub of plastic, textile and petrochemical industries and provide our youth with newer avenues of employment," said Union petroleum minister Dharmendra Pradhan.

He said a study by Deloitte had shown that a well-planned and integrated approach towards

downstream textile and plastic clusters in eastern India could potentially unlock investments worth Rs 30,000 crore and generate 25 lakh employment opportunities by 2030.

Kovind said the SDI would offer short courses on a spectrum of skills ranging from simple to more complex ones related to artificial intelligence, 3D printing and advanced robotics. The SDI here will be the country's first in the hydrocarbons sector. Its permanent campus will be set up near IITBBS, at an investment of Rs 100 crore.

The ICT-IOC campus here will have academic and research collaborations with IIT-Kharagpur, which will act as its incubator, while industry will provide financial support.

"The success of this experiment will pave the way for a different model of industry-oriented research," said former director of IIT-Kharagpur, former chairperson of AICTE, and founding vice-chancellor of BPUT, Damodar Acharya.

A peek at the nano-level to biomimic bones

https://researchmatters.in/news/peek-nano-level-biomimic-bones

From the pattern of a honeycomb to the complexity of a DNA strand -- the intricate structures found in nature have astounded and inspired many scientists and designers for centuries. Many newer and better technologies in the fields of medicine and research, like the bullet trains in Japan inspired by the kingfisher's beak, or the prosthetic arm inspired by tentacles, were possible, thanks to nature. Now, a study by researchers from the Indian Institute of Technology (IIT), Hyderabad, aims to study the structure and composition of human bones to help in repairing them.

In the world of medicine, the technique most commonly used to repair bone tissue is called a bone graft. A surgeon would either remove some bone tissue from one part of the body and graft it to the injured area or use tissue obtained from a donor. But, procuring the required amount of bone tissue for a graft is not easy. An alternative to this is to 'manufacture' bone tissue artificially that is similar to natural bone tissue in porosity and composition. The study aids in manufacturing such a bone tissue.

“Bones have a complex hierarchical structure and behave differently on different scales of measurement. That’s why studying the levels of biological organisation and mimicking these structures at the macro and nano levels are important for bone tissue regeneration”, said Dr. Subha Narayan Rath, Associate Professor in the Department of Biomedical Engineering, IIT Hyderabad, who

has lead the team along with Dr. Chandra Shekhar Sharma, Assistant Professor in the Department of Chemical Engineering, IIT Hyderabad. In their study, published in the journal Tissue Engineering and Regenerative Medicine, the researchers have successfully mimicked the structure and pattern of bone tissue, which can improvise current methods used to regenerate and repair broken bones.

Scientists study bones at three levels. At the superstructure level, they analyse the overall size and shape of the bone. The macrostructure level dwells on how cells are arranged in the bones, and the subcellular level deals with the nanostructure of the bone tissue. Like glass, bones are anisotropic in nature. Their elasticity and strength differ based on the direction in which stress or strain is applied. This property is due to the way in which the collagen fibres and other minerals that make up the bone are oriented. Interestingly, at the nano level, bones are isotropic and have the same physical properties irrespective of the direction from which they are measured.

In this study, the researchers made three-dimensional scaffolds that mimic the porosity and structure of the extracellular matrix of the bones, with the help of electrospinning. Besides, they have used photolithography to micropattern the light-sensitive substrate, on which mesenchymal stem cells (MSC) or adult stem cells can grow and align themselves. When the researchers tested this substrate, they found that the stem cells developed into different cells that make up the bone tissue.

The researchers also observed that the orientation of the mesenchymal stem cells, growing on the substrate, resembled the structure of a spiral staircase - a finding documented for the very first time. The helicoidal arrangement of fibres resemble the natural hierachical structure of bone tissue.

“This study highlights the importance of physical cues in osteo-differentiation of mesenchymal stem cells on a patterned substrate without having to add any chemical factors,” said Ms. Sharanya Sankar, Research Scholar from IIT Hyderabad, who is the first author of the study. The study could drastically improve bone implant surgeries in the future with the development of smart biomaterial surfaces for tissue regeneration and repair.

Dr. Subha Narayan Rath and his team plan on using their findings to develop free-standing films - structures similar to hierarchical bone tissue and made from biomaterials. They postulate that this film could be used to further bone tissue regeneration technology.

March 18

With 600 seats, IITs look to fill gender gap

https://www.hindustantimes.com/education/with-600-seats-iits-look-to-fill-gender-gap/story-jIOvIJ4fy3zZFy5bVx40jO.html

The IIT Council, which is the highest decision-making body for tech schools, approved last year the creation of supernumerary seats to increase girls’ enrolment from 8% to 14% in the 2018-19 academic session, 17% in 2019-20 and 20% in 2020-21.

The Indian institutes of technology (IITs) are likely to have over 600 more seats, compared to a total of about 11,000 in 2017, and the focus will be on enrolling more women students this year, said a senior official of the human resource development (HRD) ministry.

According to the senior official, who doesn't want to be named, the ministry had asked the 23 IITs in the country to submit seat matrix details and how many additional seats would be created from this academic session. An increase of more than 600 seats was discussed at a meeting of the joint admission board (JAB) on Saturday that IIT directors and senior HRD ministry officials attended.

The board has also decided to conduct the JEE-Advanced test online from this year, doing away with the traditional pen-and-paper system. The IITs will hold the JEE Advanced test on May 20. The IITs were asked to create supernumerary seats for girls and were directed to ensure adequate hostel facilities for them.

The move came after a panel constituted by the JAB of the IITs filed a report painting a grim picture about the biases that women continue to face in India.

A move to create special seats for girls was also discussed at length at Saturday's meeting.

The senior official said objections were raised by an IIT on the proposed method to have more seats for girls. "The senate of an IIT said the move may reduce the number of seats for boys. The issue was discussed and the methodology was explained to everyone. Now everyone is on board," said a senior IIT director requesting anonymity.

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Several IITs expressed concern over accommodation. "Though the senate has approved the scheme they had raised concern over lack of hostels for girls. As the HRD ministry is keen on introducing the supernumerary seats from this year, we are creating accommodation in the vicinity," said another IIT director, who also doesn't wish to be named. The proportion of women in IITs has been fluctuating in the past few years — from 8.8% in 2014 and 8% in 2016 to 9.3% in 2017.

Cuttack boy tops GATE, eyes IIT-Kharagpur stint

https://timesofindia.indiatimes.com/home/education/news/cuttack-boy-tops-gate-eyes-iit-kharagpur-stint/articleshow/63357847.cms

BHUBANESWAR: Jyotiranjan Barik, a fourth-year student of agricultural engineering at the Orissa University of Agriculture and Technology (OUAT), topped the Graduate Aptitude Test in Engineering (GATE)-2018. He scored 959 out of 1,000 marks.

"This was my first attempt and I did not expect to top the exam. I was sure of qualifying though. When my friends told me about the result, I could not believe it," said the 23-year-old.

GATE is the national-level qualifying test for admission in master's and direct doctoral programmes in engineering, technology, architecture and other branches of science at the Indian Institute of Science (IISc) and across the Indian Institutes of Technology (IITs). This year, the exam was conducted by IIT-Guwahati. The results were declared on Saturday.

Barik completed his schooling from Sri Sri Abhiram Paramhansa Bidyapitha in Sasol village in Cuttack district and his Plus-II from Maharshi College of Natural Law in Bhubaneswar. He secured 90.33% in Class X and 80.5% in his Plus-II boards.

"I don't study much. Every day, I would keep at my books for around three to four hours. I did not go to any coaching centre. I think classroom lectures were quite helpful," said Barik. "I want to do research by clearing the Junior Research Fellowship. I think I will do an MTech in soil and water conservation from IIT Kharagpur," he added.

After news of Barik's success spread, congratulatory messages started pouring in. Chief minister Naveen Patnaik tweeted, "Delighted to learn that Odia student from Orissa University of Agriculture and Technology Jyotiranjan Barik has topped the all-India Graduate Aptitude Test in Engineering #GATEExam2018. Many congratulations to him and wishing him all success in his career."

Union petroleum minister Dharmendra Pradhan also congratulated Barik on Twitter. "This is a moment of pride for Odias. He will be an inspiration to Odisha's youth," the minister said. The vice-chancellor of OUAT said, "This is certainly a proud moment for the university and the state."

Barik's father, Gajendra, works in a private firm while his mother is a housewife.

IIT-Kanpur to pave way for all campuses to have 14% girls

https://timesofindia.indiatimes.com/home/education/news/iit-kanpur-to-pave-way-for-all-campuses-to-have-14-girls/articleshow/63350067.cms

NEW DELHI: IIT-Kanpur has been entrusted with writing the seat allocation algorithm which will help all Indian Institutes of Technology ensure the number of girl students on each campus will be at least 14%. This was decided at the Joint Admission Board (JAB) meet here on Saturday.

The step is part of the government's long-term plan to increase the female representation in IITs to 20% of the total number of students by 2026. The number of girls in the IIT campuses are set to see a quantum leap of 14% as there will be a separate supernumerary list prepared for coming session. This will be apart from the girls shortlisted in the common list for admissions. The JAB decision came following a circular from the ministry of human resource development specifying that the number of girls to be admitted - to achieve 14%- will be "supernumerary" and the number of boys to be admitted cannot go down from the 2017 number.

"A consensus has been reached among the IITs and the JAB decided to ensure 14% supernumerary seats for girls. The numbers of the girls in the common list will not be calculated in the 14%, which means there will be more girls in the campuses now. IIT-Kanpur will write the seat allocation algorithm," said R Subrahmanyam, secretary, higher education, MHRD.

IIT Bhubaneswar ready to host President Kovind

https://www.nyoooz.com/news/bhubaneswar/1060137/iit-bhubaneswar-ready-to-host-president-kovind/

"We are expecting our ranking to go up in 2017-18," said Raja Kumar. "It is certainly a proud moment for us at IITBBS to welcome the President of India. Bhubaneswar: The IIT Bhubaneswar IITBBS) is ready to welcome President Ram Nath Kovind , who will attend its sixth convocation on Sunday.The convocation ceremony will be held inside a makeshift tent, with a capacity of more than 2,000, to be erected on the campus.The President will confer degrees on 295 students, including 14 PhD, 60 MTech, 71 MSc and 150 BTech students. The institute has undergone a positive transformation on multiple fronts such as academics, research, campus infrastructure, expansion in academic programmes and student strength. It is marching towards achieving international recognition," said director of the institute R V Raja Kumar In the last two years, IITBBS has improved its ranking among the IITs - from 26 in 2015-16 to 18 in 2016-17.

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March 17

Need to sensitise students to rural innovation, says Anil Rajvanshi an alumnus of IIT Kanpur

https://www.hindustantimes.com/pune-news/need-to-sensitise-students-to-rural-innovation-says-anil-rajvanshi-an-alumnus-of-iit-kanpur/story-hYEacZPh83PGfBoxz2U0CN

An alumnus of IIT Kanpur and University of Florida, Anil K Rajvanshi has dedicated his life to the application of science and technology for rural development. A recipient of the Jamnalal Bajaj award, Rajvanshi has extensive experience in renewable energy research, rural and sustainable

development. As the director of Nimbkar Agricultural Research Institute (NARI), Phaltan, Rajvanshi initiated a number of technology-based projects for rural development. He shares his thoughts on the occasion of the 50th anniversary of Nari on March 17.

Anil K Rajvanshi

What have been the challenges faced in the road ahead to rural development?

The biggest challenge is to get people to work. Nobody really wants to work here.They all wish to be in big cities. The country does not lack good brains. It is the mentality that needs to evolve and change. People have a mindset that good work only lies in the urban spaces. If we had the people with the required mindset, Nari would've been expand better and would have been able to bring real changes to the villages of the country. We need to empower rural areas, which is the base of the country, to eventually strengthen the country as a whole. Funding has been another challenge that we have been trying to overcome over the years.

What are the major aspects that the government needs to focus for rural development?

The fact is that rural India heavily depends on agriculture, and that sector needs to be empowered to bring in drastic changes in the villages. The first step would be to fix the correct price of the produce. It is also important to control the influence of the middlemen and see that farmers are not losing in the process. The government has not come up with a foolproof solution to this problem. There is a huge disparity between the cost the customers pay and what the farmers get for their produce.

What is the scenario with respect to rural innovation?

I have been trying to communicate to the youth to be involved in rural innovation and development, but the response is very low. One reason behind this is lack of sensitisation of students in colleges and universities, towards agriculture. Most prominent institutes including IITs are mostly encouraging the mass to migrate towards IT startups, while there is so much demand in the rural sector.

What are the future plans?

With our eyes on the future, we are looking at high-tech agriculture, specially precision agriculture or container agriculture, which a procedure under controlled conditions. Technically, it means

dealing with hydroponics and aeroponics, which results is yields much higher than the usual ground-based agriculture. Hence, through this. you can sometimes even have 5-10 harvests in a year. Also farmers get very little money for their produce, so what is required is processing of their produce into products, that can be sold directly to the market. For instance, the sugary juice produced from the stem of sweet sorghum is being converted to table-variety syrup which has several health benefits and is in great demand in the market. While a sorghum was being sold at Re 1 or Rs 2 per kilogram, the syrup is sold at Rs 400 to Rs 500 per kilogram. Internationally, it is also being sold at Rs 800 per kilogram. We are also developing a solar-powered oil compressor in which the oil can be cold-pressed. The oil that comes out is pure and devoid of chemicals.

IIT-M invites applications for MS in Analog design

https://www.newstodaynet.com/index.php/2018/03/17/iit-m-invites-applications-for-ms-in-analog-design/

Chennai: Texas Instruments India and IIT Madras are inviting applications for the Master of Science (MS) course in Analog/Mixed Signal VLSI.

This is a unique research programme that combines the strength of the analog-mixed signal activity at IIT-M, with TI' s industry expertise and leadership to offer students a comprehensive understanding of the theory and practice of analog/mixed-signal VLSI, a press release said.

The MS Analog/Mixed-Signal VLSI programme combines the rigour of research with in-depth practical experience at TI through a year-and-a-half long internship. The programme is meant for students who want to build a career in analog/mixed-signal engineering, are keen to dive deep into challenges faced by the industry, and develop cutting-edge technology.

The three year programme is designed to reflect advances in analog/mixed-signal VLSI and to develop skill sets needed to address future challenges. The selected students get an opportunity to work with the industry leader in semiconductors.

Students with a bachelor's degree in Electronics / Electrical/ Telecommunications/Instrumentation engineering (or allied disciplines) with an aggregate of 65 per cent (up to the final semester; if the final semester results are not yet announced, up to the seventh semester) are eligible to apply. Also students should have a valid GATE score of 700 or more in EC, EE, or IN. Currently, GATE scores are valid for three years.

GATE requirement is waived for IIT B Tech students with a cumulative grade point average (CGPA) or 8 or higher, the release said.