Recent Research from Indian Institute of Technology Highlight Findings in Microwave and Wireless Technologies


By a News Reporter-Staff News Editor at Journal of Technology -- Investigators publish new report on Microwave and Wireless Technologies. According to news originating from New Delhi, India, by VerticalNews correspondents, research stated, "In this paper, a new way of obtaining a band rejection in a ultra wideband (UWB) filter using a uniplanar Electromagnetic bandgap (EBG) structure is reported. The EBG structure has a bandgap centered at 6.69 GHz which is almost 38% lower compared with the conventional uniplanar EBG of same dimensions."

Our news journalists obtained a quote from the research from the Indian Institute of Technology, "A one-dimensional EBG structure coupled with a microstrip line provides a narrow bandgap, which is used in obtaining a notch in the UWB filter. Single notch UWB filters with variations in the placement of EBG are fabricated producing a notch centered at 5.19 GHz (wireless local area network (WLAN)). A dual notch (5.16 and 8.24 GHz (satellite communication)) UWB filter is also fabricated with two different unit cell EBGs."

According to the news editors, the research concluded: "Switchable and tunable notch band UWB filters are proposed."


The news correspondents report that additional information may be obtained from L. Kurra, Indian Inst Technol Delhi, Center Appl Res Elect, New Delhi 110016, India. Additional authors for this research include M.P. Abegaonkar, A. Basu and S.K. Koul.

Keywords for this news article include: Asia, India, New Delhi, Microwave and Wireless Technologies

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Source: Journal of Technology
Poor show: No Indian institute in world’s top 200 colleges

IIT-Delhi, ranked at 222, fares best in QS Ratings 2013

THE LIST

- Published on Tuesday, the QS rankings has only 11 Indian educations featuring in top 800.
- IIT-Delhi is the highest ranked institute at 222.
- IIT-Bombay, standing at 23rd position and IIT Kanpur at 295 are other Indian institutions in the top 300.
- IIT Madras is ranked 313 while IIT Kharagpur stands at 346.
- The only Indian institution to have performed better than last year this time is IIT Kharagpur, by three places to 346th rank this year.
- The QS rankings has been published annually since 2004. For this tenth edition, 90,000 survey responses were collected, more than 3,000 universities considered, and more than 800 evaluated.

THE ITs, India’s premier engineering institutions, have found no place in the latest list of top 200 universities of the world. Even worse, they have slipped down a couple of notches in the list of top 200 Asian universities, according to the rankings released by Quacquarelli Symonds (QS) for 2013.

Apart from the six ITs which figure in the top universities in Asia, universities of Delhi, Pune and Bombay also feature lower in the list.

Published on Tuesday, the QS rankings has only 11 Indian educations featuring in top 800. IIT-Delhi is the highest ranked institution at 222. IIT-Bombay, standing at 23rd position and IIT Kanpur at 295 are other Indian institutions in the top 300. Further, IIT Madras is ranked 313 while IIT Kharagpur stands at 346.

Most ITs, however, have slipped by a couple of notches when compared to last year’s rankings.

IIT-Delhi, for instance, has slipped by two places — from last year’s 36th position to 38 in 2013.

In the world rankings, IIT Delhi has fallen from the 212th rank to 222 this year. The only Indian institution to have performed better than last year this time is IIT Kharagpur, by three places to 346th rank this year.

Officials at IIT Delhi, however, were unmoved by the ranking. S N Singh, Deputy Director (Operations), IIT-Delhi, said, "The ratings are for all universities. We are an engineering institute. If you look at the top engineering institutes in the world, IITs figure in the top positions.”

Singh said IIT-Delhi was looking at the parameters on which the ranking was done.

“We are still studying the ratings. There are two parameters which might concern us — one on academic reputation and another on international students and faculty,” he said.

According to senior IIT officials, the parameters for rankings such as the teacher-student ratio and international faculty might be behind the drop in ratings.

“We don’t have many foreign teachers due to the rules governing appointments,” an official said. Moreover, IITs do not include guest lecturers in the student-teacher ratio while others do, he said.

The QS rankings has been published annually since 2004. For this tenth edition, 90,000 survey responses were collected, more than 3,000 universities considered, and more than 800 evaluated.

The rankings are based on six indicators — academic reputation (40 per cent), employer reputation (10 per cent), faculty student ratio (20 per cent), citations per faculty (20 per cent), international students (5 per cent) and international faculty (5 per cent).
अब रैंकिंग में किसी से पीछे नहीं रहेंगे आईआईटी

नई दिल्ली | मदन जैक्स

आईआईटी ने वैश्विक रैंकिंग में शिखर ने करार किया है लेकिन हाल ही है उक्त को आईआईटी उनमें पीछे नहीं रहेंगे। 

प्रत्येक आईआईटी में इन सर्वेक्षणों के लिए आंकड़े उपलब्ध कराने और सर्वेक्षणों के लिए रैंकिंग प्रक्रिया बनाने का रास्ता है। 

आईआईटी काउंसिल की 16 सितंबर को होने वाली बैठक में रैंकिंग प्रतिक्रिया स्थापित करने का मंजूरी दी जाएगी।

मानव संसाधन विकास मंत्रालय में उच्च पद्धति विभाग की अतिरिक्त सत्यिक अभियान शरीर के संयोजक कार्यालय रैंकिंग कमेटी ने पाया कि मानव संसाधन ने आईआईटी करने वाला प्रमुख संस्थानों क्षेत्र में वर्तमान

व्यावसायिक पीयरों और विद्यार्थियों का सर्वेक्षण में सर्वेक्षण में 40 फीसदी दे जाता है। 

अंतर्निहित प्रोफेसर रिलायन्स एंड विश्वविद्यालयों की सुरक्षा में एक भी भारतीय संस्थान अधिक नहीं है। 

एआईटी दिल्ली की सुरक्षा में विश्वविद्यालयों की सुरक्षा में 22% स्थान मिला। 

कुल 800 संस्थाओं को रैंकिंग में भाग लेने के लिए 11 संस्थानों में सभी फीडबैक कार्यान्वयन है। 

एआईटी का दबदबा है।
C.V.R. Murthy.

Chennai: Prof. C.V.R. Murthy, civil engineering professor at the Indian Institute of Technology (IIT), Madras, has been appointed as director of IIT-Jodhpur by the President and visitor of IITs Pranab Mukherjee.

Prof. Murthy assumed charge as the new director on Wednesday and will serve in the post for five years. After completing B.Tech (civil engineering) at IIT-Madras, he continued at the institute to do masters in that subject.

He received his Doctor of Philosophy in civil engineering from the Caltech, USA. He joined IIT-Madras as a senior project officer in the civil engineering department in 1986, moved on to become a lecturer, assistant professor before becoming a professor in 2003. He was associated with BIS as advisor on seismic safety design for buildings.
A study in apathy

Our universities are sliding down in world rankings. Let's hope foreign universities will kickstart competition

The Quacquarelli Symonds (QS) World University Rankings published earlier this week have come as an unpleasant surprise to those who believe that, despite the dismal quality of our primary education, our institutions of higher learning, especially the Indian Institutes of Technology, are world class. Of the leading Indian universities, IIT Delhi is ranked globally at 222 with a 49.4% score with IIT Bombay making it to 233 and IIT Kanpur to 295. Delhi University is ranked at 441 while the University of Mumbai made it to a dismal 601. In contrast, China has three universities in the top 100 with Peking and Tsinghua placed at 46 and 48 and Fudan at 88. Quite shockingly, no Indian university has made it to the top 200.

Few statistics could have brought out as clearly the distance we have to traverse to catch up with our giant neighbour. A sound education is the foundation on which strong nations are built and there's little doubt that the absence of truly exemplary institutions of learning is terrible news for a country that aspires to be a world leader.

Since we can't seem to go forward ourselves, perhaps we can reap some educational benefit from foreign universities that are eager to set up shop here. The government has just announced that it will allow foreign universities to offer degrees at campuses set up in India. This means Indian students can soon pay in rupees for a world class education without ever leaving Indian shores. Educational institutions that want to operate in India need to be ranked among the top 400 universities in the world. Let's hope it's the Massachusetts Institute of Technology, ranked the best university in the world, that intends to establish a presence in the Indian higher educational market currently worth ₹46,200 crore, and not the University of Turin that's ranked 399 or Northeastern University from the US that's ranked at 397 — both, incidentally, way ahead of the Universities of Pune and Kolkata at 701!
Raising the bar

Entry of foreign educational providers must focus attention on what holds back India’s universities

With legislation to allow and regulate entry of foreign educational providers hanging in Parliament for three years, the government has used the executive route to permit and streamline their entry. Universities ranked high on one of three respected indices will now be allowed to register as non-profit companies (as per Section 25 of the Companies Act), set up campuses in the country and award degrees. With the HRD ministry sending the requisite proposal to the Department of Industrial Policy and Promotion and the Department of Economic Affairs, the next step of formulating UGC rules for the universities to qualify as foreign educational providers, or FEPs, is likely to follow. In the past, many foreign universities had expressed interest in setting up campuses in India, and the executive order will clear their path. But the hope touched off by this move must encompass domestic educational providers too, by drawing attention by comparison to the grave problems that inhibit state funded universities from achieving their potential.

The objective of the order is obviously to allow Indian students to avail of quality education, in a way that augments local infrastructure and inducts pools of excellence into the domestic landscape. Various checks are proposed to keep the bar high, by requiring that an FEP be in the top 400 on the Times Higher Education, Quacquarelli Symonds or Shanghai Jiao Tong rankings, and that a sufficiently large corpus be maintained as a guarantee of good intent. Given the ever-increasing numbers of Indian students pushed overseas for higher education, for lack of comparable opportunities domestically, it will be welcomed by a growing demographic. It would be missing the wood for the trees, however, to fail to admit that local options are discounted by students not only on the basis of availability, but also on falling quality. For too long, the government has failed to act upon the infirmities in Indian institutions, in upgrading their curriculum, producing and recruiting the needed faculty and regulating admissions — and allowing them enough autonomy to do so. One of the indices the government has adopted to regulate entry of FEPs, the QS rankings, was released this week. Only the IITs, no other Indian educational provider, are in the top 400.

It may be too much to ask that offshore campuses lift standards at local universities. But the need that makes these FEPs so attractive must compel more sustained and urgent focus on the neglect and bureaucratic muddle that holds back India’s rather generously funded universities.
GLOCAL EDUCATION

Allowing foreign universities to go solo in India is great news for students starved of quality education

Given around 2 lakh Indian students go overseas each year, spending upwards of $8-10 billion on education, the decision to allow foreign universities to set up campuses in India was long overdue. Not only will this add to the number of university seats for students, the biggest improvement will be in the quality of the education available—while India has traditionally boasted of several high-quality universities, it has none in the top 200 in the world. Indeed, if you look at the Shanghai ranking of universities, the number of Indian universities in the top 500 are falling while those of countries like China are rising. This is especially problematic given that no country which has developed fast has done so without having top class universities.

While the government has allowed foreign universities to come into the country, whether they come is a different matter. Apart from the difficulties of getting land after the Land Acquisition, Rehabilitation and Resettlement Bill, the larger problem will be getting the requisite clearances. Keep in mind that a reputed Business School such as ISB preferred to go the non-recognised route as it found the existing system of approvals too bureaucratic.
Hurdles remain for foreign univs to set up India campuses

Criteria like world ranking and not-for-profit tag might act as deterrents

KALPANA PATHAK
Mumbai, 11 September

US-based Stevens Institute of Technology on Wednesday tied up with the Mukes Patel School of Technology Management & Engineering, of NMIMS University, for student exchange, faculty exchange and research programmes. But if Stevens Institute, ranked 75 among all US universities, were to consider opening a campus in India, it might not qualify. For, it does not rank within the top 400 universities of the world published by Times Higher Education, Quacquarelli Symonds or the Academic Ranking of World Universities by Shanghai Jiao Tong University.

This, and a few more conditions put forth by the ministry of human resource development on Tuesday for allowing foreign universities to open campuses in India have irked the academic community and industry players. “To say that institutions would have to rank within the top 400 universities of the world is not correct. Different agencies use different criteria to rank universities and the order changes every year. How do you decide on it then?” said Rajan Saxena, vice-chancellor of NMIMS University. Overall, Saxena thinks, it is a positive move. But concerns remain. “The Ivy leagues are certainly not interested in setting up a campus here, but there are others which are. Though foreign universities might not warm up to India immediately, they would in the long term,” said Shalini Sharma, head, higher education, Confederation of Indian Industry.

While foreign institutions would be required to maintain a corpus of not less than Rs 25 crore (brought down from Rs 50 crore suggested earlier), it would have to be a not-for-profit entity that has been in existence for at least 20 years and accredited by an agency of the country of origin or by an internationally accepted system of accreditation. Foreign varsities will have to operate as a not-for-profit entity under Section 25 of the Companies Act 1956. A not-for-profit entity is one that does not distribute its surplus funds to owners or shareholders. It, instead, reinvests these in the institute. Many, private universities have been set up under Section 25 of the Companies Act. However, deemed universities are not covered by the Act.

Some higher education institutions have taken this route in the technical education space to escape policing by the All India Council for Technical Education. For instance, many management schools have gone the Indian School of Business way, opting for a one-year management programme (against the conventional two-year courses), and have registered themselves under Section 25 of the Act.

Foreign universities interested in engaging with India have three different needs and objectives — prestige-enhancing, prestige-seeking and revenue-profit maximising. “Indian policymakers were interested in attracting universities from the first group without understanding that unless they are funded or financially supported by the host country — for instance, New York University in Abu Dhabi — there is a lack of interest among this group in building branch campuses,” says Rahul Choudaha, director, research and strategic development at World Education Services in New York.

Choudaha says the foreign universities Bill proposed barriers like the requirement of a corpus fund of Rs 25 crore, due to the depreciation of the rupee. Besides, given that the Indian government does not promote ‘for-profit’ institutions, it has included a clause regarding non-repayment of surpluses by foreign universities.

Choudaha says big names like Duke Fuqua, Virginia Tech and Georgia Tech have abandoned their ambitions for full-fledged degree campuses. “The clause regarding non-repayment of surpluses effectively eliminated all leading universities, especially the publicly funded ones, which cannot justify to their stakeholders putting up financial capital when there is limited potential for a return on their investment,” he said.

A professor and India representative of an international university in India told Business Standard that non-repayment of funds would act as a deterrent to international universities. “The Indian government should first look at its own institutions which have, under the garb of being charitable ones, mastered the art of profit making,” he said. Choudaha explains that in terms of philanthropy, Indian higher education is still far behind. “There are hardly any cases of wealthy Indians donating money to higher education institutions and potentially funding foreign branch campuses, though there are a couple of examples like Shiv Nadar University and Azim Premji University — both private universities funded by technology billionaires.”

Also, there is a lack of clarity on how does one qualify foreign institutions which are already operating in India in partnership with Indian institutions — like Lancaster University and GD Goenka, Leeds Metropolitan University (MET) and Jagaran Social Welfare Society (a non-profit organisation owned by the Dalnik Jagann media group), and Strathclyde University and SKL India. Last year, several students filed petitions in an Indian high court accusing Leeds MET India of misrepresentation, as the degrees they confer lack recognition from accrediting bodies in India.
Foreign varsities’ entry significant only if care is
given to quality and research, say academicians

Our Bureaus
Sept. 11

There may not be a dramatic response to allowing foreign universities’ campuses. However, it could augur well for the country in the long run.

The Human Resource Development (HRD) on Tuesday said the regulation for allowing foreign campuses in the country was being finalised.

However, present economic environment and certain challenges might result in a lukewarm response in the near term even if the final regulation is put in place, feel experts.

“To set up a green-field university will cost about Rs 1,000 crore given the prevailing land costs. I am not expecting a great response to this at the moment,” Ajit Balakrishnan, Chairman, Board of Governors, Indian Institute of Management – Calcutta, told Business Line on Wednesday.

Many others academicians and experts are also not too excited.

If the objective of a foreign university is just to offer teaching without research, it is of no use, according to E. Hari Babu, Pro-Vice Chancellor, University of Hyderabad.

“We need to ascertain the commitment of funding for R&D to local scientists before allowing them. Otherwise, education will become just a tradable commodity. In South Africa, many American universities are only teaching undergraduate courses without research,” he said.

Yogendra Yadav, Member, UGC sees it as “a game to push these policies through aravana, said competition would lead to better quality. Those who go abroad for education-cum-employment may not prefer foreign universities. State universities may face trouble as quality students and faculty might migrate to foreign varsities.

POSITIVE MOVE

Deepak Chandra, Deputy Dean, Indian School of Business (ISB), said he would welcome foreign universities in India. “I am assuming that good quality universities will come and nurture research culture,” he said.

Some experts, including K.R. Sekar, Partner, Deloitte Haskins & Sells, termed the decision to allow foreign institutions into India as a right decision at the right time.

“The churn in the higher education industry in various fields suggests that the market is beginning to be discriminating. This is an attractive environment for good foreign universities to enter the country and provide quality education at a competitive price,” said C. Gopinath, Dean, Jindal Global Business School.

When contacted, a spokesman for Azim Premji University declined to comment on the issue.

For Vikram Kattimani, a student of University of Hyderabad, this is a welcome move in view of the rising costs of education abroad.

Pramath Sinha of 9.9 Mediaworx, who was the founding dean of ISB and is overseeing the upcoming Ashoka University, also said it was a positive move. However, he said certain caveats may prove a deterrent for the top-rung universities. These include the stipulation that a corpus of Rs 25 crore be maintained by the universities and that they do not take any surplus profits out of the country.

“The fly-by-night operators willing to bend the rules are more likely to come in. However, right now the attempt is to prevent that,” he said. Ashok Mittal, Chancellor, Lovely Professional University, felt competition would only bring out the best from the players. The same could be expected here, though without challenges.

(With inputs from G. Nagabhar, Sridhar/Hyderabad, Aesha Datta/New Delhi, N.S. Vagesh/Mumbai, V. Bharani/Chennai and Anil Urs/Bangalore.)
Super 30 students to get foreign aid

PATNA: A Japanese university has decided to grant scholarships to students of Bihar’s celebrated coaching centre Super 30, known for sending underprivileged students to IITs.

Super 30 founder Anand Kumar said representatives from the University of Tokyo in Japan visited their campus on Wednesday, and spoke to students about the emerging opportunities in Japan.

Super 30 has helped 281 students crack the prestigious IIT JEE — the joint entrance examination for the Indian Institutes of Technology — in the past 10 years.

“We have heard a lot about Super 30,” said Jonathan Woodward, project associate and professor at the university’s department of chemistry.

“It (Super 30) is a remarkable thing. The Japanese media has also documented it. Now, we are here to see how bright students from Super 30 can make it to Japan for advanced studies. All that we need is talent. If students are poor, they can get full scholarship,” he said.

Woodward was accompanied by Hiroshi Yoshino, director of University of Tokyo India operation, and Takako Hayashi, project officer at undergraduate admission office.

Earlier this year, Anand Kumar was invited to the University of Tokyo as part of a programme to attract Indian students, especially from Bihar. Woodward said studying in Japan has been made easier after English-medium courses were introduced.

“We have started English medium undergraduate and postgraduate courses to remove the foreign language barrier,” he said.

Yoichi Itoh, STB Research Institute chief economist, was the first to make a film on Super 30 for NHK Channel, which was later made into a hour-long documentary.

Japan’s Amazon TV, Kansai Telecasting Corporation and TV Man Union have also made separate films on Super 30 after visiting Patna. Former Miss Japan Norika Fujiwara came to Patna as part of the TV Man Union team. “I hope more students get opportunity to study there,” Anand Kumar said.

IANS

Super 30 inspires Tokyo varsity to help poor kids

MERITORIOUS students from underprivileged sections of the society will soon get a chance to pursue higher studies in Japan thanks to Bihar’s pioneering coaching institute Super 30, which has helped 281 poor students make it to the IITs in the past decade.

Inspired by the institute’s achievements, a high-level delegation of the University of Tokyo visited Super 30 in Patna on Wednesday on a talent hunt. The students handpicked by the team will get admission to Japanese universities for advanced studies with full scholarships.

“We have heard a lot about Super 30 which is doing yeoman’s job in the field of education here. Now, we are here to see how bright students from Super 30 can make it to Japan for advance studies. All that we need is talent,” Dr Jonathan Woodward, project associate professor at the university’s department of chemistry, said.

The Japanese team interacted with the students and told them about the global platform that Japan would provide them. Yoshino said the university would provide full scholarship to meritorious students.

Giridhar Jha/Patna
Mars Mission ready to explore methane & life

KESTUR VASUKI • BANGALORE

India's quest to conquer the Red Planet has now become a reality. Country's premier space agency Indian Space Research Organisation's Mars Mission is ready and would be launched between September and October 2013 from spaceport at Sriharikota. The ₹450 crore venture has passed many tests at ISRO Satellite Centre (ISAC) in southern city of Bangalore and ready to explore methane and life on Mars.

Addressing a Press conference in Bangalore on Wednesday Dr SK Shivakumar, Director of ISAC, said the intention of the Mars Mission was to demonstrate the Indian space capabilities beyond the gravity of the earth and also to explore methane and life. He said, "It is a challenging task looking beyond the gravity of the earth. This is country's first mission beyond moon exploring the Red Planet."

He also admitted the Mars Mission was a technical mission rather than a scientific mission to prove the Indian capabilities.

The ISRO which is banking on NASA for ground tracking of the satellite carries many scientific payloads to explore the red planet.

According to S Arunan, project Director, Mars Orbiter Mission will carry five Indian scientific instruments, including a multi-spectral camera, sophisticated spectrometers, and a highly sensitive methane sensor to check the origin of the gas. The instruments will study the atmosphere of the planet, look for methane which could indicate if life exists on mars, take coloured photos of Mars, and analyse the presence of water.

The unmanned mission, which will explore the existence of life and the possibility of sustaining life on Mars, will travel 299 days in space before reaching the Red Planet in September 2014. The Mars Orbiter Mission will be sent through powerful PSLV-XL launch vehicle.

The first stage of PSLV-C25 with strap-ons has already been assembled, with the rocket ready for satellite integration by October 10.

ISRO said the primary objectives of the mission are to demonstrate India's technological capability to send a satellite to orbit around Mars and conduct meaningful experiments such as looking for signs of life, take pictures of the red planet and study Martian environment.

The satellite will carry compact science experiments, totalling a mass of 15 kg. There will be five instruments to study Martian surface, atmosphere and mineralogy.

After leaving earth orbit in November, the spacecraft will cruise in deep space for 10 months using its own propulsion system and will reach Mars (Martian transfer trajectory) in September 2014.

The 1350 kg spacecraft subsequently is planned to enter into a 372 km by 80,000 km elliptical orbit around Mars.
To know answer about life on Mars, ISRO orbiter to sniff for methane

PRESS TRUST OF INDIA
BANGALORE, SEPT 11

INDIA’s upcoming Mars Orbiter Mission (MOM) seeks to reveal whether there is methane, considered a “precursor chemical” for life, on the Red Planet, key officials behind the ambitious venture said today.

A Methane Sensor, one of the five payloads (scientific instruments) onboard the spacecraft, would look to detect the presence of the gas, MOM Project Director Arunan S said.

He said the sensor was aimed at understanding whether life existed on Mars or if it would have life in future. “Methane is fundamentally base for life on any planet,” he said.

M Annadurai, Programme Director, IRS & SSS (Indian Remote Sensing & Small, Science and Student Satellites), said: “Most probably we will be able to answer whether there is presence of Methane. If it’s there, yes; if it’s not, not there. If it’s available, where it’s available”.

After a media preview of the Mars orbiter at ISRO Satellite Centre here, where it is being given final shape, officials of the space agency indicated that the aim is to launch the mission on October 21, weather permitting.

The launch window is from October 21 to November 19.

The MOM is a Rs 450 crore mission — Rs 110 crore for building PSLV-C25 that would launch the Rs 150 crore spacecraft, with the remaining amount spent on augmenting ground segment, including those required for deep space communication.

Once launched from the spaceport of Sriharikota, the spacecraft would go around the earth for 20-25 days before embarking on a 9-month voyage to Mars.

The minimum life of the spacecraft around Mars is six months but it would certainly outlive it, as similar satellites orbited by other countries have sometimes lasted six-seven years, Arunan said.
नासा के हंटर स्पेसक्राफ्ट ने दूंढ़े 10 बड़े ब्लैकहोल
पिछले दो साल से इन पर थी नासा वैज्ञानिकों की नजर

एजेंसी | व्यूरोंगिटन

नासा के ब्लैकहोल हंटर स्पेसक्राफ्ट न्यूस्टार ने 10 बड़े ब्लैकहोल खोजे हैं। वैज्ञानिकों का कहना है कि ये ब्लैकहोल पृथ्वी से 0.3 बिलियन से 11 बिलियन प्रकाश वर्ष दूर है।

पृथ्वी से 0.3 से 11 बिलियन लाइट टाइम की दूरी पर मिले

इस खोज को नासा ब्लैकहोल के अध्ययन में बड़ी सफलता मान रहा है। इन ब्लैकहोल पर पिछले दो साल से वैज्ञानिकों की नजर थीं। न्यूस्टार स्पेसक्राफ्ट के पास शक्तिशाली टेलीस्कोप है जिससे ब्लैकहोल की बारिकियों को समझने में आसानी हुई।

नासा का कहना है कि ये ब्लैकहोल आकार में काफी बड़े है। अलग-अलग गैसों से बने इन ब्लैकहोल का घनत्व काफी ज्यादा है। इस खोज की निष्ठुर जानकारी एस्ट्रोफिजिकल जर्नल में विस्तार से लेख छपा हुआ।

अब स्पेस रोवर खुद लेगा फैसले

स्पेस रोवर अब जल्द ही अपने निर्णय स्वयं लेने में सक्षम हो जाएंगे। नासा के वैज्ञानिकों ने एक ऐसा स्मार्ट कैमरा बनाने में सफलता पाई है जिसकी मदद से ऐसा संभव होगा। यह कैमरा न केवल अंतरिक्ष की तस्वीरें खींचेगा बल्कि यह उसके अर्थ को भी समझने में मदद करेगा।

जिसके आधार पर रोवर यह निर्णय दे सकेगा कि कितने जगह पर वह कितनी देर और क्या क्या खोज करेगा।

नासा के वैज्ञानिकों ने कहा कि मंगल पर भेजे गए क्यूफियोस्टी रोवर में जरूर काफी नई तकनीक है लेकिन भ्रष्टाचार में रोवर और भेजनेवाले खोज करने के लिए स्मार्ट और टेक्नीकली से स्ट्रॉग होने की जरूरत है। वैज्ञानिकों ने बताया कि अभी रोवर अंतरिक्ष से फोटो लेकर धारती पर भेजते हैं और फिर यहां से उन्हें आगे के संदेश भेजे जाते हैं। इस पूरी प्रक्रिया में वक्त और पैसा दोनों काफी लगता है। इस स्मार्ट कैमरे के बाद ऐसा नहीं करना होगा।
Removing me will be contrary to UGC rules: Yogendra to HRD

EXPRESS NEWS SERVICE
NEW DELHI, SEPTEMBER 11

RESPONDING to the showcase notice issued by the Pallam Raju-led Human Resource Development Ministry over political affiliation coming in conflict with his membership of the University Grants Commission, Prof Yogendra Yadav said the move to remove him would be “contrary to the letter and spirit of law, rules and regulations and the Code of Conduct that govern membership of the UGC”.

He warned it would set a “dangerous precedent and deter autonomous bodies from functioning autonomously”, as it would convey that any independent member of an autonomous body who dares to disagree with the ministry would be thrown out. He listed a number of counts where he disagreed with the UGC and the ministry on academic issues. In a strong communication, he sought to draw the minister’s attention to “brazen conflict of interest” in the form of “more than 100 honourable MPs who own or run private higher educational institutions” and how the ministry nominated people running educational institutes to the UGC that led to the deemed university scandal.

In his reply to the notice, Yadav said the UGC Act 1956, does not bar a UGC member from membership of a political party or participation in politics; the UGC (Disqualification, Retirement and Conditions of Service of Members) Rules 1992 also list ‘unsound mind’, ‘undischarged insolvent’ or undue ‘absence from any four consecutive meetings’, none of which apply to him. That apart, political affiliation clauses find no mention in the UGC’s 2012 conflict of interest policy.

“Even when I joined the Commission in July 2011, I was an ordinary member of the Samajwadi Jan Parishad, a lesser known registered political party. I left it to join Aam Aadmi Party in November 2012. There was no rule, regulation or proforma that required me to inform UGC or the ministry about my political affiliation or changes therein... The UGC is not the Election Commission and does not regulate political parties. It does not entertain any representation from political parties. So, there is no direct or obvious conflict of interest,” Yadav said. He said he had duly informed the minister's office, Secretary, Higher Education, HRD Ministry and UGC chairman of his decision to join the AAP.

“Aam Aadmi Party is wedded to the philosophy embedded in the Preamble to the Constitution. It seeks to achieve high quality of context-relevant education for Indians irrespective of means or birth. There is no way the membership of such a party can be in conflict with objectives of the UGC... Someone might wonder if your government would have acted with similar zeal if I had joined the Congress party or has done so with similarly placed functionaries who have joined the ruling party.”

Officials in the HRD ministry said although they did not doubt Yadav’s academic credentials, there is a strong case of conflict of interest with him being a founding member and officebearer of a political party and retaining him would set a precedent which would undermine the character of UGC.
New solar energy research institute for India

(www.pv-tech.org/news/new_solar_energy_institute_for_india_4673)

As part of JNNSM India is advancing its state solar R&D facility despite claims the advancement is outdated and could harm the industry.

India’s ministry of new and renewable energy announced the approval of a new solar research and technology institute.

The union cabinet approved plans for the National Institute of Solar Energy (NISE) to work alongside the ministry to advance solar technology capabilities in India, as proposed in the 2010 national solar strategy, Jawaharlal Nehru National Solar Mission (JNNSM).

The announcement surfaces amid tensions with India’s solar developers at loggerheads with domestic manufacturers over international dumping accusations, with the outcome of the investigation pending.

NISE will be an overhaul of the current Solar Energy Centre in Haryana, India, established in 1982 for the development, testing and evaluation of solar technologies.

The refurbishing of national solar research will focus on commercialisation and cost efficiency, to motivate developers in using nationally sourced solar equipment, by keeping pace with international competitors and raising efficiency.

Changes include restructuring management, seeking highly skilled employees and implementing a national committee for review and strategy with industry, scientific and financial representation, comparing products on an international scale to advise on an industry roadmap.

According to the ministry, the centre will be part government funded with private partnerships welcomed.

India is also home to the Solar Energy Research Institute for India and the United States (SERIIUS), a cooperation of the Indian Institute of Science (IISc) and the US National Renewable Energy Laboratory (NREL). SERIIUS jointly works towards India’s national solar initiative (JNNSM) and the US SunShot Initiative, to lower the cost per kWh of solar generated energy.

Raj Prabhu, CEO of Mercom Capital Group, a clean energy communications and consulting firm told PV Tech: “While I applaud the government on following through with this portion of their roadmap, the current market conditions are very different than they were in 2010.”

Prabhu said the Domestic Content Requirement (DCR) restrictions placed on developers to use domestic solar technology will harm the industry by locking out other already commercially proven technologies.
Prabhu added: “It remains to be seen how the National Institute of Solar Energy will differ [from other solar R&D centres in India]” and that “the best and most efficient way to create and commercialise new technologies is through the private sector”.

**200 academics to attend meet on higher education**

B K Mishra, TNN Sep 11, 2013, 06.30AM IST

PATNA: Preparations are afoot to hold a two-day conference on higher education at Raj Bhavan on September 21 and 22. Over 200 academics, including vice-chancellors, pro-VCs, registrars, deans, financial advisers and examination controllers of all the universities of the state will attend the conference.

According to a notification issued from the governor's secretariat, eminent academics from different parts of the country would discuss topics like the role of institutional leadership in quality assurance, academic leadership and governance, vocational education, examination reforms, distance education and Rashtriya Uchchatar Shiksha Abhiyan (RUSA). It is expected that the conference would provide an opportunity for capacity building and for gaining experience by the faculty and students of the state universities.