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Prof. Kumar of IIT to succeed JNU V-C Sopory

AGE CORRESPONDENT
with agency inputs
NEW DELHI, JAN. 21

IIT-Delhi professor M. Jagdeesh Kumar has been appointed the next vice-chancellor of the Jawaharlal Nehru University after his name was cleared by President Pranab Mukherjee from a panel of four forwarded to him by the HRD ministry.

Prof. Kumar, a professor of electrical engineering at IIT-Delhi, said that he had received a communication from the ministry on Thursday informing him about his appointment.

A professor of electrical engineering at IIT-Delhi, Prof. Kumar said his priorities after taking over as the JNU V-C would be to strengthen collaboration between institutions, streamline recruitment process and interact with students to see how the research output can be improved.

He said that the institutions like IIT Delhi and JNU are close to each other, but there is need for more cross-collaboration in various areas than is actually happening.

Asked about reports that he attended an RSS-linked event, Prof. Kumar said, "I am an academician and have no formal association with any organisation," adding that he attended the event as it was about science and organised at IIT-Delhi. The event was organised by RSS-linked body Vijnana Bharati.



M. Jagdeesh Kumar

Asked as to how he, with a primarily science background, would administer JNU, which has a very strong humanities side, Kumar said science and humanities can work together. He added that even in engineering studies there is an important humanities component.

"I think JNU is a unique institution, the way it has several schools and centres like on languages, international studies and law etc. and I consider them a strength of the institution," he added.

The term of JNU's current V-C Prof. Sudhir Kumar Sopory will end by January 27.

The President, as Visitor of all Central universities, selected Prof. Kumar's nomination from a panel of four eminent names, including scientist V.S. Chauhan, coordinator of the National Centre for Applied Human Genetics, JNU, R.N.K. Bamezai and Ramakrishna Ramaswamy of the department of physical sciences, JNU, it is learnt.

Full of ideas, new JNU VC wants to interrupt the usual

Anticipates Opposition, But Says He Will Work With All

Akshaya Mukul &
Manash Pratim Gohain | TNN

The newly-appointed vice-chancellor of Jawaharlal Nehru University, Professor M Jagadesh Kumar of IIT-Delhi, wants to "interrupt the usual". A professor of electrical and nano-science, Kumar will cycle his way to office in JNU as he does now. He spoke to TOI about his priorities. Following are the excerpts:

● Is this your first big administrative role?

I had a different kind of a very stressful administrative experience as organising chairman of GATE. I was a hostel warden and also coordinator of a huge nano-research facility worth Rs 60cr-70cr in which 30 faculty members were part of our team.

● JNU is different from IIT. What are your expectations and plans?

JNU is a unique institute because it not only has very good science and technology departments, but also unique international and social studies, law, aesthetics and culture departments. I am going to devote my life to the institute because I think universities do a great service to the country in training students who will ultimately become good citizens.



NEW ROLE: Professor M Jagadesh Kumar

● Any specific ideas for JNU?

In the last five to 10 years, the entire pedagogical approach has changed. It is no longer the teacher writing on the blackboard and students taking notes. Students now have access to a lot of information. So how do you make your teaching more learner-centric? I want to look at that and see how to make this process more student-centric. Research excellence is another area. Most of our institutes, including IITs, are public funded. So when we do research it should also be beneficial to the society. I want to build on this research culture.

● Your plans for social sciences?

That is one of the strong

points of JNU. I think talent is spread uniformly across the country. But there are many who don't have the opportunity to come and study in a university like JNU. Can we record lectures from these specialised schools that JNU has, which other universities don't have? In the IIT system we are already recording the lectures. Can we join hands with National Programme on Technology Enhanced Learning and put our specialised lecture there so that anybody can access it? Why don't we offer courses where people look at our videos, write an exam and earn credits? We are stuck with a very age-old kind of education. We need to change our mindset. This will also make JNU much more popular and

more accessible.

● Your challenges in JNU?

There will be many. For example faculty recruitment. One important thing I am going to do in JNU is to talk to my colleagues and have a faculty search committee for every centre. They will identify the candidates, motivate them and tell about the good things that had happened in JNU. In a nutshell what I want to do is to interrupt the usual. I am not anticipating nice things when I become VC, there will be opposition and counter arguments. Challenge is how do we converge and find a middle path and move forward.

● JNU has been a hotbed of politics. How do you plan to deal with that?

Even in the IIT system we encourage our students to think freely. In society, if something is happening, it is natural that they will think about it and react. I am a firm believer of free thought as long as my thoughts and deeds are within the boundaries of law. It is perfectly fine for everybody to have a different view and I am going to fully support that. You can't have only Left or only Right. My job as VC is to take everybody and go forward. As long as my students are raising issues and behaving like good citizens I will have absolutely no problems.

कैंपस में चलाएंगे साइकल, स्टूडेंट्स के बनेंगे फ्रेंड और सिखाएंगे कराटे फिटनेस क्रेजी हैं JNU के नए VC

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■ नई दिल्ली : अगर जेएनयू स्टूडेंट्स मार्शल आर्ट्स में दिलचस्पी लेते हैं, तो उनके लिए बढ़िया खबर है। उनके नए वीसी प्रो. एम जगदीश कुमार कराटे फाइटर हैं और अगर स्टूडेंट्स चाहें तो वे टाइम निकालकर उन्हें कराटे सिखाने के लिए तैयार हैं। आईआईटी दिल्ली के प्रो. जगदीश इलेक्ट्रिकल इंजीनियरिंग डिपार्टमेंट से हैं और वो आईआईटी कराटे क्लब में भी कभी-कभी स्टूडेंट्स को दो-दो घंटे तक कराटे सिखाते हैं। वह जेएनयू जिम के मेंबर भी हैं और अक्सर वहां वर्कआउट करते हैं। एनवायरनमेंट फ्रेंडली और फिटनेस क्रेजी वीसी के पास कार नहीं है और वह या तो साइकल या मेट्रो से सफर करते हैं। जेएनयू में भी वह साइकल चलाएंगे और स्टूडेंट्स को भी साइकल चलाने के लिए अवेयर करेंगे।

27 को ले सकते हैं चार्ज

प्रो. जगदीश जवाहरलाल नेहरू यूनिवर्सिटी के वाइस चांसलर की कुर्सी 27 जनवरी को संभाल सकते हैं। अभी यूनिवर्सिटी के वीसी प्रो. एसके सोपेरी का टर्म 26 जनवरी को पूरा हो रहा है। 26 को ही प्रो. सोपेरी ने उन्हें बुलाया है।

10 साल से जेएनयू जिम के मेंबर

आईआईटी मद्रास के एलुमनाई जगदीश हैदराबाद से हैं। वह कहते हैं, जेएनयू में पांच साल तक इस रोल को निभाने के लिए मैं तैयार हूँ और एक्साइटेड भी। करीब 12 साल से कराटे प्रैक्टिस कर रहे जगदीश



वीसी के पास कार नहीं है, वे साइकल या मेट्रो से सफर करते हैं

कहते हैं, 2006 से मैं जेएनयू जिम का मेंबर हूँ, ऐसे में वहां जाता रहता हूँ, बुधवार को भी मैं वहां स्टूडेंट्स के साथ वर्कआउट कर रहा था। अगर स्टूडेंट्स चाहें तो आईआईटी की तरह मैं जेएनयू में भी कराटे क्लब शुरू कर सकता हूँ, जहां टीचर्स आएँ और टाइम मिला तो कभी कभी मैं भी।

सबसे पहले स्टूडेंट्स से करेंगे दोस्ती

जेएनयू को लेकर मेरा पहला प्लान है स्टूडेंट्स के साथ इन्टरैक्शन। मैं उनके साथ फ्रेंडली रहना चाहता हूँ और यूनिवर्सिटी में उनकी जरूरतों के मुताबिक फैसिलिटी लाना चाहता हूँ। नई फैकल्टी को क्रिएटिव मेटरिंग सिस्टम के साथ लाना जरूरी है, इस पर मैं

ट्विटर पर छाया RSS लिंक!

जेएनयू वीसी बनते ही प्रो. जगदीश सोशल मीडिया में छा गए। उन्हें आरएसएस से जुड़े साइंस ग्रुप 'विज्ञान भारती' का करीबी बताया जा रहा है। हालांकि, वीसी का कहना है कि वह विज्ञान भारती से कभी भी नहीं जुड़े। वह कहते हैं, बस हाल ही में आईआईटी में हुए विज्ञान भारती के इंडिया इंटरनेशनल साइंस फेस्टिवल में मैं शामिल हुआ था। विज्ञान भारती के सेक्रेटरी जनरल ए. जयकुमार ने बताया, वह हमारे ग्रुप से नहीं हैं और ना ही किसी प्रोजेक्ट में उन्होंने हमारे साथ काम किया। यहां तक कि आईआईटी में हुए फेस्टिवल में भी उनका कोई रोल नहीं था।

काम करेगा।

पॉल्यूशन, लोकल प्रॉब्लम्स को लेकर करवाएंगे रिसर्च!

जगदीश आईआईटी दिल्ली में इलेक्ट्रिकल इंजीनियरिंग डिपार्टमेंट में एनएक्सपी (फिलिम्स) के चेयर प्रोफेसर हैं। वह कहते हैं, इंटरनेशनल लैंग्वेज स्टडीज, सोशल साइंस, रिसर्च वर्क में जेएनयू बहुत मजबूत है। साइंस फील्ड में बायोटेक्नॉलजी, लाइफ साइंसेज, मॉल्युक्यूल बायलॉजी में भी इसकी अच्छी पकड़ है। मैं इन सभी डिपार्टमेंट के रिसर्च आउटपुट पर जोर दूंगा। जैसे, दिल्ली के पॉल्यूशन के लिए कई डिपार्टमेंट के स्टूडेंट्स टॉप लेवल की रिसर्च कर सकते हैं। मैं चाहता हूँ जेएनयू लोकल प्रॉब्लम्स को लेकर रिसर्चिबल आउटपुट दे।

'प्रोटेस्ट का मतलब है फीडबैक'

जेएनयू के वामपंथी माहौल को लेकर प्रोफेसर का कहना है कि लेफ्ट हो या राइट, सब सोसायटी का हिस्सा हैं, जरूरत है कि एक दूसरे के लिए इज्जत रहे। मार्क्स, लेनिन से लेकर विवेकानंद तक, मैंने बहुत लोगों को पढ़ा है और ये सब यही कहते हैं और मुझे लगता है कि जेएनयू स्टूडेंट्स भी इसे लेकर काफी समझदार हैं।



यूजीसी, रोहित प्रो. एम जगदीश कुमार वमेला जैसे मुठों को लेकर जेएनयू के एक्टिव पार्ट पर वीसी का कहना है, यह प्रिंडम ऑफ एक्सप्रेसन है और जब तक कानून के दायरे में रहकर प्रोटेस्ट है, वह फीडबैक है। अगर जेएनयू स्टूडेंट्स मेरे ऑफिस के आगे भी ऐसे प्रोटेस्ट करते हैं, तो मुझे कोई ऐतराज या गुस्सा नहीं।

पांचजन्य के 'एंटी नेशनल' कमेंट या फिर जेएनयू के माहौल बदलने की चर्चा को लेकर जगदीश कहते हैं, बदलाव जरूरी है मगर एजुकेशन में, टेक्नॉलजी में...। मुझे नहीं लगता कि जेएनयू के स्टूडेंट्स औरों से अलग हैं या कुछ गलत कर रहे हैं।

साइकिल से चलते हैं नए कुलपति

नई दिल्ली | अरिष्ठ संवाददाता

जेएनयू के भावी कुलपति प्रो. एम जगदेश कुमार साइकिल से चलते हैं। गुरुवार को 'हिन्दुस्तान' से विशेष बातचीत में उन्होंने बताया कि उनके पास कार नहीं है। वह सालों से साइकिल से ही चल रहे हैं।

आईआईटी दिल्ली में अध्यापन के दौरान वह साइकिल से ही जाते थे। उन्होंने बताया कि जेएनयू के कुलपति का कार्यभार संभालने के बाद भी मैं इसे जारी रखूंगा। साइकिल से ही ऑफिस जाऊंगा। कुमार ने कहा कि उनकी कोशिश होगी कि विवि के छात्र और शिक्षक भी साइकिल चलाएं और पर्यावरण फ्रेंडली मुहिम से जुड़ें। उन्होंने कहा इसके लिए कोई बाध्यता नहीं होगी। जो लोग ऐसा करना चाहेंगे, उन्हें जरूर प्रोत्साहित



● प्रोफेसर एम. जगदेश कुमार

करूंगा। इससे पर्यावरण को फायदा होगा। साइकिल आज के दौर की मांग है।

उन्होंने कहा कि साइकिल को बढ़ावा मिले तो प्रदूषण को काफी कम किया जा सकता है। उन्होंने बताया कि उन्हें छात्र जीवन से साइकिल से लगाव रहा है। इसीलिए उन्होंने कभी कार नहीं चलाई। प्रोफेसर एम. जगदेश कुमार शोध कार्यों में सुधार को अपनी प्राथमिकता बताते हैं।

आईआईटी मद्रास से पीएचडी की डिग्री ली

प्रोफेसर एम. जगदेश कुमार का जन्म तेलंगाना के नलगोंडा जिले के मामिडाला गांव में हुआ। उन्होंने पीजी और पीएचडी आईआईटी मद्रास से की है। कुमार आईआईटी दिल्ली से 1996 से जुड़े हुए हैं। जहां वर्ष 1997 में वह इलेक्ट्रिकल इंजीनियरिंग विभाग में एसोसिएट प्रोफेसर और वर्ष 2005 में प्रोफेसर बने। वर्ष 2013 में उन्हें उत्कृष्ट शिक्षक का सम्मान मिला था। प्रो. कुमार का सबसे अधिक काम नैनो-इलेक्ट्रॉनिक्स उपकरणों पर है। इस विषय पर वह अब तक चार किताबें और 200 से अधिक लेख भी लिख चुके हैं।

IIT-Delhi professor will be new JNU vice-chancellor

HT Correspondent

■ htreporters@hindustantimes.com

NEW DELHI: IIT Delhi professor M Jagdeesh Kumar is set to be the next vice-chancellor of the Jawaharlal Nehru University.

According to ministry of human resource officials, Kumar's name has been cleared by President Pranab Mukherjee from a panel of four names that were forwarded to him by the ministry.

Kumar is a professor of electrical engineering at IIT Delhi. The term of JNU's current vice-chancellor Professor Sudhir Kumar Sopory will end by January 27.

The President, in the capacity of the Visitor of all central universities, selected Kumar's nomination from a panel of four eminent names, including scientist V S Chauhan, coordinator of the National Centre of Applied Human Genetics, JNU, R N K Bamezai and Ramakrishna Ramaswamy of the department of physical sciences, JNU, it is learnt.

Sopory, who took over as the vice-chancellor in January 2011, is an eminent plant molecular biologist.

He began his academic career in 1973 as a faculty at the School of Life Sciences, JNU.

Govt releases funds to operationalize transit campus of IIT Jammu

***PDD, PHE, R&B Deptts to kick start work shortly**

Posted on 22/01/2016 by [Dailyexcelsior](#)

Formal forest land transfer order soon after formation of new Govt

Mohinder Verma

<http://www.dailyexcelsior.com/govt-releases-funds-to-operationalize-transit-campus-of-iit-jammu/>

JAMMU, Jan 21: As decided by the high-level committee of the Union Ministry of Human Resource Development, the Government has released funds for operationalization of the transit campus of the prestigious Indian Institute of Technology (IIT) Jammu at Jagti-Khanpur near Nagrota, which will start maiden academic session from August this year.

Official sources told EXCELSIOR that the Campus Operationalization Committee of the Union HRD Ministry in its meeting with the concerned officers of the State Government held on December 3, 2015 had issued directions for timely formulation and submission of Detailed Project Reports (DPRs) for the infrastructure required to be created by the State Government for the transit campus of the IIT Jammu.

Accordingly, all the concerned agencies of the State—Roads and Buildings Department, Power Development Department and Public Health Engineering Department prepared their DPRs reflecting the estimates of the expenditure required to be incurred on constructing boundary wall and extending power and water supply lines up to the site of the IIT campus at Jagti-Khanpur near Nagrota.

The Roads and Buildings Department has provided estimates of Rs 16 crore for construction of 10 feet boundary wall and fixing concertina wires while as Public Health Engineering Department has reflected requirement of Rs 1.92 crore for providing water supply to the campus. Similarly, the Power Development Department has projected estimates of Rs 62.63 lakh for creation of infrastructure beyond Jagti township up to the main site of the IIT.

As per the DPRs, the Public Health Engineering Department would have to lay around 4 kilometer long supply lines to provide water connectivity to the IIT while as Power Development Department would have to lay around 5.5 kilometer long transmission lines besides creating other infrastructure, sources said while disclosing that all the concerned departments in the recent past furnished the requirement of funds to the Higher Education Department and the Planning and Development Department.

In order to ensure early start of work on creation of infrastructure for operationalization of the transit campus of the IIT Jammu, the Planning and Development Department vide Government Order No.18 dated January 20, 2016 has accorded sanction to the release of additionality to the tune of Rs one crore under Capital Expenditure Budget 2015-16 in favour of the Higher Education Department for onward transmission to the implementing departments.

With the release of these funds, the requirement of the Power Development Department to the tune of Rs 62.63 lakh has completely been met while as an amount of Rs 19.26 lakh has been earmarked for the Public Health Engineering Department. The remaining funds would be released to this department following start of work on laying of water supply lines.

As far as requirement of funds for raising of boundary walls, sources said, “it has been decided that expenditure on this component would be borne by the HRD Ministry but an amount of Rs 17.69 lakh has been earmarked for boundary marking”, adding “moreover, work on construction of boundary wall would begin only after formal transfer of the identified land by the Forest Department to the Higher Education Department”.

In response to a question, sources said that all the formalities with regard to transfer of 3200 kanals of forest land have already been completed and soon after the formulation of the new Government formal order would be issued in this regard. “If there is prolonged delay in formulation of new Government, the Governor’s approval will be taken for issuance of formal order as HRD Ministry wants to start maiden academic session of the IIT

Jammu from August this year and prior to that transit campus is required to be established as per the department wise deadlines fixed by the Campus Operationalization Committee”.

In the meanwhile, the Forest Department has started installing boundary pillars and exercise for removal of trees would begin soon after issuance of formal land transfer order.

As per the decisions taken by the Campus Operationalization Committee, the Power Development Department is required to lay power transmission lines up to the site of IIT within two months while as six months time-frame has been given to the Public Health Engineering Department for providing water connection. In order to ensure start of maiden academic session from August this year, the Central Public Works Department would erect required number of pre-fabricated structures.

IIT-K UAV to fly at a military exercise in April 2016

<http://timesofindia.indiatimes.com/city/kanpur/IIT-K-UAV-to-fly-at-a-military-exercise-in-April-2016/articleshow/50667010.cms>

Kanpur: The IIT-Kanpur would be flying an unmanned aerial vehicle (UAV) for demonstrating its capabilities at a military exercise in April. The UAV is among a batch of three remotely-operated low-cost "made in India" UAVs developed by IIT-Kanpur experts that could be used for various military purposes including surveillance.

Senior army officers led by Major General Sandeep Sharma from the Corps of Signals visited the institute on Tuesday morning to see a demonstration of the production ready UAV prototypes and reportedly evinced keen interest in the technology. If everything goes well, the IIT-K experts would demonstrate one of these UAVs at a military exercise to be held in April. The place of the exercise has not been disclosed due to security reasons.

The UAVs can be used in border areas or in insurgency related exercises. They can also be used in Naxalite-affected areas in the country. These UAVs record ground happenings and can be flown with petrol engine or even batteries and could be monitored on computer screens on ground.

An interdisciplinary team of IIT-K professors including Prof AK Ghosh, Prof Deepu Philip and many others has been working on the UAVs for the past two years. After developing the prototypes of the UAVs, the team is also working on other UAV models.

Major General Sharma, who is also an alumnus of IIT-Kanpur, reportedly expressed interest in the UAV prototypes and was satisfied with the UAV development but due to rains he could not see their demonstration, sources at the institute told TOI.

Prof Deepu Philip of IIT-Kanpur who is part of the expert team which has developed the UAVs, said, "The army officials saw the three UAV types including Low Altitude Long Endurance (LALE) UAV, 10-kg hand launch UAV and one-kg micro UAV. While the LALE project was completed in April last, the two other UAVs were developed recently. Interestingly, the LALE UAV is feature rich and could be compared with best available globally. The LALE UAV can be flown both during day and the night."

"LALE UAV has several characteristics which makes it fit for military use. While it carries an infra-red camera which enables it to capture pictures both during day and night, it can scale an altitude of 5,000 feet. Once it is 1,000 feet from the ground, it would not be visible by naked eyes. It is just 3.3 metres in size and it can move in the air at a maximum speed of 100 km/hour," said Prof Philip.

He added that these features have drawn the attention of Indian defence forces and we would be demonstrating LALE at a military exercise in April.

Interestingly, all the three UAVs can be flown either by attaching a petrol engine which can keep it flying for about eight hours or by installing batteries which can last for three hours. While these UAVs could be developed for Rs 40-50 lakhs, the imported ones cost more than Rs one crore, he added.

The advantage of these "made in India" UAVs is that they are not only cheaper, but their maintenance too is hassle-free. "We discussed these indigenously developed UAVs and are trying to find out how could they be useful for the army," he added.

`Maker summit' to be the big draw at IIT-M tech festival

<http://timesofindia.indiatimes.com/city/chennai/Maker-summit-to-be-the-big-draw-at-IIT-M-tech-festival/articleshow/50677457.cms>

CHENNAI: The 17th edition of Shaastra, the annual tech fest of IIT-Madras, will kick off on Saturday with a host of lectures, design competitions, innovations and LED shows conducted over four days.

The big attraction will be the `maker summit', on the lines of `maker movement' a worldwide trend in which individuals or groups create and market products recreated and assembled using unused, discarded or broken electronic, plastic, silicon or any raw material from a computer-related device.

"Maker movement mainly is to innovate or tinker around with objects to build products. In India, it isn't that big yet and is almost non-existent in Chennai. So we are trying to kick-start the initiative here," said Vedant Agarwal, a coordinating member of Shaastra.

In the product design competition, 50 participants will have to create products that are social projects (benefit society), life hacks (help in daily activities) or trans-media story telling (use of technology to narrate stories).

IIT director Bhaskar Ramamurthi said 40 winners will get full paid summer internships.

IISc to indigenize hardware for Digital India, cyber security

<http://timesofindia.indiatimes.com/city/bengaluru/IISc-to-indigenize-hardware-for-Digital-India-cyber-security/articleshow/50677250.cms>

BENGALURU: As part of the Centre's cyber-security programme, researchers at the Indian Institute of Science (IISc) are looking to develop indigenous hardware architecture to protect our networks, besides helping to achieve the Digital India dream through self-reliance.

Among the two pathbreaking projects that were kicked off at IISc's Centre for Nano Science and Engineering (CeNSE), one of them, supported by the office of the principal scientific adviser to the Centre, is the project aimed at making such architecture. Scientists claim this project is among the first global attempts at developing such architecture and comes under the Indian cyber-security programme, which aims to create indigenous hardware to protect our networks.

Assistant professor at Binghamton University, Aravind Prakash had told TOI at the Indian Science Congress that the need to indigenously protect data and systems that transfer and store such data is quintessential.

The programme aspires to forge local knowledge and technology to build infrastructure that will adequately support the ever-increasing connectivity. As part of it, researchers will develop integrated photonic transceiver architectures that

will enable communication speeds beyond 1 terabits per second per channel.

Former scientific secretary to principal scientific adviser, Government of India, and professor at IIT-M, SV Raghavan said in a statement: "Photonic transceivers possess transmission technology related building blocks, starting from devices. The photonics integrated chip is the first step in that direction."

He added that this technology will enable substantial scaling of users using 4G and the upcoming 5G wireless technologies. The bulk components will be integrated onto a chip scale with very compact architecture.

Prof Navakanta Bhat of CeNSE says: "India aims to take a leadership role by initiating research and technology development in the field of photonic integrated circuits, which will help achieve the dream of Digital India through self-reliance in both strategic and consumer sectors." The other project at the Centre, being supported by the Defence Research and Development Organization (DRDO), seeks to develop indigenous technology for high-speed optical interconnect technology .

Even this is pegged as a first attempt in India and researchers say it aims at developing photonics-assisted high-speed computing technology . DRDO has said in a statement that it aims to use Silicon Photonics technology for design and development of next generation multi-core processor with photonic interconnect.

Currently data transfer in microprocessors is largely in the electrical domain, which means that it employs copper wires that incur signal losses, thereby reducing efficiency, and are not amenable to increasing the rate of transfer as rapidly as our computing needs require. The new developments will change this considerably .

IIT-Kanpur alarms about chances of large magnitude earthquakes in Northwest Himalayas

<http://timesofindia.indiatimes.com/city/kanpur/IIT-Kanpur-alarms-about-chances-of-large-magnitude-earthquakes-in-Northwest-Himalayas/articleshow/50680107.cms>

KANPUR: The latest research by IIT Kanpur experts on earthquakes has revealed that the potential of the occurrence of a large magnitude earthquake in foothill zone of Northwest Himalaya (Himachal Pradesh and Uttarakhand) along the Himalayan Frontal Thrust (HFT) cannot be ruled out. The research done will help towards proper evaluation of seismic hazards in Kangra as well as in Indo- Gangetic Plain.

Recent research in Central Himalaya revealed that no large magnitude earthquake has occurred since last 700 years, considering the long silence, a great earthquake may be due in this region. "If such an earthquake occur in the foothill zone of Nanital, it would affect areas in a distance of minimum 250 kilometers. The affected areas would be West and Central Uttar Pradesh hitting Lucknow and Kanpur as well", said Prof Javed N Malik of IIT Kanpur who conducted the research.

The research also unfolds that the accumulated strain during the earthquake of 1905 in Kangra was released along Kangra Valley Fault and not along Himalayan Frontal Thrust. The new research alarms that there exists strong chances of large magnitude earthquakes in the foothills of Northwest Himalayas, stated Prof. Javed N Malik of earth science department of IIT-Kanpur who conducted the research. Considering the historical documents and earthquakes occurred during 20th Century such as 1555 Kashmir (Magnitude 7.6), 1905 Kangra (M 7.8), 1934 Nepal-Bihar (M 8.1) and 1950

Assam (M 8.4), three major 'Seismic Gaps' had been identified between Kashmir and Uttaranchal, Uttaranchal and Nepal/Bihar, and Nepal/Bihar and Northeast.

The research carried out by Prof. Javed N. Malik and his team revealed that several active faults exist between these gaps, which are capable of producing large magnitude damaging earthquakes. The April 4 1905 Kangra earthquake (M 7.8), was one of the devastating earthquakes that killed more than 20,000 people and destroyed the towns of Kangra and Dharamshala in northwest Himalaya.

The latest research by Prof. Malik and his team, published in Bulletin of the Seismological Society of America in October 2015, suggested that the 1905 Kangra earthquake did not rupture in the frontal part of Himalaya along the HFT as claimed by the researchers earlier. "Since the accumulated energy (strain) during the 1905 Kangra earthquake was released along the newly discovered Kangra Valley Fault (KVF), potential for large-magnitude earthquakes in northwest Himalaya along the HFT still remains", said Prof Malik while talking to TOI. He said that in view of present research findings it is quite possible that if a large magnitude earthquake (M 7.5-8.0) occurs along HFT, it will cause severe damage to the neighbouring cities/towns in states such as Punjab, Haryana, Delhi, Himachal Pradesh, Uttarakhand and parts of West Uttar Pradesh.

He also mentioned that the recent earthquakes in Nepal (Gorkha M7.8 and Kodari M7.3) testify the ongoing collision between Indian and Eurasian Plates. This ongoing collision is causing accumulation of strain along the active faults, which if released could result in occurrence of large magnitude earthquake in the foothill zone of Nainital (Central Himalaya).

IIT E-summit to promote Make in India

[Ashok Pradhan](#) | TNN | Jan 22, 2016, 04.13 PM IST

<http://timesofindia.indiatimes.com/home/education/news/IIT-E-summit-to-promote-Make-in-India/articleshow/50684017.cms>

BHUBANESWAR: E-Summit'16, an event to promote entrepreneurship being organized by Centre for Entrepreneurship, IIT Bhubaneswar begins here on Friday.

With the theme "Industry 4.0", the three-day summit will focus on promoting the Make-in-India concept by infusing IT into manufacturing processes, IIT director R V Rajakumar said.

The inaugural session is scheduled to be addressed by Rajnish Kumar (MD NBS, SBI) and Jagi Mangat Panda (MD, Ortel Communications) on Friday evening.

The first panel discussion "Vision Night" is planned to be an open house discussion on "India, Industry 4.0 & Entrepreneurship". It will bring many industry leaders for interaction with students. They include: Varun Jha (ex-COO Tata Steel), Jagi Mangat Panda (co-founder, Ortel Communications), Rajib Shekhar Sahoo (president, TiE Bhubaneswar), Devesh Sinha (founder, ESSPL), J K Rath (chairman, UCCI), Prasant Satpathy (M D, SCIL), Jagadanand Mohapatra (MD, AGIL), and Tapan Das (MD, S K Engineers).

Four other panel discussions planned in E-Summit'16 are on entrepreneurship for digital india and entrepreneurship in mineral-based industry, bio-science and bio-technology industry, and public systems. Many reputed personalities from the world of practice such as Rajiv Lochan Mohanty (Chairman, MGM Group), Mukesh Kumar (COO, Vedanta), Gyana Parija (IBM Research Labs), G C Pati (former Odisha chief secretary), and G Nayak (Director, IIIT, Bhubaneswar) will share

their ideas with the young budding entrepreneurs, providing them with the much-needed help in the ideation stage of entrepreneurship.

One of the most interesting events planned in E-Summit'16 is "Investors' Drive." Here the student participants will present their Business Plans before a number of potential investors - venture capitalists, angel investors, financial institutions, and even government departments. Among them will be investors such as Raghav Kanoria (Calcutta Angels Cofounder), Sushant Nayak (IVY Consultants), Srikanth Sunder Rajan (Helion Ventures), and Binayak Acharya (Unitus Seed Fund), and investors from Indian Angel Network.

BEYOND PLUTO

Scientists find evidence of a ninth planet in the solar system

BY NIKITA MEHTA
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NEW DELHI

Far, far away, at the edge of the solar system, scientists have found an object moving in an elongated orbit around the sun—it could be the ninth planet and a giant.

For now, researchers have decided to call it Planet Nine.

It is 10 times more massive than our Earth and orbits about 20 times farther from the sun on average than Neptune, the penultimate planet of the solar system. Neptune orbits the sun at an average distance of 2.8 bil-

lion miles. So, the newly found object would take between 10,000 to 20,000 earth years to come one full circle of the sun.

All this information is the outcome of mathematical modeling and computer simulations by California Institute of Technology (Caltech) researchers Konstantin Batygin and Mike Brown. They are yet to see it for themselves. But the duo is almost sure that it's a planet.

According to Brown, the object is 5,000 times the mass of Pluto, which implies that it is anything but a dwarf planet. Planet Nine gravitationally dominates its neighbourhood in the

solar system, researchers say.

"This would be a real ninth planet," says Brown, the Richard and Barbara Rosenberg Professor of Planetary Astronomy.

"There have only been two true planets discovered since ancient times, and this would be a third. It's a pretty substantial chunk of our solar system that's still out there to be found, which is pretty exciting," Brown said in a press release issued by Caltech on Wednesday.

Planet Nine helps explain many mysterious features of Kuiper Belt, a region in the solar system beyond Neptune's orbit that contains many comets,

asteroids, and other small bodies made of ice, the researchers said in *The Astronomical Journal*, a peer-reviewed monthly scientific journal.

"Although we were initially quite sceptical that this planet could exist, as we continued to investigate its orbit and what it would mean for the outer solar system, we become increasingly convinced that it is out there," says Batygin, an assistant professor of planetary science at Caltech. "For the first time in over 150 years, there is solid evidence that the solar system's planetary census is incomplete."

The investigation on the exist-

ence of Planet Nine began in 2014 when a former postdoctoral scholar of Brown, Chad Trujillo and his colleague Scott Sheppard, published a paper, noting that 13 of the most distant objects in the Kuiper Belt are similar with respect to their orbits.

They suggested the possible existence of a planet. Though Brown doubted that, he decided to check it out. Batygin and Brown found that the six most distant objects in the Kuiper Belt follow elliptical orbits that point in the same direction in space.

"It's almost like having six hands on a clock, all moving at

different rates, and when you happen to look up, they are all in exactly the same place," says Brown. "Basically, it shouldn't happen randomly. So, we thought something else must be shaping these orbits," he added.

It was then that Batygin and Brown found that if they ran their simulations with a massive planet, the distant Kuiper Belt objects in the simulation assume the alignment that is actually observed.

For now, scientists continue to search for the planet through their large telescopes because for the beings on Earth, seeing is believing.

वैज्ञानिकों ने कंप्यूटर मॉडलिंग के आधार किया दावा, नया ग्रह सौर मंडल के किनारे पर मौजूद सौर मंडल में जल्द नौवां ग्रह जुड़ सकता है

नई दिल्ली | हिन्दुस्तान टीम

जल्द ही हमारे सौर मंडल को नौवां ग्रह मिल सकता है। प्लूटो सौर मंडल में वापस नहीं आ रहा है बल्कि एक नया ग्रह सौर मंडल में जुड़ सकता है। कैलिफोर्निया यूनिवर्सिटी के वैज्ञानिकों ने कंप्यूटर मॉडलिंग के आधार पर यह दावा किया है। साथ ही यह भी कहा है कि उनके पास नौवां ग्रह होने के पुरे साबूत हैं।

बताया जा रहा है कि यह नया ग्रह सौर मंडल के किनारे पर मौजूद है। यह ग्रह पृथ्वी से 10 गुना ज्यादा बड़ा है। साथ ही इसे सूरज का एक



वैज्ञानिकों की परिकल्पना के मुताबिक कुछ ऐसा दिखता है नौवां ग्रह। • एएफपी

चक्र काटने में 10 से 20 हजार साल लगते हैं।

प्लूटो को दिखाया था बाहर का रस्ता: इस नए ग्रह को अभी केवल कंप्यूटर मॉडलिंग में ही खोजा गया

है, लेकिन वैज्ञानिकों का कहना है कि पांच सालों में दूरबीन की मदद से इस ग्रह के होने की पुष्टि कर दी जाएगी। दो वैज्ञानिकों की टीम में माइकल ब्राउन भी शामिल हैं।

नए ग्रह की खास बातें

10 गुना ज्यादा बड़ा है यह ग्रह पृथ्वी की तुलना में

10 से 20 हजार साल का समय लगता है सूर्य का चक्कर लगाने में

कैसे हुई ग्रह की खोज

इस ग्रह की खोज नेपच्यून ग्रह की कक्षा के पीछे मौजूद छह ग्रहों की कंप्यूटर मॉडलिंग के बाद हुई है। विज्ञानियों का दावा है कि जिस कंप्यूटर मॉडलिंग का इस्तेमाल उन्होंने किया है वह 0.007 फीसदी ही गलत साबित हो सकता है।

प्लूटो क्यों बाहर हुआ

• प्लूटो सौर मंडल का हिस्सा नहीं है। वैज्ञानिकों ने 2006 में इसको ग्रहों की श्रेणी से बाहर करा था।

• वैज्ञानिकों ने प्लूटो को नई श्रेणी में शामिल किया था, प्लूटो अब एक बौने ग्रह के तौर पर जाना जाता है।

जापानी दूरबीन खोज करेगी

इस खोज को सही साबित करने के लिए वैज्ञानिकों की टीम अगले पांच साल में हवाई में मौजूद एक बड़े टेलीस्कोप 'सुबारू' से इस ग्रह की खोज करेगी। ये टेलीस्कोप जापान का है।

2014 को पीछे छोड़ा

नासा और नोआ के आंकड़ों में 2015 सबसे गरम साल

ग्लोबल वार्मिंग का खतरा तेजी से बढ़ा है। इस बात की तस्दीक 2015 के आंकड़े करते हैं। इस साल को अमेरिका की दो एजेंसियों नासा और नोआ ने दुनिया का अब तक का सबसे गरम साल घोषित किया है। इससे पहले 2014 सबसे गर्म वर्ष था। प्रशांत महासागर में मौजूदी अल-नीनो भी तापमान बढ़ने का एक कारण माना गया है। एक नजर:

कितनी गरम हुई धरती

नासा और नेशनल ओशनिक एंड एटमोस्फेरिक एडमिनिस्ट्रेशन (एनओए) के मुताबिक धरती 2014 के मुकाबले काफी गरम हुई है।



गरम हुई है पृथ्वी 2014 के मुकाबले 2015 में नासा के अनुसार



ज्यादा बढ़ा है तापमान 2014 के मुकाबले 2015 में नोआ के मुताबिक

0.9 डिग्री सेल्सियस ऊपर है 2015 में धरती का तापमान 20वीं सदी के औसत तापमान के यानी 136 साल में यह उच्चतम तापमान है।

0.29 डिग्री सेल्सियस से पीछे छोड़ा दिसंबर 2015 में पारे ने दिसंबर 2014 के पारे को

* मौजूदा सदी में चौथी बार उच्च तापमान का रिकार्ड बना।

धरती का हर कोना गरम

नोआ के अनुसार यह बढ़ा हुआ वार्षिक तापमान समूची दुनिया में दर्ज किया गया है। इसमें मध्य अमेरिका, दक्षिण अमेरिका का आधा उत्तरी हिस्सा, उत्तरी, दक्षिणी और पूर्वी यूरोप के हिस्से, पश्चिमी एशिया, पूर्वी और दक्षिणी अफ्रीका के हिस्से, उत्तरपूर्व और भूमध्यरेखी प्रशांत का बड़ा भाग, पश्चिमी उत्तर अटलांटिक, ज्यादातर हिन्द महासागर और आर्कटिक महासागर के हिस्से गरम पाए गए।



भूमि और समुद्री सतह कितनी गरम

2015 में भूमि पर वैश्विक औसत तापमान 20वीं सदी के औसत से 1.33 डिग्री सेल्सियस ऊपर रहा। 136 साल में भी यह सर्वाधिक है।

2015 में समुद्री वैश्विक औसत तापमान 20वीं सदी के औसत से 0.74 डिग्री सेल्सियस ऊपर रहा इसने 2014 में बने रिकार्ड को 0.11 डिग्री सेल्सियस से पीछे छोड़ा।

जलवायु विसंगतियां



भारत: 21 मई से 10 जून के बीच देश में जबरदस्त लू चली। गर्मी और लू के कारण 2000 से ज्यादा लोगों की जानें गईं।



चीन: मई से अक्टूबर तक भारी बरसात हुई। इससे आई बाढ़ के कारण 75 मिलियन लोग प्रभावित हुए।



आस्ट्रेलिया: यहां 1910 से तापमान रिकार्ड शुरू होने के बाद 2015 पांचवां सबसे गरम साल रहा।



यूरोप: 2015 दूसरा सबसे गरम साल बना। स्पेन और फिनलैंड के लिए पिछला साल सबसे गरम रहा।