Newspaper Clips
September 14, 2013

Indian Express ND 14-Sep-13 P-9

IIT directors reject Kakodkar model for financial autonomy

ANUBHUTI VISHNOI
NEW DELHI, SEPTEMBER 13

DISAGREEING with nuclear scientist Anil Kakodkar's recommendations to reduce the IITs' dependence on the government for funding — aimed at ushering in greater financial autonomy to these institutes — IIT directors have told the HRD ministry that such a model will "strongly constrain the future growth of the IITs".

Arguing that IITs are not just teaching institutes, IIT directors have suggested that the institutes continue to be funded considerably and in fact be treated as "strategic assets of the nation". To be taken up at the IIT council meeting slated for September 16, this view of IIT directors on the Kakodakar Committee's recommendations on governance, autonomy and finances says that "the proposed model is not consistent with the funding pattern of any reputed public research university". "If IITs are to become institutes with an international profile, the expenses are likely to increase significantly compared to the current amounts and this must come from the Government rather than student fees and overheads", the IITs have said.

The Kakodkar Committee had recommended major changes to extend greater financial autonomy to IITs. It's recommendations were taken up at the IIT council meeting held in January this year but IIT directors had sought time to form a view on the same.

"It may be noted that no reputed public research university in the world is financially self-sustaining and in most cases the universities are considerably subsidised by public funds ... IITs cannot progress without such government support. It is suggested that IITs may be treated as strategic assets of the nation, rather than just teaching institutes, since the institutes do much more than education," reads the IIT directors' note on the matter.

Citing the example of other Asian varsities like the National University of Singapore and Beijing's Tsinghua University wherein public funding has helped improve quality, the IIT directors have further pushed for their old proposal to fund an IIT's operational expenses based on a Block Grant Scheme with the amount commensurate with the number of students enrolled per institute.

While the directors agreed that "gradual raising of fees" will help reduce non-planned expenditure of the government, they also point out that with operational expenses increasing substantially due to the renewed focus on research and outreach in IITs, it was not advisable that these "be passed on to students as fees".

Hindu ND 14-Sep-13 P-8

One up on petrol pumps

Martand Jha

IIT Delhi students design a device to keep a check on fuel theft and track the quantity of fuel being filled in vehicles

Ever felt suspicious about being cheated during fuel refills at petrol pumps? If yes, then here comes a device to assuage your doubts --Fuel Manager. The appliance has a display screen and when installed in a vehicle records the exact quantity of fuel filled during each refill and even records the data for future reference.

It is the brainchild of former IIT-Delhi students Arpit Gupta and Sankalp Srivastav. They were guided by P.M.V. Subbarao, Associate Dean and Professor of Mechanical Engineering, IIT-Delhi.

Analog fuel meters used currently in vehicles only give a rough estimate of the fuel present, says Sankalp, adding that this helps some petrol pump attendants to hoodwink customers. Also, the analog meters give no idea about the amount of fuel present when in reserve mode.

In Fuel Manager, the height of the fuel in the tank is converted to voltage output which is processed by the microprocessor that is also interfaced with GPS (Global Positioning System) and GSM (Global System for Mobile Communications) modules. The final processed signal is displayed on the display screen.

FUEL MANAGER: Records data.

"The best thing about this technology is that now there is no need to step out of the car to see how much fuel is actually filled in the vehicle during refilling," says Raj Verma, who provided technical assistance to Arpit and Sankalp.

Another interesting feature of the device is a SIM that is fitted to send an SMS automatically to the mobile number of the user registered with the device whenever a fuel refill is done in the vehicle. The SMS provides the user with information like the amount of fuel filled (in Rupees), exact volume of fuel filled, place at which fuel is filled and the vehicle number.

The issue of fuel thefts are also addressed as the device will instantly send a SMS on the mobile phone informing the user about the amount of fuel stolen and even the place where it took place. "Fuel Manager will also warn the driver if there is any fuel leakage," says Sankalp.

Hindustan Times ND 14-Sep-13 P-10

Manipal faces UGC flak, asked to discontinue exchange programme with Chinese university

Vanita Srivastava
vanita.shrivastava@hindustantimes.com

NEW DELHI: The University Grants Commission has asked the Manipal University not to proceed with an academic exchange programme that it had entered into with a university in China.

In a letter sent on Wednesday, the UGC has asked Manipal University to discontinue the exchange programme that it had signed with the Beijing Institute of Technology, one of the prominent universities of China.

Manipal University had earlier this year signed an MOU with Beijing Institute of Technology for an academic exchange of students, faculty and collaboration of research programmes. It was slated to start from the current academic session.

The HRD ministry had a few days back asked the Commission to look into the matter.

"Under the UGC Deemed University 2010 Regulation, prior approval of the Commission is needed before starting any such programme with a foreign institution. Manipal University has so far not sought any permission," official sources in the UGC said.

The UGC has also put on the public domain, the University Grants Commission (Promotion and Maintenance of Standards of Academic Collaboration between Indian and Foreign Educational Institutions) Regulations 2012, which has made it mandatory for an Indian university to seek a formal approval from the Commission for collaborating with a foreign educational institute.

Reacting to the UGC decision, Manipal University's director for public relations and media communications Alex Chandy said: "We have so far not got any letter from the UGC. Till we get a formal communication, it will be difficult to comment on anything. So far only the MOU has been signed and the programme is in the preliminary stage."

NO PERMISSION

- Manipal University signed an MOU with Bejing Institute of Technology for an academic exchange of students and faculty
- It was slated to start from the current academic session
- HRD ministry had a few days back asked the Commission to look into the matter.

Times of India ND 14-Sep-13 P-21

Voyager 1 exits solar system

Nasa Spacecraft Becomes First Man-Made Object To Enter Interstellar Space

Kounteya Sinha | TNN

London: Nasa's Voyager 1 spacecraft has become the first man-made object to breach interstellar space and leave the solar system.

It is currently 18.3 billion km away from the sun and 18.2 billion km from earth 36 years after it was launched.

The historic feat has been described as important as "Ferdinand Magellan's first circumnavigation of the earth, the first planetary flyby in 1962, when Nasa's Mariner 2 went by Venus and Neil Armstrong's first step on the moon". A Nasa statement said Voyager 1 is now the most distant human made object.

"We've never entered the interstellar medium before, or actually sampled interstellar space, before now. It is another first in the history of exploration," it said.

The spacecraft is believed to have entered the interstellar space on August 25, 2012.

This conclusion was drawn after combining data about the changes in the charged particles observed, the magnetic field data and the new plasma data from April to May. Voyager project scientist Ed Stone said they needed time to analyze these observations and make sense of them. "But we can now answer the question we've all been asking — are we there yet? Yes, we are."

New data indicates Voyager 1 has been traveling for about one year through plasma, or ionized gas, present in the space between stars.

MISSION IN NUMBERS

Aug 20 | 1977: Voyager 2 is launched

Sept 5 | 1977: Voyager 1 launched on a faster, shorter trajectory. It will reach Jupiter first, so named Voyager 1

Right now, **Voyager 1** is rising above the ecliptic plane at a rate of **540 million km** a year

Voyager 2 diving below the ecliptic plane at a speed of **475 million km** a year

Dec 16 | 2004: Voyager 1 crosses the termination shock (14 billion km from the Sun)

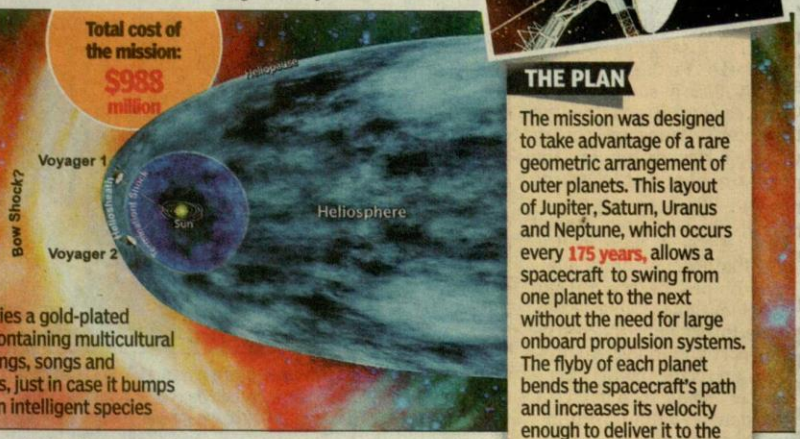
Aug 30 | 2007: Voyager 2 crosses the termination shock (13bn km from the Sun)

Voyager 1 may have exited cosmic border crossing in August last year

NEW FRONTIER

Thirty-six years after it was launched from Earth on a tour of the outer planets, Voyager 1 has become the first spacecraft ever to leave the solar system. The plutonium-powered probe is right now over 18.51 billion kilometres from the Sun

Total cost of the mission: $988 million



WHAT'S NEXT

Voyager 1 will study exotic particles and other phenomena in a never-before-explored part of the universe and radio the data back to Earth

It carries a gold-plated disc containing multicultural greetings, songs and photos, just in case it bumps into an intelligent species

THE PLAN

The mission was designed to take advantage of a rare geometric arrangement of outer planets. This layout of Jupiter, Saturn, Uranus and Neptune, which occurs every **175 years,** allows a spacecraft to swing from one planet to the next without the need for large onboard propulsion systems. The flyby of each planet bends the spacecraft's path and increases its velocity enough to deliver it to the next destination. **Using this technique, the flight time to Neptune was cut from 30 years to 12 years. Voyager 1** used Saturn as a a gravitational slingshot to power itself past Pluto

MILES TO GO BEFORE IT SLEEPS

After **2020,** scientists expect they will have to turn off instruments, until around **2025** when the probes will be completely out of power and fall silent

Voyager 2, which is heading out of the solar system in another direction, has five to seven more years before it reaches interstellar space

While **Voyager 1** may have left the solar system as most people understand it, it still has hundreds, perhaps thousands, of years to go before bidding adieu to the last icy bodies that make up our neighbourhood

Voyager 1 and its twin, Voyager 2, were launched 16 days apart in 1977. Both spacecraft flew by Jupiter and Saturn. Voyager 2 also flew by Uranus and Neptune. Voyager 2, launched before Voyager 1, is the longest continuously operated spacecraft.

Voyager mission controllers still talk to or receive data from Voyager 1 and Voyager 2 daily, though the emitted signals are currently very dim, at about 23 watts — the power of a refrigerator light bulb.

"Voyager has boldly gone where no probe has gone before, marking one of the most significant technological achievements in the annals of the history of science, and adding a new chapter in human scientific dreams and endeavors," said Nasa's John Grunsfeld. Scientists do not know when Voyager 1 will reach the undisturbed part of interstellar space, where there is no influence from the sun. They also are not certain when Voyager 2 is expected to cross into interstellar space, but they believe it is not far behind. Voyager 1 is now in a new environment just beyond the plasma (the solar wind) emitted by the sun, and immersed in the plasma of interstellar space. Plasma is the densest and slowest moving of charged particles in the space.

For the full story log on to www.timesofindia.com

Deccan Herald ND 14-Sep-13 P-7

Isro to make new stage for GSLV

BANGALORE, DHNS: The high-level task team constituted to probe the August 19 failure of the Geosynchronous Satellite Launch Vehicle-D5 (GSLV-D5) is yet to submit the final report on the reasons for the glitch, but the Indian Space Research Organisation (Isro) has decided to assemble a new second stage for the rocket.

A senior Isro official, while stating that the exact date for the launch of GSLV-D5 can only be set in November, added that the launcher would be launched into space in December, carrying the GSAT-14.

"Going by the availability of hardware and components, the GSLV assembly and checkout is expected to be completed at the vehicle assembly building by the first week of December," said a note issued by Isro.

"Although the exact reasons for the leakage in the second stage of the engine, which prevented the launch on August 19, are being probed by the team headed by K Narayanan, it has been decided that a new liquid second stage (GS-2) will be assembled to replace the leaked stage," said the official.

He added that the process of assembling has begun, and that besides the GS-2, all the four liquid strap-on stages are being replaced with new ones.

Another official, while stating that the team is also inspecting the first stage (solid) and core base shroud, added that if any of the elements are found to be affected, "we will replace even those".

"The satellite assembly, avionics equipment bay and the cryogenic stage will be preserved, following prescribed practices," said an official note issued by Isro.

Events of the leakage

The GSLV was loaded with 210 tons of liquid and cryogenic propellants, of which about 750 kg of UH25 fuel had leaked out, leading to contamination of the area around the launch pad.

The flight was called off after Isro had noticed the leakage in fuel. It took the team of scientists working on the project about a week before the contamination could be reduced to a level safe enough to enable movement of the launcher to the vehicle assembly building.