VCs to review progress of value-based education

K. Balchand

President Pranab Mukherjee addresses the audience during the XII Convocation of the Rajiv Gandhi University at Doimukh in Arunachal Pradesh on Saturday.

President Pranab Mukherjee on Saturday stressed the importance of holistic value-based higher education to tackle contemporary moral challenges.

Addressing the Twelfth Convocation of Rajiv Gandhi University here, the President announced that a meeting of all vice chancellors in the country would be convened in February to review progress in promoting value-based education.

The real yardstick of development, Mr. Mukherjee said, was not the number of factories, dams, roads and power houses built in the country, but people, their values and devotion to the nation’s spiritual and cultural heritage.

Educational institutions must inculcate the core values of love for the motherland, performance of duty, compassion, tolerance for pluralism, respect for women, honesty, self-reliance and responsibility in action and discipline, said Mr. Mukherjee.

The President regretted that India ceased to be the leading seat of higher education after having been the guiding light for well over 18 centuries from 6 BCE to 12 CE. He expressed shock that not one Indian body had been adjudged to be in the top 200 institutions in the world.

Mr. Mukherjee placed emphasis on quality and innovation in higher education and said mere physical enrolment could not spearhead development.

He observed that foreign students must be invited to come to India for higher learning as opposed to Indian students going abroad for studies.

The country had to take advantage of its geographical location and infrastructure and once again establish itself as a hub of international studies.

His advice to Arunachal Pradesh was to carry out inter-disciplinary research on natural-resource management to work out alternative growth models. The thrust had to be on border trade opportunities and integration of the North East economy with the national and global economies.

The President reiterated that Arunachal Pradesh was a crucial State in matters of external relations, particularly the Look East Foreign Policy.

Keywords: Pranab Mukherjee, north-eastern states, educational issues, XII Convocation of Rajiv Gandhi
Power shortage can’t be addressed without nuclear energy: Kakodkar

RUPNAGAR: DAE Homi Bhabha chair professor and former Atomic Energy Commission chairman Dr Anil Kakodkar on Saturday said the power shortage problem of the country could not be solved without nuclear energy.

He was talking to reporters on the sidelines of the second convocation of Indian Institute of Technology (IIT), Ropar.

He said nuclear and solar energy would be the main energy resources for meeting the power requirement of the country in the future.

“You cannot solve the power problem without nuclear energy. Right now, for solving the power problem of the country you must deploy all energy resources like coal, hydro, nuclear and renewable energy, but in the long run a time will come after 20-30 years when nuclear and solar energy would be main resources on which the country would have to depend for meeting the power requirement,” Dr Kakodkar said.

He said nuclear was the safest electricity-producing mode. “Nuclear energy is 16% of the total global electricity being produced, which is significant. In the casualty per unit of electricity produced, you will find that the nuclear energy is the least, which shows it is the safest electricity-producing mode,” he maintained.

Later, in his convocation address, Dr Kakodkar said IITs had the challenge to lead the national efforts to create a paradigm shift in terms of both the capability to usher in domestic technology-enabled national development and also to enhance the number of high-quality engineering graduates to support nation-building that also includes cutting-edge research.

He also stressed the need for good quality scientific research for achieving competitive edge in the world. “To achieve competitive technological edge, we must create, on a large scale, an innovation echo system where frontline scientific research that pushes the knowledge frontiers forward takes place in the presence of a large number of engineering students and entrepreneurs,” he said.

He said there was also need to produce a large number of high-quality engineering graduates to meet the needs of our industry.

IIT Ropar Board of Governors chairman Prof VS Ramanurthy urged the students to take a leadership role in technology development that can put India in a leadership position globally in selected areas of technology such as biomedical instrumentation, clean energy and advanced materials and manufacturing technologies, adding that attracting the best of students to higher education and research is absolutely essential to realise this dream.

IIT Ropar director Prof MK Surappa presented the annual report and highlighted the achievements of the institute.
HRD mulls proposal to provide 5,000 faculty positions

**HT Correspondent**

NEW DELHI: The ministry of human resource development (HRD) has proposed to provide 5,000 faculty positions in the higher education under the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) during the current five-year plan, ending 2017.

According to an official release, the support will be provided to fill up positions in the category of assistant professors or equivalent cadre against vacancies.

A fixed amount of ₹5.8 lakh per year for each faculty position will be given by the Centre and any excess, over and above this amount due to higher scales, grade pay or dearness allowance (DA) has to be borne by the state government.
IIM-C’s $1 million prize for start-up competition

HT Correspondent

KOLKATA: In order to promote entrepreneurship among students, the Indian Institute of Management, Calcutta (IIM-C) has launched a business plan competition ‘i2I’ where the best start-up will get a seed funding of $1 million, or 6.2 crore.

“Our endeavour is to provide a platform for budding entrepreneurs to realise their dreams as we connect them to ideas, money and people who matter. i2I, one of the largest processes of its kind in scale in India, is sure to attract entrepreneurs via our networks in the national entrepreneurship network, pan-IIM and IIT alumni networks, and a large base of working professionals,” said Deep Patel, a second year post graduate program student of IIM-C.

i2I has a legacy of enabling funding for some of the successful ventures of today. Past winners include SportsKeeda – a sports website, Winkle - the app development company acquired by US-based Location Labs, Phyzok Learning Solutions, and MadRat Games.
IIIT to come up in Gulbarga

Special Correspondent

Paucity of funds coming in the way of setting up IIIT in Raichur: Pallam Raju

An Indian Institute of Information Technology (IIIT) will be set up here soon, Union Minister for Human Resource Development M.M. Pallam Raju has said.

He told presspersons on the new campus of the Central University of Karnataka on Saturday that the proposed IIIT on the Gulbarga University campus had been shifted to Karnataka University, Dharwad.

However, Mr. Raju was non-committal when asked about the long-pending demand for an Indian Institute of Technology (IIT) at Raichur.

He said paucity of funds was coming in the way of setting up an IIT in Karnataka. Mr. Raju said the government had cut the allocation of the Human Resource Ministry by Rs. 2,000 crore this year following financial crunch. Referring to the demands for more IITs and other Central institutes by State governments, Dr. Raju said people should not be carried away by names of premier institutes such as IITs, IIMs or IISecs and more attention should be paid to improving the quality of existing institutions of higher education. Asked whether funds were not released on time for relief operations in the cyclone-hit areas in Andhra Pradesh due to the political instability in the State, Dr. Raju admitted that relief operations had been delayed due to the Telangana and Seemandhra agitations.

The Union government released Rs. 1,000 crore for providing relief to the people affected by Phalin, he said.

‘Funds for HRD Ministry cut by Rs. 2,000 crore because of financial crunch’

‘Centre released Rs. 1,000 crore for relief operations in Andhra Pradesh’
ISRO set to catapult Mars orbiter into sun-centric orbit

T.S. Subramanian

In a crucial manoeuvre that will have far-reaching implications for India’s mission of sending a spacecraft to Mars, the Indian Space Research Organisation (ISRO) will fire the propulsion system on board its Mars spacecraft for 23 minutes from 00.49 hours on Sunday.

If the exercise is successful, the spacecraft will be catapulted out of its present earth-bound orbit into the sun-centric orbit. The complex manoeuvre is called Trans-Mars Injection (TMI). The spacecraft’s propulsion system is called 440 Newton engine.

ISRO Chairman K. Radhakrishnan told The Hindu on Saturday: “Preparations are going on well. Command sequences are already loaded into the computers. We are waiting for the time, that is, 00.49 hours Sunday, because commands are time-tagged. The firing of the spacecraft’s propulsion system will last 23 minutes. After that, there will be small corrections done on the spacecraft. Everything will be over by 1.30 a.m.”

M. Annadurai, Programme Director, Indian Remote-sensing Satellites and Small Satellites Systems, ISRO, said: “Preparations for the firing of the 440 Newton engine are in the final stages. Some of the commands are already loaded.” It is from the state-of-the-art ISRO Telemetry, Tracking and Command Network in Bangalore that the commands would be given for the propulsion system to fire. Right now, the spacecraft is orbiting the earth with a perigee of 268 km and an apogee of 1.92 lakh km.

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China readies to go to the moon

Rocket carrying rover will take off tonight; touchdown in two weeks will be first since 1976

Steve Connor

A Chinese Long March rocket is scheduled to blast off to the Moon on Sunday evening at about 11.30pm IST carrying a small robotic rover that will touch down on the lunar surface in about two weeks’ time — the first soft landing on the Earth’s only natural satellite since 1976.

The take-off from the Xichang Satellite Launch Centre in Sichuan Province marks the latest stage in China’s grand ambitions not just to put a man on the Moon by the end of the next decade, but to build a permanent lunar base from which it can plan missions to Mars and beyond.

While the United States scales back its grand plans of re-conquering the Moon, China is forging ahead with a bold three-step programme beginning with the robotic exploration of possible landing sites for the first Chinese astronauts to step foot on lunar soil between 2027 and 2030.

“This launch fits in perfectly with China’s logical development of its capabilities in space,” said science writer and astronaut David Whitehouse, author of The Moon – A Biography.

“It is sending astronauts into space to do more complicated things each mission, and each lunar probe builds on the last. They plan to bring them together and it’s very possible the next person to walk on the Moon could be Chinese in 15 years’ time,” Dr Whitehouse said.

It is 10 years since China sent its first astronaut into space, a quietly followed up with the first Chinese spacecraft and docking procedure in space. At the same time, it has initiated a progressively more complex set of unmanned lunar missions with increasingly sophisticated probes.

Tomorrow’s launch of the Chang’e-3 lunar probe will be the first to involve a soft landing. The last time a similar touchdown occurred softly on the Moon was Russia’s Luna-24 probe in 1976 — indicating how lunar exploration has shifted towards more remote orbiting satellites.

The probe is targeted to land within a huge volcanic crater known as Sinus Iridum, which means the Bay of Rainbows, on about December 14. Once it has landed, it will send probes beneath the surface as well as taking high-resolution images of the rock, a flat area formed from the molten basalt released by lunar volcanoes several billion years ago.

The journey of the Chang’e-3 probe and its final landing will be closely monitored by the European Space Agency (ESA), which is cooperating closely with China.

ESA’s, says a launch from its Kourou, French Guiana, will immediately start receiving signals from the mission after take-off and it will upload commands to the probe on behalf of the Chinese control centre.

“Whether for human or robotic missions, international cooperation like this is necessary for the future exploration of planets, moons and asteroids, benefitting everyone,” said Thomas Reiter, director of ESA’s human spaceflight operations.

The cooperation extends to having a team of Chinese engineers stationed at the European Space Operations Centre (ESOC) in Darmstadt, Germany, said Krist Sorensen, who is in charge of helping to track the mission for China.

“We have teams in Europe,” Mr. Reiter said, “and they will help each other if any unforeseen problems.”

When China announced its lunar exploration programme in 2004 it made no secret of the fact that it wanted to follow in America’s footsteps, quite literally, by putting a man on the Moon. But even more ambitious than this, China said that the third and final phase of the programme will include the establishment of a lunar base, The Independent
When will my country become civilised?

Vasant Natarajan

I spent the third decade of my life in the U.S., first doing a PhD at MIT and then working at Bell Labs. But I came back to India to teach at the Indian Institute of Science, Bangalore, where I have been ever since. The choice was mainly motivated by the fact that my undergraduate education at IIT was funded by the taxpayer’s money, and I felt a moral obligation to return (literally and figuratively). The point is I love my country as much as the next person, though my chosen profession of science knows no borders.

When I came back in 1995, India was on the radar of the world and of all big multi-nationals. With the opening of the economy in 1991, everyone felt that India would be the next miracle like the South-East Asian countries — Malaysia, South Korea, Singapore, Taiwan, etc. We would replicate the success of these “tiger economies,” but in the manner of an elephant — slow to move at first but with a large momentum once it got going. The Asian elephant had been awakened.

But what I have seen in the last two decades has left me disillusioned as to whether we will ever join the ranks of civilised countries. It dismays me that, despite our rich history and tradition, so many of our fellow citizens live in abject poverty, in inhuman conditions. The image of India that my American friends have is a place that is hot, dirty, disease-ridden, and over-populated. Can you blame them?

I list a few things that I think make a country civilised. There are glaring differences between India and any developed country.

Lack of litter and overall cleanliness: No civilised country tolerates open garbage or litter. The roads are clean. The sides of the railway track are litter-free. Nobody spits or urinates in public.

And lack of open garbage is the reason that there are no stray dogs in these countries. Stray dogs in India are rabid and will bite anyone who comes near them. Civilised countries have only pet dogs, dogs that are vaccinated and well cared-for, often better than humans!

No honking and respect for pedestrians: Traffic in developed countries is orderly and disciplined. There is no honking. Drivers are taught to respect other road users, particularly people on bicycles or foot.

I remember once running across a road in a U.S. city before a bus came by. In my hurry, my right sandal came off, but I continued running barefoot because I was more interested in saving my life. The driver, however, stopped the bus, smiled at me and waited for me to pick up the sandal from the middle of the road before moving again. I felt sheepish that I had held up all passengers in the bus because of my stupid hurry. But can you imagine this happening in India?

Disabled friendliness: Go to a country like the U.S. or Germany, and you will find that the road pavements are smooth and end in a slope so that a person on a wheelchair can go anywhere. All shops and restaurants have handicap-access ramps. Each building has at least one toilet that can be used by a person in a wheelchair.

Two of the nearest parking spaces are always reserved for the handicapped. City buses, in addition to steps, have platforms that can be lowered to street level so that anyone in a wheelchair can wheel himself/herself in.

This was not always the case, at least in the U.S. 50 years ago. Back then, only a few restaurants had proper wheelchair access. I remember one of my teachers telling me that he became sensitised to this issue when he went to eat out with a
handicapped friend, and found that the restaurant did not have proper wheelchair access. He made up his mind from that day to eat only at restaurants with proper access. If we made a similar resolution in India, we would have to give up eating out altogether!

Emergency services: Last but not least, medical and fire services are never more than a few minutes away. Drivers are taught to move to the side of the road to let emergency vehicles pass if they hear the siren of an ambulance or a fire engine. Compare the response in Boston to the recent bombing during a marathon there to any similar incident in India.

When will my beloved country become civilised?

( The writer belongs to the Department of Physics, Indian Institute of Science, Bangalore. Email: profvasant@gmail.com )


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Higher education needs policy aid

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Teachers’ panel discusses ideas to enhance teaching standards.

The 27th National Statutory Conference of the All India Federation of University College Teachers Organisation (AIFUCTO) on Saturday called for a strong policy backing for initiatives in higher education during the 12th plan.

Deliberating on the theme of the statutory conference—Changing paradigms of higher education, 12th plan initiatives—experts put out hair-raising statistics about higher education in the country.

According to vice-chancellor of Mangalore University, TC Shivashankar Murthy, 83% of the 22 crore children who join schools drop out at college level and only 17% continue higher education. If the policy initiatives towards retaining students in higher education are not taken up during the 12th plan initiatives, India will lag behind by five years, even while it is the most chosen destination for producing quality human resources for the entire world, he said.

The report on higher education by Sam Pitroda spoke about India’s potential for higher education, which was quoted by Murthy, who stated that India needs not less than 1,500 more universities and 5,000 more colleges in all streams of higher education just to retain 30% of students at higher education levels.

Though the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is one of the positive initiatives in higher education, it falls behind in the total quality concept, said higher education expert C Padmanabhan.

“The RUSA document states that there is a need to revisit the acts of various state universities to find out if there are clauses detrimental to their autonomy. It is better if the Union government, in consultation with the University Grants Commission, constitutes a committee to frame a model University Act and statues,” said Padmanabhan.

AIFUCTO president Tarun Kumar Patra rued that neo-liberal economic conditions, privatisation, commercialisation and commoditisation of higher education in the global market has emerged as a major threat to the access, equity and quality of higher education in India.
On teachers’ financial condition, Patra said: “In most states, teachers have not got 80% of their arrears from 2006 to 2010. Teachers are being deprived of MPhil and PhD increments. Except Tripura, West Bengal and Kerala, the pension scheme has been withdrawn. A large community of teachers, consisting of part time, contractual, guest lecturers, work for a meagre sum of emoluments, without any security of service and avenues of promotions,” he said.
Nano-device breakthrough to boost security

Mihika Basu Posted online: Sun Dec 01 2013, 02:13 hrs

An "e-dog" that can detect a bomb at a railway station or a crowded mall. A point-of-care test that can raise an alarm about hard to diagnose cardiac diseases. These are just two of the socially relevant nano-sized devices that Professor V Ramgopal Rao, chief investigator at the Centre of Excellence in Nanoelectronics at IIT-Bombay, has developed.

Overall, he has been the face behind 15 such devices, for which he was awarded the Infosys Prize for Engineering and Computer Science 2013. The jury has recognised Rao, who has over 330 publications and 22 patents to his name, for his "wide-ranging contributions to nano-scale electronics" and "for innovation and entrepreneurship in creating technologies and products of societal value".

Rao, who got his MTech degree from IIT-Bombay and a PhD from Universität der Bundeswehr in Munich, Germany, began working on the e-dog in 2008 when the Prime Minister's principal scientific advisor asked him to develop solutions for detecting explosives.

Later, he and his team of 20 scientists at NanoSniff Technologies Pvt Ltd, a company he co-founded with Soumyo Mukherji at IIT-Bombay's Society for Innovation and Entrepreneurship (SINE), developed a low-cost point-of-care sensor which can detect cardiac markers in the blood "within a few minutes". The project was funded by the Defence Research and Development Organisation under its National Programme on Micro and Smart Systems.

But Rao says there are no takers in the market. "Converting research back into money and taking the product to the market is an uphill task. The industry continues to be averse to risk-taking. It is easy to start a software company in India and scale it up, but not a technology-driven company, which needs much higher levels of funding and resources for a longer period of time."

Talking about the US and its well-developed ecosystem which facilitates funding from the government and venture capitalists to start-ups, he says that "a similar ecosystem that allows conversion of an innovation into a product does not exist in our country."

In fact, "facilitating the commercialisation of nanotechnologies" was one of the primary reasons Rao set up NanoSniff Technologies. The company's only source of funding is IIT-Bombay (SINE is a facility within IIT that helps its faculty/students to launch start-ups.) But clearly, that's not enough to "take the products to the next level, which is the market", says Rao.

That hasn't deterred Rao, though, from continuing to research and innovate. "We are now focusing on demonstrating our products in real-life conditions and hopefully they will be converted into marketable products in the future," he says.

Using the same principle of an e-sniffer, Rao's team is developing a sensor network for BEST buses in Mumbai. "The idea is to have multiple sensors inside a bus. The driver will be given an Akash tablet which will display a 'map' of the bus with all the seats and other areas in green. If any suspicious material is inside the bus, the area will turn red. The driver can then check the object. Currently, nothing prevents a person from putting explosives on a bus. Our sensor network is meant to be a deterrent."

He adds that the only problem is to look at feasible ways to power these sensors without depending on batteries or chargers. "We have recently patented a technology that creates power from vibrations in the buses and we can implement it in this area," Rao says.
PIL to appoint Vice Chancellors only by merit

DC | 30th Nov 2013

Chennai: A public interest litigation has been filed in the Madras High Court to direct the state government to select and appoint as Vice Chancellors only academicians of excellence in merit with eligibility criteria as per the University Grants Commission (UGC) Regulations for Periyar University in Salem, Bharathidasan University in Tiruchirappalli and Alagappa University in Karai kudi and all other public universities in the state, by adopting a transparent selection process.

When the PIL from S Krishnaswamy, Convenor of TN Federation of Universities Faculty Associations came up for hearing before a division bench comprising Justices Chitra Venkataraman and T S Sivagnanam, additional advocate general P H Arvind Pandian took notice for the state government.

Directing the petitioner to serve notice to the Search Committees constituted to choose VCs for the three universities and UGC, the bench posted to December 5, further hearing of the case.

According to R Vaigai, counsel for the petitioner, the search committees have already met once or twice and that if they were allowed to finalize names in violation of para 7.3.0 of the UGC (Minimum qualification for appointment of teachers and other academic staff in Universities and colleges and measures for the maintenance of standards in higher education) Regulations, huge damage would be caused to quality of education.

In the past, several unqualified persons were appointed as VCs to top state universities. Some of the less eligible candidates, who had completed their tenures as VCs, were again in the race for a second term in any of the three universities.