

Newspaper Clips October 6, 2010

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Our target is 100 PhDs a year'

The university also plans to set up a centre in urban design, Dilip K Bandyopadhyay, vice chancellor of GGSIP University tells *HT Horizons* about the varsity's new plans



When is the university shifting to the new campus in Dwarka?

We have shifted four departments - applied sciences, environment management, IT and biotechnology - to the new campus in Dwarka. While the humanities, education, law and chemical technology departments will shift in December, we expect the department of management to follow next year. That leaves only three wings - media and communication department, architecture and planning and IGIT (Indira Gandhi Institute of Technology) - which will continue to function from Kashmere Gate campus.

What are your plans after the university moves to its new campus spread in an area of 63 acres?

We are focusing a lot on research and hope to produce 100 PhDs every

year. Last year, the number was 25.

The university plans to set up a centre in urban design that will only carry out research. The centre will focus on issues such as transportation, residential planning and city design.

Has the university managed to fill all its seats at the undergraduate level?

All seats have been taken for our popular courses - BTech, law, BEd, MBA and MBBS while some seats are still vacant for programmes such as BBA, BCA and BJMC.

This happened because we increased the total intake of stu-

dents from 18,000 last year to 19,000 this year.

Are there quality controls in place for affiliated colleges?

We set up a quality cell last year, members of which visit the affiliated colleges to look into their quality standards. These colleges will be classified under different categories - A, B and C on the basis of their findings. These ratings will later determine the fee structure of the affiliated colleges and act as an incentive for colleges to upgrade their infrastructure and quality.

Will the quality cell have the powers to strip the college of its affiliation?

The above data will be passed on to the joint affiliating committee that will then check the status of the affiliated colleges following the annual review.

Has the university partnered with foreign universities?

Yes, we have tie-ups with several universities in South Korea, Japan, Budapest, France and Florida. Some have facilitated student exchanges while others have led to faculty exchanges and joint degree programmes.

Thirty MBA students are currently on study tour in Malaysia and Singapore.

Interviewed by Vimal Chander Joshi

'I had to send 500 e-mails'

Perseverance and a well-written application can fetch you a research internship in a foreign university. Undergraduate students share their experiences

Vimal Chander Joshi

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Before summer vacations began, Rajat Goel, a third year student of BTech (computer science) at NSIT (Netaji Subhas Institute of Technology) had sent around 300 e-mails to computer science departments of universities around the world.

Only a couple of them responded and there was one university (University of Western Ontario in Canada) which agreed to sponsor a six-week project in computer algebra. A hit-and-trial formula helped grab a foreign internship, he says.

Perseverance pays

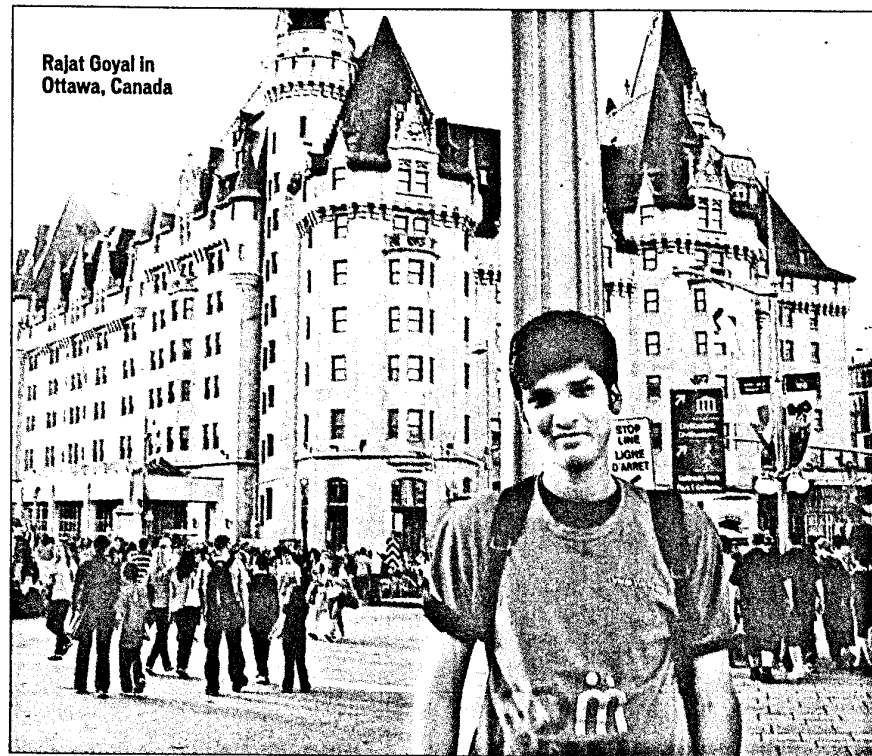
Another student from the same college, Abhishek Gupta, had sent around 500 e-mails to avail a similar opportunity at Ryerson University, also located in Canada.

"A friend of mine is studying engineering at IIT Delhi. Even he had to send 200 e-mails before he got a call from a Chinese university," says Gupta.

His seniors at NSIT guided him in preparing the application which, as they had suggested, needed to highlight prior experience in college laboratories. "My area of interest lay in the security of ad-hoc networks and I had already worked on a similar project at NSIT. In my application, I also attached an abstract and summary of the project," says Gupta.

Goel had been exposed to similar projects in the past. He had worked in a startup in the college campus and had also contributed to a video game designed by his seniors.

Getting through a US college is the real test of patience, thanks to an extremely competitive nature of application procedure. Shivani Pande, a final year student of environment engineering at the Delhi Technological University



Rajat Goyal in Ottawa, Canada

(DTU) wanted to intern in a US university but couldn't make the cut. So, she went to University of Padova, Italy to work on a research project in Biofuels. "Top universities there such as Caltech and Princeton have a system to select interns from applicants world over and one has to be extremely talented to get through," says Pande.

Career advancement

A research internship can prove useful for those who hope to pursue a career in research and who plan to join the industry. International exposure certainly makes you stand out. "Even if you don't get into research, the international exposure helps you in your career. Foreign universities are much more diverse than those in India. In US universities, the percentage of foreign students is somewhere around 35 per cent," says

Kavita Singh, CEO, Future Works Consulting.

Among a batch of 60 students, Gupta was the only one who went for a foreign internship. Though, he intends to take up a corporate job right after his BTech, the experience, he believes, will further his career prospects.

During his project work at Western Ontario, Goel got to work with students, scholars and scientists from around the world. "There were two interns from France, others were MS students in the university and came from all over the world such as Iran and Caribbean," he says.

Shivani Pande went to the Italian varsity confident that it might buoy her chances of selection when she applies for her PG at an overseas university next year. "I want to apply abroad for my further studies and this internship gives me the global exposure I needed,"

says Pande.

Internship without prior experience

Though previous experience in research increases your chances of selection, it's not a thumb rule to get an internship. Shivam Gupta, a student of BBA in Amity University, recently returned from Ukraine where he worked on an environment related project. The fact that he had never worked on a research project before didn't scuttle his global ambitions. "My project wasn't funded by any university but by AIESEC which provided boarding and lodging for the six weeks I spent at Ivano-Frankivsk, a city in Ukraine. I worked on a comparative project on ecology of India and Ukraine. During my stay spanning six weeks, I had to travel to a different cities," says Shivam.

Incubating talent

The department of science and technology joins hands with MDI, Gurgaon, to set up an innovation incubation cell

HT Horizons Correspondent

Adarsh Kataruka, an alumnus of MDI, 2009, is a happy man these days. His alma mater has set up an incubation cell in collaboration with the Department of Science and Technology (DST) to support the innovations conceived at the MDI campus. Kataruka had dropped out of placements last year and dared to turn entrepreneur. Till now, he hadn't received any financial support from the institute but now, he hopes, some money (to the tune of ₹10 lakh) will come his way. "I provide services to the corporates to make them conduct CSR activities. Now I expect to receive some funding which I will use to set up a web platform for my enterprise," he says.

With a total budget of ₹7.5 crore, it is the first incubation cell set up in partnership with DST in Delhi. The cell will primarily focus on technology-centric innovations taking birth in the MDI campus.

The support system to be provided by the institute will relieve entrepreneurs of numerous expenses such as company's office rent, telephone, and hiring a research company to conduct market research, and also paying the lawyer and accountant.

To top it all, the young



Students at MDI now have a chance of taking their innovations to the market stage

entrepreneurs will also get a platform where he/she can present his/her business plan to the angel investors, who visit the campus. If lucky, their venture would receive funding from venture capitalists. "The confidence of an angel investor goes up when he knows that there is a system backing the venture," says HK Mittal, head of National Science and Technology Entrepreneurship Development Programme (NSTEDB), Department of Science and Technology. When a venture capitalist (VC) gets convinced, he not only adds value to the start up in terms of investment but also brings in intellectual support. In return, he stands to get a two per cent stake in the venture and a seat on the board.

DST is hopeful of this initiative. "We have set up 60

such cells in different IITs, NITs and IIMs. More than 3,000 ventures have been churned out of these cells. A few of them were successful and made around several million dollars in three years of incubation (the maximum period for which assistance is given). In our country, innovations take place but they lack business sense. We want to expose them to the commercial opportunities they can tap," adds Mittal.

While management related guidance will come from the in-house faculty of this B-school, technical support will be delivered by the experts at FITT (Foundation for Innovation and Technology Transfer), IIT Delhi, informs Prof Rohit Prasad of MDI. The cell will be headed by a Chief Incubation officer who will establish links with the industry and VCs for the benefit of the start ups.

Nobel for miracle form of carbon

AMAZING FIND The duo reported isolating Graphene in 2004

The Guardian

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LONDON: Andre Geim, 51, and Konstantin Novoselov, 36, formally received the 10 million Swedish-kronor (£1 million) prize in an announcement today by the Nobel Assembly at the Karolinska Institute in Stockholm. Novoselov is the youngest Nobel laureate since 1973.

Geim and Novoselov were both born in Russia and collaborated as PhD supervisor and student in the Netherlands before moving to Manchester University, one of Britain's top physics institutes.

The scientists' breakthrough came from a deceptively simple experiment in 2004 that involved a block of carbon and some Scotch tape. The two used the tape to strip off layers of carbon that were only one atom thick. These thin wafers of carbon, known as graphene, were found to have extraordinary properties.

Tests showed the graphene layers were stretchy, as strong as steel and almost completely transparent. Graphene is one of the most exciting new materials for producing electronic components. The thin wafers can also be used to study some



The winners



■ Andrei Geim



■ Konstantin Novoselov

GRAPHENE: 21ST CENTURY'S SILICON

What is Graphene?

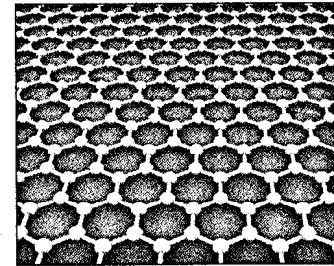
■ Graphene is a form of carbon that comprises a single layer of atoms arranged in a honeycomb-shaped lattice, the thinnest substance in existence.

■ Though chemically simple, it is incredibly strong — 200 times the strength of steel and tougher than diamond, conducts electricity better than copper and is excellent at dissipating heat.

Why graphene will save the computer

■ Graphene will, replacing the silicon chip and allowing computers to become smaller and more powerful for decades to come.

■ Already IBM and Intel have been investing heavily in the material.



■ Graphene's lattice-like atomic structure

The future with Graphene

■ Graphene transistors would run at far higher speeds and cope with much higher temperatures than now.

■ Graphene is more suitable for touch screens, light panels and solar cells.

■ It can be used as composite materials in satellites, airplanes and cars.

of the more peculiar effects of quantum mechanics.

Graphene consists of carbon atoms held together in a flat lattice like chicken wire. Drawing a pencil across a sheet of paper produces thin sheets of graphite, but Geim and Novoselov managed to find a way to reliably separate these sheets into wafers only a single atom

thick. There are around three million sheets of graphene in a millimetre-thick graphite layer.

Novoselov was chatting online to a friend in Holland at 10 am this morning when he heard of his award in a phone call from the Nobel committee. "It was quite shocking. Every October someone speculates about this and you learn not to

pay attention."

Geim encouraged creative experiments at the laboratory, Novoselov said. "We'd just try crazy things and sometimes they worked and sometimes not. Graphene was one of those that worked from the very beginning. It's such a robust material and all the effects were so pronounced," said Novoselov.

success mantra raja ramanna

'Stories from the *puranas* were my best education'

A few snapshots of the life and times of the legendary Indian nuclear physicist (1925-2004)

Early education

Although I managed to do well in school as far as studies were concerned, I still felt somehow a misfit as I couldn't conform to a major activity in the curriculum set up by the British — sports. However, that did not pose a great problem because I'd another support system — music. Classical music during my school days, as is evident today, was not particularly liked by many, but that did not kill my enthusiasm for it because the then warden of my school, Canon Elphick, was a music lover and I struck up a friendship with him...

Piano lessons

Yet another teacher whom I remember fondly at school was Maurice Lanyon. A missionary, he had come to India at a very young age, charged with the spirit of self-sacrifice. Lanyon was an excellent musician, a good pianist and a baritone with a fine voice and I used

to wonder why, with his talent, he had come to India and buried himself in missionary service. I was drawn to him and recall several hours of playing the piano together and listening to lectures on musicology...The Bishop Cotton School (Bangalore) was known for its discipline and I benefited a lot from this. Despite facing problems of transition, my school kept up standards and remained a good institution within the definition of "good" of that period." (From Bishop Cotton School, Ramanna went to St Joseph's School, Bangalore, for his intermediate studies and later Madras Christian College, Tambaram, for a BSc (Honours) degree in physics.)

...My close association with Western music started with my changing schools when I was six years old. The old school, called the

Dalvoy School, was an overcrowded cattle-shed and my parents realised that it would not suit me. I was shifted to the Good Shepherd Convent which was located on the outskirts of Bangalore. The nuns of this convent had taught the members of the royal family and enjoyed a good reputation. Apart from that, the main advantage at this school was that they also taught European music. At home, there was now the general feeling that because there was enough appreciation of Carnatic music, somebody should also study European music. It was decided eventually that I make the effort and so began my piano lessons at the new school at the ripe age of six. I guess the nuns at the convent must have been conscientious but I was not particularly attracted to any of them except for

one outstanding lady, an Irish nun called Mother Maurice. She had been the music teacher to the Yuvaraja's son, Jaya Chamaraja... Mother Maurice was a sensitive teacher and was particularly good with young children. It was she who made music an indispensable part of life.

Influence of my aunt

(A) member of the family who was quite an influence on my life was my mother's sister, Rajamma. Widowed at a young age, Rajamma was considered a beauty as a young woman. After she lost her husband, my grandparents, who were progressive, had her trained to become a schoolteacher. Rajamma finally rose to become the headmistress of a government middle school on a salary of fifty rupees a month... A fantastic storyteller, Rajamma would often tell me stories from the *puranas* and the great epics. In retrospect that was the best education I ever received. I'm proud of the fact that Raja, the name by which I am referred to by all my friends, is taken from my aunt's name — Rajamma.

Source: Dream 2047, the newsletter of Vigyan Prasar, an autonomous organisation under India's Department of Science and Technology



Classical music during my school days, as is evident today, was not particularly liked by many, but that did not kill my enthusiasm for it

— Raja Ramanna

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Thinnest material ever fetches physics Nobel

Stockholm: Two Russian-



Novoselov (top) and Geim

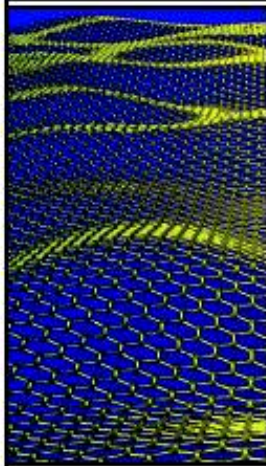
born scientists shared the Nobel Prize in physics on Tuesday for "ground-breaking experiments" with the thinnest, strongest material known to mankind — a carbon vital for the creation of faster computers and transparent touch screens.

Andre Geim and Konstantin Novoselov, professors at the University of Manchester in Britain, in 2004 isolated graphene, a form of carbon only one atom thick but more than 100 times stronger than steel, and showed it has exceptional properties, the Royal Swedish Academy of Sciences said.

Experiments with graphene could lead to the development of new superstrong materials to make satellites, airplanes and cars, as well as innovative electronics, the academy said in announcing the \$1.5 million award.

"Graphene transistors are predicted to be substantially faster than today's silicon transistors and result in more efficient computers," the academy said in the citation. "Since it is practically transparent and a good conductor, graphene is suitable

WHAT IS GRAPHENE?



An artist's impression of graphene, which could lead to much more efficient PCs

- Graphene is one-atom thick, which makes it the thinnest material ever discovered
- It is also the strongest material known to man
- Graphene is highly conductive, conducting both heat and electricity better than any other material
- In 2004, Geim and Novoselov found a way to isolate graphene planes from graphite by using adhesive tape
- The discovery of graphene revolutionized materials science and offered physicists a way to study 2D materials with unique properties
- Applications include graphene transistors that could lead to more efficient PCs

for producing transparent touch screens, light panels and maybe even solar cells."

Geim, 51, is a Dutch national while Novoselov, 36, holds British and Russian citizenship. Both are natives of Russia and started their careers in physics there. They first worked together in the Netherlands before moving to Britain.

Novoselov is among the youngest winners of a prize that normally goes to scientists with decades of experience. The youngest Nobel laureate to date is Lawrence Bragg, who was 25 when he shared the physics award with his father William

Bragg in 1915.

Geim said he didn't expect to win the prize this year and had forgotten that it was Nobel time when the prize committee called him.

The two scientists used simple Scotch tape as a crucial tool in their experiments, peeling off thin flakes of graphene from a larger piece of graphite, Geim said.

"It's a humble technique. But the hard work came later," he said, comparing the material to plastics in its ability to revolutionize the world.

"It has all the potential to change your life in the same way that plastics did," he said. "It is really exciting." AP

“They asked who’s Sheila Dikshit, a rock star? ‘That’s me,’ I said”

Chief minister Sheila Dikshit is basking in the glory of the thunderous applause she received at the opening ceremony of the Games. Mention it and she can't stop smiling. In this interview with **Abantika Ghosh**, she recalls how she pulled off the salvage operation

Now that the Games has got off to such a rocking start, how are you feeling? There is a sense of relief and joy. We went through a lot of difficulties. There was rain and floods, which we handled well. Work like laying of roads, repairs and painting got delayed as nothing was drying up. Just a week or so before the Games everything became alright. The Village as you know was a big problem but that was sorted out in four-five days. We got NDMC and MCD to do the cleaning. The boundary wall had gaps and dogs would enter in search of food. That was mended. Within 36 hours, things started changing. The electrical and plumbing work was faulty in many places. Emaar MGF had the maps, so our people could not do anything.

Emaar was not there?

No. Some fellows, may be four, were floating around. We had a meeting with them and told them that while our people will be doing the work, you made the building and know where things are. So be there. It was a bad situation. There was seepage because of which the lifts were not working in 20 of the 34 towers.

You have said that when the Village was handed over to you, 60% of it was not livable. How did you put it right?

When the cabinet secretary told me that the PM wants us to put things right — I was not there because it was not my domain — we first put housekeeping in order. I contacted ITC. Then Lalit came on board and so did Taj and Meridien. We realised there was no system in place. The OC's own housekeeping staff was not very effective. We put 38 officers in charge of one tower each. Things were so bad that somebody had opened a tap and he got burnt because there was no system of mixing cold and hot water. Some of the bathrooms were flooded. When we took charge, the refrigerators and air-conditioners were just being brought in and there were cartons lying all around. All that mess had to be cleaned up, and on top of that, there was the uncertainty that just seven-eight countries had come in and others were doubtful because of the negative publicity.

Was it due to lack of leadership?

“There were some foreign delegates sitting near me, and when the public went berserk at the mention of my name, one of them asked, ‘Who is this Sheila Dikshit? Is she a rock star?’ I said, ‘That’s me’. Anybody may say anything but my connect with the *aam aadmi* has always been good... There is a sense of relief and joy. We went through a lot of difficulties. There was rain. Just a week before the Games, everything became alright”

of a good leader? Who is to blame for the Village mess?

IOC had got agencies to clean up but they were not there. Only 60 of the 300-400 people, who were supposed to be there, were actually present. Emaar had built the flats and handed it over to DDA, which in turn gave them to IOC. Why did the DDA take flats that were not complete? The balconies were supposed to have glass railings and some of them were missing. What would have happened if somebody had fallen off at night? DDA should have checked everything. The seepage was so bad that we were scared there may be an electrocution. Mosquito breeding was another problem as muck was floating all around. We got the off-

TOI EXCLUSIVE

cers to check everything. There was absolute lack of coordination that led to minor thefts. How were flooded bathrooms allowed to remain that way? Somebody had to think of solutions. Even IOC had the place for a week or so before we stepped in and they did not check all this either. Who do you blame? Those three-four agencies involved were just passing the buck and were careless.

Does the fact that your intervention had to be sought at the last minute to get the Games ready, strengthen your case for more powers for the Delhi CM?

I do hope that there is a realisation. The day the PM had called a meeting on the mess, I had gone to the Village in the morning and I told them what I saw. Many people were surprised why I was saying these things but I thought it was time we woke up. That is when the PM decided that it would be the cabinet secretary and me who would put things right in the Village. All our officers, MCD, NDMC... everybody did a wonderful job. In those three-four days the cabinet secretary and I spent a lot of time at the Village.

Is the parallel chain of command of the L-G an administrative problem?

I can't blame the L-G because at every meeting he was told things are fine. You can't expect him to physically go everywhere and check the ground situation. The DDA and IOC, all of



them were responsible. It's not that they were not present, they were not doing anything.

It would have been a perfect 10 for Delhi government had it not been for the FOB collapse. Has blame been fixed?

We have formed an inquiry committee with an IIT professor and a director-general of CPWD. Their report will be in by the third week of October. Responsibility will definitely be fixed.

This question is for a senior member of the Congress and not the CM. There have been allegations of corruption and nepotism in the Games. What sort of action can we expect?

None of the allegations has been proved. There is a set procedure of the CVC to judge the quality of work. That procedure is being followed. What has not happened is a preliminary inquiry. The PM, Sonia Gandhi and myself have said time and again that if standard material has been used or any other deficiencies are found, there will be no leniency.

FThere were reports that we have charged citizens for the Commonwealth Games. We have not charged them a paisa. If we look at just the Games, our spending has been little. The buses we have bought will remain here. Whether we make money from the event is for the IOC to decide. But there will be no new taxes after the Games

to play. We decide upon a project, invite tenders, companies are chosen following due procedures and quality of work is checked. There is a set process that is followed without it there would be chaos.

How much money did the Delhi government spend? Will we make any money given all the exemptions?

on all the exemptions?

I would not be able to say that. Many of the projects were ongoing, others were for the Games. We had JNNURM under which our buses were bought. Delhi was given little money in the last budget. We have also saved some money in some of the PWD projects. Our collections have improved. There were some reports that we have charged citizens for the Games. But we have not charged them a paisa. There is nothing to worry if we make our collections more effective. If we look at just the Games, our spending has been little. The buses will remain here. Whether we make money from the Games is for the IOC to decide.

So there will be no new taxes after the Games?

No, none at all. We are just making our collection system more efficient. Value Added

Tax (VAT) is going up every quarter.

What was the highest point of the Games so far for you?

The opening naturally. We were jittery about it. Prason Joshi, Javed Akhtar and Shyam Benegal, who we had made in charge of the ceremony, suggested the name of Bharat Bala, who did an excellent job. I have not met a single person so far who did not like it. I was not sure of my own judgement because I have been so closely involved.

For the first two days, the Games' events took place before empty galleries. Fennell said it was a problem. Do you think IOC should sell tickets at discounted rates?

I don't think it is the prices. It is the security. You buy tickets from one place and then walk a long distance to get into the stadium. That is putting people off. A person needs to be guided properly.

Beggars have been wiped off the city's roads. How did you manage to do that?

We have all these homes where we have told them to stay. They can come out and work during the day but they have to return there. Many of our beggars come from neighbouring areas, travel by public transport and go back. Begging is an offence so for once we have just asked the police to be effective.

There is speculation how the Games is your swansong as CM and you are set to play a national role?

We will see if this is the swansong or not. I do not make any plans politically or in life. It all depends on the party. I don't want to commit something now and then not do it. I may want to do something but that may not happen.

So what do you want to do after the Games?

I can't say because I don't know. I don't want to cheat myself. I have stopped making plans.

FThings were so bad at the Village that somebody opened a tap and got burnt because there was no system for mixing cold and hot water. Some of the bathrooms were flooded. When we took charge, refrigerators and ACs were just being brought in and cartons piled up



I don't know if the Games will be my swansong. I do not make any plans politically or in life. It all depends on the party. I don't want to commit something and not do it for it may not happen

Giant airship that can carry entire buildings 2000km

London: Enormous airships that can lift heavy loads over long distances can also shift entire buildings from one place to another.

Australian firm Skyliifter is developing a piloted airship that will carry up to 150 tonnes, about 700 times the weight lifted by a heavy cargo copter, for about 2,000 km. They hope the vehicles could one day carry rural hospitals and disaster-relief centres to remote areas.

The airship has been designed as a disc rather than a conventional cigar shape, which the developers say makes it easier to steer and carry heavy loads under different wind conditions, reports the Daily Mail.

Measuring 500ft across - the size of a football stadium - it will move using propellers which can be adjusted to change direction while the heavy weight of the load

An Australian firm is developing the airship, measuring 500m across, that could one-day carry disaster-relief centres & hospitals to remote areas

hanging underneath keeps the airship steady.

And the payload it carries will be 700 times that of a heavy cargo helicopter.

Skyliifter has already produced a prototype called Betty, which is just under 10ft across and can carry just over a pound in weight.

It has also produced a 60ft-wide prototype of the balloon design itself, without an engine.

The firm plans to launch a full-sized prototype, nearly 150ft wide, within the next three years. AGENCIES

Nod for 13 new central varsities

In an attempt to improve access to higher education, the Union Cabinet approved the proposal for incurring an expenditure not exceeding Rs 3,000 crore during the 11th Plan Period for setting up of 13 new central Universities, and turning three state universities into Central universities.

Nasa to keep an eye on Himalayas

Kathmandu: A new system that will allow scientists to monitor the impact of climate change in the Himalayas using images from Nasa satellites was launched in the Nepalese capital Kathmandu on Tuesday.

Experts say Himalayan glaciers are melting at an alarming rate, threatening to bring floods and later drought to the region. But relatively little is known about the impact of climate change on the vast region. The web-based system, called SERVIR, will allow scientists to access satellite images of the Himalayas, giving them early warning of floods and other disasters. **AFP**

Times of India Chennai 05.10.10 p-5

HRD ministry hikes scholarships for research students in IITs, NITs

Hopes To Attract More Engg Graduates To Technical, Scientific Research

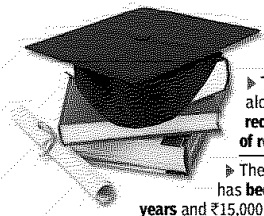
D Suresh Kumar | TNN

Chennai: In an effort to attract more engineering graduates to the field of scientific and technical research, the Union human resource development ministry has increased the scholarships for junior research fellows (JRFs) and senior research fellows (SRFs) in centrally-funded technical institutions.

Accordingly, BE/BTech graduates with a GATE score (IIT graduates with a CGPA of 8 or above need not appear for GATE) or equivalent qualification will receive a stipend of Rs 16,000 per month in their first two years of research in technical institutions under the control of the ministry. Earlier they were entitled to a monthly scholarship of Rs 14,000.

Likewise, the research fellows who have a postgraduate degree in basic sciences along with a pass in the National Eligibility Test (NET) will receive a monthly fellowship of Rs 18,000 up to the fifth year of research. Till now, they were given Rs 14,000 a month in the third and fourth year of research

More In The Kitty For Research Scholars



► BE/BTech graduates with a GATE score or equivalent qualification will receive a stipend of **₹16,000 per month in their first two years** of research

► Those with a postgraduate degree in basic sciences along with a pass in the National Eligibility Test (NET) will receive a **monthly fellowship of ₹18,000 up to the fifth year** of research

► The scholarship of researchers with a ME/MTech degree has been increased from **₹14,000 to ₹18,000 in the first two years** and ₹15,000 to ₹20,000 in the next two years

and Rs 15,000 monthly in the final year. The monthly emolument for researchers with a ME/MTech degree has been increased from Rs 14,000 to Rs 18,000 in the first two years and from Rs 15,000 to Rs 20,000 in the next two years. These scholars will not be granted financial assistance beyond the fourth year of research.

In a letter on September 30, Pratima Dikshit, director (technical), HRD ministry, has communicated the revision in scholarship, which will come

into retrospective effect from April 2010, to the heads of Indian Institutes of Technology, National Institutes of Technology, Indian Institute of Science, National Institute of Technical Teachers Training and Research (NITTTR) and other central institutions.

"This increase in fellowship will definitely attract more candidates for research. I feel that if inter-disciplinary research is offered in the field of engineering education it will become even more attractive for students,"

said professor S Mohan, director, NITTTR, Chennai.

According to professor S Krishniah, dean (academic research), IIT Madras, past experience has shown that the number of students pursuing research studies is more or less the same irrespective of the scholarship offered. However, he suggested that uniform scholarship must be given to research scholars irrespective of their academic qualification. "Now a research scholar with a postgraduate degree is awarded a higher scholarship than his/her counterpart who has an undergraduate degree. I believe there should be no differentiation among researchers who have enrolled for a PhD programme. All of them can be given the same Rs 20,000," he argued.

The HRD ministry has advised the institutions to encourage JRFs and SRFs to register for higher degrees and "the tuition fees to undertake these studies may be reimbursed to the student from the contingency grant sanctioned under the project grant, if required."

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Economic Times ND06/10/2010 P-10

HIRING FORMULA FIXING STANDARDS

IIMA out to reform placement system

Recruiters' Conclave Discusses Uniform Methods Of Compiling Salaries

PAY PACKETS

In 2010

- IIM-Calcutta reported ₹1.6 crore as the highest international annual salary offered to one of its students.
- At IIM-A, the average domestic salary was ₹14.94 lakh in 2010 as against ₹12.17 lakh in 2009, but much lower than the 2008 levels of ₹17.85 lakh.

● Average international salary stood at \$1,10,750, an improvement over last year's figure of \$83,000, but below \$2.8 lakh offered in 2008.

- The average salary at IIM-Kozhikode stood at ₹14 lakh.
- In a departure from the earlier trend, finance cos lost the top recruiter slot and hired 27% of the batch. Consulting firms placed 29% of the 280-strong batch at IIM-A



We hit upon an idea to tackle this problem. Through these standards we are looking at figures that are more robust and reliable. No matter how long it takes, we will be striving for a consensus on this issue. It is the endeavour of IIMA to involve all B-schools and stakeholders in developing this standard.

SARAL MUKHERJEE IIMA PLACEMENT CHAIRPERSON

Avinash Nair & Parag Dave
MUMBAI

IN 2010, IIM Calcutta reported ₹1.6 crore as the highest international annual salary offered to one of its students.

At IIM Ahmedabad, the average domestic salary this year was ₹14.94 lakh as against ₹12.17 lakh in 2009, but well below the 2008 levels of ₹17.85 lakh. The average salary at IIM-Kozhikode stood at ₹14 lakh.

The astronomical salaries paid to management posits is a much-discussed topic and B-schools too, in their rush to establish supremacy, sometimes tweak salary components to arrive at higher figures.

Hence a need was being felt to bring in more uniformity and transparency in placement standards. Towards this end, the IIMA has put forth a new system, "Indian Placement Reporting Standards", which aims at achieving goals similar to those envisaged in the International Financial Reporting Standards (IFRS).

IIMs, private B schools and blue-chip recruiters debated the concept at a recent recruiters' conclave in Mumbai. The proposed system would calculate salary figures as per a common formula and placement results would be announced in a pre-decided format.

The pan-India standards presented in the conclave also aimed at a "fair" comparison between B-schools on parameters like salary figures and number of grads picked up by top recruiters. The norms aim to bring in more clarity on say, what actually constitutes a crore-plus salary package. According to IIMA director Samir Barua, the norms will include salary structure, amount of CTC (cost to company), bonuses, relocation expenses, other cash expenses and even the non-

cash part of the salary offered to the students.

The conference was attended by over 50 recruiters, including GE, McKinsey & Co, HUL, P&G, Wipro, Standard Chartered, Bank of India, and Monitor Group.

While IIM-Bangalore was conspicuous by its absence, other IIMs, including IIM-Calcutta, Indore, Lucknow and Shillong participated along with private B-schools like ISB, SP Jain Institute of Management and Research and Institute of Management Technology, Ghaziabad.



We prefer the cohort system at IIMA. It was clear that we needed time to discuss with the candidate and evaluate the strengths before hiring any graduate. The Day system did not give enough time. Students ended up hurriedly selecting jobs

VASUDEV MURTHY S

GENERAL MANAGER, CONSULTING OPERATIONS, WIPRO

In fact, IIMA has introduced its new cohort-based system for both summers as well as final placements from this year itself. The new system, which has replaced the traditional Day Zero process, aims to accommodate the increased number of students and facilitate smooth placement for them — IIMA's student strength has gone up from 220 in 2003 to 431 in 2010.

According to it, recruiters are grouped together as per sectors, and not as per salaries offered. The process

typically goes on during weekends without disrupting classes and allows recruiters more time with a student during interviews.

IIMA placement chairperson Saral Mukherjee, who designed the cohort-based system, said there were inaccuracies in the way salary packages were reported. "We hit upon an idea to tackle this problem. Through these standards we are looking at figures that are more robust and reliable," Mukherjee said, referring to the blatant misuse of students' salary figures by some B-schools in promoting their brand.

The format has found favour among most recruiters, and the premier B School hopes to tell its success story to other institutes through recruiters' experiences.

"We prefer the cohort system at IIMA. It was clear that we needed time to discuss with the candidate and evaluate the strengths before hiring any graduate. The Day system did not give enough time and students ended up hurriedly selecting jobs," said Vasudev Murthy S, general manager-consulting operations, Wipro.

"There was a need for a new system that can give much more time to students and recruiters. We believe that all the top IIMs like Ahmedabad, Bangalore, Calcutta and Lucknow should discuss and find out a common placement system which is similar to the cohort. Apart from reporting standardisation, there is a need for process standardisation," said a top official of a leading global investment bank on condition of anonymity.

We'd love to hear from you. Reach us at
cbl@timesgroup.com

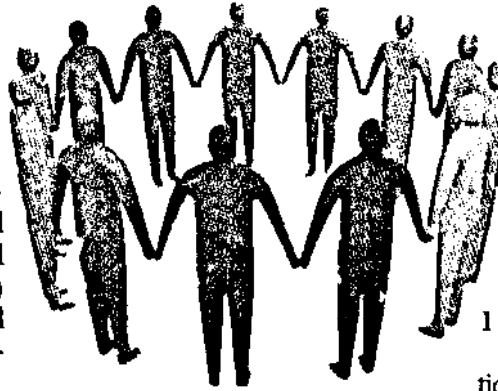
JV to set up 100 skill development centres

Writankar Mukherjee
KOLKATA

THE small and medium enterprise unit of Infrastructure Leasing & Financial Services (IL&FS) is in final negotiations with the National Skill Development Corporation (NSDC) to float a joint venture which will set up 100 skill development centres over the next five-seven years.

While both the organisations are giving a final shape to the deal, IL&FS Cluster Development Initiative (IL&FS-CDI) will hold 73% of the equity in the proposed special purpose vehicle, while the balance 27% is likely to be held by NSDC, two people familiar with the development said.

When contacted, NSDC CEO & MD Dilip Chenoy told ET that the NSDC board has just cleared the setting up of a joint venture with IL&FS-CDI. "We are in the process of finalising the term sheet with them. As per the proposed plans, the JV will set up 100 skill centres, on the lines of the ITIs, over the next five-seven years which will focus on developing manpower for the



leather, textile and general engineering segments," Chenoy said.

IL&FS-CDI head RCM Reddy said the JV deal with NSDC will be frozen by early November. "The operational details are still being worked out. We plan to launch a large-scale programme for skill development," he said.

NSDC sources said the total NSDC contribution to the JV would be nearly ₹159 crore by way of loan, grant and equity. The target of the IL&FS-CDI-NSDC JV will be to train 1.94 million skilled workers. This is expected to give a fillip to NSDC's mandate to create 150 million employable youth by 2022.

The deal with IL&FS-CDI will be

the second such JV for NSDC. Just last month, NSDC announced its intention to form a JV with Bharti Group's Centum Learning where also the national skill body will hold 27% stake. The JV — Centum Workskills — will set up 383 training centres nationally which will aim to train 11.5 million people.

NSDC is a not-for-profit organisation set up by the Union finance ministry to lift private sector participation in manpower training in 21 sectors identified by the government. While the government holds 49% in NSDC, the balance 51% is with the private sector which includes all the apex chambers of commerce such as ASSOCHAM, CII and FICCI. Recently, Nasscom joined NSDC as a shareholder.

A study conducted by IMAcS, a subsidiary of IcrA, on behalf of NSDC, points out there would be incremental HR requirement of 240-250 million by 2022 in sectors like construction, IT, leather, gems and jewellery, retail, electronics and automobile. This number could grow higher if the economic growth tops 8-9% on a sustained basis in the next decade.

Asian Age ND 06/10/2010

P-11

Japan ekes out rare earths from gadgets



HIROKO TABUCHI

KOSAKA, JAPAN

Oct. 5: Two decades after global competition drove the mines in this corner of Japan to extinction, Kosaka is again abuzz with talk of new riches.

The treasures are not copper or coal. They are rare-earth elements and other minerals that are crucial to many Japanese technologies and have so far come almost exclusively from China, the global leader in rare earth mining.

Recent problems with Chinese supplies of rare earths have sent Japanese traders and companies in search of alternative sources, creating opportunities for Kosaka.

This town's hopes for a mining comeback lie not underground, but in what Japan refers to as urban mining — recycling the valuable metals and minerals from the country's huge stockpiles of used electronics like cellphones and computers.

"We've literally discovered gold in cellphones," said Tetsuzo Fuyushiba, a former land minister and now opposition party member, who visited here recently to survey Kosaka's recycling plant.

Kosaka's pursuits have become especially important for Japan in recent weeks.

Two weeks ago, amid a diplomatic spat with Tokyo, China started to block exports of all rare earths to Japan.

The shipping ban was still in effect on Monday evening in Japan, an industry official said, though a trickle of shipments seemed to be seeping out as a result of uneven enforcement of the ban by customs officers at various ports. China has allowed exports of Chinese-made rare earth magnets and other rare earth products to Japan, but not semi-processed rare earth ores that would enable Japanese companies to make products.

The cutoff has caused hand-wringing at Japanese manufacturers, from giants like Toyota to tiny electron-

ics makers, because the raw materials are crucial to products as diverse as hybrid electric cars, wind turbines and computer display screens.

Late last week, Japan's trade minister, Akihiro Ohata, said he would ask the government to include a "rare earth strategy" in its supplementary budget for this year.

In Kosaka, Dowa Holdings, the company that mined here for over a century, has built a recycling plant whose 200-foot-tall furnace renders old electronics parts into a molten stew from which valuable metals and other minerals can be extracted. The salvaged parts come from around Japan and overseas, including the United States.

Besides gold, Dowa's subsidiary, Kosaka Smelting and Refining, has so far successfully reclaimed rare metals like indium, used in liquid-crystal display screens, and antimony, used in silicon wafers for semiconductors.

The company is trying to develop ways to reclaim the harder-to-mine minerals included among the rare earths — like neodymium, a vital element in industrial batteries used in electric motors, and dysprosium, used in laser materials.

Although Japan is poor in natural resources, the National Institute for Materials Science, a government-affiliated research group, says that used electronics in Japan hold an estimated 300,000 tons of rare earths.

Though that amount is tiny compared to reserves in China, which mines 93 percent of the world's rare earth minerals, tapping these urban mines could help reduce Japan's dependence on its neighbor, analysts say.

It is important for Japan to actively tap its urban mines," said Kohmei Harada, a managing director at the National Institute of Materials Science, and an enthusiastic supporter of recycling efforts like the one in Kosaka.

— NYT

Slate wars: Apple faces big rivals

Microsoft CEO says will see Windows slates by Christmas



Dell India's Mahesh Bhalla shows off the Streak tablet, in Bengaluru on Tuesday.

Dell Streak first tablet in India

AGE CORRESPONDENT

BENGALURU

Oct. 5: Waiting for iPad, caught the Streak. That might be the story of the tablet wars in India. On Tuesday, PC major Dell became the first to launch a tablet computer in the Indian market. What's more, the Dell Streak's a 3G smartphone, too.

The Streak has a 5-inch screen, is powered by Qualcomm's Snapdragon 8250 mobile processor, runs on Google's Android operating system, comes in two colours - red and black - and costs Rs. 34,990. It will be available from October 15 at Dell stores, authorised retailers and Tata DoCoMo 'Dive In' centres. India hasn't heard from Apple on when its 9.7 inch-screen iPad will be available here and seems to be below Apple's radar after the company's iPhone didn't do quite as spectacularly here as in the US.

Although the Streak may be considered high-priced for the Indian market, Dell is betting that it "hits the sweet spot between traditional smartphones and larger-screen tablets" and would therefore become the preferred single device for people constantly on-the-go. "The smartphone facility distinguishes Streak from other tablets", said Mahesh Bhalla, executive director, Dell India.

Dell plans to launch 7- and 10-inch screen models of Streak as well as models below 5-inch over the next few quarters.

The tablet war is hotting up, with BlackBerry-maker RIM set to launch its PlayBook later this year.

London Oct. 5: A Microsoft slate to counter Apple's popular iPad tablet computer will be seen by the Christmas holiday, Microsoft's Chief Executive Steve Ballmer said on Tuesday.

Ballmer did not say whether the palm-sized slates would actually be on sale in time for Christmas, nor did he say who would make them. Microsoft has been slow to respond to the iPad, and has also made little headway in mobile phones.

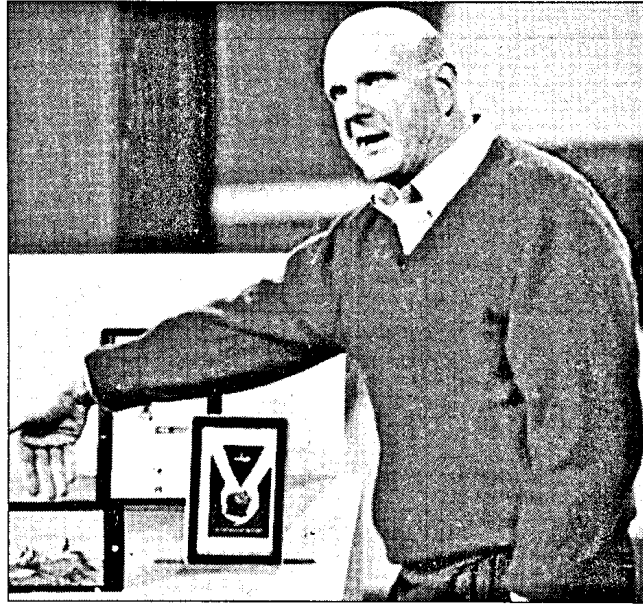
"You'll see new slates with Windows on them. You'll see them this Christmas," he told an audience of students, staff and journalists at the London School of Economics.

"Certainly we have done work around the tablet as both a productivity device and a consumption device," he said.

IT research firm Gartner expects 10 million tablet PCs to be sold this year as consumers begin embracing such devices, which include Dell's Streak and Asustek's Eee Pad. The Apple iPad alone sold 3.3 million in its first quarter.

At this year's Consumer Electronics show in January, Ballmer unveiled a Hewlett-Packard tablet computer running Windows, beating Apple's hotly anticipated move into the market.

But little has been heard about the device since HP agreed to buy smartphone maker Palm for \$12.2 billion, and HP has said it plans a new crop of devices



Microsoft CEO Steve Ballmer shows Slate PCs at the Consumer Electronics Show in Las Vegas earlier this year. On Tuesday, Ballmer said they would be out by Christmas.

including tablets based on Palm software, although it will still offer Windows tablets. Microsoft has also failed to make much headway in the smartphone market, where rivals like Apple and HTC are growing fast, while Research In Motion captured the corporate market with its BlackBerry.

Microsoft's Windows phone software had 8.7 percent of the smartphone market last year and that is

expected to decline to 3.9 percent by 2014, according to Gartner. Microsoft also ditched a feature phone aimed at teenagers in July after just three months.

"The job right now is we've got to get back seriously into the game of phones," Ballmer said.

Ballmer did not get his maximum bonus for the last fiscal year despite scoring the company's highest-ever sales, mainly because of

missteps on phones and tablets. Microsoft is due to launch its new Windows Phone 7 software later this month, after unveiling it a year later than expected at this year's Mobile World Congress in February.

"We've got to have a comeback against the competition and I think with our new Windows phones we really have a beautiful product," Ballmer said on Tuesday.

-Reuters

Samsung's Galaxy to go global

SACHI IZUMI

TOKYO

Oct. 5: Samsung Electronics said it plans to sell its Galaxy Tab tablet computer in the United States, Japan, South Korea and Italy this year, taking aim at frontrunner Apple in the new but already congested segment.

Although it will also compete with a bevy of devices from the likes of Dell and HP, the Galaxy Tab, unveiled last month, has been described by some analysts as the most credible rival to Apple's iPad.

It is smaller than the iPad and Samsung has forged partnerships with the top four US mobile carriers and with media companies which are providing programming for its Media Hub



service, they say.

The device, based on Google's Android platform, has a 7-inch screen, smaller than the iPad's 9.7-inch

screen, but in at least one market - Finland - it will be priced much higher than the iPad.

The Galaxy Tab will go on sale in Italy in October, in South Korea in October or November, and in the United States and Japan in November. Samsung aims to sell 1 million units this year.

In Japan, NTT DoCoMo Inc will start also selling the Galaxy S smartphone in late October, with Samsung hoping to win over Japanese consumers that have warmed to foreign devices thanks to the iPhone and iPad.

DoCoMo's shares rose 3.4 percent to 141,900 yen, climbing with rival KDDI which ended up 5.4 percent at 410,000 yen on its plans announced Monday to

launch Japan's first smartphone that can also be used as an electronic wallet. The broader market rose 1.5 percent.

Foreign mobile phone makers have long struggled to crack the uniquely developed Japanese market, and even Nokia, the world's biggest handset manufacturer, has been forced to retreat from the market in the past.

But Barclays Capital analyst Tetsuro Tsusaka said he expects Samsung to fare well this time.

"Things are different nowadays. The kind of products consumers want now are different from the products that existed when foreign makers were struggling to sell their phones here," he said.

-Reuters

Stem Cell therapy has been found to cure many ailments that could not be treated by the existing conventional methods. This has increased the career opportunities in this industry. **ANUBHA SINGH** gives the details

STEM OF LIFE

An adult organism body consists of various stem cells. As scientists learn to understand and use them to treat various diseases and disorders, it helps to enhance basic clinical and biological research consequently.

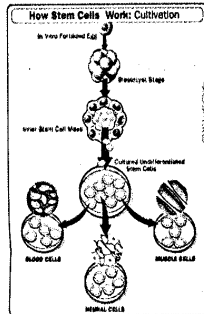
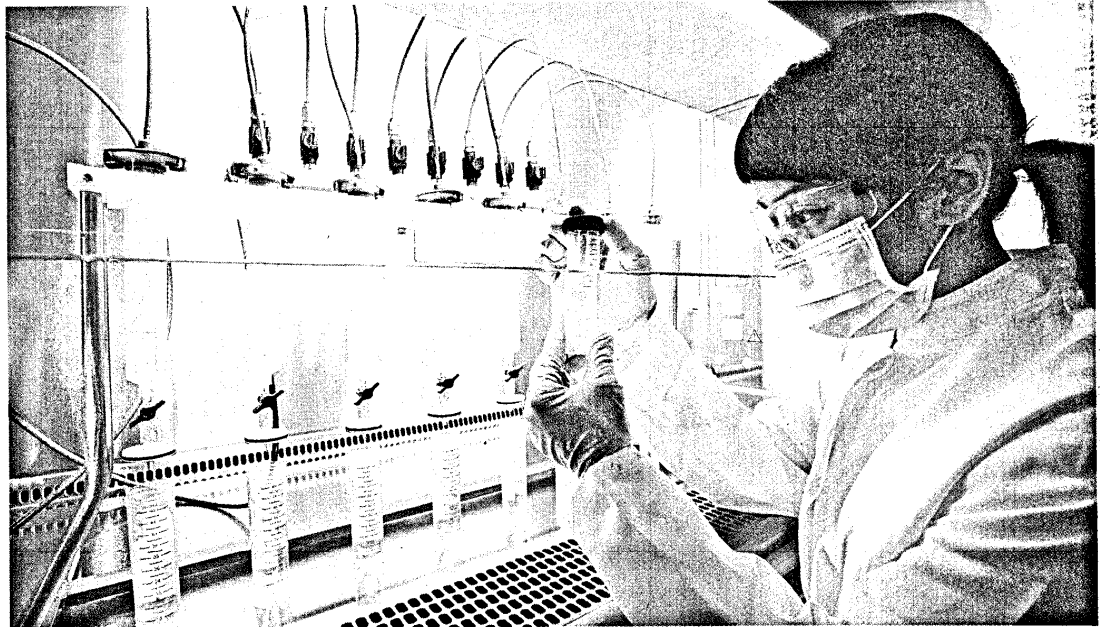
Stem cell research has become an upcoming field in biology and medicine and now these cells help scientists and physicians to cure many deadly diseases. This research has developed into a useful tool for scientists and its real power is still being explored.

Stem Cell Banking industry has opened up new avenues in generation of employment opportunities. It has attracted entrepreneurs, doctors, stem cell biologists, biotechnologists, laboratory technologists, quality assurance and related personnel, directly and new bred marketing and sales personnel, who are evolving and propagating the "concept selling".

Dr Prosanto Chowdhury, Medical Director of Indian Headquarters, Cordlife Sciences, states "stem cell industry is not an isolated industry and it encompasses all the major fields".

QUALIFICATIONS REQUIRED

The minimum qualification for doctors is MBBS, with training in stem cell technology. Stem cell biologists and bio technologists should hold masters in any of the bioscience related subjects or bio technology with PhD in related discipline, respectively.



Laboratory technologists should hold Bachelor's degree in bioscience related subjects with diploma or bachelors in Medical Laboratory Technology from a recognized university.

Sales and marketing personnel are better placed and understand the subject when they are also from bioscience related discipline with masters in sales, marketing, finance and management.

SKILLS REQUIRED

Dr Chowdhury says one should have a pleasant personality and should be able to communicate well. He should also have a good convincing ability and basic knowledge of biology is useful.

ELIGIBILITY

To pursue this field a Bachelors or Masters Degree in Bio-technology and bio informatics, in any branch of Life Sciences, Medical Sciences, Pharmaceutical Sciences is required.

STEM CELL BANKING INDUSTRY HAS OPENED UP NEW AVENUES IN GENERATION OF EMPLOYMENT OPPORTUNITIES. IT HAS ATTRACTED DOCTORS, DOCTORS, STEM CELL BIOLOGISTS, LABORATORY TECHNOLOGISTS, BIOTECHNOLOGISTS, QUALITY ASSURANCE AND RELATED PERSONNEL

CAREER PROSPECTS

Stem cell industry is an amalgamation of many fields, thus career opportunities are plenty in this field. "Some of the fields one can get into are marketing, sales, human resource, biomechanics, accounts, software and research and development in laboratory," says Dr Chowdhury.

SCOPE

The industry is sure to observe

robust growth, that is, any one who starts at the lowest level can slowly get up the ladder with performance and end up as part of the higher management. The industry and the person both will grow and prosper together. Experience in the job is definitely required at higher levels of employment. "One has various options to chose from like sales, research and development, laboratory personnel or as a technologist to start from," says Dr Chowdhury.

REMUNERATION

At the base level one can expect a five figure salary with the usual perks and at higher level it can rise up to 12 lakh to 18 lakh per annum with the perks.

WHERE TO STUDY

National Institute of Cell Science, Pune offers PhD in stem cell research and also conducts various projects and seminars for professionals and aspiring student.

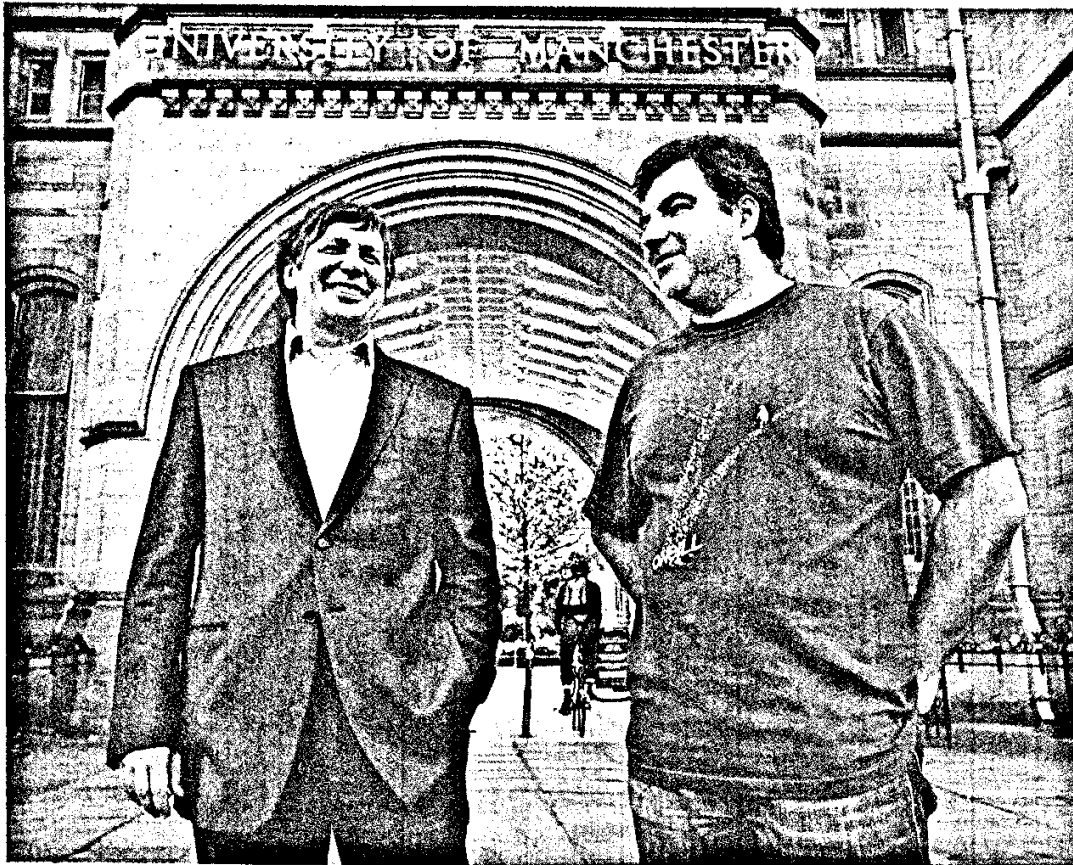
NICHI, in their centre for Regenerative Medicine, provides PhD in collaboration with Acharya Nagarjuna University, Department of Biotechnology, Guntur, Andhra Pradesh.

International Institute of Information Technology, under IGNOU Center of Excellence for Advanced Education and Research, Pune, provides MS in Bio technology with specialisation in Molecular Medicine and MS in Bio technology with specialisation in Stem Cell Biology.

Hindu ND 06/10/2010 P22

Physics Nobel for groundbreaking work on experiments with graphene

Graphene is a new form of carbon with immense possibilities



SHARING SMILES: Professor Andre Geim (left) and Professor Konstantin Novoselov, who have been awarded the Nobel Prize for Physics, seen outside Manchester University, England, on Monday. — PHOTO: AP

Hasan Suroor

LONDON: A day after winning the Nobel Prize for Medicine, two scientists in Britain struck it "rich" again at Stockholm on Tuesday when Russian-born Andre Geim and Konstantin Novoselov of Manchester University were named joint winners of this year's Nobel Prize for Physics for their "groundbreaking" work on experiments with graphene, a new form of carbon with immense possibilities.

At 36, Professor Novoselov, a British-Russian citizen, was the youngest physicist since 1973 to win a Nobel, a committee official said.

Professor Geim (51) is a Dutch citizen. Both started their careers in Russia.

Highlighting the significance of their work, the Prize committee said graphene could be put to a number of practical uses.

"Since it is practically transparent and a good conductor, graphene could be used for producing transparent touchscreens, light panels and maybe even solar cells," it said.

No change

Reacting to the news, an unemotional Professor Geim, said he "slept well" and his plans for the day would not change.

"In my opinion, there are

several categories of Nobel Prize winners. There are those who, after getting the Nobel Prize, stop doing anything for the rest of their lives, which is a big disservice for their community...There is another type of person who thinks that other people think they won the Nobel Prize by accident. So they start working even harder than before," he said.

About his plans for the day, Professor Geim said: "My plan for today is to go to work and finish up a paper that I didn't finish this week. I just try to muddle on as before."

Professor Martin Rees, President of Britain's Royal Society, said there could not

be a better example of the value of enabling outstanding individuals to pursue "open-ended" research projects.

"The U.K. must sustain our science at a competitive level in a world where talent is mobile and other countries are advancing fast," he said.

Professor Peter Main, Director of education and science at the Institute of Physics, said: "Following yesterday's [Monday's] win for Professor Robert Edwards [for medicine], there could be no clearer sign of just how much the U.K. punches above its international weight in a very competitive scientific world."

Mint, ND p-3
06-Oct-10
**Novoselov,
Geim win
physics Nobel**

BY NIKLAS POLLARD &
ADAM COX

.....
STOCKHOLM

Two Russian-born scientists shared the 2010 Nobel Prize for physics for showing how carbon just one atom thick behaved, a breakthrough with implications in areas from quantum physics to consumer electronics.

Andre Geim and Konstantin Novoselov, both with the University of Manchester, conducted experiments with graphene, a new form of carbon that is both the thinnest and strongest material known.

"Since it is practically transparent and a good conductor, graphene is suitable for producing transparent touch screens, light panels and maybe even solar cells," the committee said.

Novoselov, 36, is a dual British-Russian citizen, while Geim, 51, is a Dutch citizen. A committee official said Novoselov was the youngest physics laureate since 1973.

The pair extracted the super-thin material from a piece of graphite such as that found in ordinary pencils using adhesive tape.

One millimetre of graphite actually consists of three million layers of graphene stacked on top of each other, the academy said, although they are weakly held together.

The academy said that graphene offered physicists the ability to study two-dimensional materials with unique properties and made possible experiments that can give new twists to the phenomena in quantum physics.

Mentioning a few possible applications, the academy said graphene transistors were expected to become faster than today's silicon ones and yield more efficient computers.

REUTERS

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