


Newspaper Clips

January 13, 2011

Publication: The Times Of India Delhi; Date: Jan 13, 2011; Section: Times Nation; Page: 15; 

A mosquito-killing robot powered by the insects it eliminates

Ishan Srivastava | TN


Chennai: We have seen mosquitoes getting attracted to light sources. But what about a lamp that devours them and uses the biomass to power itself? That was one of the concepts show-

cased by the duo — Jimmy Loizeau, faculty at Goldsmiths College, University of London and James Auger, faculty at Royal College of Arts, University of London — at IIT Madras on Wednesday.

It doesn't look like your typ-

ical robot. In fact, it is just like your lamp with holes on it. But the catch lies in the detail. These holes are cleverly designed in such a way that pests can enter it but can't come out. These pests are funnelled into a microbial fuel cell which con-

verts them into electricity. The 'lampshade robot,' as it is called, is smarter. When you go to sleep, the lamp switches itself off. But if it still needs more energy to fulfil its requirement, it switches on its UV source to attract insects in the dark.

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For office staff, standing up is key to health

London: Office workers, please note — getting up while talking on the phone and taking a minute's desk breaks at regular intervals can keep you slim and healthy, a new study has claimed.

An international team has carried out the study and found that these simple office routines can help lower levels of potentially dangerous glucose and fats in the blood, the Sun newspaper reported.

The study of almost 5,000 staff found standing more often made hearts healthier — even for those who led super-fit lifestyles out of the office. Those who took the most breaks had an average 4.1cm smaller waist circumference.

But those who sat around

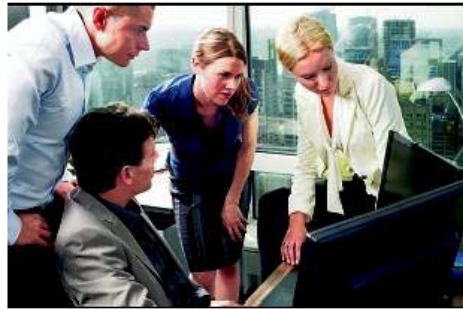
had more problems, including high levels of bad (LDL) cholesterol.

"To keep staff fit, bosses should order them to stand for meetings, use the stairs instead of lifts and even use loos on other floors," the research team said.

Study leader Genevieve Healy, from the University of Queensland, Australia, said the potential health risks of prolonged sitting are just being realised.

She added: "Even small changes, which could be as little as standing for one minute, might help to lower this health risk."

"Stand Up, Move More, More Often" could be a slogan to get this message across,"



SITTING DUCKS: The study says regular desk breaks keep office workers slim and their hearts healthy

Healy said.

The study of almost 5,000 American volunteers discov-

ered that those who got up most often had higher levels of good (HDL) cholesterol,

lower levels of blood fats called triglycerides and lower levels C-reactive protein, which is an indicator of the process that leads to blocked arteries.

The average volunteer spent 8.4 hours of their waking day sedentary, getting up 92 times, or once every 5.5 minutes.

However, they exhibited a very wide range of activity. Time spent sedentary time ranged from 1.8 hours to 21.2 hours, while the number of reaks ranged from 14 to 180. Those who spent the longest time sitting down did not necessarily get up the most.


The study looked at 4,757 people aged 20 and over and with an average age of 46

years, who took part in the US National Health and Nutrition Examination Survey between 2003 and 2006.

They wore a small device called an accelerometer, which monitored the amount and intensity of activity.

Importantly, the results accounted for confounding factors such as socio-demographic differences between volunteers, their medical histories and their diet, how much alcohol they drank and whether they smoked.

Consequently the academics said the differences in waistline and heart health indicators were only due to variation in the amount of time spent sitting down and the frequency of breaks. AGENCIES

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Camel milk, urine to treat cancer?

New Drug Developed By Arab Experts Proves 100% Successful In Mice

Dubai: A group of Arab researchers is claiming to have developed a medical formula for treating cancer by using camel's milk and urine.

Researchers at Arab Biotechnology Company (ABC) have said experiments conducted on mice have proved to be 100% successful. They found the camel's immune system was rejuvenating itself every time they took samples of milk and urine, making it one of the strongest immune systems.

The lab mice that have been injected with the new drug since six months are still live and their behavior natural like the healthy ones. The



STURDY SOURCE: Camel's immune system constantly rejuvenates itself, making it disease resistant

new remedy carries smart cells that can attack poisonous substance in the cancerous cells without producing any side effects, they added.


"The medicine, a combination of camel's milk and urine, has been tested on experimental mice and will be tested on human being," Abdalla Al-najjar, President of Arab Science and Technology Foundation said.

He added that the experiments had started at Sharjah University and completed at the cancer institute in Baghdad.

Cancer kills 6 million persons every year in the world. According to

the Arab Cancer Control Association, cancer is the second cause of death in the Arab World after heart and communicable diseases.

Infection has reached alarming rates with 100-150 cases per 100,000 people, an increase of 213% per annum. He said the researcher had re-programmed the immune system to accept certain chain of foods and the results were amazing.

According to him, the formula treats Leukemia (blood cancer) and can be developed to cure other types of cancer infecting lung, liver and breast. 

Times of India ND 13/01/2011 p-13

IIMs raise cut-off, entry gets tougher

Sruthy Susan Ullas | TNN

Bangalore: Getting into IIMs is never easy. When the Indian Institutes of Management (IIMs) announced the cut-off percentiles for the admission process on Wednesday, a few of the IIMs had raised their cut-offs. Like IIM-Ranchi, which had the highest cut-off of 99.65 percentile among all IIMs last year, has further raised it to 99.66 for the 2011-13 batch. At IIM-Calcutta, Ranchi's mentoring institute, the cut-off is 99.59. IIM-Ahmedabad announced that 540 students whose overall percentile is 99 and of each section were 94 would be called for the personal interview.

IIM-Lucknow, which is one of the Common Admission Test (CAT) 2010 organising institutes, has increased the weightage to CAT scores. What was 30% for the CAT

scores has gone up to 37.5% for the next batch. The fees, too, has been raised from Rs 8 lakh to 12 lakh.

IIM-Kozhikode has also decided to give 50% weightage to CAT score, 15% to GD and social skills, personal interview 25% and writing task 10%.

Interestingly, many IIMs are set to take in more women and non-engineering students to increase the diversity in the institute. IIM-L has decided to give another 2.5 points for these candidates.

The directors of newer IIMs will meet next week to decide on

holding joint PIs and GDs.

The scores for CAT 2010 were released on Wednesday. While many students found it difficult to access results online, the IIMs informed that the website did not crash.

CATALOGUE

► 8 score 100 percentile, 19 get 99.99

► IIMs raise cut-off percentile

► Will commence the next step of admission process that includes personal interview in last week of January

CAT is out of the bag but the mouse plays truant

TIMES NEWS NETWORK

New Delhi: Results for Common Admission Test (CAT) 2010 were declared online on Wednesday, but many candidates could not access them till late in the evening. The link to the results posted on the official CAT website remained unavailable for several hours, leaving candidates anxiously waiting throughout the day. However, IIM officials refused to acknowledge there was a serious problem and said they were happy that the CAT server did not crash this year.

Many candidates in the city waited in vain the entire day for the link to open. "I have been trying to access my result since midnight without luck. It's 8 pm now, but I still don't know my result. It's so frustrating. I have also asked my friends to keep trying to open the link. I don't believe IIMs can't fix this problem," said Sameer Singh (name changed on request), a candidate.

Ulhas Vairagkar, director, Triumphant Institute of Management Education, said: "Students have been calling us up since morning to help them get their results directly from the IIMs. They are institutes of global standards. Why can't they fix their technology? Why should the results be available only on one website?"

He added: "Candidates face this problem every year. IIMs had earlier promised to introduce IVRS and SMS service for declaration of results, but nothing happened." According to Himanshu Rai, convenor, CAT 2010, non-availability of results was just an individual network problem and not a glitch in website. "Some students could not access the results probably due to heavy traffic. If a lot of people try to open the link from the same IP address, the network tends to get slow. What is important is that the website is opening, which means the server hasn't crashed," Rai said.

Times of India ND 13/01/2011 p-13

HRD to check if deemed univs are complying with UGC rules

Akshaya Mukul | TNN

New Delhi: The HRD ministry's notice to 44 deemed universities will not only point out deficiencies found by the Tandon Committee but also ask them if the new guidelines of University Grants Commission (UGC) are being adhered to.

Though the ministry will not make a judgment on each of the 44 universities with a total 2.06 lakh students, its comprehensive report to the Supreme Court will specify on what counts these institutions have faltered or taken corrective steps to sort out the deficiencies highlighted

by the Tandon Committee.

The ministry will again seek the help of Tandon Committee to examine the representations of deemed universities. In its earlier report, Tandon Committee — after a long deliberation that included presentation by all deemed universities — had said 44 of them did not deserve the tag of university since they lacked necessary academic and administrative infrastructure.

“Many deficiencies pointed out by the Tandon Committee relate to issues like lack of doctorate students and absence of publications in prestigious academic jour-

nals. It is unlikely that in a year's time, these universities would have sorted out these deficiencies,” a senior ministry official said.

On Tuesday, the SC had asked HRD ministry to send notice to 44 universities.

The apex court also said institutions shall be entitled to not only give a reply on the deficiencies but also make a representation on corrective measures.

However, ministry sources said, “The Supreme Court could have asked us to issue the notice earlier. Tandon Committee had already gone through the process in great detail two years back.”

Times of India ND
13/01/2011 p-19

Painkillers up risk of stroke, heart attack by four times

London: Commonly used painkillers such as ibuprofen and diclofenac may increase the risk of dying from a heart attack or stroke by fourfold, a new study has claimed.

In one of the most comprehensive studies on the cardiovascular effects of painkillers, scientists from Bern University in Switzerland analysed data from 31 trials involving more than 116,000 patients taking such drugs and found that heart patients using a high-dose painkiller daily for a year could triple their risk of a stroke.

Although the overall numbers of people suffering heart attacks or strokes while on the drugs is small, the team found that there are important risks associated with taking them, the Telegraph reported. The drugs examined were naproxen, ibuprofen, diclofenac, celecoxib, etoricoxib and two others called rofecoxib or Vioxx, and lumiracoxib.

The drugs, called non-steroidal anti-inflammatory drugs (NSAIDs) and a subgroup of newer ones called COX-2 inhibitors, are known to affect the heart and one of them, Vioxx, was removed from sale in 2004 because of the increased risk of heart attacks. PTI



Heart patients using a high-dose painkiller a day for a year could triple the risk of a stroke.

Times of India ND
13/01/2011 p-19

At 88kmph, this solar car is world's fastest

Melbourne: Australian students claim to have designed the world's fastest solar car which has smashed a Guinness World Record by travelling at a speed of 88 kmph.

The car, designed by the University of New South Wales students, smashed the world solar car speed record at the HMAS Albatross navy base airstrip in Nowra. The speed was faster than the previous record of 79 kmph. The Sunswift IVy normally uses its cells to charge a 25 kg battery, but this was removed for the record attempt.

"We broke the record at 10.32 this morning. The Guinness World Book of Records adjudicators were on hand, so it's all official. We've even been handed our certificate," said Sunswift project manager Daniel Friedman. IVy produces about 1200 watts — the same power it takes to run a toaster.

While students are also usually the drivers of the carbon-fibre vehicle, professional racing driver Barton Mawer and Craig Davis, from electric car firm Tesla's European operations, were drivers for this attempt. "We were confident, we only needed a little bit of sunshine and that was enough. I've been lucky enough to drive racing cars all around the world but this was right up there as a buzz," Mawer said. PTI

Clean CAT sweep for engineers

THE TOPPERS of the common admission test (CAT) this year for entry into premier business schools are all engineers. The eight boys who scored 100 percentile marks are engineering students; even the 19 candidates who scored 99.99 percentile are engineers.

The CAT results — declared on Wednes-

day — will decide the admission for 11 IIMs and 150 business schools. There are only two girls among these 19. Among the eight toppers, two are from Mumbai and one each from Pune, Delhi, Bangalore, Kolkata, Chennai and Indore. Vidit Agarwal is the only candidate in Delhi to have scored 100 percentile.

Mail Today Bureau

Business Standard ND 13/01/2011 p-14

CAT results declared; eight candidates score 100 percentile

BS REPORTER

Kolkata, 12 January

The process of admissions to the Indian Institutes of Management (IIMs) has begun with the announcement of the Common Admission Test (CAT) results across the country today.

The test was aced by 27 engineers, of whom eight scored 100 and 19 a 99.9 percentile. Of them, 25 were boys and one girl each from Kerala and Andhra Pradesh.

Among the eight engineers, three are from Maharashtra — two from Mumbai and one from Pune — with one candidate each from Bangalore, Kolkata, Delhi, Chennai and Indore.

"There is an obvious and overwhelming domination of male engineers as far as the CAT toppers are concerned.

The trend confirms to the overall reality of the results," said Himanshu Rai, CAT convenor, 2010.

At the time of going to press, IIM-Ahmedabad (IIM-A), IIM-Bangalore (IIM-B), IIM-Lucknow (IIM-L), IIM-Shillong (IIM-S) and IIM-Rohtak (IIM-R) had declared the list of students named for interviews, with the criteria for selection.

With the number of students

that have appeared for CAT considerably lower this year, there was a decrease in the cut-off percentile for the IIMs. In 2010, the 150-minute test was taken by 186,238 students across 30 cities between October 27 and November 24, as opposed to 250,000 students who took the test a year earlier.

CAT scores are used for admission of students to 11 IIMs and over 150 other B-schools across the country.

IIM-A cutoff at 94%

IIM-A, the second oldest IIM in the country and arguably the most sought, has lowered its

cut-off from 96.1 percentile last year to 94 percentile this year, while the numbers shortlisted for the interview process is

917, similar to last year.

"The main reason for the cut-offs having been lowered is attributable to the decline in the number of students that have taken the test this year," said Gautam Puri, chairman, Career Launcher.

About 5,000 students are likely to get a call from the IIMs this year. The number, despite the lower number of candidates, is comparable to last year on ac-

count of the lowered cut-offs.

Also consistent will be the 1:4 ratio between those called for interviews and the numbers of seats available.

A standout trend this year is the marked preference for a selection of students that have a record above average in academics.

IIM-A for example, has allocated 36 points for academics and work experience. This is inclusive of matriculation (eight points), higher secondary (eight points) bachelors (twelve points), masters and work experience (four points each).

This is a change over last year, where the significance allotted to the academic record was restricted to ensuring selection of candidates who'd got over 70 per cent in the matric-

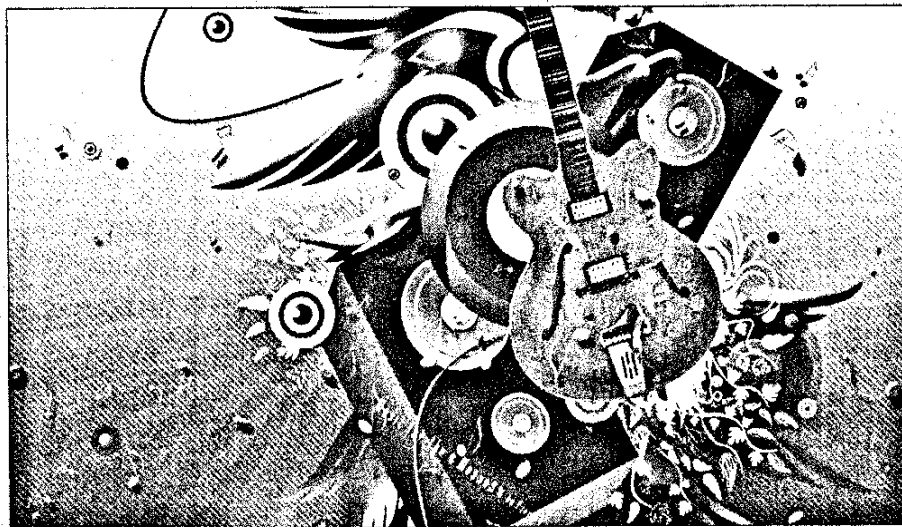
ulation and higher secondary examinations.

The trend finds reflection in the admission policy of other IIMs as well, although the point-wise significance allocated to academics, vis-à-vis CAT and interview scores, vary.

"IIMs have made a conscious effort to increasingly focus not just on CAT results but the holistic academic record of students. The trend will reflect in admission policies this year," said Devi Singh, director, IIM-Lucknow.

CAT, administered by Prometric and the IIMs, was marred last year by delays and technological snags. The test gathered negative publicity this year as well, when there were rumours of results having been leaked 10 days before these were actually declared.

Love music? Thank a chemical in your brain



WHETHER it's the Beatles or Beethoven, people like music for the same reason they like eating or having sex: It makes the brain release a chemical that gives pleasure, a new study says.

The brain substance is involved both in anticipating a particularly thrilling musical moment and in feeling the rush from it, researchers found.

Previous work had already suggested a role for dopamine, a substance brain cells release to communicate with each other.

But the new work, which scanned people's brains as they listened to music, shows it happening directly.

While dopamine normally helps us feel the pleasure of eating or having sex, it also helps produce euphoria from illegal drugs. It's active in particular circuits of the brain.

The tie to dopamine helps explain why music is so widely popular across cultures. Robert Zatorre and Valorie Salimpoor of McGill University in Montreal write in an article posted online Sunday by the journal *Nature Neuroscience*.

The study used only instrumental music, showing that voices aren't necessary to produce the dopamine response, Salimpoor said. It will take further work to study how voices might contrib-

ute to the pleasure effect, she said.

The researchers described brain-scanning experiments with eight volunteers who were chosen because they reliably felt chills from particular moments in some favorite pieces of music. That characteristic let the experimenters study how the brain handles both anticipation and arrival of a musical rush.

Results suggested that people who enjoy music but don't feel chills are also experiencing dopamine's effects, Zatorre said.

PET scans showed the participants' brains pumped out more dopamine in a region called the striatum when listening to favorite pieces of music than when hearing other pieces. Functional MRI scans showed where and when those releases happened.

Dopamine surged in one part of the striatum during the 15 seconds leading up to a thrilling moment, and a different part when that musical highlight finally arrived.

Zatorre said that makes sense: The area linked to anticipation connects with parts of the brain involved with making predictions and responding to the environment, while the area reacting to the peak moment itself is linked to the brain's limbic system, which is involved in emotion.

The study volunteers chose a wide range of music — from classi-

cal and jazz to punk, tango and even bagpipes. The most popular were Barber's *Adagio for Strings*, the second movement of Beethoven's *Ninth Symphony* and Debussy's *Claire de Lune*.

Since they already knew the musical pieces they listened to, it wasn't possible to tell whether the anticipation reaction came from memory or the natural feel people develop for how music unfolds, Zatorre said. That question is under study, too. Dr. Gottfried Schlaug, an expert on music and the brain at Harvard Medical School, called the study remarkable for the combination of techniques it used.

While experts had indirect indications that music taps into the dopamine system, he said, the new work really nails it.

Music isn't the only cultural experience that affects the brain's reward circuitry. Other researchers recently showed a link when people studied artwork.

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Financial Express
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P-3

Engineers dominate CAT 2010

fe Bureau

New Delhi, Jan 12: The Common Admission Test popularly known as CAT—the gateway to the prestigious Indian Institutes of Management (IIMs)—this year too was dominated by engineering students with all those scoring 100 percentile in CAT 2010 coming from engineering streams.

Eight candidates, all of them male with engineering background, got 100 percentile while 19 candidates, also engineers—of which two are females—scored a near perfect 99.9 percentile.

Almost 1.8 lakh candidates wrote the CAT exam in 2010.

Hindustan Times
ND 13/01/2011 P1

IIM MANAGING SOCIETY SEATS TO BE SOLD? BATTLE BREWS

ht **SPECIAL**

Charu Sudan Kasturi

■ charu.kasturi@hindustantimes.com

NEW DELHI: A proposal by a government panel to allow the Indian Institutes of Management to sell seats on their managing society is threatening to explode into a battle both within the IIMs and with the government.

The faculty councils of IIMs Bangalore and Calcutta are against giving corporate entities entry into the managing society for five years in exchange for ₹20 crore. Bangalore held a meeting in this regard on Tuesday and Calcutta is expected to do so on Friday, sources said.

The proposal was made by a panel headed by Maruti Udyog chairman RC Bhargava with IIM Bangalore, Calcutta and Kozhikode directors on the team.

"This is an attempt at back-door privatisation of IIMs. We want more autonomy but you can't sell IIM society membership like cricketers in the IPL," a senior professor said.

The panel has said this membership would give companies preference in placement dates, discounts in executive training programmes and enable them to get new hostels, blocks or centres named after them. Critics argue it could place corporate houses in a position to influence IIM policies.

IIM professors may also voice their concern over two other proposals — the first about making it mandatory for faculty to teach 160 hours a year; the second, that the proposed reforms, while withdrawing some of the government's powers, would give too many academic powers to the IIM Boards.

Indian Express ND 13/01/2011

P-14

Deemed varsities: How the idea took shape

THE concept of deemed to be universities took shape when a commission headed by well-known educationist and former President of India, Dr S Radhakrishnan, recommended in 1948-49 that the government should consider allowing setting up of varsities through charters, and not legislation alone. The idea was to encourage setting up of new varsities in the newly independent India and to take education to the masses.

Section 3 of the University Grants Commission Act, 1956, paved the way for the first of the deemed-to-be universities of the country that included the likes of the Indian Institute of Science, Bangalore; the prestigious Birla Institute of Technology (BITS), Pilani; Tata Institute of Social Sciences; Indian School of Mines; School of Planning & Architecture and others.

More recently, the Prof Yashpal-led Committee on Rejuvenation of Higher Education said in its report that the provision for the status of deemed universities was made with a noble intent. It was felt that institutions, which had a unique and distinct character of their own, could enjoy the privileges of a university without losing their distinct character and autonomy.

The last decade or so, which has seen a spurt in the education sector, has also witnessed a rise in the number of applicants for the deemed varsity status. In the first 10 years after the enactment of the UGC Act, eight institutions were notified as deemed universities. In the 1970s, the UGC decided + that notification under Section 3 should be made only in special cases and so, only three institutions were

conferred the status. There was a slight shift in policy in the 1980s and 18 more institutions were added under Section 3. Between 1956 and 1990, in 35 years, only 29 institutions were granted the deemed university status. In the last 15 years, 63 institutions were declared deemed universities and particularly in the last five years, 36 institutions, excluding RECs, have been notified as deemed universities as per the details compiled by the Prof Yashpal-led Committee.

Karnataka is home to a number of reputed deemed-to-be universities, including the Indian Institute of Science, Bangalore, Manipal Academy of Higher Education, National Institute of Mental Health & Neuro Sciences, Jawaharlal Nehru Centre for Advanced Scientific Research and International Institute of Information Technology among others. The Union HRD ministry has listed 14 deemed-to-be universities in the state, including KLE University and JSS University.

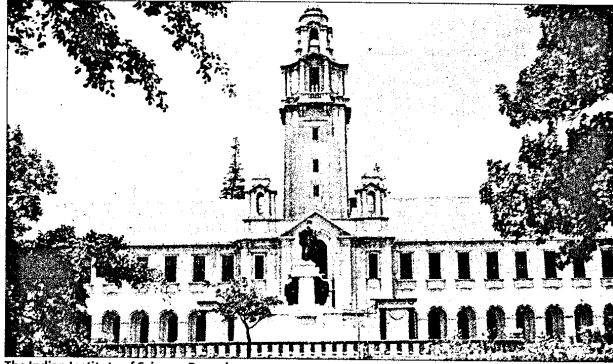
The deemed university status, which enables not just full autonomy in setting course work and syllabus but also allows these institutes to set their own guidelines for admissions and fees, was also a recognition of the quality education being imparted. The process of conferring the deemed-to-be university status has been a rigorous one.

An institute applies to the Human Resource Development (HRD) ministry and the University Grants Commission for a deemed varsity status. In response to the representations made by an institute seeking the deemed status and on the basis of a recommendation made by a committee

comprising the UGC chairman, the chairman of the All India Council for Technical Education and the Secretary, Secondary and Higher Education, Government of India, the UGC issues a notification stating that there is no objection to a particular institution using the word university in its name. As part of the process, a UGC team inspects the premises of the applicant institute to verify its credentials. Finally, a full UGC commission meeting is held before recommending that the deemed university status be conferred on the institute.

Such institutions would, however, be required to distinguish themselves from universities created by legislation by carrying a statement in parentheses, below their name, that they are deemed-to-be-universities under Section 3 of the UGC Act, 1956. Similarly, universities established by Parliament or state legislature would, under their names, state in parentheses the number and year of the Act under which they were established.

The Commission has laid down guidelines for considering proposals from institutions. Some of the guidelines are that the institution should be generally engaged in teaching programmes and research that are innovative and of very high academic standard, capable of further enriching the university system, should be financially sound and also create a corpus fund as prescribed by the UGC, competent to undertake application-oriented programmes in emerging areas of knowledge and should generally have been in existence for 10 years or more.



The Indian Institute of Science, Bangalore

Science's premier institute

The Indian Institute of Science (IISc) was conceived as a research institute or a university of research by Jamsetji Nusserwanji Tata, in the final years of the 19th century. A long period of almost thirteen years was to elapse from the initial conception in 1896 to the birth of the institute on May 27, 1909.

The cast of characters in the drama that led to the establishment of the Institute includes, in addition to its charismatic and generous founder J N Tata, figures from the pages of Indian history. There is Swami Vivekananda, whom J N Tata befriended on his famous voyage to the United States, the Maharaja of Mysore, Shri Krishnaraja Wodeyar IV and his mother then acting on his behalf, and Lord Curzon, the Viceroy of India, whose first task on arrival on December 31, 1898 was to receive a draft proposal prepared by the Provisional Committee set up to plan the establishment of the Institute. The plan was shepherded through many difficult years by Burjorji Padshah, a close associate of J N Tata. Unfortunately, J N Tata's vision was realised a

few years after he died in 1904. When the British Government finally issued the Vesting Order in 1909, an unmatched experiment in higher education and research was launched in India. IISc is truly the first example of a public-private partnership in this country.

In the century that has passed since its inception, IISc has grown to become India's premier centre for research and postgraduate education in science and engineering. The Institute's departments in fields ranging from Biochemistry to Aerospace Engineering have served to nucleate research and development in both the public and private sectors. The faculty and alumni of the Institute have been responsible for establishing and spearheading many new institutions and programs across the country. Homi Bhabha conceived the idea of the Tata Institute of Fundamental Research (TIFR) and an Atomic Energy Program while working in the Department of Physics. Vikram Sarabhai, the founder of India's space program was an alumnus. Following his premature death, the Indian Space Research Organisa-

tion (ISRO) was built by the farsighted leadership of Satish Dhawan, who simultaneously held the position of the Director of the Institute with the greatest distinction. The first Indian Institute of Technology (IIT) at Kharagpur was established by J C Ghosh, who was the Director of IISc in the critical period 1939-48, during which much of the activity in engineering was initiated at the Institute. Many of India's most distinguished scientists have been associated with the Institute as students or faculty. Notable among them are G N Ramachandran, Harish Chandra, S Ramaseshan, A Ramachandran, C.N.R. Rao and R Narasimha. The Institute offers a variety of Masters degree programs in Engineering, an integrated PhD (post-BSc) program in sciences and PhD programs in a wide spectrum of disciplines in science and engineering. The research laboratories at the Institute are well equipped. Many national facilities are housed at the Institute. The library and computational facilities at the Institute are amongst the best in India. A major program for modernising laboratories is un-

derway. The Institute hosts hundreds of visitors from India and abroad every year and is the venue for many major national and international academic events.

The face of science and engineering research has been changing very rapidly over the past few years. Approaching the second century of the Institute, many new activities have been initiated. Notable among them are the interdisciplinary PhD programs in Mathematical Sciences, Chemical Biology, Earth System Science, Nanoscience and Nanotechnology and Nanoengineering for Integrated Systems. These programs are intended to blur the traditional boundaries between disciplines, thereby promoting cross-disciplinary research. An MTech program in Climate Science has also been introduced. New centres in the areas of Earth Sciences, Climate Change and Neurosciences have been established. The Institute hopes to foster collaborative and interdisciplinary research in a vigorous fashion in the years to come. The Institute engages in interactions with society and industry through a variety of outreach programs. The Centre for Scientific and Industrial Consultancy (CSIC) and the Society for Innovation and Development (SID) promote collaborative interactions with industry, while the Centre for Continuing Education (CCE) provides an opportunity for working scientists and engineers to enrich themselves academically. The Institute actively promotes programs that encourage bright young school and undergraduate students to undertake research careers.

The Institute's Young Fellowships Program in Science and Engineering seeks to bring young students to the campus in summer. The Institute also administers the Kishore Vaigyanik Protsahan Yojana (KVPY) program of the Department of Science and Technology (DST). The Institute's commitment to socially relevant research is specifically emphasised by the activities undertaken at the Centre for Sustainable Technologies (CST), together with the Karnataka State Council for Science and Technology (KSCST), which is housed on the campus.

The Institute has completed a century of existence. It is poised for a new phase of expansion and renewal. To live and work at the Institute is a special privilege. The faculty, staff and students of the Institute can be rightly proud of its past and optimistic about its future.