

## Snapshots

### Campus Reporter



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### Summer Internships

Students recount their experiences as interns in different environments, during the past summer -pages 4 and 5

### Fee structure

A detailed analysis of the revised fee structure -page 2

### SciTech page

A page devoted to the latest in science and technology, both inside the institute and out. Watch out for the Return of Goel, as our favourite PopSci writer is back with a vengeance! -page 3

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Everyone's favourite page is back, despite ominous rumblings that it might be gone forever. We celebrate with an ode, to Batman! -page 6

### Profspeak

Prof. Gaitonde of the Mech department tells us that while the campus has changed over the years, IITians are still the same -page 8

### Population Explosion- Radhika



The 540 odd acre campus of IIT Bombay is a lot more populated than it used to be. Apart from the 28% increase in the student body size over the past 6 years,

the Institute implemented the first phase of the OBC reservation by offering admission to 9% OBC candidates in all programs without reducing the number of general category seats, thereby admitting a total number of 1734 students. By a similar increase each year, at the end of 3 years, OBC students will form 27% of the entire student community which will itself be 54% larger than it is today. Currently standing at 5505, the population is dangerously close to 6000 – once estimated to be a critical limit given the current infrastructure. “The next two to three years are going to be critical”, in the words of Prof. Mallik, Dean Planning.

### Faculty

The most significant resource crunch that the Institute will face is that of faculty. Before the news of the OBC expansion or faculty reservation broke out, in an unprecedented move, the Institute hired 65 new faculty members- a decision that then reeked of foresight. However, today, when batch strength is projected to increase by over 50% in the next 3 years, maintaining the faculty to student ratio is proving to be nearly impossible. Till date, the Institute

## The Resource Crunch

The overall student intake in 2008 – 2009 has increased by 12.9% from the previous year. Tarun and Sudarshan explore some of the problems this has thrown up.

simply lacks the research facilities, quality of laboratories and salaries to attract post-doctoral students and faculty. “IIT is no longer a glamorous place to teach”, remarks Prof. Shevagaonkar, Dean - Resource Mobilization.

“Funding is simply not an issue”, echoes the Institute administration – but only as far as infrastructure is concerned. The Government, with its rampant orders of reservation and subsequent expansion, never kept in mind the number of new faculty members required to balance the scales. It still maintains its set formula as far as funding is concerned – Rs. 1.7 Lakh per enrolling student. This figure, set six years ago, hasn't even accounted for inflation. For the OBC expansion though, an additional grant of Rs. 10 Lakh per new student (over and above last year's number) has been approved. “We must generate endowments from other sources – alumni and the corporate sector”, says Prof. Shevagaonkar, regarding attracting quality faculty to the Institute.

Although the concept of 'Chair Professorship' was created for exactly the same reason, today there are only 23 Chairs in spite of the

initial aim being 200. The interest from the endowments generated from the corporate sector by these influential Chairs is intended to be used for topping

up salaries.

### Academic Infrastructure

The anticipated rise in the number of students led the institute to plan a Convention centre and a Lecture hall complex opposite the IDC and adjacent to the Physics Department respectively. The Convention centre is set to open in March '09 while the 4800 - capacity Lecture hall complex will take another 18 months after construction commences. In spite of these ambitious plans, Prof. Shevagaonkar predicts that the institute will face an acute shortage of class rooms due to various logistical issues such as scheduling.

### Hostel Infrastructure

The Institute had already planned several student housing facilities as early as 2006. Namely, extension projects of Hostels 12 and 13 and three new Hostels – one behind Hostel 1, and two new hostels beyond the pipeline – were charted on the Institute map. Just the extension projects alone would house an additional 800 students.

(Contd. on page 2...)

## Energy Audit of the IIT Bombay Campus

The electricity bill of the IIT Bombay campus exceeded Rs. 10 crores during the year 2007, which translates to an approximate per

An energy audit of the campus, done by students of the Energy Science department, throws up some revealing facts. Palak, Anasuya and Manas report.

54% which turn off after 20 minutes. 83% of the CPUs in the institute are never turned off! Adopting normal energy saving

capita cost of Rs. 5950/person/annum (Specific Energy Demand) and cost per unit area of 2 lacs/acre. Realizing the gravity of the situation, the students of the Department of Energy Science and Engineering carried out an energy audit of the IIT Bombay Campus under the guidance of Prof. Rangan Banerjee in July 2008. An energy audit is a study of a plant or facility to determine how and where energy is used and to identify methods for energy savings. Their report describes in detail the energy consumption in various areas of the institute and in different sectors of consumption. It also suggests possible steps which can be taken to reduce energy consumption by about 20%. Presented below are some startling facts from their report.

(per kVA of maximum demand during the month). In addition, there is a penalty for low power factor and a Time of Day (TOD) tariff.

power setting for computers saves Rs. 31.1 lakhs per annum.

- IIT Bombay has 14 departments, 10 centers, 3 schools and 4 interdisciplinary programs; about 5300 students, 450 faculty and 1500 supporting staff over an area of about 500 acres. The electricity bill of Rs. 10.2 crores is charged in two parts: first for the energy consumed (per kWh) and the maximum demand charge

- The total rated capacity of the AC load in the institute is 2 MW with a capacity of 1450 tons of refrigeration which accounts for about 50% of the campus contract demand. Measurement of power consumption with an energy saver for each room AC leads to power savings of upto 46%.

- The hostel kitchens and staff canteen collectively consume 106.5 kW. H-1 leads with 11.5 kW; H-10 and the staff canteen are at 5.3 and 3.2 kW respectively. The per capita use of LPG in all the hostels is 5 MJ/ student on an average except for H-1 where it is 10 MJ/ student. The average electricity cost is Rs. 6300 per student per annum and the actual amount paid by the students is Rs. 600 per annum. This amount has now been raised to Rs. 2000 according to the revised fee structure.

The soft copy of the entire report is available at [http://www.ese.iitb.ac.in/Energy\\_Audit\\_of\\_IIT\\_campus.pdf](http://www.ese.iitb.ac.in/Energy_Audit_of_IIT_campus.pdf)

While the Computer Science, Electrical, Mechanical and Chemistry and Chemical Departments dominated the chart on the total energy consumption, the departments of Biosciences and Mathematics also featured among the 'leaders' in the chart for normalised per unit area energy consumption.

(Contd. on page 2...)

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## New Fee Structure

**IITB finally announced this year that it would be increasing its fees. Antariksh and Harish look at the magnitude of and reasons for this increase**

As is well known, the IITs, IIT-Bombay in particular, have been facing resource crunches. In May 2008, the Ministry of Human Resources Development approved a hike in the tuition fees for IIT entrants. The 2008 UG batch will be first one to pay as per the new fee structure which increases the net per semester fees for General Category students from Rs. 25,950 to Rs. 41,550, a rise of about 60%.

The semester fee consists of three parts – Tuition Fee, Institute Fee and Hostel Mess Advance. Under the new structure, the Tuition and Institute fees have been increased. The existing students will only have to pay the increased Institute Fee (the Tuition Fee remains what it was when they entered).

“This semester, the fee payment for existing students has already

been done, so they will be asked to pay the difference between the old and the new Institute Fee sometime during the semester”, explained Shri M K Patil, Deputy Registrar (Academic). “The new fee structure for PGs has some complications which will be sorted out”, he added. The amount that existing UG students will be asked to pay later this semester is not known yet, as the exact structure hasn’t been worked out.

### Freshie Speak

The first year students were surprisingly opinionated about the issue. Although many of them confessed to being unhappy at having to pay so much, most of them acknowledged that the fee hike was a reasonable move.

Kovid Kapoor (CSE) felt that the fee hike was justified but that it should have been done in a step-wise manner.

Prashant Jain (CSE) was of a similar opinion and said the hike must have been well thought out and justified. Nishanth Mundru (Chem) felt the rise was long overdue. Sachin A. S. (EP) made the point that whatever the students are paying as fees can be recovered ‘pretty soon’ after they pass out. This was also the main reason cited by the IIMs for hiking their fees. The astronomical starting salaries of IIT and IIM graduates routinely make it to Page 1 of leading national dailies, and have already been talked about *ad nauseam*.

On the other hand, a few freshmen felt that the rise was uncalled for, and that it was the government’s responsibility to fill up the deficit.

(Antariksh Bothale and Harishchandra Ramadas are sophomores of the Mechanical and Physics Depts. respectively. They can be contacted at [antariksh.bothale@iitb.ac.in](mailto:antariksh.bothale@iitb.ac.in) and [harishchandra@iitb.ac.in](mailto:harishchandra@iitb.ac.in))

## Energy Audit

Contd. from page 1...

Yet another surprise sprang up in the chart for normalised per capita consumption – the CSRE department has a per capita consumption of 4 kWh/capita where the institute average was calculated to be 1 kWh/capita.

Finally, some measures are suggested to lessen the exorbitant consumption. Replacement of Electromagnetic Fluorescent Tube Lights (FTL) in departments saving Rs. 34.8 lacs/year, installation of solar water heaters in hostels saving Rs 49.68 lacs/year and installation of Aircon savers for 1.5 ton ACs saving Rs 21.9 lacs/year are a few of the ideas suggested.

In totality, the mentioned measures, if implemented, could save Rs 1.75 crore (17% of the total electricity bill) with an average payback time of 1.75 years.

In addition the audit suggests the appointment of an Energy Manager and that the Executive Electrical Manager should ensure efficient energy usage on the campus.

**Report: Energy Audit Presentation (LT; 13.8.08; 5:30 PM)**

The Energy Audit team gave a presentation highlighting the main points of the report. They presented some detailed statistics and provided some very feasible and almost zero-investment measures.

A finding worth mentioning is that the energy demand reaches its maximum during March, April, October and November - the ‘endsem’ months when there is 24x7 usage of lights and fans in the hostel. This goes down during the ‘vacations’ (that only B.Tech students have!). A very important point that was raised was that as the usage by students is not accountable, if there are incentives provided to minimise this wanton usage, a lot of wastage can be curbed.

The Dean (Planning), who had graced the occasion, remarked that given a priority list, the planning department would start to implement it. In addition, with the new infrastructure coming up, it is obvious that

### How to Pay? Availability of Scholarships/Loans

Students whose parental gross annual income is less than Rs. 2 lakhs are eligible to apply for the Merit-cum-Means Scholarship. SC and ST students are exempted from paying the Tuition Fee. SC/ST students whose parental gross annual income is less than Rs. 2 lakhs are also eligible for free messing. Students whose parental gross income is less than Rs. 5 lakhs per annum are eligible to apply for Private Trust Scholarships and the IIT Bombay Heritage Fund (IITBHF) Scholarships.

In general, IIT students are considered exceptionally loan-worthy by Indian banks: Allahabad Bank, for instance, offers loans to IIT students on terms that are significantly milder than for other students- for IITians, the prime lending rate (PLR) is 2 percentage points lower than for others. The State Bank of India (SBI) also has special tie-ups with the IITs. Students who require financial assistance can also look to the IITB Alumni Association (IITB-AA), which offers educational loans with subsidized interest rates, zero collateral and flexible repayment options.

## Resource Crunch

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However, the *status quo* today remains as it was three years ago – we are at square one. Owing to BMC restrictions regarding the width and span of the planned overhead bridge to cross the pipeline as well as plans to lay a new pipeline, the extension project and the new hostels behind the pipeline were stalled. The pending geo-technical testing of the land behind Hostel 1 stalled the last of the three projects.

In an attempt to salvage the situation, plans to modify the stilt areas in each wing of hostels 12 & 13 to house approximately 100 additional rooms in all were put into play. These are to be ready in 6 months. Once all these projects are done, the Institute foresees a shortage in electricity, if the dedicated TATA line, currently at 450 kVA, is not upgraded.

All said and done, a massive time-lag exists from the point when the demand of infrastructure in the Institute is recognized, to the point when it is actually realized, much to the frustration of the Institute community. We set out to find the reason for this bottleneck and time-lag – especially with the OBC expansion in mind, and to find out what we could do about it.

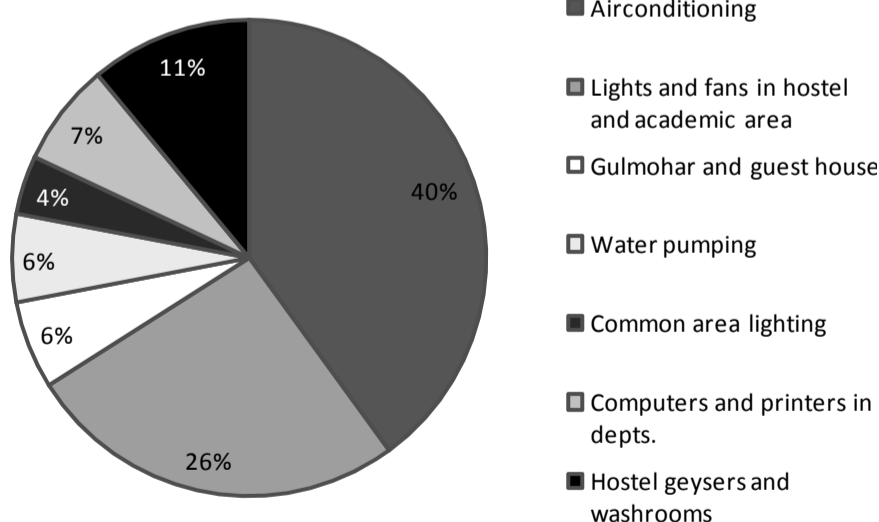
Starting from the roots, the demand and requirements are realized immediately, with a clearly defined chain of command from the Hostel Wardens or Department HoDs

to the Dean Planning and the Building and Works Committee, to the Government. Even though the Government takes time to process the request for funds, the Institute uses its own for the time being, confident that the grant will not be rejected. There exist two problems thereafter. First, the projects on campus are small jobs for the major corporate players in the market, given that we are competing against high-profile projects in Mumbai. Hence, attracting tenders becomes a difficult process. Second, for any construction we require various clearances from the BMC, ranging from tree-cutting permissions and geo-technical inspections to EPA clearances. In most cases, it is the slow dynamics of this entire process that hinder these projects.

It is evident that the Institute plans way ahead of time. Take the GG Building for example – it was well overdesigned to house 120 students in 2004, but batch strength will have increased to 150 after the OBC expansion. However, due to externalities like the BMC regulations, land problems and the like, the planned infrastructure takes a painstakingly long time to materialize. The OBC expansion is just another, although astronomical, externality.

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Percentage consumption of electricity



An annual energy report should also be made and submitted to the Director. Hostels and staff should be given incentives for energy savings.

The energy audit summarises the grave power situation that we in IITB are facing. Those reading this article, please turn your computers off or put them on standby mode when not in use – you’ll be astonished when you realize how much you yourself can contribute!

the power crunch will cut deeper. So, it is important that we become responsible and, to quote the Dean, “optimise our needs but not completely discard our comforts.”

(Palak Ambwani is a 5th year student of the MEMS Department. Anasuya Mandal and Manas Rachh are 2nd and 3rd year students of the Chemical and Aerospace Departments respectively. They can be contacted at [palak\\_a@iitb.ac.in](mailto:palak_a@iitb.ac.in), [anasuya@iitb.ac.in](mailto:anasuya@iitb.ac.in) and [manasrachh@iitb.ac.in](mailto:manasrachh@iitb.ac.in))

# inPsiight

## The Second Big Bang?

Ashish Goel takes us on a dizzying ride into the world of the Large Hadron Collider, and shows us how modern science is fast catching up with science fiction

If things go according to plan, towards the end of this year, we shall witness probably the most significant man-made explosion ever- The Large Hadron Collider, popularly known as the LHC. It can be understood as a long circular tunnel in which magnetic fields will be used to accelerate hadrons (for example, protons) up to speeds of 0.9999c. Energetic hadrons travelling in opposite directions would collide and reveal numerous secrets of the physical world. Let us see why the entire scientific community is so excited about this project.

**Higgs Boson:** Higgs Boson is a hypothetical particle which, if it exists, would give the mechanism by which particles acquire mass. Higgs Bosons are postulated to be everywhere around us. It is said that particles like electrons are inherently massless and the reason why we find them massive is that we always perceive their effective mass, borne out of their collisions with the Higgs Bosons. Now in many ways, unification can be understood as an attempt to explain the disparity between the strong electromagnetic force and the weak gravitational force. By considering an inhomogeneous distribution of the Higgs Boson in the fifth dimension, theoretical physicists have been able to account for the difference in the magnitudes of the gravitational and electromagnetic forces. Discovery of the Higgs Boson can be regarded as one of the most significant goals of this mission.

**Higher dimensions:** We know that the aim of String Theory is to unify the fundamental forces of nature by postulating that strings are the fundamental constituents of every particle in this universe. But while we perceive ourselves as creatures in a 3D world, the mathematical formulation of String Theory demands that spacetime has 26 dimensions (degrees of freedom). Through considerations of symmetry, we can bring this number down to 10. Considering the fact that we perceive only four dimensions (3 for space and one for time), the question that we now need to ask is: Where are the remaining 6 dimensions? It has been postulated that the remaining 6 dimensions are curled up in a space too small for us to perceive. The scales of the higher dimensions are too small for us to measure, given our current level of sophistication. However, we know that wavelengths and distances scale as the inverse of energy and if we can generate enough energy, we might be able to enter the realm of the fifth dimension. This is one of the objectives of the LHC. We'll however need bigger particle accelerators to delve into the higher dimensions.

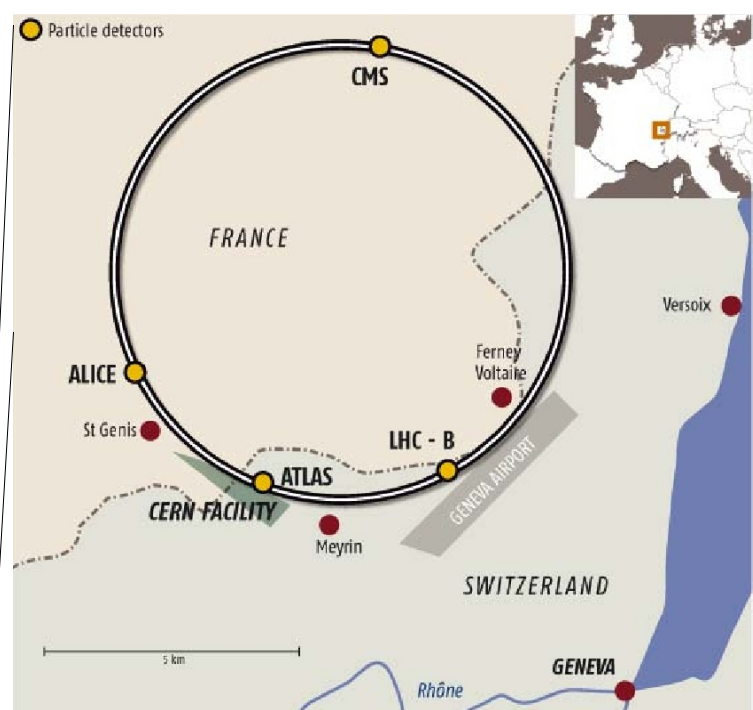
**Other issues:** Thanks to the amount of energy that the collisions will generate, the scientists will be able to create conditions very similar to what they believe to be the state of the universe just after the Big Bang. The LHC will also be looking for to understand the nature of dark matter. Calculations tell us that 96% of the universe is made up of dark matter and dark energy. Though the Big Bang is supposed to have created an equal amount of matter and antimatter, antimatter makes up only a tiny fraction of the universe today. The LHC would also be trying to find the reason behind this apparent contempt of nature for antimatter. In brief, the LHC will be addressing numerous pivotal issues of fundamental physics. So make sure you stay up to date with the latest developments and keep your fingers crossed.

- Ashish Goel is a fourth year student of the Engineering Physics Department

The LHC would be the largest machine ever, with a circumference in excess of 26 km.

The LHC would represent the emptiest space in the Solar System. In order to avoid collisions with gas molecules inside the accelerator, the internal cavity would be as empty as the interplanetary space.

While the colliding beams would generate temperatures 10,000 times hotter than the core of the sun, the cryogenic system, with more than 10,000 tons of liquid nitrogen and liquid helium, would maintain the temperature of the LHC at 1.9K, which is lower than the temperature of outer space.



The experiments would generate 1 million gigabytes of data every year and thousands of computers around the world would be engaged in analyzing the data obtained over the next 15 years through grid computing (The expected lifetime of the LHC).

## 'Live Project' - Biosynth

The establishment of a biodiesel plant at IITB

In keeping with the growing need for alternative sources of energy, the Department of Chemical Engineering is to set up a biodiesel plant in IIT under the aegis of Prof Sanjay Mahajani and Prof Madhu Vinjamur. The plant will be completely designed and operated by students – a once-in-a-lifetime opportunity for the team members to build a plant from scratch.

The Department seeks enthusiastic and dedicated members to form the team that will be in charge of the operation and management of the plant. Liaisoning with industry for procurement of raw materials and technical assistance, operation and optimization of the plant, maintenance, safety and quality checks as well as budgeting and keeping accounts are some of the responsibilities. Selection of members begins soon for the teams of Research and Development, Materials and Planning and Design and Production. About 1000 sq. ft. of land has been leased for the setting up of the plant and the first phase involves finalising the process flow diagram and fabricating it so that the plant can be set up.

Even though the production of biodiesel is currently not economically viable, the institute has allocated Rs 30 lakh to this project as the educational value of the project is immense. The project, in its later stages, may be utilized to enhance the understanding of principles taught in the core courses of the Chemical Department and also to accommodate students for projects and internships.

The team aims at making biodiesel a commercially viable product in the future, maybe even to partially meet the electricity needs of IIT Bombay, and later to set up more such plants for electrifying rural areas. Reputed universities like MIT and Penn State already have such running plants in their campus. With the grim power situation we're currently facing, such a plant, if successful, will be very useful.

- Anasuya Mandal is a second year student of the Chemical Engineering department.

## Questech

0. The increasing sequence 1, 3, 4, 9, 10, 12, 13... consists of all those positive integers which are powers of 3 or sums of distinct powers of 3. Find the 100th term of the sequence.

1. Consider N petrol bunks on a circular highway. A car is to start with zero petrol from one of the bunks and travel around the circle, returning to its original point. The petrol is distributed among the bunks in such a way that the total amount of petrol available in all the bunks is exactly sufficient for the car to make a single loop of the highway. Prove that there always exists a choice of the starting bunk such that the car will be able to complete the loop. One solution is put up on our website. We would like you to give us an inductive solution.

2. There are N parking slots numbered 1 to N. There are N cars, labeled C1 to CN. Given a sequence  $\{a_1, a_2, \dots, a_N \mid 1 \leq a_i \leq N; \text{ for } 1 \leq i \leq N\}$ , car C<sub>i</sub> goes to the a<sub>i</sub>th slot and parks the car there if it is not already unoccupied, otherwise it parks in the next higher unoccupied slot. It can happen that the car never gets to park at any slot. Find the number of sequences  $\{a_1, a_2, \dots, a_N \mid 1 \leq a_i \leq N; \text{ for } 1 \leq i \leq N\}$ , such that all cars are parked in some slot.

-Anup Rao is a fourth year student of the Engineering Physics department

Mail your answers to [vaibhavdevanathan@iitb.ac.in](mailto:vaibhavdevanathan@iitb.ac.in) or [raoanup@iitb.ac.in](mailto:raoanup@iitb.ac.in). Early and correct entries get a treat at the Coffee Shack.

## Editorial

Note: This is NOT meant to be a preachy editorial. We are not saying that we're better than anybody else. We are merely expressing an opinion that IITians should be more socially responsible, and are pointing out laudable examples where IITians have made a difference to society.

IITians the world over are respected, not actually for their brain power or their exceptional ability, but rather for what these qualities could mean to society. To quote, well, Spiderman's Uncle Ben, "With great power comes great responsibility". Such power is ours and we certainly wield it with abandon. What then, of the responsibility?

Fortunate as we are, we owe a larger debt than usual to our peers, society and country. Unfortunately, most IITians appear to be quite unconscious of this responsibility. What is the use of education, if even during an energy crisis students still leave their fans, lights and comps on when they're at class? What is the use of world class facilities when copious amounts of food are wasted in hostel messes every day, as millions of people elsewhere starve? The simplest way of justifying the faith placed in us, is by setting an example. There is no necessity for grand gestures - you don't need to join politics or donate half your earnings to charity. But the little things - stuff like not littering or turning out lights, those are what count, and those are the things we so often neglect.

Still, while most IITians aren't as yet awake to their social duties, some are doing even more than their bit. Cases in point are Junoon - the now Sophie awareness group, the Environment Activism Committee set up last semester and Vidya, an offshoot of Umang, the NGO set up by Mrs. Rashmi Mishra - under which many IITians devote their afternoons to teaching underprivileged children.

Junoon - the club started by freshies last year, created quite an impression when it first began. These young people actually let their work do their talking, organizing tree plantation and cleanliness drives. In an age of cynicism and posing, to see IITians actually taking such initiative is inspiring, to say the least.

The Environment Activism Committee began with a few faculty members questioning the felling of trees in the campus. In time, the committee has grown to include students and has widened its scope to not only to keep a track of the trees on campus, but also to explore options like generating biodiesel from shed leaves.

Umang, an NGO set up nearly 20 years ago has an offshoot named Vidya, right here on the campus. Under Vidya, underprivileged children are coached every afternoon in academics and several vocational skills. Several IITians including passouts number among the teachers.

These are just three of the many initiatives IITians participate in, doing a great deal of "quiet good". Whenever one feels cynical or jaded, it does a great deal of good to remember the work these people are doing. If more of us embarked upon initiatives like this, think of how much we could do. Instead of stirring ourselves to protest only when we hear of a reservation or a LAN Ban, if we diverted a little of that energy to do some good, think of what we could accomplish.

In conclusion, let's just say that while we're certainly not saying you need to suddenly become a social crusader or fight against injustice; the next time you leave your room, do turn off the light.

As you can see by the number of this issue, InslghT has just completed ten years of existence. As we step into the new decade, we feel keenly the importance of reaching out to more and more people. One way we thought of doing this was by Campus Reporter, the revolutionary new competition in which you can win money every fortnight just by reporting Institute events! Full details on Page 8.

In our second decade, we must make the transition from a print-only newsletter to a full-fledged media body. To that end, we have put up Bulletin Boards at the Bhavani Juice Centre and the Staff Canteen. These will bring you news on a day-to-day basis. We have also revamped our website, and we urge you to visit it for news archives, video interviews, and Campus Reporter.

### Sophie Foreign Research Internship

Aishwarya Sharma, 3<sup>rd</sup> year, Mechanical Engineering  
Place of Internship: Brown University, USA

An internship, if done diligently, is an ideal way for sophomores to apply and to enhance their engineering know-how. Buoyed by their seniors' experiences, most sophomores look forward to engaging themselves in a project over their summers, with a university abroad being their preferred destination. Is interning abroad better than interning in India? That's debatable. What isn't, is how different one would find the work scenario. From how research groups function to the prevalent social dynamic, students gain valuable insights into the career choices that lie ahead and grow as individuals.

#### The Process

Self assessment of one's interests is the best way to start - it makes sense to spend three months following an already grueling semester doing something one likes. Identify faculty members and their research areas by visiting university web pages, and try and design your application (cover letter + CV) to convince someone you'd like to work under to take you on.

Instead of simply stating your credentials and how motivated you are, a bit of background reading about a given group's research activities would put you in a better position to elaborate on how you'd fit in and contribute to said activities. A more time consuming process than generically "spamming" every professor you encounter online, yes - but way more effective. Your application can be strengthened by citing certain "references". These words of backing have to be earned, so chasing every IIT professor for a letter of recommendation may not work. Speaking to seniors is also a good idea, especially concerning the paperwork and other formalities involved. With your application all set, establish contact with a professor abroad via email, and wait for his reply.

#### Still waiting for that reply?

Financial support for a research group's activities comes from grants secured by a professor via funding by government agencies like the NSF or NIH, or private collaborations. It becomes a bit of a gamble to completely support a relatively "inexperienced" sophomore, who isn't expected to make significant breakthroughs in a short duration of 3 months. Most universities abroad have a well established undergraduate research program in place. The professors are further spoilt for choice, as they receive hundreds of emails every week from students in China, South Korea and Europe, who are often self-supported. However, most professors who've worked with IITians, both as their post-grad students as well as interns, hold them in high regard. It thus becomes essential for interns not to hamper their juniors' prospects by underperforming or slacking off.

#### What you do once you get there

One would be expected to master the learning curve rapidly and update oneself by reading relevant research papers. A sophomore's role in a project could range from design and modeling, to experimentation and analysis of the data obtained. Now, a professor would want the maximum bang for his buck, so anticipate long working hours and periodic progress reports. A monthly stipend is the remuneration one receives. Understanding the existing administrative and social system by interacting with people around would be a constructive way to spend one's free time.

#### Finally

Even though it's the most popular, several options exist outside of the US, most notably in Western European nations like Switzerland and Germany. Although a big name university might provide sizeable resume value, for those who cherish the learning experience it really wouldn't matter. The sophomore summer is thus the ideal time to do an internship abroad, as a student returns better aware of his interests, and better equipped to pursue them. A paid vacation, this certainly isn't.

### Applying for a foreign univ internship? Here are some DOs and DON'Ts

- DO**
- Start early. August-September is perfect.
- Have a good CPI, preferably >9. Like it or not, it's the first thing they'll notice.
- Have some prior research experience, such as a project in the freshman summer or a UROP.
- Have a convincing and grammatically sound cover letter
- DON'T**
- Randomly spam every professor. Background research about his activities is a must
- Send superlative-laced recommendations. A reference and contact details are enough.
- Spend space highlighting your coordinator/organizer experience. A better option would be elaborating on your previous projects.

### Rural Internship

Manas Rachh, 3<sup>rd</sup> year, Aerospace Engineering  
Place of Internship: Villages in the Vidarbha district

Imagine this situation. A population of over one thousand people receiving a water supply of only 1,000 litres (the normal requirement would be 50,000 litres) living in a place where there are power cuts of at least 14 hours everyday. There are no wells in the vicinity, no sanitation facilities, hardly any connectivity to the outside world and no form of public transportation to get to the place.

This is what you will face on a rural internship. It is not easy, but it is challenging. Also, the motivation to do a rural internship can come either from a very real desire to help at the grassroots level, or to build up the 'social service' part of your CV while applying for higher studies abroad.

I got the opportunity to study village life in the Vidarbha region of

Maharashtra over the summer thanks to iVolunteer, an organization which allocates students to NGOs working in rural areas. Another good way to apply for a rural internship is through the GRA (the Group for Rural Activities).

The typical work an IITian would be called upon to do is teaching things like English and basic computer skills. However, to teach effectively, one must first integrate into the society of the village and understand the problems of the villagers.

The biggest problem is the lack of education and awareness. Most of the villages have an *anganvadi* (Primary school) where they teach only up to the fourth grade. For higher education there is a common school for about 20-30 villages, and this means that most students have to walk about 3 km to get to school everyday. Only one in a batch of 100 pursues higher studies - and the situation for girls is even worse.

We as IITians can help in the villages - teaching comes naturally to us. So, if you're interested in doing such work, do look out for the posters publicizing iVolunteer and GRA.

### Foreign Industrial Internship Checklist

Gautam Salhotra, 4<sup>th</sup> year, Mechanical Engineering  
Place of Internship: Siemens, USA

1. Companies accepting interns from abroad are generally very big, and have a lot of applications for internships. Make sure your application gets the attention it deserves.
2. If applying to the US, a visa application will take much longer than a Schengen/Swiss visa. Keep a good margin for this. Remember - book your tickets early for better prices.
3. Travelling on weekends can be a great relief from work, but keep an eye on your wallet! Make sure you have your student ID with you wherever you go - you might get a discount!!
4. Companies may not provide you with accommodation, airfare etc. They will probably give you an hourly wage, and you have to arrange for everything. Mailing your supervisor or the HR people will not help.
5. You should expect tax cuts on your pay check. Remember to file for tax returns. This might be delayed, so you have to make arrangements to get your money after you have left.

## We Know what you did last Summer

InslghT interviews people who've done just about every type of summer internship, and brings you expert advice both on how to apply and the exact nature of work involved

### Indian Financial Internship

Rahul Dash, 4<sup>th</sup> year, Electrical Engineering  
Place of Internship: ICICI Securities, Mumbai

So the third year vacations arrive somewhere near the horizon and the dreaded thought that you have been trying to avoid for a major portion of your life strikes you : What do I want to do once I graduate? Once you vaguely figure that out, the turbulence changes form into: What sort of an internship should I do which would help me to do that? And the answer is not easy.

Partly because of the hefty pay-checks that are normally associated with it, partly because of the glamorous lifestyle projected in the media, finance in general and investment banking in particular is a huge favourite amongst fresh graduates from the topmost schools in the world.

#### The Choices

So in order to gain entry into an organization which breeds smartness and comes looking for it to IITB, how do you gain any sort of an upper edge? The answer is: A properly selected internship. There are many excellent organizations that you can do an internship at. There are the international powerhouses like Goldman Sachs, Merrill Lynch and Morgan Stanley and there are the Indian market rulers like ICICI Securities, Kotak et al. I had applied at quite a lot of these places, and finally got a chance to work at ICICI Securities, Equities Trading Research desk, Mumbai.

#### The Work

You probably don't know what that means. Well, basically, the work involves finding out trading strategies for various stocks. In simpler terms, you find out a way to buy and sell shares of a particular company for a particular time period so as to earn the maximum possible returns. The other work I did involved doing something known as GARCH modelling of stochastic volatility, which involves the usage of a fair amount of knowledge of partial differential equations, probability, stochastic calculus and MATLAB, which are considered to be the forte of any IITian (funny, but true).

The investment banks that come looking for internships to IITs look for students who would like to work mainly in their IT/Technology department (UBS being an exception). This job involves mainly coding related work, with a financial outlook to it. The other place where I-Banks provide internship opportunities is in the Research division. And by research, I mean mainly quantitative research. So your mathematical skills and programming skills (to an extent) are tested here.

#### Getting in

So if it not the work that makes a financial internship difficult, what is it? It turns out that the toughest part is getting in. Personal contacts are the best way to get an internship in an I-Bank.

Investment Banks mainly take in applications for summer internships till January the same year. This is of course subject to company specific variations. The process includes resume screening followed by one or two rounds of interviews. A combination of your academic performance, mathematical aptitude, communication skills and extra-curricular activities are reviewed during the entire process. Once you land up in an organisation by some amount of luck like I did, the most important thing is to make the best use of the opportunity. And by that I not only mean slogging, but slogging smartly. Try and make contacts/friends that would help you later in your career.

The information provided above is a much reduced version of what you actually need to know in order to seriously apply for an internship at a good financial institution. The real picture becomes a bit clearer once you talk to a lot of people who are already working full time at these institutions.

### Indian Industrial Internship

Vaibhav Devanathan, 4<sup>th</sup> year, Engg. Physics, Parasvil Patel, 4<sup>th</sup> year Electrical Engineering  
Place of Internship: ITC factory at Haridwar/ITC HO at Kolkata

With a number of career options to choose from, every student wants to make sure that he/she makes the right choice and the path that he/she has chosen is the best for him/her. A summer internship will go a long way in finding a solution to this problem. It is an ideal opportunity to explore various industry sectors and apply the theory that we have learned in class. If you have an interest in hands-on work; if you want to see how concepts are actually put into practice then an internship on the shop floor might be ideal for you.

#### The Process

Department specific companies like Google and Texas Instruments are contacted via the PT nominee of the respective department. On the other hand, companies from various sectors like FMCG (ITC and P&G) and oil (Schlumberger and Transocean) recruit interns through the placement body. The selection process usually includes an initial resume based shortlist followed by GD and PI sessions.

#### Our Experience

Vaibhav was placed in the personal care products division of ITC at Haridwar (in a factory) and Parasvil was at the ITC Head Office in Kolkata. Life in a factory is different from anything you would have done before - the two major differences are that you get to do hands-on work (for example, fabrication/design of machine parts) and that you usually have to work long

hours. Though the long hours might initially seem daunting, the sheer amount that you learn and the diversity of the people you interact with on a daily basis make it worth while.

Life in the corporate world is, again, very different from student life. One is expected to be formally dressed, polite in conversations and punctual with respect to all appointments. Most interns work on projects which are of immediate importance to the company.

#### The Projects

The initial period of any project is spent in learning - in acquiring basic concepts and learning how to apply them. The real difficulty is faced in applying these concepts and overcoming the constraints that one faces on the way. Interns give a final presentation on their project. Unlike in the academic world, every intern is judged absolutely and the achieved results are evaluated objectively.

All in all, an industrial internship will make you appreciate the intricacies involved in the practical implementation of theoretical knowledge and give you some idea about the life that you would be living after graduation. For the confused souls, this is a golden opportunity to explore various sectors and opportunities.

# WHY SO SERIOUS?

Imagine how it would be if famous events from history had been reported in the same style as those writing on IITB hostel notice boards use.

Now, imagine how it would be if famous events from movies or sitcoms were reported on our notice boards.

## Notice Board

India @#^%\$ West Indies with cricket bat

Room No 181, Veerappan, please report to Police Station for passport verification

In view of the spreading Bubonic plague, all first year, second year, third year, fourth year and fifth year students of B. Tech, Dual Degree and 5 yr Integrated MSc Chemistry courses are hereby notified to vacate their room at the earliest possible. If you wish to retain your room to work for Mood Indigo, Techfest, or the Student satellite program, please inform the Hostel warden. And oh, best of luck.

All Freshies, come to Jallianwala Bagh

Phoolan Devi, Room 420, please pay your mess advance by 15.8.08, and release Mess Manager immediately  
Crossy junta please assemble at PA for Dandi March

Nagasaki craxxx atom bomb

## N.O.T.I.C.E B.O.A.R.D

FOUND ONE RING WITH INSCRIPTION: ONE RING TO RULE THEM ALL... SAURON  
PLEASE COLLECT FROM FRODO

JOKER  
CRAXXX  
BATMAN

Forrest Gump, come to PA.  
Crossy practice starting

SPARTANS ALL TEAM MEET AT LT AT 0.300 HOURS.  
MEET WILL BE FOLLOWED BY DINNER IN HELL.

JASON BOURNE HAS LOST HIS IDENTITY. IF ANYONE FINDS IT PLEASE INFORM THE WATCHMAN

MA 105: MATRIX TECHNIQUES TO SOLVE REAL WORLD PROBLEMS. LECTURE POSTPONED DUE TO DEATH OF PROF. SMITH

\* Electrician Cartman, light not working in ROOMS 213-219  
- SCREW YOU GUYS, I'M GOING HOME.

- AND BY THE WAY, IT TAKES only one CARTMAN TO SCREW IN A LIGHT BULB



## Which Dark Knight character are you?

1. Have you seen the movie?  
a. Yes  
b. No

If no, you are the first joker clone who got killed by his partner in the bank robbery; he also hardly got to see any of the movie.

2. Your professor is scolding you for coming late to class. You -

a. Ask him 'Why so serious?'  
b. Put a smile on his face  
c. Show him a magic trick  
d. Give him your card

If you answered the question at all, you are The Joker.

3. What do you do during lectures?  
a. Sleep, because you were up all night, delivering justice  
b. Sleep, because it's the natural thing to do.

If you answered 'a' you are Bruce Wayne.

4. Did you toss a coin to answer the previous question?  
a. Yes  
b. No  
If you answered yes, you are Two-face.

5. Have you been to the top of GG building on a rainy night?  
a. Yes  
b. No  
If yes, you are Batman.

If you did not fall into any of the character categories till now, you are a very forgettable personality, just like the woman in Batman, called um..., Rachel?

**MERA NAAM JOKER**

HEATH "LEDGER CLOSED"  
MAGGIE "TWO-MINUTE NOODLES" GYLLENHAAL  
CHRISTIAN "SUPPORTING ACTOR" BALE

No, I kill the camera-man  
Then what we waiting for?  
Pepperoni, I hope  
Definitely worth the wait  
He he he, I already killed the camera-man  
Oh, I ordered pizza for two  
Yeah, and if he doesn't reach in another 73 seconds, we get it FREE!

Mera naam hai joker, Main kheita hoon poker  
Main hoon joker card, I'm stuck with this stupid retard

MORE DARK KNIGHT SPOOFS AT ↓

GAUTAM 'THE GOOD' HAZARI  
EESHAN 'THE BAD' MALHOTRA  
VAIBHAV 'THE UGLY' DEVANATHAN  
CHRIS 'ME TOO' NO LAN

## IIT GN

Tejal, Sudarshan and Parasvil spoke to Prof. Yajnik, who is currently in charge of the new IIT Gandhinagar. Excerpts from the interview...

IIT Gandhinagar, presently mentored by IIT Bombay, has enrolled 91 students for the four year B. Tech. courses in Chemical, Electrical and Mechanical engineering. While its promised 300 acre campus is up coming, it has started running as of August 2<sup>nd</sup> at the Vishwakarma Government Engineering College as its provisional campus. An interview with Prof. Yajnik (Department of Physics – IIT Bombay), currently in-charge of IIT Gandhinagar, provides some insights.

### What is the course and fee structure?

IIT Gandhinagar will be following the same fee and course structure as that of IIT Bombay until the administrative body of the new IIT is in place.

### What is the total faculty strength?

With the faculty comprising four professors from IIT Bombay and one from DAIICT, five research scholars have been additionally hired as Research Assistants. Faculty strength will be gradually increased by hiring new faculty at standards similar to those followed by IIT Bombay.

**The inaugural batch of IIT Gandhinagar, which includes 8 girls, has students with AIRs in the range of 2500 to 3800**

### What are the academic facilities available on campus?

The library is being stocked with books that would be required by first year students, and online subscriptions to various databases are being arranged. The Chemistry lab is being set up as well, the equipment for which has been ordered and will get installed soon. There are two lab assistants and four teaching assistants coming in from IIT Bombay. Computer facilities are also available with one computer being shared by 2 students. Internet facilities will be made available soon.

### Are the hostel and medical facilities provided within the campus?

The hostel block is across the road from the campus while the mess is in the campus itself. There is a visiting doctor on campus every day. Further, there are many hospitals close by.

### Are there any plans for establishing a student council and clubs?

There are plans to collaborate with IIT Bombay for cultural activities. This can be done by an exchange of students with IIT Bombay. Someone from the Student Gymkhana might be invited to help organize extracurricular activities.

While Prof. Yajnik thinks that things have been very well set up, he wishes that students and teachers could spend quality time together and not just limit interaction to formal instruction. Currently doing everything from setting up the academic programme to the hostels, IIT Bombay will mentor this institute until the HRD Ministry appoints a Director and Council.

(Tejal Bhamre and Sudarshan Bhatija are 2nd and 3rd year students respectively, of the Physics Department. Parasvil Patel is a 4th year student of the Electrical Engineering Department. They can be contacted at tejal.bhamre@iitb.ac.in, sudarshanb@iitb.ac.in and parasvil@iitb.ac.in)

The Undergraduate programme of IIT Bombay has undergone a significant revamp as per the recommendations of the Biswas Committee (chaired by Prof. S. Biswas, Dean, AP). The concept of Minor courses, one of the Committee's most novel recommendations, is being implemented for the first time with the present sophomore batch. The courses were allocated in a JEE-esque manner, with CPI (Cumulative Performance Index) being the criterion for ranking students. What makes it all the more interesting is that the choices for the subjects were not made with any previous patterns/biases in mind (unlike the branch selection after JEE).

The Minor course allocation data this semester (released as what seems like an exercise in transparency) threw up several interesting results. A total of 339 students applied for a Minor course. Although it was largely anticipated that the Computer Science and Electrical Engineering courses would be the most sought-after, the dark horse turned out to be the course offered by SJMSOM: Operations Management (MG 607). 25 out of the top 50 rankers by CPI in the 2007 batch chose the Management course, and all 40 seats were filled up by Institute Rank 91: the closing CPI was 8.76. MG 607 was also the first preference for an additional 107 students. Though individual reasons varied, the general sentiment in the MG 607 class is that Management skills are essential in any discipline. Some people had more well defined reasons. "I want to enter the corporate world at an earlier stage with a start-up of my own, so management is a very important aspect because it teaches you to lead, not to follow", asserts Amrose Birani (CSE).

The other course that was opted for by a surprisingly large number of students was EN 301: Introduction to Renewable Energy Technologies; all 40 seats were filled up. Says Ritika Goyal, a 2nd year EE student, "The course is about renewable

## Minors- An Analysis

The current sophies had the opportunity of choosing from among 17 institute-offered minors. Antariksh and Harish analyze what they picked and why.

energy technologies, which are relevant to my main discipline (EE)". The popularity of EN 301 has also been matched by the response to the newly-introduced Energy Engineering Dual Degree Programme for this year's UG entrants, which closed at JEE AIR 1394 for the General Category.

The current first year batch also seems to be enthusiastic about the Minors system.

The prescribed maximum class size for each minor course was 40. (Maths & Statistics were exceptions with each admitting only 20 students) Of the 15-odd courses being offered in the Minor slot, all seats were filled only in the following courses (closing CPIs given in parentheses):-

MG 607	Operations Management	(8.76)
CS 207	Discrete Structures	(8.28)
EE 221	Digital Electronics	(8.16)
SI 417	Probability Theory	(7.42)
MA 403	Real Analysis	(5.78)
EN 301	Introductions to Renewable Energy Technologies	(5.43)

In total, 339 students out of a batch of ~540 applied for Minor courses. Of these:

164 students got their first choice,  
72 got their 2<sup>nd</sup>,  
35 got their 3<sup>rd</sup>,  
33 got their 4<sup>th</sup>,  
5 got their 5<sup>th</sup> and  
1 got his 6<sup>th</sup>.

21 students couldn't be allotted a course because of low CPI (the lower limit is 8.00 for DD students) or because they had accumulated more than one backlog. 8 weren't allotted a course because all the courses that they'd chosen were full.

"The new curriculum is pretty light and flexible and gives us greater control on our time" says Sankalp Agrawal (MEMS).

### Registration Hiccups

This being the first time Minor courses are being run, not everything happened as smoothly as it should have. Even at the end of the Spring '08 Semester, nobody was quite sure what the registration procedure was going to be. The Dean (AP) even stated that students might have to come back to the Institute a few weeks into the summer vacation expressly for the purpose of registration. Also, sometime in early May, the Academic Office released a form which students were supposed to fill in with their Minor course preferences, get the signature of their faculty adviser and parents and submit by the end of the month. This resulted in a minor panic in student circles- as anyone who has tried making railway reservations during the summer rush knows, getting to and from Mumbai at such short notice is wholly nontrivial and impractical.

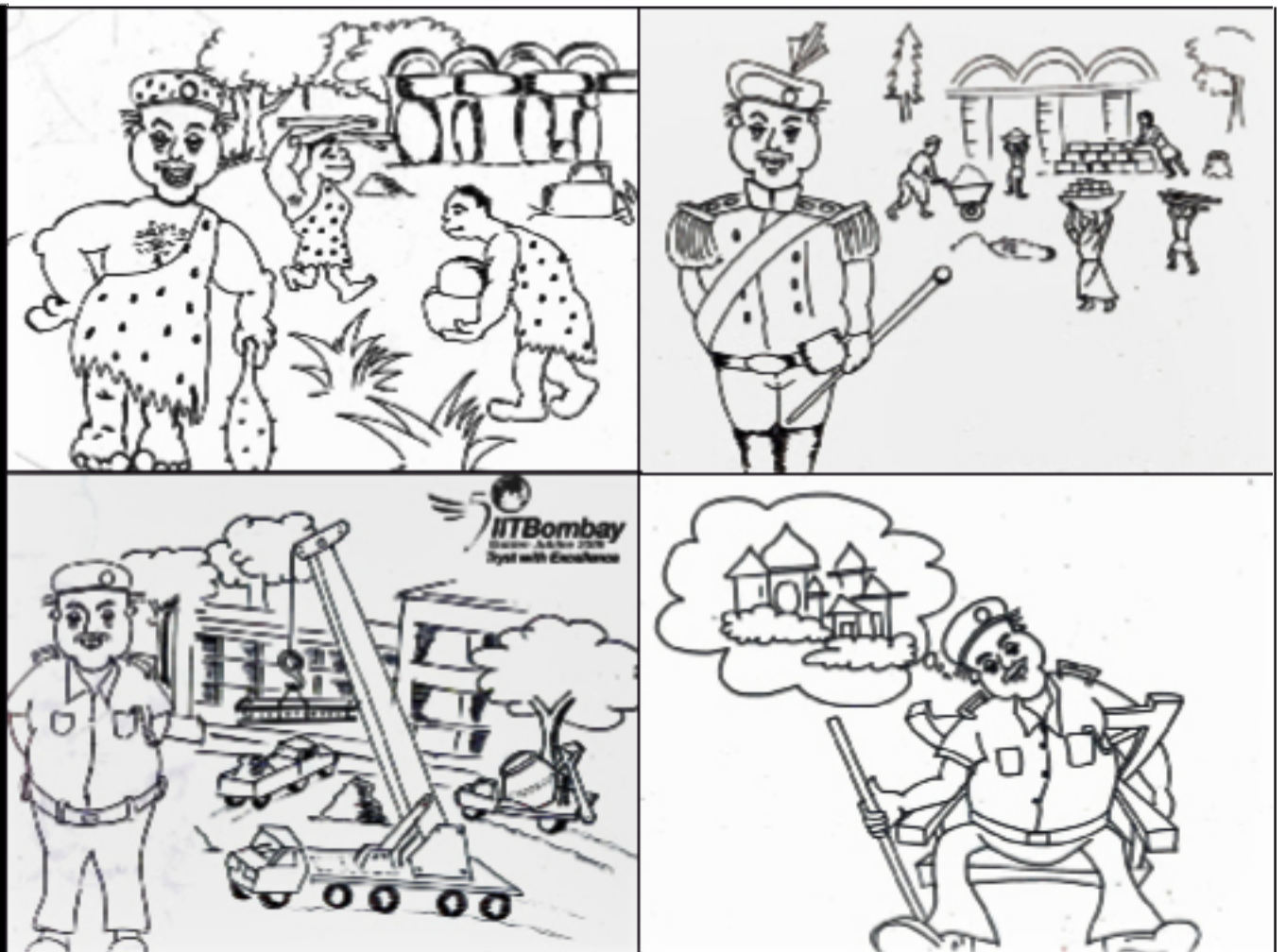
Thankfully, soon enough, the ASC released an online interface for Minor course registration, accessible even from outside the IITB network. (The Academic Office promptly took the old registration form offline.) Exact details of which courses were being offered by each department were made available less than a week before the registration deadline.

Further, the entire allocation list had to be updated when it turned out that a CS B.Tech student had opted for the CS Minor Course! This had a cascading effect, which finally resulted in a few people's courses being changed.

All in all, however, the general consensus is that, considering that it was the first time the Minor system was implemented, the process worked fairly smoothly.

(Antariksh Bothale and Harishchandra Ramadas are both sophomores of the Mechanical and Physics Depts. respectively. They can be contacted at antariksh.bothale@iitb.ac.in and harishchandra@iitb.ac.in)

## The Watchman- Never-ending Constructions



## Prof Speak

1. Having yourself been an undergraduate at IITB, we would be really interested in learning about five ways in which IITB has changed over the years, and your views on whether these changes have been for the better or for the worse.

Having spent 37 of my 57 years on this campus, it is natural that Insight wants to talk to me about 'things at that time'. IITB must have changed in N different ways, but I will restrict myself to N=5.

- The campus has become very green. In 1968 (Hey! it is 40 years since I came here as a UG student on 01 July 1968!) I could sit in the staff canteen and see the whole Gymkhana, and into my wing of Hostel 5. The hills were barren, and there were no leopards visiting us. There were a large number of mongooses, though.
- The number of students has increased tremendously. So have the number of structures. All of us UGs (all 5 years) could fit comfortably in the Convo Hall. The number of profs were around 300. And I believe there was more interaction (academic as well as personal) between students and profs.
- There are now many other activities than academics. Also, there are more channels of entertainment and leisure. Add to this the fact that most students are not from Mumbai city (or linked directly to someone in Mumbai). The campus is more lively, in those days it was almost dead over weekends. During my PhD days (1973-1977), I remember once traversing the whole of the corridor from the library end to the physics end without crossing a human!
- Academics have changed a lot. We now have many electives, many cross-disciplinary programmes, even two-in-one degrees. During my BTech, we just had three electives in the fifth year. Everything else was strait-jacketed. Also, the evaluation has become more student-friendly.
- The way IITians look at themselves and the way others look at IITs and IITians has changed. Forty years ago, we came to IITB because it seemed it was a very good engineering college. Many people outside did not even know about it, and did not grant it the status of a good engineering college. There was no talk of 'world-class' or 'IIT brand', nor of 'packages' at the end of our studies. The JEE was not the monster it is now, it was just an examination of four papers over two days that one had to write.

2. Can you tell us about the differences in study patterns among undergraduate students then and now?

**Prof. U.A. Gaitonde of the Mechanical Department kindly consented to answer a few questions for us, and his answers prove that most professors do think better of students than perhaps the students themselves believe**

During my UG days there was hardly any activity on campus except academics and the gym (there was no SAC then!). TV came only during my final year, and hence we had a lot of time with us. Life just outside the campus was almost non-existent. I am sure many of us studied to kill boredom! It was not uncommon for a few students in a wing to group together and solve all the problems in Thomas/Kreyszig/Resnick-Halliday. We had time on our hands, in spite of attending seven courses and four/five labs each semester. We even had 'labs' in such courses like English and Mathematics. Tutorials were then in groups of no more than 20 students, and it was here that there was tremendous interaction between students and tutors (who were profs - there were no PG TAs then).

3. To give this interview a wider scope and to cater to the PG readers as well, it would be great if you could give us an insight into the life of a postgraduate student then, and how it is different now.

My experience is only that of a PhD student, although I have watched my MTech hostel-mates at close quarters. The life of a PG at that time was different because he/she did not have to do any TA work, but otherwise the programme structure was not much different. The number of courses was more, but the intensity was less. There were hardly any computing facilities on campus - the first machine which could take care of much of the campus load, EC-1030, was installed in 1975-76. So, students who had to use a computer for their projects had to travel all the way to TIFR for the use of the CDC-3600 there.

4. All the students would be really glad to have an inside look into the grading patterns followed at IITB. In particular, we hope you can tell us how you grade your classes, and what other systems of grading are used by professors.

I could go on and on on this! The letter-grade schemes and continuous evaluation commenced sometime in the early seventies. The grading system initially had 4 grades

(A, B, C, D). Then, when the 4-year BTech programme commenced in 1981, we moved to the 7-grade (AA, AB, ..., DD) system. I remember that this was at the request of many student representatives, who thought (wishfully) that this might lead to an increase in CPIs. Students expected the grade B to split into AB and BB, etc., but what happened was that AA became a rather exclusive grade, and many of those who would have scored an A in the 4-grade system ended up with an AB in the 7-grade system. The CPIs did move a bit downward.

Earlier, the scheme of grading was statistical (for large classes). Later, a simpler method was prescribed. I grade my courses in a way which follows more-or-less the prescribed method. I tend to be stingy for the AA grade, but tend not to award a DD, except for those who I decide not to detain in a merciful or pitiful mood. Since I have taught a large number of batches, I have developed a feeling for the 'goodness' of a batch, and the average performance of a batch (the CoursePI, as I call it), is made to reflect that. For a good batch, it will be around 7.5, for poor batches, it will be around 6.5. Other profs do use other systems and, even for a given prof, the system of grading depends on the number of students in the class (some have just 10 students, some have over 500).

5. We would also like to know what professors would really like to see in their students and what kind of class response, class size and student-professor interaction levels would be considered ideal by you.

I started my UG teaching with a class of just 42 students (the 1981-1985 batch). The number increased slowly, and has now reached nearly 100, and is likely to exceed 150 in a few years. I think that anything beyond 60 is a large class, and I tend to 'teach' about 20-25 students who are in the 'front block'. This block comes into existence during the first week, and then remains more or less unchanged for the rest of the semester. I am usually happy with the responses of this 'front block'.

Outside the class, the level of student-faculty interaction has not really undergone much change. When I was a student, a few students used to meet the prof after classes for some discussions. The number of such students seems to have remained the same, even though the total number of students has increased. There are some profs who are not good at such interaction, and some may discourage it. But there are a large number of us profs who enjoy such interactions and I hope the students enjoy it too!

## Campus Reporter

Campus Reporter or CR is the competition that allows everyone on this campus to be a reporter and, what's more, get paid for it! The rules are simple. Whenever you see anything newsworthy happening on the campus- it may be an innovative GC event, or a summary of Surbahar, a Nobel laureate's lecture that you attended, or a Bhavani workers' strike. As long as it's news, snap a picture and write it up to earn prizes every fortnight. Cartoonists too will have plenty of scope, since the most innovative cartoon strip of the fortnight will win a special prize.

Detailed Rules and Regulations:-

1. Articles must be about news; no pieces about personal experiences or opinions of any sort will be entertained. However, opinions of people related to the event as organizers or spectators may be collected and reproduced as quotations or statistics. This does not however hold for cartoon strips, as long as they're funny.
2. Every entry must be spell and grammar checked before submission.
3. Profanity/abusive language of any sort is not allowed and will lead to immediate disqualification.
4. Written entries must be in .doc or .docx format and must not exceed 400 words + relevant photograph of

the event in .jpg format.

Cartoon entries must be in .jpg format. If they are photographs of a hand-drawn cartoon, please ensure that the photo is high enough resolution for every detail to be clearly distinguishable.

5. Each entry must be mailed as an attachment to insight@iitb.ac.in. In addition to the article attachment, kindly mention your Name, Roll number and Mobile number.

6. Every two weeks, cash prizes for the top two best written articles of Rs. 350 each and a cash prize of Rs. 300 for the best cartoon will be awarded.

7. InslghT retains the right to freely edit your work and publish it- on the website, Bulletin Boards and/or in the print issue.

8. All facts stated in CR articles will be assumed correct and reprinted as such, with the writer's name at the bottom. InslghT will not claim responsibility for incorrect facts.

**Campus Reporter began on Wednesday, August 13<sup>th</sup>. Last date for submission of articles is Tuesday, 26<sup>th</sup> August, 2359 hrs.**

### InslghT team

Chief Executive Editor  
Nithya Subramanian

Chief Editor  
Vaibhav Devanathan

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