



LIVE WIRE

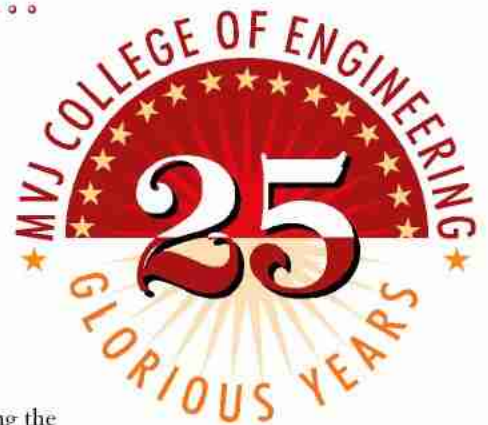
Volume XI

December 2006

The dynamism of youth & the wisdom of age... Your College turns 25!

It was in 1982 that the first batch of students entered MVJ College of Engineering, Bangalore. Today, your college is one of the premier Engineering Colleges in the State and as it turns 25, it is all set to celebrate its Silver Jubilee with some golden events. So you can look forward to year-long activities like Art Festivals, Sports Events, Elocution and Debate Contests, Presentation of Technical Papers, Quiz Contests, Personality Quotient and lots, lots more! All the programmes will be organized at intercollegiate level and some of them at national level. Some special events such as intercollegiate faculty sports and games meet with a view to foster good will and healthy relationship among teaching fraternity are also planned.

A Core Committee consisting of members from faculty and students is actively involved in making the Silver Jubilee Celebrations a grand success. But the enthusiasm is not restricted to any committee or group... it has infected the entire College! You can almost feel the crackle of excitement in the air as the College gets ready for the year-long celebration. In fact some of the events, such as Technical Paper Presentation & Personality Quotient at an inter-department level and a Workshop on Excellence in Manufacturing at intercollegiate level have already been held and received an overwhelming response. Are you ready for more magic and the *masti*?



From the Editorial Team

Thank you for your valuable suggestions and feedback on the last edition of LIVEWIRE. This has helped shape the current issue of your Newsletter. All efforts have been made to make it vibrant, informative and interesting.

Learn all about the Smart Card which is going to be introduced in our college shortly. Read about the latest developments at our campus and listen to the *gossip* Jude Arvind and Nishala Sheela had with the 'Smile Specialist' who lightens the hearts of many Bangaloreans. Yes, we are talking about Ms Sunaina Lall of Radio City 91.1 FM. There are also interesting features on WIMAX and Orkut.

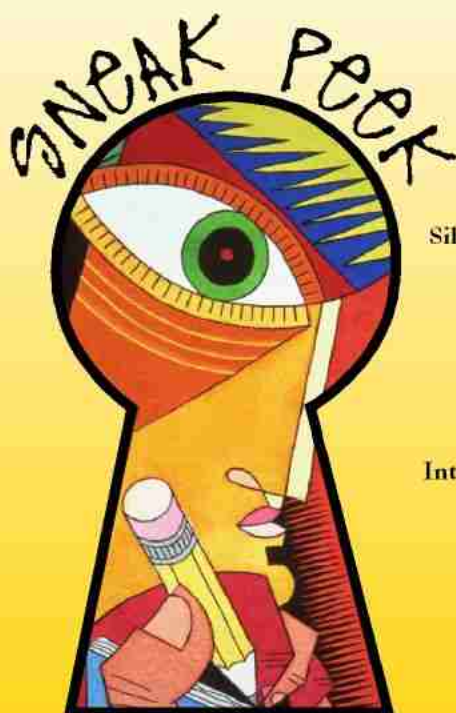
We hope you enjoy this issue of LIVEWIRE as much as we enjoyed putting it together. Do write in and tell us what you think. Bouquets and brickbats are both welcome!

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GOING PLACES! PLACEMENT NEWS

No. of students placed in the academic year 2005 – 06:
187 (From August 2005 to July 2006)
No. of students placed in the academic year 2006 – 07:
50 (From August 2006)

The companies who interviewed our students up to September'06

Satyam, Caritor, Perot systems, Accenture, TCS, Wipro Technologies, TATA Elxsi, Cognizant Aztec, Novellus, Infosys, DELL International Services, DSL Software Systems, Flowserve, GE Powers, ICICI Bank, India Satcom, L & T Limited, L & T Emsys, L & T Valdel, Secon, Sonata Software, IDEB, Kirloskar Electric Co. Ltd, Nichi-In Software Solutions, RCS Technologies, Robert Bosch, Salarpuria, L & T Infotech, Bristlecone, Birla Soft, MBT, HCL Technologies, Global Automation, Jatayu, Geneva, Syntel, Trveni Engineering, Altair, Tasman Networks, Tally Solutions, SUBEX Systems, Universal Power Transformers, Torry Harries, Tyco, ITC Infotech, Mphasis, Stone India, Patni Computers, Blue Star, Microland, Subhash Projects, Quasar Innovations., Capgemini, Caritor, Lifetree Convergence Ltd, Microland, ICICI Prudential, IBM, Hindustan Lever.

SPORTING ENCOUNTERS!

- Team MVJCE were the Runners-Up in the RVCE Mini Cricket Tournament held at RVCE on October 6 and 7, 2006.
- MVJCE won the Bronze Medal in VTU Wrestling Competition held at BIET, Davangere on October 2 and 3, 2006.
- **Sabitha I Nair** (V Sem IS) won the Bronze Medal in Heptathlon of the VTU Inter Collegiate Athletic Meet held at SJBIT Bangalore from November 14 to 17, 2006.
- **Sudharshan Kumar** of V Sem ME won the Bronze Medal in Pole Vault of the VTU Inter Collegiate Athletic Meet held at SJBIT Bangalore from November 14 to 17, 2006.

LIVEWIRE congratulates all the winners. Go for the gold, now!



CULTURE CHAMPS!

These have been rewarding times for students of MVJ College who brought home several laurels in various College Fests.

Abhijit (V Sem ME) won the II Prize in Western Music held at Kalanjali, Sir MVIT Bangalore on November 3 and 4, 2006.

At "Abhyuday 2006" held at Sir MVIT, Bangalore in September 2006, **Akhil C R** (VII Sem) won the II Prize in Big Fight as well as Bio Sell. **Imran K** (VII Sem) walked away with the II Prize in Bio Sell and the III Prize in Paper Presentation. **Harish P** (VII Sem) also bagged the III Prize in Paper Presentation.

The "Aug-Met 06" was held at MSRIT, Bangalore between October 6 - 8, 2006. The MVJ Team comprising **Karthikeya M Upadhyay, Sourabh Nyalkalkar and Gourav Datta Dwivedi** (V Sem) won the I Prize in Biomodelling. Sharing the honour were **Omprasad Rout, Shaik Mohd. Muzammil, Imran K** (V & VII Sem) who also bagged the I Prize in Biomodelling. In the Collage Competition it was **Annapoorneshwari, Lalna Divakaran & Chaya M K** (VII Sem) who stole the show with the II Prize.

Congratulations to all the winners. You've done us proud!



CAT Vs GATE

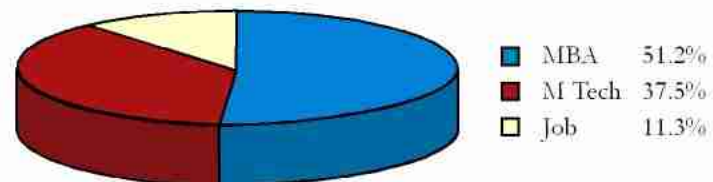
What would you like to do after your Engineering degree? Does a PG in Management beguile you? Or is it M Tech that beckons you? And what are the reasons that shape your choice? Livewire did a sample survey amongst the 1st Year students and found some interesting answers. Here's what they had to say....

Yay, yay, MBA !

- Fat pay cheques *Saurav Verma (ME)*
- Trend, i.e. BE + MBA *Oindrila (ME)*
- Start up with own firm *Ramesh (CS)*
- To master managerial, financial and administrative skills *Suresh (EC)*
- Infinite job opportunities *Prashant (EC)*
- Direct Managerial Post *Shweta (EC)*
- Likes corporate world *Aditi Saha (CS)*

Only M Tech for me!

- Interest in research field *Arishek (ML)*
- Mindset for same field *Jerome (ME)*
- Enhance latest technology *Roshan (EC)*
- Scholarships in MTech *Shujaat (ML)*
- Civil services *Tapan (ME)*
- Economical *Megha (BT)*
- Lesser stress level & competition *Yuv Jyoti (ME)*



ENOUGH SPACE TO ACCOMMODATE SHAKESPEARE, MOZART, SIR ELTON JOHN, BRITNEY SPEARS, BRANGELINA, MAGIC JOHNSON AND MANY MORE GREATS!

Imagine an auditorium that sprawls luxuriously over 112 x 169'.

Imagine an auditorium which can comfortably seat about 1000 persons.

Imagine an auditorium with a stage where drama gets more dramatic, where music is touched by magic, where conventions become more powerful and where movies come with more *masti*!

Imagine an auditorium that can transform itself into an indoor sports facility with excellent lighting and ventilation.

Imagine an auditorium which comes with a VIP Guest Room, a Swimming Pool, a Squash Court and other Indoor Games Facilities.

Your imagination will soon be reality with the **Silver Jubilee Auditorium** at MVJ College of Engineering. With good acoustics and comfortable seating and flexible partitions, the Auditorium has been designed to ensure multi-size spaces. Which means it can double up as a mini seminar hall or a games room, as the situation demands.

Check out some of the features of this exciting new place taking shape in our campus!

- ★ Stage with separate gender-segregated Green Rooms.
- ★ Indoor Badminton court with wooden flooring.



- ★ Swimming pool with changing rooms and lockers.
- ★ Squash court with viewing area.
- ★ Table Tennis Room.
- ★ Music Room.
- ★ Adequate number of exits.
- ★ Lift & Ramp Facility available for the elderly and the physically challenged.

STUDENTS AT MVJCE GET SMART!



It's official! MVJ College of Engineering is now a SmartCampus! The Smart Card introduced at MVJCE, is available to the students, staff, parents and alumni of the College and will serve as the official Identification Card. It will also give you access to a variety of College Departments and Facilities such as the Library, the Internet, etc.

The information on the card includes staff/student identification number and photograph with the USN (User Name) and Password. Once you have been issued a Campus Card, it's yours for life. This means you won't need a replacement card when you enroll in a new semester.

Smart card readers will be provided in campus and in all departments.

Parents will also be provided with a separate account of their child, so that they can easily access their offspring's profile and get detailed information regarding internal/external marks, attendance, performance, etc.

What can you do with your Smart Card?

Besides giving you easy access to the various Departments/Facilities of your College, the Smart Card also allows you to:

- Create your personal profile
- Check your timetable
- Check your attendance
- Check Internal/External Exam Schedule & Results
- Pay your Examination/College Fees... and do lots more!

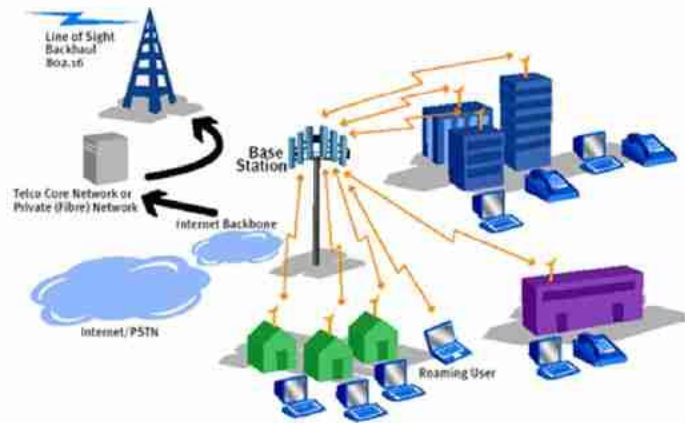
A Notice Board menu will also be provided.

The Smart Card Information System is being provided by IDenizen Smartware Pvt. Ltd. (www.smartcampus.in)



WiMax
(Worldwide Interoperability for Microwave Access)

Bangalore is rocking! Two things happened simultaneously on the same day. Both based on WiMAX technology, one of which means the Indian state will be WiMAX-enabled within months.



At the two-day Intel Developer Forum, Intel revealed its WiMAX roadmap, with the launch of its first WiMAX compliant chip - Rosedale 2, which offers support for dynamic switching between fixed WiMAX and mobile WiMAX. Residents of Bangalore can look forward to experiencing a wire-free weekend.

The Karnataka Government will offer a 10-day free trial of Wireless Internet Access (using WiMAX) as an aperitif to Unwired Bangalore. Between Wednesday night and the weekend, the network will be up, offering a 2 MBps connection at select locations in the city. It will be available to citizens till November 2.

Unwired Bangalore is a Rs.20 crore project that will allow citizens to access wireless Internet at blazing speeds of 25 MBps from a park, or even their terraces. The project is still in the initial stages, with the committee headed by the Institute of Information Technology Director. The project will be completed in 2008.

Meanwhile, service providers Aircel and Microsense are setting up WiMAX towers for this pilot project. Each tower will have a cell radius of 4-5 km, compared to WiFi's (Wireless Fidelity) limited range of a few metres.

The service has also been tested on Saturday, coinciding with the State's annual event, BangaloreIT. The locations identified for the free Internet access are Palace Grounds, Vikas Soudha and Vidhana Soudha.

WiMax is an important technology with far-reaching impact on all aspects of telecommunications in the future, including data applications, mobile data applications and mobile voice communications.

Microsense is going to deploy WiMax in Bangalore. It claims to be the only Indian company having capabilities for offering end-to-end solutions in the WiMax space: designing, planning, equipment supply, deployment and management. Microsense has successfully completed a RF Blueprint for WiMax.



ORKUT- the Virtual Park where one can socialize with old friends or meet new friends in different communities with similar interests - is run by Google - the world's most popular search engine. Named after its creator Orkut Buyukkokten, a Google software engineer who developed the project during personal time allowed to him by Google. The genesis of Orkut is interesting. All employees at Google are encouraged to spend twenty percent of their time working on personal interests, to stimulate creativity. Buyukkokten who was very interested in social networking, developed his interests further by setting up Orkut. The rest as they say is history. Until recently, entry to Orkut was by invitation only. Now the company has decided to open it to the public.

Orkut.com is one of the most popular websites in India as well as in its subcontinents with users ranging from teenagers to working corporates, who are hooked on to the site whenever they are free. Orkut limits the membership only to those who have a valid g-mail account or are invited by someone who is already an Orkut member. One of the most fascinating features of Orkut presents is 'SCRAP', which allows to give a short message to friends as well as to the related community members. What's more, you can view anybody's scrap without their prior permission. "The scrap thing is given so much hype that people congratulate on 1st, 100th 1000th scraps.", says Anamitra of Biotechnology. This is the best medium through which one can increase their social groups and community. "The reminder sent by orkut is just crap, its very irritating" feels Harsh Tank of Info Science. But the most interesting part is that one can find old friends online by a single press of the search button powered by Google. This free to use service can sometimes be misused as Akansha of Info Science says, "Photos can be copied from the personal profile and misused".

Orkut can become an addiction too. Members of the Orkut communities spend hours at this 'virtual park' leading many employers and educational institutions banning it in their premises.

Demographics of Orkut

	Brazil	61.57%		United Kingdom	0.70%
	United States	14.53%		Japan	0.52%
	India	11.26%		Portugal	0.45%
	Pakistan	1.72%		Canada	0.42%
	Iran	1.10%		Mexico	0.40%

Nishant Sharma
III Sem EC



IT'S ALL SMILES WITH THE SMILE SPECIALIST

Recently two members of the editorial board, Jude Arvind and Nishala Sheela, sat down for a tête-à-tête with Bangalore's favourite RJ Sunaina Lall. Here are some tit bits that brewed over the cup of coffee and hot chocolate....

How do you maintain such good chemistry with RJ Darius on air?
Cause Darius is madly in love with me and I'm not!

What are your bobbies off-air?
I love music basically. I play the keyboard and love singing as well as dancing and I loooooove watching movies.

Anything unique about yourself that your listeners don't know about?
I'm very domesticated ! If the maid doesn't come I would actually clean my place and wash the dishes

Your favourite RJ in the station?

Well I guess I cant say 'me!' so I'll have to go with Darius. (Unfortunately!) Jokes aside Darius and I have known each other for about 7 years now. I think he's a great guy to work with and a really nice person as well. He's so sooooo sweet and helpful. I remember the first time I joined Radio City; he was the one who really made me feel at home.

Any favourites among the persons you have interviewed on-air so far?

Jackie Shroff for sure! He's such a flirt and flatterer! I still remember asking him what he does to de-stress himself and his reply was "driving, cooking, listening to lovely voices like yours" and then I asked him what he likes to cook, to which his reply was "well with someone with a voice like yours... YOU!!!"

Any person in particular stands out amongst the thousands of callers you have had on-air?

I put this guy on air recently who said something that touched me so much. He was talking about the woman he was going to get married to and he said "I've had so many people reject me for so many reasons but along came this girl who said 'you may not be perfect but I love you for just the way you are and I want to spend the rest of my life with you'".

And listening to this guy I thought that in a world where a person's looks, status and bank balance are usually the priority that was such a refreshing change and tho thweet!

Person in the world you would most like to meet?

Definitely John Abraham!!! (Minus his girlfriend)

Describe yourself in one word

JOSH

Whom do you consider a promising musician and your favourite singers?

I love that song "chalo saath mere" from Elektrik and the voice of Shomshukla is just amazing! I also love KK's songs as well as music by Shankar-Ehsaan-Loy

How has radio city changed since the first time you were here?

The changes that I've seen have definitely been positive, both on and off air. On air there's lots of scope to experiment and get adventurous and off air the working environment is definitely cooler. My boss really gives me a lot of flexibility on my show.



We've introduced a lot more characters like Uncle Appukutan Nair, one and half Altaf, English music is back and so are some of the RJ's! There are also a lot more people. I still remember when I used to work here earlier, by around 6 pm there was no one in the office, but now even after I'm done with my show at 9 pm, the office is still so full of life with people working and having fun. It just makes the environment a lot nicer and more energetic.

Any tips for those who want to become RJs?
If you're the type who simply looves talking and cant stop, then you're definitely a candidate!

Most people think RJ'ing is ONLY about that...well they can't be more wrong! It involves a lot of hard work as well. Understanding your listeners, understanding their minds, their moods and their music. What helps is if you go for some voice training in modulation, breathing, etc Get a tape recorder and record yourself, listen to what you sound like, get feedback from people and start improving yourself. Then go to a studio, get a demo done and give it in to a radio station and then say your prayers!

If not RJ-ing then what?

An actress. I simply love acting and the camera

How did you decide that you wanted to be an RJ?

It happened as an accident actually. I was at a theatre workshop and someone from a radio station was there who was asking a few people to audition to be an RJ.

The amusing bit was that I went up to him and invited myself for the audition. I was so so so nervous initially and didn't really know whether that was what I wanted to do but I found that I was putting my huuuuge mouth to good use and having fun and getting paid at the same time so it seemed like a great option!

Something about RJ Darius that most people don't know...

Darius pretends to be this big flirt with tons of girlfriends but in reality he's a total softie! Yes I mean the complete sensitive, understanding, caring, faithful type!

What do you attribute the enormous popularity of your show?

I love life and thoroughly enjoy what I do and because I genuinely have fun it's just contagious. Cause if 'you' don't enjoy what you do or you just pretend to enjoy it, sooner or later you get fed up or bored and get your listeners bored along with you. But if you are having fun then your listeners just have a blast along with you and enjoy themselves as much as you do.

What have you learnt from being an RJ?

Initially when I came to Radio City, my job was just about talking, playing music, having fun and getting paid for it. But today it is so so so much more than just that. Radio has made me realize the power it has to influence and how big a difference it and we as RJ's can make to the lives of millions of people. I never realized how the radio and the RJ could be someone's best friend and how I could actually be responsible for bringing a smile on someone's face and making their day a better one.

Advice to today's youth?

Be who you are and not what others want you to be !



SIMPUTER: The Next Generation

The Simputer is a small handheld computer, intended to bring computing power to the masses of India and other developing countries. It is a low cost portable alternative to PCs, through which the benefits of IT can reach the common man. It has a special role in the third world because it ensures that illiteracy is no longer a barrier to handling a computer. The key to bridging the digital divide is to have shared devices that permit truly simple and natural user interfaces based on sight, touch and audio. The word "Simputer" is an acronym for "simple, inexpensive and multilingual people's computer."

Pilot production of the Simputer started in September 2002. Since 2004, it was commercially available for \$240 and above. Recently, higher production volumes have shrunk prices to \$150, depending on the screen size and type. The projected cost of the Simputer is about Rs.9000 at large volumes. But even this is beyond the means of most citizens. A local community such as the village panchayat, the village school, a kiosk, a village postman, or even a shopkeeper should be able to loan the device to individuals for some length of time and then pass it on to others in the community. The Simputer, through its Smart Card feature allows for personal information management at the individual level for an unlimited number of users. The impact of this feature coupled with the rich connectivity of the Simputer can be dramatic. Applications in diverse sectors such as micro banking, large data collection, and agricultural information and as a school laboratory is now made possible at an affordable price.

The Simputer uses the Linux operating system, and the Alchemy™ Windows Manager. The software packages include Scheduling Calendar Voice Recording and Playback, Katha, Internet and Keyboard Connectivity, Web Browsing and Email, E-Library and Games. The Simputer meets these demands through a browser for the Information Markup Language (IML). IML has been created to provide a uniform experience to users and to allow rapid development of solutions on any platform. The language has been created to suit the unique needs of the Simputer. The markup itself is however, XML based. HTML is not useful here because it is not currently as versatile as IML, we don't control the standards and hence cannot make the necessary changes tailored to our requirements and IML is an XML application, and so does follow the Internet standards.



And now for the hardware part – the Simputer requires 32 bit Intel strong-ARM 206 MHz Processor, 64 megabytes of RAM, 32 MB of flash memory and can use cheap removable Smart Cards each able to hold from 8 KB to 1 MB of data. 33.6/56 Kbit/sec V.90 modem (external) encore offers this as an internal option. Display interface 320x240 LCD built in USB, CFII, speaker and microphone in Encore's Simputers. Simputer was powered by 3AA batteries, but breaking of the contacts while changing batteries was commonplace, and so the 2005 models have rechargeable Li-ion battery (3.7V, 2200 mA-h). Its physical dimensions are "142 by 72 by 20mm". The weight of the Simputer along with the battery is just 206 gms!

A rapid growth of knowledge can only happen in an environment which admits free exchange of thought and information. Indeed, nothing else can explain the astounding progress of Science in the last three hundred years. Technology has unfortunately not seen this freedom too often. Several rounds of intense discussions among the trustees convinced them that the only way to break out of the current absurdities is to foster a spirit of cooperation in inventing new technologies.

V Kumaraswamy Holla
III Sem ML

GENDER-BENDERS

A CEO of a big company had previously been a sailor. He was very aware that ships are addressed as "she" and "her". He often wondered what gender computer should be addressed as. To answer that question, he set up two groups of computer experts. The first group was composed of women and the second of men. Each group was asked to recommend whether a computer should be referred to in the feminine gender or the masculine gender.

They were asked to give 4 reasons for their recommendations. The group of women reported that computer should be referred to in the masculine gender because:

1. In order to get their attention you have to turn them on.
2. They have a lot of data, but are still clueless.
3. They are supposed to help you solve problems but half the

time they are the problem.

4. As soon as you commit to one, you realize that if you had waited a little longer you could have had a better model.

The men, on the other hand, concluded that computer should be referred to in the feminine gender because:

1. No one but the creator understands their internal logic.
2. The native language they used to communicate with other computers is incomprehensible to everyone else.
3. Even your smallest mistakes are stored in long term memory for later retrieval.
4. As soon as you make a commitment to one, you find yourself spending half of your pay cheque on accessories for it.



METRO RAIL



As cities grow in size, the number of vehicular trips on road system goes up. This necessitates a pragmatic policy shift to discourage private modes and encourage public transport once the level of traffic along any travel corridor in one direction exceeds 20,000 persons per hour.

Introduction of a rail based Mass Rapid Transit System (MRTS) therefore becomes the need of the hour. MRTS is capital intensive and has a long gestation period. It has been observed that in developed countries, planning for mass transit system starts when the city population exceeds 1 million; the system is in position by the time the city population is 2 to 3 million and once the population exceeds 4 million or so, planned extensions to MRTS is vigorously taken up. In developing countries including India, because of paucity of funds and poor planning, implementation of rail based Mass Rapid Transit Systems have been lagging far behind the requirement. Today the traffic on roads of Bangalore is a heterogeneous mix of cycles, scooters, buses, cars and rickshaws jostling each other. This has resulted in a chaotic situation so much so that due to road accidents, the average number of persons killed per day has increased to 5 and of those injured to 13. The position is expected to deteriorate further in the years to come. For the reasons mentioned above, Bangalore has come up with a solution- THE METRO-RAIL. Bangalore Metro's logo is a green and purple design with the phrase "Namma Metro" (Kannada for "Our Metro"). The green is symbolic of Bangalore's sobriquet of 'Garden City' while the purple represents the Bangalore Metro. The agency responsible for its implementation is Bangalore Mass Rapid Transit Ltd. (BMRTL).

Features:

1. Call boxes mounted on pylons on station platforms enable passengers to report emergencies to the station manager.
2. Closed circuit video cameras cover every area of the station. Monitors are in the station manager's kiosk.
3. Clear, uninterrupted sight lines, an architectural feature of every station, practically eliminate areas where criminals can hide.
4. Flashing lights on the platform edge warn of approaching trains.
5. Special antennas run through all tunnels to ensure high quality communication between police and fire departments responding to an underground emergency. Metro has a specially designed emergency evacuation cart for anyone unable to walk from the rail right-of-way.
6. Chain link fences block people from trying to cross-outdoor Metrorail tracks.
7. Call boxes at the end of each rail car enable any rider to report an emergency to the operator. Train operator is in constant radio communication with Central Control.

8. Every rail car has an emergency door release behind the panel next to the middle doors.
9. The panel carries instructions for releasing the doors and evacuating passengers.
10. Door chimes alert passengers to stay clear of the doors as they open or close.

Maximum Permissible Speed - 55 Km/hr
Average Speed - 30 Km/hr



Quite often, people make the assumption that any elevated rail is a monorail. The assumption, needless to say, is totally wrong. The problem is that when other types of transit systems are described as "monorails," some of those rail modes have problems that monorails don't have. When they are improperly lumped together with monorail, the disadvantages are assumed to be common with REAL monorails. Hence, monorails get portrayed in a negative light.

MONORAIL n. 1. A **single rail** serving as a track for passenger or freight vehicles. In most cases rail is elevated, but monorails can also run at grade, below grade or in subway tunnels. Vehicles are either suspended from or straddle a narrow guideway. **Monorail vehicles are WIDER than the guide way** that supports them.

Features:

1. Almost all modern monorails are powered by electric motors fed by dual third rails, contact wires or electrified channels attached to or enclosed in their guidance beams. There is a startup called Metrail who have built a hybrid prototype using diesel power to generate electricity for the motors
2. Magnetic levitation train (maglev) systems by the German Transrapid were built as straddle-type monorails, as they are highly stable and allow rapid deceleration from great speed. When in full-speed operation, maglev trains actually hover over the track and are thus not in physical contact with it. It is the fastest monorail, running at up to 311 mph.
3. Switching has been a perennial issue with monorail systems since simple switching mechanisms associated with other systems are usually not feasible
4. The rail vehicles are wider than the beam, and monorail systems are commonly elevated, requiring only a minimal footprint for support pillars and are quieter, as monorails use rubber wheels on a concrete track
5. Monorails are capable of climbing, descending and turning faster than heavy rail systems, though not light rail systems.

RUTHERFORD

Sometime ago I received a call from a colleague. He was about to give a zero for an answer to a question, while the student claimed a perfect score. The instructor and the student agreed to an impartial arbiter, and I was selected. The question was: "Show how it is possible to measure the height of a tall building with the aid of a barometer".

The student answered, "Take the barometer to the top of the building, Attach a long rope to it, lower it to the street, and then bring it up, measuring the length of the rope. The length of the rope is the height of the building." The student had a strong case for full credit since he had really answered the question completely and correctly! On the other hand, if full credit were given, it could well contribute a high grade in his physics course and to certify competence in physics but the answer did not confirm this.

I suggested that the student have another try. I gave the student six minutes to answer the question with the warning that the answer should show some knowledge of physics. At the end of five minutes, he had not written a single thing, I asked if he wished to give up, but he said he had many answers to this problem, he was thinking of the best one. In the next minute he dashed off his answer, which read: "Take the barometer to the top of the building and lean over the edge of the roof. Drop the barometer, timing its fall with a stopwatch. Then, using the formula $X=0.5 \cdot a \cdot t^2$, calculate the height of the building."

At this point I asked my colleague if he wished to give up. He conceded, and gave the student almost full credit. I recalled that the student had many answers to the problem, so I asked him what the answers were. "For example," said the student, "you could take the barometer out on a sunny day and measure the length of its shadow, and the length of the shadow of the building, and by the use of simple proportion, determine the length of the height of the building.

"Another method is to take the barometer and walk up the stairs. As you climb the stairs, mark off the length of the barometer along the wall. You then count the number of marks and this will give you the height of the building in barometer units. A very direct method, of course. If you want a more sophisticated method, you can tie the barometer to the end of a string, swing it as a pendulum, and determine the value of g at the street level and the top of the building. From the difference between the two values of g, the height of the building in principle can be calculated".

"Probably the best is to take the barometer to the basement and knock on the superintendent's door. When the superintendent answers, you tell him: Mr. Superintendent here is a fine barometer. If you tell me the height of the building, I'll give you this barometer." At this point, I asked the student if he really did not know the answer to this question. He admitted that he did, but said that he was fed up with high school and college instructors teaching him how to think. The student was Neils Bohr (quantum theory and physics mechanics, hydrogen atom guru, etc.) and the arbiter Rutherford.

Contributed by Nistala Sheela N
V Sem CS



They are fighting with their lives at the Border
They don't care about death who is their partner
They can tolerate any torture
Because they are Indian Soldiers.

Even though they miss their family members
They sacrifice their life for the family of whole country
They are ready to give their entirety
Can't we shed a tear for those noble souls?

They are very proud to be an Indian
Because they were born in bloodied sounds of Martyrs

Their blood flows like water in the war
So remember your saviors forever!!!

Vinayaka Prasad A
III Sem Civil



Art by
Chandrashekhar N R
VII Sem NE



Guess who is in the news these days?

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