A monthly news bulletin

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e-Designer
Ms. Suman Acharya
from the director’s desk

The recent brouhaha about the academic rigor and consequent student performance of the Biju Patnaik University of Technology has opened up a fresh debate among all academicians and educational administrators. A committee has been setup to study the syllabus, regulations, intake quality, examination pattern, results, etc. While a review is welcome one has to be careful of populist expectations. World over, there is plethora of supply over demand. The same is true for the engineering and management disciplines. If quality is given a go-by in our educational system, we will be bypassed by all recruiters simply because they have plenty else to choose from. As Orissa opens up to large scale employment possibilities let us maintain our educational system as nothing less than the best. While we do not condone the shoddy physical and teaching infrastructure in a few institutes we should be careful not to take law into our own hands at any cost. The engineering community has an image before the society at large and it should not be dented. It is best summarized by our motto “Quality with Discipline”.

Ten years have completed for NIST Technology Consulting Services (1997-2007). NTCS started with a humble background of offering industry-oriented courses to the engineers of Orissa. The first course offered was PCB Design (September, 1997) which had only 3 participants. The mission of NTCS is to bring global technologies to the campus whether it is through advanced technical training programs or certification programs or bringing cutting edge technologies to our classroom through BE projects, industry-institute interactions, etc. Today, NTCS is the creator of the entire ERP suite which runs seamlessly through our Institute’s networked computers. Few Institutes in India are as transparent and can operate at blinding speeds as we can thanks to NTCS. From all of us, Cheers to the NTCS team led by Bhawani Patnaik.

With Best Wishes

Sangram Mudali

from the editors’ desk

Time and again the patience and perseverance of people is tested for qualities that they retain for long. The objective is translucent. It is, in no way, to suppress or discourage but on the contrary to boost them up and to reiterate their pacified energy and confidence. The passivity is taken over by positivity and explosive outburst of inner elegance. That is the way we teach, preach and practice our beloved students to come up with their all round talent and intelligence and moreover to hold on to the same for all times to come. When we find ourselves completely engrossed with lot many of activities, be it awarding the Best Performers on their academic grounds, upgrading our resources for making the students accoutered with new technologies, adding up gems of academicians to the existing teaching-fraternity or setting a benchmark of creating a NISTian Book of Records and letting it for others to break, then we feel to have achieved something worthy of praise and admiration and in these spheres NIST leaves a laudable trace behind.

The young and energetic ISTE team is all set to usher in an intoxicating SANKALP 2008. The benchmark for each SANKALP is being set higher than ever. The urge to excel has increased manifold. In this context the events and activities of SANKALP will be deemed to be successful if a large number of NISTians and delegates from all over the country participate in the best sense of competition.

Dipti Ranjan Lenka
Amrut Phalguni Mohanty

Septmber 15, 2007
Placement Boom Still on…

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<td>Ranjan Kumar Padhy</td>
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<td>398</td>
<td>Nihar Ranjan Sahani</td>
<td>ECE</td>
<td>L&amp;T Emsys, Mysore</td>
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Laurels

The student toppers with GPA >= 9.0 in their BPUT examinations in various disciplines of B.Tech, MCA & MBA were honored with Certificate of Appreciation and Cash Award from our Director, Prof. Sangram Mudali for their academic excellence.

Certificate of Excellence in ATTP

The Institute provides Advanced Technological Training Program (ATTP) throughout all the semesters. The B.Tech 2nd semester students were assigned with the Web Designing Course and presented projects on the same in teams as a part of this course. Our internal technical experts adjudged the best three projects out of the given 40 and the best performers were honored with certificates and cash awards given away by our Director, Prof. Sangram Mudali.

1st Prize:

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<td>055</td>
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<td>Prabhat Kiran Padhy</td>
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<td>Apurva Singh</td>
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<td>022</td>
<td>Dipankar Choudhury</td>
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<td>Ankit Tripathy</td>
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2nd Prize:

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<td>Gadi Jagannadh</td>
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<td>401</td>
<td>U. Sunil Ratnakar</td>
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**Synopsis Tool at NIST**

With the received grant of Rs.1 crore from the Department of Science and Technology (DST), Govt. of India, under FIST program, NIST has purchased Synopsis Tool for IC Design and TCAD activities. NIST is second only to IIT, Kharagpur in the entire Eastern Zone of the country to possess this tool. It is now installed at VLSI Lab of our institute.

Students may contact Dr. Ajit K. Panda, Dean for further information.

**Laboratory Equipments**

NIST has added a good number of modern and high-tech equipments to its existing host of laboratories to meet the plethora of technical needs. The list is as follows:

1. **Electrical Lab:**
   - Single Phase Half / Fully Controlled Converter Power Circuit
   - Single Phase Converter Triggering Unit
   - IGBT Based 3 Phase PWM Inverter
   - DC Regulated Power Supply
   - DC Chopper Power Supply
   - DC Chopper Triggering Unit
   - DC Regulated Power Supply

2. **Workshop :**
   - CNC Milling Machine

3. **DSP Lab :**
   - DSP Starter Kit
   - TMS 320C6713

4. **Robotics Lab:**
   - Etching of PCB (A complete NIST Robotics Club Processing)
   - GBW Motors with gear set
   - Ni MH Batteries
   - Lithium Ion Batteries
   - Infrared Sensors
   - Keil µ Vision Programmer
   - Servo Motors
   - Line Follower Circuit (without microcontroller circuit)

**Conference/Seminars Attended**

Dr. Sukanta K. Tripathy and Mr. Mihir Hota, Assistant Professors, Dept. of Physics, presented a paper entitled “Analysis of diffraction efficiency of a Holographic coupler with respect to angular divergence and spectral width at incident beam” in the National Conference on “Condensed Matter Days” held at NIT, Rourkela from 29th to 31st August 2007.

Our Dean, Dr. Ajit Kumar Panda, Professor, Electronics and Communication Engineering and Mr. Sudhakar Das, Faculty, Electronics and Communication Engineering presented a paper entitled “Studies on Characteristics of In_{x}Al_{1-x}As/In_{x}Ga_{1-x}As based MODFET” in the National Conference on “Condensed Matter Days” held at NIT, Rourkela from 29th to 31st August 2007.

**Publications**

Dr. Sukanta Kumar Tripathy, Asst. Professor, Dept. of Physics and Dr. Arun Kumar Padhy, Professor, Dept. of Chemistry published a book entitled “Materials Science” under Scitech Publications, Chennai. The book extensively deals with one of the most emerging fields of science and technology, i.e., Material Science and very much caters to the need of BPUT syllabus.

Mr. Minakshi Prasad Mishra, Lecturer in the Dept. of Humanities and Basic Sciences made his maiden publication on the title, ‘To Teach or not to Teach: Culture in the ESL Classroom’, in one of the “Refereed Journals” entitled DIVINER published by DAV College, Chandigarh. This is a joint paper by Mr. Mishra and Ms. Punyashree Panda, Research Scholar, Berhampur University.
NIST welcomes the following Members to its parivaar:

Mr. Manoj Kumar Sahu joined as Faculty in the Department of Electronics and Communication Engineering. He is a B.E. in ECE from NIST, Berhampur and has an Advanced Certification in VLSI Programming from MSRAS, Bangalore. He has working experience in VLSI Front End Design & Testing and Verification. His Research interest includes VLSI and Embedded System.

Mr. Ratnakar Mishra joined as Faculty in the Dept. of Humanities and Management Studies. After his graduation in Political Science from Ravenshaw College, Cuttack, he did his M.A. from Utkal University, IMS, Devi Ahalya University, Indore, and Diploma in Human Resource Development (DHRD) from AIIMS, Chennai. He has 2 years of organizational experience as a Manager, PTPL, BBSR and more than 6 years of academic experience as a Senior Lecturer, JITM, Paralakhemundi. His research interests include Human Rights, Socio-Economic Status Survey, and Training and Development. He has publications in 3 National journals and has also presented many conference papers.

Dr. Smeeta Panda joined as Faculty in Environmental Science. She is a graduate in Zoology from G.M. College, Sambalpur and got M.Sc. in Life Science with Bio Chemistry as her specialization. She did her M.Phil. and Ph.D. in Environmental Science from Sambalpur University. She has Research experience of 8 years and 1 year of teaching experience. She was an Associate at IIT, Delhi. Her Research interests include Ecotoxicology, Environmental Impact Assessment, and Environmental Monitoring. She has publications in 5 International and 5 National Journals, and 1 Book Chapter in “Frontiers in Environmental Research” by NOVA Publishers, New York. She has also worked for Council of Professional Social Workers for the publication of 2 volumes of book on State of Orissa’s Environment.

Mr. Arabinda Panda joined as Faculty in the Dept. of Electronics and Electrical Engineering. He did his B.E. from Bangalore University in Electrical Engineering. He has more than 10 years of teaching experience to his credit. He worked as a Lecturer at Diploma and Degree Engineering College, SMIT, Berhampur, and also MITS, Rayagada as a Sr. Lecturer. His Research interests include Power Electronics and Control Systems.

Ms. P. Sunita joined as Faculty in the Department of Electrical and Electronics Engineering. She did her B.E. in Electrical and Electronics Engineering from Roland Institute of Technology, Berhampur. She has 1 year of teaching experience at SMIT, Berhampur as a Faculty in EEE. Her Research interests include Electrical Machines and Power Electronics.

Mr. Chinmaya Sahu joined as Faculty in the Dept. of Humanities and Management Studies. He did his B.E. in Electronics and Communication Engineering from NIST, Berhampur and MBA from Regional College of Management, BBSR. His Research Interest is in the field of Human Resource Marketing.
Ms. Sanghamitra Das joined as Faculty in the Dept. of Computer Science and Engineering. She did her M.Sc. in Applied Physics from Baroda University, Baroda and her M.S. in Computer Science from Illinois Institute of Technology, Chicago, USA. She has over 7 years of teaching experience in Universities and Educational Institutes in India and USA. She worked as a Software Developer at the Department of Physics, University of Illinois, USA, and was appointed to develop Fourier Transform Software for the Physics lab. Her Research interests include Database Design and Management, Data Mining, and Bioinformatics.

Mr. Trupti Ranjan Lenka joined as Faculty in the Dept. of Electronics and Communication Engineering. After completing his B.E. in Electronics and Communication Engineering from NIST, Berhampur, Mr. Lenka did his M.Tech. in VLSI Design from U.P. Technical University, Lucknow. He has 7 years of teaching experience at GLA Group of Institutions, Mathura, U.P. His Research interests include VLSI CAD Tools, and DSP Processors. His Conference Papers got published in 2 International and 5 National journals.

Mr. Niranjan Sahu joined as Faculty in the Dept. of Electronics and Electrical Engineering. He did his B.Tech. in Electrical Engineering from UCE, Burla. He has rich industry experience of more than 35 years to his credit. He worked for 7 years as an Executive Engineer at Hydro Power Station, Balimela, Koraput; 4 years as an Asst. Engineer at Thermal Power Station, Talcher; 20 years as an Engineer in Maintenance of Extra High Voltage (EHV) lines and Sub Stations; and 5 years as DGM in the Design and Planning Cell at Orissa Hydro Power Corporation Ltd. (OHPC), Bhubaneswar.

Ms. Prangya S. joined as Laboratory Supervisor in the Department of Electrical & Electronics Engineering. She was working at GHITM, Puri before joining us. Mr. Ambika Prasad Kaur, Mr. Tirthankar Tripathy, and Ms. N. Sweta joined as Lab Supervisors in the Department of Computer Science and Engineering.

New Students to NIST parivaar
NIST welcomed the 2007 joining batch students into the B.Tech, MCA, and MBA programs on the 20th of August 2007. The informative, inspiring and thought-provoking welcome addresses of Prof. Sangram Mudali, Director; Ms. Geetika Mudali, Placement Director; Dr. Ajit Kumar Panda, Dean; Dr. Arun Kumar Padhy, Course Coordinator, B.Tech.; Mr. Shom Prasad Das, Course Coordinator, MBA; and Mr. Siddharth Bhusan Neelamani, Course Coordinator, MCA, in the Orientation Program, enthused and energized the new entrants. A video on NIST, prepared by Mr. Dipti Ranjan Lenka and Mr. Amrut Phalguni Mohanty, Faculties, was screened before the audience. Classes commenced soon after the distribution of refreshment packets.

Joining of Lateral-entry Students
Forty five lateral-entry students joined NIST in the B.Tech course at the third semester after completing their diploma in various disciplines.

NIST e_news welcomes all the new members and wishes them success.
EVENTS

Inauguration of New Building at S.M. Public School
Mr. Surendra Nath Mudali, Chairman, S.M. Charitable Trust and his wife Mrs. Janaki Mudali inaugurated a new building at S.M. Public School on the Independence Day, 2007. Prof. Sangram Mudali, Director, donated two computers and Dr. Ajit K. Panda, Dean, donated Rs. 10,000 towards students’ educational development and different awareness programs.

ATM Installation
The institute inaugurated the Indian Overseas Bank-ATM Counter in its premises. The second in the city of Berhampur, 24 hour air-conditioned cash facilitated counter, incepted by the Deputy General Manager, Mr. K. Subramanyam along with the Senior Regional Manager, Mr. Naresh Choudhary of the bank, is now being used by the entire NIST family of faculties, staff and students.

Summer Course
NIST hosts a cluster of training programs during summer every year. The year 2007 was not an exception. A month long program was organised taking all the students of B.Tech, MCA, and MBA into account. A large number of students from various Engineering colleges of the state also joined the same. Students were trained by the expert faculties of the institute on various courses like Electronic Design Automation Software Tools For VLSI/ASCI Design, Advanced Industrial Automation Technology, Certification Course Cisco Certified Network Associate (CCNA), Certification Course Introduction To Oracle 9i: SQL [Exam # 1z0-007], Certification Course Sun Certified Java Programmer (SCJP) for The Java 2 Platform, Computer Aided Simulation & Analysis In Electrical Engineering, J2EE and Rational Rose, Spoken English Language Course, and Japanese Language Program Training (JLPT) Course.

Independence Day Celebration at NIST
The Institute, though a hub of technology, never forgets to commemorate the essence, flavour and charm of the Independence Day. This year the auspicious day was observed both in the college and at different hostels of the institute. The Tricolour was hoisted up in the sky, the National Anthem been chanted and sweets were distributed.

Club Excel’s Activities
Club Excel organizes a biannual ‘Programming’ event, C Sparc. In the 1st C Sparc (Fall 2007) Contest, Mr. Yusuf Siraj, Mr. Pavan Kumar and Mr. Govind Kinkar Sahu received cash awards of Rs. 1000, 800, 600 each as 1st, 2nd, and 3rd prizes respectively and Rs. 100 each was also given to the rest performers in a function presided by the B.Tech Course Coordinator, Dr. A.K. Padhy and the MCA Course Coordinator, Mr. Sidharth B. Neelamani, Faculty Advisor, Club Excel on 11 August, 2007.

The 2nd C Sparc (Monsoon 2007) Contest selected 54 contestants from the preliminary round for the final one.
Club Innova: Dare to Dream, Strive to Excel, formed under the lead of Mr. Jagannath Mohanty, as Faculty Advisor and Mr. Minakshi Prasad Mishra, as Co-Faculty Advisor, aims to promote innovative thinking in the campus and encourage creative solutions proposed by the diverse class of students. The club encourages dreaming BIG and more importantly having the hunger and attitude to fight out to attain a realizable and a constructive solution.

The club conducted an innovative contest, NISTian Book of Records, and in its first phase, held ‘The Tallest Man’, ‘The Tallest Woman’ and ‘The Sharpest Mind of NIST’, competitions:

**TALLEST MAN**
S. NAVEEN KUMAR, CSE, 2004 BATCH. HEIGHT – 6’ 2.8”

**TALLEST WOMAN**
SMITA PATRO, ECE, 2005 BATCH. HEIGHT – 5’ 8.8”

**SHARPEST MIND**
P. RAMESHWARI, EIE, 2004 BATCH. NO. OF WORDS – 255

Challengers who want to set a brand new record or challenge an already set record are welcome.

**NEW RESPONSIBILITIES**

In the process of shouldering of new responsibilities, the B.Tech Course Coordinator, Dr. Arun Kumar Padhy, Professor, Dept. of Chemistry, took up the additional charge of being the Coordinator of the NIST Alumni Chapter; Mr. M.Suresh, Asst. Prof., Dept. of Electronics and Communications Engineering as the M.Tech Coordinator; Dr. Motahar Reza, Asst. Prof., Dept. of Mathematics as in-charge of NIST R & D Programs at IIT, Kharagpur; Mr. Jagannath Mohanty, Asst. Prof., Dept. of Management and Humanities as the Entrepreneurship Development Cell (EDC) Coordinator; and Mr. Amrut Phalguni Mohanty & Mr. Dipti Ranjan Lenka, Faculties, English took the responsibility of being the Editors of the Institute’s monthly news bulletin, NIST e_news.
Institutional Factors Affecting Student Retention

Dr. Sisira Kanti Mishra
Sr. Lecturer, Dept. of Management & Humanities Science

Student retention has become a challenging problem for the academic community; therefore, effective measures for student retention must be implemented in order to increase the retention of qualified students at institutions of higher learning. This attempt suggests that institutional administrators, faculty, and students play a vital role in improving student retention. For instance, institutional administrators can help students stay in school by providing them with the appropriate funding, academic support services, and the availability of physical facilities, in addition to the effective management of multiculturalism and diversity on campus. Faculty members can help to maintain a positive learning environment for students by using multimedia technology and innovative instructional techniques such as cooperative and collaborative learning in the classroom. Ultimately, the success of college retention depends on the students themselves. Therefore, students must be motivated to participate actively in their own learning process.

Role of Institutional Administrators

It is noticed that college students who drop out usually do so by the time they finish their first year. Unfortunately, the student retention rate usually includes students who were also transferred to other colleges. Therefore, the retention rate does not provide an accurate account of the number of students who actually dropped out of college. First, some students leave for reasons that may be beyond institutional control, such as lack of finances, poor student-institution fit, changing academic or career goals, or unrelated personal circumstances. Secondly, many more students leave because the institution has failed to create an environment, inside or outside the classroom, that is conducive to their learning and educational needs. Thirdly, the inability to manage normal school work or to assimilate within the student population could discourage some students from returning for another year of torture. Therefore, it is extremely important for institutional administrators to ensure that students fulfill their prerequisites before taking upper level courses, because they do not understand the importance of education, and/or do not know how to apply classroom-learned theories to real life problems. Further, the lack of appropriate role models or mentors in the academic environment could complicate this problem. Finally, during their first year at an academic institution of higher learning, freshmen might be overwhelmed with the transition from high school to college life, and they might become overly stressed by the dramatic changes even before they finish their first year of college.

Role of Faculty

There is no doubt that faculty play a crucial role in promoting educational growth among students. There are several ways in which faculty members can help to maintain a positive learning environment for students.

Emphasis on Teaching and Learning

Faculty must attempt to be less theoretical and more practical in preparing students for their future careers. Besides providing students with a basic understanding of a specific discipline, faculty
members must help them to think logically, critically, and imaginatively, and to develop more effective oral and written communication skills. It is important that instructors concentrate on nurturing each student’s critical thinking, problem-solving, and creativity skills that are needed for the ever-changing world. Learning should be treated as a dynamic, not static, process.

**Collaborative and Co-operative Learning**

Collaborative learning is a dynamic, student-centered, task-oriented learning process, involving the active participation of both faculty and students. For instance, students are welcomed to work with peers and instructors to explore and understand the concepts and fundamentals of the subject discipline, and then to apply this newly acquired knowledge to practical situations. This innovative instructional technique assumes that students and faculty can learn from each other. Students frequently work in group projects, oral presentations, and student-directed class segments, where the faculty is always available to offer prompt and constructive feedback. However, it is imperative that students be educated to work in groups, and understand the responsibilities and dynamics of a collaborative setting to make this process effective.

Co-operative learning is found to increase student retention, student satisfaction, cognitive skills, and active participation. This can be achieved through the use of problem-based learning methods, especially in the fields of business, social sciences; case methods that analyze actual, real-life, business problems and decisions; and, stimulation methods that allow students to participate in “real-time” problem-solving situations. A faculty should encourage the formation of groups that consist of a mix of students from various disciplines and academic levels as co-operative partners.

**Academic Advising**

Academic advising should be treated as an on-going process, to be complemented with periodical follow-up sessions throughout the semester. However, academic advising is more important to the freshmen than to seniors, as the former needs more guidance and support from the academic community. Continuous interactions between students and their academic advisors are also important. Students must be encouraged to take courses offered by their advisors, because the instructors are the best appraisers of their academic performance. Positive reinforcement and support from faculty members will lead to favorable instructional experiences for students, and challenge them to move toward greater academic and interpersonal development.

**Role of Students**

The role of individual student effort cannot be overemphasized. Indeed, students themselves play a critical role in getting good grades and remaining in institutions. They must actively explore all opportunities available and develop a sense of belongingness so as to ease the process of adapting to the institutional system, and increase their own chances of staying in institutions until they graduate.

**Student Accountability**

The students must be taught to account for their own actions. A student’s immature behavior can result in serious consequences, such as academic probation or suspension. Students must constantly be warned of the serious consequences, if they are unable to maintain the minimum grade requirements to stay in institution. Nonetheless, acceptance by their peers and faculty members also help to validate and affirm their capabilities in the learning process, and support their academic endeavors and social adjustment.
Motivation

Students who perform poorly during their first year tend to be potential candidates for dropping out of institutions. Studies have indicated that motivation is a prerequisite for student learning and students can foster this motivation by setting clear, explicit learning goals and understanding the expectations of success. In other words, the greater the belief that a task can be accomplished; the greater is the motivation to try.

Career Centers

Career centers of many academic institutions periodically provide useful programs to help students increase their self-esteem and the motivation to succeed. Students must be inspired to constantly seek out positive role models in the college community, such as administrators, faculty, fellow students, or even their parents or siblings. There is evidence to indicate that students who have continual contact with their role models during college tend to succeed and excel in classroom learning.

This study identifies several institutional factors that may affect student retention in academic institutions of higher learning. As illustrated in this study, institutional administrators, faculty, and students must redefine their individual roles and responsibilities, and work together as a unit to produce a meaningful and healthy academic community.

Tips to Remain Ever Happy

Collected by Suvendu Choudhury

- Whatever you intend to do, God should be in front of you. Feel His presence while talking, eating, walking, sleeping, and traveling. Involve Him in all your activities. So long as you keep your hands in His hands, you are safe from all miseries of the world. So make him your PARTNER in everything you do.
- Maintain cleanliness and neatness in your surroundings.
- Never give the excuse that you don’t have time.
  - There is a quotation ‘A busiest man has the greatest leisure’
- Learn to remain in the present moment which is most desirable feature for success and happiness in life.
- Ensure at various intervals that your thinking is planned and systematic and not haphazard and random.
- Develop the habit of viewing everything positively, even the most miserable situations. Negative thinking weakens the mind, makes it restless, agitated and impure.
- We should realize that no difficulties or problems are permanent. They all will pass. Such is the law. Everything is in a state of constant motion and change. Nothing is permanent and static here.
- Remember that everything which happens to us in life is for our good only. You have been placed by God exactly where you deserve. Once you play your present role successfully, you will be automatically shifted to the next higher place.
A NISTian Speaks…

Smruti Sagarika,
B.Tech., 7th Sem., Team e_news

Now that the dust has settled finally,
Sleepless nights, days spent in anxiety,
Now that all hullabaloo is over,
all for the yet-to-be an engineer,
I sit down and try to decipher,
the circumstances how I landed up here.

As a child, believing and unquestioning,
When life wasn’t all about rationalizing
I dreamt sometimes of becoming an astronaut,
an airhostess,
A doctor, a scientist and funnily, sometimes an actress.
But honestly, never did I fantasize or bother
About the life I would have as an engineer.

But when chance came my way,
I embraced it as if it was all I had wanted till that day.
I was determined to prove my mettle
To bear on my shoulders, however cumbersome the fradle
And now not even a year is left for me and my friends,
to leave these classrooms and corridors.

And still I feel there is so much to discover,
So much to learn, more to acquire,
As to how I am here, I may not get the answer,
But gradually, I’m understanding why I am here.
Not only as an individual do I exist,
But as a part of the family called NIST.

Not a looser

Jagannath Satpathy
B.Tech., 3rd Sem., Team e_news

What of the lad who never wins,
but never quits the race?
Who knows before the day begins,
he’s doomed to second place.
Two left feet; too many thumbs
but still he plods ahead.
He’ll arrive to catch the crumbs,
after the winners have been fed.
Who is this lad of average skills,
who’s most of the human race?
One by one he’ll climb life’s hills,
just trying to keep life’s pace.

obituary

Mr. Manas Ranjan Mishra, a 1996-2000 batch, B.E., Electrical Engineering student, passed away in a fatal accident few days back in New Delhi. Bearing the roll no. 199617060, Mr. Mishra, a resident of Balimela, was the son of Mrs. & Mr. K. B. Mishra.

NIST e_news is mournful at the sad and untimely demise of Mr. Mishra and pays homage to the departed soul.
One of the issues sizzling on the palate of the Indian man at this moment is the one concerning our laborious student community (I’m sure the student fraternity will agree with me unanimously while the parents might not be that easily consenting!) No, no I’m not implying that the students have become a menace for the Indians, for that’s still another controversy! What I’m referring to is the issue of Reservation Quotas.

After going for the colossal drive of reservations in the government job sector, the Indian government is now looking for the same in the education sector. And the most ironic part in this inconsiderate situation is that these reservations are being done on the basis of Caste! With the recent refusal (or should I say diplomatic stand?) by the private sector to introduce the ‘Quota system’ in their domain…the matter has become even more ominous. I guess there’s still more to be done before our conventional businessmen learn to put their sharp business acumen aside! And why should they? Not only that I do not agree with the relevance of these quotas but also the procedure of their allotment is not plausible. When the Hon’ble Education Minister Arjun Singh declared the massive chunk of quotas for the so called lower castes in the educational institutions, I’m sure he must have gathered numerous invitations of Thanksgiving from his protégés……not to mention the uncontrollable wrath of the rest!

Speaking of the issue, its splashes are on everybody. Not only has this ensured less opportunity for the talented but also accumulation of the undeserving at the eligibilities. This reminds me of the countrywide protests of the doctors against these quotas. I think they were quite justified in their protests against the ‘quotafying scheme’. Just how many times these ‘quota promoters’ go to a quota-qualified doctor for treatment? But no, they want the best treatment they can afford. I wonder just how they expect the best doctors to be available when the best talent available was not even given the chance! The IIMs, the IITs are also facing a similar scrutiny. The quality should never be compromised in matters so crucial to the very foundations of development.

For the Indian democracy which boasts of secularism, casteism no doubt is a disgrace! And I’m sure that demanding quotas by screaming out loud that “we belong to the lower castes” is not going to help matters! Tracing back to the times when Dr. B.R. Ambedkar had introduced the quotas in the constitution it was clearly mentioned that these measures were to be implemented until the ‘then lower castes’ developed which was estimated to be around a decade or two. When we intend to erase the barriers of caste, by providing these quotas we exactly are reminding them of their lowly status. This is the loudest citation of hypocrisy on our part. Looking to the facts there are only two categories now – the rich and the poor. Truly speaking only the extremely poor (though every man thinks himself to be!) and the physically challenged deserve the quotas for it’s a human act to help them when they have trouble helping themselves. If we want to help the under privileged then we should empathize with them rather than showing our sympathies! For it is our sympathies and weaknesses that these Machiavellians aka politicians take advantage of, for their veneers.

Quotas were meant to help us develop as a nation and not for the rich to grow richer and the poor poorer. Its time we work hard and get jobs as per our qualification rather than looking out for quotas.
It is the question of the present and laying the strong and substantial foundation of the future as development can never take place on a compromised foundation! For if we do not, the day is not far when each one of India’s populace will have a RESERVATION and we will have to resort to priorities! May be then some of our software engineers will teach them priority!

[Any suggestions or feedback regarding the article are welcome and can be mailed to vijaya_126@hotmail.com ]

News Desk

Hello friends, the month of August was completely eventful for India. Clouds were looming large over the Indo-US nuclear deal as there was lot of pressure from the left as well as from other allied parties of the UPA government. But now it seems as if the UPA government has had control of the situation and will be holding negotiations with the IAEA (Indian Atomic Energy Agency) in the month of September. A recent poll conducted by TOI saw a gigantic 93% of the population supporting Indo-US nuclear deal which can act as a boost for the government. Moreover such kind of deal will improve Indo-US relationship, which had deteriorated during the cold war period. There was another triumph for India as far as the terrorism plot of UK was considered as the Australian court on 21st August ruled that the immigration minister Kevin Andrews wrongly revoked a work visa for Mohammed Haneef and he was falsely accused of links with a bomb plot. But sometimes it seems as if it is quite impossible to keep terrorism out of India. Hyderabad was a witness to the twin blast that occurred on 25th evening. It claimed nearly 42 lives. It came as a telling blow to the Indian government as recently there were bomb blasts in Mecca Masjid that claimed 14 lives in Hyderabad. It is said that the Hyderabad city police had earlier received information from the intelligence department from New Delhi that two suicide bombers of foreign origin were lurking in the city but the police was not successful to avert the inevitable. The Andhra Pradesh government has blamed terrorist groups based in Bangladesh and Pakistan of the twin blast. Now it is a bitter truth that India’s track record in cracking terror cases is pathetic. When are such incidents going to stop? Perhaps this is a question whose answer no one knows. I hope that there can be a day when people understand the preciousness of one’s life and that would be the day when earth becomes a much better place to live in.

Terrorism is like quick sand, the one whose foot is over is doomed. The same happened with Sanjay Dutt as he was sentenced to six years imprisonment for illegally possessing arms linked with the 1993 Mumbai serial blasts. This came as a major setback for the Hindi film industry as he was a part of many big budget projects. For some, this occasion was very pleasing as justice was done and the culprit was punished, but I really doubt that how many people think this way because of the fact that Dutt junior has got a colossal image in public for his blockbuster Munna Bhai series. He was eventually released by the Supreme Court on interim bail due to technical problems as the TADA court failed to provide him with a copy of the sentence on 20th August. Let’s see how Munna Bhai goes with this sequel of his life. It was curtains up for Sanjay Dutt but it was curtains down for Salman Khan as a Jodhpur Session’s Court dismissed his appeal against the five year term for poaching an endangered species and issued a non-bailable warrant against him. The star was convicted for poaching a Chinkara in September 1999 during making of Sooraj Barjatiya’s film ‘Hum Saath Saath Hain.’ Salman Khan’s arrest comes as a great loss to the producers as he was involved in movie projects worth 200 crores.
But lastly there was some good news for the Bollywood as Yash Raj film’s Shahrukh Khan starrer Chak De India proved to be a huge success among the audience. The film is based on the Back drop of Indian women’s hockey team which is at the verge of its deterioration. The story is quite natural which adds to its uniqueness and popularity. The film is didactic in nature as it gives a social message. This movie proved to be a hatrick for the Yash Raj banner as it was their third consecutive hit film, the previous ones being Dhoom-II and Tara Rum Pum. I cannot pen down my final line without mentioning about cricket. Yes, it was a moment to be proud of as the Indian cricket team clinched the Test Series 1-0 against England to mark their 1st Test victory in 21 years on English soil, the last being the series of 1986. One common factor that lies between the two teams is Dillip Venksarkar. He was the ‘Man of the Series’ in 1986 and now he happens to be the Chief Selector of the Indian cricket team. He is surely a lucky coin in Indian team’s purse. But there is a word of caution for the team as they are 3-1 down in the one day series against England. This is a picture perfect example of the inconsistency of the Indian cricket team, isn’t it?

For any feedback or suggestions regarding this article, readers can mail me at amitdash_nist@yahoo.co.in

Tech Check

Ankan Ghosh & Srastanka Kumar Behera
B.Tech., 7th Sem.

Cursor control with tongue

Steering a wheelchair with your tongue sounds impressive enough. Doing so with your mouth closed and gadget-free is the feat allowed by a tongue-tracking earpiece. Ravi Vaidyanathan, an engineer at the University of Southampton, UK along with Lalit Gupta of Southern Illinois University Carbondale have created a device that identifies a range of different tongue movements with 97 per cent accuracy, using a microphone that sits inside the ear. The company Think-a-Move of Cleveland, Ohio, says it will launch a wheelchair steered by the device by the end of 2007.

The key elements are a plug that seals the ear from outside noise and a microphone that points inside the ear canal. When the wearer moves their tongue, it forces air around the mouth, creating pressure changes unique to those movements. These pressure changes are transmitted to the ear canal via the connecting Eustachian tube. There, the microphone detects them and transmits them to an on-board computer, which converts them into commands that steer the wheelchair. Soldiers and firefighters might also use such devices to steer remote-controlled robots with their tongues, leaving their hands free. Is the Indian army wagging its tongue in anticipation?

Next-Gen transistors

Computers the world over are about to get a makeover. Intel, the world’s largest computer chip maker, announced on Saturday that its next generation transistors will have metal - not silicon - gate electrodes. They will also have insulating walls made of a “high-K” hafnium compound, which is transparent to electric fields, instead of silicon dioxide. The new transistors will make their way into Intel’s next generation products, currently codenamed “Penryn”, which include the Core 2 Duo, Core 2 Quad and Xeon processors. These will run Windows Vista, Mac OS X, Windows XP and Linux. The exact composition of this “high-k” material is a secret, but Intel says that it contains
Hafnium. It is claimed to increase transistor switching speed by 20% and leak five times less current. The changes mean that the 45-nanometre transistors on Intel’s next suite of computer processors will not only be faster and smaller than today’s 65-nanometre ones, they will also be more power efficient. That combination has been difficult to achieve in the past. Using the new 45 nanometer transistors, dual-core processors will contain 400 million transistors, while quad-core will contain 800 million. It seems that the days of your desktop PCs and laptops are going to be numbered.

Stay tuned for some more exciting tech bits in the next issue.

**Birthday Bash (16 Sept. - 15 Oct.)**

NIST e_news wishes a very **Happy Birthday** to:

- Mr. Sushant Kumar Tripathy 24 September
- Mr. G.V. Kiran Kumar 12 October

Many Many Happy Returns of the Day!!!

**National Himalayan Trekking-2007**

Vinay Kumar Das  
Coordinator-Students Activity Center

National Institute of Science and Technology, as every year, conducted a National Himalayan Trekking Expedition to the Parvati Valley of Kullu, Himachal Pradesh during Summer 2007. A team of 15 students with Mr. Jagannath Mohanty, Faculty, and me set out for a new adventure.

First of all I congratulate all for their successful trekking to the Shivalik Range of mighty Himalayas.

SARPASS, a small lake at 13,800 ft. above the sea-level, is surrounded by snow peak hill tops. One of the most popular trails in the Shivalik Range, Parvati Valley, abounded in natural beauty with snow clad mountains, perennial rivulets, streams and waterfalls, picturesque meadows in the midst of dense forest of deodar and fire trees, beckons the young adventure lover to come and experience the serene and calm atmosphere of all pervading Nature.

SARPASS trails offer an opportunity to enjoy the exquisite beauty of Parvati Valley. KASOL was our base camp for entire trekking. It’s famous for its cool and pleasant climate with tall pine trees. The first camp, GUNNA PANNI, surrounded by the snow clad peaks, looked like molten gold at the time of sunrise & sunset. Second camp was FUAL PANNI- it is a vast ground with flora and fauna all around. *Fual* means shepherd and *Panni* means water. Third camp was at ZIRMI, which presents the view of Rudra Nag Top, Tosh Nullah and Khirganga. Fourth camp Tilalotni, the highest point SARPASS, is heaven on earth presenting a spectacular view of Maan Talai, Bijli Mahadev hills. After descending through Biskeri and Bhandhak Thatch one is finally back to Base camp KASOL through Bharshani.
Purpose of the Program

The Purpose of the program is to expose our student to a greater adventure and rough out the rigors of plodding through snow with a sense of love for nature and outdoor recreational activity aiming at promoting National Integration.

Safety

Extensive & painstaking preparation had gone into the planning of track routes for every trekker by the Youth Hostel Associations of India. The field staff & experienced camp leader of YHAI frequently visited the area and checked all the details.

The whole idea of trekking is not to climb hills but enjoy the cool environment & to know how to preserve it. Trekking gives us the experience of perseverance, team work, determination, cooperation, fellow felling and instills in us the indomitable spirit to win over the battle of life. The hills allow us to enjoy the beauty but simultaneously it also asks to preserve its surroundings. It’s an environment-friendly trek. It encourages us to go to the top overcoming all odds through sheer determination and mental strength. Above all it also tests the physical fitness of an adventurous seeker.

Last but not least, I owe my deepest gratitude to Prof. Sangram Mudali, our Director and Dr. Ajit Kumar Panda, our Dean for encouraging & giving such an opportunity to organize this trekking program & my thanks also goes to Mr. Jagannath Mohanty for his valuable contribution to the group during the program.

Students’ View towards Trekking

Amit Kumar Dash  
B. Tech., 7th Sem.

Hello Readers! I would like to share some of the most defining moments of my trekking experience in the Shivalik Range of Himalayas in the month of June 2007. We started our journey on 27th of May and reached Delhi by 29th morning. In the evening, we all left for Kasol which was our base camp. We reached there on 30th. The soothing atmosphere was really enjoyable in Kasol. It appeared to me as a foreign land as there were as many Israelis as there were Indians. The Sun used to hide itself behind the colossal mountains at nearly 7.30 pm which meant that the dusk lasted for another 30 minutes and darkness usher in by 8 pm. It was pretty unusual for all of us. We were given various training in Kasol which included acclimatization, rappelling and morning drills. Finally we started our trekking on 2nd of June. We had 7 higher camps to cover in our trekking journey of 52km. Our first camp, Gunna Pani, which took us nearly 3 hours to cover, was beautifully located. We had an astronomy session there at night. Our second camp was Fual Panni. It was perhaps the most difficult journey not because of the terrain but only due to the fact that we encountered rain that day. It made the track slippery and it was a bit of a real life adventure, but alls well that ends well. The next camp being Zirmi, We had to reach that camp by crossing the forests in the Himalayan ranges. The journey was quite easy. The camp had a mystic beauty about it, more so because of the snow clad Himalayas which was in the nearby vicinity. Tila Lotni was our next camp. Here the terrain was very high and it tired us quickly but one thing that really kept our spirits going was the scenic beauty. As most of our journey was through the higher grass lands, it
made it a majestic experience. We reached the camp fairly quickly; I remember the camp leader there getting annoyed by the fact that we made our journey so quickly that he was not able to make the necessary preparation.

Our next camp was the day of reckoning as we had to cover Sarpass, the highest peak, that day. It was 13,800 ft above sea level. We started our journey at 3.30 in the morning so that we could cross the Sarpass glacier by 9 am. Otherwise later in the day the region experiences hailstorms and snow storms. It was really tough that day because there, the atmosphere was thin and all of us had a bit of breathing problem. But when we reached the peak, all our pain disappeared because there was snow all around, I mean everything was snow. It was one of the happiest moments of my life. Finally we reached Bhiskeri camp and spent the day merry-making and playing kho kho. Our next camp was Bhandhak Thatch. It is popularly called as the Switzerland of India. When I reached there, I realized what was said was true. Finally we reached our last camp, Bersaini after which we went to Kasol by jeep. It was one of the most trilling and majestic experiences of my life.

Asish Ghoshal
B. Tech., 7th Sem.

One of the most enterprising tours of my life was when I went up north in the lap of Mother Nature which entwines the mountains of Himachal Pradesh and its beautiful snow capped sceneries. I would love to unravel the myriads of feeling I went through during the momentous trip. We, a group of 17 adventure seeking personnel started off the journey on 27th of May. The journey of more than 1000 miles started off from Berhampur under the watchful supervision of Vinay sir and Jagannath sir. We reached Kasol on 29th May and set up our base camp there. The chief purpose of setting up the base camp was to get ourselves acclimatized to harsh conditions prevalent there. After spending three days in base camp, we headed off to the trekking zone in Shila village on 1st of June. The sight was a paradise to behold. We enjoyed thoroughly there. We reached Guna Panni further north. It was raining there and after that the sun made its presence felt by revealing itself from the clouds. The next destination was Fual Panni which was an arduous journey but we valiantly fought off the inclement weather to reach our destination. Then we headed to Jhirmi the next day, which was our first encounter with snow. It was 9,800 ft above sea level and was chilly.

Then it was Tilalotni, which came with the added difficulty of facing low oxygen level and steep terrain. But when we reached Tilalotni, it was simply a superb sight to witness and experience. Next day we started off before day break towards Sarpass, climbing further up towards the zenith. We walked on ice stretched land for a couple of miles battling bone-freezing temperatures. The sight from the top was exhilarating and worth a moment to capture. Then we stared the downhill journey passing by Biskeri Thatch and Bhandak Thatch, popularly known as the Switzerland of India.

After seven days of grueling adventure we turned our attention to Manali where we enjoyed rafting to the hilt. The ride through raging waves shook us from the core yet I should admit that the quest could not have been better. Finally we were treated to some sumptuous food at Manali by Vinay sir, which marked the end of our trip. It was one trip I would ponder the rest of my life, a feeling endorsed by all my colleagues as well.
NIST Alumni Chapter with Dr. Arun Kumar Padhy, as the Coordinator, Mr. Bhabani S. Patnaik, as the President and Ms. Sumitra Ojha, as the Secretary, has launched a Scholarship Scheme to help the academically sound but economically backward students. A special account, **NIST Alumni Scholarship Fund**, has been opened for the alumni contribution.

**Contact Us at Our new e-mail ID:**

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In every sense you are the designer, creator, and store house of knowledge. In all sphere one needs your guidance to get on life. May it be work, social or spiritual?

After years, you still fire, the same enthusiasm in me, Still your words ring in my ears, To roam, explore, and go ahead in life, With veracity at the core for your generation, For you helped me to blossom.

I express my sincere obedience, Seeking your blessings.

May Lord bless you! May be guide you in all your way!

Wish you a very Happy Teacher’s Day.

With best regards,

Arun

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