We begin 2010 on a great note. The placement of our students in the companies who have visited our campus have been inspirational to say the least. More than the numbers who got selected, it is the feedback from the recruiters which is exciting. The technical prowess and quality of projects done by our graduating students is highly appreciable. The green ambience of the campus and the outstanding discipline of our students came in for high praise. The active role of the student clubs and the large number of students who have acquired certifications in various industry-oriented packages were the exclusive hallmark of our student community as different from any other campus.

I must recount with pleasure that being one of the five prestigious Institutes who were selected in the year 2009 for establishment of TIFAC CORE through an all India level selection process was an emotional high-point of my career. This is our single biggest achievement in the field of industry-institute partnership and our opportunity to be a center of excellence and shape up as a mini-IIT in the field of Communications Technology. This being an interdisciplinary area will bring the best minds of the country to work from the NIST campus on innovative solutions and industrial problem solving. I thank Dr. Ajit K. Panda and all the faculty for making this possible.

On Dec 26-28, 2009, I attended the Silver Jubilee Reunion of the 1985 batch of IIT/Kanpur. After a long gap of 25 years, we met our roommates, wingmates, faculty, etc., as we took long walks down memory lane. Things and distances looked smaller than we thought they were at that time. Although IIT has changed enormously, what was intact was the spirit of can-do. However, regretfully, even the IITs have to throw out students for non-attendance, non-performance, etc. What was most eventful was that our batch collected over Rs. 100 lacs as Alumni funding and presented it to IIT/K to fund Chair Professors/Undergraduate Research Programs/Travel Funding for Conferences/etc. Alma Mater – how can I ever repay thee!

15 February 2010

Sangram Mudali

Before the reading begins for the fresh issue of nist e_news, we sincerely apologize for the last two months which could not see the publication of the news bulletin.

The past few months have added tremendously to the academic and research infrastructure of the Institute. The grant of more than 9 crore rupees to establish the TIFAC Core Center at the institute premises, inception of IBM Center of Excellence, the institute being selected as the business incubator for entrepreneurs under MSME, collaboration with Drexel University, faculty members being selected by TCS as their Technical and Life Skills Trainers are few of the examples to validate the fact that chances are ample for multifarious growth in the campus of NIST.

The time has once again come to celebrate and cherish another passing year of nist e_news. Over the period of past eight long years the magazine has solely been the speaking witness of the Institute’s roller-coaster ride and has tried to replicate all the nuances of the Institute in all its tits and bits. It’s been a journey worth travelling.

nist e_news owes its gratitude and gratification to all its readers for making its existence felt.

Amrut Phalguni Mohanty

Dipti Ranjan Lenka
National Institute of Science & Technology has been selected as the “Business Incubator for Entrepreneurial and Managerial Development” by Ministry of Micro, Small & Medium Enterprises (MSME), Govt. of India. Under the scheme, financial support will be provided to commercially viable business plan or an idea if implemented can potentially become commercially viable or simply, business ideas. For the current year a total of 10 business ideas have been sanctioned for incubation at NIST. The ideas/innovations can belong to any discipline/faculty. The scheme is not limited to NISTians alone, any business ideas can be referred to which are potential for incubation. The incubatee can be a student, a teacher, an existing entrepreneur, an unemployed, small business owner or a freelancer. Every viable/short-listed idea will get monetary support ranging from 4 - 8 lakhs, depending on the idea and money required to make it commercial. And in the long run, the Govt. will extend help in converting the idea into an enterprise. The entire program is organized by the Coordinator Entrepreneurship Development Cell (EDC), NIST, Mr. Jagannath Mohanty.

Papers Published


- **Dr. Sukanta K. Tripathy, N. Mudali and Mihir Hota**, Faculty, Department of Physics, published a paper, entitled, “Optical Bistability in a Photonic Crystal Structure Close to a Magnetic Semiconductor, the Effect of Impurity and Self Interaction”, “VCOM’09” presented at International Conference on Communication Technologies and VLSI Design (CommV’09) held at VIT Vellore from 8th – 10th October 2009.


(Note: ICIT is published the proceedings with IEEE/ M/s Tata McGraw-Hill Education Limited).

Papers Presented

- **Mr. Trupti Ranjan Lenka**, Faculty, Dept. of Electronics & Communication Engineering attended the XVth International Workshop on the Physics of Semiconductor Devices ( IWPSD-2009) at JMI University, New Delhi from 15th – 19th December 2009 and presented a paper, “Heterointerface
Polarization Effect and DC Characteristics Study of Al$_x$Ga$_{1-x}$N/In$_x$Ga$_{1-x}$N/GaN Based High Electron Mobility Transistor”.

- Mr. Trupti Ranjan Lenka attended the 12th International Symposium on Microwave and Optical Technology (ISMOT-2009) held at Hotel Ashoka, New Delhi from 16th – 19th December 2009 and presented a paper, entitled “Microwave Characteristics of Al$_x$Ga$_{1-x}$As/In$_x$Ga$_{1-x}$As/GaAs – Based Pseudomorphic HEMT for High Frequency Communication Circuits”.

- Ms. Raseswari Pradhan, Faculty, Dept. of Electrical & Electronics Engineering, attended an International conference on BICA, 2009 at ITER, Bhubaneswar held between 20th – 22nd December 2009 and presented a paper, entitled, “Application of Genetic Algorithm based PSS for Two - Area AGC System in Deregulated Scenario” co-authored by Dr. Sidhartha Panda.

- Dr. Sidhartha Panda, Faculty, Dept. of Electrical and Electronics Engineering presented a paper, entitled, “Multi-Objective Optimization Technique for TCSC-Based Supplementary Damping Controller Design” at the International Symposium on Biologically Inspired Computing And Applications (BICA-2009) held at SoA University, Bhubaneswar on 21st and 22nd December 2009. The conference proceedings would be published by the IEEE Computer Society & indexed both by EI (Compendex) and ISTP.

- Mr. Mihir Hota, Faculty, Dept. of Physics, presented a paper, titled, ‘Optical Bistable Switching in a Magnetic Semiconductor’ which was reviewed and accepted at ELECTRO-2009, the International Conference on Emerging Trends in Electronic and Photonic Devices & Systems held at IT, BHU, Varanasi from 22nd - 24th December 2009.

- Mr. Bhaskar Bandyopadhyay, Faculty, Dept. of Management Studies presented a paper entitled, “Effectiveness of Re-Branding as a Competitive Advantage for Proper Re-Positioning of Corporate Image”, co-authored by Prof. (Dr.) Arun K. Panda, Berhampur University & Prof. (Dr.) Arun K. Mahapatra, NIST at the International Conference on Brand Management (ICBM 2010), jointly organized by IMT, Ghaziabad & the University of Greenwich, UK on 8th & 9th January 2010. Dr Lubna Nafees, Dr Omkumar Krishnan, IMT, Ghaziabad and Mr. Tim Gore OBE, Greenwich University were the joint Chairs for the conference. Around 75 papers were presented in two days. Welcome address was given by Prof. Sahay, Director, IMT, and Key Note address was given by Prof. Abraham Koshy, IIMA (Co-author with Prof Philip Kotler: Marketing Management- A South Asian Perspective by Kotler, Keller, Koshy & Jha). Special invitee was Mr Kensaku Konishi,President & CEO of Canon India Pvt. Ltd. A good number of faculty from IIMs, IITs,other Indian Universities as well as foreign Universities participated in the program.

Invited Talks

- Dr. Sidhartha Panda delivered an invited talk on “Flexible AC Transmission Systems (FACTS) Controllers in Power System” at National Conference on Future Perspective of Renewable Energy Sources, held at KIIT University, Bhubaneswar on 12th December 2009.
Dr. Sidhartha Panda has been invited as the Technical Judge for the National Level Student Paper Contest and Exhibition, STEPCONE-2010, at GMRIT, Rajam, A.P., held on 8th & 9th January 2010. He also delivered a talk on “Flexible AC Transmission Systems (FACTS) Controllers: Overview, Modeling and Simulation” during the program.

Workshops/Seminars/Conferences Attended

- Mr. Ranjit Kumar Behera, and Mr. Bhagaban Swain Faculty, Dept. of Computer Science & Engineering attended a Faculty Enablement Program, a part of the ‘Infosys Campus Connect Program’(FEP), held at Infosys, Bhubaneswar from 16th - 20th November 2009. The main focus of the program was to discuss about the new courses added to the Foundation program including, Introduction to Computer System, Operating System, Problem Solving Techniques, Programming and Testing and RDBMS. The program was addressed by Mr. Abhijit Sen, Head of Infosys DC, Bhubaneswar. Mr. Nirmalya Chaudhury (E&R), Mr. Bhupesh Deka (E&R), Mr. Hara Prasad Misra (IVS), Mr. Nirmalya Mishra, Project Manager, along with other members of Infosys were the resource persons for the program.

- Mr. Trupti Ranjan Lenka, Faculty, Dept. of Electronics & Communication Engineering attended the 2nd International Winter School for Graduate Students (IWSG 2009) at IIT-Bombay from 30th November – 5th December 2009 sponsored by INUP and NNIN, USA.

- Mr. Ratnakar Mishra and Dr. Pavan Kumar attended an AICTE sponsored Staff Development Program organized by PJ College of Management Studies at Bhubaneswar as Resource Persons for Factor Analysis (SPSS) on 11th December 2009. The program was meant for faculty members of various management institutes who were relatively new in using statistical software for their data analysis. The other resource persons were from IIT Kharagpur, XISS, Ranchi, XLRI, Jamshedpur, KIIT, Bhubaneswar, Berhampur University. A total number of 40 participants attended this program on ‘Research Methodology’ organized during 6th – 13th December 2009.

- Mr. B. Balaram, Faculty, Dept. of Management Studies, participated in the Training on Research Methodology and SPSS 18.0 Predictive Analytics Software (Statistics) organized by SPSS South Asia, Bangalore and School of Management Studies, JNT University, Hyderabad, during 11th – 13th December 2009.

- Mr. Ratnakar Mishra and Ms. Sanjukta Mahapatra, Faculty, Department of Management participated in an AICTE/MHRD sponsored ‘Winter School on Competency Mapping and Feedback’ organized by Indian Institute of Technology (IIT), Kharagpur at its extension centre at Bhubaneswar from 13th – 20th December 2009. The FDP cum winter school was attended by 65 participants from all over India and was coordinated by Dr R. K. Pradhan, Dept. of Humanities and Social Sciences, IIT Kharagpur. Resource persons were from both the host institution and industry. Several competency mapping tests were conducted by eminent psychologist like Dr. Pravash Mishra, Utkal University and Dr. F. M. Sahu, XIM, Bhubaneswar. A field tour was conducted for the participants on 11th December to visit Puri and Konark. The program was inaugurated by Dr. S. Bhattacharya, Director, IIT,
Bhubaneswar and the valedictory session was chaired by Dr. Damodar Suar, Head, Department of HSS, IIT, Kharagpur.

- **Mr. Shom Prasad Das**, Course Coordinator, MBA & PGDM attended the Management Development Program on ‘Innovating for Excellence Programs for Leaders in Management Education’ held at Indian Institute of Management (IIM), Ahmedabad, from 14th – 20th December 2009. The MDP was attended by professors from different top-notch Business Schools/Institutes/Universities of India. The main focus of the program was on institutional excellence, innovating in curriculum matters, developing academic partnerships, maintaining an industry-economy focus, creating graduates who show the flexibility to respond to emerging areas in the economy, including those outside traditional industry, developing academic infrastructure and utilizing it efficiently, and attracting and retaining academic staff.

- **Dr. Manabendra Patra**, Faculty, Dept. of Chemistry, attended a Short Course on Industrial Waste Management & Environment Management Practices (IWEMP-2009) held at Bhubaneswar during 16th - 18th December 2009 organized by Institute of Advance Technology and Environment Studies, Bhubaneswar.

- **Mr. Kumar Srikanta Nayak**, Faculty, Dept. of Management Studies attended an FDP from 16th - 21st December 2009 on ‘Learning to do Academic Research for Publishing in Academic Journals and for Doctoral Dissertation’ organized by Indian Institute of Management (IIM), Kozhikode, Kerala.

- **Dr. Manabendra Patra**, Faculty, Dept. of Chemistry attended the 23rd Annual conference of Orissa Chemical Society & National Seminar on Recent Trends in Chemical Science and Technology held at National Institute of Technology, Rourkela during 19th & 20th December, 2009.

- **Mr. B. Balaram** attended the Third ISB Accounting Research Conference, organized by Indian School of Business, Hyderabad during 21st – 23rd December 2009. The program was organized by Sanjay Kallarpur, ISB, Cathy Schrand, Wharton, L. Shivakumar, London Business School, and Sri Sridharan, Northwestern University. Several issues regarding Accounting, such as, information asymmetry around earnings announcements during the financial crisis, the role of stock liquidity in executive compensation, pricing of restructuring charges, managerial incentives and the informativeness of earnings announcements etc. were discussed in the conference. All the presenters were from foreign universities.
• The M. Tech. CSE students of NIST along with 15 faculty members attended the workshop on “Service Oriented Architecture and It’s Application” as a part of International Conference on Information Technology (ICIT) 2009 held at Apex Institute of Technology and Management, Bhubaneswar on 21st December 2009.

• Mr. Shidarth B. Neelamnai, MCA Course Coordinator, Mr. Rabindra Kumar Shial, Mr. Bhabani S. Gouda, and Mr. Chandan Kumar Behera, Faculty, Dept. of Computer Science and Engineering attended the 12th International Conference on Information Technology (ICIT-2009) organized by Orissa Information Technology Society, BBSR in collaboration with TITE, BBSR at TITE Campus, Bhubaneswar from 21st – 24th December 2009.

• Dr. E. Raja Rao, Ms. Sreta Patnaik, Ms. Monalisa Mishra, Faculty English and Ms. Sanjukta Mohapatra, Faculty, Management Studies attended the ‘Teacher Support Program’ (TSP) organized by British Council at Gandhi Institute of Technological Advancement (GITA), Bhubaneswar from 23rd – 25th January 2010. Ms. Jharna Ganguly, British Council, being present during the TSP as the resource person highlighted the four basic features of learning a language, such as, reading, writing, listening and speaking. Around 20 faculty members from different engineering colleges of the state participated in the same.

• Dr. E. Raja Rao, Mr. Dipti Ranjan Lenka, Mr. Amrut Phalguni Mohanty, Mr. Minakshi Prasad Mishra, Ms. Tripti Mund, Faculty, English and Mr. Jagannath Mohanty, Faculty, Management Studies attended the Examiners’ Workshop organized by University of Cambridge at Hotel Kharavel, Bhubaneswar on 26th January 2010. The day long workshop discussed on the methods of examining for BEC Prelims and Vantage oral tests, the faculty members were tested on their examining skills at the end of the workshop. Around 12 faculty members from different engineering colleges participated in the said program.

NIST Welcomes the following new members into its parivaar:

Mr. Santosh Kumar Sethi joined as Placement Executive. He has done his MBA from Sikkim Manipal University, Gangtok, B.A and LL.B from Utkal University, Bhubaneswar. He is trained on Business Etiquettes, teleconferencing skill, and telephone etiquette at SATYAM. He has worked in SATYAM Computer Services Ltd., Bhubaneswar as a Learning officer, Training and Administration and also as an Executive, HR & Immigration, at KIIT University, Bhubaneswar as an Executive, Training & Placement and at XIMB, Bhubaneswar as a Research Investigator. His interest lies in the field of Human Resources.
Ms. Debabandana Apta joined as Faculty in the Department of Electronics and Communications Engineering. She has done her B. E. and M. Tech., in ECE from NIST. She has also worked as a Lab Supervisor in Communication Lab at NIST. Ms. Apta takes her research interest in the field of MIMO Antennas.

Mr. K. Tarakanath joined as Faculty in the Dept. of Electrical and Electronics Engineering. He has done his M.E in Control Systems from BIT, Mesra, Ranchi and B. Tech. in Electrical & Electronics Engineering from JNTU, Hyderabad. His Research Interest lies in the area of Control Systems Applications.

**Thursday Lecture Seminar Series**

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A Microsoft Webinar on Faculty development session on Windows Mobile OS Emulator

Date: 24th December 2009

Raseswari Pradhan

Application of Genetic Algorithm based PSS for Two - Area AGC System in Deregulated Scenario

A Microsoft Webinar on Faculty development session on cloud computing

Date: 21st January 2010

Dr. A. K. Panda

Diode to communication: A Challenge at NIST

Date: 28th January 2010

Mr. M. Suresh, Dr. A. K. Panda and Mr. T. R. Lenka

International Conference on VLSI Design and Embedded System, 2010

Mr. Sushanta Tripathy

Performance measurement of Online Information System
Awareness camp at Gopalpur Beach Festival -09

An Awareness Camp was held during the five-day long GOPALPUR BEACH FESTIVAL-09 from 24th to 28th December 2009 at Gopalpur Beach, Berhampur. It demonstrated awareness programs on some of the nuances of Robotics, Entrepreneurship Development, Solar Car, etc. Many of the faculty members, staff and student volunteers being present at the camp enlightened the visitors’ insight towards the recent technological advancements.

Talk on ‘Electronic Transport in Mesoscopic System’

Prof. Mukunda P. Das, Institute of Advanced Studies, Australian National University, Canberra, ACT0200, Australia delivered a talk on ‘Electronic Transport in Mesoscopic System’ in the institute premises on 1st December 2009. Prof Das is also in the editorial board of Condensed Matter, Journal of Physics.

DST Sponsored TIFAC CORE at NIST

The Institute has been granted with a sum amount of Rs. 9. 1579 Crore to establish the ‘TIFAC CORE in 3G/4G Communication Technologies’ based on an agreement signed by both TIFAC and NIST at Coimbatore on 22nd December 2009. TIFAC CORE is the brainchild of former President of India, Dr. A P J Abdul Kalam. It is based on the concept that Centers of Relevance & Excellence (CORE) should be established in renowned technical institutions on specific areas of technology using world class laboratory infrastructure. This infrastructure will be used to provide consultancy to medium and small scale industries in order to be innovative and globally competitive. In addition, these centers of excellence will produce world class trained manpower in the form of M. Tech and Ph.Ds who will then propel Indian industry in the respective domains. The funding for the CORE’s will be jointly borne by the Department of Science & Technology, Government of India and the Indian Industry.

NIST has been selected as a CORE in the area of 3G/4G Communications Technology. The major industry partners for the project are National Instruments, Freescale, Altera, ARM and Agilent. The aim of the center is to work on industry and research related areas on LTE, WiMAX, SDRs, MIMO and WSN. The expectation from the stakeholders is that this center should propel NIST to be a mini-IIT. NIST has been selected based on a tough selection criteria at an all India level based on its technical competence, industry collaborations and unparalleled academic and technology leadership of its faculty. More than 25 top notch engineers in the field of Communications, Networking, VLSI, Embedded Systems, Testing, Instrumentation, etc., are expected to be working at this center. For more details, contact Dr. Ajit Kumar Panda.

Collaboration with Drexel University

Prof. Shyamalendu Bose, Drexel University, USA visited the institute for a collaborative work with Prof. S. N. Behera, Emeritus Professor, NIST during 6th – 16th January 2010. Prof. Bose delivered a talk on ‘Science and Technology of Carbon Nanotubes’ on 9th January 2010. Prof Bose also interacted with the faculty members and discussed the importance of research besides teaching to sustain in American Institutes. Possible collaborative work with Drexel University through organizing seminars and exchange of students were discussed.

Introduction to Lab-View

A three day workshop was conducted in NIST campus by National Instruments from 14th - 16th November 2009. Mr. Karun Jain (Academic Technical Consultant, NI Bangalore) was the resource person. In this workshop NI has provided hands on training on LabVIEW, ELVIS and Compact RIO etc. Around thirty faculties were trained within these three days.
FDP on ‘Frontiers of Microwave Engineering’

A Faculty Development Program entitled, “Frontiers of Microwave Engineering” was conducted by Department of Electronics & Communication during 21, 25-29 December 2009. The program was inaugurated formally by Prof (Dr.) Niranjan Das, Dr. Amitabh Bhattacharya and Dr. Arun Kumar Padhy. Professor Subrat Sanyal, Prof. Binay K. Sarkar, Prof. Amitabh Bhattacharya were the resource persons from IIT, Kharagpur to cover various topics in Microwave like Microwave Measurements, Challenges of RF Circuit Designs, Design of RF Amplifier, Design of LNA and Broadband Amplifier, RCS Signal Processing and Electromagnetic Interference/Compatibility (EMI/EMC). Different experiments using microwave components, Microwave test bench, Vector Network Analyser, spectrum analyzer added extra flavour to the program. All the experiments were handled by the Technical staff from IIT, Kharagpur. The whole program was coordinated by Mr. Rajesh Kumar Dash, Faculty, Dept of Electronics & Communication.

Talk on “Stock Markets and Small Investors”

Dr. S. S. N. Raju Indukoori, Professor, Trainer, Area Head (Finance), IFIM Business School, Bangalore, delivered a lecture on the title, “Stock Markets and Small Investors” on 9th January 2010. The lecture, being a part of the expert talk series in management, highlighted mostly on investment patterns and selection of investment options in the stock market. The students and faculty members of MBA and PGDM attended the program.

IT Olympiad

IT Olympiad Test (Senior Level) was conducted on 13th September 2009 all across the state of Odisha and NIST was also one of the centers for the same. Around sixty seven NIST students appeared the examination out of which two of our students, Mr. K. Venkateshwar Reddy, B. Tech., 5th Sem. and Mr. Subrat Kumar Sahu, B. Tech., 3rd Sem. secured the second and seventh position respectively in the state. The first, second and third rankers are given with the prize amount of Rs.3000/-, Rs.2000/- and Rs.1000/- respectively and the remaining winners get a consolation prize of Rs.500/- each.

Congratulations to the Winners!

SMILE GREEN 1

Friends! We are not writing anything funny but they are supposed to be funniest...
We are not writing anything serious but we need to be serious...
We are not telling anything hypothetically but all they are experimentally...

So now with this article we all are going to start our fabulous journey into world of computer’s not actually about the origin of computer’s but about...Green computing! Not actually computer with trees leaves etc. but something we all should aware! So before going into what actually green computing is! A small but shocking headline......
So again a big question after all it is an OS of some megabytes, how it can waste 25 billion dollars?
Here is the cause behind it

- First, Microsoft never put power-saving options high on the list of default specs. In order for XP to run smoothly, with all its bells and whistles going, desktop machines had to run in “high-performance” mode, the equivalent of flooring your Honda at every green light. So the defaults were often set to “High Performance.” Even when they weren’t, consumers generally chose the setting themselves, not realizing that it had any affect on power consumption.

- The second mistake was a flaw in the much touted “sleep” mode. Sleep mode saves a ton of power; it is a very good idea, and essential, especially for portable devices. Studies of Windows 95 and 98 had shown that users hated to turn computers off because the boot times were so long. Sleep mode was supposed to be the answer to this. The problem is that Windows XP lets any program override the sleep function. So if you have an anti-virus program running in the background, it might not allow the computer to sleep. This flaw is the cause of countless failed laptop batteries, and the complete avoidance of the sleep function by desktop users.

- The third problem was administrative. Systems administrators in offices across the nation find it too confusing or difficult to control power saving functions for all computers on the network. So, instead, they let individual users decide. The result: millions of computers, and even monitors, stay on 24 hours a day and even sometimes during weekends, with absolutely no power-saving functions on.

Now end of all that suspense’s, stories and headlines coming to the point what green computing is!

Green computing or green IT, refers to environmentally sustainable computing or IT. It is “the study and practice of designing, manufacturing, using, and disposing of computers, servers, and associated subsystems—such as monitors, printers, storage devices, and networking and communications systems—efficiently and effectively with minimal or no impact on the environment. Green IT also strives to achieve economic viability and improved system performance and use, while abiding by our social and ethical responsibilities. Thus, green IT includes the dimensions of environmental sustainability, the economics of energy efficiency, and the total cost of ownership, which includes the cost of disposal and recycling. Is the study and practice of using computing resources efficiently."

The goals of green computing are similar to green chemistry;
- reduce the use of hazardous materials
- maximize energy efficiency during the product's lifetime
- promote recyclability or biodegradability of defunct products and factory waste

In 1992, the U.S. Environmental Protection Agency launched Energy Star, a voluntary labelling program which is designed to promote and recognize energy-efficiency in monitors, climate control equipment, and other technologies. This resulted in the widespread adoption of sleep mode among consumer electronics. The term “green computing” was probably coined shortly after the Energy Star program began; there are several USENET posts dating back to 1992 which use the term in this manner. Concurrently, the Swedish organization TCO Development launched the TCO Certification program to promote low magnetic and electrical emissions from CRT-based Computer Display; this program was later expanded to include criteria on energy consumption, ergonomics, and the use of hazardous materials in construction.
So this is all about what green computing is! Its goals and basics. The next article will have the story staring from ROADS TO GREEN COMPUTING and many more details

Now some GREEN TIPS how to make your PC green

- Enable the standby/sleep mode and power management settings on your computer.

Point your cursor at the desktop background and right-click. Choose “Properties” from the pop up menu. Go to the “Screen Saver” page; in the lower right-hand corner near the ENERGY STAR® logo click the “Settings” button. This brings up another dialog box where you choose power management settings.

- Power off your monitor when you are not using it instead of using screen savers. Because it doesn’t save energy or your screen unless you’re using an old monochrome monitor. “Making a conscious decision to go green in the workplace, not only improves your bottom line, but also reduces your carbon footprint. It’s a win-win no matter how you look at it”

For more details please visit: nist.venkynist.venky@gmail.com

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**The Damsels in dungaree**

**Dr. E. Raja Rao**

**Faculty, English**

Sane people polish
Their hearts every day
Like marble floors
Dark and dense
That shines every thought
They caress fondly, wickedly,
Amorously with pleasure.
Nothing comes out of nothing.
Three hoots for those
Who sow the weeds
With labour of their hearts.
They know not the values
Whither go if any
They know not for sure
Their own destiny.

The fair ladies and
The black ladies
Of colleges and schools
Stay studded
To the lamppost like a jewel
On the bride’s finger
They get glued to the same spots
With single hope in their minds
A star will surface some day on the earth

They know not
What scent of sacred
The rock breathes
In the airy nothingness
What innocence it holds
In its bosom that is sealed
On all its sides.
Every fringe of their kameez
A different story; every lock
The casket of a different theory
Though they daren’t push an idea too far
They feign to speak
In simple language
Full of riddles and blur.

On their unwilling ears.
Nor do they chase their chastisements
To restore their forgotten pangs.
From the crow they learn
When to work in the fields
From the sparrow they gather
The lessons of Providence.
From the sun they acquire
Shunning their prejudice.
From the moon they learn
The teachings of forbearance.
Buffaloes, cows and sheep
Their apt kinsmen and peers
They rub their robust shoulders
With the humps of the Aries.
In the same carriage they move
With great amity and fraternity
They work out their lives
With great equanimity.
With the wisdom of the cave
They set the clock in the sky
They mourn not their daily pain
They learn to live in gay.
Here we are, standing at the starting point of a new decade. The year we are beginning with ‘Twenty-ten’ has a cool, well-rounded ring to it. It certainly trips off the tongue more neatly than the messy mouthful of ‘two-ob-oh-eight’ or, even worse, ‘two-thousand-and-nine’. Well, content is more important than form, and so we need to think about what 2010 stores for us rather than drool over its sleek, semantic shape. Will the coming year raise our spirits anew, or will it be just a hangover of the past decade? Will 2010 be tensile or barely tenable? Will it display a tendency towards tension, or hit the high notes like a tenor? For this month, cynosure of all eyes says its enough politics, time to get down to serious work!

Life within the college campus is undoubtedly the most enjoyed one but then life begins only after this phase. At the end of their college life what the students want is a good placement and a ‘1st-class’ tag attached to their memo. The end of the previous decade saw the world falling apart and the companies switching performance gears. Many were fired and some were hired, some gained and some bared the recession pain and lot more in the waiting. The salary packages were driping and bleeding. Promised jobs pending and above all IT was one sector which was hurt the most. Everyone knows the word recession. Thanks to the year 2009 A.D. that spread the word. From the fruit vendors to the IT giants, all cribbed about recession. There was a price hike and there was meltdown. The IT majors handed over the pink slip like Christmas greetings without acknowledging the reason and well if someone asked, the reason was recession. What the graduates saw saw through out the year was “hired but will have to wait” situation. They were hired from the campus through the campus recruitment but had to wait and are still waiting for the company’s to give them a call. It was a situation wherein they didn’t know what they had to do because they were hired and so had a job, but they were still not given a call so they were unemployed.

No matter where you passed out from, you had to go through this waiting period and the companies blamed the US economy and the US economy blamed the recession. No matter who blamed whom, the student had to suffer with this waiting. There were other factors that added on to the pain of waiting. The students couldn’t join other companies in the mean time as they weren’t sure about the call coming in for joining. The other factor that took a toll on them was the fact that the companies were hiring and firing like an arm and nobody liked a resume with a pink slip for under-performance and those who wanted to pursue education couldn’t make up their mind.

But the mark of this decade is visualizing a change in the scenario. The economy is showing positive signs of retrieval. Government examinations of the finances of the nation’s largest banks are finding the weakened banking system in a better shape than expected. The world market is taking a positive stride and Indian market has reacted accordingly. Organizations are coming back to campuses slowly. Software industry body, Nasscom expects at least 70k-80k engineering graduates who passed out in June 2009 and were offered jobs in their 5th and 6th semesters by TCS, Infosys and Accenture, among others, to get absorbed by March 2010. This is for a sure to boost the morals of the students who will be undergoing the recruitment in the campus interviews.

As everyone saying, the need of the hour is, Change. This decade can see students instead of running behind jobs, on and off campus recruitments, setting up their own business. Entrepreneurs are already becoming a major force in developing nations and in the economy worldwide. And there is no misconception that if you have failed, you can never succeed. After all, Venkataraman Ramakrishnan, who won the Nobel Prize in Chemistry in 2009, decades ago, had failed to clear entrance tests for both the IITs and a reputed medical college. This decade requires not just the candidate who is the most qualified, but the one who is also most likely to be engaged and committed.

Cynosure of all eyes can only hope for the market stability and wishes success and growth to all.
**Future of IT Industry & IT Engineers in India**

Mr. Atanu Dutta, NIST Placement Cell

The Indian Information Technology industry has played a key role in putting India on the global map. According to the National Association of Software and Service Companies (NASSCOM), the revenue of the information technology sector has risen from 1.2 per cent of the gross domestic product (GDP) in FY 1997-98 to an estimated 5.8 per cent in FY 2008-09. Further, the industry body expects the sector to grow between 4 per cent and 7 per cent during 2009-10 and return to over 10 per cent growth next year. India’s IT growth in the world is primarily dominated by IT software and services such as Custom Application Development and Maintenance (CADM), System Integration, IT Consulting, Application Management, Software testing, and Web services. Indian ITeS sector grew by 12 per cent in FY 2009 to reach US$ 71.7 billion in aggregate revenue (including hardware). Of this, the software and services segment accounted for US$ 59.6 billion. ITeS exports (including hardware exports) grew by 16 per cent from US$ 40.9 billion in FY 2007-08 to US$ 47.3 billion in FY 2008-09.

According to NASSCOM, software and services exports (including exports of IT services, engineering services and R&D and software products) reached US$ 47 billion in FY 2008-09, contributing nearly 78 per cent to the total software and services revenue of US$ 59.6 billion.

India continues to be the most preferred destination for companies looking to offshore their IT and back-office functions. It also retains its low-cost advantage and is among the most financially attractive locations when viewed in combination with the business environment it offers and the availability of skilled people, according to global management consultancy AT Kearney. Tata Consultancy Services is understood to have bagged a US$ 248.75 million software implementation contract from the Cardiff City Council, UK. Etisalat DB, formerly known as Swan Telecom, has outsourced implementation of its software applications and IT infrastructure to Tech Mahindra as part of a US$ 400 million deal spread over the next 10 years.

Information Technology enabled Services (ITeS) industry, which started with basic data entry tasks over a decade ago, is witnessing an expansion in its scope of services to include increasingly complex processes involving rule-based decision making and even research services requiring informed individual judgment. It now offers services such as knowledge process outsourcing (KPO), legal process outsourcing (LPO), games process outsourcing (GPO) and design outsourcing among others. India with its natural competitive advantage is likely to play a huge role in various segments of the ITeS industry. The Indian animation industry is rapidly growing as a major outsourcing hub with a growth rate of 30 per cent. The Indian KPO sector is estimated to become a US$ 10 billion industry by 2012, from the current size of US$ 4 billion. As per a Confederation of Indian Industry (CII) report, the industry is growing at an annual rate of 35 per cent and India’s outsourcing opportunities in the value-added and core services will help make the publishing BPO industry worth US$ 1.46 billion by 2010. As per a CRISIL study, engineering services outsourcing (ESO) is poised to be the next big opportunity in the Indian outsourcing services industry. The ESO sector is likely to grow at a compounded rate of 26 per cent and post revenues aggregating around US$ 7.5 billion by 2012. The market for recruitment process outsourcing (RPO) continues to grow at a healthy rate notwithstanding the tough economic condition with the number of deals signed rising this year, according to a study by global consulting and research firm Everest Group.

NASDAQ-listed EXL Service has acquired American Express’ travel services captive in India for US$ 30 million. Etisalat DB Telecom, a new entrant in the Indian telecom space has awarded an end-to-end outsourcing contract to three BPO service providers — Tech Mahindra, Aegis and Conflux. The deal, spanning over five years, is valued at over US$ 161.3 million. Indian IT majors Tata Consultancy Services (TCS), Infosys Technologies and Wipro Ltd, besides global IT giants IBM and Accenture, have bagged a five-year US$ 1.5 billion outsourcing deal from BP (British Petroleum), the world’s third-largest petroleum refining company in the world. Infosys Technologies subsidiary Infosys BPO will acquire US-based McCamish Systems for an initial payment of US$ 38 million.

In India, combined revenue of the IT and IT Enabled Services (ITeS) was USD 52 billion in the year 2007-08. In spite of severe financial and banking crisis affecting the world’s economic growth, many of the IT companies in India are maintaining good success record. Though there are many competitors in the market like China, Malaysia, Philippines, etc., it is still the major player in the world in outsourcing due to its many advantageous factors. The Department of Information Technology, under the Ministry of Communications and Information Technology, is the central authority responsible for outsourcing industry. There are concerned ‘Department of Information Technology’ in States and Union
Outsourcing industry is the sunrise industry in India, which plays a vital role in the sustained growth of the economy. Information Technology enabled Services are the fastest growing sectors in the Indian IT industry, both in terms of employment opportunities and revenue generation. They have become a highly sought after career option for fresh graduates, especially those from the Information Technology (IT) sector. This is due to the advantageous position of India in having one of the largest pools of low cost, English speaking, scientific and technical talent. On one hand, these creates more employment opportunities for people at large with good pay package, and on other hand, brings global businesses into the country and thus, helps to increase India’s national income. Hence, as the outsourcing activities booming in the world, India stands to gain with more foreign exchange earnings. KPO sector is increasingly becoming most preferred option for the growth of Indian economy, where the Indian companies outsource their high-end knowledge work. Here, major advantages and opportunity areas are cost savings, operational efficiencies, access to the skilled and talented workforce, multilingual capabilities and improved quality norms.

India’s outsourcing industry is creating many innovative business models that can actually save precious management time and resources as well as allow companies to focus on their core competencies. In order to meet international standards, outsourcing to India is now focusing more on high and stable quality systems rather than only on cost savings. All these shows that India is poised to emerge as a global powerhouse for outsourcing of IT software, ITES and KPO sectors and for other types of outsourcing categories as well. There exists innumerable opportunities in Indian outsourcing industry and is considered to be an attractive destination for investors the world over. This industry has also helped in increasing adoption of technology which enhances performance and competitiveness in the domestic market as well as seeks to reduce economic disparities by greater participation of women in the workforce.

The Indian Telecommunications industry is also one of the fastest growing in the world and India is projected to
become the second largest telecom market globally by 2010. According to the Telecom Regulatory Authority of India (TRAI), the month of October 2009 saw telecom operators in India register a record number of 16.67 million new mobile subscribers. According to Business Monitor International, India is currently adding 8-10 million mobile subscribers every month. It is estimated that by mid 2012, around half the country’s population will own a mobile phone. It is projected that the industry will generate revenues worth US$ 43 billion in 2009-10. Moreover, according to a study conducted by Nokia, the communications sector is expected to emerge as the single largest component of the country’s GDP with 15.4 per cent by 2014. With the availability of the 3G spectrum, about 275 million Indian subscribers will use 3G-enabled services, and the number of 3G-enabled handsets will reach close to 395 million by 2013-end, estimates the latest report by EvaluateServe. According to a Frost & Sullivan industry analyst, by 2012, fixed line revenues are expected to touch US$ 12.2 billion while mobile revenues will reach US$ 39.8 billion in India. Tata Teleservices is planning to invest an additional US$ 1 billion in its recently-launched GSM service Tata DoCoMo. Reliance Infratel, the tower subsidiary of Reliance Communications (RCom), will build 56,596 telecom towers by financial year 2010, increasing the total number of towers to 100,000. BSNL, India’s leading telecom company in revenue terms, will put in about US$ 1.16 billion in its WiMax project. Vodafone Essar will invest US$ 6 billion over the next three years in a bid to increase its mobile subscriber base from 40 million at present to over 100 million. Bharti Airtel will invest US$ 126.5 million to ramp up its networks in the Assam and Northeast circles in 2009-10. Loop Mobile, formerly known as BPL Mobile plans to invest around US$ 75 million in its Mumbai operations.

Hence, from the above mentioned facts we can definitely conclude that India would continue to boom in IT, Outsourcing & Telecommunications Industry in the 2nd Decade of the 21st century which would ensure great careers for the future IT Engineers.

Quiz

K. Venkateswar Reddy
B. Tech., 8th Sem., Team e_news

1. Which awards were first presented in 1929?
2. The longest highway in the world is the—
3. The name given to the border which separates Pakistan and Afghanistan is—
4. The coldest place on the earth is—
5. The world’s oldest known city is—
6. The city which is the biggest centre for manufacture of automobiles in the world is—
7. The river which carries maximum quantity of water into the sea is the—
8. The Eifel tower was built by—
9. The Red Cross was founded by—
10. The sculptor of the statue of Liberty was—

From Mailbox

From: drskm7@gmail.com To: webmaster@nistinfo.com; placement_nist@hotmail.com
Subject: Letter from San Date: Fri, 15 Jan 2010 07:36:11 +0530

Dear Sir
Happy New Year 2010

With reference to my interest in bioinformatics I have came across your Bioinformatika Magazine which is more resourceful to our research community. And I would like to know whether NIST is going to open the Biotechnology or Bioinformatics in B. Tech or M. Tech. Courses curriculums in the near future or what?

Waiting for your reply
Have a Nice Day
Cheer

Santosh Kumar
Chief Scientific Officer (CSO)
SKM BioTech Pvt Ltd
New Delhi
Our role on climate change

The little we think, while wasting water or petrol,
The little we act, while time is ripe for damage control!
Ignorance is no more bliss, for it takes toll on life,
Educated foolishness is blunder for it strains the existing strife!

If ever one is asked, For whom should we care -
As nature is for all, It’s one’s birth right to spare?

Then, here is the answer, To our beloved friend,
Kindly care for your kids, for leaving something on their hand!
Enough is written and said, But the little is done,
Politics may have it way, Let’s ACT before the nature is GONE!

Thanks,
Aruna Kumar Tripathy
CS 2000 17142

NIST Faculty as TCS Corporate Trainers

Tata Consultancy Services (TCS) has selected few of the NIST Faculty members to train their employees on Technical and Life Skills at different TCS Initial Learning Program (ILP) Centers. The faculty members were selected after being interviewed by TCS experts and have been imparting training since 14th December 2009.

Technical Trainers:
1. Mr. Sidharth Bhusan Neelamani
2. Mr. Goutam Ganguly
3. Mr. Shom Prasad Das
4. Mr. Bhawani Shankar Patnaik
5. Mr. Asesh Tripathy
6. Mr. K. Laxmi Narayan
7. Mr. Pradeep K. Jena
8. Mr. Hemant Reddy
9. Mr. Raj Shekhar Reddy

Life Skills Trainers:
1. Mr. Amrut Phalguni Mohanty
2. Mr. Dipti Ranjan Lenka
3. Mr. Jagannath Mohanty

New Year Celebration at NIST

The advent of New Year 2010 has been a great beginning for NIST. The NISTians’ move from academics to research got consolidated with the establishment of TIFAC CORE Center in the campus with a grant of more than nine crore rupees from DST, Govt. of India. It was a gala moment to celebrate the success of getting this huge grant after the tough competition with the top institutes of the country. All NISTians commemorated the occasion with a grand lunch at NIST canteen in the presence of Mr. Surendra Mudali, Chairman, Prof. Sangram Mudali, Director, Ms. Geetika Mudali, Placement Director, Dr. Ajit Kumar Panda, Dean and the faculty and staff of the institute. Prof. Mudali envisaged a greater innings for the institute in the current year and promised that the New Year would definitely add new colours to the NISTians wings of success.
While Andhra continued to simmer in the raging fire over the Telengana issue, the global leaders decided to fight it out at Copenhagen. The demand reached a whole new level with K.Chandrashekar Rao (spearheading the demand for Telengana) switching to fast-unto-death & his supporters adopted a more violent path to get the centre’s attention. At the global level, developed countries faced the ire at the Copenhagen summit for “GLOBAL WARMING” or “PAYING OFF their CLIMATE DEBT”. While the debate over climate continued, Russia and India moved ahead to sign what is being referred to a landmark nuclear pact. After Russia, India moved ahead to seal the highest defense deal with U.S ($2.1 bn) for Airlift Aircraft Globemaker. The racist attacks on Indians continued in Oz with the toll of victims never being static. There was however no respite from terrorism as IRAQ continued to bear the wrath of rebel groups with the no. of deaths touching 112 in a single strike. The alleged conspiracy mastermind of the 26/11 Mumbai attacks – David Coleman Headley was indicted by the FBI. The revelations about the Pakistan law forces being in co-ordination with the terror groups did indeed raise eyebrows about Pakistan’s commitment towards fighting terrorism. In India however the trial of Ajmal Kasab took new twists and turns with the accused even called himself a Marathi whose aim was joining Bollywood. Inflation in food prices showed no signs of decrement over these months, while it attained some stable index towards the end of the year ‘09. The government finally accepted its failure in controlling the price rise. The Red rampage in the state continued with the police finally successful in cracking whip over the rebels when they arrested Subhashree Das, wife of a most wanted rebel leader. Many relevant documents were recovered in which links of the rebels with the politicians were revealed. The no. of suicides in the farming community increased- starvation being the main reason. Security in the metros was beefed up after receiving terror threats from Taliban. The home ministry proposed to restructure the security system to deal with terrorism & another revelation that hit the headlines was the news of the “IT industry is a soft target for the terrorists”. Terrorists struck the heart of Srinagar and it took the forces over 22 hrs of gun-battle to overpower the militants who had holed up in a hotel. The political scenario in the nation maintained its very dynamic state with Amar Singh managing to keep himself in the headlines due to the scuffle in the Samajwadi Party, which eventually resulted in his expulsion from the party. In West Bengal, an era of politics ended with the demise of Jyoti Basu at the age of 95. In the agriculture department, the proposal of introduction of Bt-Brinjal managed to rake up another controversy drawing sharp reactions from both supporters and the persons opposing the move. In sports, perhaps the biggest scandal to be exposed was that of ace Golfer Tiger Woods personal life. It forced him to adopt a temporary retirement phase and resulted in a significant decrease in his brand value. India managed to clinch the top notch of the test rankings after a magnificent series victory over SriLanka and Bangladesh. Hockey India hogged the limelight for all the wrong reasons as the players revolted to quit from the world cup over non-payment issues. However the problem was solved owing to generous contributions from numerous institutions. India’s only individual gold medalist I.S Bindra threatened to quit after being asked to face trials by NRAI. The IPL auctions were over with the Pakistani players facing a total boycott as no franchise decided to take any PAK player in their team. The move has been severely criticized but with little effect.

And did u know fact 4 u -NETAJI SUBHASH CHANDRA BOSE was the president of the Tata labour union from 1928-1937.
## Placement drive

**B.Tech. & MCA**
- TCS - 148 students
- Infosys - 72 students
- Vedanta Aluminium - 7 students

**MBA & PGDM**

### BASIX INDIA
1. Mr. S. Kashyap MBA
2. Mr. J. Srinivas MBA
3. Mr. S. Ravi Sankar MBA
4. Mr. Abhaya Kumar Sahoo MBA
5. Mr. K. Tirumula Rao PGDM

### Linxsmart Technology Pvt. Ltd.
1. Mr. Asit Panda PGDM
2. Mr. Vijay Rai PGDM
3. Mr. Pabitra Kumar Singh MBA
4. Mr. Ajay Kumar Singh MBA
5. Mr. Sagar Subudhi MBA
6. Mr. Manoranjan Patri MBA

## AEIOU

Ebullient effervescence emancipated when encomium of education, embedded in each entrant was elegantly exhibited; Elysian expedition towards Exultation shall be etched With exaltation On the edges of epistemology; When enticing early emolument Has enhanced the emollient Of ennui; With ecstasy and euphoria, Enormously elated is e-news for their exceptional execution.

*Jagannath Satpathy,*  
*B.Tech. 4th Yr, Team e_news*

## Birthday Bash & Marriage Anniversary

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<td>Abhro Mukharjee</td>
<td>8 March</td>
<td>Amrut P. Mohanty</td>
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<td>Nihar Ranjan Sahu</td>
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<td>Sisira Kanti Mishra</td>
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<td>Rabindra Kumar Shial</td>
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<td>Rashmita Jena</td>
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**National Institute of Science & Technology, Berhampur, 761008**

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Celebrating 8th Anniversary

8 YEARS FROM today...

There have been many ups and downs in my professional life. Sometimes more downs than I'd like. But I have learned to take one day at a time, to be in "the moment." In this moment, I am content. All is good.

nist e_news