

Message from the Director

Words cannot convey the sorrow of the fateful day of January 17, 2005. Time stands still in grief and in poignant silence we remain.



Asim Abinash Panda

Birth: April 26, 1983 **Death:** January 17, 2005

Father: Mr Abhaya Kumar Panda

Mother: Mrs Purnima Pati

Hails from: Bhadrak, Orissa

NISTians deeply grieve the untimely demise of **Asim Abinash Panda**, our beloved student of Final Year (2001 batch) on January 17, 2005. We pray to God to let his soul rest in peace.

February 15, 2005

Sangram Mudali

Message from the Editor

NISTe_News has completed three years. Happy birthday to NISTe_News! This year we are not celebrating its birthday because of the sudden demise of our beloved student and friend **Sri Asim Abhinash Panda**. *Asim* was with us, is with us and will be with us for all times to come...

February 15, 2005

Partha S Mallick

Placement of Last Month (January 15, 2005 – February 15, 2005)

Batch 2001-2005

Sl #	Name	Organization
1	Nikhil Kumar	Satyam
2	Tanusri Panda	Satyam
3	Deepika Sahu	Satyam
4	Susman Dash	Satyam
5	Bikram Kumar Mishra	Satyam
6	Darpan Puri	Satyam
7	Subhra Narayan Patra	Satyam
8	Shyam Sundar Rath	Integra Microsystems
9	Tapaswini Mohanty	Wipro Spectramind
10	Suzuki Banerjee	Wipro Spectramind
11	N. Eswar Mallick	Wipro Spectramind
12	Avneet Gambhir	Wipro Spectramind
13	Kohinoor Biswas	Wipro Spectramind

Batch 2000-2004

14	Brajesh Mishra	Satyam
15	Smruti Tirtha Samal	Satyam
16	Shyam Sundar Behera	Satyam
17	Ipsita Sethy	Satyam
18	Neelam Sangeeta Tirkey	Satyam
19	Sibabrata Dash	Satyam
20	Sujay Kumar Sabat	Symphony Software
21	Lokanath Meher	CG Corel
22	Diptimayee Panda	Jataayu Software
23	A. Srikant Subudhi	Jataayu Software

NIST Faculty wins Laurels

NIST faculty, **Dr. Saroj K Meher**, of the Department of Electronics & Communication



Engineering, has been awarded the Young Scientist Award by the Orissa Bigyan Academy for the year 2003. In a glittering ceremony held at Bhubaneswar on January 20, 2005, Dr. Meher received the award and citation from the Chief Minister of Orissa. Dr. Meher has been awarded the Young Scientist Award for his impressive work in the area of Digital Signal Processing, Mobile Communication and Digital Watermarking. He has also been the recipient of the Gold

Medal for the Best Paper award from the Institution of Engineers in the year 1999, 2000, 2001 and the recipient of J C Bose memorial award for the best Engineering Research paper from IETE, India in 2002.

News Corner

NIST Toppers

List of Students who secured more than 9.00 SGPA in the 1st Semester BPUT Result of the batch of 2004. Congratulations! May your tribe DOUBLE in the next result.

Anurag Rath	9.07
Senapati Chandra Kiran	9.00
Smruti Sagarika	9.25
Hira Lal	9.32
Ranjit Singh Garewal	9.18
Chinmayee Ku Panigrahi	9.71
Jitendra Kumar Dash	9.00
Dinkar Kumar Verma	9.36
Sahara Kanungo	9.04
Iswar Prasad Tripathy	9.36
Vinit Kumar Mantry	9.00
Satish Kumar	9.57
Chandra Bijay Narayan	9.07
Aswin Agarwal	9.30
Satyaswarup Mohanty	9.81
Dilip Kumar Patro	9.11
Debasis Panda	9.22
Sunil Kumar Sabata	9.33
Venkatseema Das	9.19
Milan Padhy	9.15
Ashish Kumar Srivastava	9.00
Kari Karunakar Reddy	9.04
Sanjana Parida	9.00

List of Students who secured more than 9.00 SGPA in the 3rd Semester BPUT Result of the batch of 2003. May your tribe DOUBLE in the next result.

Upasana Panda	9.04
Swagatika Panda	9.25
Sambit Kumar Sabat	9.57
Deep Sengupta	9.14
Battula Srinivas	9.04
Biswaranjan Gouda	9.0
Mrutyunjaya Dash	9.21
Hrushikesh Mukherjee	9.0

Top 10 in 5th Semester Results

Here is the list of top 10 students of the batch of 2001 whose 5th semester results was recently published by Berhampur University

Roll Name	Marks(/700)	Position
69202 Dhananjay Mohanty	599	1 st
61902 Dipaniwita Das	596	2 nd
63502 Biswojita Mishra	593	3 rd
70802 Salini Pattanaik	593	3 rd
55302 Soubhagya Mishra	591	4 th
206703 Bandana Rout	586	5 th
57102 Sambit ku Pattanaik	583	6 th
76602 Suchismita Pradhan	582	7 th
68802 Jiten Mishra	581	8 th
74902 Supreet Mitra	581	8 th
70202 Ashis Padhi	576	9 th
55602 Pragnya Parimita Mohapatra	574	10 th

Satyaswarup Mohanty – Topper of BPUT

Satyaswarup Mohanty of 2004 batch



bagged the first position in the 1st semester B. Tech examination of BPUT securing SGPA 9.81.

Congratulations! Satyaswarup belongs to Cuttack, Orissa.

Dr Amalendu Pattnaik – the R&D Coordinator of NIST



Dr Amalendu Pattnaik is now back with us. He joined us on February 1, 2005, after successful completion of his Post Doctoral

work at the University of New Mexico, USA in the area of *Mobile Communications*. Dr. Amalendu Pattnaik was a recipient of the Boyscast Fellowship of the Government of India. It is a great pleasure for all NISTians that Dr Amalendu Pattnaik has now taken the responsibility as the coordinator of Research & Development of NIST. He has published many research papers in IEEE Transactions and presented several Tutorials in CIT, Bhubaneswar, CODIS, Calcutta, etc.

Japanese Scholarships for NIST students

Japanese Government has awarded the MONBUKAGAKUSHO SCHOLARSHIP to the following NIST STUDENTS.

1. Ms Sonali Mishra(ELE) 2003 Batch
2. Mr Aani Prakash Sahoo(ELE)2003 Batch
3. Mr. Rakesh K Jammula(CSE)2003 Batch

The above mentioned students have been awarded the scholarship to study in the following College of Technology respectively:

KITAKYUSHU NATIONAL COLLEGE OF TECHNOLOGY, Fukuoka, Japan.

TSUYAMA NATIONAL COLLEGE OF TECHNOLOGY, Okayama, Japan

TOYOTA NATIONAL COLLEGE OF TECHNOLOGY, Aichi, Japan

- The award is for a period of 4 years from April 2004 to March 2008
- The student will receive a monthly allowance of 135,000Yen (approx. Rs. 56,000.00 per month).
- The Government of Japan will provide free housing, full medical expenses and college fees for all the four years.

We congratulate the above mentioned students. Special Thanks to Faculty (Japanese Language), Santanu Mukherjee for having coordinated the entire scholarship issue with the Japanese Embassy at Kolkata.

NIST faculty on FullBright fellowship at USA

NIST faculty of the Department of English, **Mr. Anjan Dasgupta**, left India on January 17, 2005 for Washington D.C., USA, on a Fullbright Fellowship. He has joined the John Hopkins University – SAIS,



Washington DC, USA. Mr Dasgupta will work there as a Foreign Language Teaching Assistant for a period of one year.

IEEE Workshop at NIST, Orissa

The first IEEE Student Chapter of Orissa at NIST organised a Workshop on *Embedded Systems in Electronics and Instrumentation*



on January 30, 2005. Chief Speaker Prof S K Lahiri, Deputy Director of IIT, Kharagpur inaugurated the IEEE Student Chapter and then the workshop was inaugurated by Prof D Mukhopadhyay of Jadavpur University, Kolkata. Prof Swapna Banerjee, IIT, Kharagpur inaugurated the NIST Embedded System and Robotics Lab and Prof S K Lahiri inaugurated NIST's VLSI Lab. NIST Director, Prof Sangram Mudali and Dy Director Dr Ravi P Reddy spoke on NIST R& D activities. NIST Dean Dr Ajit K Panda demonstrated the Lab activities. Faculty members from various engineering colleges of all over Orissa participated in the Workshop. The workshop was successfully organised by NIST M.Tech Course Coordinator Dr Partha S Mallick. The Workshop and NIST R&D activities were highly praised by the honourable Guests.

Annual Conference of Orissa Mathematical Society at NIST

NIST hosted the 32nd Annual Conference of Orissa Mathematical Society (OMS) on February 5-6, 2005. The theme of the conference was *Mathematical analysis and its applications*. Many renowned mathematicians of the state attended the conference and presented their research

papers. Prof Swadhin Patnaik, Prof G Das,



ex-Vice Chancellor of Utkal University spoke on various important issues of modern education. Many faculty members of NIST are life members of OMS. The Secretary of the local organising Committee, Mr Pallav Kar, Faculty of Mathematics, NIST did an excellent job to make this conference successful. The program was conducted by the Convenor of the Conference, Dr Ravi P Reddy.

The best ISTE Chapter in Orissa

NIST is proud to be awarded as the best ISTE Chapter in Orissa. This declaration was made on the basis of various activities carried out during the year 2004. A grand award ceremony was held on December 18, 2004 during the inaugural function of the 34th Annual Convention of ISTE in Netaji Subhash Inst. of Tech., Dwarka, New Delhi.

The best chapter ISTE award which consists of a medallion and a citation, was received by **Abhishek Shekhar Choudhary (5th Sem)** and **Richy Yati Mishra (5th Sem)** on behalf of the college. This is the fruit of strong determination and sincere hardwork of all the ISTE members under the able guidance of all faculty members, especially the ISTE Faculty Advisor, **Mr. B.K.Dash**. Congratulations to all ISTE members.

Achievement of NIST M.Tech student

Mr Manmath Ray of M.Tech 2003 batch is working on various problems in Embedded Systems under the supervision of our Deputy Director Dr Ravi P Reddy. Recently their work titled "Family Card for Rural

Poor" has been accepted and well appreciated by Axalto, Paris, France. Mr Manmath Ray was invited to present his work at *E-gate Open 2005 – the World Wide USB Smart Card Contest* organised by Axalto, Sun and ST Micro electronics, Paris, France. Manmath has been presented with a complete Smart Card Kit free of charge for his project by the company.



Another book from NIST Publications

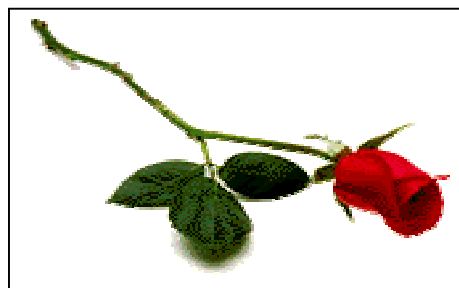
NIST Faculty of Computer Science & Engineering, **Mr K Lakshmi Narayana** has written another book titled "Web Designing – with HTML, Javascript and Flash MX" – a self study book which has been published by NIST



Publications recently. It is a very useful guide for those who want to learn HTML, JAVAScript and Flash MX. The clear presentation and easy-to-follow style make it suitable for the user. This book has been well received by the faculty member and students. Mr Lakshmi Narayana is an MCA from JNTU and has a long teaching experience and has expertise in this field.

The Winners....

◆ NISTe_News Competition...	Cover	Page
Amit Kumar Sahoo of Final Year, Electronics and Communication Engineering, bagged the first prize of cash Rs. 500/ and the second prize of Rs. 300/ obtained by Aditaya A of 5 th Semester, Computer Science and Engineering.		



◆ Expressions – 2005, on-the-Spot Writing Contest

Seventy two students participated in the contest. Here is the list of top 10...

1st - RAKESH PARIDA, 4TH SEM

2nd - SMIRITI SAGARIKA, 2ND SEM

3rd - BISHAL MANDAL, 4TH SEM

Seven Merit prizes go to.....

RAJANI KANTA DAS, 2ND SEM

AKASH BANERJEE, 2ND SEM

VINEET NANDA, 2ND SEM

AMIT KUMAR DAS, 2ND SEM

SWASTIK CHOUDHURI, 4TH SEM

SOUMYA RANJAN BHUYAN, 4TH SEM

DEBASHISH SAHU, 4TH SEM

(The Date and Venue of the prize distribution will be notified later)

NIST in IT Expo, Berhampur

NIST participated in the IT-Expo held at old Mango Market, Berhampur from February 5-9, 2005. All the Berhampur-based IT companies alongwith some other IT companies from the state participated in the exhibition. NIST demonstrated its products developed by NTCS and also presented NIST's Robotics and Embedded System club activities. Books published by NIST publications were also displayed. **Mr Bidhyabhusan Padhy** and **Mr Aswini Kumar Mishra** organised and coordinated the NIST part under the able supervision of our faculty Mr. Bhawani Shankar Pattnayak.

NISTians Success

- ◆ NIST Cricket Team won the Runners-up Trophy in the recently held Cricket Tournament of South Orissa Engineering Colleges. The Tournament was held at Gandhi Institute of Engineering and Technology, Gunpur.
- ◆ In the *All Orissa Engineers Cup Tournament* held at CET, Bhubaneswar, NIST Cricket Team was the quarter finalist. Around 10 Cricket Teams participated in the Tournament. NIST cricket team members are Sudeep Mishra-(Capt), Ashok Choudhary-(V.Capt), Ramakanth Behera, Biswajeet

Kar, Abhijeet Mohapatra(Wkt Keeper), Sanjeet Pradhan, Tapan Ray, Nikhil Kumar, Syed, Vijay Kumar Abbrella, Monaj Kumar Paricha, Smruti Ranjan Routray, Debasish Mohanthy, Sushanth Kumar Swain.

NISTians Welcome U....

- ◆ We welcome **Mr. Jyoti Ranjan Panda**



to our NIST family, who joined us on January 10, 2005. Jyoti did his B.Tech in Electrical Engg from CET, Bhubaneswar

in the year 1999 and then completed M.S from BITS Pilani in the area of Communication Engineering. He worked in the area of Optical Fiber Communication while he was pursuing his Ph.D work at IIT, Kharagpur. He also brings in a wide expertise in experimental work. His research interests are in the area of communication technologies, semiconductor physics, etc. He has a few good research papers to his credit.

- ◆ We welcome **Mr Subrata Kumari Panda, Mr. Kabiraj Nayak, Ms. Rina Pattanaik** and **Mr Aswini Ku Panda** who joined us as Lab. Supervisors in Computer Science department on February 1, 2005. We also welcome **Mr. Narayan Das** who joined on February 14, 2005 as Bus Helper.

Saraswati Puja at NIST Hostels

Saraswati Puja was celebrated in a grand style at the different hostels of NIST on January 13, 2005. Hostels vied with each other for impressive decorations and receptions. Under the guidance of hostel superintendents, students displayed remarkable team spirit to make celebrations a success.

TREKKING - 2005

TREKKING – 2005 was successfully organised by NIST Students, Faculty and Staff members on January 16, 2005. Our Dean Dr Ajit K Panda flagged off the TREK-2005 at RAMAIIHYA PATNAM and all the participants were received by our Director Prof Sangram Mudali at GOPALPUR BEACH. Among the staff and faculty members, Dr Arun K Padhy, Mr Anisur Rehman, Mr Pallav Bhattacharya, Mr Santanu Mukherji, Ms Basanti Patra, Mr Ashok Sahu and Mr Subhas Padhy participated in the TREK-2005. Congratulations and thanks to all for their participation in TREK-2005.

Picnic - 2005

It was yet another occasion for all to enjoy. The annual picnic was organised at *Budhokhol* which is situated at a distance of 70 km from Berhampur on January 9, 2005. The place comprises of lush green forest with a Shiva Temple situated at a height on the backdrop of a waterfall. Many staff and faculty members along with their families (a total of about 235 members) joined the picnic. Everyone enjoyed Dumb Charade, which was conducted Ms. Geetika Mudali, our Placement Director. It was real fun watching little children playing in their own way and hogging delicious food. Thanks to - Mr Arun K Patnaik, Mr. K. Premeswar Rao, Mr. Naresh Choudhury, Mr. Ranen Nayak, Mr. Nruparaj Sahu and Mr. Manoj Panigrahi who took active part in organising the picnic. The serene atmosphere of the place along with the excitement of the NISTians made the picnic quite memorable.

Hostel Picnic - 2005

NIST hostel(s) enjoyed their respective picnics this year in a grand style. The girls opted for *Tapta Pani* on December 26, 2005 while the boys opted for *Budhokhol* this year on December 25, 2005. Music, Games, Dumb Charade, Antakshari etc., made picnic more enjoyable and lively. NIST Staff and faculty members took active part in organising the picnic.

NCC CAT Camp of NIST

The Combined Annual Training camp (CATC) of N.C.C Naval wing for the state of Orissa was organised this year at Tampara, Chatrapur & Berhampur from October 17 to December 28, 04 under the guidance of commanding officer No.1, Orissa Naval Unit Lt.Cdr. Shiv Kumar. In this camp, cadets of senior division & junior division from Berhampur, Sambalpur, Bhadrak, Cuttack, Damanjodi participated.

From NIST, Prerana Priyadarshini, Abhishek Mahapatra, Subhendu Gouda of 5th semester & Reena Sahu, Pragya Puspita Padhy, Deepti Ranjan, M Mahesh Kumar of 4th semester and Sujeet Kumar Behera, Vivekanand Majhi, W V Jagannath of 1st semester had attended this CATC. Our NCC Officer Mr. Shantanu Mukherji escorted these cadets. Training to cadets were given on various activities like swimming, pulling, sailing, firing, ship modeling, P.T classes, power of command, turn out parade, etc.

NIST, Berhampur was the only engineering college that participated in this camp. NIST cadets had many adventures, enthralling and unforgettable experiences, as this was the 1st NCC camp for the Institute. NIST has always been proud of its students who have excelled wherever they have gone and it was yet another time to raise the toast of success as the young NISTians made their mark this time by bagging prizes in Firing & Debate Competitions. NIST Director Prof Sangram Mudali congratulated all the participants for their successful completion of the camp. On the last day the cultural programme and prize distribution was organised by CATC at Berhampur. Prof. K. Vijaya Kumar, Principal Khallikote College graced the occasion and Prof. Arun Kumar Patnaik of NIST participated as the Guest of Honour in the programme. The entire CAT camp was conducted successfully under the able guidance of Lt. Cdr. Shiv Kumar, Lt. (Dr). B. B. Panigrahi & Lt. Dr. (Mrs) P. Praharaj.

Flower Show by NISTians

NISTians participated in the Flower Show held at Ganjam Kala Parisad, Berhampur from January 21-22, 2005. The show was



organised by Swastik, a Non Government Organisation. Around 50 participants were there. NISTians bagged one Gold medal for the best MariGold.

BPUT Sports

The Biju Patnaik University of Technology Sports was held from January 23-25, 2005. The university organised the sports program for the first time since its inception with the full cooperation of Orissa Private Engineering Colleges Association (OPECA). NIST was one of the organisers. NIST organised Table Tennis, Basket Ball, LawnTennis and Volley Ball. More than 200 students from various engineering and other colleges participated. NISTians got the Runners Up Trophy in Basketball losing to GIET in the finals. NIST student Subha Laxmi Sahoo won the 2nd Runners up Trophy in 400meter and Gaurav Bhuyan won the 2nd Runners up Trophy in Shot put. The players of NIST basketball team are Deepak Kumar Sathpathy, Sonu T Sekharan, R Hari Prasad, Subhendu Gouda, Amartya Banerjee, Vikramditya Mishra, Mohammed Ejaz Baig, Durga Madhab Patnaik, Sakti Asish Patnaik and Janaki Jeevan Pattnaik.

An inspiring Letter....

Respected Mr. Mudali, It is indeed a pleasure to have received the new year's Greetings from you on behalf of all the NISTians. I convey the same to all, with a slight feel of embarrassment that I should have done it earlier, I feel good that my

daughter has become a part of your family since beginning of the session 2004. Whatever exposure I have had to the institution since then, makes me think that NIST is following a basic quality concept, i.e., doing things right, rather than doing right things. I am sure that our wards shall understand that the onus to elevate National Institute of Science and Technology to a National Institute, understanding the global meaning of the title with them also. Regards, **Ramgopal Banerjee, Rourkela, E39/Sector 2, Rourkela-769006, 15/1/05.**

Wedding knot....

- ◆ **NISTe_News Student representative – Sunita Panigrahi** of 2000 batch tied the knot with Mr Shantanu Sahu on December 8, 2004 at Berhampur, Orissa. Sunita was the NISTe_News student representative who gave her dedicated service for enews for last two years.
- ◆ At last he did it! He is our **RKD sir**. Mr Rajesh K Dash got married to Ms. Ninima Mahapatra on January 31, 2005 at the bride's residence, Khateri Colony, Kanisi, Ganjam.
- ◆ **Ms. Haripriya Mishra** of our NTCS department got married to Mr Rajat Mishra of Niladripur on February 1, 2005 at Bhanjanagar.
- ◆ **Mr Bhagirathi Behera (Pandu)** tied the knot with Ms. Sandhya Dakua of Mundamarai on February 2, 2005 at Gajapatnagar, Berhampur.
- ◆ **Mr Dinabandhu Nayak** tied knot with Ms. Banita Barada of Bhubaneswar on February 1, 2005 at Uttereswar Temple, Gosaninugam, Berhampur.
- ◆ **Mr Tukuna Sabat** got married to Ms. Rasmita Panda on January 29, 2005 at Radhakrishna Marg, Hinjili.
- ◆ **Mr. Bigneswar Maharana** got married to Ms. Mamata Maharana of Lanjipalli, Berhampur on February 2, 2005 at Dashpur, Ganjam.

We wish all of them a Wonderful Married Life.

Student's Corner

My first visit to the First Aid Center (FAC), A. Aditya , 5th Semester

It's been a fortnight since the incident. We (I and three of my friends) were playing lawn tennis that day. I had stopped playing out-door games for a while now because of a previous hand injury, but that day I couldn't stop myself. The weather was good, our semester exams had just been over and *luckily* we had a free period. I was trying to get my shots correct, when suddenly as soon as I served, I felt enormous pain in my right hand and I threw away the racket. Thinking it to be a cramp I tried to massage my right arm but could not. Soon Saurav approached me and tried to help me out, but things were worse than what both of us had thought. It wasn't a cramp, it was a dislocated shoulder... Soon I was taken to the SAC. In no time Basanti mam had come over and provided me the First Aid. Mr. Panda was not available that day so she decided to send me to MKCG. The ambulance was ready to leave, meanwhile Vinay sir briefed up the driver (Jagdish Bhaina) & Babu Bhaiyana with the whom to's and the what to's. Padhy sir took care of the financial assistance that I needed. Soon I was at MKCG and thanks to all now I'm recovering. Now the obvious question comes what was the need to go and play? What I believe is that *every experience that does not kill you only makes you stronger*. So go on have fun and you don't even need to fear. FAC, HAIN NA!!!

8 steps to fight fear Sudhansu Sekhar Sadangi, MCA final year

1. Analyse what exactly you are afraid of.
2. Have faith in your ability to solve problems.
3. Introspection
4. Be realistic
5. Do the thing you fear.
6. Work on problems as soon as they emerge.
7. Address shortcomings promptly.
8. Have faith in God

Funny Definitions K.Girija Shankar Senapati, 4th Semester

Ability - One's capability to borrow when others don't want to lend.

Advice - A castor oil easy enough to give out, but dreadfully uneasy to take.

Conference - A meeting of bored people.

Economy - Spending money without getting any fun out of it.

Market -The place where u come to realise you need things you didn't know you need.

Nurse - A person who wakes you up to give you a sleeping pill.

Patience -The ability to put up with people you wouldn't like to put down.

Politician - A man who sacrifices your life for his country.

Successful Man - A man who earns more than his wife spends.

Secret - Something a woman tells another woman not to tell anybody else.

**Happy birthday to
NISTe News**

Nature of a Man Neeraj Prasad 4th semester

- If a man speaks too much,
he is talkative.
- If a man speaks too little,
he is reserved.
- If a man spends too much,
he is spendthrift.
- If a man spends too little,
he is miser.
- If a man advances too much,
he is forward.
- If a man lags behind,
he is laggard.
- If a man insists too much,
he is obstinate.
- If a man speaks too little,
he is fickle.
- If a man is accommodative,
he is cheap.
- If a man remains stiff,
he is proud.

The need to be alone Sumani Misra, 5th Semester

“The philosophy of Solitude” says that in reality, all of us are solitary. But, paradoxically, almost all of us are afraid to be alone. We are born alone---only us—and we die alone. No one goes with us on that last journey. We spend a good part of our lives making decisions and choices all, alone, for which we alone must accept responsibility. Our greatest fear and insecurity is to be alone. Since most of us are afraid to be alone, or at least to feel alone, we do everything we can do to forget our essential solitude. We use every trick in the book to avoid being alone. We keep busy, we work overtime. But, actually without solitude of some sort, there is and can be no maturity. Unless one becomes empty and alone, he cannot give himself in love, because he does not possess the deep self which is the only gift worthy of love. Young people are particularly afraid to be alone. It is only when we become older and more mature that we realize that we have to be alone from time to time to discover ourselves. But sitting alone in a place, we can visualize our everyday action being tossed into the currents and whirlpools of the great river of life and being thoroughly mixed in a great matrix of interconnectedness. Those who take upon themselves the adventure of treading the successful path must also learn to let go their separate selves. The real self, the deep self, can not be discovered in the midst of other people.

Keep true, never be ashamed of doing right, decide on what you think is right and stick to it
– George Eliot

The best way to cheer yourself up is to try to cheer somebody else up – Mark Twain

Research and Development

Research Paper

1. Empirical relations for the field dependence of electron mobility in InSb - **Dutikrushna Panda**, C K Sarkar, D Mukhopadhyay and **P S Mallick**, - to be published in March, 2005 in *Indian Journal of Physics(INDIA)*, 2005.
2. Dynamic Analysis of multi-area reheat hydrothermal power system with AGC using decomposition technique - A.M. Panda and **G. Panda**, Accepted for Publication in AMSE Journal, France, Jan. -2005.

Conference Paper

1. Study on the characteristics of GaN-based Gunn diode to operate at THz frequency, - **A. K. Panda**, Published in the *Proceedings of National Conference on Physics and Electronic Materials and Devices 2005*, February 2005.
2. Optimization and Study on the high frequency properties of ion implanted IMPATT devices using fourth moment approach - **A. K. Panda**, Published in the *Proceedings of National Conference on Physics and Electronic Materials and Devices 2005*, February 2005.
3. A Multiband Reconfigurable antenna: An Experimental Study, - **A. Patnaik**, Published in the *Proceedings of International Conference on Microwave, Antenna, Propagation and Remote Sensing (ICMARS-2004)*, December, 2004.
4. Neurocomputational Analysis of a Frequency Reconfigurable Antenna - **A. Patnaik**, D. Anagnostou, C. G. Christodoulou, Accepted for presentation in the *International Conference on Antenna Technologies, ICAT 2005*.
5. V-Dipole Fractal Antenna - **Rowdra Ghatak**, Ravindra K. Mishra, Deepak R. Poddar, Published in the *Proceedings of 2nd International Conference on Microwaves, Antenna, Propagation and Remote Sensing, ICMARS-2004*, Jodhpur, India, 23rd-25th December, 2004.
6. Performance of Sierpinski Fractal Equitriangular Loop Antenna - **Rowdra Ghatak**, Ravindra K. Mishra, Deepak R. Poddar, Published in the *Proceedings of the Conference Proceeding of NCC-2005*, IIT, Kharagpur, January 29 - February 01, 2005.

The first paper from M.Tech Students

- ◆ **Sanjeev Mishra, Omprakash Acharya** and OPN Calla, Measurement of dielectric constant of dry soil using waveguide cell method, Published in the *Proceedings of the International Conference on Microwave, Antenna Propagation and Remote Sensing(ICMARS – 2004)*, held at Jodhpur, India, December, 2004.
(The paper was presented in the Conference on December 10, 2004)

Conference/Training/Refresher Course Attended by NIST Faculty

1. **Dr Ajit K Panda, Dr Partha S Mallick, Mr M Suresh, Mr N Srinavsu** and NIST M.Tech Student **Mr Manmath Roy** attended the 18th International conference on VLSI Design and 4th International Conference on Embedded Systems held at Hotel Taj Bengaluru, Kolkata from January 3-7, 2005. They got the Fellowship for attending the Conference.

2. **Dr Ravi P Reddy, Sidhartha Bhusan Neelamani, Mr B K Dash, Mr Indraneel Mukhopadhyay, Mr Vivek Sharma, Mr Suryakanta Dash, Devanand Kanhar** alongwith 8 students from different streams attended the International Conference on Information Technology-CIT 2004 held at Taj Krishna, Hyderabad from December 20 – 23, 2004.
3. **Mr Indraneel Mukhopadhyay, Mr Vivek Sharma, Ms Suprabha Sahu** participated in the Object Oriented Analysis and Design through Rational Rose Training program held at IBM-Rational, Bangalore from January 3 - 7, 2005.
4. **Mr Rowdra Ghatak** participated in the UGC-ASC sponsored refresher Course in the field of *Microwave Theory and Technique* held at Jadavpur University, Kolkata from January 3, 2005 to January 22, 2005. Mr Ghatak obtained Grade A in the Examination based on the Course.

New Arrival: Software/Hardware

- ◆ NIST has recently purchased *Symbols 2000* from High Tech Systems, STEP, IIT, Kharagpur. It can be used for modeling, simulation and control system design and analysis of systems belonging to multi-energy domain. Interested persons may contact Mr Abhro Mukherjee (Room No 308, Lecture Hall Building).
- ◆ We have acquired Hi-Class Language Laboratory Software. The software will be used to setup our Spoken English Laboratory shortly.
- ◆ Now we have Matlab 7.0, Release 14 with Simulink. We have also purchased some new toolboxes: Optimization Toolbox, ANN Toolbox, Genetic Algorithm Toolbox, Matlab Mathematics, etc.
- ◆ We have purchased Xilinx based kits for the development of VLSI Lab. Interested persons are requested to contact Dr Ajit K Panda.

Do you know it?

What is a brain computer interface?

A brain computer interface refers to the exchange of data between the human mind and a computer. It is the subject of study wherein brain signals can be used to operate a computer and no longer the stuff of science fiction where a person thinks of a command and the computer executes it. Earlier, implanted electrodes were used for this purpose. However with recent advance in non-invasive technology, even these are not required and scientists are working at using brain activity for computer operation. After some fine-tuning, it should be particularly useful for the disabled.

What is Reverse Osmosis?

When a semi-permeable membrane separates two solutions of different concentrations, the solvent travels from the dilute solution to the concentrated solution. This natural phenomenon is called *osmosis* which continues until equilibrium between the two solution is reached. Applying external pressure to the concentrated solution can reverse the flow of solvent. The reversal of solvent flow is known as *reverse osmosis*. This principle is now widely applied to produce fresh water from brackish and even sea water with the help of a high pressure pump.

Why is Carbon Paper called so?

Carbon paper is thin paper coated with a mixture of wax and carbon powder which is used to produce copies by placing it between two sheets of ordinary paper. When something is written on the top plain paper by using a hard pointed pen the paper gets transferred onto the second plain sheet kept below the carbon paper and what we get is a carbon copy. The first documented use of carbon paper was in 1806 when Englishman Ralph Wedgewood issued a patent for his *stylographic writer*. Pellegrino Turri invented a typewriter in Italy by 1808 and he invented black paper also for the machine.

Career Corner

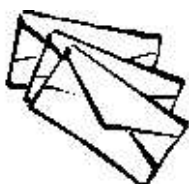
Knowledge Teasers

Kushal Bhut & Manmit Singh, Alumni(2000 batch)

1. Which Indian scientist has a group of nuclear particles named after him?
2. In which city does Batman live?
3. Who wrote the book - *A Hindu view of Life*?
4. Which medicine system's name comes from the Sanskrit word for Greek?
5. What is Philammatophobia the fear of?
6. Which is the only word in the English language whose pronunciation does not change even after removing its last four letters?
7. What is the Greek for 'instruction in the circle of arts and sciences'?
8. This phrase was first used by W H Russell to describe the British infantry during the Crimean war. Which phrase?
9. The British gave this name to the tree because Hindu merchants assembled for business and worship underneath it. Which tree?
10. Which Veda contains 114 hymns for treatment of diseases?

ANSWERS: 1. S.N. Bose, 2. Gotham, 3. Dr. Sarvepalli Radhakrishnan, 4. Unani 5. Kissing
6. Queue 7. Encyclopedia 8. Thin Red Line 9. Banyan 10. Atharva Veda.

Alumni Page



From: "amar prusty" <amarprusty@hotmail.com>

To: smudali@hotmail.com, ravipreddy@yahoo.com, geetika_nist@hotmail.com, akpanda62@hotmail.com

Subject: Update from an Alumni

Date: Thu, 27 Jan 2005 15:54:22 +0000

Hi, A very Happy New Year 2005 to the entire NIST family. I take immense pride in being a student of NIST as the moment you say Berhampur University Oriyas in Bangalore says NIST. Going through the e-news about all the latest happenings installs lot of positive vibes in NIST Alumnus like me. Keep up the good work entire team and all the best for future.

Kindly let me know if I can be of any help for the College. An update from me is that the next wave of IT outsourcing is for sure Infrastructure Management for overseas client network. Huge companies like Toshiba, GE, IBM are currently trying to outsource their Global Network and Server Infrastructure to be managed by their Indian companies like IBM India or else outsource it to IT vendors like Infosys, Wipro, HCL. Remote network, server management along with database and application support at a lower cost and better quality from India. This is a huge multi-billion dollar market yet to be tapped completely. The IT industry needs lot of Engineers for the above segment with the following qualities:

1. Analytical mind.
2. Quick reflexes.
3. Certifications like MCSE, CCNA, RHCE, OCP, etc.
4. Excellent communication skills.
5. Willingness to work on client timings and Indian Holidays.

All the interaction happens with administrators or users abroad hence excellent communication skills is highly essential in this line of business. Fresh Engineers will be trained in core areas of expertise initially and will be under continuous training henceforth on the complexities of client networks. May involve extensive travelling to client site depending on the project requirement for client handling and onsite training on client network. Some of the big players in this arena are: IBM Global Services India. Accenture India HP India Intel India, GE India, Wipro HCL Microland Cognizant TCS. The list is unending and opportunities are vast. Presently I am working in the Infrastructure Management Arm of Infosys Technologies for a UK retailing giant. Please feel free to email me any queries. Thanks and Regards. **Amar Prusty Batch 1997 EC.**

Date: Wed, 19 Jan 2005 23:40:50 +0530 (India Standard Time)

From: "Ritwick Sanyal" <u103038@ximb.ac.in

To: psmallick@yahoo.com

CC: arun_nist@hotmail.com

Subject: Hello Sir

Dear Sir, I hope this letter finds you and the whole NIST family in Great Spirit. It was a real surprise for me when I received the NIST e News December issue. I regularly visit the web site and read the e News. It gives me great pleasure to see that NIST has become one of the best engineering colleges in Orissa. We all wish we had such clubs like Robotics club during our 4 years in NIST. It would have been a great way to channelize our energy and our ideas into something more useful. Anyway my Kudos to the Robotic club and wish them all the best and hope they keep up the good work. Again congratulations to one and all for the successful SANKALP. NIST has indeed come a long way from the annual WAVES event to holding such seminars and events. This definitely gives the students the much needed soft skills which are as important as the academic knowledge in real world. I am really proud to see the developments at NIST. About news from my side, I would be completing my MBA in another 2 months and have been placed with *Pricewaterhouse Coopers* as Consultant. I would be joining in the month of May. I am thankful to all my Professors in college and particularly to Mr Jagannath Mohanty, Dr Arun Padhi and Dr. Ravi P Reddy without whose guidance it would have been difficult for me to reach the place where I am now. Hope to hear from you soon, Regards, **Ritwick, Ritwick Sanyal, Class Representative, PGP 2003-05, C-128, XIM Campus, Chandrashekharpur, Bhubaneswar-765013, Cell: 91 9861107991, Email: ritwicksanyal@gmail.com.**

I never teach my pupils, I only attempt to provide the conditions in which they can learn

– Albert Einstein

Date: Thu, 30 Dec 2004 20:38:29 +0530

From: "Indira Mohanty" <izmohanty@kanbay.com

To: psmallick@yahoo.com

Dear Sir, Hope this letter finds you in best of your spirits. I joined KANBAY at Pune on 16th November. I am currently undergoing my training in Web Technologies. After a lot of days I visited the NIST website and was overwhelmed by the progress NIST has made in the last couple of months. I want to congratulate the juniors for their commendable efforts in carrying on the tradition of Sankalp. Sankalp last year left the whole 2000 batch exhausted but exhilarated as well.....and we are proud to see it taking such beautiful shape. Kudos to all those who have lend their hand in making it a big success. Happy New Year to the whole NIST family on behalf of the Class of 2000. Thanks and Regards, **Indira Mohanty, Associate Consultant, Kanbay Softwares (I) Pvt. Ltd., Pune.**

TCS Questions & Answers Priyadarshini Panda

1. If $g(0)=g(1)=1$ And $g(n)=g(n-1)+g(n-2)$, find $g(6)$.

Answer: $g(6) = 13$

2. Given \$ means Tripling and % means change of sign then, find the value of $\$ \% \$ 6 - \% \$ \% 6$

Answer: -72

3. 16 litre can, 7 litre can, 3 litre can, the customer has to be given 11 litres of milk using all the three cans only. Explain.

Solution: 16 litre Full initially 16-7 = 9 in 16 litre, 7 in 7 litre. 7 to 3 to 16 (twice) than 15 in 16 litre 1 in 7 litre 0 in 3 litre 1 in 7 litre can to 3 litre can 15 in 16 litre can 0 in 7 litre can and 1 in 3 litre can. From 15 in 16 litre can to 7 litre can Than 8 in 16 litre can 7 in 7 litre can and 1 in 3 litre can From 7 in 7 litre ad 2 to 3 litre can. Than 8 in 16 litre can 5 in 7 litre can 3 in 3 litre can 3 to 16 litre can than 11 in 16 litre can 5 in 7 litre can and 0 in 3 litre can.

4. A traveler walks a certain distance. Had he gone half a kilometer an hour faster, he would have walked it in 4/5 of the time, and had he gone half a Kilometer an hour slower, he would have walked 2 1/2 hr longer. What is the distance?

a) 10 Km b) 15 Km c) 20 Km d) Data Insufficient

Answer: b

Solution: distance == speed x time

$$st = (s + .5) \times .8t \text{ -----(1)}$$

$$st = 0.8st + 0.4t$$

$$2st = .4t, s = 2KM, st = (s - .5) \times (t + 150) \text{ -----(2)}$$

Substituting you will get the distance as 15 Km.

5. A ship leaves on a long voyage. When it is 18 miles from the shore, a seaplane, whose speed is 10 times that of the ship is sent to deliver mail. How far from the shore does the seaplane catch up with the ship?

a) 24 miles b) 25 miles c) 22miles d) 20 miles

Answer: d

Solution: $(d-18) = st$ $d = st$ $d = (d-18) + 180 = 9d$.

In a circular race track of length 100 m, three persons A, B and C start together. A and B start in the same direction at speeds of 10 m/s and 8 m/s respectively. While C runs in the opposite direction at 15 m/s. When will all the three meet for the first time on the track after the start?

a) After 4 s b) After 50 s c) After 100 s d) After 200 s

Answer: c

7. Amal bought 5 pens, 7 pencils and 4 erasers. Rajan bought 6 pens, 8 erasers and 14 pencils for an amount which was half more than what Amal had paid. What % of the total amount paid by Amal was paid for pens?

a) 37.5% b) 62.5% c) 50% d) None of these

Answer: b

Solution: You can observe from the question that for addition of 1 pen 7 pencils and 4 erasers rajan pays 50 % more. It implies that the cost of 4 pens is 50% of the total amount paid by Amal. Therefore cost of 5 pens will be 62.5% of the total cost.

8. A non stop bus to Amritsar overtakes an auto also moving towards Amritsar at 10am. The bus reaches Amritsar at 12.30pm and starts on the return journey after 1 hr. On the way back it meets the auto at 2 pm. At what time the auto will reach Amritsar?

a) 2.30pm b) 3.00pm c) 3.15pm d) 3.30pm

Answer: b

Solution: Let the distance between the meeting point of Auto at 10.00 AM and Amritsar be d . The bus takes 2.5 Hours(150 minutes) to reach Amritsar from that point. The bus commences its return journey at 1.30 PM and meets auto at 2.00 PM. The bus has thus traveled 30 Minutes. The bus would have covered $30/150 d$. The auto has covered $(1-1/5)d$ during the period is $4/5$ th of the distance has been covered in 4 hours (2.00 PM -10.00 AM) The remaining $1/5$ th distance will be covered in 1 hour. The auto will reach Amritsar at 3.00 PM

The cost of one pencil, two pens and four erasers is Rs.22 while the cost of five pencils, four pens and two erasers is Rs.32. How much will three pencils, three pens and three erasers cost?

Answer: 27

Solution: $x + 2y + 4z = 22$ $5x + 4y + 2z = 32$ Solving we get $3x + 2y = 14$
and $y + 3z = 13$, Adding both we get $3x + 3y + 3z = 27$

The lowest temperature in the night in a city A is $1/3$ more than $1/2$ the highest during the day. Sum of the lowest temperature and the highest temperature is 100 degrees. Then what is the low temp?

Answer: 40 degrees

Solution: $(1/2 + 1/3 \times 1/2)t + t = 100$ Solving we get $t = 60$ i.e the highest temperature is 60 and the lowest is 40.

Wise man talk because they have something to say, fools talk because they have to say something.

- Plato

Person of the Month

NISTians are proud of Dr Saroj Meher, Faculty of the department of Electronics and Communication Engineering who was the newsmaker of this month. He has been awarded the *Samanta Chandrasekhar Young Scientist Award* by the Orissa Bigyan Academy for the year 2003. He received the award on January 20, 2005 from Honourable Chief Minister Mr Naveen Pattnaik. Dr Saroj Meher joined NIST in July, 2003. Since then, he has been showing his talent in doing research and completed many commendable research work in the area of Image Processing and Digital Signal Processing. Dr Meher did his PhD from NIT, Rourkela under the supervision of Professor Ganapati Panda. He received the J C Bose Memorial Award in the year 2004 and also three Gold medals for the best research papers in the year 1999, 2000 and 2000. Dr Meher published 29 research papers in various journals of National and International repute. Before joining NIST, he worked in GIET, Gunpur for two years. He is the eldest son of Mr B Meher and Mrs. N Meher of Bandhapali, Bargarh, Orissa. His hobbies are organising mini picnics of NIST, playing Cricket, badminton and Table Tennis.

In the Next Issue.....

- ◆ **Person of the Month**
- ◆ **Summer Course – 2005**
- ◆ **NIST Rock Garden**
- ◆ **Many other news....**

NISTe_News Welcomes students opinions, suggestions regarding NIST. Feel free to send at niste_news@yahoo.com

Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence
– Helen Keller

Cartoon of the Month



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The next issue will be published on March 15, 2005. Send your message on or before March 10, 2005 to niste_News@yahoo.com. Thanks.
 ----- **NISTe_news**

**OITS and NIST's joint venture
 Workshop on *Recent Trends in Computing*
 – some pictures**

Indraneel Mukhopadhyay



Our Student Representatives
**Vivekananda Dora, Padmalina Kabita, Priyadarshini Panda,
 Sudhansu Sekhar Sadangi, Rohan Gupta, and Arun Reddy.**