EDITORIAL

POSITRON 2K11 was first started by 2002-06 ECE students with the help of staff members of our ECE department. Since then numerous technical activities have been conducted successfully.

This edition of POSITRON 2K11, covers details about the Teaching and Non-Teaching staff members of our ECE department, with their achievements (Journal publications, National and International Conferences, Project contributions to industries and technical memberships). It contains details about the technical activities undertaken since the start of this newsletter.

It covers details about the workshops, technical fests, guest lectures and research activities carried out in our department. The list of 4th year ECE students who got placed in various companies during the academic year 2010 – 11is included in this newsletter.

Students from 3rd year and 4th year ECE have participated in various technical fests (Paper presentations, Project exhibitions, Elocution and Filme) off campus and stood at 1st, 2nd and 3rd places, details of which are posted along with photographs. Let's hope the achievements by ECE department continue…

Someone said "The democracy provides equal opportunity to all". Let this be true for all **MITSIANS**.

All the very best to everyone.

Editors

G.R Hemantha
J.T Pramod

Chief of Positron

Dr.S.A.K.Jilani

Our sincere thanks to review committee,

Dr. A.R Reddy,
Professor & Head of the Department

G.N.Kodandaramaiah, M.Tech (PhD)
Professor

B.D.Venkataramana Reddy, M.Tech (PhD)
Professor

Message from the Correspondent:

Positron 2011 offers an excellent opportunity for making each one of the students feel better of being informative and knowledge oriented. It has formed an incredible knock to from a technologically advanced and fully loaded commitment. Brace yourself with the devices which ensure you with healthy valuable returns. Warm up with ultra gaming experience and find out your carrier option. Fasten your growth, development and disseminate your knowledge at various levels. Grab the opportunities to the best of its exposure and illuminate your carrier, overcoming the odds against your efforts and endeavor. I am happy that every year the Department of ECE resolves to create a Magazine which cherishes the student's awareness in substantial making of his carrier.

Message from the Chairperson:

With the philosophy of taking our students to the forefront of the new economy and to drive them by intellect and values, the enthusiastic Faculty drawn up this Magazine to their appreciation. To continue the challenging legacy of achieving excellence, I would therefore advice the students to be cognizant to multiply the knowledge. Know about the Faculty, polish yourself with their help and set your minds to get holistic success.

Message from the Principal:

The technological information dissemination to public is the key factor in bringing concerned people/department together. The department of Electronics and Communication Engineering contributing best of its efforts in development of technical temper by publishing news letter "Positron". The documentation of different activities and bringing it to relevant technical community is the excellent towards service of society. These activities will help in making the science and technology much stronger towards knowledge bank. I am congratulating all the ECE department staff and students on this occasion.

Message from the HOD:

I am happy to see one more issue of POSITRON - a departmental newsletter exclusively for students and faculty. Our faculty has achieved a distinct progress in teaching to the students, and conducting research in various fields of electronics and communication engineering. This news letter brings all about their achievements. Our students have made deep impact in the Rayalaseema region by bagging several prizes in various events conducted by Engineering Colleges. Congratulations to all the winners.

Departmental activities

Profile

ECE department has an intake of 120 UG students, 18 of M.Tech Students and 60 of Diploma Students. Department has permanent affiliation to JNTUA, Anantapur. It has all necessary laboratories required to conduct JNTUA curriculum. Department has facilities to conduct Mini-projects and main projects by the final year students. Students take up innovative projects in the area of Embedded Systems, VLSI, Signal Processing, Image processing, Voice processing, Robotics, Control Systems, Wireless Systems, etc. It is regular feature to win awards by our students at various forums such as Seminars, Symposiums, Conferences, and other events for project exhibitions, research paper presentations, script writing, sports, etc. The Faculty of ECE is department is highly qualified with minimum of M.Tech degree qualification and imparts high quality education to the students. Students are well placed in several companies across India and Globe.

Workshops

The department has conducted two workshops in this academic year. The first one is International Workshop on "Image Processing" in collaboration with IUCEE. The second workshop is National workshop on "Advanced Processors for Embedded Systems". An expert from industry conducted the workshop high lighting ARM architecture, instruction set, addressing modes, and programming. The workshop has kick-started research work at MITS on ARM technology. Participants have immensely benefited from these workshops. Both the workshops were highly successful as it attracted faculties from various colleges across the country.

Guest Lectures

Guest lectures were delivered to Second year and fourth year students. Prof Rama Rao, conducted these guest lectures on Electronic Device Circuits for Second year students and Cellular Mobile Communication for Fourth year students. These lectures were well received by the students and learned basics and fundamentals in these areas.

New Research Initiative

An expert from industry conducted the Workshop high lighting ARM architecture, instruction set, addressing modes, and programming. The workshop has kick-started research work at MITS on ARM technology. Participants have immensely benefited from these workshops. We are proud to announce that this year our students have taken up project based upon ARM9 processor under the guidance of senior faculty. This is the first time our faculty is guiding the students on ARM9 processors by providing the developmental boards and required software tools either for Windows and Linux real time operating systems. The project work of PG students based upon

ARM9 is already published in leading newspapers. Perhaps, we are the only college in the Rayalaseema region to achieve such a remarkable research work in ARM Technology.

Illuminatus

The word ILLUMINATUS in Latin means "To give light", it is an ancient underground society by some eminent scientists in the early part of the 11th centuary A.D. The group of scientists had to carry out research work secretly as the church was very powerful at the time and shunned scientific work, which they considered to be the pagan. Illuminatus is student's voluntary organization of Electronics and Communication Engineering branch. It was started in 2005 by small group with a burning desire to improve. The volunteers of the organizations are called ILLUMINATI.

We named our students association as ILLUMINATUS, keeping in mind the very fact that modern technical education provides no scope for overall personally development. The main motives behind forming such an association are to expose the students to various aspects of learning. The association meets once in a week within allotted hour. The various programs covered in the association meetings are Seminars, Paper Presentations, Guest lectures, G.Ds, Quizzes and other innovative ideas that not only relax the students from mentally toxing heavy academic work but also teach the students some new skill.

It provides the platform for the students to exchange their innovative ideas to expose their inner talents. We released a logo for the Quiz and conducted intra Departmental Quiz program and paper presentations. To encourage the students and for their active participation, illuminates award prizes for the winners. The students discuss about advanced technology so that it provides flexibility to switch the modern technology and practical knowledge.

The important works carried under this are:

Seminars, Paper Presentations, Debates, Group discussions, Quiz and more…!

The above mentioned activities make the students overcome their stage fear apart from gaining knowledge.

C-Time

It implies Company Time. A company details will be given in every session such as projects undertaken by particular company, about management their recruitment procedure, awards achieved by the company and the working environment in that organizations.

Q-Tech

'Q' refers to quiz and 'tech' represents technology. This is quiz on technology. Each and every student of ECE is a participant of Q-tech which is having its own versatile process for selection and elimination of groups.

Techno Impeller

Under this program, techno impellers i.e., one of the faculty members will be imparting knowledge in the upcoming fields in Electronics, satellite Communications, Embedded systems and many others latest technologies.

Portroyal

The word portrayal means "describe in words" or "play the role of". This is a chance at the doorstep of students. Questions posed in portrayal test the spontaneity, clarity, focus of students which are considered to the qualities that should be possessed by technical students. Questions include general, current affairs, technical and analytical. The program describes the best creativity of a student in one minute.

Electro'n'

Pursuing higher studies in nothing but penetrating into the basics. Electro'n' is program where basics of technical subjects are made strong. Electro refers electronics and 'n' refers to elements from base to infinity. For each session a basic elements are described elaborately. We are very much thankful to the Head of the Department Mr. A.R. Reddy for his continuous support in making all the sessions successful.

Achievements made by the ECE department staff during 2010-11

S.No.	Name of the Faculty	Designation (administrative Positions, if any)	Qualification, University and year of graduation	Areas of Specialization	No. of research publications in journals and conferences since joining the department and Total no. of such publications (INJ,INC,NJ,NC)
1	 Dr. A. R. Reddy	HOD, Professor	M.Tech, Ph.D, IIT Kharaghpur, 1986.	Embedded Systems and Cryptography	NJ-02, NC-02
2	 G.N. Kodanda Ramaiah	Professor	M.Tech, Ph.D (Submitted on Sept 2010), JNTUA.	ECE(Speech Signal Processing)	INJ-1, INC-01 NJ-02, NC-01
3	 Dr. S.A.K.Jilani	Professor	Ph.D, Sri Krishna Devaraya, 2002	Digital Signal Processing	INJ-01, INC-01 NJ-1, NC-02
4	M.B.Manjunatha	Professor	M.Tech (Ph.D), V.T.U, 2000	Biomedical Instrumentation	INJ-01 NC-02, NJ-02

5	 B.D.VenkataRamana Reddy	Professor	M.Tech, S.V.U, 1999	Electronic Instrumentation & Communication systems	INJ-03 NC-02
6	 Mr. Mahesh	Associate Professor	M.Tech(Ph.D), J.N.T.U, 2005	Digital System & Computer Electronics	NC-01
7	 K.Kanthamma	Associate Professor	M.Tech(Ph.D), J.N.T.U.C.E, 2006	Digital System & Computer Electronics	INJ-01, INC-01 NC-03
8	 B.Sukumar	Associate Professor	M.Tech, J.N.T.U, 2007	Digital Electronics & Communication Systems	NC-01
9	 R.Triveni	Assistant Professor	M.E, Sathyabama University , 2007	Applied Electronics	NC-01

10	 V.Sai Kumar	Assistant Professor	M.Tech, V.I.T, 2007	VLSI Design	NIL
11	 S.Arun	Assistant Professor	M.Tech, Amrita Vishwa Vidyapeetam, 2009	VLSI Design	NIL
12	 G. Rathnasekhar Reddy	Assistant Professor	M.Tech, V.T.U, 2009	VLSI Design & Embedded Systems	NIL
13	 C.K. Hemantha Lakshmi	Assistant Professor	M.Tech, J.N.T.U, 2009	VLSI System Design	NIL
14	 M. Haritha	Assistant Professor	B.Tech, MITS, 2008	Electronics & Communication	NIL

15	 G. R Hemantha	Assistant Professor	M.Tech, J.N.T.U.A, 2010	Digital System & Computer Electronics	NC-01
16	 J. T. Pramod	Assistant Professor	M.Tech, J.N.T.U.A, 2010	Digital System & Computer Electronics	NC-01
17	Balakrishna Reddy.D	Assistant Professor	M.Tech, NITC, 2010	Signal Processing	NIL
18	 S. Ravishankar	Assistant Professor	M.Tech, NITC, 2010	Telecommunication	NIL
19	 J. Nithin	Assistant Professor	M.Tech, NITC, 2010	Electronic Design and Technology	NIL

20	 P R Ratna Raju .K	Assistant Professor	M.Tech, SVNIT,Surat, 2010	Communication Systems	NIL
21	G. Sarvajee	Assistant Professor	M.Tech, NITC, 2010	Microelectronics & VLSI Design	NIL
22	 P. Kiran Kumar	Assistant Professor	B.Tech, MITS, 2008	Electronics & Communication	NIL

Details of ECE Department Technical Staff

1	 B.M Ramamurthy	Technical Staff	B.Tech, MITS, 2006	Electrical & Electronics
2	 M. Manjula	Technical Staff	B.Tech, KSRM College of Engg, 2004	Electronics & Communication
3	 Mounika	Technical Staff	B.Tech, MITS, 2008	Electronics & Communication

Publications of ECE Faculty in 2010-11

Dr A. R. Reddy

International Journals:

1. Mohan H.S and A. R. Reddy, "An Effective Defense Against Distributed Denial of Service in Grid", "IEEE International conference on integrated intelligent computing ICIIC-2010, Aug 5-7, 2010, SJBIT, Bangalore. ISBN 978-0-7695-4152-5, PP 84-89, Published in IEEE Explore.

2. Mohan H.S, and A. R. Reddy, Generating the New S-box and Analyzing the Diffusion Strength to Improve the Security of AES Algorithm, IJCNS September issue (Vol.2, No.9), 2010.

National Conferences:

1. Mohan H.S and A. R. Reddy, "An Approach for Certifying Security in Software Components", "NATIONAL CONFERENCE ON ACADEMIC RESEARCH", Aug 13-14th, 2010, Dr MGR University, Chennai. ISBN 978-81-910827-0-8.

International conferences:

1. Mohan H.S and A. R. Reddy, "An Effective Defense Against Distributed Denial of Service in Grid", "*First International conference on integrated intelligent computing*" ICIIC-2010, SJBIT, Aug 5-7, 2010, Bangalore. Published in IEEE Explore.

2. Mohan H.S and A. R. Reddy, "Generating the New S-box and analyzing the Diffusion Strength to Improve the Security of Rijndael algorithm", "*International conference on Computer Science and information Technology*", ICCSIT-2010, Sep 17-18, 2010, RLJIT, Doddabalpur.

3. A Purushotham Reddy, AR Reddy, R Elumalai, **"**MUCOS RTOS for embedded systems**"** *International Conference* on Communication, Computation, Control and Nanotechnology (ICN-2010), REC Bhalki, Karnataka, India, October 29-30, 2010.

Dr S.A.K.Jilani:

1. Dr. S.A.K. Jilani, G.N. Kodandaramaiah, M.B. Manjunatha, M.N. Giriprasad, R.B. Kulkarni & M. Mukunda Rao" The Minimal and Maximal Vocal Tract Shape Variabiligy for Vowels Based on LPC", International Journal of Highly Reliable Electronic Systems (Vol.3 No.1 Jan-June 2010) Pages: 39-45, http://www.serialspublications.com/contentnormal.asp?jid=180&jtype=1

2. Dr.S.A.K.Jilani, T.Syed Akheel, K.Kanthamma, "Face Recognition Using Eigen Values",Proceedings of international conference on MEMS & Optoelectronics Technologies (ICMOT 2010), 22-23 January 2010, Pages 455-459.

3. Dr.S.A.K.Jilani, T.Syed Akheel, K.Kanthamma, C. Sreevardhan, "Brain Image Segmentation Using RBF Neural Network", Proceedings of international conference on MEMS & Optoelectronics Technologies (ICMOT 2010), 22-23 January 2010, Pages 361-364

4. Dr.S.A.K.Jilani, T.Syed Akheel, K.Kanthamma," A Location Based Distributed Database Architecture For Global Roaming in Next Generation Mobile Networks" Proceedings of

international conference on MEMS & Optoelectronics Technologies (ICMOT 2010), 22-23 January 2010, Pages 331-334

Industrial projects collaboration:

1. Worked as team member in designing and developing PC based three-axis stepper motor control and driver circuit and nuclear radiation strength detection for gamma tomography system was designed and developed and shipped onto DRDO, Jodhpur and involved direct reporting and discussions with technical production.

2. Developed PC based system to determine Ultrasonic velocities of different liquids combinations by interfacing to interferometer. Processing was done in MATLAB

3. Worked as team member in designing and developing DSP based geophysical monitoring system for APFRO, Habsiguda, Hyderabad

Memberships and Reviewer:

Technical member for First International Workshop on Wireless and Network Security (WNS 2010), June 23-25 2010, Sheraton Grande Ocean Resort, in Miyazaki, Japan. http://sersc.org/ISA2010/First%20International%20Workshop%20on%20Wireless%20and%20Network%20curity.pdf

Reviewer for:

Springer
the language of science

G.N. Kodandaramaiah:

1. G.N. Kodandaramaiah-Professor-Vocal Tract Models for voiced Sounds: 3rd National Conference for Research Scholors on Application of Emerging Technologies
2. G.N. Kodandaramaiah-Professor-Vocal Tract Models for Vowels: 1st National Conference on Intelligence Instrumentation
3. G.N. Kodandaramaiah-Professor-Vocal Tract shape variability estimation for non Contextual vowel using LPC Coding First International Conference on Frontier Technologies
4. G.N. Kodandaramaiah-Professor-Use of lip Synchronization by hearing impaired using Digital Processing for enhanced perception of speech 2nd IEEE International conference on computers, control & communication
5. G.N. Kodandaramaiah-Professor-The Minimal & Maximal vocal tract shape variability for vowels based on LPC
6. G.N. Kodandaramaiah-Professor-Independent speaker recognition for native English vowels.

7. G.N. Kodandaramaiah-Professor-Intra speaker tract shape variability estimation for vowels using LPC for female speakers

8. G.N. Kodandaramaiah-Professor-Variability estimation of ice cold effect on vocal tract shape using LPC for male speakers

9. G.N. Kodandaramaiah-Professor-LMS algorithm using MATLAB and SIMULINK in speech analysis

10. G.N. Kodandaramaiah-Professor-Implementation of LPC based vocal tract shape estimation for vowels

B.D. Venkataramana Reddy:

1. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad ‘‘Color-Texture Image Segmentation using Hypercomplex Gabor Analysis’’ Signal and Image Processing: An International Journal, December 2010, AIRCC.

2. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad ‘‘Color image Registration and Template Matching using Quaternion Phase Correlation’’ Ubiquitous Computing and Communication Journal (UBICC), vol.6, no.1, February 2011, Ubicc publishers, Canada.

3. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad “Edge Detection in Satellite Images using Quaternion Convolution in Frequency Domain’’ International Journal of Electronics Engineering Research (IJEER), Research India Publications.

4. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad ‘‘Digital Colour Image Watermarking Scheme based on Quaternion Singular Value Decomposition’’ International Journal of Systemics, Cybernetics and Informatics (IJSCI), Pentagram Research Publications.

5. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad, ‘‘Frequency Domain Filtering of Colour Images using Quaternion Fourier Transforms’’ International Journal of Computer Science and Technology (IJCST), Cosmic Journals, Vol. 1 Issue 2 December, 2010.

6. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad ‘‘Colour-Texture Image Segmentation Algorithms based on Hypercomplex Gabor Analysis’’ Research Journal of Engineering &Technology.

7. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad “Colour Image Compression using Quaternion Principal Component Analysis’’ Journal on Electronics Engineering, I manager Publications.

8. B.D.Venkatramana Reddy, Dr.T.Jayachandra Prasad,K.Sudhamayee ‘‘Hypercomplex Correlation Techniques for Vector Images’’ National Conference on Control of Power Electronic Drives and Systems held during 30^{th}-31^{st} May 2010 at AU College of Engineering(A),Andhra University,Visakhapatnam,pp.42-47.

R Thriveni:

1. R Thriveni, A real time licence plate recognition using image segmentation technique, National conference on Image processing, CMRIT, Bangalore, 23 April 2010.

Workshops Attended:

1. National Workshop Advanced processors for embedded systems, MITS, Madanapalle, 25 October 2010.

K. Kanthamma:

Papers:

1. K Santha, K Kanthamma, Content based image retrieval using adaptive features, National Conference on recent trends in Electronics and Communication Engineering (NCEC-2010), Page 57-61, Bellari Institute of Technology and Management, Bellari, Karnataka, 24-25 September 2010.

2. J Kamalakar, K Kanthamma, Fractional order singular value decomposition representation for face recognition, National Conference on recent trends in Electronics and Communication Engineering (NCEC-2010), Page 62-69, Bellari Institute of Technology and Management, Bellari, Karnataka, 24-25 September 2010.

Workshops attended:

1. IUCEE Workshop on Image processing, MITS Madanapalle, 5-9 July 2010.
2. High Teaching Skills, WIPRO Mission10X, MITS, Madanapalle, 12-13 July 2010.
3. WIPRO Mission10X, MITS, Madanapalle, 14-17 July 2010
4. SKD Technologies-2K10 SKD Engineering College, Gooty, 23-24 October 2010.
5. National Workshop Advanced processors for embedded Systems, MITS, Madanapalle, 25 October 2010.

B. Sukumar:

Workshops Attended:

1. National Workshop Advanced processors for embedded Systems, MITS, Madanapalle, 25 October 2010.

GR. Hemantha:

Papers:

1. GR Hemantha, Hiding data in images by LSB substitution using double polynomial, National conference on Emerging trends in electronics and communication engineering, SJBIT, Bangalore, 8 May 2010.

Workshops Attended:

1. National Workshop Advanced processors for embedded Systems, MITS, Madanapalle, 25 October 2010.

JT. Pramod:

Papers:

1. JT. Pramod, Format variability for vowels using AR Model of vocal tract, National conference on Emerging trends in electronics and communication engineering, SJBIT, Bangalore, 8 May 2010.

Workshops Attended:

1. National Workshop Advanced processors for embedded Systems, MITS, Madanapalle, 25 October 2010.

V. Sai Kumar:

Workshops Attended:

1. National Workshop Advanced processors for embedded Systems, MITS, Madanapalle, 25 October 2010.
2. High Teaching Skills, WIPRO Mission10X, MITS, Madanapalle, 12-13 July 2010.
3. WIPRO Mission10X, MITS, Madanapalle, 14-17 July 2010
4. IUCEE workshop on Mobile computing, IUCEE, Pune, June 21-25, 2010.

G Rathna Sekar Reddy:

Workshops Attended:

1. IUCEE Workshop on DSP using Labview, IUCEE, Sri Vishnu Engineering College for Women, Bhimavaram, 5 July 2010.
2. MATLAB, Vidyanikethan, Tirupati, 20 June 2010.

S. Arun:

Workshops Attended:

1. High Teaching Skills, WIPRO Mission10X, MITS, Madanapalle, 12-13 July 2010.
2. WIPRO Mission10X, MITS, Madanapalle, 14-17 July 2010
3. IUCEE workshop on Teaching Engineering using MATLAB and Simulink, IUCEE, Madurai, 5 July 2010.

Achievements by ECE students in 2010-11

Paper Presentations:

1. B. Krishna Kiriti, V. Ahamed Subhan presented a paper on "Heart Failure Alert System using RFID Technology" at Sri Sai Institute of Technology, Rayachoty on 25-Oct-10 and bagged 1st place.

2. B. Krishna Kireeti, V. Ahamed Subhan presented a paper on "Heart Failure Alert System using RFID Technology" at Chadalawada Ramanamma Engg. College, Tirupati on 23-Jan-10 and bagged 3rd place.

3. M. Nikhil Surya, M. Sundeep Kumar presented a paper on "Wireless Charging of Mobiles Using Microwaves" at Vemu Institute of Technology, Chittoor on 29-Jan-11 and bagged 3rd place.

4. B. Benkata Sai Sravan, K. Varun Kumar Reddy presented a paper on "Neuromorphic VLSI design using batecholation" at Vemu Institute of Technology, Chittoor on 29-Jan-11 and bagged 3rd place.

5. S. Saraswathi, N.R. Samhitha presented a paper on "Adaptive Guided Missile Technology" at Siddhartha Institute of technology, Chittoor on 23-Oct-10 and bagged 1st place.

Project Exhibition;

1. S.K. Afzal Khan, Gondi Mahesh, S. Gowtham, A. hemanth exhibited a project named "Propeller LED Display" at Siddhartha group of Institutions, Puttur on 23-Nov-10 and bagged 1st place.

2. S.K. Afzal Khan, Gondi Mahesh, S. Gowtham, A. hemanth exhibited a project named "Propeller LED Display" at Siddhartha group of Institutions, Puttur on 12-Oct-10 and bagged 2st place.

3. B. Krishna Kireeti, Y. Bhaskar, V. Ahamed Subhan exhibited a project named "Home Automation using Internet" Chadalawada Ramanamma Engg. College, Tirupati on 23-Jan-10 and bagged 1st place.

Elocution:

1. B. Krishna Kireeti participated in Elocution competition on the topic “Importance of vote” organized by Govt. A.P. on 26-Jan-11 and bagged 3rd place.

Filme:

1. Ashwitha, Medha, Deepikamani, and Charishma participated in Filme on the topic “Environment” at JNTUA, Anatapur on 04-Mar-11 and bagged 1st place.

List of students placed in various companies

CSS Corporation

M. Aditya

B. Harika

G.S. Harika

A. Hemanth Kumar

B. Krishna Kireeti

E. Naga Harika

M. Narendra Naidu

C. Poornima

K. Sai Siva Sankar

K. Sandeep Kumar

B.V. Sheetal

S. Sireesha

A. Sunil Kumar

K. Sunitha

HCL Comnet

S.K. Afzal Khan

E. Arief Baba

P.S. Divya

G.R. Kishore Kumar

B. Krishna Kireeti

G. Manju Priya

E. Naga Harika

K. Purushotham Das

K. Sai Siva Sankar

B. Santhosh

T. Siddartha Reddy

M. Sindhu

P. Lakshmi Shalini

Syntel

K. Sushmitha

S. Sireesha

J. Ranjitha

N. Mohan Krishna

G.S. Harika

Convergys

K. Sunitha

Mphasis

S.K. Afzal Khan

A. Sunil Kumar

K. Yugandhar Reddy

B. Harika

C. Poornima

T. Tauseef Ahmed

Tech Mahindra - Mahindra Satyam

V. Chaya Devi

S. Gopinath

M. Narendra Naidu

N. Niharika

K. Sai Siva Sankar

G.R. Kishore Kumar

P. Surendra

K. Venugopal

G. Vishnu Vardhan Reddy

Articles by Students

How a computer virus works!!!

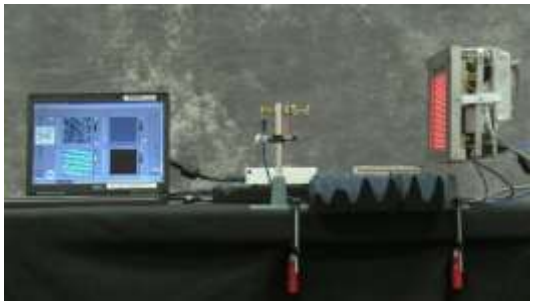
Computer viruses are mysterious and grab our attention. On the one hand, viruses show us how vulnerable we are. A properly engineered virus can have an amazing effect on the world wide internet. On the other hand, they show how sophisticated and interconnected human beings have become. For examples, the thing making big news right now is the “mydoom” worm, which estimate infected approximately a quarter million computers in a single day. Back in march 1999, the Melissa virus was so powerful that it forced Microsoft and a number of other very large companies to completely turn off their e-mail systems until the virus could be contained. The “Iloveyou” virus in 2000 had a similarly devastating effect. That's pretty impressive when you consider that the Melissa and “Iloveyou” viruses are incredibly simple.

Virus prevention and removal:

A virus is a piece of cod that gets loaded onto your computer without your knowledge and runs against your wishes. The first known occurrence of viruses goes back to 1987 when the ARPANET was infected by one. One common misnomer among people is that you can infect your computer just by opening an email and reading its text. That is not possible; it is usually the files attached to the email that contain the virus. The most common file types are “SCR”,"VBS", and “PIF". Prevention is better than a cure. Here are some tips to make sure that your computer does not get infected.

- Get good Antivirus software like Norton Anti-virus 360, NOD32, AVAST 5, and Kaspersky 2011. Don't prefer AVG.
- Keep your antivirus software updated by downloading new virus definitions regularly Most Anti-virus software comes with the feature of updating virus definitions.
- Keep your windows operating system updated by regularly downloading new updates from the Internet. Windows OS's have a lot of security loopholes and bugs that can be easily exploited by worms and viruses.
- Make sure the antivirus scans the file each time before it's opened.
- Floppy disks and removable media are a good source of viruses always scans them before accessing files on them.
- Never open email attachments from sources that ate unknown or suspicious.
- Do not open emails that have questionable subject lines.
- When in doubt about a file, don't open it.
- Even with the best of precautions bad things can still happen. Back up all your data and important files.

New portable camera sees inside solid materials and structures



A research team from the Missouri University of Science and Technology (Missouri S&T) has succeeded in creating a portable scanning system that's capable of looking inside objects or structures and revealing hidden secrets. Using technology similar to that used for full body scans at airports, the new transmission mode camera system can detect, collect, process and display millimeter-wave and microwave signal information in real time and at adjustable focus points between the transmitter and collector aperture. The whole setup is powered by a single laptop-sized battery, with the results being displayed on a notebook screen.

5G (5TH generation) technology

5G Technology stands for 5th Generation Mobile technology. 5G mobile technology has changed the means to use cell phones within very high bandwidth. User never experienced ever before such a high value technology. Nowadays mobile users have much awareness of the cell phone (mobile) technology. The 5G technologies include all type of advanced features which makes 5G mobile technology most powerful and in huge demand in near future.

The gigantic array of innovative technology being built into new cell phones is stunning. 5G technologies which are on hand held phone offering more power and features than at least 1000 lunar modules. A user can also hook their 5G technology cell phone with their Laptop to get broadband internet access. 5G technology including camera, MP3 recording, video player, large phone memory, dialing speed, audio player and much more you never imagine. For children rocking fun Bluetooth technology and Piconets has become in market.

- 5G technology offer high resolution for crazy cell phone user and bi-directional large bandwidth shaping.
- The advanced billing interfaces of 5G technology makes it more attractive and effective.
- 5G technology also providing subscriber supervision tools for fast action.
- The high quality services of 5G technology based on Policy to avoid error.
- 5G technology is providing large broadcasting of data in Gigabit which supporting almost 65,000 connections.
- 5G technology offer transporter class gateway with unparalleled consistency.

- The traffic statistics by 5G technology makes it more accurate.
- Through remote management offered by 5G technology a user can get better and fast solution.
- The remote diagnostics also a great feature of 5G technology.
- The 5G technology is providing up to 25 Mbps connectivity speed.
- The 5G technology also support virtual private network.
- The new 5G technology will take all delivery service out of business prospect
- The uploading and downloading speed of 5G technology touching the peak.
- The 5G technology network offering enhanced and available connectivity just about the world

Multi-Touch screen technology

Apple's new phone is released at Macworld recently; the feature that elicited the most "oohs" and "aahs" from the audience was the touch-screen interface: it allowed more than one touch at a time. This "multi-touch" technology adds functions such as allowing a person to easily zoom in and out of pictures and Web pages by pinching the screen with two fingers. But the full power of multi-touch technology might be unleashed in screens far larger than those on phones. Over the past few years, Jeff Han, consulting research scientist at New York University, has developed an inexpensive way to make large multi-touch screens accommodating 10, 20, or even more fingers. He envisions applications ranging from interactive whiteboards to touch-screen tables and digital walls--any of which could be manipulated by more than just one person. And this month, Han has unveiled Perceptive Pixel, his new company based on the technology.

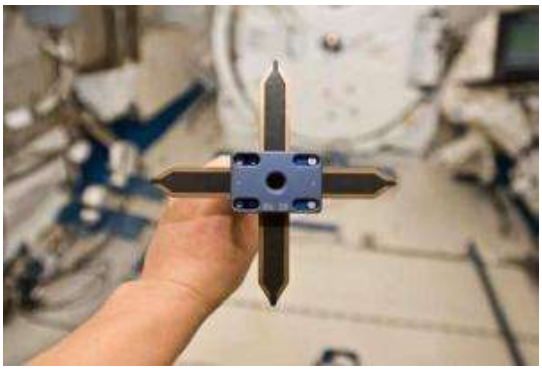
"The new I Phone is too small to be a very interesting multi-touch device," says Han, who demonstrates his technology on this YouTube video. That's because multi-touch technology implies multiple users. More than one person gathered around a large touch screen "becomes interesting," he says, "because multiple users can then become collaborators." Such collaboration could take many forms, from brainstorming sessions using networked, interactive whiteboards to animation collaborations at which six hands can mould the face of a monster. Perceptive Pixel is set to ship its first wall-size touch screen this month, to an undisclosed U.S. military customer. Various approaches to multi-touch technology have been demonstrated at engineering conferences since the 1980s. Mitsubishi Electric Research Labs developed the Diamond Touch table, which allows a group of people to sit around and collaborate on projects. Multi-touch screens "never completely went away, but they're coming back in different ways,

and for certain things they're going to be really important," says Bill Buxton, principal researcher at Microsoft Research.

There are many ways to make a multi-touch screen, Han. Some of the early designs measured the change in electrical resistance or capacitance on a surface when fingers touched it. But these devices have limited resolution, are relatively complex, and don't easily and inexpensively scale up to large dimensions. Apple has not disclosed what multi-touch technology it's using on I Phone.

I wish the touch screen will become a key feature in the new generation.

New Sensor Technology to Make It Easier and Safer for Spacecraft to Rendezvous and Dock to International Space Station



This new docking navigation system prototype consists of an eye-safe Vision Navigation Sensor, or VNS, a high-definition docking camera, as well as the avionics and flight software. Both sensors will provide real-time three-dimensional images to the crew with a resolution 16 times higher than the current space shuttle sensors. This next generation system also provides data from as far away as three miles -- three times the range of the current shuttle navigation sensor. The hardware will be tested by astronauts aboard STS-134, the last planned shuttle mission, currently scheduled for April 2011, as part of the Sensor Test for Orion Relative Navigation Risk Mitigation (STORRM) Development Test Objective (DTO). On Flight Day 11 of the mission, the shuttle crew will conduct an unprecedented on-orbit maneuver; they will undock from the space station and then re-rendezvous with the station on an Orion-like approach. Five retro-reflectors, which will serve as targets for the VNS, were installed on the station's visual docking target during the STS-131 shuttle mission in May.

The demonstration, held at Ball Aerospace in Boulder, Colo. offered the STORRM team the chance to operate the flight hardware for personnel who will be supporting STORRM during the mission -- the astronaut crew, flight director, and mission operations personnel. Mark Kirasich, deputy Orion Manager from the Orion Project Office at NASA's Johnson Space Center in Houston recognized the STORRM team for its perseverance and dedication to develop the DTO flight hardware on an aggressive and success-oriented schedule. The intense project required NASA engineers and contractors to work holidays, evenings and weekends in order to successfully deliver the DTO flight hardware per the shuttle schedule. Normally, it takes more

than two years to develop flight hardware, but the STORRM team was able to deliver the DTO sensor hardware in half that time. Despite the aggressive schedule, the team finished on time.

"It's been challenging -- but we were successful," said Frank Novak, STORRM project manager from NASA's Langley Research Center. "We were successful despite many challenges; my hat's off to the team." "We have met every milestone along the way, and I could not be more proud of this team," echoed Howard Hu, manager of Orion Vehicle Performance and Analysis, responsible for STORRM from NASA Johnson. Following the demonstration, the STS-134 crew was briefed on the STORRM hardware and mission objectives. After the hardware demonstration, the STORRM avionics lead Tom Johnson from NASA Langley and the Deputy Principal Investigator Sean Maguire from NASA Johnson led the crew training activities, which gave crewmember Andrew Feustel and Commander Mark Kelly "hands on" time to gain experience running the software application and the STORRM flight hardware. "I've been to the space station three times, and this is the first time that I'll be doing something like this," said Kelly, who will serve as commander on STS-134. On Aug. 3, the STORRM hardware will be shipped to NASA's Kennedy Space Center where it will be integrated into the shuttle. "This is a huge step forward for us," said Kirasich. "You saw Pad Abort-1. This is the next big thing."

STORRM was developed by the Orion Project Office at NASA Johnson, which is responsible for program management, technology evaluation, flight test objectives, operational concepts, contract management and data post-processing. Engineers at NASA Langley were responsible for engineering management, design and build of the avionics, STORRM software application and reflective elements. They are also responsible for the integration, testing and certification of these components. Industry partners Lockheed Martin Space Systems and Ball Aerospace Technologies Corp. were responsible for the design, build and testing of the VNS and docking camera.

Google Ultra-Fast, Consumer Broadband Networks

Search and advertising giant Google plans to build and test super fast fiber-optic broadband networks in a few communities around the promising up to a one gigabit per second service — a hundred-fold increase over what most Americans currently can subscribe to. A 1Gbps could let a user download a HD movie in minutes and is more than 1000 times faster than AT&T's basic DSL offering. Behind Super broadband the goal is to experiment with new ways to help make Internet access better and faster for everyone. Here are some specific things that we have in mind:

Next generation apps: We want to see what developers and users can do with ultra high-speeds, whether it's creating new bandwidth-intensive "killer apps" and services, or other uses we can't yet imagine.

New deployment techniques: We'll test new ways to build fiber networks, and to help inform and support deployments elsewhere, we'll share key lessons learned with the world.

Openness and choice: We'll operate an "open access" network, giving users the choice of multiple service providers. And consistent with our past advocacy, we'll manage our network in an open, non-discriminatory and transparent way.

The announcement is not good news for the nation's ISPs, which have long had a sour relationship with Google. Although Google interconnects with networks just as any other participant in the internet does, ISPs — including AT&T — have complained that Google properties such as YouTube should pay more to ride on their networks. For its part, Google sees high ISP subscription fees and the ordinary slow connection speeds as hindrances to more profits. In the simplest equation, the more people who are online and the faster their connection, the more money Google makes from little text ads on the net. Any company who wants to make money anywhere between a user and an online ad has to fear that Google will try to drive the profits out of its business, whether that be a hardware vendor, a software company like Microsoft or an internet service provider.

Google is doing at least three things here:

1) It's demonstrating to the public and to regulators that really fast broadband isn't nearly as hard as companies like AT&T and Verizon pretend it is.

2) It's sending a warning to large telecoms that they better start working to reduce prices and increase service or they might face a competitor they don't want to go up against, and

3) By partnering with municipalities, it's learning/showing the nation how to bypass the current dominant telecom players by creating municipally-owned fiber infrastructure that can be rented to multiple service providers, who can then duke it out on price and service. If successful, that could create a model where Google uses its huge cash surplus to finance municipally-owned fiber optic networks, undermining its telecom rivals and speeding up the nation's internet without ever having to run a consumer-grade network or learn how to do customer support.

If I were an executive at a large ISP, I'd be very unhappy with Google's announcement. When Google enters a market, it usually destroys traditional ways of making money. ISPs want to find ways to measure internet traffic, and charge users by levels — even as their own upstream bandwidth costs continue to plummet. The rhetoric used to justify those decisions to consumer and lawmakers just won't hold up if there's a fairly priced, all-Fiber 1Gbps connection just down the road. Anyway Google is providing super broadband facility with the speed of 1Gbps which is going to make new revolution in the usage of internet.

Revolutionary microchip technology

A team of scientists at Tyndall National Institute, UCC have made the world's first junction-less transistor even smaller. The transistor is the building block of the microchip. The development of the world's first junction-less transistor by Tyndall's Professor Jean-Pierre Colinge had already sparked off huge interest amongst the leading semiconductor manufacturers around the globe when it was published in *Nature Nanotechnology*.

The announcement was made as part of the programme of events taking place for Nanoweek which runs from 31st January to 4th February. "The semiconductor industry was excited by the development of the junction-less transistor as it could represent simpler manufacturing processes of transistors. Considering that there are approximately 2 billion transistors on a single microprocessor, any improvement in the performance or structure of the transistor is always hugely significant for the semiconductor industry. Once we had developed the junction-less transistor our attention went towards making it even smaller. We have succeeded in making it at 50 nanometers, which is 20 times smaller than the transistors that were published in *Nature Nanotechnology*," explains Professor Jean-Pierre Colinge, Tyndall National Institute. Today's electronic devices are power hungry and feature hungry. The electronics industry is looking for ways to pack more features into their devices while making them more energy efficient.

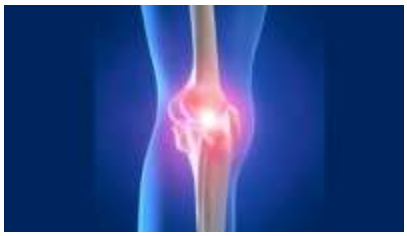
Blind Driving

This January 29, 2011 photo shows blind driver Mark Riccobono making adjustments to his equipment before driving a specially equipped car around the road course at Daytona International Speedway in Daytona Beach, Florida. A blind man in the U.S. is said to have created history by driving a car around a race track in a test, which could one day lead to all visually impaired people taking to the roads, a media report said. Mark Riccobono, 34, successfully navigated his way round the Daytona International Speedway in Florida, overtaking a van and dodging some cardboard boxes thrown in his way, the Daily Mail online reported. His SUV was fitted with laser sensors that passed data to his hands and sent vibrating signals telling him how much to turn. The cushion on his seat was also wired into the same system and vibrated telling him to brake or accelerate. The car was modified by students from Virginia Tech University with a “non-visual interface for a car that can convey real-time information about driving conditions to the blind.”

The test was the culmination of a decade-long project to build a car that could allow blind people to one day drive on normal streets like those without any visual impairment.

Bandage with integrated sensors to monitor the healing of injured knees

Sensors integrated into the bandage register the knee's range of movement. We can Measure Pressure Distribution with our Tactile Pressure Sensors MEMS Inertial Sensors Accurate, easy to use, low cost, high accuracy, long-term stability, calibrated, temperature compensated. Knee injuries are one of the most common injuries that can befall sportspeople or those that simply enjoy an active lifestyle. Such injuries can lay up patients for weeks while they wait for the joints to regain their full function. Although the time it takes for the knee to heal is directly related to how well it responds to the chosen treatment, it can be difficult for an orthopedic doctor to evaluate the healing process and for the patients themselves to know what progress they are making. Researchers have now developed a new type of bandage that features integrated sensors to monitor a knee's range of movement over time to let patients know how they are progressing and let doctors know it they need to adapt the treatment.



The new bandage, developed by researchers from the Fraunhofer Institute for Manufacturing Engineering and Automation IPA in Stuttgart, comprises a bracket that incorporates special sensors that measure and record the joint's range of movement, as well as determining to what degree it rotates and what forces are acting upon it. The sensors used in the bandage include angular measurement systems based on magnetic principles, and acceleration and rate-of-rotation sensors. The sensors observe movements and record data continuously, allowing doctors to determine exactly how patients are moving their knee and observe how the knee's range of movement changes over time. Using software that evaluates the data and presents it in an easy-to-understand format, doctors can recognize trends and, if necessary, adjust the treatment. The researchers say the various fittings for the sensor systems have been designed so they don't restrict freedom of movement in any way, so the Bernhard Kleiner of Fraunhofer IPA says that the new bandage can give patients a psychological boost by highlighting every little improvement in knee mobility, even though they may not feel they are getting any better.

Patients do not even notice their knee is being monitored. The Fraunho "We would like to apply the measurement of human kinematics to other parts of the body in future," says Kleiner. The Fraunhofer researchers have already set their sights on the shoulder and hip joints, but with their movement about all three axes, these joints pose extra difficulties. To overcome this, the engineers are looking at coupling 3D sensor systems with special software. The mobile joint monitoring bandage developed at Fraunhofer will be demonstrated at the MEDTEC Europe trade show, which runs from March 22-24, 2011, in Stuttgart, Germany.

Audio spotlighting

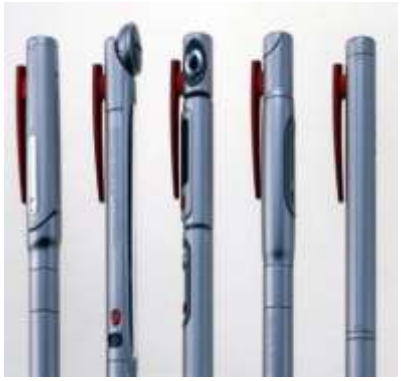
Audio spot lighting is a very recent technology that creates focused beams of sound similar to light beams coming out of a flashlight. By 'shining' sound to one location, specific listeners can be targeted with sound without others nearby hearing it. It uses a combination of non-linear acoustics and some fancy mathematics. But it is real and is fine to knock the socks of any conventional loud speaker. This acoustic device comprises a speaker that fires inaudible ultrasound pulses with very small wavelength which act in a manner very similar to that of a narrow column. The ultra sound beam acts as an airborne speaker and as the beam moves through the air gradual distortion takes place in a predictable way due to the property of non-linearity of air. This gives rise to audible components that can be accurately predicted and precisely controlled. Audio Spotlight is made of a sound processor, an amplifier and the transducer. Audio spotlight can be either directed at a particular listener or to a point where it is reflected. The targeted or directed audio technology is going to a huge commercial market in entertainment and consumer electronics and technology developers are scrambling to tap in to the market.

First figure shows how audio spotlight creates focused beam of sound which was different from ordinary loud speakers. First the ultrasonic waves are fired into the air and they are converting into audible sounds by the property of non linearity of air. The person the second figure is Dr. F. Joseph Pompei, inventor of audio spotlighting. He carrying audio spotlight which looks like a disc-shaped loudspeaker, trailing a wire, with a small laser guide-beam mounted in the middle.

By Y.Bhaskar, IV-A.

5 Pen PC Technology

P-ISM ("Pen-style Personal Networking Gadget Package"), which is nothing but the new discovery, which is under developing, stage by NEC Corporation. P-ISM is a gadget package including five functions: a pen-style cellular phone with a handwriting data input function, virtual keyboard, a very small projector, camera scanner, and personal ID key with cashless pass function. P-ISMs are connected with one another through short-range wireless technology. The whole set is also connected to the Internet through the cellular phone function. This personal gadget in a minimalist pen style enables the ultimate ubiquitous computing.



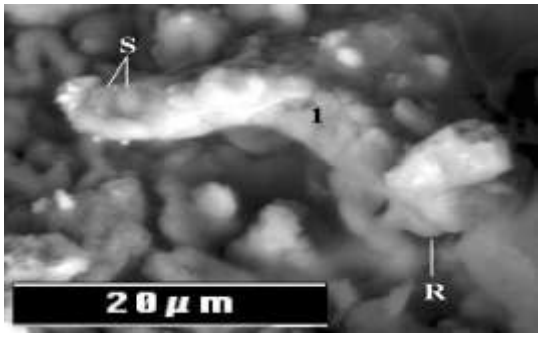
By G.R.Kishore kumar, IV-A.

NASA found alien

An astrobiologist working at NASA'S Marshall Space Flight Center outside Huntsville, Alabama has made an astounding claim. In a recently published journal article, he claims to have discovered a preserved alien life form residing inside a meteor that journeyed through the vast black of space before impact our planet.

The researcher, Dr. Richard B. Hoover, had to go to extraordinary lengths to make his discovery. He reasoned that if alien microbes were to hitch a ride on a meteorite, they would likely have to do so in a special meteor. Specifically, he zeroed in on the CI class of carbonaceous chrondite meteors. These meteors are rich in water, amino acids, and other organic compounds -- seemingly a virtual pantry for a microorganism. Picking the most ideal type of CI meteorite -- CI1 optimized his chances, but narrowed his pool of available specimens.

In total only nine such meteorites are known to exist on earth. After going to great lengths to obtain one of these meteorites, he destroyed a piece of it, smashing it apart. Using scanning-electron microscopes and field emissions electron-scanning microscopes he images the result dust and fragments and made the extraordinary discovery he was hoping for to be a



fossilized bacteria. The identified specimen appears remarkably similar to the bacteria *Titanospirillum velox*, a sulfur-loving archaebacteria, which was discovered in 1999 mud samples from Spain. The meteorite was reportedly broken under carefully controlled sterile conditions. Now the only unknown is whether the meteorite could have somehow been contaminated. The meteors were sterilely harvested in the frigid reaches of Antarctica immediately after their observed fall. The fact that they were collected so quickly limits the possibility that indigenous microbes contaminated them.

By N.Niharika, IV-A

A day without "SUN"

Does a day happens or starts without sunrise? Yes says NASA. The sun is a huge, glowing ball that provides light, heat, and other energy to our Earth. The Sun follows an 11-year cycle of high and low periods of solar activity. It is now leaving a notably quiet phase and scientists expect to see a sharp increase in the number of solar flares as well as unprecedented levels of magnetic energy. The rings of fire, which have the power of 100 hydrogen bombs, could cause more economic damage. NASA has warned that a peak in the sun's magnetic energy cycle and the number of sun spots or flares around 2013 could generate huge radiation levels. The resulting solar storm could cause a geomagnetic storm on Earth, knocking out electricity grids around the world for hours, days, or even months, bringing much of normal life grinding to a halt.

A massive solar flare is caught on camera on September 8th.

Scientists fear that the Sun's activity could cause havoc on Earth in 2013

NASA is using dozens of satellites – including the Solar Dynamics Observatory – to study the threat. Smart power grids, GPS navigation, air travel, financial services and emergency radio communications can all be knocked out by intense solar activity. But much of the damage could be minimised if it was known in advance that the storm was approaching. Putting satellites in 'safe mode' and disconnecting transformers could protect them from damaging

electrical surges. There's little point getting worked up about all this. The same people who think that the world was going to end in 2012 are the ones probably telling us this new scare.

Here's one for you: Things are ok. Stop worrying and enjoy your life. Don't fret over something that you have no control over.

By K.Yugandhar Reddy, IV-B

Bacteria = Bio fuel

Genetically altered *Clostridium (E. coli* bacteria*)* can produce *n*-butanol at faster rates. University of California, Berkeley, chemists have engineered bacteria to churn out a gasoline-like biofuel at about 10 times the rate of competing microbes, a breakthrough that could soon provide an affordable and "green" transportation fuel. Various species of the *Clostridium* bacteria naturally produce a chemical called *n*-butanol (normal butanol) that has been proposed as a substitute for diesel oil and gasoline. While most researchers, including a few biofuel companies, have genetically altered *Clostridium* to boost its ability to produce *n*-butanol, others have plucked enzymes from the bacteria and inserted them into other microbes, such as yeast, to turn them into *n*-butanol factories. Yeast and *E. coli*, one of the main bacteria in the human gut, are considered to be easier to grow on an industrial scale. While these techniques have produced promising genetically altered *E. coli* bacteria and yeast*, n*-butanol production has been limited to little more than half a gram per liter, far below the amounts needed for affordable production.

Michelle C. Y. Chang, assistant professor of chemistry at UC Berkeley and her colleagues stuck the same enzyme pathway into *E. coli*, but replaced two of the five enzymes with look-alikes from other organisms that avoided one of the problems other researchers have had: *n*-butanol being converted back into its chemical precursors by the same enzymes that produce it. The new genetically altered *E. coli* produced nearly five grams of *n*-buanol per liter, about the same as the native *Clostridium* and one-third the production of the best genetically altered *Clostridium*, but about 10 times better than current industrial microbe systems. The enzyme pathway by which glucose is turned into n-butanol is set against the silhouette of an E. coli bacterium. The pathway, taken from Clostridium bacteria and inserted into E. coli, consists of five enzymes that convert acetyl-CoA, a product of glucose metabolism, into n-butanol (C_4H_9OH). This boosts the production fuel and there by meets the amounts needed by the world.

By K.Yugandhar Reddy & K.Venu Gopal, IV-B

US varsity scam: How to avoid the same fate

Here's a list of a few guidelines to students who intend to pursue higher education in the US. It is important that students do due diligence to land up in a genuine college.

The news of California-based Tri-Valley University (TVU) duping Indian students created quite a stir back home. What you can do to avoid the same fate?

First check these guidelines before joining any University:

- Who is the accreditor? A mere accreditation doesn't mean it is a quality institution. Just as there are diploma mills churning out fake degrees, there are accreditation mills that sell accreditation.
- Visit CHEA's website: It has a database of accredited institutions and programmes. Apart from CHEA, a few websites have names of some non-accredited schools.
- The notion that suffixes like '.edu' (education) and '.ac' (academic) is for legitimate academic organizations is false. These domains are also owned by some fake organizations so be careful while going through those websites.
- Check if the attractive building or a huge campus on the college's website is indeed the college's property and not rented for a ceremony. One of the clever marketing techniques is false depiction of the campus.
- Only virtual presence - Some fake institutions may exist in the world of Internet only. There is no real infrastructure and changing addresses is easy.
- Get regular updates on dedicated blog sites like Diploma Mill News.
- Checking out the rankings is also a good way of knowing about credibility of an institution. Website of 'US News & World Report' and 'Princeton Review' is a good idea, suggests Vivian Doskow, a 2010 graduate student from New York.
- States like Idaho, Hawaii, Montana and California have low or doubtful standard academic institutions.
- Some US states like Oregon gives a list worldwide schools unacceptable to them. For e.g., "Schools that are not authorized to Offer Degrees in the State of Oregon".
- Alumni descriptions: If the school boasts of an impressive list of alumni or produces a long list in its short existence, it should ring an alarm bell.
- Students can also consult educational advisers at the United States-India Educational Foundation (USIEF).