## METRON

THE FIRST DEPARTMENTAL NEWS LETTER IN VJEC

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## "Here we are the Instrumentation Engineers"



Front View of Vimal Jyothi Engineering College Administrative Block. The Applied Electronics & Instrumentation Engineering Celebrating its 5th birthday in Vimal Jyothi Engineering College. Photo by Mr. Jithin Alias.

What is Instrumentation? Instrumentation engineering is a specialized branch of electrical and electronic engineering, which focuses on the principle, and operation of measuring instruments, which are used in design and configuration of automated systems.

These engineers work for industries with automated processes, such as chemical or manufacturing plants, with the goal of improving system productivity, reliability, safety, optimization and stability. Instrumentation Engineers help in the designing, construction and maintenance of instruments and entire instrumentation systems of an industrial undertaking. An instrumentation engineer decides the type of instruments needed for ensuring better quality and efficiency of the end product.

Instrument Society of India was registered on 1st August 1970 with the registered head quarters at the

Indian Institute of Science, Bangalore, Vimal Jyothi Engineering college stared a student chapter of ISOI in the year 2009 and presently has 123 student members and 1 life member. The objectives of the ISOI VJEC Student chapter is to provide a forum for pooling the knowledge and experience of personals from institutions and industries. The chapter is actively involved in promoting the goals of ISOI and act as a technical knowledge exchange bureau for students.

The ISOI VJEC Student chapter is trying to provide a base in the Instrumentation and most modern topics like Space instrumentation, Automotive Instrumentation, Artificial Intelligence & Expert Systems, Process Dynamics & Control, Robotics Engineering & Application, Identification & Adaptive Control, Instrumentation in Petrochemical Industries, Digital Instrumentation. The

research projects like Climate control for Mushroom farm using Lab VIEW, Ratio Control in mixing process without a control valve and much more are on its work with the help of ISOI VJEC Student Chapter.

Presently the ISOI student chapter is concentrated to improve the auality of students by different industrial based training programs, different techniworkshops, Student Congress, and especially the Leadership programs On celebrating the year of the chapter, its really proud to that the ISOI has become one of the most energetic & vibrant group in VJEC.

After the completion of the Instrumentation based courses you could be an On- Stream Analysis Specialist, Plant Maintenance & Quality Control Engineer, Instrument De-PLC/ signer, SCADA/ DCS/ Lab VIEW Specialist, Automation Technologist, Industrial safety Engineer, Process & Instrumentation Designer, or Control system Specialist. Dream the future with a branch which having a high job chance, high demand career and great salary. Expert says that the coming 20 years will be the world of automation and self intelligent machines and be prepared

for your future. ISOI Student chapter makes a simple and smooth way for your aim.

—Rahul Antony charge





## Inside this issue:

SENSOR TO MEASURE THE HAPPINESS OF HUMAN MIND	2
NI INTRODUCED LABVIEW ROBOTICS	2
CARTOON CORNER	2
CHARACTERISTICS OF AN OUTSTANDING LEADER	3
BOOKS CORNER	3
JOKE BOX	4



Main Gate of Vimal Jyothi : A long view from the fourth floor of VJEC- photo by Mr. Sreeraj P. V., Lr

"SCIENTISTS
INVESTIGATE
THAT WHICH
ALREADY IS;
ENGINEERS
CREATE THAT
WHICH HAS
NEVER BEEN."

## Sensor to Measure the Happiness of Human Mind

Reporter: Nikhin Cyril

Washington: **S**cientists in the united states have created a sensor that is capable of measuring the happiness of the people.

The research in this field had already started in the time of 1980's. In 1881, the optimistic Irish economist Francis Edgeworth imagined a strange device called a "hedonimeter" that would be capable of "continually registering the height of pleasure experienced by an individual." In other words, a happiness sensor.

Just imagine that what if you had a remote-sensing mechanism that could record how millions of people around the world feels on a particular day - without their knowing?

## NI Introduced LabVIEW Robotics:

Collected by, Own Reporter

U.S: **N**ot long ago, robots were little more than science fiction and highlights in Hollywood.

Now they assist in surgery, navigate Mars, and help the blind drive vehicles. And the NI LabVIEW graphical programming environment is making these things possible.

Last week NI introduces a new software package for designing sophisticated autonomous systems. Lab-VIEW Robotics is built on the LabVIEW programming language, taking advantage of more than 20 years of proven development and unmatched productivity.



### **ISDC**

To join in the AeID Design Club (ISDC) please contact,

Mr. Sreeraj P. V, Lr, AeID "With out us how they can measure...

Without us how they can calibrate....

Without us how they can control...

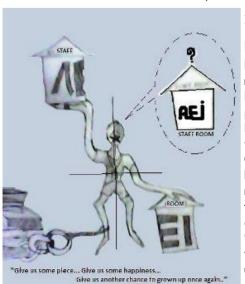
Without us there is no quality....

Proud to be an Instrumentation Engineer"

### **CARTOON CORNER**

BY JITHIN ALIAS, S5 AEI

## Social Networking on Move



Reporter: Shone Jose

In the social networking space, the latest craze is the creation of social networks on mobile phones, pushed by a rapid proliferation of smart phones and a new avatar called location—based—networking. Visit www.foursqure.com to dig deeper. Created by Dennis Crowley and Naveen Selvadurai, it is a web and mobile application that allows registered was to connect with friends and update their locations. Users can 'check in' online on their mobiles to visit bars, restaurants, discos, museums, galleries and hordes of other

interesting places and are awarded points. The more place one visits, the more points one earns and these points are then converted into badges. While the site's main focus is to help visitors locate their friends at a particular point in time, it real value is offering tips and recommendations on places of interest- literally on the move. The moment a registered user opens up the application on his or her mobile, the site locates them and provides about the location. The site, which has already clocked one million users since it was launched in March 2009, is said to be pursued by Yahoo! In., which has reportedly offered \$123 million!!

### LabVIEW fall 2009

**ISO1** organized a Faculty Development Program on March 11th of 2010 and is handled by Experts from Cranes Software Ltd., Bangalore. The program was conducted at the Process Control Instrumentation Laboratory, 18 staffs from different departments attended the programme. The workshop covered different operating tools in Lab VIEW, scope of the virtual instrumentation, and different applications of Lab VIEW. The session covered the real time demo of data acquiring using the Lab VIEW data Acquisition System.



### FACULTY DEVELOPMENT PROGRAMS

- Mr. Vind A. S (HOD, AE&I dept.) attended a short term program on LabVIEW and its practical applications at Thrissur Government Engineering College on 5, 6, and 7 of August 2010.
- Mr. Rahul Antony (Lr, AE&I dept.) attended a one week AICTE approved STTP on "Image Processing and its Practical Applications" at Mar Baselious College of Engineering & Technology, Trivandrum, conducted by the Electronics & communication Department.

### Seminar On VLSI Design on 26th of March

Instrument Society of India, VJEC students chapter conducted a 3 hrs seminar on VLSI design and its chances on 26th of March 2010. The seminar was preceded by Mr. Abraham C. G, A.P, from St. Josephs College of Engineering & Technology Palai. He is a maestro in the field of VLSI design. The program included the basics of VLSI design, how we can use VLSI in Instrumentation, and its state. The program was attended by all the final year students of AEI Department. The program was conducted as a part of MATRIX '10 of ISOI VJEC Student Chapter& it was co\_ordinated by the 3rd year students of AeID.



Mr. Abraham C. G delivering a talk on VLSI Systems

Department of AEI Celebrating its 5th Birthday On 2010

### 5th Birthday of Applied Electronics & Instrumentation Engineering

Department of AE&I is celebrating its 5th birthday in this academic year. The course was started in 2005 with 58 students and 6 faculties under the Electronics & Communication Department. As a part of the celebration, Instrument Society of India is planning to conduct a 6 days training program on PLC/SCADA/DCS from Yokogawa and a Robotic Workshop. The ISOI in hand with the ISDC (Design club of AeID) is also planning to conduct a **MEGA TREASURE HUNT** program for the students (members of the ISOI) starting from September 1st week, the technical treasure hunt consists of 7 hint places and finally the TREASURE at the end. It also plans to conduct its 2nd technical quiz on September second week.

Explore the unexplored scenic beauties near to you in South India Visit: www.xploresouth.blogspot.com

"The engineer's first problem in any design situation is to discover what the problem really is."

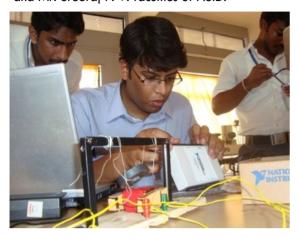
KALEIDOS '10 September 3rd, 4th, and 5th

IEEE ALL KERALA STUDENTS CONFERENCE
INVITES YOU ALL TO THE FUNCTION.
Venue: VJEC Chemperi

### ISOI Awareness Session for 2nd year Students

Instrument Society of India VJEC Student Chapter conducted an awareness program for the 3rd semester students on 19th of July 2010. Shone Jose and Jithin M. Alias of S5 AEI handled the session. It was a one hour session detailed about the possibilities and benefits of the ISOI Membership. Information about the upcoming technical fests across the country and the participation tips was also included in the session. The session was attended by Mr. Rahul Antony and Mr. Sreeraj P. V. faculties of AeID.





The technical expert from Cranes Software Ltd., is checking one of the project of our students

### **PROJECT PRESENTATION**

The department of AEI in association with ISOI conducted the final year project presentation on 16th and 17th of March 2010 at the Process Control Instrumentation Laboratory. Different innovative projects were displayed. Vibration Monitoring using Lab VIEW, Chemical Process Control using GE Fanuc PLC were some of the interesting projects.

### LATEST NEWS FROM ISOI SC- VJEC

- ISOI VJEC Student Chapter celebrating its 1 year on September 2010.
- For the easy working of student chapter which is divided the chapter into 4 groups and having members from all semesters and branches. Elected 4 group leaders for the groups under the General Committee.

### LATEST NEWS FROM ISOI SC- VJEC

- Instrument Society of India VJEC Student Chapter opened a Syndicate Bank Account in the name "ISOI Student Chapter VJEC" with an account number of "24272200001782".
- Instrument Society of India VJEC Student chapter started a collection of technical printed books, journals, technical data sheets and digital books related to Instrumentation to avail the student members.
- Instrument Society of India VJEC Student Chapter 1st General Committee meeting for the new year on 13th of August 2010.

# ROB

ROBOTICS WORKSHOP

@ VJEC

On September 25, 26

### **MATRIX '10**

As per the academic activities of Instrument Society Of India, ISOI Student Chapter a 15 hours training program was provided for the final years (S7AE&I) students in the name of MATRIX '10. The batch wise training program started from 22ndmarch 2010 onwards. One batch contains 14 students and a total of 34 students registered their name for the training. A seminar on VHDL was conducted on 26th march 2010 which was handled by Mr. Abraham C.G, (AP, SJCET, palai). The last session of the program will be conducted from 16th August 2010. The training program is about the topics on Lab VIEW and Matlab. The training sessions will be handled by Mr. Rahul Antony & by Mr. Shijoh V., respectively from the AE&I dept.

### Interesting Statistics by Amazon.com

- 1. 67% of people who buy a book NEVER even open it.
- 2. 62% of people who buy hardware NEVER use it.
- 3. 42% of people who buy music only listen to it ONCE.
- 4. 83% of people who start to read a book NEVER finish it.
- 86% of people who start to use new hardware NEVER use it again (the main reason being insufficient knowledge about and training on the application).
- 6. 6. 93% of people NEVER read the software users manual (no surprise there).

### **GENERAL COMMITTEE MEMBERS 2009- '10**

- 1. Mr. Rahul Antony, Staff In charge
- 2. Mr. Nabeel Abdul Rehman, President
- 3. Mr. Jithin M. Alias, Vice President
- 4. Mr. Jojo K Thankachan, Secretary
- 5. Ms. Meenu George, Joint Secretary
- 6. Ms. Sneha S., Treasurer
- 7. Ms. Sruthi P. P, Joint Treasurer

(This Committee is upto September 20th. The new committee will take charges from September 21st on wards)

### Characteristics Of An Outstanding Leader

-U. A.

Wisdom is one of the primary characteristics of an outstanding leader - leaders have an insatiable curiosity for discovering and learning n e w things. Leadership and learning go together. If you have determined that your learning is behind the curve, then recommit yourself to seeking it out at every opportunity, in every conversation, around every corner. Do you have a process for continual selfimprovement? Get hooked on the improvement habit. Here are some tips:

Spend your time with optimistic, growing people.

Become a reader. If you are not one already, this is an

important source of learning and reflection. Many great books are available to inspire, guide, and instruct your improvement effort.

**Become a speaker.** I find that some of my best insights come from trying to articulate (or write) my thoughts.

**Become a student.** Attend workshops, seminars, and training sessions. Take college courses.

Become a teacher. Give internal and external presentations on your area of expertise. Volunteer to present at the next professional conference you were just going to attend.

**Become a writer.** Do you write in a journal for yourself? You can write articles for associations you belong to, your local paper, or inter-

nal newsletter.

Become a listener. You can get hundreds of hours a year of education, inspiration, information, and instruction by listening. Try listening to audiotapes in your car.

**Keep your commitments.** Call back when you promised (or before). Meet your deadlines. Show up on time. Under promise and over deliver.

Put quotes, goals, reminders, and vision statements where you will see them throughout your day. Keep changing them and moving them around so you don't start to look past them.

**Develop a personal improvement plan.** Schedule time for personal and professional improvement as if your career depended on it. It does.



"WISH U A HAPPY ONAM"

"A SCIENTIST STUDIES WHAT IS, AN ENGINEER STUDIES WHAT NEVER WAS."

Design a low cost automatic Bell System for VJEC and Win Prizes from ISOI. Students of VJEC from any branch can participate in this contest.

For more details Contact Jojo K Thankachan, S5 AeID

JOIN US... BE WITH US... GROW WITH US...

AND MAKE NEW CAREER WITH YOUR IMPROVED TALENTS...

### INSTRUMENT SOCIETY OF INDIA V.JEC STUDENT BRANCH

Students those who are interested in instrumentation, from any department can join in this Professional Society.



For more details contact: Mr. Tinu Thomas, S7 AeID

### **Books Corner**

Industrial Instrumentation

Industrial Instrumentation: By Krishnaswamy & S Vijayachitra. New Age Publications

The text book mainly cover the type of instruments for the measurements and control of process variables in various industries.

The book is an outcome of one of the authors' vast industrial experience and his academic eminence. The book contains 7 chapters in all. Chapter 1 describes the basic concepts of temperature and temperature measuring instruments. Chapter 2 covers all possible types of pressure detectors. Chapter 3 gives fundamentals of force, torque and velocity whereas the

chapter 4 is devoted for acceleration, vibration and density measurements. While chapter 5 dealing with complete range of flow meters. Chapter 6 covers all types of level measurements. The last chapter 7 describes the basic concepts with reference to measurements of viscosity, humidity and moisture. The book would serve as an ex- 4. tremely useful text for Electronics and Instrumentation students and as a reference for the students of other branches. The book is published by New Age Publications.

### **NOTICE:**

- Inauguration of ISOI on last week of August.
- Quiz Competition by ISOI. Screening test on September 15th. 'Quiz on Desk' on September 23rd.
- C o m i n g Soon.Treasure Hunt by ISOI In association with ISDC.
- 4. Congratulations to Neena K., Prasanth Kumar N. K and Prabhitha Balakrishnan of S3 AeID, who scored high score in the July comprehensive tests.

### Contact:

ISOI VJEC SC Vimal Jyothi Engineering College, Chemperi.

Kannur- 670 632

### **Private Circulation Only**

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Student In-charge: Shone Jose Student Editor: Tinu Thomas

### ISOI VJEC SC NEWS LETTER



### **INSTRUMENT SOCIETY OF INDIA Department of Instrumentation**

**Indian Institute of Science** 

The Society of Instrumentation professionals was established in the year 1970, with head quarters at Indian Institute of Science, Bangalore. Today it has six chapters at Delhi, Chennai, Hyderabad, Dehradun and Pune. It strives to act as a link between academic institutions and the instrumentation industry, by organising several programs. It also conducts programs for students and working professionals in the form of short term courses, symposia and topical reviews.

## Contact us: isoi.vjec@gmail.com

Seeking Student News Reporters "METRON", ISOI news letter of Student chapter, Vimal Jyothi Engineering College. Interested students please contact Mr. Rahul Antony, Staff In- Charge.

### **JOKE BOX**



A typical engineering student grabbed a coin, flipped it in the air and said "For heads i go 2 sleep, tails i watch a movie,

If it stands on the edge I'll study.

### NOTICE

Send your response about the ISOI VJEC SC News letter "METRON" to our mail. Please report the mistakes in the Newsletter. Those who are reporting the mistakes in the METRON will have a chance for a gift for each mistake. Find the grammatical or spelling mistakes happened in the news letter, and submit it to News letter in charge. After the valuation we will inform you by notice.



Page 6