



# Dronacharya College of Engineering

## ISSUE

Vol viii issue LXXXI

## Electronics & Communication Engineering

### In This Issue....

- ✦ Editor's Desk
- ✦ HOD's Desk
- ✦ Projects
- ✦ International Project Exhibition "GRIDTECH-2013"
- ✦ FDP on "Networking and Security"
- ✦ Workshop on SCI Lab
- ✦ Webinar on Research Methodology
- ✦ Achievements
- ✦ Outside Conferences/Seminars/Workshops
- ✦ Placement
- ✦ Publication
- ✦ Student's Viewpoint

### From Editor's Desk :

Education is transmission of Civilization and its globalization has made it more quality and competition oriented. We at **Dronacharya College of Engineering, Gurgaon** intend to move towards a better tomorrow by following best practices of imparting technical education to match the standards of the present competitive scenario. The College intends to implement industry-friendly, demand-driven, research-oriented approach of educating in order to inculcate professionalism amongst the students.

Our objective is to produce a well educated, skilled, responsible professional and an employable Graduates possessing a positive attitude research oriented aptitude who later on become an asset to his family and society.



**Editor, (Dr. Sunil K. Mishra)**

### From HOD's Desk :

**"Paying attention to details and doing things right the first time will be a big leap forward towards achieving Excellence".**



It is my privilege to release the e-newsletter for the month of **May 2013**. The Department of Electronics & Communication Engineering continuously strives to provide effective teaching, counseling and mentoring to its students especially for fabrication of new innovative projects and publication of research papers. I take pride in sharing that two projects put up by our students in an international Exhibition "**GRID TECH-13**" organized by **Power Grid Corporation of India** have won awards.

We lay stress on the overall personality development of the students and keep on organizing guest lectures by industry experts, seminars, workshops/conferences, panel discussions and industrial visits for our students. The ECE deptt with the support and guidance from Hon'ble Principal has been successful in the establishment of a IEEE students-chapter in the college for enhancing the students participation in seminars/conferences, project competitions and awards etc at national and international levels.

*Head of Department, Prof. (Dr.) H. S. Dua*

### Projects :

#### **Title: INDUSTRIAL MONITORING & DISPLAY USING ZIGBEE**

**Guide :** Prof. (Mrs.) A. N. Mahajan

**Team Member :**

Arpit Gupta (12146)

Vishul Gupta (12263)

Pravesh Vats (12212)

Amit Kumar (12140)

#### **Objective & Application :**

In this project one can monitor some basic industrial machine parameters distantly to take control measures in real time by using suitable sensors. After the basic signal acquisition process, the signal is being processed in the Micro Controller Unit (MCU) and transferred via Xbee.

#### **Title: VEHICLE IDENTIFICATION AND AUTHENTICATION USING XBEE**

**Guide :** Prof. (Mrs.) A. N. Mahajan

**Team Member :**

Kusum Yadav (12773)

Renu Kataria (12224)

Chirag Sood (11160)

Savneet Grewal (12237)

#### **Objective & Application :**

The purpose of this project is to provide security for important places as well as for important people through VEHICLE IDENTIFICATION AND AUTHENTICATION SYSTEM USING XBEE. This project is very much useful as it can be used in Parliament, VIPs homes, hotels and other prime locations. The use of XBEE modules ensures the system to be low cost and of low power consumption, a user-friendly interface and simple system set-up.

## International project Exhibition "GRIDTECH - 2013":

A three-day International Project Exhibition **GRIDTECH 2013** was organized by Power Grid Corporation of India, supported by Ministry of Power, Govt of India in association with Indian Electrical & Electronics Manufacturers' Association (IEEMA) at Pragati Maidan, New Delhi from **April 3rd to 5th, 2013**. The objective of this International Exhibition was to provide an opportunity for all technocrats and students to showcase their projects related to transmission, smart grid, renewable integration, load dispatch and communication etc. More than 80 Project ideas from the universities and institutions of India, US, Sweden, Canada, **Czechoslovakia** like IIT Kanpur, NIT-Warangal, VIT Nagpur, M.N.I.T Jaipur, **Dronacharya College of Engineering, Gurgaon**, CZECH Technical University and other colleges were submitted at entry level out of which 38 were shortlisted.

The working of two projects (a) **3E (Effective, Eco friendly and Economic) recycling of waste heat energy into sustainable electrical energy** (b) **Wireless industrial monitoring and control** were demonstrated by the students of **Dronacharya College of Engineering, Gurgaon**. These projects were designed and exhibited by **Mohit Sharma** (Roll No 13190), **Manish Saini** (Roll No 13184), **Kulshrestha** (Roll No 13180) **Dipanshu** (Roll No 13166), **Divyansh** (Roll No 13171), **Pravesh Vats** (Roll No 12212), **Arpit Gupta** (Roll No 12146), **Amit Kumar** (Roll No 17269), **Vishul Gupta** (Roll No 12263) under the guidance of **Prof. (Mrs.) A. N. Mahajan** and **Mr. Lalit Kumar**, Lab instructor from the Department of Electronics & Communication Engineering.

In the presence of more than 40 Technical Institutes from India and abroad along with various International & National companies like Phoenix Pvt. Ltd., Hyosung Pvt. Ltd. L&T constructions Pvt. Ltd, the projects were appreciated by the jury members for its commendable working. PowerGrid officials and other visitors showed keen interest in the projects and extended the possibilities to use its concept in their Pondicherry project. **Mr V. K. Kanjlia**, Secretary, Central Board of Irrigation & Power (CBIP) valued the utilities of the projects demonstrated by students of **DCE, Gurgaon**. **Mr. I. S .Jha** Director (Projects POWERGRID) also appreciated the projects of Dronacharyans and marked them as Market- ready. During the award ceremony the projects were awarded with a **prize of Rs. 10000** each along with certificates by **Mr. R. N. Nayak**, Chief Managing Director (CMD), Power Grid.



**A group of Droncharyans at International Project Exhibition GRIDTECH 2013**



**Project demonstration by the students from ECE Department of DCE, Gurgaon**



**A view of the Project 3E (Effective, Eco- friendly and Economic) recycling of waste heat energy into sustainable electrical energy**



**Dean Academics, HOD (ECE) and Prof. (Mrs.) A. N. Mahajan along with the students**

### Faculty Development Program on "Networking and Security":

The proliferation of commercial activities over different networked systems has brought security concerns on an unprecedented scale. From traditional Internet-based applications to newly emerging ubiquitous services over 3G, Wireless LAN, and mobile ad hoc networks; there is an increasing demand of measures to guarantee the confidentiality, integrity, and availability of system services.

Realizing the importance of security issues, a one-day **Faculty Development Program** on "**Networking and Security**" was organized by the department of Computer Science and Engineering in association with **Network Bulls, Gurgaon** at **Dronacharya College of Engineering, Gurgaon** on **24th April, 2013**. The main purpose of this program was to promote further research activities on network security. More than 30 Faculty and staff members of the departments of CSE, IT and ECS were benefitted through this program.

The distinguished corporate trainers from Network Bulls, **Mr. Dipanshu** and **Mr. Manish Gupta**, shared their ideas on Networking and Network Security issues along with its applications. They also discussed other related topics like Creating Networks, Configuring CISCO routers, switches, firewalls, spoofing, sniffing and hacking etc. The implementation of the topics was done on software's like GNS3, Packet tracer and wire-shark. A brief idea about various certifications related to networking like CCNA, CCNP, CCIE, CCSP was also shared during the program.

The Faculty Development Program was educational and informative for all participants as they understood various concepts of Networking and Security through practical trainings. It was concluded with a vote of thanks by HOD CSE & IT, **Dr. Jitender Kumar**, followed by certificate distribution to all attendees.



**Mr. Manish Gupta from Network Bulls, Gurgaon delivering a lecture on Network Security**



**HOD CSE Prof. Jitender Kumar and Mr. Dipanshu a Corporate trainer, from Network Bulls, Gurgaon**

### Workshop on SCI Lab :

A five-day workshop on **SCI LAB** initiated by **Spoken Tutorial Project - IIT Bombay** under **National Mission on Education through ICT** was organized from **1st to 5th April 2013** at **Dronacharya College of Engineering, Gurgaon** for sixth semester students of ECE and CSE.

### Webinar on Research Methodology :

On **5th April 2013** the Department of Electronics & Computer Engineering organized a webinar on Research Methodology on in collaboration with **Springer**. Around 100 students from various departments participated in this webinar conducted in the college auditorium and were benefitted.



## Achievements :

### IEEE Student Chapter :

The ECE Department has established the IEEE STUDENT CHAPTER at the college. This forum will allow the members to meet and learn from fellow students, as well as faculty members and professionals in different technical fields. Its activities offer numerous educational, technical, and professional advantages of IEEE membership through special projects, activities, meetings, seminars/conferences, competitions, tours and field trips.

- **Ms. Sarita Rani (14233)** of ECE fourth semester qualified to appear for IInd round NCAT examination at IIT Delhi on **15th June 13**.
- Two students from the college participated in a debate competition held at FICCI on **18th Apr 13**. The topic was "**Can India be a Super Power**".
- Four ECE students **Deepanshu Gupta** (Roll No. 13165), **Kulshreshtha Yadav** (Roll No. 13180), **Manish Saini** (Roll No. 13184) and **Mohit Sharma** (Roll No. 13190) from the department of Electronics & Communication Engineering received **Margdarshan Award** for the project "**Recycling waste heat energy into electrical energy**" held at Qutub Institutional Area, New Delhi by **Knowledge Resource Management & Welfare Group** on **27th April 2013**.
- A project "**Emerging Break Assist System**" by Mechanical VIII semester students **Harkesh Yadav** (Roll No. 12288), **Nikhil Kaushik** (Roll No. 12302), **Nitin Yadav** (Roll No. 12304) and **Rakesh** (Roll No. 12312) won the second prize in FIA competition held at Faridabad on **20th April 2013**.
- Our students, **Anshul Patro** (14605), **Vineet Kataria** (14631) and **Vijay Kumar Arora** (14630) of IV Sem ECS department and **Shalini Sharma** (14091) of IV Sem CSE department participated in an Inter College Project Exhibition cum Competition "**JLJ Codefest**" held on **27th April 2013** at **JLJ Academy, Faridabad**.

## Outside conferences/Seminars/Workshops :

### Seminar on "Recent Development in Electronics and Communication" :

A two-day national level seminar on "**Recent development in Electronics and Communication**" was held under aegis of Electronics and Telecommunications Engineering Division Board of the Institution of Engineers (India) organized by Alwar Local Center of IEL, at St. Margaret Engineering College, Neemrana, Rajasthan from **6th to 7th Apr 2013**. The following research papers were presented by the students of ECE Department :

	Title	Students
A.	Next Generation Technologies of Wireless Communication	Ankur Raghav (13149), Harmandeep (13176)
B.	Overview on NEMS Hatching Process	Bhavesh (13155), Shivani Gupta (13234)
C.	Performance analysis of optical modulator using fuzzy logic control	Anita Dangi (13142), Ankur (13148)

- Eight ECE students- **Abhinandan** (Roll No. 13135), **Arunabha** (Roll No. 13600), **Chahat** (Roll No. 13158), **Kumar Rahul** (Roll No. 13181), **Ajita** (Roll No. 13136), **Anjali** (Roll No. 13143), **Ankur Raghav** (Roll No. 13149), **Gaurav** (Roll No. 13172) presented a paper at International conference on "**Technical and Innovative advancement in Computing and Communication Engineering**" organized by Department of Computer Science and IT, at MEC at Bikaner on **13th April 2013**.
- **Prof. (Mrs). A. N. Mahajan** from the deptt of ECE attended the International Conference on "**New Technologies in Transmission, Distribution, Load Dispatch and Communication**". The conference was on HVDC and Facts technology. **Mr. Ajit**, Assistant Professor from ECE Department attended another conference on "**International colloquium on ultra high voltage(UHV) in association with CIGRE**".

### Workshop for "Coordinators on Analog Electronics" at IIT Kharagpur :

**Mr. Surrender Dhaka**, Assistant Professor of ECE Department attended five days workshop from **1st to 5th April 2013** under the National Mission on Education through ICT (MHRD, India) held at IIT Kharagpur.

- + A national level **Seminar** on "**Android and Its Application**" was organized on **7th April 2013** at **Cepta Infotech Pvt. Ltd. Noida** to guide the attendees about various applications of android. **Anshul Patro** (Roll No. 14605), **Vineet Kataria** (Roll No. 14631) from Electronics & Computer Engineering department and **Shalini Sharma** (Roll No. 14091) from CSE department of IV semester attended this workshop.
- + **Lakshit Gupta** (Roll No. 14614) from Electronics and Computer Engineering department attended a three day **workshop on Windows 8 Application Development organized** at **Maharaja Agrasen College of Engineering, Rohini, Delhi** from **3rd to 5th April 2013**.
- + **Prof. D. P. Bhatt** from the Department of Applied Sciences & Humanities attended a meeting with Deputy Commissioner, Gurgaon on **15th Apr 2013** on behalf of Hon'ble Principal **Dronacharya College of Engineering, Gurgaon** in connection with the making of New Voter I-cards and initiatives to be taken by Govt. and Non-Govt. bodies.

### Placement :

Our College assists the students for their career and placement. We conduct PDPs, Mock Interviews, Aptitude test, GDs etc for better placement. The Placement and Training Cell conducts training programmes to prepare the students to face the recruitment process and to meet the needs of the industry. Students have been placed in many companies in last month like Aon Hewitt, Xchanging India, NCR Corporation & Leeway Hertz etc.

### Publication :

The following faculty members got their research papers published in reputed journals:

- + **Sumit, Ashu Soni** and **Shilpa Mehta** "DWP Based High Performance MEMS Pressure Sensor" ICRTCCEA-2013, MIMTM (Hisar), **March 2013**.
- + **Hari Mohan Rai** "Feature Extraction and Signal Classification of Electrocardiogram Signal using Wavelet Transform" International Journal Computer Science and Application, Vol.III , No.10, **April 2013**.
- + **Bhupender** and **Rajoo Pandey**, "A video directional weighted Median filter with adapting threshold and color correction", Proc. IEEE International Conference on Intelligent Systems and Signal Processing, pp 72-77, India, **1st-2nd March, 2013**.
- + **Sharma, R. C:** "Trends Analysis of Atmospheric CO<sub>2</sub> and CH<sub>4</sub> and their impact on climate change"; proceedings of International Conference on Civil Engineering, ITM University (**March 4th-5th, 2013**).

### Student's Viewpoint :

During recent years, the College has registered an impressive quantitative and qualitative improvement. The quality of the incoming students and the University results have shown a progressive upward movement. The upgradation and enhancement of essential amenities and other facilities for students has made the College a prestigious institution.



**Surbhi Abhi**  
(Roll No. 13242) ECE 6th Sem

I feel privileged to be a part of this esteemed Institution. It has always given every student a lot of opportunities to explore themselves. It inculcates leadership quality in every student and provides best training to grab upcoming opportunities. Electronics and Communication Engg department has always been a step ahead in arranging nourishing programs for its students. Teachers have always made sure that students remain up-to-date in their knowledge and practical skills. Overall development is targeted by the management. Suggestions are very well entertained by the management. Students get homely and very friendly ambience in the college campus.



In a nutshell, our college has a lot to offer to its students.

**Saniya Puri**  
(Roll No. 13230) ECE 6th Sem

**Dronacharya College of Engineering, Gurgaon** is one of the best engineering colleges in Haryana. It aims at providing excellent technical knowledge to the students. Students are provided with excellent study environment, fully equipped laboratories, well furnished classrooms with projector facility. The college offers high standards of academic opportunities and has set a benchmark in discipline and conduct. I have personally benefited a lot from excellent faculty that college has on its rolls.



**Ritika Ghai**  
(Roll No. 14926) ECE 4th Sem

The Department of ECE at **Dronacharya College of Engineering** has a fine blend of renowned as well as young and dynamic personalities as faculty. The vision of the department is practical implementation of ideas and quality education. The laboratories are modernized at regular intervals to keep pace with latest developments in ECE field. The activities of the department include research, sponsored consultancy projects and is carried out with active participation of students and faculty. The department conducts various seminars and workshops which help us to be upgraded with the latest technology. Apart from this we are also encouraged to attend seminars, conferences and workshops organized by the societies like IETE, ISTE and IEEE. The membership of these societies is providing great help to our engineering career. It is my proud privilege to be a part of Dronacharya family.



**Avisha Kumari**  
(Roll No. 13154) ECE 6th Sem

I am lucky to get admission in **Dronacharya College of Engineering** where I am gaining a lot of knowledge. Faculty are highly qualified and very friendly, render good advice in studies, project work and other activities. During this session various workshops were held in the college, one of them was **ROBOZEST**, organized in association with **ROBOSPECIES**, Noida. Three teams have been shortlisted to participate in final competition to be held at IIT Gwahati in **Jul/Aug 13**.



A guest lecture was held at college auditorium on "**Wireless and Mobile Communication**" as an activity of **IETE students Forum**. Students also participated in workshop and competition held outside the college.

The most pleasurable experience in this semester was project making. Student made different projects with the help of their guides. Students get an opportunity to participate in extra circular activities like cultural program, blood donation camp, NSS camp and sports etc.

**Gaurav Gautam**  
(Roll No. 14175) ECE 4th Sem