



Achievement: IOT BASED POLLUTION MONITORING SYSTEM GOT 1ST PRIZE IN



SCIENCE CITY

The IOT Based Pollution Monitoring System was made by four students of ECE department based on IOT students were Dheeraj, Khushvir Rishi, Naina Nagpal, Himank saran and Mentor Ramanpreet kaur. The project was selected by the organization of Pushpa Gujral Science City, jalandhar-kapurthala Highway on the event of Inno-tech 2k16. The project was selected for the first prize. It was a great honor for the students as well as for the mentor who worked on this project and stood first.

INDUSTRIAL VISIT TO PCL

On 04.02.2016 An Industrial Visit was organized by ECE Department for B.Tech

5th semester students at Punjab Communication Ltd, Mohali. PunCom is a leading manufacturer and supplier of telecommunication and IT equipment and solutions in India. Its diverse product range covers Voice/Data Multiplexers, Power Plants, Optical/Transmission Equipment, Digital Radios, PLCC, Broadband Equipments and services. It caters to the



growing telecommunications, networking and broadband needs of major organizations and service providers in the country including BSNL, MTNL, Railways, Power sector, Defence, Private sector, Private Service operators, corporates etc. The students visited the production unit, Transmission assembly plant and SMPS manufacturing plant. A prototype of V Mux Lan card is shown to students. It was the one day event which was attended by Mr. Hardeep Saini (Placement Coordinator), Ms. Chanpreet Kaur (A.P) and B.Tech 6th sem students of Group-AB

RE RECENT TRENDS in Organic Electronics

The development of conducting polymers and their applications resulted in another



Nobel prize in 2000, this time in chemistry. Alan J. Heeger, Alan G. MacDiarmid and Hideki Shirakawa proved that plastic can conduct electricity. Unlike conventional inorganic conductors and semiconductors, organic electronic materials are constructed from organic (carbon-based) molecules or polymers using chemical synthesis. Organic electronics is not limited to conducting polymers, but includes other organic materials that might be of use in electronics. These include a variety of dyes, organic charge-transfer complexes, and many other organic molecules. In terms of performance and industrial development, organic molecules and polymers cannot yet compete with their inorganic counterparts. However, organic electronics have some advantages over conventional electronic materials. Low material and production costs, mechanical flexibility, adaptability of synthesis processes and biocompatibility make organic electronics a desirable choice for certain applications.

Commercially available high-tech products relying on organic semiconductors, such as curved television screens, displays for smartphones, coloured light sources and portable solar cells, demonstrate the industrial maturity of organic electronics. In fact, several high-tech companies, including LG Electronics and Samsung, have invested in cheap and high-performance organic-electronic devices. It is expected that the organic electronics market will grow rapidly in the coming years.

WORKSHOP ON: EMBEDDED SYSTEMS

A Workshop on "Raspberry pi and arduino-platform for embedded systems" was held on 26 Feb. 2016. The event was organized



by the Robotics Club of ECE Department at Seminar hall of Block one. The event was attended by all the students of 4th semester. The students got to know about many features of Embedded systems like Raspberry pi and arduino are the platforms for building the future ready robots. The workshop was aimed at helping getting started with these platforms. Students were shown how they can start making robots using these platforms. Brief introduction about the concept of IOT was also given in the workshop.

An **Investment** in
knowledge pays the best
interest



SEMINAR ON: MEMS DESIGN

A Seminar on MEMS DESIGN was



delivered on 14 TH OF MARCH 2016 by Dr. Jaspreet Singh from semiconductor laboratory (SCL). He is a “MEMS DESIGN AND PROCESS ENGINEER” having sufficient knowledge of MEMS packaging and testing especially of pressure sensors. The expert introduced the students to the MEMS Design which is Micro-Electro-

Mechanical Systems, or MEMS, is a technology that in its most general form can be defined as miniaturized mechanical and electro-mechanical elements (i.e., devices and structures) that are made using the techniques of microfabrication. The critical physical dimensions of MEMS devices can vary from well below one micron on the lower end of the dimensional spectrum, all the way to several millimeters. Likewise, the types of MEMS devices can vary from relatively simple structures having no moving elements, to extremely complex electromechanical systems with multiple moving elements under the control of integrated microelectronics. The one main criterion of MEMS is that there are at least

some elements having some sort of mechanical functionality whether or not these elements can move. The term used to define MEMS varies in different parts of the world. In the United States they are predominantly called MEMS, while in some other parts of the world they are called “Microsystems Technology” or “micromachined devices”

AT PATENTS FILED :

- “UNFOLDING MECHANISM FOR LARGE WINGS”.
- “CANSAT CONTAINING CONTAINER AND GLIDER FOR MEASURING ATMOSPHERIC CONDITIONS”.
- “NAV TRAPEZIUM BRAKING SYSTEM MECHANISM”.

MESSAGE BY HOD-ECE

I am really happy to inform you that our pride reels in the department newsletter “Electric Flash” which gives an insight of the academic and non academic activities of both staff and students of the department. Ours is the most vibrant department in the institution in terms of students, faculty, facility, placements and grants. It is known for conducive ambience and very cordial atmosphere between faculty and students. We, at our department, have many platforms to promote the students' talents like IETE student chapters, magazines, clubs, etc. I am happy that there is a dedicated team of staff and students who work on the magazine of



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our
department
. I also
extend my
thanks to
all the
contributors
for their

articles.

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CEC Landran

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