# Departmental Report to be submitted for Akanksha 2015-16

Name of the Department: Electronic Science

Departmental Report

## A. Activities conducted by the department :

 Hands on training on Photo-voltaic system installation and use of solar energy : The students are made aware of solar energy utilization. They were given a training to calculate load, find the photo-voltaic system requirement and install the same . The training was conducted on 4<sup>th</sup> & 5<sup>th</sup> September 2015. Twenty four students from B.Sc. (General), B.Sc.(Comp. Sc.) & B.Sc. Biotechnology.

## 2) Hands on training on Printed Circuit Board (PCB)Design :

To bridge the basic gap between the Industry & Academia, the department had organized a training on **"Introduction to steps involved in Electronic Product Design and PCB designing using Express PCB software"** sanctioned under DBT STAR college scheme on 5<sup>th</sup>, 6<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> Feb.2016. The workshop was successfully conducted with the participation of sixteen students of B.Sc.(General) & B.Sc.(Computer Science). Experiment boards for Code converter is the outcome of the training.

## 3) One day Workshop on Lab Safety :

Department of Electronics and Physics organized a one day workshop on **Lab Safety** on 30<sup>th</sup> June 2016. Our principal and in-house staff and resources from Scientech Pvt.Ltd. guided the participants from various colleges about safety guidelines and instrument handling in various laboratories.

#### 4) <u>Guest Lecture :-</u>

a) Guest lecture was arranged for S.Y.B. Sc. students.

Dr. Jayshree Bangali, Asst. Professor from Department of Electronics, Kaveri College, Pune delivered a lecture on "Smart Spaces" on 9<sup>th</sup> January 2016.

- b) Mr. Giwdra Pandu delivered lecture on "Talent to innovation" on 12<sup>th</sup> September 2015.
- Project Exhibitions: Forty students exhibited projects/models on various ideas applied for security, aid for handicapped people, agriculture, meters and displays.
- 6) Quiz was conducted in Snake and ladder game form to improve basic knowledge of the students
- One minute games were arranged to improve the technical skills of the students.

#### B. <u>Student Achievement</u>:

- Balika Gawade and Amit Kadmallu, students of B.Sc. Computer Sc. presented a poster on vigilant attendance system using fingerprints in an research project competition "Avishkar" organized by B.R.Gholap college, Pune and Savtribai Phule Pune University,Pune.
- F.Y.B.Sc. (Computer Science) students Mayuri Rawate and Nikita Kolekar won 1<sup>st</sup> prize for the project "Traffic Light Control" in an project competition "Anubhuti" organized by science association of our college .
- S.Y.B.Sc.[Computer Science] students Jitin Nair, Winnie Nakijoba ,, Mangesh Panhale and Ronik Mane won 3<sup>rd</sup> prize for the applied project "Gas Sensor" in an project competition "Anubhuti " organized by science association of our college .

 Thirteen of the S.Y.B.Sc.[Computer Science] students have completed certificate course on "Embedded Systems and it's Applications " sanctioned by UGC. These students developed applied projects like Gas sensor, Thermometer for blind, Irrigation system using WSN network.

#### c. Personal / Staff Achievement :

- Mrs.Varsha Bapat published a paper on "Design of a compact Test -Jig for Opto- interrupters in the Crop Field Perimeter Control" in International Journal of Advanced Research in Electrical, Electronics and instrumentation Engineering. { Vol-4 ,Issue8 August 2015,ISSN(print):2320-3765,ISSN (online):2278-8875}
- 2) Mrs.Varsha Bapat presented a paper on "Modeling of crop damagedue to animal attack for technology assisted crop security system" in National Conference on Wireless Technology(Dec .2015).
- 3) Mr. Kumbhar Deepak presented poster on "Development of wireless sensor network for monitoring and analysis of concrete compressive strength development in early age concrete structure" in an international conference on Functional Materials and Microwaves (ICFMM:28-30 Dec. 2015) organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- 4) Mrs. Mrinalini Bhadane delivered a guest lecture on "Communication Principles" in Marathwada Mitra mandal's Commerce College, Pune
- 5) Mrs. Vaishali Salunke guided the students to represent poster in an research project competition "Avishkar" organized by B.R.Gholap college, Pune and Savitribai Phule Pune University, Pune.

- 6) Mrs. Mrinalini Bhadane attended a one day workshop on "Graduation Ceremony" organized by Modern College ,Shivajinagar and Savitribai Phule Pune University, Pune.
- 7) Mrs. Mrinalini Bhadane guided the interdepartmental project named Gas Sensor to be implemented in Chemistry Department to sense the LPG gas leakage and secure the department from probable hazard of fire.
- 8) Mrs.Varsha Bapat guided Agri-electronics project "Irrigation system using WSN network" of UGC-COC students
- 9) Mrs.Pathakji Pradhnya guided project "Talking Thermometer" of UGC-COC students.
- c. Co-curricular Activity : This year also we successfully conducted one year course titled 'Embedded Systems & Applications' sanctioned by UGC under XI<sup>th</sup> plan for career oriented courses. Total of 15 students enrolled for this course

**H.O.D.** Department of Electronics

# Photos:

• Hands on Training on "Photo-voltaic system installation and use of solar energy"





 Hands on Training on "Introduction to steps involved in Electronic Product Design and PCB designing using Express PCB software" under DBT STAR college scheme





• One day Workshop on "Lab Safety"





# Guest Lecture:

1. "Smart Homes"

Dr. Jayshree Bangali ,Department of Electronics ,Kaveri College, Pune



2. "Talent to innovation"



• Poster presentation in research project competition "Avishkar"



• Project Exhibition "Anubhuti" : Organized by Science Association

• Quiz in Snake and Ladder game form:





• One minute Games



