## Department of Physics and Electronics Annual Report Year 2010-11

#### Certificate programmes initiated

• New certificate programmes initiated

Certificate Course: Interdepartmental activity Title: Basics in Management Duration: 20Hrs Fee: Rs 200/-Resource Persons: Faculty of the Department of Business Administration

#### • Bridge courses

To enrich Conceptual knowledge levels and to acquire required skill set before exploring further levels in the Science subjects , the Department initiated bridge courses in Physics and Electronics Subjects.

**Subject:** Electronics **Title:** Basics in Electricity and Semiconductor Physics. **Resource Person:** Mr.M.L.N.Rao

Subject: Physics Title: Fundamentals in Physics. Resource Person: Mr.Sravan Kumar

#### **Departmental Activities**

#### **Report on Field Visit to Vijaya Dairy**

Date:21-08-2010

We the students of B.Sc II Year attended for the **Field visit (Vijaya dairy) on 21-08-2010(Saturday)** located at Tarnaka,HYd under the supervision of Mr. M. Shravan Kumar,lect in Physics, Dept. Physics & Electronics.About 30 students visited in order to get awareness about the present day technology being used in the process and production of dairy products.

We learnt about the preparation, production, Quality, mixing, cooling, boiling, packing of milk, ghee, cheese, Badam milk, etc.Milk products production details given by the respective Departmental incharge of vijaya dairy. This had helped us to gain a lot of information on present technology.



**<u>Activity</u>**: Field Visit to All India Radio& Rainbow 101.9 FM, Hyderabad.

Date: 29.07.10'

The Department of Physics & Electronics organized a field visit to AIR/RAINBOW 101.9 FM, which allowed students to explore the functional & realistic aspects of the Electronics (Communications). This tour helped them to have a real time exposure to the transmission, Modulation techniques & recording in the studios. Students actively participated in the procedures with regard to recording and broadcasting and had in house experience of the procedures followed. About 30 students of II B.Sc (Electronics/Physics) participated in the visit.



# Report on Science Day Celebration Date: Nov 9<sup>th</sup>-10<sup>th</sup>,2010.

Science Day Celebrated by the Department of Physics & Electronics, on Nov 9<sup>th</sup>-10<sup>th</sup>, 2010.Various programs are conducted with the involvement of large number of young students for purposeful interaction between the science fraternity & the other Department students for mutual benefit. The programs include guest lecturers, poster presentation, Group discussion.

On second day the Department arranged for a lecture series. The following Eminent personalities have kindly agreed to deliver guest lecture for students of Physics & Electronics.

#### <u># Lecture 1:</u>

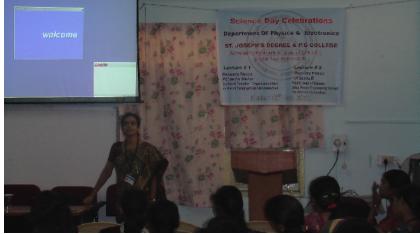
Topic: Embedded systems and Its Applications Resource Person: P.Chandra Shekar, Technical Director Technical Group,Sec'bad.

#### <u># Lecture2:</u>

**Topic: Nano Materials** 

Resource Person:	Dr. Seshu. B

HOD, Dept of Science, Bhoj Reddy Engineering College for Women Hyderabad



Guest Lectuer on Nanomaterials



Guest Lectuer on Emdedded System and its Applications



Event: Poster Presentation

## Science Day Celebrations-9.11.2010

Event	Торіс	Winner Name	Prize
Poster	Science in the	Shraddha, Parveen-III	Ι
Presentation	Kitchen	MPCs	
		Prem, Sharavan	II
Chat Time(GD)	Does detention	Neil Mario, Avinash,	Ι
	actually serve a	Raghava -III MSCs	
	Purpose		
	Social Networking	Nihar, Aashish, Faisal	II

Report on Science Club Activities Activity:1 Date: 20.07.10

## Event: TAMBOLA-Play with Periodic Table

Department of Physics & Electronics conducted "TAMBOLA-Play with Periodic

Table "as a part of our monthly activity of the club. This game was conducted for all the three years science students by II B.Sc students Vinay Sai Krishna and his four member team. The prime objective in arranging this program was to augment students' interest in the subject along with fun.



"TOMBOLA- Play with Periodic Table" Participants in action

Report on Science Club Activities Activity:2 Date:1<sup>st</sup> October2010 Event: Group Discussion.

As a part of Science Club activities the Department of Physics & Electronics always encourages and provides opportunity for students to arrange and to conduct various events. Most of these events are students need based and are arranged with the guidance of other Departments if needed.



Students receiving tips from the judge at the time of Group Discussion

## **Report on workshops**

**1. Topic**: Animation

Date: Sept 9th,2010

2. <u>Seminar: Topic</u>: IT education and significance in current industry <u>Date</u>: 5th Aug 2010.

**Target group**: B.sc students of three years.

**Objective**: To familiarize about emerging trends in the IT market and to stress on the need to learn new courses like Animation and movie Editing to meet industry demands.

Students of B.Sc received an opportunity from NIIT, Hyderabad, to gain knowledge about current trends in IT and its impact on the market .Speakers were eminent faculty from NIIT. The seminar was targeted for the B.Sc students. Department also conducted workshop for students on Animation and Movie Editing with the help of OPTIMUS, training institution from Hyderabad. Mr.Hari senior faculty from the institute gave presentation on various features in MAYA software and also demonstrated linear and nonlinear movie editing.

This half day workshop opened a broad future prospective for the students of B.Sc.



OPTIMUS faculty in action at workshop.

## Year 2010-11 -Land Marks of the Department

- 1. Extra Feather in the Cap of St.Joseph's Ranked 10<sup>th</sup> in the city of Hyderabad among the TOP SCIENCE Colleges by INDIA TODAY Magazine 2010.
- 2. Established separate Lab for Simulation in Electronics with MULTISIM, Keil, edsim51, 8085 Simulator Packages.

#### **Student Participation**

#### 1. Student Seminars

- To inculcate better usage of e-learning system by the student .
- To enrich their knowledge in various subjects (both Curriculum based & beyond curriculum) and
- To guide fast learner / enthusiastic student. Faculty allow student to give power point presentation on a topic during the class hour.

S.NO	Торіс	Student Name/Class	Date
1.	Embedded Systems	AVS Krishna Jasintha Mary (Individual)-III Yr	July 20 <sup>th</sup> ,2010
2.	GSM Vs CDMA	Stevenson Mirza Nadeemmullah Baig (Individual)-II Yr	October 7 <sup>th</sup> ,2010
3.	8051Microcontroller	Zeeshan,Muna Mazher,Nikhita,Bernadine (Group)-III Yr	July 21 <sup>st</sup> ,2010
4.	Basic Types of Communication Systems	B.Hari (Individual)-II Yr	December 9 <sup>th</sup> ,2010

#### 2. Assignments

The Department encourages student to take up assignments or to prepare a report after on the spot study, either in group or individually. Few of the topics are mentioned in the table.

	S.NO	)	Topic		Studen Name/		Date
	1.		Digital Commu	nication	II B.Sc I	Electronics )	October,2010
	2.		Network	Theorems	I Year(	Elec)	Sepetember,2010
	3.		Bipolar'	Fransistors	I Year(	Elec)	November,2010
4.		Microcontro 8051 Archit		III Year(Ele	c)	August,201	0
	5.	I	Nano Ma	aterial	III Yr(P	'hy)	November
	6.		Lasers a Applicat		II Yr(Pl	ny)	November
	7.		Crystal S	Structures	III Yr (I	Phy)	December

## 3. Extra Curricular Activities

For all round growth of student, the Department always encourages student to actively involve themselves at various happenings in other organizations or within the campus.

S.No	Event	Participated Group	Event Organizers
1.	YRC Workshop 5 <sup>th</sup> Oct 2010	2Members from I&IIYr (AVS Krishna,Lal	Red Cross,Hyderabad
	Topic:Health Development	Chand Yadav)	
2.	HIV/AIDS Day Quiz	Amair - IYr	Rotary Club of Bhagyanagar
3.	ABACUS IT Quiz 19 <sup>th</sup> Nov	4 members(2 in each team)-III & II Yr	Badruka College,Hyderabad.
		Received	

		Consolation Prize.	
4.	Inter College Paper Presentation Competition at INNOVATION 2010,29 <sup>th</sup> July 2010	2 members –IIIYr <b>Topic</b> :Nano Technology	Loyola Academy Degree & P.G College,Sec'bad.
5.	State Level Student Seminar at ALPHA, 12th Dec 2010.	2 Members-I Yr <b>Topic</b> :Hydrosphere	Andhra Loyola College,Vijayawada.
6.	United Games of Education-Alternate Education (A Cultural Exchange Program)	5 members-Ilyr	Thiruvarur



Our students at Tiruvayur Cultural Exchange Programme

## **Community services**

Our students participated actively in the NSS programme conducted at 30 Anaram village, Bandlla Guda, arranged by the Management.

## Student achievement and awards

S.No	Event	Achievement	Student/Class
1.	ABACUS Quiz,Conducted by Badruka Degree & PG College on 19.11.10	Consolation Prize	Joseph Thomas,II B.Sc(MPCs)
2.	COFEE,Conducted by St.Francis College on 7.1.11	Talent Hunt-I Prize	M.Anand ,II B.Sc(MECs)

## Placement services provided to students

## **Placement Details & Programs**

Program Title	Resource Person	Duration	Targeted Group
Resume Interview Tips - <b>Workshop</b>	Ms.Kiran Khaidem Lect.Dept.of English.	6Hrs.	III yr B.Sc
<b>Seminar -</b> Software testing Tools	Mrs.Kiran Jyothi Associate Professor Dept.of Computer Science	1Hr	III Yr B.Sc



Students at Seminar on Software Testing tools



Resume Interview Tips Workshop, Ms.Kiran Khaidem ,Lect.Dept.of English

S.No/Date	Company	Appeared No.	Selected
	Name		Number
1. 18/8/10	WIPRO(BPO)	19	
2. 8/11/10	DELL	11	
3. 11/11/10	APOLLO	18	5
	Health Street		
4. 10/11/10	ADP	6	3
5. 6/11/10	Cognizant	21	3
6. 18/11/10	MRF	21	3
7. 24/11/10	E-Boss	18	0
8. 28/2/11	HSBC	9	1

#### **Placement Details: Registered Number:**21

#### Healthy practices of the Department

#### Learning process

- **Encouraging Hands on Learning:** Experiential learning through mini projects, model making, Simulators, component soldering.
- **Each one, teach one:** Empowering students as leaders: Student peer who assists in laboratory work, mini projects and class room discussions.

### **Teaching:**

- Peer review of Materials.
- Developing Scientific Research Skills.
- Developing Scientific Understanding.

## Department of Physics & Electronics St. Joseph's Degree & PG College Report 2010-11 (Summary)

Activity	Date/Mo nth	Objective	Class/Group	Topic/Organisation
Field Visit	21.8.10	To get hands on experience with the production & services involved in various industries.	III B.Sc (Elec) 26 students visited.	Vijaya Dairy
	29.7.10	To get acquainted with the real time transmission technology	III B.Sc(Phy/Elec)	<b>Industry</b> :All India Radio/Rainbow 101.9FM
Guest Lecture	9.11.10	To familiarize about various emerging technologies.	I/II/III B.Sc –All Groups <b>Topic:1</b> . Embedded systems and Its Applications <b>2</b> .Nano Materials	<ul> <li>Resource persons:</li> <li>1. P.Chandra Shekar, Technical Director, Technical Group,Sec'bad.</li> <li>2. Dr. Seshu. B</li> <li>HOD, Dept of Science, Bhoj Reddy Engineering College for Women, Hyderabad</li> </ul>
Pre-Placement Activities	30.9.2010 9.9.2010	To train the students to meet the industry needs	Seminars:1.Testin g tools. 2.Aminatio n	Resource Person:1. Mrs.Kiran Jyothi,Associate Professor,Dept.of Computer Science 2.OPTIMUS-Institute.
	11.10.201 0	To provide tips to prepare effectively for placement interviews.	III B.Sc –all groups Workhop-6Hrs	Ms.Kiran Khaidem Lect.Dept.of English.
Career Counseling		To development habit of sharing	For all years of B.sc	Part of regular time table

Bridge Course	June	and expressing problems in /among students To fill gaps in knowledge level from +2 level to UG	For I years Title: Learn basics	Incharge:Mr.MLNRao- Electronics
		from +2 level to UG	in Electricity <b>Duration</b> :1Week	Mr.Sravan Kumar- Physics
Certificate Course (Interdepartm ental Activity)	5.8.2010	To Enrich knowledge in beyond curriculum related topics.	For II B.Sc's <b>Title</b> : Basics in management <b>Students Attd</b> :22	Conducted by:Dept.of Phy & Elec/MBA Dept.
Student Seminars		To make student s to be more tech savvy.	III B.Sc/II B.Sc	List enclosed with the report
Assignment		To develop research skills by making use of various resources available	III B.Sc/II B.Sc	List enclosed with the report
Tutorials	19.1.2011 To 27.1.2011	To help slow learner	<b>Tutorial Subject</b> : Physics /Electronics	1)Physics-Incharge:Mr Sharavan Kumar 2)Electronics- Incharge Mrs:Priya,Mr.MLNRao.
Extra- Curricular Activities		To generate interest & to explore in all fields &dimensions	Pracipation list enclosed with the report	List attached with the report.