#### **DEPARTMENT OF PHYSICS**

#### **SYNOPSIS 2012-2013**

1. Department of physics has conducted a guest lecture on "**PHYSICS BEHIND IT**" by Dr.Sahaya Bhaskaran, Reader In Physics, A L College, Vijayawada on 17<sup>th</sup> August 2012. All the physics degree students participated in the programme .



. An Intercollegiate paper presentation competition on "PHOTONICS AND **ITS DEVICES** " was organized by department of Physics on 28<sup>th</sup> September 2012 for all degree colleges under Acharya Nagarjuna University..Dr.V.Venkat Rtd Rao. .Professor, N.V.R Engineering college ,Tenali and Mr.P.Satish Kumar ,Department of Physics ,JMJ College ,Tenali acted as judges for the competition .Ch.Vijaya Durga III B.Sc Elctronics ,JMJ College ,Tenali got I

prize & K.Hema latha III B.Sc SRR College, Vijayawada secured II prize.



3. Mrs.D.Vidyavathi, Lecturer in physics gave a lecture on "The Bombings of Hiroshima and Nagasaki" on 12-10-2012 in the seminar hall .All the faculty members from various departments attended this lecture. She delt on the bombings of Hiroshima and Nagasaki and the adverse effects.



## SYNOPSIS 2013-14

## **Guest Lecture**

 On 21-9-2013, Dept. of Physics organized a guest lecture on "Role of Mathematics in physics" by Prof. V.G.K.M.Pissipati, Director, K.L.University, Vaddeswaram in old auditorium. Final B.Sc physics and PG students(Chemistry & Mathematics) participated.



## **School Activity**

 Mrs.G.Saraswthy Devi & C.M.Anitha along with physics club members, organized JAM (Just a Minute)and Quiz Programme at Z.P.High School, Angalakuduru on 13/12/2013 for VIII, IX & X class students. Prizes were distributed to the winners by Head master, Sri M.Krishna Murthy.



# Sales Mela

 Dept of Physics conducted Sales Mela on 20th Dec, 2013 to raise funds for economically poor students. students exhibited sarees, Dress materials, Blancketes, towels etc., fancy items like artificial Jewellary .The amount collected by the dept. is 1000/-



# **Guest Lecture**

4. Dept. of Physics organized a guest lecture on "Demonstration of 1)Faraday's & Lenz's law 2) Coulmbs law 3) Stoke law in viscosity on 10<sup>th</sup> Jan, 2014 in physcis laboratory by Prof.Subhash Samanth of Midnapore University, Midnapore, West Begal.

## **IDRC Report**

Research cell has conducted a workshop on "Functioning of Ultrasonic Interferometer" on 18th Dec, 2013 at IDRC, College campus from 2 to 5p.m. Mr.Rayapa Reddy, Lecturer in chemistry and Mr.M.Rama Krishna, Lecturer in Physics, A.L.College, Vijayawada weret he resource persons. Mr. Rayapareddy explained the construction and worki ng of ultrasonic Interferometer by powerpoint presentation. IIIB.Sc MPC and CBZ students and Physics & Chemistry staff participated in the workshop. During workshop they determined the Ultrasonic velocity of reference liquid(water) and specimen liquids (Ethanol ,Methonal &Anelene)



#### Synopsis 2014-15

Dept. of physics organized an Intercollegiate paper presentation competition on the topic "GREEN ENERGY -SMART CITIES" on 19th August 2014 at 2.00Pm in the old auditorium of our college campus. Dr.P.Parvathi, HOD of English, Govt. college for women, Guntur was the chief guest and resource person. Mr.D.V.Somaiah Sastry, HOD of physics, VSR&NVR college, Tenali and HOD of Mr.K.V.Ravi Kumar, physics, KSR&NRK college, Tenali were the judges of the competition. Eighteen students from various colleges under A.U,ANU and Krishna University presented their papers. Chief guest Dr PARVATHI distributed the prizes and certificates to the winners.



Dept. of physics organized an ENDOWMENT LECTURE on the topic ''SPECTROSCOPIC TECHNIQUES'' on 4<sup>th</sup> Sept.2014 at 10.00AM in the Mini auditorium of college campus .Dr.RVSSN Ravi Kumar, Asst.Professor, Dept of physics ANU delivered his lecture on UV,VISIBLE and IR emission and absorptionspectroscopy.UG and PG (chem.) students participated in the programme.



Dept. of physics arranged a visit to OLD AGE HOME "MAHARSHI DAYANANDA ASHRAM" at Nandivelugu five km from our college. Final year Bsc MPc and MP Comp.students interacted with the inmates of the ashram. They distributed oranges to the elders as a token of Reverance.



Physics club members organized a "JAM(Just A Minute)" programme for IX & X Class students of VSR&JDM ZP HIGH SCHOOL at Angalakuduru on 1<sup>st</sup> November 2014 under lab

to land programme. Prizes are distributed by Head master of the school.



In connection with ''NATIONAL EDUCATION DAY'', Dept. organized a debate programme on the topic ''PRESENT DAY EDUCATION –EMPLOYABILITY OPPORTUNITES ''on 12<sup>th</sup> November 2014 at mini auditorium in the college campus. Sri. D.V.SOMAIAH SASTRY, Principal, VSR&NVR College, Tenali, was the chief guest. All the Heads of Departments expressed their views .All the students participated in the programme enthusiastically.



Dept. also conducted "SALES MELA" in connection with "SOLIDARITY DAY" and collected Rs.1500 and donated to tribal students of Kodramutla.



Department of Physics and NCC Committee together organized an awareness programme on "DISASTER MANAGEMENT "on 19<sup>TH</sup> DECEMBER,2014, for both degree and intermediate students at mini auditorium. Sri.J.NARASIMHULU, RDO of Tenali, was the chief guest. Sr.KP SHINY ,Principal, presided over the programme. In his talk he said that the disaster management is a continuous and integrated process of planning, organizing, coordinating and implementing measures to prevent danger ,to mitigate the risk and severity of disaster, capacity building and preparedness to deal with disaster, prompt response, assessing severity or magnitude of the disaster ,evacuation, rescue ,relief ,rehabilitation and re construction.



Department of Physics conducted NGPE (National Graduate Physics Examination organized by IAPT (Indian Association of Physics Teachers) on 25<sup>th</sup> JANUARY,2015, for degree Physics students. Fifteen students attended the examination. The main objective in conducting the exam is to enable the students to evaluate themselves against national standard and to get the correct perspective of Physics.



#### ENDOWMENT LECTURE

Dept. of Physics organized an Endowment Lecture on the topic **'Light and it's Applications"** on 3.9.2015 in commemoration of late Sr.Mercy Chacko, Former Principal and HOD of physics (1965-1992). The Resource person was Dr.B.Subba Rao, Reader in Physics, VSR & NVR College, Tenali. Dr.B.Subba Rao covered the topics – Electro magnetic spectrum, Types of polarized lights, Luminescence and types of Luminescence.



Inter-collegiate paper presentation-Report

Department of Physics has conducted an intercollegiate paper presentation competition on the topic **"Light and its Applications"** on 10<sup>th</sup> September 2015 at 2P.M. in the MBA block of college campus. Dr..Y.Gouri Sankar, Reader, Dept of Physics was the chief guest and Resource person. He delivered a lecture on "**Physics in daily life**".Sixteen students from various colleges under A.N.U & K.U presented their papers through Power Point.. Prizes were distributed to the prize winners.



NATIONAL EDUCATION DAY

**National Education day** was organized by Department of physics on 12<sup>th</sup> November in the mini auditorium at 2.00 Pm . Ms Esther Shoba Rani ,Librarian ,JMJ College, Tenali was the Chief guest. She delivered her speech on "Importance of Education". Students expressed their views on "Education".



#### SALES MELA

Department of Physics with the help of Physics club students conducted sales mela on 28.11.2015 to raise the funds for economically backward students at Kondrumutta .Students actively participated in selling the items like Sarees, Dress materials Blankets, Towels and Food items. The amount collected by the Department was Rs 1600 /.



### **Guest Lecture**

#### Guest Lecture was arranged by the Dept of

Physics for III BSc Physics students on 4.12.2015 at 2.00Pm.Ms Raga Deepika M.Sc ,Viswabharathi University, Kolkata was the Chief Guest. She delivered a lecture on "Astrophysics". She covered the topics like Birth and death of stars, Supernova, Black holes, Dark matter, Sun flares, etc.



## **Extension Activity**

Department of Physics organized "School Activity" with the help of III BSc Physics club students on 5.12.2015 at Z.P High school ,Angalakuduru. Demonstration classes were taken by III BSc students on the topics Ohm's Law and Kirchoff's Laws. Later Essay writing competition was conducted on the topic "Light and its Applications" to X class students. Prizes were distributed to the prize winners on the same day.



#### WORKSHOP -- MICROPROCESSOR

Department of Physics organized a workshop on Microprocessor- Functioning of 8085 Microprocessor for III B.Sc MPC and MPComp students on 7.12.2015. Ms I.Rajini, Lecturer in Electronics, Priyadarsini Degree College, Tenali was the resource Person. She explained the Boolean algebra as introduction and Architecture of 8085 Microprocessor. After that she demonstrated the operations like Addition and Subtraction on 8085 processor.



#### SCIENCE EXHIBITION

The Department of Physics arranged Science exhibition on 11.12.2015 for High School Students. 8<sup>th</sup>, 9th, and 10<sup>th</sup> of Krishna Veni Public School and Oxford Public School visited the exhibition. The exhibits include Spectrum of Light, Sound Resonance experiment, Newton's interference fringes ,Diode and Transistor characteristics, Verification of Ohm's Law, Magnetic lines of force, Diffraction of Laser light, Simple and Torsional pendulums etc.Students are benefitted from this exhibition by getting in depth knowledge of concepts of physics.





Contribution to little sisters of the poor, Nambur

The Department of Physics donated essential commodities like Surf, Phenol, clothes and some amount of money to the little sisters of the poor, Nambur, as a token of social responsibility.

#### Synopsis 2016-17

#### VISIT TO CENTRAL LAB

Department of Physics arranged a study tour to Central Lab of Acharya Nagarjuna University .About (40) students of III BSc, MPC & MPComp. visited Department of Physics and Centralised Lab of ANU, accompanied by faculty members Dr.G.Saraswathy and Ms.C.M.Anitha on 27<sup>th</sup> July 2016. Dr.R.V.S.S.N Ravi Kumar, Dept. of Physics.



#### VISIT TO ASRAYA WARD

III BSC students along with Physics faculty Dr.G.Saraswathi Devi, MS.C.M.Anitha and Principal of the college Dr.Sr.Shiny K. P, visited Asraya ward of Government Hospital as a part of feeding the hungry on 10.08.2016. We distributed food packets to all inmates of the asraya ward. Later we interacted with the inmates of the ward.



# Krishna Pushkaralu- Elocution competition

In connection with Krishna Pushkaralu ,Department of Physics conducted an Elocution competition on "Double Digit Growth "on 20<sup>th</sup> August 2016. Chief guest Sri LNS.Prasad Rtd Lecturer in Economics, Hindu College, Guntur, enlightened the students on the topic "Double Digit Growth" of A.P – its practicability. In his lecture, he said that1)Effective Governance 2)Effective monitoring system 3)converging various sectors public private partnership, science led development, skill development, human capital are key drivers for sustainable double digit growth .Dr G.Anjeneyulu Rtd Lecturer in commerce, VSR &NVR College, Tenali was the Judge for the competition.



#### **ENDOWMENT LECTURE**

Department of Physics organized an **Endowment Lecture**" on 3<sup>rd</sup> September 2016

The Resource person was Dr M.Rama Krishna,HoD of Physics, The Hindu College, Machilipatnam. He delivered his lecture on Energy Materials. He explained about the role of energy in human life, natural resources of energy in the universe, necessity of renewable energy resources, solar energy from photo voltaics, global warming, role of nano materials and liquid crystals as energy materials.



Field visit to SHAR center

Department of Physics arranged a field visit to SHAR center, a rocket launching center operated by ISRO, on 10.11.2016.Sixty students and five faculty members namely Dr.G.Saraswathy & Ms.C.M.Anitha, Lecturers in Physics participated in the visit. We reached library and & publications Division where we were allotted a guide to accompany us during our visit. First we were taken to a theater where a Documentary film SHAR center and its activities were displayed. Later we visited master control room, MSR Tower, Two Launch Pads, Assembling room, Third Launch Pad was under construction. Afterwards we moved to Space Museum.



## National Seminar on SMART MATERIALS

A two day UGC Sponsored National Seminar on " SMART MATERIALS " is organized by the department of physics, JMJ College for Women, Tenali on 30<sup>th</sup> Nov &1<sup>st</sup> Dec About 30 research abstract papers are presented by the participants during the event. Prof. A.B Rajendra Prasad, Vice chancellor of Acharya Nagarjuna University was the chief guest who inaugurated the seminar and Prof. V. Veeraiah, Vice – chancellor of Vikram Simhapuri Unviversity, was the key note speaker. Dr.Sr.Shiny K.P, Prinicipal, JMJ College delivered the welcome address and Sr.Stella Maris extended her greetings for the of seminar. Smt. success

Nannapaneni Rajakumari in her message expressed that how the life of humanity improved by the developments in science and technology. Dr.G.Sarswathy Devi, convenor, introduced the theme of the seminar. Dr, Raj Kishora Dash, Asst. Professor from University of Hyderabad, delivered a talk on "Smart materials for future applications". technological Prof.V.Seshubai, school of physics, University of Hyderabad delivered lecture on "Magnetic Shape **Memory Alloys for Transducer** Applications". Dr.R.V.S.S.N.Ravi Kumar, Asst. Prof., Dept. of Physics Acharya Nagarjuna . University delivered a lecture on "Nano Technology applications for Food Packing Materials"

Second day of the seminar was started with the invited lecture by Prof. C. K .Jaya Sankar Dept. of Physics, S. V. University, Tirupathi on "**Role of Rare Earth Doped Materials For Smart Devices**". Second invited lecture was given by Dr. Ravi Shankar , Nano Centre and Nano Technology ,Asst. Prof. ,University of Madras , Chennai,

# on "Smart Nano Materials for Affordable Diagnostics"

Valedictory function was started at 2 pm. Dr. Sr. Shiny presided over the function. Dr. G Saraswathy Devi, Convener of the Seminar gave the detailed report of the two day National Seminar. Dr. D. Ravi Shankaran delivered the valedictory address. He encouraged the students to do research and informed about the various research funding agencies like FIST, UGC, DST etc., later he distributed the participation certificates to the delegates.



## Visit To Gandhi Ashram

Department of Physics visited an old age home "Mahatma Gandhi Ashram"run by Sri Vajrala Ramalingachari, Gandhi follower. On 9<sup>th</sup> Dec 2016.Department provided lunch for all the residents of the ashram,all are above 65 yrs. Students interacted with the old people and enquired about their health, family background etc. Programmes like this inculcate social responsibility among students. Ms P.Sravni ,Ms K .Srilatha,,Ms G. Dhanalaksmi,Ms D. Mounika Ms D.Haveela ,Ms A.kavitha ,Ms J.Sravani participated in the programme. The programme was done under the supervision of Ms.G.Saraswathi and Ms.C.M.Anitha.



## **School Activity**

Deptartment of Physics along with Physics club student members went to Z.P.High School , Angalakuduru , on 21<sup>st</sup> Dec 2016 at 3:30PM to conduct "Lab to Land" programme. Final Year Degree III BSc students 1.Ms. Narayanamma, 2.Ms. Haveela, 3. Ms.Dhanalakshmi, 4.Ms. Keerthana and 5. Ms.P.Sravani Participated in programme. They explained about (1) Faraday's Law of Electro magnetism, (2) Lenz Law, (3) Fleming's Right Hand Rule etc; They showed some electrical apparatus and components like Ammeter, Voltmeter, Galvanometer, Solenoid, Rheostat, Capacitors, Resistors, IC etc. The programme was done under the supervision of Ms.G.Saraswathi and Ms.C.M.Anitha.



# **Republic Day**

68<sup>th</sup>Republic Day Celebrations Were Conducted by the Department of Physics in JMJ College. Freedom fighter Sri.Aaradhyula Balarammurthy, chief secretary of freedom fighters association, Guntur was the Chief Guest for the function. Ms.G.Saraswathy, HOD of Physics welcomed and introduced the guest .Flag was hoisted by Dr.Sr.Shiny, Principal. Chief guest and principal took the Guard of Honour by NCC cadets. Chief guest addressed the gathering and shared his experiences during quit India movement in 1942.After the speech management felicitated the chief guest.

