

# **BON SECOURS COLLEGE FOR WOMEN**

Nationally Accredited with 'A' Grade by NAAC **Affiliated to Bharathidasan University** UGC Recognized 2(f) & 12 (B) Institution VILAR BYPASS, THANJAVUR - 613 006



Newsletter 2017 - 2018

PG & RESEARCH DEPARTMENT OF PHYSICS

### INTRODUCTION

Department of Physics was established in the year 2003 with the commencement of B.Sc., and M.Sc., Courses. The department has excellent laboratory with more advanced features and library facilities with about 851 titles and leading journals in several areas of latest technology. To provide research platform that would encourage many young minds to do new things, this year we have started M.Phil research programs. The department has facilities for research both in theoretical and experimental physics. The department has received fund from TNSCST under the student project scheme.



## ASSOCIATION INSTALLATION

Galaxy association 2017-18 of Department of Physics was inaugurated on July 12, 2017 with new vision of endowing the spirit of being physicist among students. Principal introduces the newly elected office bearers of the Galaxy Association.

#### WORLD OZONE DAY CELEBRATION

Ozone layer protects the earth from harmful ultraviolet radiations and therefore it is important to preserve it. On 16th September International Day was celebrated for the Preservation of the Ozone Layer every year. Department of Physics undertook an awareness programme to mark the day. Students acquired the knowledge of ozone layer and its information. On that day Mr. M. Ganesh, Social Scientist, was the chief guest and he delivered a special address on the meaning and the impact of ozone layer depletion.





# SCIFEST-2017

Department of Physics, Chemistry, Botany and Biotechnology jointly organized intercollegiate competitions" SCIFEST-2017" Totally 390 students from 12 different colleges in and around Thanjavur participated in "SCIFEST-2017".

#### **EDUCATIONAL TOUR**

Educational tour offered an opportunity for a rich immersion experience, and a tremendous way to facilitate learning. In an educational tour, students had a chance to experience and explore much deeper level than they ever could in the classroom. Therefore, the department of physics arranged educational tour from October 06 to 10, 2017 at Kerala.



# **HEALTH HAZARDS DUE TO RADIATION (HRT)**

To assess the knowledge of radiation hazards, radiation protection practices, Department of Physics and Chemistry organized extension activity at Govt Primary School, Achuthapuram, Thanjavur, on Health Hazards due to radiation and toxicity on 15th February 2018



#### CAREER PERCEPTION PROGRAMME

In order to create awareness among the students about career opportunities related to physics and also in general opportunities available for students, Department of Physics organized "Career Perception Programme" on 05.10.2017. Dr. S. Balakrishnan, Assistant Professor of Physics, VIT University, Vellore, delivered a special talk on "Outstanding Opportunities for Physics Students".





#### INTERNATIONAL CONFERENCE

One day National Seminar on "Emerging Trends in Materials-18" was organized on 22<sup>rd</sup> February 2018. Dr. S. Periandy, Associate Professor of Physics, Kanchi Mamunivar centre for Post graduate studies and research, Puducherry, Rev. Fr. Dr. S. Xavier, Head & Dean of Studies, St. Joseph's College of Arts & Science (Autonomous), Cuddalore, Dr. C. Ravidhas, Assistant Professor & Head, Department of Physics, Bishop Heber College (Autonomous), Trichy, Dr. A.T. Ravichandran, Associate Professor, Department of Physics, National College (Autonomous), Trichy, Dr. K. Jeyadheepan, Assistant Professor (Research) School of EEE, SASTRA Deemed University, Tirumalaisamudram, Thanjavur, delivered their lectures on their own fields related to the conference. Students from various colleges in and around Thanjavur presented their research works in the conference.

#### STUDENT'S ACHIEVIEMENTS

- University Rank Holder: J.Silviya (B.Sc.,) 6<sup>th</sup> rank, R.Priyanka (B.Sc.,) 9<sup>th</sup> rank, V.Selvaprabha (B.Sc.,) 9<sup>th</sup> rank, J.Amala anusuya rani (B.Sc.,) 10<sup>th</sup> rank, R.Vijaya bharathi (B.Sc.,) 19<sup>th</sup> rank, J.Selvasneha (M.Sc.,) 13<sup>th</sup> rank, V.Rajeshwari (M.Sc.,) 17<sup>th</sup> rank.
- BON Fest was conducted by our college:

  - P.Elakkiya (II Physics) won 1<sup>st</sup> prize in mono act, S. Monisha (III Physics) won 1<sup>st</sup> prize in rangoli, M. Simran Nisha (II M. Sc Physics) and A. Atchaya (III Physics) won 2<sup>st</sup> prize in literary quiz,
  - A. Karthika, T. Ethaya, T. Kayathri, & M. Mathumitha of III Physics and T. Abithasree, M. Benny of II Physics won 3<sup>rd</sup> prize in mime. D. Sivaranjani (II Physics) won 2<sup>rd</sup> prize and A. Dharshini (I Physics) won 1<sup>rd</sup> prize in cartooning.
- An Intercollegiate Cultural Convergence was conducted by STET Women's College, Mannargudi: A.Risha (III physics) won 2<sup>nd</sup> prize in classical dance, M. Elakkiya and A. Nivetha of III & II Physics won 3<sup>nd</sup> prize in group dance and P. Elakkiya (II Physics) won 1" prize in Skit.
- Bharathidasan University was organized BDU Fest:
  - P.Elakkiya (I I Physics) won 1<sup>st</sup> prize in one act play and 1<sup>st</sup> prize in skit A.Nivetha (II Physics) and M.Elakkiya (IIIPhysics) won 2<sup>nd</sup> prize in Folk dance.
- R.Priyadharshini (I M. Sc Physics) won 3rd prize in Western group dance, P.Elakkiya (I I Physics) won 1st prize in mime and skit, and A.Nivetha (II Physics) and M.Elakkiya (IIIPhysics) won 1" prize in Folk dance conducted by Annai College of Arts and Science, Kumbakonam.
- R.Priyadharshini (I M. Sc Physics) won 1th prize in western group dance conducted by Periyar Maniyammai University.
- R. A. Sushma Bharathi, P. Vanisree, S. Revathi, H. Habsha Fathima and A. Arockia Amala Princy of III Physics has been placed in the campus drive by the company TCS.

#### STAFF ACHIEVIEMENTS

- Dr. K. Catherine Siriya Pushpa had received financial support from TNSCST in the student project scheme (2017-18) worth Rs. 9,000/-.
- Dr.N.Anuradha, and Dr. Anandhi, Assistant professor of Physics had successfully completed the course "Physics of Semiconductor" (15th Aug 2017 to 20th Nov 2017) conducted by Indian Institute of Technology, Kanpur.
- Dr. K. Catherine Siriya Pushpa, Assistant Professor of Physics, delivered a special lecture on "Crystal Growth and Thin Film Physics" which was organized by Department of Physics, Annai Vailankanni Arts and Science College, Thanjavur.
- Ms. K. Kalpana, Assistant Professor of Physics, had presented a Oral presentation entitled, "Photocatalytic Efficiency of Pristine and ZnO/g-C<sub>3</sub>N<sub>6</sub>, Nanocomposites film on different aperture Stainless Steel Meshes" and received Best oral presentation in the One day International Seminar on Recent Challenges in Materials Science (RCMs-17) on 15th July 2017 organised by Department of Physics, Sree Sevugan Annamalai College, Devakottai.
- Ms. K. Kalpana, Assistant professor of Physics, had published her research work entitled "Cost effective fabrication of ZnO/g-C3N4 Composite film coated  $stainless\,steel\,meshes\,for\,visible\,light\,responsive\,photocatalysis''\,in\,the\,International\,Journal\,of\,Material\,Research\,Bulletin.$
- Ms. K. Kalpana, Assistant Professor of Physics, had presented a paper entitled, "Enhanced Photocatalytic dye degradation through ZnO/g-C<sub>1</sub>N<sub>4</sub> film coated meshes" in the International Conference on Material Physics on 29th January 2017 organized by the Department of Physics, Bishop Heber College, Trichy.
- Ms. K. Kalpana, Assistant Professor of Physics, had presented a paper entitled, "Facile Fabrication of ZnO/g-C<sub>1</sub>N<sub>4</sub> Composite Film Coated Stainless Steel Meshes for Efficient Photocatalytic Applications" in the 3rd National seminar on Advanced Oxidation Process on 17th December 2017 was organized by Department of Chemistry, Bharathidasan Institute of Technology, Anna University, Tiruchirappali.
- The following members of the staff presented their research work in the National Conference on Recent Developments in Nanomaterials and Thin films Research (RDNMTR-2018) organised by Department of Physics, A.V.V.M Sri Pushpam College, Poondi, on 9 to 11.2.2018.

Dr.N. Anuradha, had presented a poster entitled "Green synthesis of ZnO nanoparticles for antibacterial activity", Ms. K. Kalpana, had presented a oral presentation entitled "Facile Fabrication of Ternary Combined ZnO/Ag/gC<sub>3</sub>N<sub>4</sub> thin film on stainless steel for efficient photocatalytic Applications", Dr. Anandhi, had presented a oral presentation entitled "Influence of Fe doping on the structural, optical and magnetic property of ZnO nano particles synthesised by wet chemical method", Dr. K. Catherine Siriya Pushpa, had presented a oral presentation entitled "Removal of bacteriological pollution from water by using ZnO nanopowder synthesised by green synthesis".



J.Silviya









#### UNIVERSITY RANK HOLDERS





V.Rajeshwari