

### Dr. N.G.P. ARTS AND SCIENCE COLLEGE (Autonomous)

Re-accredited by NAAC with 'A' Grade (An Institution of Kovai Medical Center Research & Educational Trust) (Affiliated to Bharathiar University, Coimbatore) Dr. N.G.P. - Kalapatti road, Coimbatore - 641 048, INDIA

### Volume - 1

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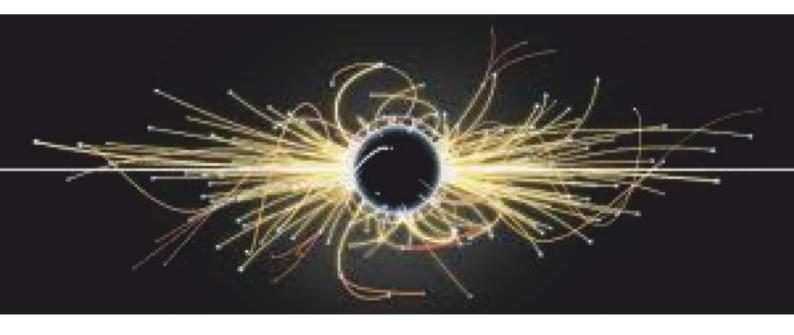
#### **Editors**

Dr. R. Karunathan Assistant Professor

Mrs. R. Revathi
Assistant Professor

# Physics News Letter 2017





#### Editor's desk

We are back with yet another issue. The issue has a lot of interesting department news which will tell you how we are always abuzz with activities underneath. It is the efficiency of our students and staff that so many activities of different flavours keep taking place and yet the schedules and daily activities don't get disturbed. The Department fosters a friendly and stimulating learning environment in which students are motivated to reach high standards, acquire real insight into Physics, become self-confident, committed and adaptable graduates. We the faculty, as a team support teaching and learning with well-equipped laboratory, library and computing facilities.

Dr. M. Jagadesh

#### The Department of Physics @ DrNGPASC

Established in the year 2015, The Department of Physics at Dr. N.G.P. Arts and Science College aims at imparting quality education in Physics. Physics is one of the fields of knowledge that underlies the physical universe and applies constantly to people's everyday lives. Studying Physics develops scientific temper and encourages students to innovate in diverse research and technical areas. Physics is the basic science that underlies all of the physical sciences and influences most of the biological sciences. It treats matter, energy and interactions at the fundamental level. This programme provides an excellent background for a wide variety of careers in science, science-related and technological fields. With a team of dedicated faculty and substantial infrastructural facilities, we march towards Excellence!!

#### **Vision**

The Department of Physics is committed to Inculcate analytical thinking in students and make them compete and contribute to the varying technology- centered advancements in Physics with services to the society.

#### **Mission**

The Department of Physics aspires to provide the best scientific methods in teaching the basic principles of Physics in both theoretical and experimental avenues and promote the level of education, scientific research and community service.

#### **ACTIVITIES 2016-17**

Curricular aspects

The Department of Physics conducted its Second Board of Studies meeting on 29th April 2016. The members included Dr. L. Senthil Kumar, Associate Professor, Department of Physics, Bharathiar University (University Representative), Dr. V. Ponnuswamy, Associate Professor and Head, Department of Physics, Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Dr.P. Meena, Associate Professor and Head, Department of Physics, PSGR Krishnammal College for Women and Mr. Amarnath (Managing Director), Tamilnadu Energy Solutions Pvt. Ltd, Coimbatore (Industry Representative). Eminent resource persons suggested necessary modifications for the curricular improvement. Outcome Based Education System was highly emphasized for curriculum transaction.

#### **Workshops and Industrial Visits:**

Our II BSc students attended a Training Camp in "World

Robotics Olympiad 2016" organized by T N S C S T a n d Regional Science Centre, Coimbatore from 17.05.16 to 18.05.16.



Our II BSc students attended a

Workshop on "Basic Electronics and Robotics" at Regional Science Centre, Coimbatore from 04.06.16 to 05.06.16 and had hands-on training in the area specified.



#### **Orientation Programmes for the I Year:**

"Significance of Nutrients" by Dr.D.Sridevi, Head-Dept. of Nutrition and Dietetics, Dr.NGP Arts and Science College on 22.06.2016.



"Orientation in Medical Physics" by Mr.P.Velliangiri, Department of Medical Physics, Dr.NGP Arts and Science College on 22.06.16



"Basic Internet and Computing Skills" by Dr. K. Khumaravel, Head-Dept. of Computer Science, Dr. NGP Arts and Science College on 22.06.16



**PANORAMA- Association Activities** 

Guest/ Invited/ Special Lectures:

Placement Orientation for II Year BSc Physics Students on 29.06.16 by Mr. Balaji, Placement Coordinator, Dr NGP Arts and Science College.

A Guest Lecture on "Chemistry is Not a Mystery" by Dr. M. Dhandapani, Associate Professor, Department of Chemistry, SRMV CAS for II Year BSc Physics Students on 08.07.16

A Guest Lecture on "Personality Development" was delivered by Dr. P.R. Muthuswamy, Principal, Dr NGP Arts and Science College on 09.08.16 for the I and II year BSc Physics

Mrs. R. Revathi, Assistant Professor, Department of Physics attended a webinar on "Balancing work and career as a career women" on 29.09.16 organized by Department of Nutrition and Dietetics, Dr NGP Arts and Science College.

Mrs. R. Revathi, Assistant Professor, Department of Physics attended Session on "Women entrepreneurship and road show" on Indian Women Network on 19.10.16 organized by IWN Coimbatore Zone at the Department of Nutrition and Dietetics, Dr NGP Arts and Science College.

Dr. P. Kolaindavel, Fmr Head, Department of Physics, Baharathiar University delivered a Guest Lecture on "Fundamentals in Physics" on 27.12.16 for the Students and Staff of Physics Department.

Dr. Dr. Maithili Sharan, Professor, Centre for Atmospheric Sciences, IIT –Delhi delivered a Guest Lecture on "Atmospheric Sciences- Scope and Opportunities" on 29.12.16 16 for the Students and Staff of Physics Department.

Mr.D. Jayaseelan, and Mr.N.R. Vaideeswaran, External Faculty, Petroleum Conservation Research Association delivered a Guest Lecture on "Global Warming and Petroleum Products Conservation" for the BSc Physics Students on 08.03.17



#### **Workshops/Industrial Visits:**

A Science Visit to Regional Science Centre by I BSc Physics Students on 12.07.16.

The Department of Physics students visited Coimbatore Book Fair at CODISSIA on 22.08.16

Two teams comprising SIX students of II BSc Physics took part in "World Robot Olympiad India 2016" from 17.09.16 to 18.09.16 organized by National Council of Science Museums And Dept. of Science and Technology at Vellammal International

#### School, Chennai

Dr.M. Jagadesh, Head, Department of Physics attended an Orientation session organized by Keysight Technologies at the Residency Hotels on 25.10.16.



Students and Staff participated in a National Seminar on "MEMS, Applications of Semi conductor Devices" Organized by Department of Electronics and Instrumentation, Bharathiar University from 19.12.2016 to 20.012.2016.

#### **Skill Development Program:**



A Skill Development Program on "Smartphone Servicing and Maintenance" was organized by the Department of Physics in collaboration with New Technology, Coimbatore from 20.07.16 to 21.07.16



Four students of II BSc Physics underwent a Hands-on Training Workshop on "Fruits and Vegetable Preservation" from 19.09.16 to 23.09.16 Organized by Ministry of Women and Child Health, Govt. of India, Madurai and Department of Nutrition and Dietetics, Dr NGP Arts and Science College.

Astronomy Club Members underwent a Workshop on "Astronomy and Telescope Training Workshop" on 21.10.06 organized by the Department of Physics, Dr. N.G.P. Arts and Science College.

Dr.M. Jagadesh, Head, Department of Physics participated in a National Conference at St. Joseph's College of Commerce (Autonomous), Bengaluru emphasizing "New approaches to Learning Outcomes and Assessment under CBCS" on 10.02.17.

II year BSc Physics students underwent a "Beekeeping training" on 14.02.17 organized by Dept. of Agricultural Entomology, Tamil Nadu Agricultural U n i v e r s i t y , Coimbatore.



#### **Extension Activity:**

Students of BSc Physics in association with Petroleum Conservation Research Association (PCRA) actively participated in an Extension activity at Veeriampalayam Village orienting the public about the significance of Energy Conservation.

















## Students' Interdepartmental and Intercollegiate activities :

S. No.	Inter Collegiate / Inter Departmental	Date	Event	College	Prizes won
1	Inter Collegiate BCom PA	13.07.2016	Professional Hunt 2016	-	NIL
2	Inter Collegiate - Tamil Debate	14.07.2016	Tech Expo	-	M. Yogeshwarapradeep - I Prize
3	Independence Day Competitions	15.08.2016	-	-	1. Tamil Debate - I Prize - M. Yogeshwarapradeep and R. Dharshan 2. English Oratorical - I Prize - R. Dharshan
4	Dept. of Master of International Business	17.08.2016	Brave Bharath	-	1. Poster Presentation - I Prize - K. Bhuvaneshwari and A. Nivetha
5	Dept of Computer Science	21.09.2016	-	-	Poster Presentation - II Prize - V. Surya and G. Madhumitha
6	Inter Collegiate	23.12.2016	NGP FEST	-	-
7	INSPIRE 2016	26.12.2016- 30.12.2016	-	-	Students active participation
8	NCAMFAE	25.01.2017	National Conference	Dr. NGP IT	10 Students participated and presented papers.
9	ALBEDO	17.02.2017	-	SRMV CAS	15 students
10	INFINIT17	24.02.2017	-	NIT Trichy	15 students Paper Presentation - II Prize - Hariprashad Ravikumar

#### **Publications:**

- 1. D. Prabha, R. Karunathan, V. Sathyanarayanamoorthi, Experimental and theoretical perspectives on 2-amino 5-bromopyridinium salicylate: a third order nonlinear optical Material, J Mater Sci: Mater Electron in Springer-DOI 10.1007/s10854-017-6718-8-2017.
- 2. V. Anbu, R. Karunathan, K.A.Vijayalakshmi, A. David Stephen, Explosives properties of high energetic Trinitrophenyl Nitramide molecules: A DFT and AIM analysis, Arabian journal of chemistry, September 2016.
- 3. Pradeep, N Suriyanarayanan, R. Karunathan, "Influence of Concentration on Structural, Optical and Electrical Properties of Nebulizer Sprayed n-type v2o5 Thin Films", Asian Journal of Research in Social Sciences and Humanities, Vol. 6, No. 5, May 2016, pp. 1218-1236
- 4. B.Vijayakumar, Sathyanarayanamoorthi, R.Karunathan, Theoretical studies on 3-aminorhodaninederivatives in the gas phase: charge delocalization and NLO properties, International Journal of Innovations in Scientific and ISSN: 2347-9728(print) Engineering Research (IJISER).

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