

Department Of Physics

Activities (2021-2022)

1. Students Induction Program was organized on 17/9/2021 through online mode. Alumnae of SAC ,Miss Bhavana J. A (PG and Research Dept., National College Thiruchirappally) was the speaker. Scope of Physics was well explained using power point presentation.

Students Induction Programme- Physics (17-09-2021)

Friday, September 17 · 10:00 – 11:00am

Google Meet joining info

Video call link: <https://meet.google.com/sie-cagx-gep>

Or dial: (US) +1 331-305-3511 PIN: 416 630 974#

2. **NATIONAL ENERGY CONSERVATION DAY** Celebration-an awareness program on Energy Conservation' was conducted in the campus on 14/12/2022.

REPORT:

An awareness program on '**ENERGY CONSERVATION**' was conducted by the Department of Physics on 14/12/2021. 14th December is celebrated as National Energy Conservation Day all over the world. In connecton with this, department of Physics conducted an awareness program to the college students. Program was conducted in the College Seminar Hall . All the teaching, non teaching staff and students have participated in the program. The program was started with a prayer song sung by Miss.Babisha of I B.Sc Physics. College Chair person Miss. Krishna Priya, III B.Sc physics proposed warm Welcome to the audience. Head of the department Dr. I.S.Prameela kumari presided over the function. In her presidential address, she explained the importance of conserving energy and how to save it for the future generation. Then Dr. P.V.Radhika , Assistant professor of Physics, Sree Ayyappa College for Women has given an interesting talk on '**Methods of energy conservation**' through power point presentation. Audience have clarified their doubts through questions. The interaction between the Guest and audience was interesting and useful to all. Miss. Vaishnavi of III B.Sc Physics proposed Vote of thanks. A poster presentation on '

Energy Conservation' was also conducted in the same day. More than 30 students have participated in the program and posters were displayed in the campus. Prizes were given for the best poster. The function came to an end at 3.30pm.



3. NATIONAL SCIENCE DAY was celebrated on 28/2/2022. An essay writing competition on the topic “Science for the people and people for science” was conducted. More than 25 students have participated in the competition. Best three were awarded.

REPORT:

In connection with National Science day, Department of physics conducted an essay writing competition for the UG students. The topic given was ”SCIENCE FOR THE PEOPLE AND THE PEOPLE FOR SCIENCE”. The competition was conducted at the seminar hall at 2.00pm. Before conducting the competition all the students and staff members were assembled in the seminar hall. The Head of the department Dr.I.S.Prameela Kumari, Associate Professor of Physics addressed the students and explained the importance of celebration of Nationla S cience Day. Other staff members Mrs.R.G.Ajitha Dr.M.R.Meera, Dr P.V.Radhika also shared their views to the students. More than 25 students have participated in the competition. The best three were awarded.

RESULTS :

First Prize ----- V.A. VIS MAYA (III-BSc Physics)

Second Prize-----1.ASWINI (III-B.Sc Physics)

2.ABARNA J. . (III-B. c Physics)

Third Prize-----1.BABISHA.M (I-BSc Physics)

2. SIVAPRIYA (II-B. c Physics)

4. SKILL DEVELOPMENT PROGRAM

In connection with Womens Day celebration, five days Skill development program was conducted (7/3/2022-10/3/2022,15/3/2022 and 16/3/2022 in association with JCI Palayamkotai, Naandi foundation and Mahindra Pride Classroom. Dr. M.R Meera, Asst.Prof of Physics was the program coordinator. This program covered essential skills like MS word,Google docs, MS Power point, Animation etc..and personal skills like Hygiene and

behaviour skills, body languages etc.50 students have participated in this program and benefitted much.

REPORT:

As a part of our curriculum , department of physics organized a 5 day skill development program for women in associaton with JCI (Junior Chamber International Palayamkotai, Nandi Foundation and Mahindra Pride Classroom(Inaugural function was conducted on 7/3/2022 at 10.00am in the college seminar hall (Organizing secretary Dr.M.R.MEERA expressed welcome address to the participants, College Principal Dr.K.V.Jayasree inaugurated the program, Head of Department Dr.I.S. Prameela Kumari delivered the presidential address. In her speech she said life skill education have found to be an effectve psycho social intervention strategy for promoting positive social and mental health of adolescents, which plays an important role in all aspects in their field of interest outside the college hours JC HGF P. Saravana Kumar, JC Zone director, JC HGF Allen Bridjith, Vice president and project chairman Digital Literacy –JCI, Palayamkotail , Jc HGF Maria pan (President of JCI Palayamkotail Jc (HGF(oishi (Secretary of JCI, PalayamkotailSahaya Vivek (Vice president JCI ,Palayamkotail,T(Thivakaran (Trainerl have also partcipated in the programme. Skill development program covered essential skills like MS Word Home Tab-Introducton

M S Word insert Tab and Notes

Google Docs

Google Sheets

MS Power Point

Animation and Transition

Google Slides

Showing Open Source Applications like WPS Office ,Library And personal skills like

- Iam unique
- Mini presentation
- Body language
- Hygiene And Behavior Skills

51 Students have actively participated in the programme(Training programme has been conducted from 10.00am to4.00pm all the days(Lunch and refreshments were given to the

students (The valedictory function was conducted on 16/3/2022 at 400 pm. During the function certificates were awarded to the students. Best five performers were awarded trophy by the College Principal. The goal of this program was to teach our youth to be self sufficient and thereby enable them to become self supporting individuals who are able to care for themselves their families and contribute significantly to the future of their community. Computers are now part of our lives playing an important role in business, education and health care. They are an integral part of our professional lives and in the developments of our nation. Hence skill development can be connected to broader growth employment and development.





5. SCIENCE EXHIBITION---(31/3/2022)

REPORT:

In association with SCIENCE CLUB Sree Ayyappa College, our department has conducted a science exhibition for the students of Govt: Primary School, Chunkankadai on 31/3/2022. 45 students and 3 staff members have visited our department. College Principal Dr.K.V.Jayasree has inaugurated the event. HOD of Physics Dr.I.S.Prameela Kumari proposed the welcome address. A documentary film about our solar system was first displayed to the school children using LCD Projector. Various models were prepared by our UG students and displayed. All the students asked their doubts to our students and much benefited. On the whole, the event was much beneficiary to the children.

Models displayed

- | | | |
|---------------------------------------|--------------------------|-----------------------------|
| 1. Water alarm | 2. Mini air cooler | 3. Water density and volume |
| 4. Water dispenser | 5. Earth quake alarm | 6. Vacuum cleaner |
| 7. Reaction of turmeric and detergent | 8. Volcanic eruption | 9. Wind mill and food |
| 10. Wind turbin | 11. Density testing expt | 12. Electrolysis |
| 13. Water dispenser machine | 14. Electric bell | 15. Water and sanitiser |

16 Newtons cradle

17. Pendulum





5. **ASSOCIATION MEETING** was conducted on 18/4/2022. Dr. Prem Kumar , retd. Principal Scientist from Central Electro Chemical Research Institute -Karaikudy, was the chief guest. He delivered an interesting talk on, “India Goes Electric”.

REPORT

Department of Physics has conducted an association meeting on 18/4/2022 in the seminar hall at 11.00 am. Dr T Prem Kumar, retired Principal Scientist CECRI (Central Electro Chemical Research Institute) was the chief Guest. Meeting has started at 11.00 am with a prayer song sung by N.S.GOPIKA of 3rd Physics. Dr. I.S.Prameela Kumari –HOD delivered the Welcome address. College Principal Dr. K.V.Jayasree proposed the presidential address. Dr.Prem Kumar, the chiefguest delivered an interesting talk on “INDIA GOES ELECTRIC”, using power point

presentation. He explained about batteries and different types of vehicles using Lithium ion batteries and its advantages. Students clarified their doubts through simple questions. Also he distributed the prizes for the winners of various competitions conducted by the department.



Amritha of 3rd physics proposed the vote of thanks.





6. Dr. P.V.Radhika, Asst. Prof. Of Physics attended UGC Sponsored Induction Program (4/1/22-2/2/22) conducted by HRDC, University of Kerala, Kariyavattom, Thiruvananthapuram.

Activities by the students

1. Niranjana Govind if II B.Sc Physics has participated in the National Integration Camp 2022 held at Sri Rama Krishna College of Arts and science, Coimbatore from 14th- 20th December 2022 organieed by Regional Directorate of NSS Chennai.

2. Final year students along with 4 staff members have conducted a study tour to, Ooty Wayanadu, Kochi in 24/4/20222-28//4/20222.

3. 11 girls from our department have presented a radio program on 30/3/20222 -Nagercoil radio station.

Dr. M.R. Meera

S. No	Author (s)	Title	Name of Journal	Volume	Page	Year
1.	R. Geetha, M.R. Meera* C. Vijayakumar R. Premkumar P. Arul Prakash M.S. Mohamed Jaabir	Synthesis, Spectroscopic Characterization, Molecular Docking and in Vitro Cytotoxicity Evaluation Studies on 6-Methoxy-8-Nitroquinoline Hydrogen Sulphate: A Novel Cervical Cancer Drug	Polycyclic aromatic compounds		DOI: 10.1080/10406638.2022.2091619	2022
2.	R. Geetha, M.R. Meera* C. Vijayakumar R. Premkumar A. Milton Franklin Benial	Synthesis, spectroscopic Characterization, Molecular docking and In Vitro Cytotoxicity Investigations on 8-Amino-6-Methoxy Quinolinium Picrate: A novel breast cancer drug	Journal of Biomolecular Structure and Dynamics		DOI: 10.1080/07391102.2021.2024259	2021
3.	R. Premkumar Shamima Hussain S.J. Koyambo-Konzapa Naidu Dhanpal Jayram M.R. Meera T. Mathavan A. Milton Franklin Benial*	SERS and DFT Studies of 2-(Trichloroacetyl)pyrrole chemisorbed on the Surface of Silver and Gold Coated Thin Films: In Perspective of Biosensor Applications	Journal of Molecular Recognition		e2921	2021

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S. No	Author (s)	Title	Name of Journal	Volume	Page	Year
4.	T. Valarmathi R. Premkumar M.R. Meera A. Milton Franklin Benial*	Spectroscopic, Quantum Chemical and Molecular Docking Studies on 1-Amino-5-chloroanthraquinone: A Targeted Drug Therapy for Thyroid Cancer	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	255(3)	119659	2021

Dr. P.V. Radhika

1. Participated in the UGC- Sponsored 172nd Induction Programme conducted by the UGC- Human Resource Development Centre, University of Kerala, Trivandrum, from 04/01/22 to 02/02/22. The grade awarded is 'A'. Also served as the participant – convener.
2. Served as staff coordinator in the Inter-collagiate Photography contest in connection with International Day of Biodiversity on 22nd May 2022 conducted by Department of Physics in association with Science Club (SHRISHTI).
3. Participated in two days “In-service Teacher Training” in Physical Science held at Rani Anna Government College for Women, Tirunelveli on 5/5/22 &6/5/22.
4. Served as organizing secretary in the webinar conducted by Sree Ayyappa Research Forum in collaboration with Human Resource Development Centre, University of Kerala, Kariyavattam, Thiruvananthapuram, Kerala., Date: 22/05/22, Topic: Getting Published; Resource person; Dr. T. Prem Kumar, Formerly Senior Principal Scientist, CECRI , Karaikudy; Webinar link: <https://meet.google.com/iuz-hygy-gvs>