## **Department of Physics & Electronics**

## **Report of Activities of Dhruva club ( 2021-22)**

## Club Coordinator: Ms.V.Sai Prashanthi

Faculty Members:Dr.D.Sarala,,W.JayaSelva Vinitha, Ms. Sai Prashanthi , Dr.Y.Seetha Mahalakshmi
Student Co ordinators:
Shruti, Shreya,Nitya Vaishnavi- III MPCs & MECs
Anne sushma Swaraj, Manasa Yadav, Bhavani, Afrah – II MPCs & MECs
Kavitha, Sneha – I MECs
Student Members: 50 students from I, II and III MPCs/MECs

The Dhruva club of Department of Physics & Electronics has Organized a **National Webinar On Energy Conservation In Apartments** On December 14<sup>th</sup> 2021 In Collaboration with .**Institutional Innovative Council ( IIC)** .Dr.ChandraSekar, Managing Director- 7s Technologies has consented to be a Resource Person and to deliver the Presentation in a **Hybrid and a Blended Mode.** The Resource Person has Enticed The Physics And Electronics Students and Faculty from different Colleges.

The invocation Dance Performed by the students on the theme "**Panchabhutas**", has enthralled the gathering with the understanding of the Laws of Nature. The concept to Save **Mother Earth** by Promoting the need to conserve energy was very well depicted elegantly by the Students.

The two terms **the energy conservation and energy efficiency** used alternatively was demonstrated with the help of a video presentation. Energy conservation involves using less energy and changing one's attitude. Energy efficiency, on the other hand, involves using technology that requires less energy to perform the same function.

The practical approach to different ways of energy conservation like switching off lights, unplugging the electrical appliances from the mains when not in use, usage of LED bulbs, maximize the usage of Sunlight during daytime, was enlightening. The need to preserve and save the natural resources for the future generation was highlighted. The intelligent Lighting Control System and Energy Conservation in Multistoried Buildings was also discussed.

The department has organized a competition on creating an Infographic on the topics -Smart Cities, Transport System, Emerging Technologies To Save Energy, Alternative Sources Of Energy, Blue LEDs, Green Initiatives of the institution.the finalists of the competition have presented during the webinar and e- certificates of prizes were awarded. All the students have been issued the participation certificates.

TheDhruva club of Department of **Physics & Electronics** has organized a National Seminar to commemorate National Science Day celebrations on **25th February,2022**. Dr.M.Sree Ramana, Scientist "F' Research Centre Imarat, DRDO has kindly consented to deliver the lecture on "Photonic sensors". The session started off with the eyes of human beings being the fundamental sensor The applications of sensors and interlinking of photonics with Quantum Mechanics and other allied branches of Physics was demonstrated. The evolution of imaging devices ranging from the 1826 till date was explained. The various measurements that can be carried out with the help of Lasers were demonstrated. The resource person has enlightened on basics of diffraction patterns, double slit experiment to observe interference fringes, types of interferometers, amplitude and wave front division. The latest Laser 3d imaging and its relative advantages over normal imaging was shown with the real time photographs. Sagnac's interferometer which established the ether shift and the relevant calculations were dealt with in detail.

The lecture was followed by a skit on Erwin Schrodinger's Biography and an online Quiz competition. The students who presented papers and winners of the competition were awarded certificates.









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