



# ST.JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY

Elupatti, Thanjavur – 613 403

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year 2023-2024 (ODD Semester)

## Report on Student Seminar Presentation

<b>Name of the Event</b>	:	Student Seminar Presentation
<b>Organizing Department</b>	:	ECE
<b>Co-ordinator</b>	:	Mrs.M.Backia Lakshmi, AP /ECE
<b>Date of the Event</b>	:	22.09.2023
<b>Resource Person</b>	:	Mr. V. Ilamurugan, Mr. M. Manikandan, Mr .S. Nishanth, Ms.R.Shobana – IV year Mr. A.Kishore Nesan, Mr. C.Manivasan - III year St.Joseph's College of Engineering and Technology, Thanjavur.
<b>Targeted Audience</b>	:	II, III and IV year students and faculties
<b>No. of Participants</b>	:	81
<b>Venue &amp; Time</b>	:	Main Block Seminar Hall & 11.40 am to 12.30 pm.
<b>Objective of Event</b>	:	<ul style="list-style-type: none"><li>• To assist individuals with motor impairments in eating independently.</li><li>• To provide unique vantage points for observing the earth or other celestial bodies.</li></ul>
<b>Outcome of the event</b>	:	<ul style="list-style-type: none"><li>• To improve the dining experience and overall quality of life for individual.</li><li>• To provide most crucial information to understand the problem of coronal heating.</li></ul>

## **PROGRAMME DETAILS:**

On September 22<sup>th</sup> 2023, students of II, III and IV year participated in an offline presentation for their student seminar. The lecture was delivered to 81 members. The major goal of this event was to provide a forum for students to share their expertise on cutting-edge technologies, which would improve their research ideas, develop excellent presenting skills, and whet their appetite for discovering new innovations in their field of study.

Mr.V.Ilamurugan, Mr.M.Manikandan, Mr.S.Nishanth, Ms.R.Shobana – IV year students have discussed about “Self Stabilizing Spoon”. Parkinson's disease is a degenerative neurological condition that causes trembling in the limbs. The stabilizing spoon adjusts its head to counteract any unintentional tremors or shivers caused by the user and makes up for them. Hence, keeping the spoon bowl steady at all times and efficiently steadying the spoon and facilitating patients eating. In order to determine which way the device's handle was tilted and how quickly its position changed, a sensor containing gyroscopes and accelerometers was employed. In order to create a system with two degrees of freedom, two servo motors were positioned orthogonally to one another. Due to this, the spoon was intended to maintain its spoon bowl in a horizontal position.

Mr. A.Kishore Nesan, Mr. C.Manivasan - III year students have discussed about “Aditya - L1 Mission and its Payloads”. The primary goal of Aditya-L1 includes understanding the dynamics of the chromospheres and corona, the uppermost layers of the solar atmosphere. Observing the in-situ particle and plasma environment around L1 and how particle dynamics from the Sun impact the surrounding regions of L1. It measuring the temperature, velocity, and density of plasma inside the corona; and determining the order of mechanisms occurring in the various layers of the solar. The solar ultraviolet imaging telescope (SUIT), the visible emission line coronagraph (VELC), the solar low energy X-ray spectrometer (SoLEXS), and the high energy L1 orbiting X-ray spectrometer (HEL1OS) are the remote sensing payloads. The in-situ payloads include the Advanced Tri-axial High Resolution Digital Magnetometers, the Plasma Analyzer Package for Aditya, and the Aditya Solar wind Particle Experiment (ASPEX).

Finally, mentors Mr. V. Muthupandian, Mr. S. Jerald John James, Dr. R. Meera, Mrs. M. Backia Lakshmi and Ms. G. Ashika, AP/ECE explained how to provide real-time applications in their related areas. The students engaged fully in the questioning session and the class was quite interactive.

**SCREENSHOTS:**



Figure 1: IV year students Mr.V.Ilamurugan, Mr.M.Manikandan, Mr.S.Nishanth and Ms.R.Shobana presented about Self Stabilizing Spoon.



Figure 2: III year students Mr. A.Kishore Nesan and Mr. C.Manivasan presented about Aditya - L1 Mission and its Payloads.

**SSP COORDINATOR**

**HOD**

**IQAC COORDINATOR**

**PRINCIPAL**