



VIMAL JYOTHI ENGINEERING COLLEGE, CHEMPERI

MECHNOVA



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LATEST IN MECHANICAL ENGINEERING!!

“Electrospray” Technology: Palm-Sized Propulsion for Future Space Missions

ATHENA, a new electrospray propulsion system by European Space Agency and IENAI Space, offers innovative, scalable propulsion for small satellites. Emitter arrays etched onto this silicon wafer using micro- and nano-technology possesses more than 500 pinhole-sized emitters that spray out ions, accelerated via an electrostatic field to maximize thrust.



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VISION

“To become a centre of excellence in Mechanical Engineering, producing innovative and creative mechanical engineers to meet the global challenges”

MISSION

1. To Provide a platform to the students towards attaining quality education in Mechanical Engineering.
2. To Educate students about professional & ethical responsibilities and train them to build leadership and entrepreneurship qualities for their career development.
3. To Create opportunities and guide students in acquiring career-oriented jobs in the field of Mechanical Engineering.



Mexterious 2K23 the technical fest of the Mechanical engineering department, Vimal Jyothi Engg. College was held as a part of Tantra 23 on 4 th December 2023. It featured a wide range of events like workshop, paper presentation, technical quiz, safety class by fire & rescue department, air show, RC car show etc. The inauguration function of Tantra 23 (Mexterious - 2K23) was held on 04.12.2023 at 09:30 am in Varicattu Hall. Fr. James Chellangottu, Vimal Jyothi Engineering College inaugurated the techfest.

The events such as craft room, IEEE RAS stall and display of SAE vehicles became one of the major attractions of Mexterious 2K23. Apart from departmental events, various stalls of leading automobile companies like Mahindra, Toyota & amp; KTM bikes were setup in which students from ME department volunteered for the exhibition stalls.

"PRAGYAN" EXHIBITION AT SREE SANKARA VIDYAPEETAM SENIOR SECONDARY SCHOOL



During the grand 30th-anniversary celebrations at Sree Sankara Vidyapeetam Senior Secondary School in Mattanur, the spotlight shone on a captivating exhibition featuring innovative projects by Mechanical Engineering students from Vimal Jyothi Engineering College. From December 7 to 9, 2023, the exhibition showcased a diverse range of projects, serving as a testament to the school's deep commitment to nurturing creativity, curiosity, and technical prowess among its students. The interactive displays not only demonstrated the students' ingenuity but also facilitated meaningful engagement, fostering a spirit of learning and collaboration between the two educational institutions. This collaborative effort added a unique and enriching dimension to the anniversary celebrations, celebrating the pursuit of knowledge and innovation.

FACULTY DEVELOPMENT PROGRAM ON "FUSION360"



The three-day Faculty Development Program (FDP) on "Modeling and Design for Manufacturing using Fusion 360" at VJEC was a comprehensive initiative aimed at upskilling faculty members in the dynamic field of modern design and manufacturing technologies. The program spanned from January 8 to January 10, 2024, and was organized by the Department of Mechanical Engineering. The FDP commenced with a warm welcome by Mr. Aji Augustine, setting an enthusiastic tone for the event. His opening remarks encouraged a collaborative and engaging atmosphere. Following the welcome, Mr. Aji Augustine invited Cdr (Retd) Raju K Kuriakose, HOD of the Department of Mechanical Engineering, to officially inaugurate the program.

The session was led by Mr. Noble from BIMLABS, Cochin, a distinguished guest speaker. Mr. Noble's engaging presentation delved into the nuances of design thinking, emphasizing creativity and functionality. Participants actively engaged in practical exercises, fostering an interactive learning environment.

WORKSHOP ON "INDUSTRIAL ROBOTICS"



The Department of Mechanical Engineering at VJEC organized a workshop on "Industrial Robotics using Yaskawa GP8 Robotic Arm" from January 18 to 19, 2024, from 1:00 PM to 4:00 PM. The program, inaugurated by Cdr (Retd) Raju K Kuriakose, featured Mr. Shinu M M as the resource person and was coordinated by Dr. Christopher Ezhil Singh. The workshop provided hands-on experience and in-depth insights into industrial robotics, demonstrating the department's commitment to cutting-edge technological education. The program not only equipped participants with practical skills but also showcased the department's commitment to staying at the forefront of technological education.

PARTICIPATION IN UPSKILLING PROGRAMME FOR TECHNICIANS



On January 09, 2024, technicians from the Department of Mechanical Engineering actively participated in an upskilling program titled "Digital Literacy Unleashed: Empowering Everyday Computer Skills." The session was conducted at computer centre VJEC and commenced at 9:30 AM. The primary objective of the program was to enhance the digital literacy skills of technicians, enabling them to leverage everyday computer skills more effectively in their roles. The "Digital Literacy Unleashed" upskilling program proved to be a valuable initiative for our technicians. It not only addressed their immediate learning needs but also fostered a culture of continuous improvement within the department. The skills acquired during this program are expected to contribute positively to the efficiency and effectiveness of our technicians in their roles.

EXHIBITION AT MARYGIRI ITI TALIPARAMBA



In a significant event aligned with the Hyundai ITI tie-up program, an impressive exhibition unfolded at ITI Marygiri, Taliparamba, showcasing innovative projects by Mechanical Engineering students from Vimal Jyothi Engineering College on January 25, 2024.

The exhibition served as a testament to the ingenuity and technical prowess of the Mechanical Engineering students, highlighting their ability to conceptualize and implement solutions to real-world challenges. The projects, ranging from cutting-edge technological applications to practical solutions, drew attention to the students' commitment to excellence. This exhibition not only showcased the talent of Mechanical Engineering students but also reinforced the significance of industry collaborations in providing practical exposure to students.

ACHIEVEMENTS

1. The patent based on the student project titled "Smart Walking Support Stick for Enhanced Navigation and Safety of Visually Impaired Individuals" has been officially published in the journal of the patent office. The inventors named on the patent include Ms. Anju M, Ms. Naviya Ganesh Babu, Mr. Alan Vyshnav P, Mr. Pranav K V, Dr. Sridharan P, and Mr. Arunlal M P. The publication date of the patent is 05/01/2024, and it has been filed under Application No. 202341086832 A.

2. Mr. Appu C Kurian, Assistant Professor in the Department of Mechanical Engineering at VJEC, has successfully participated in and completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on Advances in Subtractive and Additive Manufacturing Technologies. The program took place at Mangalam College of Engineering from 04/12/2023 to 09/12/2023.

FAREWELL



The Department of Mechanical Engineering bid a cheerful farewell to Dr. Srikanth M P, Associate Professor, expressing gratitude for his valuable contributions. Colleagues gathered to wish him the very best in his future endeavors, appreciating his dedication and positive influence. As he embarks on new journeys, Dr. Srikanth M P's excellent work and guidance will be remembered, inspiring others in the Mechanical Engineering Department.

Program Educational Objectives (PEO'S)

PEO1: Graduates will be able to pursue successful professional career in Mechanical Engineering with sound technical and managerial capabilities.

PEO2: Graduates will have skills and knowledge to formulate, analyze and solve problems in mechanical engineering to meet global challenges.

PEO3: Graduates will be capable of pursuing mechanical engineering profession with good communication skills, leadership qualities, team spirit and professional ethics to meet the needs of the society.

PEO4: Graduates will sustain an appetite for continuous learning by pursue higher education and research in the allied areas of science and technology.

Program Outcomes (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

PSO1: Ability to use advance design, modelling, analysis, manufacturing tools and techniques to provide a solution in mechanical engineering problems.

PSO2: Ability to design, develop, implement and manage a product development process.

Mr. Arunlal M P (Asst. Prof, ME)

Student Editors:

Mr. Nirmal Dev P (S8 ME), Ms. Anusree P Nair (S8 ME)