



LATEST IN MECHANICAL ENGINEERING!!

Acoustic Wave Separation

FloDesign Sonics, with funding from the National Science Foundation, has developed mechanical engineering innovations with uniquely effective patented technology called Acoustic Wave Separation (AWS) that separates or cleans water or other liquids from other contaminants. Acoustic waves were the secret behind this breakthrough technology that divorced all foreign substances such as radioactive material, hydrocarbons, bacteria, chemical additives, salt, and more, without the use of chemicals or filters.

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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.

TECHFEST - MEXTERIOUS-2022

<p>MORE EVENTS LIKE NEVER BEFORE...!</p> 	<p>PROGRAMME CONVENOR Cdr. (retd) Raja K Kurian HEAD OF THE DEPARTMENT MECHANICAL ENGG</p>	<p>DEPARTMENT OF MECHANICAL ENGINEERING Presents</p> 	<p>I DRONE SHOW Live drone show and inauguration event.</p>	<p>I PRINT 3D Workshop on 3D printing & CNC Training</p>	<p>I ET. AL Presentation based on technical paper</p>	
	<p>STAFF COORDINATORS Mr. Shamin Muth KK 77082 45371 Mr. Aji Augustine 94962 59388</p>		<p>STUDENT COORDINATORS Mr. Jomy Augustine 80781 77812 Mr. Sanjal Alex Chacko 82813 68561</p>	<p>I RC AUTA 15+ RC car shows demonstrated by COPTER BOY</p>	<p>I ASSEMBLER Demonstration of dismantling and reassembling parts of an engine</p>	<p>I CANDID Photography competition</p>
<p>VENUE: VIMAL JYOTHI ENGG COLLEGE CHEMPERI</p>	<p>MEXTERIOUS 2K22 DECEMBER 5</p>		<p>I AGNI Firefighting demo and emergency situation handling by Kerala Fire & Rescue Dept.</p>	<p>I VAGABOND Treasure hunt competition based on puzzles and clues</p>	<p>I EFFICYCLE Efficacy ride tryout and hands on experience on efficacy design</p>	<ul style="list-style-type: none"> • ADRENALINE • SRUSHTI • ALPHA • AMALGAMATION
			<p>I CANNES Short film competition</p>	<p>I QUIZOPHILE Quiz based on automobile field</p>		



Mexterious 2K22 the technical fest of the Mechanical engineering department, Vimal Jyothi Engg. College was held as a part of Tantra 22 on 5th December 2022. 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.

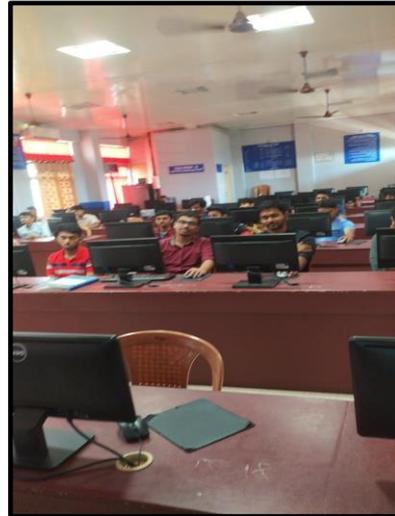
The inauguration function of Tantra 22 (Mexterious - 2K22) was held on 05.12.2022 at 08:30 am in Varicattu Hall. Mr. V. E. Krishnakumar, Chief Technology Officer of Texas higher education department inaugurated the techfest. The events such as craft room, RC car show and display of SAE vehicles became one of the major attractions of Mexterious 2K22. Apart from departmental events, an exhibition by Inker Robotics Solutions Pvt. Ltd. was organized in which Students from ME department volunteered for the exhibition.

TECHNICAL TALK ON "DEVELOPMENTS IN DESIGN AND AUTOMATION FOR INDUSTRY 4.0"



On 22nd of December 2022, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur organized a technical talk on "Developments in Design and Automation for Industry 4.0" at Varicattu Hall, Main Block, Vimal Jyothi Engineering College for Second, Third, and Final Year Mechanical Engineering students from 10 AM to 12 PM. It was conducted as a curricular gap filling program. The convener of the program was Cdr. (Rtd.) Raju K. Kuriakose, HoD, Department of Mechanical Engineering and was coordinated by Dr. Sreekanth M P (Associate Professor, ME); Dr. Jithin E V (Associate Professor, ME); Mr. Gokulnath R (Assistant Professor, ME); Dr. P Sridharan (Professor, ME); Mr. Dilin Dinesh (Assistant Professor, ME). The resource person was Mr. Vinay S, Manager, Education and Training, Conceptia Software Technologies Pvt. Ltd. Mr. Abin Kurian from Conceptia Software Technologies Pvt. Ltd. also accompanied him. The talk elaborated the benefits of 3D Modeling Software such as SolidWorks and its relevance in Industry 4.0 and Industry 5.0. Also, resource person stressed the importance of Automation and need of industry ready engineers.

WORKSHOP ON ROBOTICS CONTROL SYSTEM



Workshop on "Robotic Control System" was held on 04th December 2022 at 10.00 AM to 03.00 pm, organized by SBC03711F - Vimal Jyothi Engineering College - Kannur, RA24, for IEEE members and Non-members of IEEE from SBC03711F Members. The seminar was convened by Dr. S.Christopher Ezhil Singh, M.E., Ph.D., Staff Advisor IEEE RAS SBC, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chempiperi, Kannur, and a welcome address was given by Mr. Tinu George, Chair, IEEE RAS SBC, SBC03711F – Vimal Jyothi Engineering College - Kannur. The Resource Person of the seminar is Mr.Josy James, VJEC, and Kannur. The topic of the seminar is "Robotic control system". The topic is mainly focused on basic introduction, coding, and control. Line follower robot, obstacle sensing robot, and maze hunting robot simulation were done on gearbot software. There is a discussion between participants actively on each interval when the expert raises questions to the participants and the reply from the participants was positive. We have an interactive session at the end of the program to know how the participants have been involved in the workshop and learn about the controls of the robotic system.

PAPER PUBLICATIONS AND PATENTS

1. Dr. Jithin E. V published a paper titled "Impingement Heating Characteristics of Domestic Gas Burner Flames" in the journal " Heat and mass transfer"; Publisher: Springer
2. Mr. George Recklin, Mr. P.V. Pranav, Dr. S. Christopher Ezhil Singh, Dr. P.Sridharan published a paper titled "Compression behaviour Mg-Zn-xSr-HA hybrid nanocomposites through powder metallurgy method"; Publisher: ScienceDirect
<https://doi.org/10.1016/j.matpr.2022.12.133>
3. Mr. Rosh George, Mr. Cris Benny, Mr Thomaskutty Mathew, Mr. M. Shyamlal, Dr. S. Christopher Ezhil Singh published a paper titled" Tribological and mechanical properties Mg-Zn-xSr-HA hybrid nanocomposites prepared by powder metallurgy technique."; Publisher: ScienceDirect
<https://doi.org/10.1016/j.matpr.2022.12.136>
4. Ms. Teena George, Mr. Jayapraksh P, Ms. Tinu Francis, Dr. S.Christopher Ezhil Singh published a paper titled" Wind energy conversion system-based PMSG for maximum power tracking and grid synchronization using adaptive fuzzy logic control"; Publisher: Journal of Applied Research and Technology.
5. Patent based on the student project entitled A Compact and Portable Thermoelectric Refrigerator got published in the official journal of the patent office - Inventor Mr. Mejo Francis, Mr.Jerin Saji, Mr. Aswin K. P, Mr. Sreeprasad P. C, Mr. Vaishak C, Mr. Vishal Pittan.
6. Patent based on the student project entitled A Device, System and Method for Automated Sorting of Waste Materials in Public Places got published in the official journal of the patent office – Inventors: Dr. Sreekanth M P, Mr. Gokulnath R, Mr. Melvin K. Jiji, Mr. Nived P, Mr. Shahin Gafoor, Mr. Sreerag M.

MEMBERSHIP IN PROFESSIONAL BODIES

1. IAENG (International Association of Engineers) & IEEE (IEEE Entrepreneurship Exchange) membership acquired by Dr. Sreekanth M P, Mr. Mejo M Francis and Mr. Appu Kurian.
2. IEEE Robotics and Automation Society membership acquired by Dr. S. Christopher Ezhil Singh.

FACULTY ACHIEVEMENT



MR. GOKULNATH R

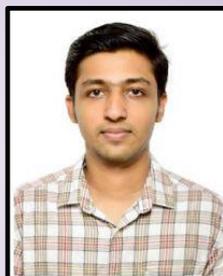
Assistant Professor, Department of Mechanical Engineering, VJEC, secured admission for PhD, in NIT Calicut.



MR. JOSY JAMES

Assistant Professor, Department of Mechanical Engineering, VJEC, secured admission for part time PhD in NIT Calicut

WELCOME OUR NEW FACULTY



MR. ANOOP K R

Mr. Anoop K R has joined as faculty in the Department of Mechanical Engineering

FAREWELL



Farewell to Mr. Gokulnath R, Assistant Professor, Department of Mechanical Engineering. Best wishes for your future endeavours sir.

GLIMPSES OF CHRISTMAS CELEBRATION



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), Mr. Anoop K R (Asst. Prof, ME)

Student Editors:

Mr. Akash P (S8 ME), Ms. Anju M (S8 ME)