VIMAL JYOTHI ENGINEERING COLLEGE, CHEMPERI

MECHNOVA

AUGUST 2024

VOL 12, ISSUE 4

LATEST IN MECHANICAL ENGINEERING!!

3D-printed ceramic ink removes 75% of deadly forever chemicals from water

Researchers have created 3D-printed ceramic lattices to remove "forever chemicals" from water supplies. These harmful substances are used in everything from non-stick pans to paint, fabrics, and more. Researchers at the University of Bath, England have created ceramic-infused monoliths capable of effectively removing these stubborn chemicals from water.

INSIDE THIS ISSUE:

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.

AI TOOLS FOR ENHANCED LEARNING AND TEACHING

Explore how AI tools can enhance your teaching and research by streamlining tasks, improving productivity, and supporting innovative practices. Here are some essential AI tools for academic professionals.

ChatGPT: **Engage in intelligent conversation**—ChatGPT assists with generating content, answering questions, and providing research support through advanced conversational AI. Visit ChatGPT: https://openai.com/chatgpt/

Chatpdf: **Interact with PDFs effortlessly**—Chatpdf allows you to extract and analyze information from PDF documents using AI. Visit Chatpdf: https://www.chatpdf.com/

Gamma: **Elevate your presentations**—Gamma uses AI to create dynamic and visually engaging presentation content. Visit Gamma: https://gamma.app/

Microsoft 365 PPT: **Enhance your PowerPoint presentations**—Explore AI-driven design suggestions and automated content creation in Microsoft 365. Visit Microsoft 365: https://www.microsoft.com/en-us/microsoft-365

Perplexity: **Generate and analyze complex data**—Perplexity helps with research and academic writing by providing deep insights and data support. Visit Perplexity: https://www.perplexity.ai/

Jenni: **Improve your academic writing**—Jenni assists with drafting, editing, and refining papers with AI-driven writing support. Visit Jenni: https://jenni.ai/

Claude AI: **Generate high-quality text**—Claude AI provides advanced text generation capabilities for research and academic tasks. Visit Claude AI: https://claude.ai/new

CLASS TOPPERS (2020-24 BATCH)

VIMAL JYOTHI ENGINEERING COLLEGE
Affiliated to APJ Abdul Kalam Technological University & Kannur University | Approved by AICTE
Under the Archdiocese of Thalassery

DEPARTMENT OF MECHANICAL ENGINEERING

CONGRATULATIONS!!!

S8 UNIVERISTY EXAM TOPPERS (2020-24 BATCH)

MR. NIRMAL DEV P
SGPA: 9.65

MR. JEEVANRAJ
SGPA: 8.97

MR. SRINAND S
SGPA: 8.82

FACULTY ACHIEVEMENTS

1. Dr. P Sridharan published a paper in 'South Asian Journal of Management' titled: "Navigating Consumer Preferences: An Examination of Organized Retail Satisfaction in a South Indian Locale". [Volume 31, Issue 1]

https://sajm-amdisa.org/index.php?option=com_content&view=article&id=132

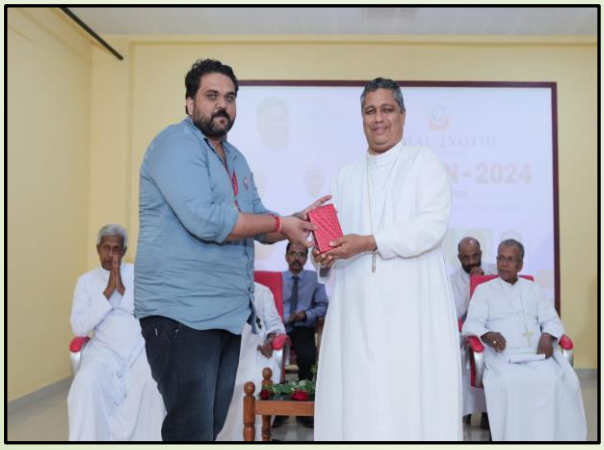
2. Dr. Christopher Ezhil Singh published a paper in 'Automatika' titled: "Data augmentation using a 1D-CNN model with MFCC/MFMC features for speech emotion recognition." [Volume 65, Issue 4]

https://www.tandfonline.com/doi/full/10.1080/00051144.2024.2371249

FACULTY ACHIEVEMENTS

1. During the staff meeting held on July 11, 2024, the following faculty members were recognized for their outstanding performance in producing high results in tough courses during the academic year 2022-2023.

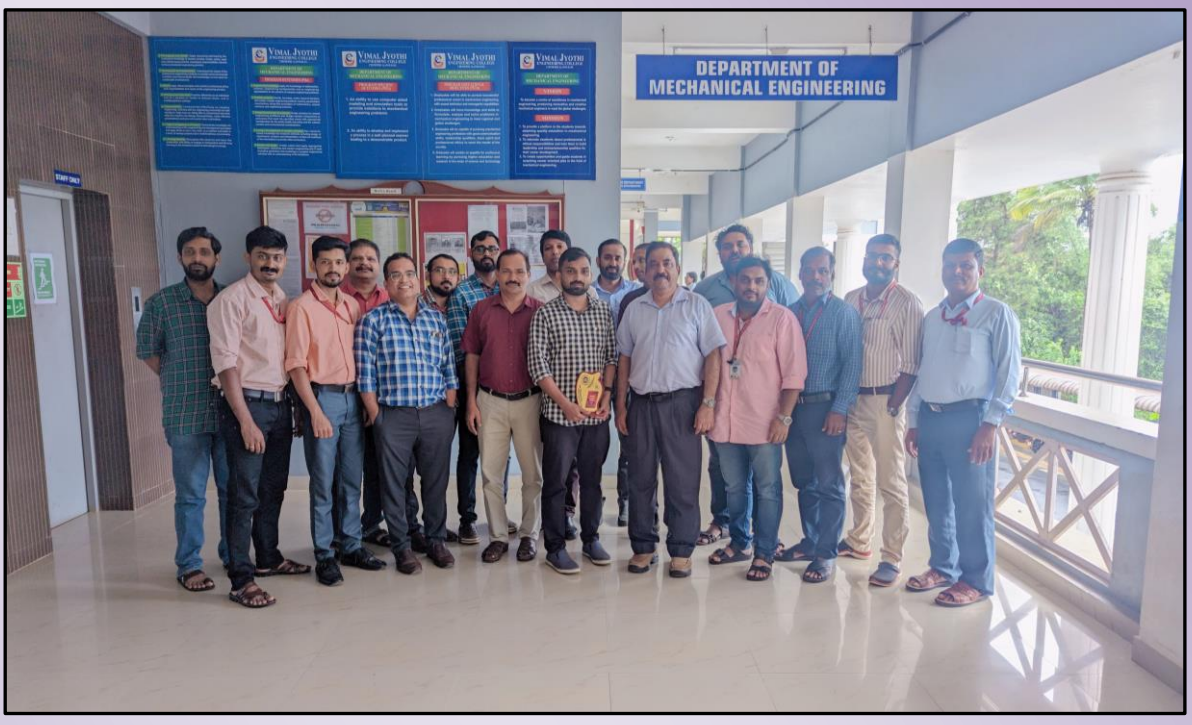
Mr. MIDHUN MUKUNDAN M K

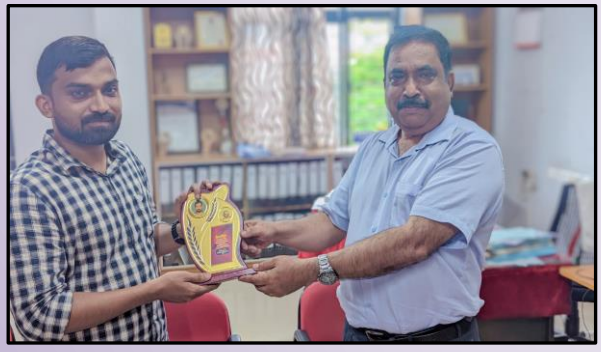


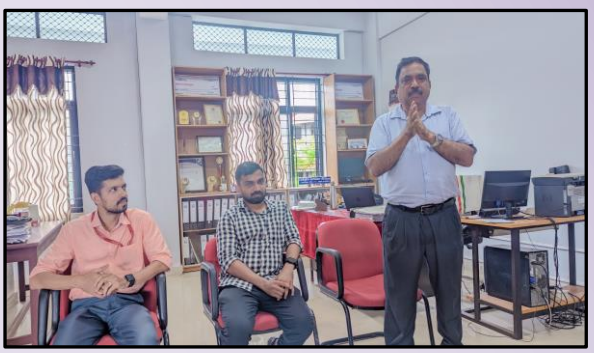
Mr. DILIN DINESH

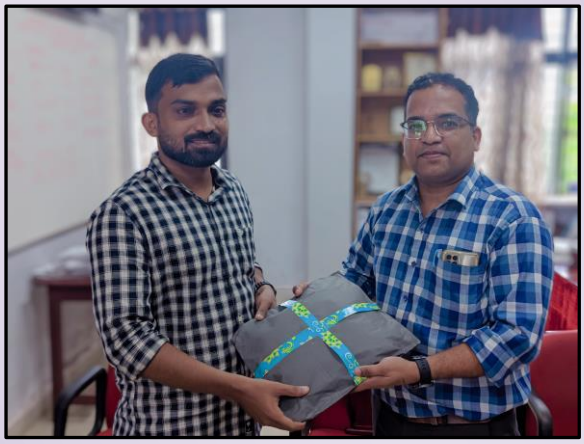
Mr. APPU C KURIAN

FAREWELL



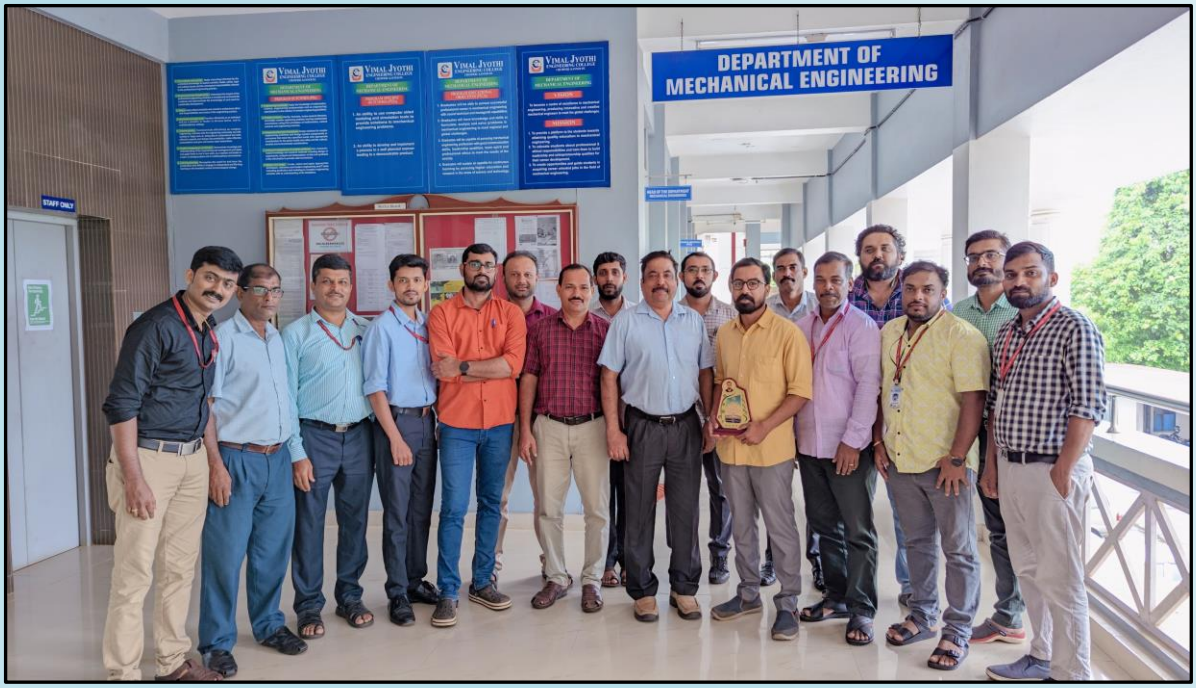


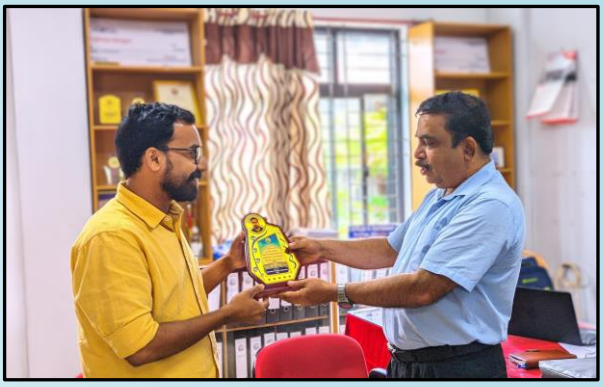


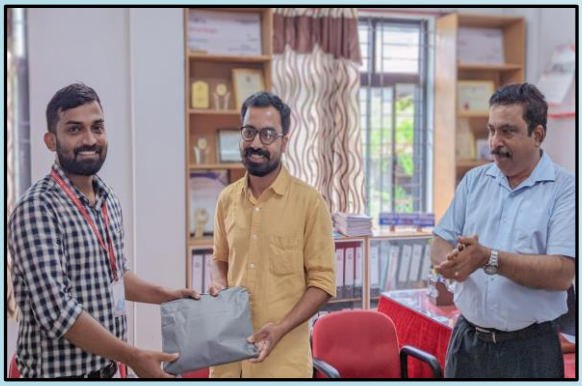


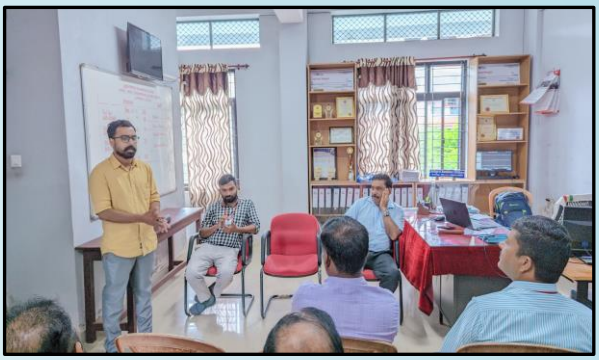
The Department of Mechanical Engineering warmly bid farewell to Mr. Niyas K M, Assistant Professor, with heartfelt thanks for his significant contributions. Colleagues came together to wish him all the best in his future pursuits, appreciating his commitment and positive impact.

FAREWELL









The Department of Mechanical Engineering gave a warm send-off to Mr. Anil Johny, Technician, acknowledging his outstanding service. Colleagues gathered to wish him success in his future endeavors, expressing their gratitude for his hard work and positive impact.

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. Sayooj Rajan (S7 ME), Mr. Joel Sunny (S7 ME)