



MBCET e-bulletin

MAR BASELIOS
COLLEGE OF ENGINEERING AND TECHNOLOGY
AUTONOMOUS

Accredited by NAAC with A Grade . Five B.Tech programmes first accredited by NBA since 2016



Space Science and Technology is an area that has been kept closely guarded by the Indian Government, allowing only Indian Space Research Organization (ISRO) to work with it for quite long.

Now, situation has changed. This area is being opened up for the startups to explore. (<https://www.isro.gov.in>). The ISRO nowadays sees start-ups as its new age industry partners – one that would propel India in fulfilling its space dreams. The Indian Government's push to privatize the space technology industry and bring in new players has led to a significant expansion in the sector. According to the Economic Survey 2022, the number of startups in the sector increased to 47 in 2021, up from just 11 in 2019, reflecting the growing interest in the industry and the opportunities it presents for innovation and growth. One important startup company is Bellatrix Aerospace. This company has plans to launch its rocket, named Chetak. The two-stage rocket is to be powered by Bellatrix's Aeon engines which would use liquid methane as fuel. In 2019, the company announced plans to use water as the propellant for an electric propulsion system. There are many subsidiary areas in the Space Technology, like remote sensing, weather forecasting, etc. which are required by humanity all the time. So, innovations are possible for talented young minds. Let us hope for a bright future for space startups in India too.

Dr. Abraham T Mathew

EXODOS 2023



The Exodos 2023, the course completion ceremony of the 18th B.Tech Batch of the College was conducted on Tuesday 23 May 2023 in the Girideepam Convention Centre. His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos, Patron and Manager MBCET presided over the function. Dr S. Unnikrishnan Nair, Director, Vikram Sarabhai Space Centre(VSSC), ISRO was the Chief Guest. The Chief Guest emphasized the need for continuous engagement with Science and Technology for the development. (to be continued on page 2)

Handing over of 3D prototype of the Anakkampoyil-Kalladi-Meppadi Tunnel Road to Government of Kerala



College has built a 3D model of the Anakkampoyil-Kalladi-Meppadi Tunnel Road with the guidance of Konkan Railway Corporation Ltd. This was formally handed over to Mr Linto Joseph, MLA of Thiruvambady on Monday 22 May 2023 in a function held at the College. Bursar Fr John Varghese presided over the function. Er Ajith Ramachandran CE, PWD, Er Birendra Kumar, Dy CE of KRCL, Mr Arun Khosh D, Manager PR, KRCL, Mr Muralidhar M., Senior Section Officer KRCL, Mr Viswanathan M., Project Engineer, KRCL and other dignitaries were present. (to be continued on page 2)

Vision: To be an Institution moulding globally competent Professionals as epitomes of Noble Values.

Mission: To transform the Youth as technically competent, ethically sound and socially committed Professionals, by providing a vibrant learning ambience, for the welfare of humanity.

(continued from page 1)

The proposed tunnel road project aims to construct a Twin Tunnel with 4 lane approach roads. The project is designed for the benefit of the general public and the development of the area. Construction of twin tunnel (2+2 lane) with four lane approaches (for existing roads) will provide direct connectivity between Anakkampoyil in Kozhikode District and Meppadi in the Wayanad District of the Kerala State. The road tunnel is expected to be India's third longest tunnel with a length of around 8.75km. This road will provide an alternate route for reducing the traffic congestion in the existing Thamarassery- Kalpetta Hill Highway which is has 9 hairpin curves enroute. Our CE Dept is privileged to be part of this venture of large scale infrastructure development of the State.

Students: Bharath B L, Rahul S, Swathi Udayan, Abhijith R Chandran, Shivani P S, Akshay H A, Arunraj A, Aswin Asok, N.Thanzeer, Navajith Sasi

Faculty: Dr Jaysree S, Ms Anupama Krishnan, Mr Sijo M Saji

MoU Signed with UST Global



The Department of CSE, MBCET has initiated an MoU with UST on 9th May, 2023 at 11.30 am. They will be facilitating an industry supported lab, internship opportunity for students and technical support as a part of the MoU.

MoU Signed with M/s BIMLABS

M/s BIMLABS Engineering Services Pvt Ltd, represented by CEO Shri Shiju Sasidharan, exchanged the MoU with the College during Exodos 2023. This is for conducting on-campus training programmes at MBCET in Building Information Modelling and other tools for the benefit of the students of Civil, Electrical and Mechanical Engineering Departments. The Company has also handed over offer letters for the first batch of 17 students who have completed the training recently. A Competency Centre is also planned at MBCET.

EXODOS 2023 (continued from page 1)

536 students (CE-123, CS-123, EC-111, EE-83, ME-96) have completed the coursework up to now barring the Eighth Semester, leading to the award of the Degree of B.Tech from the APJ Abdul Kalam Technological University. They were presented with the Course and Conduct Certificate. Prestigious **Baselian Award** for the Best Outgoing Student was received by **Aswen M**, S8 ECE. He also received the **Sunny Diamonds Outsparkle Award** (diamond ring and citation) sponsored by M/s Sunny Diamonds. The **Special mention Jury Award** for the Best Outgoing Student was received by **Argya P** of S8 ME.

MBCETAA sponsored the Best Project Awards for each class, which included a Cash Award and the citations.

Project Presentation

A project team from S8 EC comprising **Abhinav A. Pillai, Aravind U.R. and Varun George** was selected to exhibit their project "Electric wheelchair using Sip and Puff Technology", as part of the "ente Keralam" event organized by the Government of Kerala, at Kanakakunnu on 20th May 2023. The project was guided by **Ms. Amritha B J**, Asst. Professor, Department of EC.



Paper Presentation by Students

The following papers were presented by final year students at the National Conference on 'Recent Trends in Design and Application in Energy Development Programme' held on 10th & 11th May 2023 organised by The Institution of Engineers (India), Kerala State Centre under the aegis of Mechanical Engineering Division Board, IEI.

Mechanical Engineering

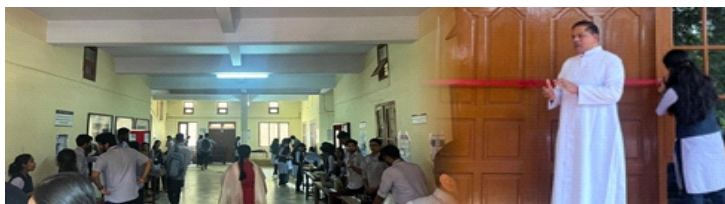
- '**Flexible Single Valve PSA Oxygen Concentrators for Medical Applications**' by Yethil. A.N., Akul Lal, Ananthan A., and Dr. Nidhi M. B., Associate Professor, MED.
- '**Review on Battery Thermal Management System of Electric Bus**' by Stebin Philip Biju, Akshay V. B., A. Sai Sreedhar, G. J. Roopesh and Dr. Nidhi M. B., Associate Professor, MED.

Electrical & Electronics Engineering

- '**Battery performance Analysis**' by Shilpa Nair U. S., Sethuraman R. S., Vrinda S. S. and Dr. Nidhi M. B., Associate Professor, MED.

AAKRITI '23

Department of Civil Engineering conducted the Project expo AAKRITI '23 on 22/5/2023. The expo was a showcasing of final year student projects. Many faculty and students from different departments came and interacted with the project teams.



Project Expo

Department of Computer Science and Engineering in association with CSI SB MBCET organised a Project Expo for final years on 21st May 2023 at Pascal Hall to demonstrate their final year projects. The exhibited projects were evaluated by our Chief Guests, Mr. Rinse P Sambrukutty, Assistant Engineer TCS and Mr. Ashiq Shahansha –Test Engineer, Infosys.

Best Projects:

- "Violence Detection in Railway Coaches" (S8 CS 2)
- "Decentralized storage drive powered by arweave"(S8 CS1).



Expert Talk

The EV Research group, Department of Electrical and Electronics Engineering organised an invited lecture on "Foundation to Electric Vehicles" for the students of EEE on 19 May 2023. The resource person for the session was Mr. Pradeep Kumar Keloth (Adjunct Professor of Practice at Amrita School of Engineering, Coimbatore and MBCET, Former HoE, Electrification at Bosch). Around 45 students attended the talk. Faculty coordinators: Dr. Dishore S V and Mr. Anil J, Assistant Professors, EED.



Paper Publication

Dr. Krishnamohan G P, Associate Professor (S&H) published a paper titled " Experimental and Theoretical Investigation of Degradation Activity of Two-Dimensional MoS₂-ZnS Nanocomposites" in ECS Journal of Solid State Science and Technology. DOI 10.1149/2162-8777/acd144 (SCI indexed).

Best Paper Award

Ms. Surasmi N. L., Assistant Professor, EED received the best paper award for the paper titled "Hybrid Multilevel Inverter Control for Harmonic Mitigation" in IEEE International Conference on Control, Communication and Computing (ICCC 2023) organized by College of Engineering Trivandrum from 19 to 21 May 2023. She also presented another paper titled "Grid-integrated Solar Photovoltaic Converter Control for Power Quality Enhancement" in the conference.



Course Completed

Dr. Dishore S V, Assistant Professor, EED completed the 20 hours fastrack course on "Electric Vehicles", organised by the Department of Electrical and Electronics Engineering, Sri Ramakrishna Engineering College, Coimbatore from 2 to 5 May 2023.

NPTEL Course Completion

Dr. Swapna P.S, Associate Professor, Dept. of ECE successfully completed NPTEL course on "Introduction to Internet of Things" held from January to April 2023. She completed all the requirements of the programme with Elite plus Silver grade (5% Topper).

Faculty wins National award



Congratulations to **Dr. Nidhi M. B.**, Associate Professor MED, for receiving the MIET Mehaboobi Mohammed Yunus memorial national award for the 'Best Women teacher' awarded by ISTE New Delhi.



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 COLLEGE OF ENGINEERING AND TECHNOLOGY
AUTONOMOUS
 MAR IVANIOS VIDYANAGAR, NALANCHIRA P.O., THIRUVANANTHAPURAM - 695015
 AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
 FIVE PROGRAMMES ACCREDITED BY SBA SINCE 2016 (SNAAC 'A' GRADE INSTITUTE)

INVITATION


EXODOS 2023

COURSE COMPLETION CEREMONY

Benedictory Address
 His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos
 Major Archbishop of Trivandrum
 Chief Guest : Dr. S. Unnikrishnan Nair
 Director, VSSC

WE CORDIALLY INVITE YOU TO GRACE THE OCCASION
 WITH YOUR AUGUST PRESENCE.

TUESDAY
23
 MAY
 2.30 PM

GIRIDEEPAM CONVENTION CENTRE

Abraham T. Mathew
PRINCIPAL
Fr. John Varghese
BURSAR



THE TEAM BEHIND EXODOS 2023



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