

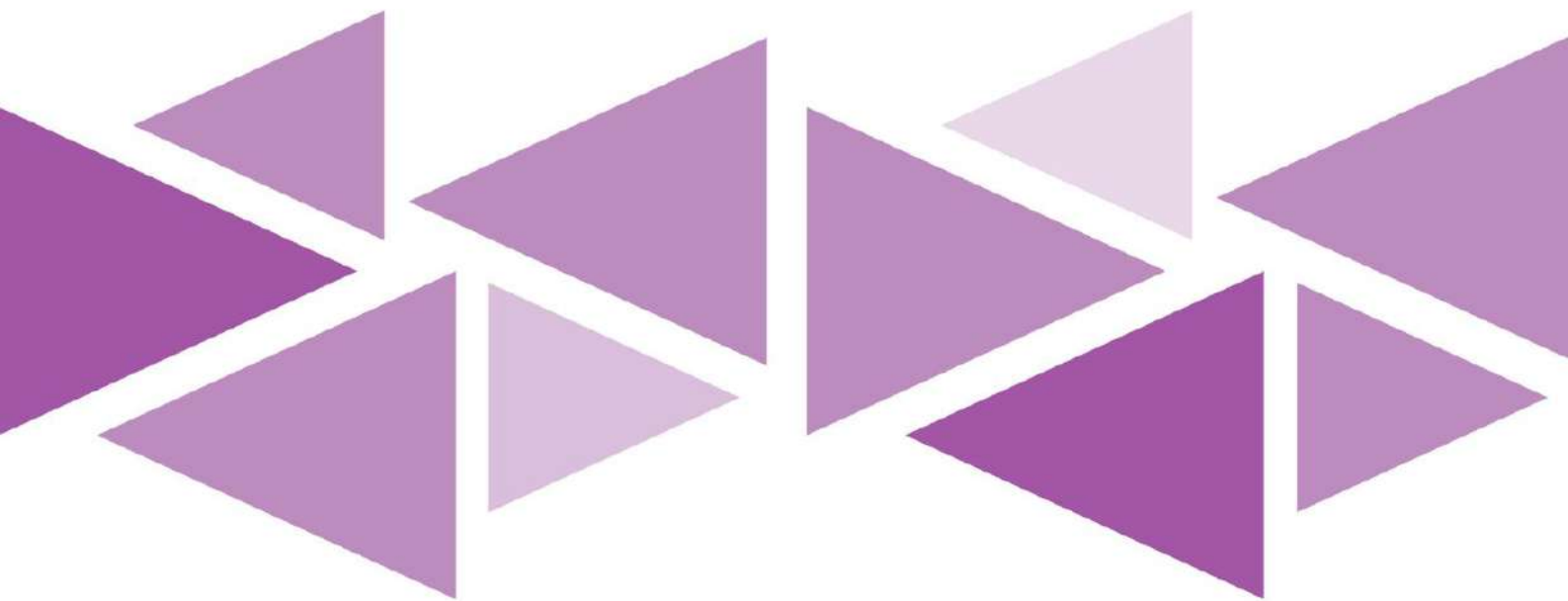


**DEPARTMENT OF MECHANICAL ENGINEERING**  
(ACCREDITED BY NBA)

2021-22

# TECHNOMECH

VOL 13



MITE



Invent Solutions

**Mangalore Institute of Technology & Engineering (MITE)**

Mijar, Moodbidri, Mangalore, Karnataka. Ph: 08258-262695

E-mail: [info@mite.ac.in](mailto:info@mite.ac.in)

 MITEedu

Website: [www.mite.ac.in](http://www.mite.ac.in)

**INSTITUTE VISION**

"To attain perfection in providing **Globally Competitive Quality Education** to all our Students and also benefit the global community by using our strength in **Research and Development**".

**INSTITUTE MISSION**

"To establish world class educational institutions in their respective domains, which shall be **centers of excellence** in their Stated and Implied sense. To achieve this objective we dedicate ourselves to meet the Challenges of becoming **Visionary and Realistic, Sensitive and Demanding, Innovative and Practical and Theoretical and Pragmatic**; All at the same time".

**DEPT. VISION**

"To develop Technically Competent Mechanical Engineering Professionals and Researchers for the benefit of the society".

**DEPT. MISSION**

- ❖ To provide a well-balanced program of instructions to impart concepts on basics and applied areas of mechanical engineering
- ❖ To provide a state-of-the-art facility for learning, skill development, and research in design and manufacture areas.
- ❖ To encourage the students to excel in the co-curricular and extra-curricular activities to impart social & ethical values and leadership quality.

**Message from Head of the Department**

**Dr. C R Rajashekhar**  
Professor & Head

Since our "TECHNO-MECH" news bulletin remains focused on its core purpose of helping to showcase the departmental activities, it gives me immense pleasure to release this issue. This volume includes the FDP's organized, Technical talks, Industrial visits arranged and Staff & Students contributions, achievements of staff & students and overall academic contributions. I am really looking forward to meeting up with all the set standards and goals put forth by management.

**Index****Department Activities**

MechMites Inauguration  
Technical Talks  
Career Guidance  
Workshops

**Students Achievements**

Awards  
Students Placed  
Technical Events  
Funded Projects

**Faculty Achievements**

Publications  
FDP's attended



## DEPARTMENT ACTIVITIES

### MECHMITE'S INAUGURATION: 2021-22

On November 11, 2021, MECHMITES hosted the occasion of fresher's welcome, also known to the students as branch entry. Mrs. Veena T. Shetty, Deputy General Manager (Training), MRPL, Mangalore, was the chief guest. She expressed her gratitude to the faculty and students in the department for their accomplishments throughout the previous academic year.



Lighting the lamp by the Chief Guest Mrs. Veena T Shetty and other dignitaries

The Chief Guest inspired and wished the students success in both their current academic year and their future careers. The department head, Dr. C. R. Rajashekhar, wished the students. The department achievements were emphasized by the principal, Dr. GL Easwara Prasad, who also urged students to engage in cutting-edge projects that benefit society. He also counseled everyone to choose a field of interest and work hard to achieve their goals.

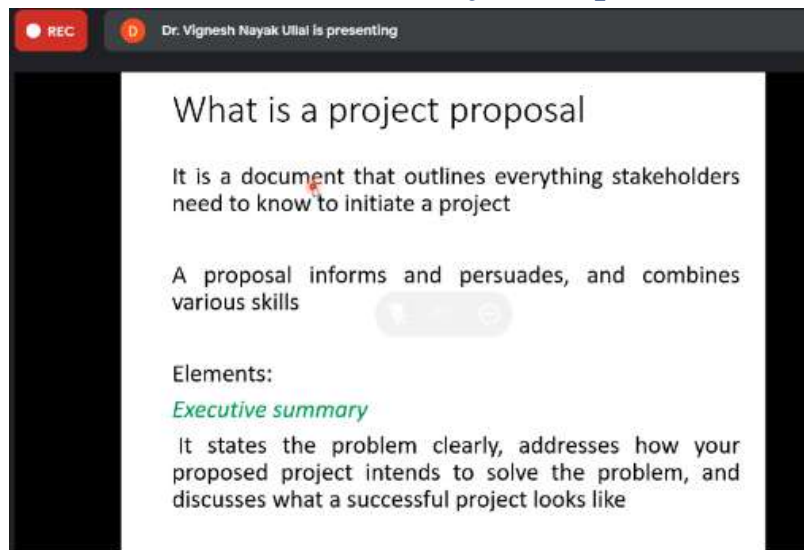


Technomech- News Bulletin Vol. 12 released by the Chief Guest Mrs. Veena T Shetty

The welcome address was given by Mr. Akshay A, President of Mechmites. Prof. Shivaramu H T, the Faculty Coordinator of Mechmites, gave the annual report for the academic year 2020–21. Mr. Razaan Rafique Kukkadi, the Cultural Coordinator of Mechmites, introduced the chief guest to the audience. Mr. Vikith Hegde, Secretary of Mechmites, gave the vote of thanks. Mr. Niranjana Kamath, a student in IV year was the master of ceremony.

## TECHNICAL TALKS

### "How to Write a Project Proposal"



**Dr. Vignesh Nayak U**, delivering a talk (05-10-2021)

A talk on 'How to Write a Project Proposal' was conducted on 05<sup>th</sup> October 2021 for the final-year mechanical engineering students. The talk was delivered by Dr. Vignesh Nayak U, Sr. Assistant Professor, Dept. of Mechanical Engineering, MITE, Moodabidri. The objective of the session is to improve the critical thinking and analysis of the idea before taking it as an academic project. Participants got benefitted from how to study the background of the idea and defining the problem statement, and objectives, and further adopting methodology, Investigation techniques.

### "Project Management & Finance"



**Mr. Sinan Ismail**, delivering a talk (20-10-2021)

A talk on 'Project Management & Finance' was conducted on 20<sup>th</sup> October 2021 for the final-year mechanical engineering students. The talk was delivered by Alumni Mr. Sinan Ismail Chief Technical Officer, Rebellion Motors Pvt. Ltd., Bangalore. Selection of project, team members, identification of projects by market demand and arriving at solutions for the problems were dealt with. The various funding avenues, timeline, key aspects of idea presentation to potential investors and documentation about product or service evolution were

briefed. The speaker suggested focusing on the importance of preliminary studies before undertaking a project and the mannerism of leading a team.

### **"Societal and Environmental contexts of Anti-Corrosion Protection Surface Treatment"**

On November 4, 2021, a technical talk titled "Societal and Environmental Contexts of Anti-Corrosion Protection Surface Treatment" was organized. The resource person was Mr. Naveen Bharadwaj, Technical Process Engineer, Electrofer Group, Portugal. The session's goal was to understand the significance of surface and corrosion mitigation treatments for materials and how they affect the environment.



**Mr. Naveen Bharadwaj**, delivering a talk (04-11-2021)

### **"Project Planning & Execution"**

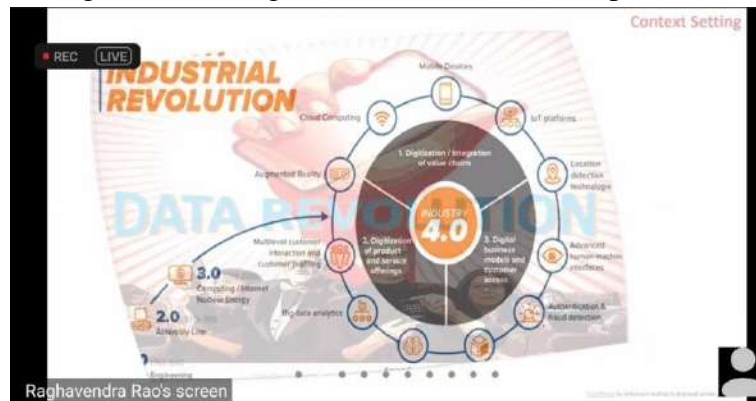
For the mechanical engineering pre-final year students, a talk on "Project Planning & Execution" was held on November 10, 2021. Mr. Shetty Harshith Ramesh, Production Engineer, G R Enterprises, Mumbai, was the speaker. The session's purpose was to improve students' comprehension of how better project planning, resource allocation, and motivating subordinates affect the results. The speaker emphasized the significance of the planning stage, goal setting, work allocation, resource management, directing and controlling staff, and timely project completion.



**Mr. Shetty Harshith Ramesh**, delivering the talk (10-11-2021)

### "Application of AI for the Concepts of Mechanical Engineering"

On January 11, 2022, a webinar on 'Application of AI for Mechanical Engineering Concepts' was held for the students and faculty members. The resource person was Prof. Raghavendra Rao, Business School IBS Group, Bangalore. The speaker provided a brief overview of AI and ML, as well as the current industrial revolution. He elaborated on the significance of digital design thinking as well as the necessity, importance, and applications of AI and ML. AI and machine learning are also being used in the automotive, space, and robotics industries.



Prof. Raghavendra Rao, delivering a talk (11-01-2022)

### "Sustainability: An Engineer's Job in Creating a Sustainable World"

On May 13, 2022, a talk titled 'Sustainability: An Engineer's Role in Creating a Sustainable World' was conducted, addressing pre-final year students. The session was engaged by an alumnus, Mr. Harish M Shenoy, Director, Plastic Fischer, Bangalore. The talk aimed to convey the role of mechanical engineers in developing products for a sustainable world. The speaker pointed out the importance of developing environmentally friendly products as well as methods for reusing or collecting used products for better disposal.



Mr. Harish M Shenoy, delivering a technical talk (13-05-2022)

### "EV's & Career Opportunities in EV's"

The second-year mechanical engineering students attended a talk on "EVs & Career Opportunities in EVs" on August 22, 2022. The talk was delivered by Alumni Mr. Praneeth

Shetty, Prototype Engineer- Battery Development, Pravaig Dynamics, Bangalore. This session was designed to teach students about the industrial workflow of electric automobile components, as well as how vehicles are conceptualized, designed, and manufactured. This program provided a platform for students to support their engineering ideas and gain practical experience.



Mr. Praneeth Shetty, delivering a technical talk (22-08-2022)

## CAREER GUIDANCE TALKS

### "Opportunities and Challenges for Mechanical Engineers in Industry"

A talk on 'Opportunities and Challenges for Mechanical Engineers in Industries' was organized on 17<sup>th</sup> Nov. 2021 for Mechanical Engineering Students. Mrs. Veena T. Shetty, the Deputy General Manager for Training at the Mangalore Refinery and Petrochemicals Ltd. (MRPL), Mangalore, was the distinguished speaker. She informed students about the numerous job opportunities available in the industry for Mechanical Engineers. Some of the challenges faced by graduates in the workplace and the prominence of upgrading skills to ensure relevance were conveyed. The speaker advised the students to prepare for public sector entrance exams.



Mrs. Veena T. Shetty, delivering a talk (17-11-2021)

## "Engineering Solutions for Rural Development"

A talk on 'Engineering Solutions for Rural Development' was organized on 14<sup>th</sup> Dec. 2021 for Mechanical Engineering Students. Mrs. Manorama Bhat G.V, Consultant, Press Alternative, Tokyo, Japan was the resource person. She emphasized that agriculture is the primary source of survival and income for the villagers. The need for technological solutions that uplift the impoverished masses having limited resources was the central theme in her speech. The speaker showcased innovations that improved the working conditions for small and marginal farmers. In a similar vein, the expert urged the 7<sup>th</sup>-semester students to devise a low-cost innovative solution to ease the working life of the needy.



Mrs. Manorama Bhat G.V, delivering a session (14-12-2021)

## "Career Advancement Skills"

A talk on 'Career Advancement Skills' was organized on the 23<sup>rd</sup> of April 2022 for the pre-final year mechanical engineering students. The talk was delivered by Mr. Karthik M Naik, Design Engineer, Dassault System, Pune. The speaker highlighted the importance of learning advanced skills to succeed in the industry. The use of Product life cycle management (PLCM), and software to maintain the product database was conveyed. He also demonstrated advanced Microsoft Excel and discussed the benefits of documenting statistics.



Mr. Karthik M Naik, delivering a session (23-04-2022)

## "Simulation of Defence, Space and Aeronautical Applications-a prospective future for Mechanical Engineers"

On April 28, 2022, a talk titled "Simulation of Defense, Space, and Aeronautical Applications-a Prospective Future for Mechanical Engineers" was organized for mechanical engineering students. The talk was given by Mr. Dhanish Abdul Khader, Sales & Marketing, SS Technologies, Bangalore. Mr. Dhanish stressed the importance of learning advanced software skills for career advancement. He elaborated on the role and prospects of Mechanical Engineering graduates in space, defence, and aeronautical fields, as well as the skills needed to be industry ready. The application of FEM fundamentals in the development of analytical and simulation software was explained. He demonstrated the STK systems toolkit software and its applications in space, defense, and aviation.



Mr. Dhanish Abdul Khader, delivering a talk (28-04-2022)

## WORKSHOPS

### "Electric Vehicle Technology"

A two-day workshop on 'Electric Vehicle Technology' was conducted on the 3<sup>rd</sup> & 4<sup>th</sup> of December 2021 for the department students. Mr. Suraj S D, Founder & CEO, Decibels Pvt. Ltd, Bangalore, led the workshop.



Mr. Suraj S D, delivering a session

The objective of the workshop was to provide an overview of EVs and their subsystems which included traction motors and controllers, battery management systems, and EV chargers. Day 1: The students learned about vehicle dynamics and important electric vehicle components such as hub motors, motor controllers, lithium-ion cells, battery packs, and traction motors. Day 2: Calculations for motor sizing and battery sizing using mathematical equations to compute the required torque and voltage for battery selection.

### **"3D Printing-the Cutting Edge Technology"**

A two-day workshop on '3D Printing-the Cutting Edge Technology' was organized on the 10<sup>th</sup> & 11<sup>th</sup> of December 2021 for the department students. The workshop was conducted by Mr. Praveen Olekar, Co-founder and CEO of Nixbess, Tumkur. The primary objective of this workshop was to present current 3D printing technology and mechanical components of 3D printers, as well as 3D model slicing and printing. During these two days, students gained hands-on experience with 3D printing the printer's components and basic settings, as well as calibration.



**Mr. Pradeep Kumar B R**, delivering a session (06-07-2021)

In the year 2015, Praveen Olekar co-founded Nixbees Technologies in Tumkur, which is working on proprietary products in various domains such as IoT, 3D Printer, Blockchain, and Android application development. He has expertise in engineering systems that necessitate a deep understanding of critical business drivers across multiple markets and industries.

## **FACULTY DEVELOPMENT PROGRAM (FDP)**

### **“Introduction to ROBCAD”**

From April 5 to April 7, 2022, FDP was held for the Mechanical Engineering faculty and related departments. Dr. M S Ganesha Prasad, the principal, inaugurated the FDP. The FDP was designed to give faculty members training in Robcad Introduction, Workcell Layout, Kinematics and Modeling, Processing, and Basic Simulation Techniques.



Inaugural session of FDP



Training session

Participants learned how to model and assemble components in Robcad and to view the kinematics involved in the operation of the built components. Participants also learned about the syntax and command choices available in the Robcad software.

### **“Cloud-based 3D CAD, CAM, and CAE platform for product development”.**

On the 29<sup>th</sup> of August 2022, a One-day FDP on 'Cloud-based 3D CAD, CAM, and CAE platform for product development' was held for the faculty of Mechanical Engineering and allied Departments.



Inaugural session of FDP

The FDP was led by Mr. Abhinandan Kabbur, Director, Head - Product Design & Manufacturing, Medini Technologies, Bangalore. Demonstrations on the creation of 2D and 3D models, simulations, and analyses using Fusion 360 software were provided.

## STUDENTS ACHIEVEMENTS

### MITE Project wins KSCST - Best Project of the Year Award

A Mechanical Engineering student's project has won the "Best Project of the Year Award" at a state-level 45<sup>th</sup> Series KSCST SPP 2022 Project Exhibition & Seminar organized by the Karnataka State Council for Science and Technology (KSCST), Bangalore in association with Visvesvaraya Technological University (VTU), Belagavi held during 12<sup>th</sup> and 13<sup>th</sup> of August 2022 at VTU, Belagavi.



**Best Project of the Year Award Project and Team Members**

The project titled "Converting Scrap Vehicle to a Low-Cost Eco-Friendly Two Wheeler using Universal Conversion Kit" was carried out by Mr. GaganGunakar, Mr. Girish, Mr. Hasheel Ismail Abdul, and Ms. MeghaBH under the guidance of Mr. Swaroop G, Assistant Professor. Vice Chancellor Dr. Karisiddappa presented the best project award to the team. The event witnessed around 332 innovative projects selected for the grand finale from various streams of engineering colleges across the state.

### Project Wins Consolation Prize at Anveshana-2022



**Team with Project model**

A student project, comprising both engineering and government school students, has won the consolation prize at a state zonal level project championship organized by the Agastya

International Foundation, in association with Synopsys, Bangalore. The project titled '**Fuel fraud detection device**' was executed by Mr. Radhvik Poonja, Mr. Nandan, Mr. Navaneeth Gowda, Mr. Shreeraksha final year Mechanical Engineering, and were guided by Dr. Shivaramu H T, Sr. Assistant Professor.

## INNOVATION 2022

A one-day student projects exhibition "Innovation-2022" was organized by the Department of Mechanical Engineering on 18<sup>th</sup> June 2022. Dr. C R Rajashekhar, Vice Principal & HoD, Dept. of Mechanical Engineering, welcomes all the dignitaries and participants and also highlighted the theme of innovation 2022. The project exhibition was inaugurated by Chief Guest Dr. Ramesha M R, Dept. of Mechanical Engineering, NITK, Surthakal. He highlighted the significance of participating in the project competitions/exhibitions and motivated the budding engineering community to involve in innovative technology. Student's project abstracts were brought in the form of the Innovation 2022 Souvenir and it was released by the dignitaries. The program was presided over by Dr. M S Ganesha Prasad, Principal.



**Innovation 2022 Souvenir released by the Dignitaries**



**Chief guest addressing the participants**

Mr. Prajwal V Kumar, MD & Co-Founder of Mangalore Robautonics Pvt. Ltd. and Dr. Sharanappa J, Associate Professor, Department of Mechanical Engineering, NITK were the jury members. Mr. Shivaramu H T, Department of Mechanical Engineering was the Dept. co-coordinator of Innovation 2022.



**Mr. Prajwal V Kumar evaluating the student projects**



**Dr. Sharanappa J evaluating the student projects**

Jury members evaluated all the student's projects and appreciated the student's efforts for their innovative idea and execution of the project works. Also, both jury members suggested how these projects can be taken to next level as a product.

Place	Project Title	Name of the students (USN)	Name of Guide
I	Design and Fabrication of single window Automated Ration vending machine for BPL/ APL cardholders	Mohammad Sahad (4MT19ME405)	Mr. Madhusudhan
		Mohammed Gouse (4MT19ME406)	
		Snehal Shet (4MT18ME123)	
		Supritha S (4MT19ME407)	
II	Smart and Safety Device For Gas Stove	Muhammed Saad (4MT18ME071)	Mr. Sridhar D R
		Kaif Yusuf (4MT17ME053)	
		Shaikh Mahd. Danyal (4MT17ME129)	
		Mohammed Fazil Ali (4MT18ME061)	

## INDUSTRY VISIT

Department of Mechanical Engineering students visited to industries. The main reason behind this – it lets student to know things practically through interaction, working methods and employment practices. Through industrial visit students get awareness about new technologies. Visits enhances students skills-set in the area of their expertise, it helps convert their theoretical learning into practical experience. And it make them understand what is expected out of them. To equip them with qualities like integrity and leadership.



Bhorukha Power Corporation Ltd. (25/10/2021)



SKF Elixer India Pvt. Ltd. (25/10/2021)



Bola Ragavendra Kamath & Sons (04/03/2022)



Maithri Industry (04/03/2022)

## STUDENTS PLACED

Infosys®



Sumith S



Shetty Adarsh S



D P Anish



Radhvik Poonja



Charan



unschool.in



AXISCADDES

Inspired Solutions. By Design



Nandan Poojary



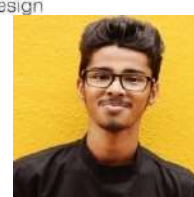
Gagan Gunakar



Anirudh V Puranik K



Adweaith Menon



Mohammed Azar

Autoliv



Shashank K



Mahammed Javid



Suhas S



Akash Shetty



Girish



Anish V



Royston Corda



Abhirami



Anugrah Valsaraj



Devraj

Hasheel Ismail  
Abdul RahimaIrwin Felix  
D'Souza

Sreerag V

Reuben George  
Oommen

Loyal Aaron





Revin Sonal



Loyal Aaron



Adweaith Menon



D P Anish



Pavan Kumar J



Collins Aerospace



Sidharth K S

Navaneeth M  
Gowda

Mithun Naik



Prahallad A Chowta



Loyal Aaron



Tarun D Shetty



Ruhail M H



Harshith Poojary



Ranjith K



PUTTING PEOPLE FIRST



Shreeraksha P



Hrithik Sanil K



Sidharth Sekhar



Amin Manojkumar



Mohd. Furqan



Nithesh



Charan



Murugharajendra M



Sayed Mohd. Asfan



Srinidhi N



Ranjan Shetty



Fawaz M H



Muhammed Badish



Akash Shetty



Rakesh R Kotian



Mohd. Gouse



Radhvik Poonja



Ajith S



Mahammed Javid



Murugharajendra M

■ square  
yards

Irwin Felix  
D'Souza

Srinidhi N



Anugrah Valsaraj



Chandan P



Mohammed Azar



Radhvik Poonja



Mahammed Javid



Sheik Mohd. Arif



Akash S Adavibhavi



Akash S Poojari

FACE Prep

RINEX  
REST ABOVE THE BEST

IntelliPaat



Akshay A



Adweaith Menon



Rithvik S Shetty

Ather Hussain  
Ismail

Radhvik Poonja



## TECHNICAL EVENTS

### COMPETITIONS / HACKATHONS

1. Mr. Akash has secured **1<sup>st</sup> place** in "Robo- War" event in Tech Yuva - 22, held during 7th & 8th June, 2022 at Srinivasa Institute of Engineering and technology, Mangalore.
2. Mr. Akash has secured **1<sup>st</sup> place** in "3D CAED Modeling" event in Tech Yuva - 22, held during 7th & 8th June, 2022 at Srinivasa Institute of Engineering and technology, Mangalore.
3. Mr. Akash has participated in "Start up challenge" on 13<sup>th</sup> June 2022 organised by Seventh sense talent solutions.

### PROJECT/POSTER PRESENTATION

1. Mr. Radhvik Poonja, Mr. Nandan, Mr. Navaneeth Gowda & Mr. Shreeraksha P have presented the project "**Fuel Fraud Detection Device**" in **Anveshana 2022** organized by Agastya International Foundation, in association with Synopsys India Ltd., 24<sup>th</sup> to 26<sup>th</sup> of Feb. 2022.
2. Mr. Girish Poojariy & Mr. Hasheel Ismail have presented the project "**Design and Development of E Vehicle**" in **Anveshana 2022** organized by Agastya International Foundation, in association with Synopsys India Ltd., 24<sup>th</sup> to 26<sup>th</sup> of Feb. 2022.
3. Mr. Ranjith K, Mr. D P Anish, Mr. Sumith S & Mr. Rithvik Shetty have presented the project "**Solar Power Assisted Water Distillation**" in **Anveshana 2022** organized by Agastya International Foundation, in association with Synopsys India Ltd., 24<sup>th</sup> to 26<sup>th</sup> of Feb. 2022.
4. Mr. Lucky Somanna & Mr. Mohamed Khalid have presented the project "**Kitchen Waste Composter**" in **Anveshana 2022** organized by Agastya International Foundation, in association with Synopsys India Ltd., 24<sup>th</sup> to 26<sup>th</sup> of Feb. 2022.
5. Mr. Gagan Gunakar, Mr. Girish, Mr. Hasheel Ismail Abdul R and Ms. Megha B H, have presented the project "**Converting Scrap Vehicle to an Low Cost Eco-Friendly 2 Wheeler Using Universal Conversion Kit**" in **45<sup>th</sup> Series KSCST SPP 2022** Project Exhibition & Seminar organized by the KSCST - Bangalore in association with VTU - Belagavi held during 12<sup>th</sup> and 13<sup>th</sup> of August 2022 at VTU, Belagavi.
6. Mr. Karthik Prabhu, Mr. Moh. Adnan, Mr. Moh. Raiyan Khan, Mr. Moh. Salman Fakki have presented project "**Design & Development of Portable/Collapsible Structure for Indoor Hydroponic Farming**" work in **45<sup>th</sup> Series KSCST SPP 2022** Project Exhibition & Seminar organized by the KSCST - Bangalore in association with VTU - Belagavi held during 12<sup>th</sup> and 13<sup>th</sup> of August 2022 at VTU, Belagavi.

## SPONSORED ACADEMIC PROJECTS: 2021-22

### KSCST

#### 1. Development of Wild Animal Ward-Off System: Crop Protector

**Team Members:** Loyal Aaron N (4MT18ME052), Moh. Yaseen (4MT18ME067), Mah. Javid (4MT18ME053), Rithvik S Shetty (4MT18ME100)

**Guide:** Dr. Shivaramu H T

#### 2. Low-Cost Corn Cob Water Purifier in Rural Areas

**Team Members:** Sidharth Sekhar (4MT18ME122), Atherhussain I U (4MT19ME401), Hrishikesh Raj (4MT18ME041), Shamil G.V (4MT18ME109)

**Guide:** Mr. Santhosh Acharya

#### 3. Design & Fabrication of Air Purifier Using High Efficiency Particulate Air

**Team Members:** Abhishek S Patil (4MT18ME004), Pavan Kumar J (4MT18ME082), Srinidhi N (4MT18ME125)

**Guide:** Dr. Neelakantha.V. Londe

#### 4. Fabrication of Semi-Automatic Water Cleaning System for Rivers And Lakes

**Team Members:** Vikit Hegde (4MT18ME135), Razaan Kukkadi (4MT18ME096), S. Mohith (4MT18ME104), Shazeeb Shafi (4MT18ME113)

**Guide:** Mr. Vikranth Kannanth M S

#### 5. Converting Scrap Vehicle to an Low Cost Eco-Friendly 2 Wheeler Using Universal Conversion Kit

**Team Members:** Gagan Gunakar (4MT18ME036), Girish (4MT18ME037), Hasheel Ismail Abdul R (4MT18ME40), Megha B H (4MT18ME056)

**Guide:** Mr. SWAROOP

#### 6. Design & Development of Portable/Collapsible Structure for Indoor Hydroponic Farming

**Team Members:** Karthik Prabhu (4mt15me047), Moh. Adnan (4mt18me059), Moh. Raiyan Khan (4MT18ME065), Moh. Salman Fakki (4MT15ME066)

**Guide:** Mr. Aveen K P

### VTU

Sl. No.	Title of the Project	Name of the Students	Guide
1.	Design and Fabrication of Single Window Automated Ration Vending Machine For BPL/APL Card Holders	1. Moh. Sahad (4MT19ME405) 2. Moh. Gouse (4MT19ME406) 3. Snehal Shet (4MT18ME123) 4. Supritha S (4MT19ME407)	Mr. Madhusudhan
2.	Development of fuel fraud Detection system	1. Radvik Poonja (4MT17ME096) 2. Navaneeth M G (4MT18ME123) 3. Shreeraksha P (4MT18ME 120) 4. Ranjith K (4MT18ME095)	Dr. Shivaramu H T

**INDUSTRY**

Sl. No.	Title of the Project	Name of the Industry/Agency	Guide
1.	Development of Eco Composite from Waste Plastic - Feather for Plywood Replacement Applications	Sadil Business Group, Ethiopia	Dr. Shivaramu H T
2.	Assessment of AI Composites Wear Behaviour	People Mechanics, Bangalore	Dr. Vignesh Nayak U
3.	Development of Waste Plastic Bottle Collecting Machine that Rewards the Recycler with Monetary Benefits	Chikmagalur Agencies, Chikkamagaluru	Dr. Neelakantha V L
4.	Electricity generation through railway track	Prashvitha Constructor Pvt. Ltd., Puttur, D.K	Mrs. Mamatha K M
5	Segregation of different Grades of Plastic for Recycling	Raj Constructions, Karkala, Udupi	Mr. Madhusudhan B
6.	Design and Fabrication of Single Window Automated Ration Vending Machine for BPL/APL Card Holders	Rural Development & Panchayat Raj Department, GoK, Mudugere, Chikkamagaluru	Mr. Madhusudhan B

**JOURNAL PUBLICATIONS/CONFERENCE (Students)**

1. Mohammed Yaseen, Loyal Aaron Noronha , Mahammed Javid , Rithvik S Shetty , Chinmay N Naik, "Development of Wild Animal Ward-Off System", IJIREEICE, ISSN (O) 2321-2004, ISSN (P) 2321-5526, 2022, DOI: 10.17148/IJIREEICE.2022.10702.
2. Saiban Ashafque, Fawaz M.H, Ruhail M.H, Sayed, Mohammed Asfan, "Review on Development of Eco Composite from Waste Plastic and Feather", Dickensian Journal, Volume 22, Issue 6, 2022, Issn No : 0012-2440, pp. 2159- 216.9
3. Radhvik Poonja, Ranjith K, Navaneeth Gowda & Shreeraksha P has presented a paper entitled "Fuel Fraud Detection Device", in the Recent trends in Mechanical Engineering Sciences, SIT, Mangalore on 10 & 11 June 2022.
4. Mohammed Yaseen, Loyal Aaron Noronha , Mahammed Javid , Rithvik S Shetty has presented a paper entitled "Wild Animal Ward-off System- A Review", in the Recent trends in Mechanical Engineering Sciences, SIT, Mangalore from on 10 & 11 June 2022.
5. Chandan P, Avanish M Kumar, Sheik, Mohammad Arief, Anish V, "A Review on Desktop 3D Printer and itsProcess", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET).
6. Bhaskara Gowda, Yashin Mohammed P, Sourav Dinesh, "Design and Fabrication of Automated Paper Recycling Machine: AReview", IJIRSET.
7. Nithin Noronha, Muhammad Badish, Ranjan Shetty, Prashant Lachyan, "A review on - Electric Dryer for Areca Nut", IJIRSET.

8. Akash S Adavibhavi, Akshay A, Namrath R, Manoj Amin, "Design of Square Hole Drilling Machine Based on Reuleaux Triangle", IJIRSET.
9. Gagan Gunakar, Girish, Hasheel Ismail, Suraj D, "Optimization of battery Cooling system for electric vehicle using Simulation", IJIRSET.
10. Mohammed Azar, Rakesh R Kotian, Rakhsith N, Sagar, "A Review on Eco-Friendly Production of Electricity Using Vortex Turbine", International Journal of Engineering Research & Technology.
11. Sumith, Sudanshu, Ashwin, Shahank, has presented a paper entitled "Solar Photovoltaic Cooling Technologies – A Review ", in International Conference on Recent Developments in Mechanical Engineering at SIT-Thumkur.
12. D P Anish, Tarun D Shetty, Chinthan Shetty, Akash Shetty, "Electricity Generation Using Railway Track", IJIRSET.
13. Niranjana Kamath, Kaushik M Hegde, Prahallad Chowta, Irfan, "A Limited Review on the Factors Affecting Wear Behavior of Aluminium Alloys and Aluminium Metal Matrix Composites", IJIRSET.
14. Nandan, Reuben George Oommen, Shashank S K, Irwin D'Souza, "Design and Optimization of Vehicle Chassis for Harsh Road Conditions ", IJIRSET.
15. Sushanth Nayak, Charan, Ruthvik A Bangera, Sumanth S Devadiga, "Highway Divider based Air Filtration System Powered by Vertical Axis Wind Turbine- A review", IJIRSET.
16. Vikit Hegde, Razaan Kukkadi, S Mohith, Shazeb Shafi, "Fabrication of Semi-Automatic Water Cleaning System", IJIRSET.
17. Prajwal Nagmule, Murugharajendra Malagi, Vivek Tamase, Shetty Adarsh Seetaram, "Fabrication of Semi-Automatic Water Cleaning System", IJIRSET.
18. Akash Shankar Poojari, Ajith S, Harshith Poojari, Poudan Kumar, "Development of Waste Plastic Bottle Collecting Machine that Rewards the recycler with Monetary Benefits", IJIRSET.
19. Muhammad Saad, Mohammed Fazil Ali, Kaif Yusuf, Shaikh Mohammed Danyal, "Development of Waste Plastic Bottle Collecting Machine that Rewards the recycler with Monetary Benefits", International Journal of Innovative Science and Research Technology.
20. Mahee Husain Ismail, Alfaz, Sujith, Shamanth Shetty, "A Review of Study on Corrosion Behaviour of Zinc Coated Mild Steel", IJIRSET.
21. Revin Sonal, Mohammed Furqan, Rakshith Shetty, Ashish Ajri, "Segregation Of Different Grades of Plastic for Recycling", IJIRSET.
22. Karthik Prabhu, Mohammed Adnan, Mohammed Raiyan Khan and Mohammed Salman Fakki, has presented a paper entitled "Design and Development of Portable/Collapsible Structure for Indoor Hydroponics Farming", in International Conference on Recent Developments in Mechanical Engineering at SIT-Thumkur.
23. Adweath Menon, Mithun Naik, Nithesh, Sidharth K S, "Refurbishment of Internal Combustion Engine to an Electric Vehicle ", IJIRSET.
24. Joswyn Rajat Menezes, Anirudh Puranik, Royston Corda, Pruthvi, "Semi – Automatic Areca Nut Collecting Machine", IJIRSET.
25. Sidharth Sekhar, Ather Hussain, Hrishikesh Raj, Shamil G V, "Low-Cost Corn Cob Water Purifier for Rural Areas - A Review", IJIRSET.

26. Snehal Pradeep Shet, Supritha S, Mohammed Gouse Inthiyaz, Mohammed Sahad, "Single Window Automate Ration Vending Machine for APL/BPLCardholders", IJIRSET.
27. Ashwin, Deekshith, Dhanush Shetty, Suhas, "Electric Wheelchair Design and its Impacts on Life among the Disabled Individuals: A Review", International Journal of Innovative Science and Research Technology.
28. Shobith, Nithesha kumar, Abhirami subhag, Anugrah valasaraj, "Fabrication and mechanical characterization of composites using hemp and glass as a reinforcement material polyester resin matrix material and cenosphere as filler material for engineering applications ", IJIRSET.
29. Pavan Kumar has presented a paper entitled "Design and Fabrication of Air-Purifier Using HEPA Filter", in the Recent trends in Mechanical Engineering Sciences, SIT, Mangalore from on 10 & 11 June 2022.
30. Pavan Kumar J, Abhishek S Patil, Srinidhi N, "Advancement in Air Purifier", IJIRSET.
31. Sreerag V, Arjun M, Krishna N, Raihan K K, "A Limited Review on the feasibility of using rice husk-Ash in various application", IJIRSET.
32. Vikas K, Suman Yadav L, V Kishan Kumar and Dhananjay Jagdish Shetty, has presented a paper entitled "Experimental Investigation on Comparing Mechanical Properties in 3d printed polymers by varying process parameter", in International Conference on Recent Developments in Mechanical Engineering at SIT-Thumkur.
33. Arjun E, Hrithick Sanil, Mohammed Rahoof has presented a paper entitled "Design and Fabrication of Air-Purifier Using HEPA Filter", in the Recent trends in Mechanical Engineering Sciences, SIT, Mangalore from on 10 & 11 June 2022.
34. Prajwal Salian, Jithesh, Vinith Shetty, Yashwanth R, "IOT based Dual Renewable Energy Conversion System", International journal of Multidisciplinary research In science, engineering and technology.

## JOURNAL PUBLICATIONS

1. Krishnakumar, Sandeep, TM Yunus Khan, **C. R. Rajashekhar**, Manzoore Elahi M. Soudagar, Asif Afzal, and Ashraf Elfakhany. "Influence of Graphene Nano Particles and Antioxidants with Waste Cooking Oil Biodiesel and Diesel Blends on Engine Performance and Emissions." *Energies* 14, no. 14 (2021): 4306.
2. Sudeep Kumar K. S., **C. R. Rajashekhar**, and H. V. Ramyarani. "Effect of Nano Material added Biodiesel Combustion on Durability of Components of Engine and Lubricating Oil Performance." *Design Engineering* (2021): 2318-2331.
3. Manjunath N., **C. R. Rajashekhar**, J. Venkatesh, TM Yunus Khan, Vineet Tirth, and Irfan Anjum Badruddin. "Forensic Studies on Spent Catalytic Converters to Examine the Effect of Diesel and B100 Pongamia Biodiesel on Emissions." *Sustainability* 13, no. 19 (2021): 10729.
4. BV Sunil Kumar, **Neelakantha V. Londe**, M. Lokesh, SN Vasanth Kumar, and A. O. Surendranathan. "Influence of oxidation on fracture toughness of Carbon-Carbon Composites for high-temperature applications." *Frattura ed Integrità Strutturale* 15, no. 58 (2021): 105-113.

5. Reddy Sadhgun, K. Narayan Prabhu, and **U. Vignesh Nayak**. "The Effect of Nanocoatings on Critical Heat Flux (CHF) under Pool Boiling Conditions." *Materials Performance and Characterization* 10, no. 1 (2021): 532-537.
6. Prithivirajan S., Mayur Babu Nyahale, **Gajanan M. Naik**, S. Narendranath, Ashwini Prabhu, and P. D. Rekha. "Bio-corrosion impacts on mechanical integrity of ZM21 Mg for orthopaedic implant application processed by equal channel angular pressing." *Journal of Materials Science: Materials in Medicine* 32, no. 6 (2021): 1-13.
7. Sachin B., Charitha M. Rao, **Gajanan M. Naik** and N. P. Puneet. "Influence of slide burnishing process on the surface characteristics of precipitation hardenable steel." *SN Applied Sciences* 3, no. 2 (2021): 1-13.
8. **Shivaramu H.T, Vignesh Nayak**, and K. S. Umashankar. "Influence of process variables on wear testing of aluminium-silicon/multi-walled carbon nanotubes nanocomposites." *Engineering Research Express* (2022).

## CONFERENCES

1. Mr. Shivaramu H T & Mr. Aveen K P attended "Hexgon MSC Software Indo Pacific User Conference 2021", on 01 & 02 October 2021, organized by Hexagon Software.
2. Mr. Shivaramu H T has presented a paper entitled "Fuel Fraud Detection Device ", in the Recent trends in Mechanical Engineering Sciences, SIT, Mangalore on 10 & 11 June 2022.
3. Mr. Shivaramu H T has presented a paper entitled "Wild Animal Ward-off System- A Review", in the Recent trends in Mechanical Engineering Sciences, SIT, Mangalore from on 10 & 11 June 2022.
4. Dr. Shivaramu H T has presented a paper entitled "Preparation and Performance Investigation of Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and Gr Nanoparticles Dispersed Waste Fish Oil (WFO) Biodiesel", in the ICRDME- 2022 at SIT, Tumakuru on 24 & 25 June 2022.
5. Dr. Shivaramu H T attended Recent Innovations in Mechanical Artificial Intelligence and Bio-Mechanical Engineering - ICRIMAIBE 2022 held at Navodaya Institute of Technology, Raichur during 29<sup>th</sup> and 30<sup>th</sup> July 2022.

## FDP/WORKSHOP

1. Dr. C R Rajashekar, Mr. Shiavaramu H T, Mr. Vikranth Kannath, Mr. Swaroop, Mr. Yajnesh P, Mr. Sridhar D R & Mr. Santhosh Acharya, attended "Electric Vehicles" 5 Day ATAL online FDP from 04 - 08/10/2021, organized by MITE, Moodabidri, Karnataka.
2. Dr. Vignesh Nayak Ullal, Mr. Aveen K P & Mr. Vikranth Kannath attended "Novel Materials: Advances and applications" 5 Day ATAL online FDP from 24 - 28/09/2021, organized by National Institute of Technology, Raipur.
3. Dr. Neelakantha V Londe & Dr. Mohan Kumar, attended "Inculcating Universal human values in technical education" 5 Day ATAL online FDP from 04 -08/10/2021, organized by AICTE, New-Dheli.

4. Mr. Shivaramu H T, Mr. Vikranth Kannath, attended "Sustainability in Materials, Manufacturing and Logistics: Opportunities and Challenges" 3 Day online workshop from 20 -22/09/ 2021, organized by SIT, Tumkur, Karnataka.
5. Mr. Aveen K P, attended "MATLAB onramp self-paced training course" online workshop from 18 - 30/09/2021, organized by Mathworks.
6. Mr. Swaroop, attended "Agri Entrepreneurship" 5 Day online workshop from 23 - 27/08/2021, organized by Entrepreneurship Development of India.
7. Mr. Sridhar D R, attended " Productivity Enhancement through Effective stress management" 5 Day online workshop from 15 - 19/10/2021, organized by IIT- Gawahati.
8. Dr. Neelakantha V Londe, Dr. shivaramu H T, Mr. Aveen K P, Dr. Kalinga T, Mr. Sridhar D R & Mrs. Mamatha K M, attended "A new era of manufacturing-Challeneges and opportunities", 5 Day online FDP from 25 - 30/07/2022, organized by D Y Patil college of engineering & Technology , Kholapur.
9. Dr. Mohan Kumar, attended "Role of Material Science in the continual progress of engineering and technology" 4 Day online FDP from 28 - 31/03/2022, organized by VCET, Puttur, D.K.
10. Mr. Shivaramu H T, attended "Academic writing" 5 Day online FDP from 04 - 08/04/2022, organized by SJEC, Mangalore, D.K.
11. Mr. Shivaramu H T, Mr. Sridhar D R & Mr. Santhosh Acharya attended "Introduction to ROBCAD" 3 Day workshop from 05 - 07/04/2022, organized by MITE, Moodabidri, D.K

## ONLINE COURSES

1. Shivaramu H T, completed Four weeks (March 2022) "Six Sigma and the Organization " online course in Coursera.
2. Mohan Kumar, completed Seven weeks (Aug. 2021) "Python for Everybody" online course in Coursera.

## Ph.D. Awarded



Dr. Sunil Kumar B V  
USN: 4MT16PMJ04

The Research Scholar Mr. Sunil Kumar B V who had registered in the R & D center, Department of Mechanical Engineering, MITE received a Ph.D. degree from V T U for the research work on **"Fracture Characterization of Carbon-Carbon Composites"** under the guidance of Dr. Neelakantha V Londe, Professor, Department of Mechanical Engineering.



Dr. Sunil Kumar S  
USN: 4MT15PMJ03

The Research Scholar Mr. Sunil Kumar B V who had registered in the R & D center, Department of Mechanical Engineering, MITE received a Ph.D. degree from V T U for the research work on **"A study on influence of corrosive environment on Fracture properties of high strength metallic materials"** under the guidance of Dr. Neelakantha V Londe, Professor, Department of Mechanical Engineering.

## PATENTS

S.No	Title of the Invention	Inventors form the institute	Application No & Date of Filing
1	Ceiling Fan Mechanically Extending Connecting Tubes	Dr. M S Ganesha Prasad Mr. Shivaramu H T Dr. Vignesh Nayak Ullal	Published Journal No. 15/2022 Dated: 15/04/2022
2	A Smart Crop Rescuer – From Animals	Mr. Shivaramu H T Mr. Chinmay N Naik Dr. Mohan Kumar Mr. Sridhar D R Mr. Madhusudhan B	Application No: 202241019615 Dated 31-03-2022
3	Detachable Electric Wheelchair Bike for Physical Disabled Person	Mr. Ashwin Mr. Deekshith Mr. Suhas S Mr. Dhanush Shetty Mr. Sridhar D R Mr. Shivaramu H T	Published Journal No. 12/2022 Dated: 25/03/2022
4	Single Window Automate Ration Vending Machine For APL/BPL Cardholders	Mr. Snehal Pradeep Shet Ms. Supritha S Mr. Mohammed Gouse Mr. Mohammed Sahad Mr. Madhusudhan B Mr. Shivaramu H T	Published Journal No. 12/2022 Dated: 25/03/2022
5	Black Pepper Plucking and Separating machine	Dr. Mohan Kumar Dr. Neelakantha V Londe Mr. Shivramu H T	Published Journal No. 12/2022 Dated: 25/03/2022

## Indian Institute of Production Engineers



Department faculty members Dr. Rajashekara C R, Dr. Mohan Kumar, Dr. Vignesh Nayak Ullal, Mr. Sridhar D.R., Smt. Mamtha K M, Dr. Kalinga T and Dr. Sachin S Jadhav have registered for Indian Institute of Production Engineers as a life member.

## SPORTS

Students of Mechanical Engineering Department were participated in the following games as a member in the college team.

- Table Tennis team has participated in the VTU intercollegiate Mangalore Zone Competition held at SMVITM Bantakal, from 24<sup>th</sup> to 25<sup>th</sup> November 2021 & has secured 2<sup>nd</sup> place & qualified for VTU single zone.
- Volleyball Team has participated in the VTU Single Zone Intercollegiate tournament held at VCET Puttur, from 29<sup>th</sup> to 30<sup>th</sup> November 2021.



Table Tennis team



Football Team

- Hockey Team has participated in the VTU Single Zone Intercollegiate tournament held at NMAMIT Nitte, Karkala, on 17<sup>th</sup> December 2021.
- Football Team has participated in the VTU Single Zone Intercollegiate tournament held at YIT Moodabidri, from 27<sup>h</sup> to 28<sup>th</sup> December 2021.

## EDITORIAL BOARD



Dr. C R Rajashekahar  
HOD & Vice Principal  
Chief Editor



Dr. Shivaramu H T  
Sr. Assistant  
Professor  
Editor



Mr. Raeid  
4MT19ME024  
Student Editor



Mr. Merwyn Pinto  
4MT19ME014  
Student Editor

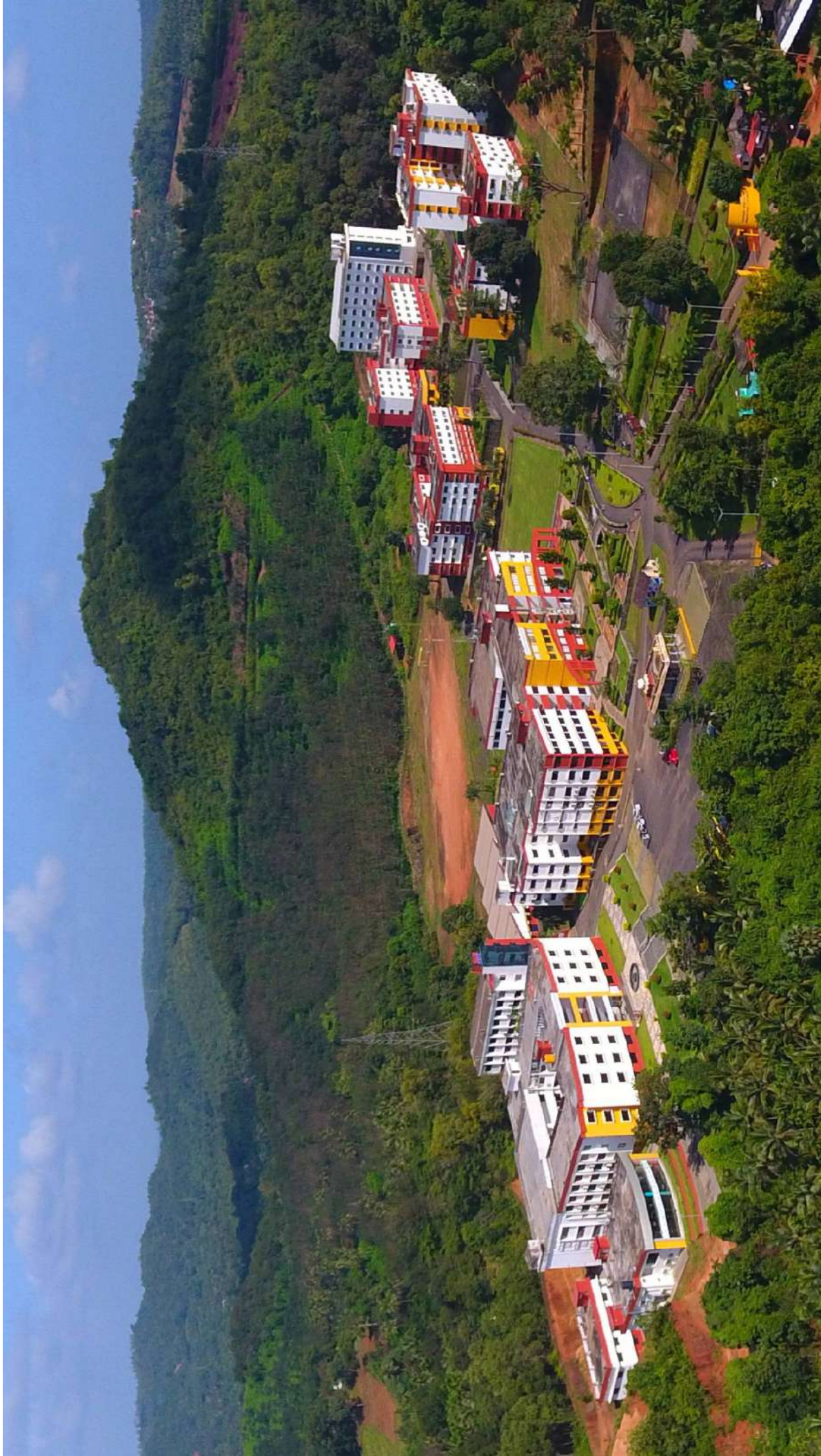


Mr. Hariprasad C  
4T20ME008  
Designer





**Mechanical Engineering: 2022 Outgoing Batch**



**MITE**

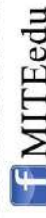


**Invent Solutions**

## **Mangalore Institute of Technology & Engineering (MITE)**

Mijar, Moodbidri, Mangalore, Karnataka. Ph: 08258-262695

E-mail: [info@mite.ac.in](mailto:info@mite.ac.in)



MITEedu

Website: [www.mite.ac.in](http://www.mite.ac.in)

## **Rajalaxmi Education Trust**

Souza Arcade, Balmatta Road, Mangalore, Karnataka.

Ph: 0824-2441581, 2441582

Fax: 0824-2441581

E-mail: [info@ret.ac.in](mailto:info@ret.ac.in)