



SAPTHAGIRI COLLEGE OF ENGINEERING

ROYAL BEATS

DEPARTMENT OF MECHANICAL ENGINEERING

VISION

To create academically excellent and globally competent Mechanical professionals with ethical and human value.

MISSION

To impact quality technical education to build strong foundation in Mechanical Engineering domain with industry training and research by including team spirit and leadership qualities to support technological development and innovation in global environment.

Principals Desk,



Its indeed very happy to bring out newsletter “ROYAL BEATS” by the department of of Mechanical Engineering. It is a platform provided by department of ME for its faculty and student members where they can share the knowledge, experience and talents in terms of written articles and I would like to compliment and congratulate the department of ME and its editorial team for the contribution in bringing out news letter.

Administrative Officers Desk,



It gives immense pleasure to note that ME Department of our college bringing out newsletter for the month November-2018. I am sure this newsletter provides an opportunity to the students and faculty of the department to project their talents through articles, reports of the various academic and extracurricular programmes. I congratulate the editorial committee of the newsletter for their efforts.

HODs Desk,

The ROYAL BEATS is a great way to stay connected with the mechanical department. Our aim is to create a platform to exchange information on all aspects of mechanical engineering, the original articles on innovation, and achievements by the faculty, students, alumini etc. are invited.

National and International Journal Publications.

Sl.No	Author(s)	Title	Journal name/publisher name	Year
1	T.Venkategowda, Anil Kumar P R	Natural Fiber Reinforced Polymer Composites For Automotive Industry-A Expatiate Review	IJRAME	2017
2	Ram Kumar M	Numerical Analysis Of Tensile Properties Of Unidirectional Coir Fiber Reinforced Epoxy Composite Laminate	IJRAME	2017
3	Basavaraj Ganiger	Dry Sliding Wear Behaviour of Commerical A393 alloy by the addition of phosphorus	MacGraw Hill Publication	2017
4	Mr.T VenkateGowda, Mr.Anil Kumar P R	Effect of fiber volume on mechanical properties of Alkali treated unidirectional long kenaf fiber with egg shell powder reinforced polymer matrix composites	ISSN:2278-0181	June 2017
5	Mr.Ram Kumar M	Fabrication of Semi-Automated Arc Welding Machine	e-ISSN:2278-0181	June 2017
6	Mr.T VenkateGowda, Mr.Anil Kumar P R	Fabrication and experimental investigation of mechanical Graphene/Silica epoxy nano composites	e-ISSN:2395-0056, p-ISSN:2395-0072	June 2017
7	Mr.T VenkateGowda, Mr.Anil Kumar P R	Design of fixture for Gear cover component machining on VMC	ISSN:2456-7655	June 2017

8	P.Raghuthama Rao	Usage Of Ethanol Blended Petrol: Experimental Investigations of reduction in Pollution Levels In SI Engine	ISSN:22311963	June 2017
---	------------------	---	---------------	-----------

CONFERENCES

Sl.No	Author(s)	Title	Conference name	Organized by	Place	Date
1	T.Venkategowda, Anil Kumar P R	Natural Fiber Reinforced Polymer Composites For Automotive Industry-A Expatiate Review	ETME -2017 (Emerging Trends in Mechanical Engineering)	CIT	Mandya	27th & 28th December 2017
2	Ram Kumar M	Numerical Analysis Of Tensile Properties Of Unidirectional Coir Fiber Reinforced Epoxy Composite Laminate	ETME -2017 (Emerging Trends in Mechanical Engineering)	CIT	Mandya	27th & 28th December 2017
3	Mr.Madhukumar	Evaluation of Sliding Wear Behaviour of Glass Particle Reinforced Aluminum alloy 6061 Metal Matrix Composites	ICERTMCE-2017	Reva university	Reva university, Bengaluru	6,7 July 2017
4	Mr.Basavaraj Ganiger	Dry Sliding Wear Behaviour of Commerical A393 alloy by the addition of phosphorus	International conference on Emerging Research in Civil, Aeronautical and Mechanical Engineering (ERCAM-17)	Nitte Meenakshi Institute of Technology, Bengaluru	Nitte Meenakshi Institute of Technology, Bengaluru	21 July 2017

INVITED TALKS DELIVERED BY THE FACULTY

Sl. No.	Faculty Name	Title of the Lecture	Date	Venue	Participants (faculty/students)	No. of Participants
1.	P.Raghut hama Rao	GPS system of satellites by ISRO	5th Jan 2018	JNTUA, Ananta pur	PG students of CS & EC of JNTUANatapur, An dhra Pradesh	50 students & few faculty of EC <CS & Mechanical(vice Principal)

WORKSHOP

Sl. No.	Name of the Faculty	Title of the workshop/ Conference	Organized by	Date and Venue	Outcome of the programme
1.	Basavaraj Ganiger	An overview of Teaching Techniques in Applied Thermodynamics	VTU-HRD Cell	CPGS, Muddenahalli, Chikkaballapura	Exposed and discussed some more Teaching Techniques in ATD
2.	Dr.P.Mahadevas wamy Dr.Tulsidas D,Ullas, Venkatarajesh	One Day Workshop on VTU Curriculum Design for 1st year BE	VTU	09/05/2018 BNMIT,Bangalore	Discussion on 1st year subjects like CAED,Workshop and EME
3.	Basavaraj Ganiger	International Conference on Sustainable Engineering and Technology (IconSET-2018)	ACS College of Engineering	19th-20th April 2018 ACS College of Engineering Bangalore	Research work is explained to audience and some more new ideas are received for further improvement

Achievements by Students

Varsha D Secured VTU 5th Rank.

PLACEMENT DETAILS

Total number of students Placed: 12

SL.NO.	COMPANY NAME	PACKAGE	DATE	No of students Placed	Details of students (Name and USN)
1.	Maintec Technologies	3.00 Lacs	24/10/2017	3	Arun KV (1SG14ME014) C R Abhiram (1SG14ME021) Clement Ryan Menzes (1SG14ME029)
2.	VEE Technologies	4.00 Lacs	13/10/2017	3	Srikanth Reddy (1SG14ME107) Tejasvi Singh 1SG14ME114 Bhanuprakash (1SG14ME017)
3.	BYJUS	9.00 Lacs	10/11/2017	2	AdityaKulkarni 1SG14ME007 Tejasvi Singh 1SG14ME114
4.	Enginium Designs Pvt ltd	As per industry standards	1/03/2018	3	Aravind Kumar K (1SG14ME013) Bhanuprakash (1SG14ME017) Clement Ryan Menzes (1SG14ME029)
5.	Pin Click	4.60Lacs	31/01/2018	1	SIDDARTH VIKRAM SINGH 1SG15ME421


Published students works:



Samples of Publication:

International Journal of Advanced Engineering and Technology

International Journal of Advanced Engineering and Technology
 ISSN: 2456-7655
 Impact Factor: RJIF 5.54
 www.newengineeringjournal.com
 Volume 2; Issue 2; May 2018; Page No. 01-03



Design and fabrication of remote controlled lawn mower

Varsha D¹, Vasavi Suresh², Prasad Hegde³, Satish Balachandra Gummani⁴, Anil Kumar PR⁵, T Venkategowda⁶

^{1,2,3,4} Bachelor of Engineering in Mechanical engineering, Sathagiri College of Engineering, Bangalore, Karnataka, India
^{5,6} Assistant Professor, Sathagiri College of Engineering, Bangalore, Karnataka, India

Abstract

An automatic lawn mower is a device or a robot which helps human to cut grass automatically. Rapid growth of various high-tech tools and equipment makes our job done comfortable and sophisticated. This project considers the implementation of a robot which can be operated wirelessly using Bluetooth technology. Every action of the lawn mower is controlled by the microcontroller which eliminates the use of perimeter wires to maintain the robot within the lawn. In addition, the project aims at fabricating a lawn mower which makes the grass cutter motor run through solar energy. The electricity requirement of the world is increasing at an alarming rate due to industrial growth, increased and extensive use of electrical gadgets. Hence solar energy is the best alternative source. This project will reduce environmental and noise pollution. Its prototype is user friendly, cost efficient and environmental friendly.

Keywords: grass cutter, solar, motor, battery, arduino, etc.

International Journal of Engineering Research & Technology (IJERT)
 ISSN: 2278-0181
 Vol. 7 Issue 05, May-2018

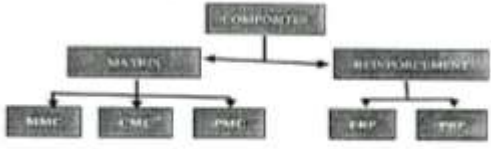
Evaluation of Mechanical Properties of Polymer Composites Reinforced with Jute Mat Fiber and Egg Shell Powder for Ligaments and Tendons Replacement

Manoj M Bhat¹, Madhu Niranjan H T², Aksheth³, Namit S Naik⁴
 U.G. Students,
 Department of Mechanical Engineering,
 Sathagiri College of Engineering, Bangalore,
 Visvesvaraya Technological University,
 Belagavi, Karnataka.

T. Venkate Gowda⁵, Anil Kumar P R⁶
 Assistant Professors,
 Department of Mechanical Engineering,
 Sathagiri College of Engineering, Bangalore,
 Visvesvaraya Technological University,
 Belagavi, Karnataka.

Abstract — In this present world scenario composite materials have a wide range of applications, but we are basically concerned over their medical applications. Fiber reinforced composite materials comprises of fiber embedded in matrix materials, which are discontinuous fiber or short fiber composites. These composites have a better bending, buckling and good tensile properties. Of the commonly available annual crop fibers jute contains one of the highest proportions of HFE natural cellulose, approximately 75 wt %. Jute may be combined with phenolic, epoxy and polyester resins to form composite materials, and it has been laminated with glass fiber to form hybrid composites. Further to enhance their flexural strength, jute fiber is treated with urea. The composite fiber is incorporated with egg shell powder to increase the tensile strength and bending properties, because greater the filler contents higher are the properties.

1.2 Classification of Composites



```

    graph TD
      A[COMPOSITE] --> B[MATRIX]
      A --> C[REINFORCEMENT]
      B --> D[MMC]
      B --> E[CMC]
      B --> F[PMC]
      C --> G[FRP]
      C --> H[CFRP]
    
```

1.2.1 Basic Types of Composites

GO KART



Editors:

Dr.P.Mahadevaswamy, Prof. Pratima,
Mr.Ajeya.V