

NADAR SARASWATHI COLLEGE OF ENGINEERING & TECHNOLOGY VADAPUDUPATTI, THENI – 625 531 DEPARTMENT OF MECHANICAL ENGINEERING BEST PROJECTS AWARDED

S. No.	Academic Year / Sem.	Project Title	Project Members	Project Guide	Project Description	Snapshot
1	2014-15 / VIII	Design and Fabrication of Robot from Waste Material	Siva R Sakthiraj M Sakthivel Prasath S Vigneshwaran R Gowtham G Sudhagar L Sankar MohammedIbrahim M		In our day to day life, there are so much material become wasted. From that wasted material we form an 8 feet robot. This robot further planned to fully automatic. If we produced that robot in automatic means, It helpful for many of the work.	
2	2014-15 / VIII	Development of Three axes Lifting Modern Trailer		Mr. A.VembathuRajesh	Trailer has lots of applications in today's world. In industrial and domestic considerations, tippers can pull a variety of products including gravel, grain, sand, fertilizer, heavy rocks, etc. By considering wide scope of the topic, it is necessary to do study and research on the topic of tipper mechanism in order to make it more economical and efficient. For making tipper mechanism with such above conditions hydraulic jack mechanism can be used.	

3	2014-15 / VIII	Design and Fabrication of Hydrogen Fueled Vehicle	Balakumar G Mohammed Ibrahim M Sakthiraj M Sakthivel Prasath S	Mr. J. Rajasekaran	In our day to day life, there are so much pollutions occurs through non-conventional fuel techniques and it leads to global warming. So we need an alternative fuel for vehicles. We are using hydrogen as a alternative fuel in our project using this approach, pollution is controlled to the optimal level. In future, this would be one of the better alternative sources in our green world.	
4	2014-15 / VIII	Performance & Emission Characteristic s of Diesel Engine by using Neodymium Magnet	Gowtham G Manoj M Lingamoorthy M	Mr. J. Rajasekaran	The current research investigates the Performance and Emission characteristics of Single Cylinder Four Stroke Diesel engine under the influence of Neodymium magnet. The strong Neodymium permanent magnet of strength 6000 gauss is applied to fuel line as magnetic field. At different engine load conditions the experiments are conducted. An exhaust gas analyzer is used to measure the exhaust gas emissions such as CO ₂ , HC and NOX. With the application of magnetic field the percentage reduction in fuel consumption is about 9.5% at higher load, the percentage reduction in HC and NOX is about 39% and 31% respectively. The percentage reduction in CO ₂ emissions is reduced about 17% at average of all loads with the effect of magnetic field.	
5	2014-15 / VIII	Design of Four wheel steering system using Rack & Pinion	Eswaran M Siva R Vigneshwaran R	Mr. R. Santhaseelan	Four wheel steering mechanism is used to increase vehicle's steering response. It increases the stability of vehicles and to decrease the turning radius of the vehicle compared with normal two wheel steering. The main aim of this project is to turn the rear wheels out of phase with respect to front wheels.	

6	2015 - 16 / VI	Automatic Side stand Removal	M. Karthick Jegan Raj N Jegadeeshwaran M Praksh M	Mr. V. Sivaganesan	The presently available bike in the market are without automation of side stand removal The prices of this system is same as that of normal bike. This system is very useful to the human for avoiding accident while on driving.	
7		Design and Fabrication of Smart Folding Bike		Mr. J. Rajasekaran	The presently available foldable bike in the market are made up of heavy materials which make them difficult to carry and uses battery to run. The prices of bike are also affordable to the common man .some of them a complex because of which their transportation becomes very difficult. It also leads to lot of difficulty. We aims at evaluating the exiting foldable bike in the market and inventing the folding bike runs using the spark ignition engine. The proposed vehicle is designed in such a way that it will be foldable by providing fasteners at the joints. The design structure impacts stable bike geometry. This system meets different topography and environmental conditions which are not met by the exiting foldable bike .It will be in low cost when it compared to other folding bikes.	

8	2015-16 / VIII	Design and Fabrication of Bore well Rescue Robot arm Using Gear System	Ashok kumar T Suresh L Thiruhari G Vijaysam M S	Mr. V. Sivaganesan	The project is used to rescue the child which fell down into the bore well hole. The children having the age of 2 to 4 years who are playing near the open bore well may fall into the dig. We are 'bore well. The robot is designed in such a way that it accommodates the size of the child and the bore well. The bore well hole in which the child would fall is at the major diameter of 12 inch. Since the present procedure is a tedious and a time consuming one, there is a need to have a robot which safely lifts the child from the bore well hole at faster rate. In order to overcome thus difficulties in the present method we are going to design and fabricate the portable robot using simple mechanical components to lift the child.	
9	2016 - 17 / VI	Design and Fabrication of Solar Car	Prem Kumar K Raja Prabu M Vasudevan T Gowtham S Harish M S Kathir kumar P Saravana R Sivanarayanan P BalaSubramaniyan M Gowtham S Abishek J Mathan kumar S Aathi Balan.K Ashok Gowtham. P Gowtham.S (1.01.1997)	Mr. A. VembathuRajesh	In these modern days, solar vehicles are well known for its efficiency, it would be a cost saving choice compared to the internal combustion engine car. Due to its advantages such as silent engines, zero emission which is totally green to the environment, we were designed and fabricated the solar car which is capable of handling load of 200kg.	

10	2016 – 17 / VI	Design and Fabrication of Portable Power Operated Lift	Sabarish A Pandi P Rajkumar D Raja Christober A Nagenthira Balaji K Nirmal Pandi P Mohamed Imran Khan Rajeshkumar. A Sakthiraj. I Vignesh. J Vivekananda. N Edwin. F	Mr. P. Surulimani	In today's world, the ladder plays a vital role in modern manufacturing industries. In our project we aim to fabricate a hand drilling operated portable lift for handling various kinds of heights. The lift reduces the workers fatigue and increases the overall efficiency of working with good safety. The lift is fabricated with complete clear front, compact frame, good reach, high lift, high strength and with low center of gravity. The lift has the capacity of lifting 250kg with wide spread application in the lift to work in both open space and near the buildings. This portable lift would serve as a safe and versatile working model.	
11	2016-17 / VIII	Design and Testing of Hybrid Fibre for Bullet Proof	Jegadeeshwaran M Jegan Raj N Sivakumar R Sivaprakash P	Mr. A. VembathuRajesh	In recent days, the composite became the most popular in various field of application. Where they have high strength and comparatively very low weight. Thus, there is more advantage in composite material. We have chosen hybrid fibre material for our project and to test it. The hybrid fibre consists the layers of carbon fiber and glass fibre. The carbon fibre is one which have more strength with respect to weight ratio. The glass fibre has the property to withstand high temperature. Thus, the hybrid fibre material is tested for bullet resistance to alter the existing material in ballistic plate in TYPE 1 body armour vest. By this the weight of armour is reduced and strength in increased.	