

# ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

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Recognized by UGC under section 2(f) and 12(B) of UGC Act 1956.

Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled "PROTOTYPE OF COLOUR BASED SORTING SYSTEM USING GANTRY BASED PARALLEL LINK SERIAL MANIPULATOR" Submitted by

A KAUSHIK	19P31A0301
M GURU RAGHAVENDRA	20P35A0332
M VINAY AKHIL	20P35A0343
P SIDDARDHA KRISHNA	20P35A0312
L JAYARAM KRISHNA	20P35A0311

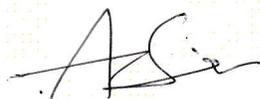
in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2020-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
**PROJECT GUIDE**

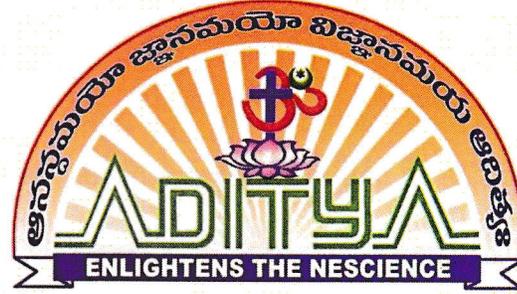
Dr. T SRIHARI, M.Tech, Ph.D  
Professor  
Dept. of Mechanical Engineering

  
**HEAD OF THE DEPARTMENT**

Dr. DANAIHAH PULI, M.Tech, Ph.D  
Professor & Head  
Dept. of Mechanical Engineering

  
EXTERNAL EXAMINER

ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY  
DEPARTMENT OF MECHANICAL ENGINEERING



**CERTIFICATE**

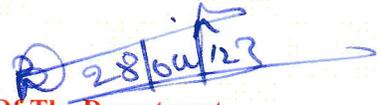
This is to certify that the project report entitled "**PERFORMANCE STUDY ON  
HEXAGONAL SOLAR STILL USING WICK MATERIALS**" submitted by

SAKIB ALI	19P31A0313
BUDDARAJU AMAR SIVA	20P35A0325
MOTHUKURI SRI HARI	20P35A0321
T.S. DURGA CHALAPATHI	20P35A0331
KANTA VENKATA RAMANA	20P35A0326

In a partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

Project Guide

  
DR. PAVAN KUMAR M.Tech,  
Assistant Professor  
Dept. of Mechanical Engineering

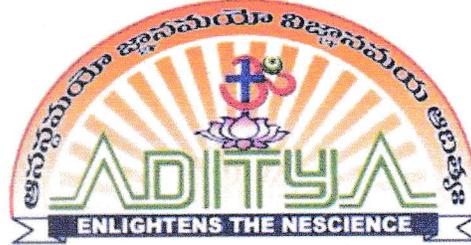
  
Head Of The Department

Dr. DANAI AH PULI, M.Tech, PhD  
Professor & Head  
Dept. of Mechanical Engineering

  
External Examiner

# ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled “Automatic tire pressure inflation system” Submitted by

<b>PINDIPROLU SURYA GANESH</b>	<b>19P31A0310</b>
<b>YELURI RAGHU NAVEEN KUMAR</b>	<b>20P35A0318</b>
<b>GUDE DEVENDRA KUMAR</b>	<b>20P35A0319</b>
<b>MAMIDI P D S R CH SAGAR PRABHU</b>	<b>20P35A0327</b>
<b>DEWARSHI KALITA</b>	<b>19P31A0305</b>

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year **2022-2023**. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

#### **PROJECT GUIDE**

**Dr. P. GANGADHARA RAO, Ph.D.**  
Associate Professor  
Dept of Mechanical Engineering

#### **HEAD OF THE DEPARTMENT**

**Dr. DANAI AH PULI, M.Tech, Ph.D.**  
Professor & Head Dept of  
Mechanical Engineering

**EXTERNAL EXAMINER**

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Surampalem, E.G. Dist., AP – 533 437.

DEPARTMENT OF MECHANICAL ENGINEERING



## CERTIFICATE

This is to certify that the project report entitled  
“EXPERIMENTAL INVESTIGATION ON THE EFFECT OF PINE OIL AS AN  
EMULSIFIER ON GASOLINE-ALCOHOL BLENDS IN MULTIPOINT FUEL INJECTION  
SI ENGINE ”

Submitted by BANDARU ASHOK bearing Roll no: **19P31A0302**, GEORGE MELANGTON bearing Roll no: **19P31A0306**, SATYA SAI KUMAR bearing Roll no: **19P31A0308**, SURYA MANIKANTA bearing Roll no: **19P31A0311**, BURRA SATISH bearing Roll no: **20P35A0314** in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year **2022-2023**. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

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**PROJECT GUIDE**

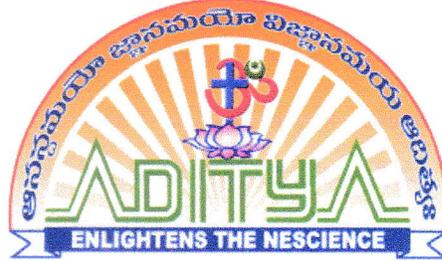
*Des/04/12*

**HEAD OF THE DEPARTMENT**

*ASi*

**EXTERNAL EXAMINER**

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify that the main project work entitled “**INVESTIGATION ON MECHANICAL PROPERTIES AND CORROSION CHARACTERIZATION OF STIR CASTING LM13 ALUMINIUM ALLOY ZrB<sub>2</sub>-TIC PARTICULATE HYBRID COMPOSITES**” being submitted by

<b>KALLA TATAJI</b>	<b>20P35A0334</b>
<b>TUTTA CHANDRA MOHAN</b>	<b>20P35A0328</b>
<b>MAVUDURI NAGENDRA</b>	<b>20P35A0330</b>
<b>VANASETTI. V. DURGA PRASAD</b>	<b>20P35A0322</b>
<b>SURAKASULA SUDHEER</b>	<b>19P31A0314</b>

In a partial fulfilment of the requirement for the award of the B. Tech degree in Mechanical Engineering for the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

**Project guide**



**Dr. N. STANLEY EBENEZER**, M. Tech, Ph. D.

**Assistant Professor**

**Dept of Mechanical Engineering**

**Head of the Department**



**Dr. DANAIAH PULI**, M. Tech, Ph.D.

**Professor**

**Dept of Mechanical Engineering**



**External Examiner**

# ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF MECHANICAL ENGINEERING



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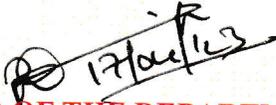
This is to certify that the project report entitled **VISION BASED INVERSE KINEMATICS OF SERIAL ROBOTIC MANIPULATOR** being submitted by

<b>D.YASWANTH SAI KIRAN</b>	<b>20P35A0316</b>
<b>K. VENKATESWARA RAO</b>	<b>20P35A0308</b>
<b>G. MURALI KRISHNA</b>	<b>20P35A0307</b>
<b>G. ARAVIND</b>	<b>20P35A0306</b>
<b>N. DURGA RAO</b>	<b>20P35A0310</b>

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
**PROJECT GUIDE**

**Dr. CH. V V M J SATISH**, M.Tech, Ph.D  
Assistant Professor  
Dept. of Mechanical Engineering

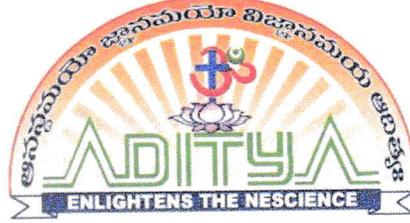
  
**HEAD OF THE DEPARTMENT**

**Dr. DANAI AH PULI**, M.Tech, Ph.D  
Professor & Head  
Dept. of Mechanical Engineering



**EXTERNAL EXAMINER**

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify that the project report entitled "DESIGN & FABRICATION OF FOLDABLE E-BICYCLE" Submitted by

<b>PENKE DEVI PRASAD</b>	<b>19P31A0309</b>
<b>SAKAMURI RAVINDRA NAGA PRASAD</b>	<b>19P31A0312</b>
<b>SK JAFEER AHMED</b>	<b>20P35A0302</b>
<b>B KARTEEK DAMODHAR RAO</b>	<b>20P35A0335</b>
<b>G SATYA CHANDRA NAGA SAI RAM</b>	<b>20P35A0336</b>

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

**PROJECT GUIDE**

Mr. M. RAMBABU, M.Tech  
Assistant Professor  
Dept of Mechanical Engineering

**HEAD OF THE DEPARTMENT**

Dr. DANAIHA PULI, M.Tech, P.h.D.  
Professor & Head  
Dept of Mechanical Engineering

**EXTERNAL EXAMINER**

ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY  
DEPARTMENT OF MECHANICAL ENGINEERING

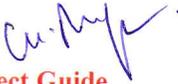


CERTIFICATE

This is to certify that the project report entitled “**FABRICATION OF POWER GENERATION USING SHOCK ABSORBER**” submitted by

J.S. SIVA KUMAR	20P35A0320
V.K.N. VENKATA SAI	20P35A0303
K. GOVINDHA	20P35A0324
M. DURGA PRASAD	20P35A0333
K. PAVAN KUMAR	20P35A0305

In a partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
Project Guide

Mr.CH.RAM PRASAD M.S., M.Tech  
Assistant Professor  
Dept. of Mechanical Engineering

  
Head Of The Department  
Dr. DANAI AH PULI, M.Tech, Ph.D  
Professor & Head  
Dept. of Mechanical Engineering

  
External Examiner

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Surampalem,  
East Godavari-II.Dist., AP-533437  
2022-2023

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the project report entitled “**Performance and Emission Control testing of the fuel-alcohol-additive mixture using in spark ignition engines**”

Submitted by

MAGA JAYESH	20P35A0309
VEDURUVADA BALAJI	20P35A0304
PODUGU DHRMATEJA	20P35A0301
ADABALA SUNIL KUMAR	20P35A0329
KARIPIREDDY NAGESWARA RAO	20P35A0313

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

**PROJECT GUIDE**

Dr. DANAI AH PULI, M.Tech, Ph.D  
M.Tech, Ph.D, Professor & Head  
Dept. of Mechanical Engineering

**HEAD OF THE DEPARTMENT**

Dr. DANAI AH PULI,  
Professor & Head  
Dept. of Mechanical Engineering

ASi

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Surampalem, E.G. Dist., AP – 533437

DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify that the project report entitled “Design, analysis and fabrication of portable pneumatic vice” Submitted by

A. PRAKASH	20P35A0358
N. NAGA SURESH	20P35A0355
T. M N V BRAHMARAJU	20P35A0384
Y. MAHESH BABU	20P35A0338
K. SAJEEVREDDY	20P35A0367

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
PROJECT GUIDE

  
HEAD OF THE DEPARTMENT

  
EXTERNAL EXAMINER

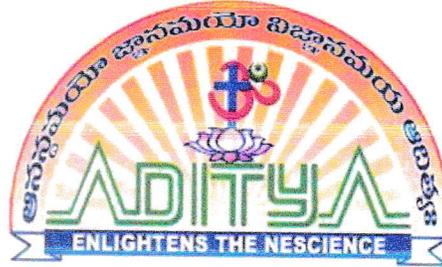
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Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “**DESIGNING PROTOTYPE OF OMNI DIRECTIONAL WHEEL BASED ROBOT IMPLEMENTING PATH PLANNING ON THE OCCUPANCY GRID MAP**” Submitted by

<b>V VENKATESH</b>	<b>20P35A0350</b>
<b>T RAJESH</b>	<b>20P35A0339</b>
<b>S NAGA VAMSI</b>	<b>20P35A0346</b>
<b>B VINAY KUMAR</b>	<b>20P35A0365</b>
<b>CH S V ATCHUTH</b>	<b>20P35A0374</b>

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year **2020-2023**. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

**PROJECT GUIDE**

Mr. P JAI KISAN, M.Tech

Assistant professor

Dept. of Mechanical Engineering

**HEAD OF THE DEPARTMENT**

Dr. DANAI AH PULI, M.Tech, PhD

Professor & Head

Dept. of Mechanical Engineering

**EXTERNAL EXAMINER**

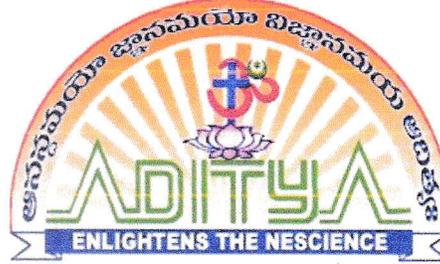
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Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “3D PROTOTYPE OF A LOW-COST SPHERICAL PARALLEL MANIPULATOR” Submitted by

S RAVI CHANDRA	20P35A0389
P VASU DEVA	20P35A0357
T V V SAI KRISHNA	20P35A0364
B UDAY KIRAN	20P35A0376
CH THARUN CHAKRAVARTHY	20P35A0375

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2020-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

### PROJECT GUIDE

Mr. A CHIRANJEEVI V S PRASAD, M.Tech

Assistant professor

Dept. of Mechanical Engineering

### HEAD OF THE DEPARTMENT

Dr. DANAI AH PULI

Professor & Head

Dept. of Mechanical Engineering

B. J. S. S.  
EXTERNAL EXAMINER

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**  
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DEPARTMENT OF MECHANICAL ENGINEERING

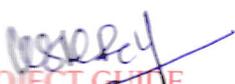


### CERTIFICATE

This is to certify that the project report entitled “FABRICATION OF AIR  
CONDITIONING CUM WATER DISPENSER SYSTEM WITH THERMOSTAT”  
Submitted by

<b>RAJANA SIVA</b>	<b>20P35A0381</b>
<b>BODDEDA SAI GANESH</b>	<b>20P35A0380</b>
<b>NEELAPU LOK SATHISH</b>	<b>20P35A0386</b>
<b>CHITROTHU J. S.PRASAD</b>	<b>20P35A0370</b>
<b>DASARI MOHAN</b>	<b>20P35A0377</b>

In partial fulfillment of requirement for the award of Bachelor of Technology degree in  
Mechanical Engineering during the academic year 2022-2023. The results embodied in  
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award of any degree or diploma.

  
**PROJECT GUIDE**

**Mr. V. SIVA NAGI REDDY**

Assistant professor

Dept. of Mechanical Engineering

Date: 15/4/23

  
**HEAD OF THE DEPARTMENT**

**Dr. DANAIAH PULI**

Professor

Dept. of Mechanical Engineering

Date:



**EXTERNAL EXAMINER**

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under section 2(f) and 12(B) of UGC Act 1956.

Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “Design Modification And Simulation Of Thermo Acoustic Refrigerator” Submitted by

S SANDEEP LAKSHMAN KUMAR	20P35A0387
B VIJAY KANTH	20P35A0340
A MAHESH	20P35A0341
V SUNEEL	20P35A0368
B SRINU	20P35A0371

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
**PROJECT GUIDE**  
Mr. ABDUL ARIF, M.Tech. (Ph.D)  
Assistant professor  
Dept. of Mechanical Engineering

  
**HEAD OF THE DEPARTMENT**  
Dr. DANAI AH PULI  
Professor & Head  
Dept. of Mechanical Engineering

  
EXTERNAL EXAMINER

# ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

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Surampalem, E.G. Dist., AP – 533 437.

DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “**Iot Based Gas Leakage Detector**”  
Submitted by

<b>JYOTHULA RAJESH</b>	<b>20P35A0356</b>
<b>MAGAPATI SURESH</b>	<b>20P35A0349</b>
<b>GANISETTI ANIL KUMAR</b>	<b>20P35A0354</b>
<b>KANURI ATCHYUTHA LAKSHMI MOHITH</b>	<b>20P35A0362</b>
<b>KURRA VINAY KUMAR</b>	<b>20P35A0369</b>

in partial fulfillment of requirement for the award of Bachelor of Technology degree in  
**Mechanical Engineering** during the academic year **2020-2023**. The results embodied in this  
project report have not been submitted to any other institute or University for the award of  
any degree or diploma.

## PROJECT GUIDE

  
Ms. A SWATHI, M.Tech

Assistant professor

Dept. of Mechanical Engineering

## HEAD OF THE DEPARTMENT

  
Dr. DANAIAH PULI

Professor & Head

Dept. of Mechanical Engineering



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Surampalem-533437

2022-2023

**DEPARTMENT OF MECHANICAL ENGINEERING**

**CERTIFICATE**

This is to certify that the Final Year Project report entitled “Thermo Electric Refrigerator”  
submitted by

B.N.V.V. MANI	20P35A0378
CH. NAVEEN	20P35A0352
K. BHANU PRAKASH	20P35A0372
P.SAI KUMAR	20P35A0382
K.SAI SOMA SEKHAR	20P35A0385

Submitted in partial fulfillment of requirement for the award of Bachelor of  
Technology degree in Mechanical Engineering during the academic year 2022-2023.  
The results embodied in this project report have not been submitted to any other  
institute or university for the award of any degree or diploma.

Under the Guidance of

  
**Dr. K. SIVA SATHYA MOHAN** (Associate professor)

**HEAD OF THE DEPARTMENT**

  
**Dr. DANAI AH PULI**, (MTech, Ph.D)

**PROFESSOR & HEAD**

**Dept. of Mechanical Engineering**

  
**EXTERNAL EXAMINER**

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Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “Design and Fabrication of Solar-Operated Automatic Hammering Machine” Submitted by

SHAIK MEERA SUBHAN	20P35A0373
A RAMA DURGA MAHESH	20P35A0383
PAMPANA NAVEEN KUMAR	20P35A0343
KALLA UMA MAHESH	20P35A0361
SUNKRA DORA BABU	20P35A0388

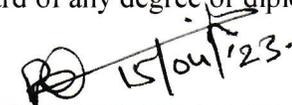
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**PROJECT GUIDE**

Mr. G.V.S SRINIVAS, M.Tech

Assistant professor

Dept. of Mechanical Engineering

  
**HEAD OF THE DEPARTMENT**

Dr. DANAI AH PULI

Professor & Head

Dept. of Mechanical Engineering



EXTERNAL EXAMINER

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Surampalem, E.G. Dist., AP – 533 437.



## CERTIFICATE

This is to certify that the project work entitled “ENHANCEMENT OF HEAT TRANSFER THROUGH PLATE FINS” submitted by

KOPPIREDDY NANI	(20P35A0344)
MATHURTHI SANDEEP	(20P35A0342)
JAVVADI ADITHYA VARDHAN	(20P35A0347)
KARANAM LEELASHANKAR	(20P35A0345)
PUROHITH BHARATH KUMAR	(20P35A0363)

In partial fulfilment for the award of degree of Bachelor of Technology degree in Mechanical Engineering during 2022-2023. The results embodied in this project report have not been submitted to any other institute or university for the award of any degree or diploma.

  
**PROJECT GUIDE**

Mr. K. Vijay  
Assistant Professor

  
**HEAD OF THE DEPARTMENT**

Dr. DANAIAH PULI  
Professor

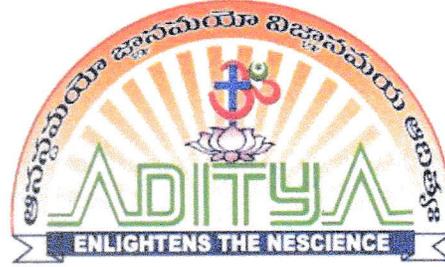
  
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Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “Design and Structural analysis of wind turbine blade using different materials (S-Glass, E-Glass, Epoxy Carbon, Armid, Graphene)” Submitted by

V. HARI KUMAR	20P35A03A0
U. VINESH	20P35A03B5
N. NAGA BALA HARI	20P35A0399
P. AVINASH	20P35A03C1
R. NAVEEN KUMAR	20P35A03C4

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

### PROJECT GUIDE:

Mr. RATNALA PRASAD, MTech

Assistant professor  
Mechanical Engineering Department

### HEAD OF THE DEPARTMENT

Dr. DANAI AH PULI, MTech, Ph.D.

(NIT Warangal)  
Professor & Head  
Mechanical Engineering Department

  
EXTERNAL EXAMINER

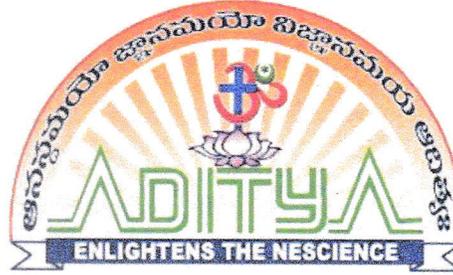
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Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING

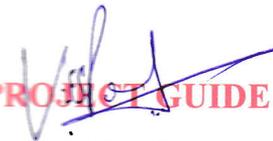


This is to certify that the project report entitled “**DESIGNING PROTOTYPE OF OMNI DIRECTIONAL WHEEL BASED ROBOT IMPLEMENTING PATH PLANNING ON THE OCCUPANCY GRID MAP**”

Submitted by

<b>PALLI KUMAR</b>	<b>20P35A0395</b>
<b>TADI SRINU</b>	<b>20P35A03C2</b>
<b>PATTAPAGALU V V MOHAN KRISHNA</b>	<b>20P35A03B0</b>
<b>KETA DURGA MAHESH</b>	<b>20P35A03C5</b>
<b>BANGARI SURYA</b>	<b>20P35A0390</b>

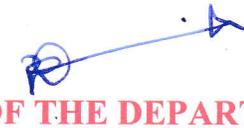
in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year **2020-2023**. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
**PROJECT GUIDE**

Mr. V.S SURYA PRAKASH, M.E.(Ph.D)

Assistant Professor

Dept. of Mechanical Engineering

  
**HEAD OF THE DEPARTMENT**

Dr. DANAIHAH PULI, M.Tech, Ph.D

Professor & Head

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**EXTERNAL EXAMINER**

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify that the main project work entitled “**MICROSTRUCTURE, MECHANICAL AND CORROSION BEHAVIOUR OF A356 REINFORCED WITH RICE HUSK ASH AND EGG SHELL ASH**”

being submitted by

<b>PEKETI RAJESH</b>	<b>20P35A03D7</b>
<b>T G S S V RAMANUJAM</b>	<b>20P35A0392</b>
<b>MUTYALA DURGA PRASAD</b>	<b>20P35A03A1</b>
<b>M S MANIKANTA REDDY</b>	<b>20P35A03B8</b>
<b>PALLI TIRUPATHI RAO</b>	<b>20P35A03D9</b>

In a partial fulfilment of the requirement for the award of the B. Tech degree in Mechanical Engineering for the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

**Project guide**

*A. L. Jyothi*

**Mrs. A. L. JYOTHI, M. Tech, (Ph. D)**

**Assistant Professor**

**Dept of Mechanical Engineering**

**Head of the Department**

*Dr. Danaiah Puli*

**Dr. DANAIAH PULI, M. Tech, Ph.D**

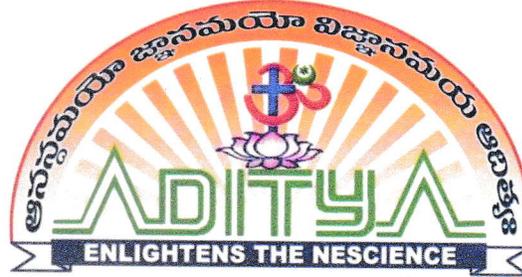
**Professor**

**Dept of Mechanical Engineering**

*M*

**External Examiner**

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify that the project report entitled “**INFLUENCE OF NANO COATE WICK MATERIALS ON PRODUCTIVITY OF HEXAGONAL SOLAR STILL**” submitted by

KOSANA MANIKANTA	20P35A03C7
KODI B N S HARI PRASAD	20P35A03B3
TUTTA SUBRAHMANYA SWAMI	20P35A03C8
KARANAM VAMSI	20P35A03D6
PANCHADA NAIDU BABU	20P35A03D5

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Project Guide

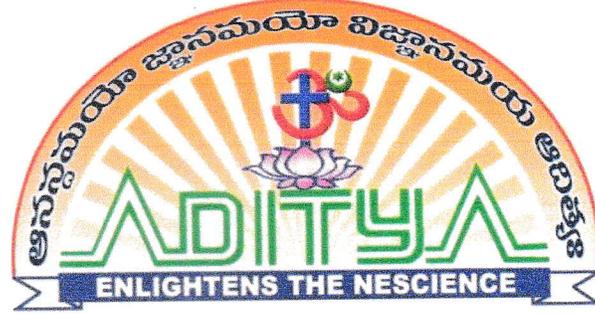
Mr. ABDUL ARIF, M Tech Ph.D.  
Assistant Professor  
Dept. of Mechanical Engineering

  
Head Of The Department

Dr. DANAI AH PULI, M Tech, Ph.D  
Associate Professor & Head  
Dept. of Mechanical Engineering

  
External Examiner

ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE

This is to certify that the project report entitled “**DUAL AXIS VEHICLE STEERING MECHANISM**” submitted by

GURRALA ASHOK	20P35A03A3
PADALA SUBRAHMANYAM	20P35A0393
MATTA MOHAN	20P35A0391
MODI TEJA	20P35A03D2
VALLURI MANOHAR	20P35A03D8

In a partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

  
Project Guide

Mr. T S SAGAR, M. Tech  
Assistant Professor  
Dept. of Mechanical Engineering

  
Head of The Department

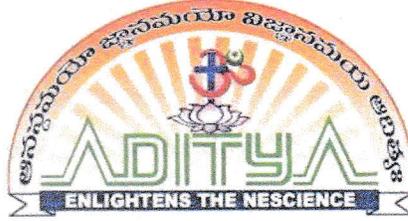
Dr. DANAIAH PULI, M. Tech, PhD  
Professor & Head  
Dept. of Mechanical Engineering

  
EXTERNAL EXAMINER

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**  
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2022-2023

**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify that the project report entitled “**Performance and Emission Control testing of the Fuel-Ethanol-Additive mixture using in spark ignition engines.**”  
Submitted by

<b>CHINTHAKRINDA RAM PRASAD</b>	<b>20P35A03C9</b>
<b>KUDULLA JAGANMOHANA RAGHAVA RAJESH</b>	<b>20P35A03A9</b>
<b>DONI VINAY</b>	<b>20P35A03B9</b>
<b>SENAPATHI VAMSI</b>	<b>20P35A03D3</b>
<b>GATTI CHANDRA SEKHAR</b>	<b>20P35A0396</b>

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year **2022-2023**. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

**PROJECT GUIDE**

*R. Houtar*  
Dr. DANAI AH PULI, M.Tech, Ph.D  
Professor & Head

Dept. of Mechanical Engineering

**HEAD OF THE DEPARTMENT**

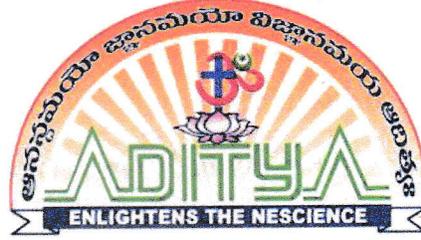
*R. Houtar*  
Dr. DANAI AH PULI, M.Tech, Ph.D  
Professor & Head

Dept. of Mechanical Engineering

*M*

**ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

This is to certify, that the main project work entitled "**FABRICATION AND TESTING OF MECHANICALLY OPERATED FLOOR CLEANING MACHINE.**" being submitted by

<b>NAKKA SIVA MANIKANTA</b>	<b>20P35A03A4</b>
<b>YANDAPALLI MANI KUMAR</b>	<b>20P35A03C6</b>
<b>SIVAGIRI NARASIMHA</b>	<b>20P35A03B4</b>
<b>SENAPATHI CHANDU</b>	<b>20P35A0397</b>
<b>GANDREDI VEERABABU</b>	<b>20P35A03D0</b>

In a partial fulfilment of the requirement for the award of the B. Tech degree in Mechanical Engineering for the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or university for the award of any degree or diploma.

**PROJECT GUIDE**

**Dr. P. GANGADHARA RAO, M Tech, Ph.D.,**

Associate Professor

Dept. of mechanical engineering

**HEAD OF THE DEPARTMENT**

**Dr. DANAI AH PULI, M. Tech, Ph.D.,**

Associate Professor

Dept. of mechanical engineering

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Surampalem, E.G. Dist., AP – 533 437.



CERTIFICATE

This is to certify that the project work entitled “ENHANCEMENT OF HEAT TRANSFER THROUGH PLATE FINS” submitted by

NEELAM GANGADHARA GANNIBABU	20P35A03A6
SAPPATHI HEMA SUMANTH	20P35A03C3
VINUKONDA VENKATA DURGA PRASAD	20P35A03A2
MARRIVADA VINAY REDDY	20P35A03A7
BANDARU TEJA SRI SAI	20P35A03C0

In partial fulfilment for the award of degree of Bachelor of Technology degree in Mechanical Engineering during 2022-2023. The results embodied in this project report have not been submitted to any other institute or university for the award of any degree or diploma.

  
Project Guide

Mr. K. Vijay M.Tech., PHD

Associate Professor

Dept. of Mechanical Engineering, ACET

  
Head of the Department

Dr. DANAIHAH PULI, M.Tech., PHD

Professor & Head

Dept. of Mechanical Engineering, ACET

  
External Examiner

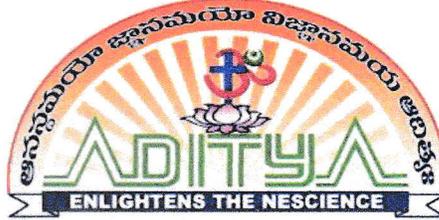
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Surampalem, E.G. Dist., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “ **STUDY AND  
EXPERIMENTATION OF VOICE CONTROLLED MOTORIZED SCREW  
JACK-A Prototype Model** ” Submitted by

KARRI VENKATESH	20P35A03A8
KAJULURI NAVEEN KUMAR	20P35A0394
LOKARPU SAIBABA	20P35A03B6
AVALA LOKESH	20P35A03B7

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year **2022-2023**. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

### PROJECTGUIDE

  
Mr. P V S MURALI KRISHNA  
Sr. Assistant Professor, M. Tech, (Ph.D)  
Dept. of Mechanical Engineering  
ACET

### HEAD OF THE DEPARTMENT

  
Dr. DANAI AH PULI  
Professor & Head, M.Tech, Ph.D  
Dept. of Mechanical Engineering  
ACET



**EXTERNAL EXAMINER**

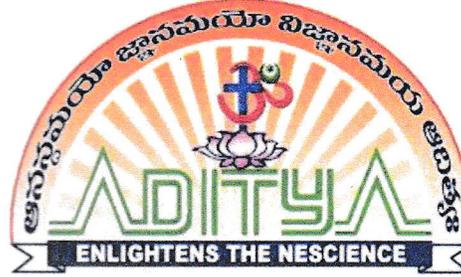
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Surampalem, E.G. Dist.-II., AP – 533 437.

## DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled “Study and Simulation of Vortex Tube Based on Minor Diameter Shape of Control Valve and Inlet Nozzle Shapes” Submitted by

V. KISHORE VARMA	20P35A0398
K. CHAITANYA RAJU	20P35A03B2
B. J. LAKSHMANA RAO	20P35A03A5
D. ABHAY VENKATESH	20P35A03B1
M. VINAY KUMAR	20P35A03D4
M.K. SAI LAKSHMAN	20P35A03D1

in partial fulfillment of requirement for the award of Bachelor of Technology degree in Mechanical Engineering during the academic year 2022-2023. The results embodied in this project report have not been submitted to any other institute or University for the award of any degree or diploma.

### PROJECT GUIDE

  
M. CH. PAVAN KUMAR M.Tech  
Assistant Professor  
Dept. of Mechanical Engineering  
ACET

### HEAD OF THE DEPARTMENT

  
Dr. DANAIHAH PULI M.Tech, Ph.D  
Professor & Head  
Dept. of Mechanical Engineering  
ACET

  
EXTERNAL EXAMINER