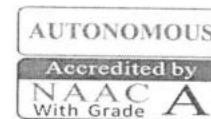


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Phones: 08678 - 273535 / 94914 57799 / 73826 16824  
E mail: office@mictech.ac.in, Website: www.mictech.edu.in



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**Department of Mechanical Engineering**

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**A.Y:2022-23**

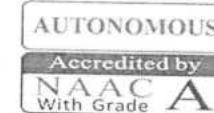
**List of Major Projects**

S no.	Regd no.	Student name	Int. Guide	Project title
1	20H75A0324	Udaybhaskar. K	D.DIVYA	Design /Analysis and Development of Spoolable Fibre Reinforced Composites Thermoplastic Pipes.
	20H75A0313	Nagaraju. M		
	20H75A0312	Maneesh. V		
2	20H75A0310	Mahesh. B	R. RANJITH KUMAR	Design and fabrication of surveillance robot using klanns mechanism
	20H75A0321	Sanath. P		
	19H71A0303	Hari Krishna. Y		
	19H71A0302	Ganesh. U		
3	20H75A0305	Harish. R	A. NAGAPAVAN KUMAR	Effect of fuel additives on combustion , performance and emission of characteristics of diesel engine fuelled with custard apple bio diesel
	20H75A0309	Mahammad Rafi. SK		
	19H71A0308	Sravankumar. M		
	20H75A0303	AmruthaPremSagar. T		



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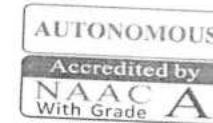


4	20H75A0316	Omkar. A	K. SUPRIYA	Modelling and analysis of shell and coil heat exchanger to determine its effectiveness with different materials.
	20H75A0318	Raja. B		
	19H71A0311	VamsiBabu. B		
	20H75A0328	Venkateswara Rao. K		
5	20H75A0325	VenkatasaiNiranjan. V	N. NARESH BABU	Experimental Investigation on Performance And Emission Characteristics of Diesel Engine Fuelled With Palmyra Biodiesel
	20H75A0304	Gnana Deep. T		
	20H75A0322	P N S S K D Satya Swarup		
	20H75A0323	Sri Muralinadh. V		
6	20H75A0302	Akbar. SK	Dr. D V SIVAREDDY	Effect of Johnson cook parameters in FE Simulation of Ti6AL4V Alloy machining
	20H75A0311	Mahesh Varun. K		
	20H75A0301	Abdul Shaheed. MD		
	19H71A0310	Venkata Siva Rama Krishna. K		
7	20H75A0314	Naveen. K	M.KOTESWARAR RAO	Tribological properties of AMMC (AL7475//ROCK DUST)
	20H75A0306	Jeevan Kumar. N		
	20H75A0315	Naveen Sagar. P		
	19H71A0306	Murali. D		



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E-mail: office@mictech.ac.in, Website: www.mictech.edu.in



8	20H75A0327	Venkatesh. R	Dr. G RAJESH	Fabrication, Testing & Analysis of partially or fully Bio-degradable composite Mother Board
	20H75A0307	Kartheek. A		
	19H71A0305	Lohith. V		
	19H71A0313	VenkataAnjaneya Prasad. A		
9	20H75A0320	Ramesh. Y	Dr. K SRINIVAS	Fatigue test on welded joints
	20H75A0326	Venkatesh. K		
	19H71A0304	Leelaprasad. T		
	19H71A0312	VeeraMaharshi Siva Ratna. K		
10	20H75A0308	Karthikeya. Y	K. SIRISHA	Entropy, heat transfer and heat transfer coefficient analysis of two different types of heat exchangers operated with NANO fluids
	20H75A0317	Prem Kumar. S		
	19H71A0309	Surya Teja. P		
	19H71A0301	Essak. CH		

  
Signature of Coordinator

  
Signature of HoD

**EFFECT OF JOHNSON COOK PARAMETERS ON FINITE ELEMENT SIMULATION OF Ti6Al4V ALLOY MACHINING**

*Project Report Submitted in partial fulfilment of the requirements*

*For the award of the Degree of*

**BACHELOR OF TECHNOLOGY**

In

**Mechanical Engineering**

By

**K. Mahesh Varun (20H75A0311) SK Akbar ((20H75A0302)  
M.A Shaheed (20H75A0301) K Siva Rama Krishna (19H71A0310)**

*Under the esteemed guidance of*

**Dr. D V Siva Reddy  
ASSOCIATE PROFESSOR**



**Department of Mechanical Engineering**

**DVR & Dr. HS  
MIC College of Technology  
(Autonomous)**

**Kanchikachelu - 521180, NTR Dist, Andhra Pradesh**

**Aped, 2023**



## CERTIFICATE

This is to certify that the project report entitled "**Effect of Johnson Cook Parameters on Finite Element Simulation of Ti6Al4v Alloy Machining**" submitted by **Mr. K Mahesh Varun (20H75A0311)**, **Mr. SK. Akbar (20H75A0302)**, **Mr. M A. Shaheed (20H75A0301)**, **Mr. K Siva Rama Krishna (19H71A0310)** to the DVR & Dr. HS MIC College of Technology, Kanchikacherla in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in **Mechanical Engineering** is a bonafide record of work carried out by THEM under our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

Supervisor



Head of the Department

Principal

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**DVR & Dr. HS MIC College of Technology**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

Internal Examiner

External Examiner

# **MODELLING AND ANALYSIS OF SHELL AND HELICAL COIL HEAT EXCHANGER AND DETERMINING ITS EFFECTIVENESS BY CHANGING ITS MATERIALS**

*Project Report Submitted In partial fulfillment of the requirements  
for the award of the Degree of*

**BACHELOR OF TECHNOLOGY**

In

**Mechanical Engineering**

By

**S.RAJA (20H75A0318)**

**A.OMKAR (20H75A0316)**

**B.VAMSI (19H71A0311)**

**K.VENKATESWARA RAO (20H75A0328)**

Under the esteemed guidance of

**Mrs. K. SUFIYA M.Tech (P.V.D)**

**ASSISTANT PROFESSOR**



Department of Mechanical Engineering

DVR & Dr. MG

**RVC College of Technology**

(Autonomous)

Ranchikodipetla - 521180, NTR Dist, Andhra Pradesh

April, 2023



## CERTIFICATE

This is to certify that the project report entitled **Modelling And Analysis Of Shell And Helical Coil Heat Exchanger And Determining Its Effectiveness By Changing Its Materials** submitted by Mr.B.Raja, Mr.A.Omkar Mr.B.Vamsi, Mr.K.Venkateswara Rao to the DVR&Dr.HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Mechanical Engineering is a bonafide record of work carried out by him/her under my/our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

  
Supervisor

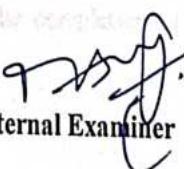


  
Head of the Department

  
Principal

PRINCIPAL  
**DVR & Dr. HS MIC College of Technology**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

  
Internal Examiner

  
External Examiner

# **DESIGN AND FABRICATION OF SURVEILLANCY ROBOT BY USING KLANN'S MECHANISM**

*A Project Report  
submitted in partial fulfillment of the  
requirements for the award of the degree of  
**BACHELOR OF TECHNOLOGY  
IN  
MECHANICAL ENGINEERING***

*By*

<b>B. MAHESH</b>	<b>20H75A0310</b>
<b>Y. HARI KRISHNA</b>	<b>19H71A0303</b>
<b>U. GANESH</b>	<b>19H71A0302</b>
<b>P. SANATH SURYA</b>	<b>20H75A0321</b>

*Under the Esteemed Guidance of*

**Mr. R. RANJITH KUMAR**

Associate Professor



Department of Mechatronics Engineering

DIST. 6, P.O. NO.

**MIC College of Technology**

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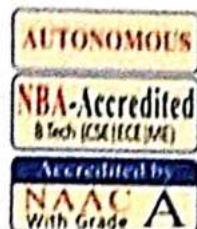
Kanchikacherla-521186, Nalgonda District, Andhra Pradesh

A.P.U.G., 2023



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Kanchikacherla - 521180, Krishna Dist, A.P. India.



### CERTIFICATE

This is to certify that the project report entitled "**DESIGN AND FABRICATION OF SURVEILLANCE ROBOT BY USING KLANN'S MECHANISM**" submitted by **Mr.B.MAHESH, Mr.Y.HARI KRISHNA, Mr.U.GANESH, Mr.P.SANATH SURYA** to the DVR& Dr. HS MIC COLLEGE OF TECHNOLOGY in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in MECHANICAL ENGINEERING is a bonafide record of work. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

R. Srinivas  
Supervisor



Head of the Department

Principal  
PRINCIPAL  
DVR & Dr. HS MIC College of Technology  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

Internal Examiner

External Examiner

**STUDY, ANALYSIS AND COMPARISON OF  
MECHANICAL PROPERTIES OF GFRP REBARS WITH  
STEEL REBARS USING ANSYS WORKBENCH FOR  
BRIDGE APPLICATION**

A Project Report  
submitted in partial fulfillment of the  
requirements for the award of the degree of

**Bachelor of Technology**

In

**Mechanical Engineering**

By

M. Nagaraju - 20H75A0313  
K. Uday Bhaskar - 20H75A0324  
V. Maneesh - 20H75A0312

*Under the esteemed guidance of*

**Ms. D. DIVYA**  
Assistant Professor



**Department of Mechanical Engineering**

**HVR & Dr. HS**

**MIC College of Technology**

(Autonomous)

Kadapa, Andhra Pradesh - 521180, NTR Dist., Andhra Pradesh

**March, 2023**



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**MIC College of Technology**

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Kanchikacherla - 521180, Krishna Dist, A.P, India.



### CERTIFICATE

This is to certify that the project work entitled as "Study, Analysis and Comparision of Mechanical Properties of GFRP Rebars with Steel Rebars using Ansys Workbench for Bridge Application" is being submitted by K. Uday Bhaskar (20H75A0324) , V. Maneesh (20H75A0312) , M. Nagaraju (20H75A0313 ) to the DVR & Dr. HS MIC College of technology in the partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Mechanical Engineering is a bonified record of work in the academic during 2020-2023. The contents of this report, in the full or in parts, have not been submitted to any other Institute for the award of any Degree.

Project Guide



Head of the Department

Principal

**PRINCIPAL**  
**DVR & Dr. HS MIC College of Technology,**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

Internal Examiner

External Examiner

**EXPERIMENTAL INVESTIGATION ON PERFORMANCE AND  
EMISSION CHARACTERISTICS OF DIESEL ENGINE FUELED  
WITH PALLMYRA BIODESSEL**

*Project Report Submitted In partial fulfillment of the requirements  
for the award of the Degree of*

**BACHELOR OF TECHNOLOGY  
In  
MECHANICAL ENGINEERING**

**By**

**P.N S S K D Satya Swarup(20H75A0322)  
V. NIRANJAN (20H75A0325)**

**T. GNANA DEEP(20H75A0304)  
V. SRI MURALINADH(20H75A023)**

**Under the esteemed guidance of  
Mr.N.SARESH BABU  
ASSISTANT PROFESSOR**



**Department of Mechanical Engineering  
DVR&Dr.HS  
RJC College of Technology  
(Autonomous)  
Kanchikacherla - 521180, NTR Dist, Andhra Pradesh**

**April,2023**



## CERTIFICATE

This is to certify that the project report entitled **Experimental Investigation on Performance and Emission Characteristics of Diesel Engine Fueled with Palmyra Biodiesel** submitted by Mr. P. N S S K D Satya Swarup (20H75A0322), Mr. T. Gnana Deep (20H75A0304), Mr. V. Niranjan (20H75A0325), Mr. V. Sri Muralinadh (20H75A0323) to the DVR & Dr. HS MIC College of Technology, Kanchikacherla in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Mechanical Engineering is a bona fide record of work carried out by THEM under our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

  
Supervisor

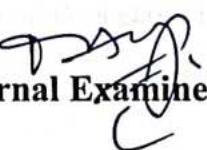


  
Head of the Department

  
Principal

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Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

  
Internal Examiner

  
External Examiner

# EFFECT OF FUEL ADDITIVES ON PERFORMANCE AND EMISSION CHARACTERISTICS OF DIESEL ENGINE FUELED WITH CUSTARD APPLE BIODIESEL

*Project Report Submitted In partial fulfillment of the requirements  
for the award of the Degree of*

**BACHELOR OF TECHNOLOGY**

In

**Mechanical Engineering**

By

R. Harish (20H75A0305)

T. Amurtha prem sagar (20H75A0303)

Sk. Mohammad Rafi (20H75A0309)

M. Sravan kumar (19H71A0308)

Under the esteemed guidance of  
Mr. A. Naga Pavan kumar MTech  
ASSISTANT PROFESSOR



**Department of Mechanical Engineering**

DVR & Dr. HS

**MIC College of Technology**

(Autonomous)

Kanakikunta - 521180, NTR Dist, Andhra Pradesh

April, 2023



## CERTIFICATE

This is to certify that the project report entitled "Effect of Fuel Additive on Performance and Emission Characteristics of Diesel Engine Fueled with Custard Apple Bio-Diesel" submitted by Mr. R. Harish (20H75A0305), Mr. T. Amurtha Prem Sagar (20H75A0309), Mr. Sk. Mohammad Rafi (20H75A0303), Mr. M. Sravan Kumar (19H71A0308) to the DVR & Dr. HS MIC College of Technology, Kanchikacherla in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Mechanical Engineering is a bonafide record of work carried out by THEM under our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

Supervisor

Head of the Department



Principal

**PRINCIPAL**  
**DVR & Dr. HS MIC College of Technology**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

Internal Examiner

External Examiner

# **DESIGNING AND ANALYSIS OF EXCAVATOR BUCKET**

*A Project Report  
submitted in partial fulfillment of the  
requirements for the award of the degree of  
**BACHELOR OF TECHNOLOGY**  
IN  
**MECHANICAL ENGINEERING***

*By*

**Y. RAMESH** (20H75A0320)  
**K. VENKATESH** (20H75A0326)  
**T. LEELAPRASAD** (19H75A0305)  
**K.V.V.S.R. MAHARSHI** (19H75A0311)

*Under the Esteemed Guidance of*

**Dr. K. SRINIVAS**

Professor



Department of Mechanical Engineering

1972 & 1982, B.E.

**MIC College of Technology**

LAKHNOOPUR

Kauchikochera-521180, N.T.B. District, Andhra Pradesh

APRIL, 2023



## CERTIFICATE

This is to certify that the project report entitled **DESIGNING AND ANALYSIS OF EXCAVATOR BUCKET** submitted by Mr. Y.Ramesh (20H75A0320), K.Venkatesh (20H75A0326), T.Leelaprasad (19H75A0305), K.V.V.S.R.Maharshi (19H75A0311) to the DVR&Dr.HS MIC College of Technology, Kanchikacherla in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in **Mechanical Engineering** is a bonafide record of work carried out by THEM under our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

  
Supervisor



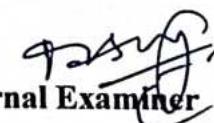
  
Head of the Department



Principal

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Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

  
Internal Examiner

  
External Examiner

**ENHANCING THE HEAT TRANSFER RATE  
IN AUTOMOBILE RADIATOR USING NANO FLUID AS  
COOLANT**

*Project Report Submitted in partial fulfillment of the requirements  
for the award of the Degree of*

**BACHELOR OF TECHNOLOGY**  
In  
**Mechanical Engineering**  
By

**A. Kartheek (20H75A0307)**

**R. Venkatesh (20H75A0327)**

**A. Venkata Arjuneya Prasad (19H71A0313)**

**V. Lolith (19H71A0305)**

Under the esteemed guidance of

**Dr. G Rajesh M.Tech. (PhD)**

**PROFESSOR**

**Mrs. K. Sirisha M.Tech. (PhD)**

**ASSISTANT PROFESSOR**



**Department of Mechanical Engineering**

**DVR & Dr. HS  
MEC College of Technology**

**(Autonomous)**

**Kanapakkancherla - 521189, NTR Cst, Andhra Pradesh.**

**April, 2023**



## CERTIFICATE

This is to certify that the project report entitled "Enhancing The Heat Transfer Rate in Automobile Radiator using Nano Fluid as Coolant" submitted by Mr. A. Kartheek (20H75A0307), Mr. R. Venkatesh (20H75A0307), Mr. V. Lohith (19H71A0305), Mr. A. Venkata Anjaneya Prasad (19H71A0313) to the DVR & Dr. HS MIC College of Technology, Kanchikacherla in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Mechanical Engineering is a bonafide record of work carried out by THEM under our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

  
Supervisor

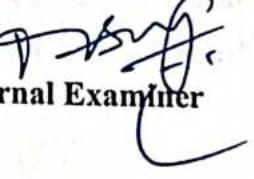
  
Head of the Department



Principal

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**DVR & Dr. HS MIC College of Technology**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

  
Internal Examiner

  
External Examiner



**EXPERIMENTAL INVESTIGATION ON TRIBOLOGICAL  
PROPERTIES OF METAL MATRIX COMPOSITE  
(AL7475/ROCKDUST)**

*Project Report*

*Submitted In partial fulfillment of the requirements  
for the award of the Degree of*

**BACHELOR OF TECHNOLOGY**

**In**

**Mechanical Engineering**

b)

**N.JEEVAN KUMAR (26H75A0306)      K.NAVEEN (20H75A0314)  
P.NAVEEN SAGAR (20H75A0315)      D.MURALI (19H71A0306)**

*Under the esteemed guidance of*

**MR. M.KOTESWARA RAO**

Assistant Professor



**Department of Mechanical Engineering**

**DVR & Dr. HS**

**JNTC College of Technology**

*(Autonomous)*

**Kanchikacherla - 531180, NTR Dist., Andhra Pradesh**

**April, 2023**



DVR & Dr. HS  
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Kanchikacherla - 521180, Krishna Dist, A.P, India.



### CERTIFICATE

This is to certify that the project report entitled **Experimental Investigation on Tribological Properties of Metal Matrix Composite (AL7475/ROCKDUST)** submitted by Mr. N. JEEVAN KUMAR (20H75A0306), Mr. P.NAVEEN SAGAR (20H75A0315), Mr. K.NAVEEN (20H75A0314), Mr. D.MURALI (19H71A0306) to the DVR & Dr.HS MICCollege of Technology, Kanchikacherla in partial fulfilment of the requirements for the award of the Degree Bachelor of Technology in Mechanical Engineering is a bonafide record of work. The contents of this report, in full or in parts, have not been submitted to any other institute for the award of any Degree.

Supervisor

Head of the Department

Principal  
**PRINCIPAL**  
**DVR & Dr. HS MIC College of Technology**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

Internal Examiner



External Examiner

# **ENHANCEMENT OF HEAT TRANSFER RATE IN SHELL AND TUBE HEAT EXCHANGER OF USING BASE FLUIDS AND NANO FLUIDS**

*Project Report Submitted In partial fulfillment of the requirements  
for the award of the Degree of*

**Bachelor of Technology  
In  
Mechanical Engineering**

**Y.KARTHIKEYA(20H75A0308)  
S.PREM KUMAR(20H75A0317)  
P.SURYA TEJA (19H71A0309)  
CHESSAK(19H71A0301)**

*Under the esteemed guidance of  
Mrs. K.SIRISHA  
ASSOCIATE PROFESSOR*



**Department of Mechanical Engineering**

**DVR & Dr.MS  
MIC College of Technology**

**(Autonomous)**

**Kondikacherla - 523180, NTR Dist, Andhra Pradesh**

**April, 2023**



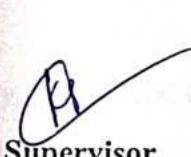
## DVR & Dr. HS MIC College of Technology

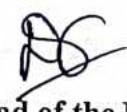
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Kanchikacherla - 521180, Krishna Dist, A.P, India.



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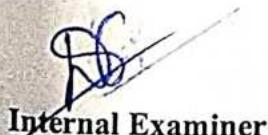
This is to certify that the project report entitled **Enhancement of Heat Transfer Rate In Shell And Tube Heat Exchanger by Using Base Fluids And Nano Fluids** submitted by Mr. Y.Karthikeya, Mr. S.Prem kumar, Mr. P. Surya Teja, Mr.CH.Essak to the DVR&Dr.HS. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Mechanical Engineering is a bonafide record of work carried out by him/her under my/our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

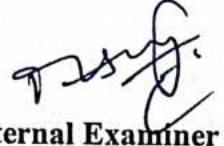
  
Supervisor

  
Head of the Department



Principal  
**PRINCIPAL**  
**DVR & Dr. HS MIC College of Technology**  
Kanchikacherla, N.T.R. Dt.  
Andhra Pradesh, India – Pin: 521180

  
Internal Examiner

  
External Examiner

