

# ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, New Delhi, and Accredited by NAAC and affiliated to

Jawaharlal Nehru Technological University, Kakinada)

Surampalem-533437, Peddapuram, E.G.Dt., A.P

## DEPARTMENT OF MECHANICAL ENGINEERING



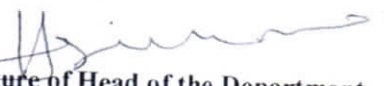
### CERTIFICATE

This is to certify that the thesis/dissertation entitled "EFFICIENCY ENHANCEMENT OF FIN AND TUBE HEAT EXCHANGER USING NEW WINGLET VORTEX GENERATOR" is being submitted by Mr. REKADI SRINIVAS bearing Regd...No 14P31D2108 in partial fulfillment for the award of MASTER OF TECHNOLOGY in THERMAL ENGINEERING to the Jawaharlal Nehru Technological University Kakinada is a record of bonafide work carried out by him/her under our guidance and supervision.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
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This is to certify that the thesis/dissertation entitled "AN INVESTIGATION ON NACA 2312 AEROFOIL WITH CURVED AND STRAIGHT LEADING EDGE WING" is being submitted by **Mr. MAGAPU MANIKANTA DORA** bearing Regd...No 15P31D2106 in partial fulfillment for the award of MASTER OF TECHNOLOGY in THERMAL ENGINEERING to the Jawaharlal Nehru Technological University Kakinada is a record of bonafide work carried out by him/her under our guidance and supervision.

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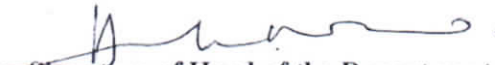
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This is to certify that the thesis/dissertation entitled “EXPERIMENTAL ANALYSIS ON THERMAL BEHAVIOUR OF WATER BASED NANOFLUID ( $Al_2O_3$ ) USING SEPERATING AND THROTTLING CALORIMETER” is being submitted by Mr. V.VEERABABU bearing Regd.No.16P31D2107 in THERMAL ENGINEERING to the Jawaharlal Nehru Technological University Kakinada is a record of bonafide work carried out by him under our guidance and supervision.

  
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This is to certify that the thesis entitled "CFD ANALYSIS OF FIN AND TUBE INTERCOOLER WITH DIFFERENT FIN MODELS" is being submitted by Mr. SHAIK KHALEEL PASHA bearing Regd. No 16P31D2109 in partial fulfilment for the award of MASTER OF TECHNOLOGY in THERMAL ENGINEERING to the Jawaharlal Nehru Technological University Kakinada is a record of bonafide work carried out by him under our guidance and supervision.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

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