## **Bio-Data**

Name of the Candidate: K Ashok Reddy Father's Name: K Rama Reddy Date of Birth: 10<sup>th</sup> Feb, 1960

Mobile & email id : 9948928942 & kashokreddy2015@gmail.com

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Plot No 91& 92, Road No 9, Reddy Enclave, Temple Alwal, Hyderabad-500 010, Telangana.

India

## 1. Educational Qualifications:

| Degree          | Year of Pass | University                                 | Class/Percentage of marks |
|-----------------|--------------|--|---------------------------|
| High School     | 1977         | M.A.O School, Aligarh Muslim University    | 1st Class 85%             |
|                 |              |  | Distinction               |
|                 |              |  |                           |
|                 |              |  | ant our                   |
| Pre- University | 1978         | Aligarh Muslim University                  | 1 <sup>st</sup> Class 69% |
| B.Sc.,          | 1979-80      | Nizam College, O.U.                        | Discontinued              |
|                 |              | _  |                           |
| B.E.,           | 1980-84      | Campus College of Engineering A.U. Waltair | 2 <sup>nd</sup> Class 58% |
|                 |              |  | Mechanical Engg.          |
| M. Tech.,       | 1994-95      | Indian School of Mines Dhanbad             | 1st Class-87%             |
|                 |              |  | Fuel Engg.                |
| Ph.D.,          | 2014         | JNTU-Hyderabad                             | Mechanical Engg.          |

## 2. Work Experience (Industry & Academic):

| Year      | Position            | Work Place  |  |  |
|-----------|---------------------|---|--|--|
| 1985-92   | Assistant Engineer  | Hyderabad Allywn Ltd , Sanathnagar, Hyderabad       |  |  |
| 1992-94   | Teaching Assistant  | Chaitnaya Bharathi Institute of Technolgy           |  |  |
| 1995-97   | Assistant Manager   | Puzzalona Machinery Fabricators, Hyderabad          |  |  |
| 1997-98   | Associate Professor | M.Boji Reddy College Engineering for Women          |  |  |
| 1998-2000 | -do-                | PRRM College Engineering                            |  |  |
| 2000-09   | -do-                | Vidya Joythi Institute Of Technology                |  |  |
| 2009-011  | Professor           | -do-  |  |  |
| 2011-14   | Principal           | Prof Rama Reddy College Of Engineering & Technology |  |  |
| 2014-2015 | Professor           | Guru Nanak Intuitions Technical Campus              |  |  |
| NOV 2015- | Professor           | MLR Institute Of Technology                         |  |  |
| till date |                     |   |  |  |

Personal Email: kannaashok2016@gamil.com

College Email: director@mlrinstitutions.ac.in

#### 3. Additional Details:

a. <u>Subjects Handled</u>: Engineering Mechanics, Engineering Drawing, Mechanics of Solids, Design of Machine Elements, Heat Transfer, Power Plant Engineering and Thermal Engineering.

b. <u>Laboratories Established & Handled</u>: Heat Transfer, Thermal Engineering, Mechanics of Solids, Fluid Mechanics & Hydraulics Machines

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c. <u>Inhouse Projects Established:</u> Heat Transfer and Thermal Engineering for Undergraduate and Post Graduate Students at Vidya Joythi Institute Technology and also at Prof Rama Reddy College Of Engineering & Technology, in addition to establishing project works on "Design of a 5 Ton Mobile Crane" and "Combustion Characteristics of Agrowastes".

#### Ph.D Research Work:

"Heat Transfer Investigations in non-Newtonian Fluids in an Agitated Vessel using Paddle Impeller".

A new type of heating equipment was designed and fabricated using kanthal elements to carryout heat transfer experiments. A theoretical model has been developed to correlate the heat transfer rates for wider range of fluids like pseudo plastic, shear thinning, shear thickening and dilatants etc which are generally used in chemical, food and cosmetic industry. Theoretical model developed for the heat transfer gives results in better agreement with experimental data compared to existing theoretical models for Newtonian and non-Newtonian fluids.(better than 20% improvement).

## **Research Work at GNITC:**

"Heat Transfer Studies in S Shaped Coil Heat Exchanger Using Nano Fluids" approved under UGC Minor Research Project. Duration: Two Years from Nov2014-Nov2016, Sanction Amount: Rs 4,00,000=00.

#### **Applied Major Research Project:**

- 1.Project Title: "Design & Analysis of Low Cost Muffler for Internal Combustion Engine". Ministry of Forests, Environment & Climate Change, ONLine Submission on 26<sup>th</sup> March 2015 Project ID: 216/ES. Total Cost Of the project: Rs. 35.2 Lakhs. Acknowledgement letter has been Generated.
- 2.Project Title "Analysis of Entropy Generation of Nano Fluids in Different Helical Coils", DST-SERB, Govt of India, New Delhi, ONLine Submission is under Progress. Total Cost Of the project: Rs. 29.5 Lakhs.
- 3. Project Title "Analysis and Design of Exhaust Manifold of I C Engine Using Advanced Technology", AICET Project, under Progress. Total Cost :34.5 lakhs.
- 4.Project Title " NDT Testing and Evaluation of Composite Aerospace Materials and Internal Combustion Engines Using Advanced Techniques", AICET Project, under Progress. Total Cost: 50-60 lakhs.

# TRAINING COURSES, TEACHING – LEARNING – EVALUATION, TECHNOLOGY, PROGRAMMES, FACULTY DEVELOPMENT PROGRAMMES (NOT LESS THAN ONE WEEK DURATION)

| Sl.<br>No | Programme                                | Duration                    | Organized by                                   |
|-----------|--|-----------------------------|--|
| 1.        | UGC-SPONSORED REFRESHER<br>COURSE        | 12-11-2003 TO 03-12-2003    | JNTU-HYDERABAD                                 |
| 2.        | UGC-SPONSORED REFRESHER<br>COURSE        | 28-3-2005 TO 16-4-2005      | JNTU-HYDERABAD                                 |
| 3.        | FDP                                      | 20-07-2010TO 3-8-2010       | VJIT, HYD-75                                   |
| 4.        | FDP                                      | 24-7-2012TO 5-8-2012        | PRRCET, DIST MEDAK                             |
| 5.        | FDP                                      | 24-7-2014 TO 5-8-2014       | GNITC,IBRAHIMPATNAM, RR DIST.                  |
| 6.        | FDP                                      | 16-7-2012 TO 21-7-2012      | CVSR College of Engg. R R Dist.                |
| 7.        | Invited Guest Lecture Date: 17-3-2002    | Projection of Solids        | PRRM CE, Shahbad<br>R R Dist                   |
| 8.        | Invited Guest Lecture                    | Dynamics of Engg. Mechanics | PRRM CE, Shahbad                               |
|           | Date: 27-3-2002                          | Dynamics of Engg. Weenames  | R R Dist                                       |
| 9.        | Invited Guest Lecture<br>Date: 21-3-2004 | Perspective Projections     | Anurag College of Engg Kodad, Nalgonda<br>Dist |

| 10. | Invited Guest Lecture Date: 1-3-2006                        | Basics of Engineering Mechanics                      |  | CVSR College of Engg. R R Dist                             |  |
|-----|---|--|--|--|--|
| 11. | Invited Guest Lecture Date: 1-3-2006                        | Perspective Projections                              | CVSR College of Engg. R R Dist                     |  |  |
| 12. | National Seminar<br>23-1-2009 &24.1.2009                    | Advanced Materials:<br>Characterization & Processing | Institution of Engineers<br>Hyderabad              |  |  |
| 13  | Invited Guest Lecture<br>Date: 27-2-2009                    | Basics of Engineering Drawing                        | PRRCET, DIST MEDAK                                 |  |  |
| 14. | Invited Guest Lecture Date: 14-3-2009                       | Basics of Engineering Mechanics                      | PRRCET, DIST MEDAK                                 |  |  |
| 15. | Invited Guest Lecture Date:8-3-2010                         | Basics Thermodynamics                                | PRRCET, DIST MEDAK                                 |  |  |
| 16. | Invited Guest Lecture Date: 30-3-2010                       | Machine Drawing                                      | PRRCET, DIST MEDAK                                 |  |  |
| 17. | Invited Guest Lecture<br>Date:8-3-2012                      | Concepts of Machine Drawing                          | Anurag College of Engg, Aushapur, R R Dist         |  |  |
| 18. | Invited Guest Lecture<br>Date:4-4-2012                      | Design of Machine Members                            | Anurag College of Engg, Aushapur, R R Dist         |  |  |
| 19. | ISTE WORKSHOP<br>11-12-2012 to<br>21-12-2012                | Engineering Themodynamics                            |  | CVSR College of Engg. R R Dist                             |  |
| 20. | Invited Guest Lecture<br>Date:23-3-2014                     | Basics of Thermal Engineering                        |  | g Engineering College,Kodad, Nalgonda<br>Dist              |  |
| 21. | Invited Guest Lecture<br>Date:29-3-2014                     | Basics of Refrigeration Systems                      | Anurag Engineering College,Kodad, Nalgonda<br>Dist |  |  |
| 22. | ISTE WORKSHOP<br>20-5-2014 to<br>30-5-2014                  | Fluid Mechanics                                      | CVSR College of Engg. R R Dist                     |  |  |
| 23. | Invited Guest Lecture<br>Date:8-4-2014                      | Basics of Thermal Engineering                        | VJIT HYDERABD-75                                   |  |  |
| 24. | Invited Guest Lecture<br>Date: 29 -4-2014                   | Basics of Engineering Mechani                        | ics  | VJIT HYDERABD-75   |  |
| 25. | Invited Guest Lecture<br>Date: 2 -4-2014                    | Heat Transfer to Non Newtonian I                     | Heat Transfer to Non Newtonian Fluids              |  |  |
| 26. | Participated in National Workshop<br>11-9-2014 to 12-9-2014 | Advanced Welding Technique                           | es   | GNITC, Ibrahimpatnam R R Dist                              |  |
| 27. | Participation on 22-8-2015                                  | Academic Laedership<br>Development Program           |  | IPE,<br>Shamirpet Campus                                   |  |
| 28. | Invited Guest Lecture<br>Date:15-8-2015                     | Basics Thermodynamics                                |  | MLRIT,<br>HYDERABD-43                                      |  |
| 29. | Invited Guest Lecture<br>Date:20-8-2015                     | Introduction<br>To<br>I C Engines                    |  | MLRIT,<br>HYDERABD-43                                      |  |
| 30. | Invited Guest Lecture<br>Date:4-9-2015                      | Need for Learning Engineering Mechanics              |  | CVSR College of Engg.<br>R R Dist                          |  |
| 31. | Invited Guest Lecture<br>Date: 8 -1-2016                    | Heat Transfer in<br>Nano Fluids                      |  | Anurag College of Engg.<br>Aushapur,Ghatkesar,<br>R R Dist |  |
| 32. | Invited Guest Lecture Date: 22 -1-2016 Heat Transfer        |  |  | ACE Engineering College R R Dist                           |  |

# **List of Publications**

1.K Ashok Reddy, P Ram Reddy and M Bhanvanth Rao, "Heat transfer studies in a circular tube using twisted inserts", International Journal of Emerging Technology and Advanced Engineering ISSN 2250-2459, V1(11),2011 PP-1-3

- 2.K Ashok Reddy, "Heat Exchange Rates Of Solar Refrigeration Systems Using Vacuum Tube Collector", IOSR Journal of Mechanical and Civil Engineering e-ISSN: 2278-1684,p-ISSN: 2320-334X, V9(2), 2012, pp-19-23
- 3. K Ashok Reddy M Bhagvanth Rao P Ram Reddy "Experimental Estimation of Heat Transfer Coefficients Using Helical Coil in an Agitated Vessel", International Journal of Engineering Trends and Technology- 3(2) (2012) p113 ISSN: 2231-5381
- 4. K Ashok Reddy M Bhagvanth Rao P Ram Reddy "Determination of Heat Transfer Cooling Rates in an Mixing Vessel Using Kanthal Heating Element" International Journal of Engineering Trends and Technology- 3(2) (2012) p193 ISSN: 2231-5381
- 5. K Ashok Reddy M Bhagvanth Rao P Ram Reddy "Effect of Dean Number on Heating Transfer Coefficients in an Flat Bottom Agitated Vessel" IOSR Journal of Engineering 2(4) (2012) p945-951 ISSN: 2250-3021
- 6.K Ashok Reddy, P Ram Reddy and M Bhanvanth Rao Convective Heat Transfer Estimation In A Circular Tube With Enchantment Techniques IOSR Journal of Mechanical and Civil Engineering e-ISSN: 2278-1684,p-ISSN: 2320-334X, V10(4), 2013, pp-1-4
- 7.K Ashok Reddy, P Ram Reddy and M Bhanvanth Rao, "Thermal Performance Of Heat Transfer Phenomena In A Heat Exchanger With Different Inserts", International Journal of Emerging Technology and Advanced Engineering ISSN 2250-2459, V 3(3), 2014
- 8. K Ashok Reddy M Bhagvanth Rao P Ram Reddy "A Review of Nusslet Number under Laminar Flow Condition in Heat Exchanger" IOSR Journal of Mechanical and Civil Engineering 11(2) (2014) p76-80 ISSN: 2278-1684
- 9.Kasi Naga Santhosh Kumar.P, Jeevan Reddy.K, Manoj Kumar.R, Sravan Kumar Reddy.M, and Ashok Reddy K, "Design Analysis of Two Stroke I. C. Engine Powered by Compressed Air", International Journal of Mechanical Engineering and Research, Vol 3 Issue 1 pp. 18-21, 2014, ISSN: 2277-8128
- 10.K. Ashok Reddy, M. Bhagvanth Rao, P. Ram Reddy, "An Experimental Investigations of Nusselt Number for Low Reynolds Number in an Agitated Helical Coil", International Journal Of Modern Engineering Research (IJMER) ISSN: 2249–6645 Vol. 4 Iss. 12 Dec. 2014 pp.35-39
- 11.K Ashok Reddy, M Bhagvanth Rao and P Ram Reddy, "Influence of Power Number on Nusselt Number for Newtonian and Non-Newtonian Fluids in an Un Baffled Agitated Vessel", IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684,p-ISSN: 2320-334X, Volume 11, Issue 6 Ver. VI (Nov- Dec. 2014), pp. 07-10
- 12.K Ashok Reddy, 2015, "Methods and Materials Characterization of Sodium Carboxymethyl Cellulose", International Journal of Advanced Research Foundation, Volume 2, Issue 1, January 2015, pp 23-26.
- 13.K Ashok Reddy ,2015, "An Alternative Method to Evaluative Nusselt Number in a Helical Coil Heat Exchanger for non Newtonian Fluids ," International Journal Of Advances in Engineering and Management (IJAEM) Volume 2, Issue 1, January 2015
- 14. K Ashok Reddy, M Bhagvanth Rao and P Ram Reddy, 2015, "Analysis of Friction Factor for Newtonian and non-Newtonian Fluids in an Mechanically Agitated Vessel," International Journal Of Advances in Engineering and Management (IJAEM) Volume 2, Issue 1, January 2015.
- 15.K Ashok Reddy, "A Critical Review of Nusselt Number and Performance Characteristics of I.C. Diesel Engine Using Alternative BioFuels", International Journal of Advanced Research Foundation, Volume 2, Issue 1, January 2015 pp 31-35.
- 16.S Sapthagiri , K Jayathirtha Rao , K Ashok Reddy and C Sharada Prabhakar, "Comparison of Mechanical Properties on 15CDV6 Steel Plates by TIG- Welding with and without copper coated filler wires", International Journal of Advanced Research Foundation , Volume 2, Issue 5, May 2015 ,pp-16-20
- 17. K. Ashok Reddy, T. V. Seshi Reddy and S Satpagiri, "Heat Flux and Temperature Distribution Analysis of I C Engine Cylinder Head Using ANSYS", International Journal of Advanced Research Foundation, Volume 2, Issue 5, May 2015, pp-21-26.
- 18.K. Ashok Reddy, "A Critical Review of Heat Transfer Studies in S Shaped Helical Coil Heat Exchanger Using Nano Fluids", International Journal of Advanced Research Foundation, Vol 2 (9), Sept 2015, pp- 5-12
- 19.K. Ashok Reddy, "A Critical Review of Transmission Loss and Acoustic Methods for Performance Evaluation of Muffler Part-1", International Journal of Advanced Research Foundation, Vol 2 (10), Oct 2015, pp-1-5
- 20.K. Ashok Reddy, "A Critical Review Of Renewable Solar Energy Applications", IOSR Journal of Mechanical and Civil Engineering e-ISSN: 2278-1684,p-ISSN: 2320-334X, V15(11), 2015, pp- 20-24
- 21. K Ashok Reddy Experimental Verification of Convective Heat Transfer Rates in S Shaped Helical Coil Heat Exchanger ",International Journal of Advanced Research Foundation Vol 2 pp-1-4

- 22 . K Ashok Reddy .Experimental Investigation of Turbulence Flow Creation with Different Profiles in Intake Manifold of Diesel Engine International Journal of Emerging Technology and Advanced Engineering Vol. 6, Issue 2, February 2016 pp-244-249
- 23.K Ashok Reddy A Survey Of Entropy Generation In A Helical Coil Heat Exchanger International Journal of Innovative Technology and Exploring Engineering Volume-5, Issue-3, March 2016, pp-2910-2915
- 24. K Ashok Reddy A Critical Review Of Performance Analysis Of Nano Coolants In Diesel Engine International Journal of Engineering, Business and Enterprise Applications (IJEBEA) Vol 15 Issue 1, December 2015-Februrary 2016, pp 95-98
- 25.K Ashok Reddy Taguchi Approach To Evaluate Performance Parameters For Diesel & Petrol Engine International Journal of Current Engineering and Technology, Vol 6 No2 April 2016 pp 451-453
- 26. K ashok Reddy A Survey On Combustion Engine Using Compressed Natural Gas-Diesel Fuel System International Journal of Innovative Research in Science Engineering and Technology vol 5 Issue 3 march 2016, pp 3575-3579
- 27.K Ashok Reddy, A Crtical Review Of Entropy Generation in Internal Combustion Engine IPASJ International Journal of Mechanical Engineering (IIJME) vol 4 Isuue 3, March 2016, pp 1-4
- 28.K Ashok Reddy Performance Evaluation of Water Emulsion Fuel used in Internal Combustion Engine International Journal of Advance Engineering and Research Development vol. 3, Issue 3, 2016 pp 210-214
- 29.K Ashok Reddy, Exhaust Manifold Developmental Activates in Compression Ignition Engine International Journal of Emerging Technologies in Computer and Applied Sciences (IJETCAS) Vol 15 issue 1 December 2015-February 2016, pp 80-85
- 30.K Ashok Reddy , A Survey on Thermal Energy Storage Systems SSRG International Journal of Mechanical Engineering Vol 3 issue 3 March 2016, pp 1-3
- 31.K Ashok Reddy A Survey of Entropy Generation in a Helical Coil Heat Exchanger International Journal of Innovative Technology and Exploring Engineering vol 5 issue 11 April 2016 pp 1-3
- 32. K Ashok Reddy, "A Critical Review Of Entropy Generation Analysis in Micro Channel Using NanoFluids", International Journal of Science & Engineering Development Research
- 33. K Ashok Reddy, "Developmental Practices Of Intake Manifold For Compression And Spark Ignition Engines", International Journal of Innovative Research in Science, Engineering and Technology, Accepted in Press.
- 34. K Ashok Reddy, "Performance Analysis and Evaluation of Solar Still System", International Journal of Emerging Technologies in Computer and Applied Sciences Accepted in Press.
- 35. K Ashok Reddy, "A Review of Heat Transfer Studies for Shell & Tube Heat Exchangers", International Journal of Science & Engineering Development Research Accepted in Press.

#### **Conference Papers**

1.Dr K Ashok Reddy, "A Critical Review on Acoustic Methods & Materials of a Muffler" © 2016 Elsevier Ltd. Materials Today: Proceedings00, International Conference on Advancement of Aero Mechanical Materials, ICAAMM-2016, held on 7-9<sup>th</sup> July 2016 at MLR Institute of Technology, Dun gel, Hyderarbad-43, Telaganna State, India. Accepted in Press

2.Dr K Ashok Reddy, "Non-Destructive Testing, Evaluation Of Stainless Steel Materials SS304L", © 2016 Elsevier Ltd. Materials Today: Proceedings00, International Conference on Advancement of Aero Mechanical Materials, ICAAMM-2016, held on 7-9<sup>th</sup> July 2016 at MLR Institute of Technology, Dun gel, Hyderarbad-43, Telaganna State, India. Accepted in Press

Date: 14th July 2016 (Dr. K. Ashok Reddy)