# <u>Bio-Data</u>

Name Father's Name	: KONIREDDY HEMACHANDRA REDDY : K. KRISHNA REDDY
Date of Birth	: 01-05-1966
Address for Communication	n: Professor of Mechanical Engineering
	JNTUA College of Engineering
	Anantapuramu-515 002. (A.P.) India.
Phone	: (P) 09440272244
e-mail	: <u>konireddy@gmail.com</u> ,
	<u>hemareddy.mech@jntua.ac.in</u>
Family	: Wife–M. Praveena – Home Maker;
	Son–K. Hasith Reddy- B.Tech, Employed with TCS

# **Education Qualifications:**

Exam Passed	University/Board	Year of Passing	% Marks	Division
Ph.D	J.N.T. University Hyderabad	2001		
(Mechanical Engg.)	(A.P.) India	(April)		
M.Tech.	J.N.T. University Hyderabad	1991	82.0	Distinction
(Heat Power)	(A.P.) India.			
B.Tech	S.V. University Tirupati. (A.P)	1988	70.9	Distinction
(Mechanical Engg.)	NBKRIST, Vakadu			
Intermediate	Board of Intermediate	1983	66.5	First Class
(10+2)	Education, Hyderabad			
S.S.C (10)	Board of Secondary	1981	66.8	First Class
	Education, Hyderabad			

# **Professional Experience:**

S.No	Name of the organization	Post Held	Nature of Job	Period
1.	JNT University Anantapur, Anantapur.	Professor & Registrar	University Administration	27-05-2019 - till date
2.	JNTUA College of Engineering, Anantapur	Professor	Teaching/Research	13-11-2014 – 27-05-2019
3.	JNT University Anantapur, Anantapur.	Professor & Registrar	University Administration	20-09-2012 to 13-11-2014
4.	JNT University Anantapur, Anantapur.	Professor & Director	Director of Academic & Planning	21-01-2010 to 20-09-2012
5.	JNTU College of Engineering, Pulivendula	Professor & Principal	Teaching/ Research	01-09-2008 to 20-01-2010
6.	JNTU College of Engineering, Anantapur	Professor	Teaching/Research	02-07-2003 to 31-08-2008
7.	Sri Venkateswara College of Engineering & Technology Chittoor, (A.P)	Principal	Administration/ Teaching	30-09-2000 to 01-07-2003

8.	G. Pulla Reddy College of	Associate	Teaching	01-07-1998 to
	Engineering Kurnool, (A.P)	Professor		29-09-2000
9.	G. Pulla Reddy College of	Lecturer	Teaching	28-08-1992 to
	Engineering, Kurnool, (A.P)			30-06-1998
10.	K.I.T.S, Ramtek	Lecturer	Teaching	20-10-1991 to
	Nagpur (Dist.) M.S			25-08-1992
11.	K.S.R.M. College of	Assoc.	Teaching	21-11-1988 to
	Engineering, Kadapa (A.P)	Lecturer		30-04-1989

#### Major Awards Received:

- Anna University National Award for the Outstanding Academic from the degree level Institutions from the ISTE, India for the year 2018
- **Best Teacher Award** from the *Government of Andhra Pradesh* for the year 2011.
- **Broad Outlook Learner Teacher Award** (BOLT) by *Air- India* for the year 2006-07.

#### Patents Received:

Patent published on "Computer implemented system and method for evaluating optimal machining parameters in WEDM'. (Publication date: U/S11A, 09-06-2017)

#### **Research Projects:**

- Ministry of Defence, Govt. of India sponsored Project on "Studies on Development of an Integrated Approach for Modeling the Annular Combustors of aero Gas Turbines" with a grant of Rs.17.97 Lakhs. (Principal Investigator, Completed).
- DST-SERB Core Research Grant Project on "Nanoparticle Enhanced Phase Change Material Microcapsules/Fibers for Advanced Energy Storage and Allied Applications". Amount Sanctioned: 37.83 Lakhs (2018-2021, Co-Principal Investigator; Ongoing).
- Ministry of Defence, Govt. of India sponsored Project on "Ultrasonic impact treatment of Ti6A14V welds of gas turbine modules for fatigue life enhancement" with a grant of Rs.18.58 Lakhs. (Co-Principal Investigator, Completed).

#### **Technical Papers Presented:**

	Journals	Conferences
International	114	40
National	24	44
Total	138	84

➢ Google Scholar Details: h-Index − 19.

#### i10 –Index – 30, Citations – 1466

- > Merit Award to Technical Paper by Institution of Engineers India.
- > Best paper Award to a Technical Paper Presented in a Conference.

# **Books Authored and Published:**

- Co-Authored a Book Titled "Thermal Engineering Data Hand Book", published by IK International, New Delhi, 2007.
- Co-Authored a Book Titled "Experimental Studies on the Performance of C.I Engine with TME Blends" Lambert Academic Publishing.

#### **Research Guidance:**

- > Post Doctoral Guided : 01
- > Ph. D's Guided : 39
- > M. Tech Projects Guided : 73

#### **Invited Talks:**

- Delivered more than 50 invited talks in various Universities and Colleges in the areas of Computational Fluid Dynamics, IC Engines, Heat Transfer, Pollution Mitigation, Materials and Alternative Sources of Energy.
- Delivered around 100 talks on Personality Development, Career Counseling, Goal Setting and Achievement Motivation in various academic institutions and public platforms.

#### Workshops/ Summer Schools Attended:

#### A. Academic:

- i. One Day Workshop on "*Energy Conservation*" Organized by University College of Engineering, Osmania University, Hyderabad, India. August 1993.
- ii. Summer School on "*Motor Vehicle Emission Regulations, Test Cycles and Control Methods"* Organized by Indian Institute of Technology (IIT), Madras, India. May 1995.
- iii. "*e-Learning" Organized by State Project Funding Unit* (SPFU) in December, 2005 at Grand Kakatiya, Hyderabad.
- iv. International Conference on "*Renewable Energy (ICORE-2006)*", 8-11 February, 2006 Organised by Solar Energy Society of India (SESI) at HITEX, Hi-Tech City, Hyderabad.
- v. "*Computational Fluid Dynamics for Industrial Applications*", 1-6 May, 2006 at IIT, Bombay.
- vi. "*Star-CD & ES-ICE*", during 11-15 December, 2006, organized by CSM Software Pvt. Ltd. Bangalore.
- vii. Faculty Development in "*Teaching entrepreneurship for teachers of colleges and Polytechnics*", during 19-30 November, 2007, organized by The Entrepreneurship Development Institute of India, Hyderabad.
- viii. One day workshop on "*R&D initiatives"* on 9<sup>th</sup> September, 2011.
- ix. Agile Methodologies, during Faculty Development Programme on 25-Feb-2015 at JNTUA College of Engineering, Ananthapuramu.

- x. One week Faculty Development Programme on "Achieving Excellence in Engineering Education" at CSDEC The Institution of Engineers (India), HP State centre, Shimla, conducted from 24-28 May 2018.
- xi. Attended Three-Day "Professional Development Training Programme" under TEQIP-III during 07<sup>th</sup> 08<sup>th</sup> Jan,2019 at Tiruchirapalli Campus.
- xii. Attended "Second International Meeting on Clean Energy Material Innovation Challenge" organized by Department of Science & Technology from 21<sup>st</sup> 22<sup>nd</sup> February 2019 at Indian Institute & Technology, Delhi.

#### B. Administrative:

- i. "*Orientation Programme on Educational Administration*" UGC Sponsored Programme organized by administrative Staff college, J.N.T.U. Hyderabad During 27-29 December, 2002.
- ii. "*Programme on Personality Development"* Held during 29-30 October, 2004 at Institute of Public Enterprise, Hyderabad.
- iii. "*Management Information System"* on 6<sup>th</sup> October, 2006 at YMCA Institute of Engineering, Faridabad.
- iv. "*Educational Leadership for Vice-Chancellors and Senior level Educational Managers*", during 12-14 May 2008 held at Administrative Staff College of India, Hyderabad.
- v. "*Management Capacity Improvement Programme*", during 8-13 June, 2008 held at Indian School of Business (ISB), Hyderabad.
- vi. "*Programme on Domestic Enquiry, Disciplinary Action and Discipline"* held during 17-19 May, 2012 by Institute of Public Administration, Bengaluru.
- vii. Attended Training Program on "Right to Information Act 2005, Case Studies/Court Cases and Improvement of Record Management System" Conducted by NCERT on 21<sup>st</sup> – 23<sup>rd</sup> July, 2018 at Leh, Ladakh.

#### Workshops/ Training Programmes Organized:

- i. National Level Student Symposium "*DYNAMECHS-*05" during 27<sup>th</sup> December, 2005 held in Dept. of Mechanical Engg., JNTU College of Engineering, Anantapur.
- ii. National Level Student Symposium "*DYNAMECHS*-07" during 6<sup>th</sup> & 7<sup>th</sup> January, 2007 held in Dept. of Mechanical Engg., JNTU College of Engineering, Anantapur.
- iii. Workshop on "*Computational fluid dynamics through STARCD"* from 27<sup>th</sup> February to 1<sup>st</sup> March, 2007 in Dept. of Mechanical Engg., JNTU College of Engineering, Anantapur.
- iv. Two-days National Level Student Symposium "*DYNAMECHS-*2008" during 28-29 February, 2008 held in Dept. of Mechanical Engg., JNTU College of Engineering, Anantapur.
- v. "*Computational fluid dynamics through STAR-CD using Expert System on IC Engines*", during 28-30 April, 2008 held in Dept. of Mechanical Engg., JNTU College of Engineering, Anantapur.

- vi. Two Day Workshop on "*Micro Air Vehicles from MICRO INDIA, Bangalore*" at JNTUA College of Engineering, Anantapur on 28<sup>th</sup> and 29<sup>th</sup> January, 2011.
- vii. Two-Day National Workshop on "*Computational Fluid Dynamics Basics, Industrial applications and Internal Combustion Modeling"* by Department of Mechanical Engineering, JNTUA College of Engineering, Anantapur & CD-adaco, Bangalore scheduled on 19<sup>th</sup> & 20<sup>th</sup> September, 2011.
- viii. Two weeks Faculty Development Program on "*Computational Methods for Flow and Heat Transfer Analysis Application of CFD Tools"* sponsored by AICTE held at Mechanical Engineering Department, JNTUA College of Engineering, Ananthapuramu during 10-23 March, 2014.
- ix. Three Days "*National Seminar on Industrial Practices of Computational Fluid Dynamics"* Sponsored by AICTE held at Mechanical Engineering Department, JNTUA College of Engineering, Ananthapuramu during 21-23 August, 2014.
- x. Two Week Faculty Development Programme on "Solar and Wind Energy Future Technologies" sponsored by TEQIP & IE(I) held at Mechanical Engineering Department, JNTUA College of Engineering, Ananthapuramu during 12-24 November, 2018.
- xi. A Two Day Student Seminar on "Multidisciplinary Approach for Mechanical System Design" sponsored by TEQIP, held at Mechanical Engineering Department, JNTUA College of Engineering, Ananthapuramu during 27-28 December, 2018

#### Visits Abroad:

- **1. Visited USA** (Missouri State) as a member of Group study exchange programme sponsored by the **Rotary International** from 1<sup>st</sup> April 2007 to 10<sup>th</sup> May 2007. The programme is designed to promote *cultural and vocational exchange*. During this visit, I could visit a few US Universities viz. Missouri University of Science and Technology, Rolla, University of Missouri–St. Louis, Harris-Stowe State University, St. Louis and Southeast Missouri State University, Cape Girardeau. This gave me an opportunity to understand the functioning of academic and administrative setups of these Universities.
- **2. Visited Austria (Salzburg)** to present a technical paper in the NAFEMS International Conference 2013 held during 9-12 June, 2013.
- **3. Visited Malaysia (Kuala Lampur)** to participate in International conference on Innovation and Technology and to attend IE (I) Council meet during 13-16 June, 2015.

#### Membership of Professional Societies and Governing/ Executive/Advisory body of Industry and Other Sectors:

- > Member of American Society of Mechanical Engineers (ASME)
- > Gold Member of International Solar Energy Society (ISES).
- > Patron Member of **Solar Energy Society of India** (SESI)
- > Fellow of Institution of Engineers (India)

- > Life Member of Indian Society for Technical Education
- > Life Member of Indian Society for Heat and Mass Transfer
- > Life Member of Environmental Council of India
- > Fellow of Indian Society of Mechanical Engineers
- > Member, Advisory Board of Kunal IT Services Pvt. Ltd, Pune
- > Life Member of Administrative Staff College of India (ASCI) Association

#### Academic Assignments:

- Member of Committee to examine the feasibility and the necessary guidelines to establish new Engineering College in Rayalaseema University campus for the academic year 2019-20
- > Member, Governing Body of G. Pulla Reddy Engineering College (Autonomous), 2018-2021.
- Member, Academic Council of G. Pullaiah College of Engineering & technology (Autonomous), 2018-2021.
- Member, Advisory Committee, VTU Journal 2018
- Expert Member, Local Programme Planning and Management Committee (LPPMC), JNTUH UGC Human Resource Development Centre, 2018-2020.
- Chairman, Board of Studies of Sreenivasa Institute of Technology and Management Studies (SITAMS), CHITTOOR,
- Member, Internal Quality Assurance Cell (IQAC) of JNT University Anantapur, Ananthapuru from May 2018 to 2020.
- > Member of the Academic Advisory Committee ITC 2017.
- Chairman, Board of Studies (Automobile) of PDA College of Engineering, Kalburgi (Autonomous), VTU, from Feb 2017 to Feb 2019
- > Member, Board of Studies to Gudlavalleru Engineering College, JNTUK from 2016 -2018.
- > Chairman, Board of Studies (PG) in Mechanical Engineering of JNT University Anantapur, Anantapur from October, 2014 to till date.
- > Chairman, Board of Studies (UG) in Mechanical Engineering of JNT University Anantapur, Anantapur from July, 2011 to November, 2014.
- Chairman, Board of Studies (UG) in Mechatronics Engineering of JNT University Anantapur, Anantapur from July, 2011 to November, 2014.
- Member, Board of Studies (UG & PG) in Mechanical Engineering of JNTUA College of Engineering (Autonomous), Anantapur.
- > Member of Governing Council, JNTUA CEP from 28.04.2013 to till date.
- > Member of College Academic Council, JNTUA CEA from March, 2015 to till date.
- Member of Board of Studies in Mechanical Engineering of S.K. University, Anantapur from August, 2014 to 2017.

- Member of Advisory Committee, S.K. University College of Engineering & Technology, Anantapur from 2013 to 2016.
- Member of Board of studies (PG) in Mechanical Engineering of Vikrama Simhapuri University, Nellore October, 2010 to October, 2012.
- Member of Governing Council of JNTU College of Engineering, Anantapur from August, 2005 to September, 2008.
- > Member of Governing Body for many Affiliated Engineering Colleges.
- > Member, Board of Studies in various Autonomous Engineering Colleges.
- Member of Advisory Committee, S.K. University College of Engineering & Technology, Anantapur from 2013 to till date.

### **Professional Body Activities:**

- Severed as National Executive Council Member of Indian Society for Technical Education (ISTE), New Delhi, for two terms during 2003- 2005 and 2012 – 2014.
- > Nominated to the National Council of Institution of Engineers (India) for the year 2015.
- Acting as Secretary, ISTE Andhra Pradesh State section from 08.06.2015 for a period of three years.
- Acting as the Chairman, Institute of Engineers (India), Ananthapuramu Local Center since September, 2015.

#### **State Level Committees:**

- Appointed as Chairman of State level Committee by APSCHE (the Govt. of Andhra Pradesh) to Conduct of Survey on the need of the localities / mandals for establishment of New Degree Colleges in the State. (Procgs.No. APSCHE/AC/NDC-2018-19-Survey-new instts./2018 Dt.02.02.2018)
- Appointed as a member of State Level Inspection Committee by the Govt. of Andhra Pradesh to cause inspection of the Private unaided Engineering Colleges to ensure maintenance of standards. (G.O.Rt.No.131, dated:15-06-2016)
- Appointed as member of a state level committee to Study the Education System and Best Practices of Tamil Nadu Government (G.O.Rt.No.367 Dated 19-09-2014).
- Appointed as a member of committee to study to examine and suggest action to be taken on the category B admissions to professional colleges in A.P. State.
- Appointed as a member of committee to suggest modifications in the web counseling process for admission into professional colleges in A.P. State.
- > Appointed as a member of committee to explore uniform promotion rules for students pursuing B.E., B.Tech courses in A.P. State.
- > Appointed as a member of committee to evolve guidelines to conduct short-term training programmes in higher educational institutions in A.P. State.
- Appointed as a member of committee to "examine the existing procedure followed and to evolve common guidelines for conventional Universities and separate guidelines for

Technological Universities so as to strengthen the affiliating systems of various Universities in the A.P. State".

- Appointed as a member of committee to examine the possibility of giving weightage to rural students studying in Government Junior colleges in A.P. State for admission into professional colleges.
- Appointed as a member of committee to explore the possibilities of introducing online counseling in place of web counseling for admission into professional colleges in the state of A.P.
- > Appointed as a member of committee to draft RUSA proposal for the A.P. State.
- > Appointed as a member of committee to prepare draft report on setting up of state assessment and accreditation counsel in the A.P. State.
- Appointed as a member of committee to make suitable recommendations on the quantum of special fee to be collected from students admitted into professional P.G. Courses in A.P. State.

# **Extension/Other Activities:**

#### 1. NSS Officer at G. Pulla Reddy Engineering College, Kurnool:

Actively participated and organized various service activities by involving the students. A few worth mentioning activities are:

- Trained on University Talk AIDS and actively participated in AIDS awareness programmes among the student community and in few villages surrounding Kurnool town.
- Organized a summer camp with 30 students, for 15 days, in Nuthana Palle village, Pasupala, Kurnool and worked for the overall development the village.
- Created awareness on advantages of Blood donation and organized Blood donation camp.

#### 2. Member of Rotary Club, Anantapur:

Actively participated and organized various service programs under the banner of Rotary club. Some of the salient programmes are:

- > Medical Camp at Rachana Palli Village, Anantapur
- > Eye Camp at Rotary School, Anantapur
- > Career Guidance to High School Students
- Tree Plantation
- > Ayurveda Medical Camp for Women

#### **Declaration**

Certified that the above furnished information is true to the best of my knowledge.

# K. HEMA CHANDRA REDDY

#### A. International Journals (114)

- Dr. B. Chandra Mohan Reddy, C. Nadhamuni Reddy and Dr. K. Hemachandra Reddy, "Applications of Fuzzy goal and Additive fuzzy goal programming approaches to Distributors selection in supply chain", Journal of Engineering and Applied Science, Faisalabad, Pakistan, Vol:2, Issue No. 10, Pp:1533-1538. 15<sup>th</sup> October, 2007.
- 2. Dr. K. Hemachandra Reddy and V. Ushasree, "Two-Layer Control Strategy for Dynamics Control System of Ground Vehicle", International Journal of Engineering research and industrial applications (IJERIA), ISSN 0974-1518, Vol.1. No. III pp 143-154, 2008.
- 3. Dr. K. Hemachandra Reddy and V. Ushasree, "Design and Development of a Scaled Test Laboratory for the Study of MEMS Accelerometer for Intelligent Steering Wheel of an Automotive System", International Journal of Engineering research and industrial applications,(IJERIA), ISSN 0974-1518, Vol.1. No. II, pp 125-145, (2008).
- 4. Dr. K. Hemachandra Reddy and V. Ushasree, "Tire Model and Its Role in the Design of ABS Controller for Ground Vehicle Using Brake-By-Wire Technology", International Journal of Math. Sci. & Engg. Applications (IJMSEA), Vol.2. No. 1, pp 211-221. 2008.
- 5. Dr. K. Hemachandra Reddy and V. Ushasree, "Design Considerations for the Development of MEMS Sensor for Measurement of Pressure for Automobile System", International Journal of Math. Sci. & Engg. Applications (IJMSEA), Vol.2. No. 1, pp 175-189. 2008.
- T.Venkateswara Rao, Dr. K.Hemachandra Reddy, Dr.G.Prabhakar Rao, "Experimental Investigation of Pongamia, pongamia pinnata and Neem Methyl Esters as Biodiesel on C.I.Engine", Jordan Journal of Mechanical and Industrial Engineers, Vol:2, pp:117-122, May 2008.
- 7. T.Venkateswara Rao, Dr. K.Hemachandra Reddy, Dr.G.Prabhakar Rao "Experimental Investigation of Non- edible oils as biodiesels on C.I Engine", International Journal of Material Sciences. Vol:3, pp:199-209, 2008.
- 8. Dr. K. Hemachandra Reddy and V. Ushasree, "Vibration Analysis for free and forced Vibrations of MEMS Gyroscope using poles and Eigenvectors for an Automotive Application", International Journal of Engineering Research and Industrial Applications, IJMSEA, Volume I, No.1 pp.1-12, 2008.
- T. Venkateswara Rao, G. Prabhakar RaoDr. K. Hemachandra Reddy, "Experimental Investigation of Pongamia, Jatropha and Neem Methyl Esters as Biodiesel on C.I. Engine", Jordon Journal of Mechanical and Industrial Engineering (JJMIE)", Vol-2, Number-2, , ISSN 1995-6665, Pages 117-122, June-2008
- Dr. K. Hemachandra Reddy, "Effect of fuel Injection Strategies On No Emission in a DI Diesel Engine with Central Squish Lip Piston Bowl", International Journal –The Technology World, Volume V, Issue I, Oct-Nov 2009.
- R. Meenkshi Reddy and Dr. K. Hemachandra Reddy, "Upward Heat Flow of Basin Type Solar Still", International Journal of Mining and Metallurgy, Vol.45(1) B, pp.121-126, 2009,.
- 12. P.Vijaya Kumar, Dr.K.Hemachandra Reddy, Dr.B.Sudheer Prem Kumar, "Simulation of a Phase Change Material Encapsulated Building Roof for Cooling Application", The Technology World, Malaysia, Vol-5, pp:285-291, 2009.

- T. Hari Prasad, Dr. K. Hemachandra Reddy, Dr. M. Muralidhara Rao, "Performance and Exhaust Emissions of a Diesel Engine Using Methyl Esters of Fish Oil with Artificial Neural Network Aid", International Journal of Engineering and Technology (IJET), Vol.2(1) pp23-27 (February, 2010).
- T. Hari Prasad, Dr. K. Hemachandra Reddy, Dr. M. Muralidhara Rao, "Combustion, Performance and Emission Analysis of Diesel Engine Fuelled with Methyl Esters of Ground Nut Oil", International Journal of Materials Science (IJOMS), Volume 5, Number 2 (2010), pp. 233–243 (April, 2010).
- 15. R. Meenkshi Reddy and Dr. K. Hemachandra Reddy, "Thermal Energy Storage System Using Phase Change Materials Constant Heat Source", International Journal of thermal science, online first issue, pages 78-82, doi:10.2298/TSCI/100520078R, 2010.
- P. Sanjeeva Rayudu, Dr. K. Hemachandra Reddy, "Modelling and Simulation of Few Cross Ventilation Scenarios", International Journal of The Technology World, ISSN: 2180-0614, volume-V, Issue-I, pp. 185-190, March 2010.
- P. Sanjeeva Rayudu, Dr. K. Hemachandra Reddy, "Variations of Air change Rates in a Building for the Few Single Sided Ventilation Cases", International Journal of Technology Today, ISSN: 2180-0987, volume-II, Issue-I, pp. 113-118, March 2010.
- P. Sanjeeva Rayudu, and Dr. K. Hemachandra Reddy, "Building Design Recommendations for Human Comfort in Anantapur Climate", International Journal of Emerging Technologies and Applications in Engineering Technology and Sciences, (IJ-ETA-ETS), Volume-2, Issues-2, pp. 404-409. (Inno-Space Scientific Journal Impact Factor – SJIF: 3.248) April 2010,
- MD. Zafar Islam Sajid, Dr.K. Hemachandra Reddy, and E.L. Nagesh, "Wind Energy in India –A Critical Review", International Journal of Engineering Research & Industrial Applications (IJERIA) ISSN 0974-1518, Vol. 3, No. I Pp. 155-167. 2010.
- T. Hari Prasad, Dr. K. Hemachandra Reddy and M. Muralidhara Rao, "Performance and Exhaust Emissions Analysis of a Diesel Engine Using Methyl Esters of Fish Oil with Artificial Neural Network Aid", International Journal of Engineering and Technology (IJET), Vol. 2, No. 1, ISSN PP. 23-27. February, 2010.
- Dr.K. Hemachandra Reddy and V. Krishna Reddy, "Numerical Simulation and Experimental Validation on Diabetic Helical Capillary Tube With R-22", The Technology World, Malaysia V/I ISSN pp. 305-314. March – April, 2010.
- 22. P. Sanjeeva Rayudu and Dr. K. Hemachandra Reddy, "Investigations on Effect of Natural Shading for Thermal Comfort in Hot Climatic Anantapur, India", International Journal of Engineering Today. ISSN: 2180-0995, volume-II, Issue-I, pp. 93-98. March 2010.
- 23. P. Sanjeeva Rayudu and Dr.K. Hemachandra Reddy, "Investigations of Sensor based Operable Windows for Energy Saving in Hot and Dry Climatic Buildings in Anantapur, India", International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, (IJ-CA-ETS) Issue 2, pp. 140-147. July, 2010.
- 24. R. Meenakshi Reddy, N. Nallusamy, Dr.K. Hemachandra Reddy and G. Ramachandra Reddy, "An Investigation of the Effect of PCM Capsule Material on the Thermal Energy

Storage System", Ultra Scientist of Physical Sciences, International Journal of Physical Sciences, Vol. 22(1), pp. 230-238 2010.

- T. Hari Prasad, Dr.K. Hemachandra Reddy and M. Muralidhara Rao, "Combustion, Performance and Emission Analysis of Diesel Engine Fuelled with Methyl Esters of Pongamia Oil", International Journal Oil, Gas and Coal Technology, (IJOGCT) Vol. 3, No. 4, pp. 374-384. 2010.
- R.Manjunatha, P. Badari Narayana, K. Hema Chandra Reddy, "Application of Artificial Neural Networks for Emission Modelling of Biodiesels for a C.I Engine under Varying Operating Conditions", International Journal – Modern Applied Science, Vol. 4 Issue 3, p77. March- 2010,
- 27. G. Naga Malleswara Rao, Dr. K. Hemachandra Reddy and M. Sreenivasa Reddy, "Influencing Parameters on Performance of a Mantle Heat Exchanger For A Solar Water Heater –A Simulation Study", International Journal of Engineering, Science and Technology Vol. 2, No.2, PP. 155-164. April, 2010,
- 28. Dr. K. Hemachandra Reddy, G. Naga Malleshwara Rao and M. Sreenivasa Reddy, "Simulation of Performance of a Mantle Heat Exchanger-Influence of Preheating and Mantle Fluid Entry", International Journal of Multidisciplinary Research and Advances in Engineering (IJMRAE), Vol.2, No. II, July 2010.
- M. Ashok Kumar, Dr.K. Hemachandra Reddy, Y.V.Mohana Reddy, G. Ramachandra Reddy and S. Venkata Naidu, "Improvement of Tensile and Flexural Properties in Epoxy/Clay Nan Composites Reinforced with Weave Glass Fiber Reel", International Journal of Polymeric Materials, 59:1-9, ISSN.PP.1-9. 2010.
- 30. E. Venkata Subba Reddy, G. Ramachandra Reddy, A. Varadarajulu and Dr.K. Hemachandra Reddy, "Chemical Resistance and Flexural Properties of Glass and Bamboo Fibers Reinforced Unsaturated polyester Hybrid Composites", International Journal of Materials Science Volume-5, pp. 785-790, 2010.
- 31. Dr K.Hemachandra Reddy, G. Naga Malleswara Rao, M. Sreenivasa Reddy, "An Experimental investigation of Effect of Mantle Inlet Position on Satisfaction in a Solar Domestic Hot Water System", Journal of Solar Energy Society of India, New Delhi. Vol-2. June-Dec, 2010.
- Dr. K. Hemachandra Reddy, Dr. G. Naga Malleshwara Rao, "Effect of Operating Parameters on Thermal Stratification in Sensible Heat Storage Systems – A Simulation Study" International Journal of Advances in Science and Technology, Volume-2, Number-5, Issue Page 74-108. December, 2010.
- 33. E.Venkata Subba Reddy, Dr. A. Varadarajulu, Dr. G. Ramachandra Reddy and Dr. K. Hemachandra Reddy "Chemical Resistance and Tensile Properties of Glass and Bamboo Fibres Reinforced Polyester Hybrid Composites", Journal of Reinforced Plastics and Composites, Vol. 29, No. 14/2010 PP.2119-2123. 2010.
- 34. M. Ashok Kumar, Dr. K. Hemachandra Reddy, Y. Venkata Mohana Reddy, G. Ramachandra Reddy, N. S. Venkatesh Kumar and B.H. Nanjunda Reddy, "Assessment of Nanoclay Filled Epoxy on Mechanical, Thermal and Chemical Resistance Properties of

Nanocomposites", Journal of Metallurgy and Materials Science, Vol. 52, No. 4, pp. 305-315, October – December 2010.

- 35. Dr. K. Hemachandra Reddy, G. Naga Malleswara Rao and M. Sreenivasa Reddy, "An Experimental Investigation of Effect of Mantle Inlet Position on Stratification in a Solar Domestic Hot Water System", SESI Journal of Solar Energy Society of India, Vol.20 No.1 & 2 June Pp: 43-54, December, 2010.
- 36. H. Raghavendra Rao, A. VaradaRajulu, G. Ramachandra Reddy and Dr. K. Hemachandra Reddy "Tensile Properties and SEM Analysis of Bamboo and Glass Fiber Reinforced Epoxy Hybrid Composites" International Journal of Applied Engineering Research. Volume 6, Number 1 pp. 27-32. 2011.
- 37. T. Hari Prasad, Dr.K. Hemachandra Reddy and M. Muralidhara Rao, "Combustion, Performance and Emission Analysis of Diesel Engine Fuelled with Methyl Esters of Fish Oil", International Journal of Science and Technology (IJST). Vol. 1, No. 1, pp. 32-37, 2011.
- 38. Mr. J. Kanna Kumar, Dr. P. Mallikarjuna Reddy and Dr. K. Hemachandra Reddy, "Experimental Evaluation of Diesel Engine Performance and Emissions Using Biodiesel with Air Preheating" International Journal, of Advance in science and Technology Volume 2, Number 6, pp. 1-13, June ,2011.
- 39. Mithun V. Kulkarni, K. Elangovan and Dr.K. Hemachandra Reddy, "Enhancement of Impact resistance property of Nylon6 by the Addition of CaSi3 as a filler material", International Journal of Applied Engineering Research, Dindigul Volume 2, No.2, 2011.
- M. Ramesh, R.P. Elvin, K. Palanikumar, Dr. K. Hemachandra Reddy, "Surface Roughness Optimization Of Machining Parameters In Machining Of Composite Materials", International Journal of Applied Research in Mechanical Engineering, Volume – I, Issue-I, PP: 26-32, 2011.
- 41. K. Ramanaiah, A. V. Ratna Prasad and Dr. K. Hemachandra Reddy, "Mechanical Properties and Thermal Conductivity of Typha Angustifolia Natural Fibre-Reinforced Polyester Composites" International Journal of Polymer Analysis and Characterization Volume:16, PP: 496-503, June, 2011.
- 42. Dr K.HemaChandra Reddy, G. Naga Malleswara Rao, M. Sreenivasa Reddy, "Simulation of Energy Storage Tank with Mantle Heat Exchanger: Influence of Preheating and Mantle Fluid Entry on Heat Transfer", Journal of The Institute of Engineers (India), Kolkata, Volume 92, July, 2011.
- 43. K. Ramanaiah, A.V. Ratna Prasad, and Dr. K. Hemachandra Reddy, "Thermal and Mechanical Properties of Sansevieria Green Faber Reinforcement", International Journal of Polymer Analysis and Characterization, Volume: 16, PP: 602-608. 11 Nov 2011
- Mithun V. Kulkarni, K. Elangovan and Dr.K. Hemachandra Reddy, "Enhancement of Impact resistance property of Nylon6 by the addition of CaSiO3 as a filler material", International Journal of applied Engineering Research, Dindigul volume-2, No-2,pp.343-347,2011.

- 45. J. Kanna Kumar, P. Mallikarjuna Reddy, Dr. K. Hemachandra Reddy, "Experimental Evaluation of Diesel Engine Performance and Emissions Using Biodiesel with Air Preheating", ISSN: 2229-5216, Vol-.2, No.6, 2011,
- 46. Dr. K. Hemachandra Reddy, G. Naga Malleswara Rao and M.S. Reddy, "Simulation of Energy Storage Tank with Mantle Heat Exchanger: Influence of Preheating and Mantle Fluid Entry on Heat Transfer", Journal of The Institution of Engineers (India), Mechanical Engineering, Volume 92, pp. 44-50, July 18, 2011.
- K. Ramanaiah, A.V. Ratna Prasad, Dr. K. Hemachandra Reddy, "Effect of Fiber Loading on Mechanical Properties of Borassus Seed Shoot Fiber Reinforced Polyester Composites", 3 (3) PP: 374-378, 2012.
- 48. R. Meenkshi Reddy and Dr. K. Hemachandra Reddy, "Solar Energy based Thermal Energy Storage System Using Phase Change Materials", International Journal Renewable Energy Technology (IJRET), Vol.3, No.1, pp: 11-23, 2012.
- K. Ramanaiah, A.V. Ratna Prasad and Dr. K. Hemachandra Reddy, "Thermal and mechanical properties of waste grass broom fiber-reinforced polyester composites" International Journal of Materials and Design (ELSEVIER) 40 (2012) 103-108, Volume 33, January, 2012.
- 50. M. Ashok Kumar, G. Ramachandra Reddy, Dr. K. Hemachandra Reddy and B.H. Nanjunda Reddy. "Assessment of Glass/Drumstick Fruit Fiber (Moringa Oleifera) Reinforced Epoxy Hybrid Composites", Journal of Polymeric Materials, 61:749-757, 2012.
- 51. D. Sreenivasulu Reddy, K. Sreenivasa Reddy, Dr. K. Hemachandra Reddy and V. Vamsidhar, "Optimization of Paratone and Teflon Additives in the Base Oil to Reduce Frictional Losses in E-LHR DI Diesel Engine", Journal of Earth Sciences and Engineering, ISSN: 0974-5904, January 2012.
- 52. Mithun V Kulkarni, K Elangovan, K Hemachandra Reddy, "Improvements in Impact Resistance Property of Metal Plated ABS and Nylon6 Thermoplastics", FS Journal of Engineering Research, Vol. 1 (1), pp. 31-33, 2012.
- 53. Basavaraj M. Shrigiri, Omprakash D Hebbal, K. Hemachandra Reddy, "Biodiesel Applications as Fuels for Low Heat Rejection Engine: An Overview", International Journal of Mechanical Engineering Research, issue-2, pp.109-116, 2012.
- 54. R. Meenakshi Reddy, N. Nallusamy, T. Hariprasad and Dr. K. Hemachandra Reddy, "Solar Energy Based Thermal Energy Storage System Using Phase Change Materials", International Journal of Renewable energy Technology. Vol.3, No.1, pp:11-23, 2012.
- 55. Mithun V. Kulkarni, ElangovanK. And K. Hemachandra Reddy, "Improvements in Impact Resistance Property of Metal Plated ABS and Nylon6 Thermoplastics", Engineering Research, Vol,1 2012.
- 56. R. Meenakshi Reddy, N. Nallusamy, and K. Hemachandra Reddy, "Experimental Studies on Phase Change Material-Based Thermal Energy Storage System for Solar Water Heating Applications" Journal of Fundamentals of Renewable Energy and Applications Vol. 2 2012, Article ID R120314, 6 pages.
- 57. Hemachandra Reddy.K. Veeranna V, and Mallikarjuna K., "Impact of Transportation Cost for Optimum Design FMS Layout: A Genetic Algorithm Approach", International Journal

of Computational Intelligence Research, ISSN 0973-1873, Vol-8, No. 2, pp. 107-118, 2012.

- 58. M.Ramesh, K. Palanikumar, K. Hemachandra Reddy, "Comparative Evaluation on Properties of Hybrid Glass Fiber-Sisal/Jute Reinforced Epoxy Composites", Procedia Engineering, 51, pp 745-750, 2013,
- N.S. Venkatesh Kumar and Prof. K. Hemachandra Reddy, "CFD Analysis of Wind Driven Natural Cross Ventilation for a Generic Isolated Building", International Journal of Mechanical Engineering & Technology (IJMET), Volume 4, Issue 5, pp. 200 – 207, ISSN Print: 0976 – 6340, ISSN Online: 0976 – 6359. September – October, 2013,
- 60. M. Ramesh, K. Palanikumar, K. Hemachandra Reddy, "Mechanical property Evaluation of Sisal-jute-glass Fiber Reinforced Polyester Composites", International Journal of Composites Part B, Elsevier 48-2013, (Published by Elsevier Ltd.,), 1-9.2013.
- Gowthami, K. Ramanaiah, A.V. Ratna Prasad, K. Hema Chandra Reddy, K. Mohana Rao, G. Sreedhar Babu, "Effect of Silica on Thermal and Mechanical Properties of Sisal Fiber Reinforced Polyester Composites", Journal of Materials and environmental Science, Volume – 4(2), pp.199-204. 2013.
- 62. K. Ramanaiah, A.V. Ratna Prasad, K. Hemachandra Reddy, "Mechanical, Thermophysical and Fire Properties of Sansevieria Fiber-reinforced Polyester Composite", International Journal of Materials and Design (Elsevier) 49 2013-986-991, 2013.
- 63. K. Ramanaiah, A.V. Ratna Prasad, K. Hemachandra Reddy, "Thermophysical and Fire Properties of Vakka Natural Fiber Reinforce Polyester Composites", International Journal of Reinforced Plastics and Composites, April, 30, 2013.
- 64. K. Mallikarjuna, V.Veeranna and K.Hemachandra Reddy, "Performance of Metaheuristic Methods for Loop Layout Design in Flexible Manufacturing System with Integrated Scheduling", International Journal of Production Technology and Management (IJPTM), ISSN 0976 – 6383 Volume 4, Issue 1, January – April ,2013,
- K. Mallikarjuna, V.Veeranna and K.Hemachandra Reddy, "Multi-Objective Optimization for Design of Single Row Layout in Flexible Manufacturing System with Scheduling Constraint: An Approach of Nontraditional Optimization Techniques", International Journal of Applied Research in Mechanical Engineering (IJARME) ISSN: 2231 –5950, Vol-3, Iss-2, 2013.
- 66. Dr. Nagamalleshwara Rao, Dr.Hemachandra Reddy, "Analysis of Thermal Stresses in Heat Exchanger to Find Optimum Wall Thickness Through ANSYS", International Journal of Innovative Research in Science, Engineering and Technology (ISO 3297:2007 certified Organization) Vol. 2, Issue 8, August 2013.
- 67. Mithun V. Kulkarni, K. Elangovan and Dr.K. Hemachandra Reddy, "Effects of electroplating on the mechanical properties of injection molded thermoplastics, International Journal of plastics Technology", Volume.17(2)., pp.163-170, October2013.
- 68. Mithun V. Kulkarni, K. Elangovan and Dr.K. Hemachandra Reddy, "Development of electroplating process for plating polyamides", Bangladesh Journal of Scientific and Industrial Research, 48(3), 205-212, 2013

- 69. Mithun V Kulkarni, K Elangovan, K Hemachandra Reddy, Arun S Bhide, "Flexural Properties of Calcium Meta Silicate Reinforced Polyamides, International Journal of Advanced and Innovative Research", Vol. 2 (9), 2013., pp. 173-176.
- H. Suresh Babu Rao, Dr. T. Venkateswara Rao and Dr. K. Hemachandra Reddy, "Palm oil and Calophyllum Inophyllum Oil are Potential Fees Stocks for Future Biodiesel in Compression Ignition Engines", International Journal of Mechanical Engineering and Technology, ISSN:2277-4106. Volume 4, Issue 5, September – October 2013.
- K Ramanaih, A.V. Ratna Prasad, and K. Hemachandra Reddy, "Thermophysical and Fire Properties of VAKKA Natural Fiber Reinforced Polyester Composites", Journal of Reinforced Plastics and Composites, 32(15), pp.1902-1098, April, 2013.
- 72. A.Raj Kumar, Dr. G.Janardhana Raju., Dr. K.Hema Chandra Reddy, published a paper On "Heat Transfer Analysis In The Cylinder Head Of A Four-Stroke SI Engine" in International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 2 Issue 5, May – 2013.
- N.S. Venkatesh Kumar and Prof. K. Hema Chandra Reddy, "CFD Investigation of Ceiling Shape on Airflow Distribution for a Generic 2-D Room Model with and without Passive Control", International Journal of Mechanical Engineering & Technology (IJMET), Volume 5, Issue 1, January (2014), pp. 10 – 25, ISSN Print: 0976 – 6340, ISSN Online: 0976 – 6359.
- 74. R. Meenakshi Reddy, N. Nallusamy, and Prof. K. Hemachandra Reddy, "The effect of PCM Capsule Material on the Thermal Energy Storage System Performance", Journal of Renewable Energy", Hindawi Publishing Corporation, ISRN Renewable Energy, Article ID 529280, 6 pages, 2014.
- M. Ramesh, K. Palanikumar and K. Hemachandra Reddy, "Impact 15rasad15r analysis of sisal/jute and glass fiber reinforced hybrid composites", Advanced Materials Research, Trans Tech Publications, 984-985, 2014, 266-272. December 2014
- 76. M. Ramesh, K. Palanikumar and K. Hemachandra Reddy, "Influence of tool materials on thrust force and delamination in drilling sisal-glass fibre reinforced polymer (S-GFRP) composites", Procedia Materials Science (Published by Elsevier Ltd.), 5, 1915-1921, 2014.
- 77. Dr. A. Sreekanth Gowd, Prof. K. Hemachandra Reddy, Dr. M. Srinivasa Reddy, "Simulation of Fluid flow in D.I. Diesel Engine for Different Bowl Configurations", IJERT, International Journal of Engineering Research and Technology, ISSN: 2278-0181 Vol.3 Issue 2, February 2014.
- 78. K. Ramanaiah, A.V. Ratna 15rasad, K.Hemachandra Reddy, "Fire properties of elephant grass fibre and glass fibre reinforced polyester composites", Applied Mechanics and Materials, 592-594, 380-384, 2014.
- A.Raj Kumar, Dr. G.Janardhana Raju., Dr. K.Hema Chandra Reddy, published a paper On "The Effect of Exhaust Gas Recirculation and Performance of Diesel engine with Isobutonal blends." International Journal of Research in Engineering and Technology (IJRET), ISSN 2320-6802, Vol. 2, Issue I, March. 2014.

- J. Kanna Kumar, P. Mallikarjuna Reddy, Dr. K. Hemachandra Reddy, "Experimental Investigation on Cotton seed Based Bio-Diesel and Additive EMDFA 200 in Diesel Engine with Air-Pre Heating", Vol-592-594 pp-1570-1574, 2014 July, 2014.
- 81. J. Kanna Kumar, P. Mallikarjuna Reddy, K.V.N. Suresh Reddy, Dr. K. Hemachandra Reddy, "Reduction of Emissions Using Cottonseed Biodiesel with ELF Multi Functional Diesel Fuel Additive 200 and Experimental Evaluation of Diesel Engine Performance", Journal of Applied Technology in Environmental Sanitation, ISSN: 2088-3218, Vol-4 No.1, pp.13-18, July, 2014.
- 82. J. Kanna Kumar, P. Mallikarjuna Reddy, Dr. K. Hemachandra Reddy, "Effect Of Fuel Temperature on Diesel Engine Performance and Emissions using Cotton Seed Based Bio-Diesel and Additive Ac2010a 2014" International Journal of Green Chemistry and Bioprocess, ISBN: 2277-7199, May 2014.
- 83. A.Raj Kumar, Dr. G.Janardhana Raju., Dr. K.Hema Chandra Reddy, published a paper On "Evaluation of C.I Engine Performance and Emission Characteristics Fueled with CNG and Ethanol Blends as Alternative Fuel" in International Journal for Research in Applied Science and Technology (IJRAS ET), IS N: 2321-9653 Vol. 2 Issue VII, August 2014.
- 84. Basavaraj M. Shrigiri, Omprakash D. Hebbal, K. Hema Chndra Reddy, "Experimental Investigation On Low Heat Rejection Engine Fuelled With Cotton Seed Oil And Its Biodiesel", International journal of latest technology in engineering, management and applied science, Volume III, Issue XII, December 2014, pp.58-62. ISSN No. 2278-2540,
- 85. Palla Hari Sankar, Yerasu Venkata Mohan Reddy and Koni Hemachandra Reddy, "Polymer blended (Epoxy/vinylester) Nanocomposites Resistance Against Pulling & Sliding Wear Loads", International Letters of Chemistry, Physics & Astronomy, 18(2014), 75-90. ISSN: 2299-3843.
- 86. Basavaraj M. Shrigiri, Omprakash D. Hebbal, K. Hemachandra Reddy "Experimental Investigation on Low Heat Rejection Engine Fueled with Cotton Seed Oil and Its Biodiesel" IJLTEMAS, Volume III, Issue XII, December 2014.
- 87. J.V.S. Bhaskar, Dr.B.Dattatraya Sharma, Dr. K. Hemachandra Reddy, "Design and Development of an Automated Tool for Job Shop Scheduling Using PSO and CPSO", International Journal of Mechanical and Prodcution Engineering Research and Development (IJMPERD), February, 2015 Volume-5, Issue-1, 45-52- ISSN (P) 2249 -6890 ISSN (E) 2249-8001.
- 88. Mithun V Kulkarni, K Elangovan, K. Hemachandra Reddy, Basappa S J "Tribological Behaviours of ABS and Polyamide 6 Polymer–Metal Sliding Combinations Under Dry Friction, Water Absorbed and Electroplated Conditions", Journal of Engineering Science and Technology, Malaysia, Vol. 11(3), 2015.
- Mithun V Kulkarni, K Elangovan, K Hemachandra Reddy, "Sliding Wear Behaviour of Injection Moulded ABS Samples Under Normal, Water Absorbed And Electroplated Conditions, International Journal of Scientific Progress and Research, Vol. 8 (1), pp. 28-33, 2015.
- 90. Basavaraj M. Shrigiri, Omprakash D. Hebbal, K. Hema Chandra Reddy "Combustion, Emission and Performance Characteristics of a Low Heat Rejection Diesel Engine

Operating with Tobacco Seed Oil" International Journal of Recent Scientific Research Vol. 6, Issue, 7, pp.5199-5204, July, 2015

- Mithun V Kulkarni, K Elangovan, K Hemachandra Reddy, "Tribological Behaviours of CaSiO3 Reinforced Polyamide 6 Polymer–Metal Sliding Combinations under Dry Friction Conditions", Advanced Materials Manufacturing & Characterization Vol. 5 (1), pp. 142 – 147, 2015.
- 92. Mr.S Sreenivas, Dr.U Chandrasekhar, Dr.K Hemachandra Reddy, Dr.K Elangovan, Dr. B R Sridhar "Dilapidation of the TBC System During the Burner Rig Test", International Journal of Engineering and Technology, Vol. 7(3), Jun – July 2015, ISSN: 0975-4024.
- 93. Palla Hari Sankar, Yerasu Venkata Mohan Reddy and K. Hemachandra Reddy, "Polyester/vinylester polymer hybrid blended nano composites: Effect of Nano on Mechanical and Thermal Properties", Fibers and Polymers Springer link Volume-16, Issue-2, March 2015, pp 443-448.
- 94. Basavaraj M. Shrigiri, Omprakash D. Hebbal, K. Hema Chandra Reddy, "Performance Emission and Combustion Characteristics of Neem Kernel Oil and Its Biodiesel on A Low Heat Rejection Engine", Alexandria Engineering Journal, Elsevier.79, 2015 30232-30235.2015
- 95. P. Ravichandra Ganesh and K. Hemachandra Reddy, "Experimental investigation on the Performance and Emission Characteristics of Di-Diesel Engine Using Diesel- Ethanol Blends with Aqueous Cerium Oxide Nano-Fluid as Additive", Applied Mechanics and Materials, Trans Tech Publications, Switzerland, Vol. 787, 2015 pp 741-745. 2015.
- 96. T.Venkateswara Rao, Dr. K.Hemachandra Reddy, Dr.P.Venkata Chalapati, "Life Cycle Analysis of Jatropha Biodiesel", International Journal of Applied Engineering research, 2015.
- 97. T.Venkateswara Rao, Dr. K.Hemachandra Reddy, G.Sateesh Kumar, "CFD Analysis of Swirling Flow Fields Axisymmetric Gas Turbine Combustor", International Journal of Applied Engineering research, 2015.
- G.Naveen Kumar, Y.V.Mohana Reddy, K.Hemachandra Reddy, "Performance Of Blended Hybrid Fiber Epoxy/Polyester Composites", International Journal of Engineering, Sciences, Technology and Management, Volume-1, Issu-1, page-23 to 29, November-2015.
- 99. P. Badari Narayana, R. Manjunatha, K. Hemachandra Reddy, "Wind Energy Forecasting Using Radial Basis Function Neural Networks", IJRET: International Journal of Research in Engineering and Technology, Volume: 04 Issue: 12 | Dec-2015.
- 100. Raja Marudhappan, U. Chandrasekhar, K.Hemachandra Reddy "Optimization of Simplex Atomizer Inlet Port Configuration through Computational Fluid Dynamics and Experimental Study for Aero-Gas Turbine Applications", Journal of The Institution of Engineers (India): Series C, PP 1-12, First online: 22 June 2016.
- 101. A. Raj Kumar, G. Janardhana Raju and K. Hemachandra Reddy "Performance and Emission Analysis of Mamey Sapote Biodiesel with SC 5D Polymer Additive" *Elixir Mech. Engg.* 94 (2016) 40565-40569 40565.

- 102. A. Raj Kumar, G. Janardhan Raju and K. Hemachandra Reddy, "Biodiesel Production by Alkaline Transesterification of Mamey Sapote Oil", International Journal for Research in Applied Science and Engineering Technology, Volume 4, Issu-I January-2016.
- 103.G.Naveen Kumar, Y.V.Mohana Reddy, K.Hemachandra Reddy, "Fabrication & Performance Optimisation of Nanoiron-composites on Mechanical & Thermal Performance", International Journal of Engineering Trends & advanced sciences, Volume-1, Issu-1, page-34 to 42, July-2016.
- 104. Mallikarjuna B E, Dr. H. K. Shivanand, Dr. Hemachandra Reddy, MD Hanif Ahamadsab, Evaluation of Mechanical properties of Fly Ash Particulate and S-Glass Fiber Reinforced Al 4046 Hybrid MMC, in International Journal of Science Research & Education. Volume||4||Issue||08||August-2016||Pages-5708-5715||ISSN(e):2321-7545
- 105. G.Naveen Kumar, Y.V.Mohana Reddy, K.Hemachandra Reddy, "Thermal analysis of Iron-oxide nanoparticles reinforced vinylester/nanocomposites", International Journal of Nanomaterials and Biostructures, Volume-6, Issu-1, page-25 to 29, September-2016.
- 106. Basavaraj M. Shrigiri, Omprakash D. Hebbal, K. Hema Chandra Reddy "The Effect of Thermal Barrier Coatings on Diesel Engine Combustion, Performance and Emission" International Journal of Advances on Automotive and Technology, Vol. 1, No. 1, pp. 6-12, October, 2016.
- 107. G. Naveen Kumar, V. Mahidhar Reddy, Y. V. Mohana Reddy And K. Hemachandra Reddy "Study Of Abrasive Wear Behavior Of Aa 6063/Ticp In-Situ Composites" International Journal Of Mechanical Engineering & Technology (IJMET), May-2017.
- 108. G.Naveen Kumar, Y.V.Mohana Reddy, K.Hemachandra Reddy, "Synthesis and characterization of iron oxide nanoparticles reinforced polyester/nanocomposites", International Journal of Scientific and Research Publications, Volume-5 Issue-8, page-01 to 12, August-2017.
- 109. Raja Marudhappan, U. Chandrasekhar, K.Hemachandra Reddy "Numerical modeling of jet fuel spray and evaporation in annular combustion chamber", International Journal of Advanced Research in Engineering and Technology, vol. 9(4), 2018, ISSN: 0976-6499, pp. 36-49.
- 110. Raja Marudhappan, U. Chandrasekhar, K.Hemachandra "No reaction flow analysis of aeroderivative annular combustor of a turbo-shaft engine", International Journal of Advanced Research in Engineering and Technology, vol. 9(4), 2018, ISSN: 0976-6499, pp. 102-112.
- 111. Raja Marudhappan, U. Chandrasekhar, K.Hemachandra "Combustion chamber design and reaction modeling for aero turbo-shaft engine", Aircraft Engineering and Aerospace Technology, ART NO:10.1108/AEAT-10-2017-0217, Production proof was submitted on 25-Sept-2018 (Accepted and awaiting for publication)
- 112. Sasidhar Jangam, K. Hemachandra Reddy, S.Raja, "Fabrication & Characterization of Hybrid fibers and Hybrid Fiber reinforced Composites A Novel Approach". Materials Today: Proceedings 5(2018) 2795-2802.
- 113. Sasidhar Jangam, S.Raja, K. Hemachandra Reddy, "Effect of multiwalled carbon nanotube alignment on the tensile fatigue behavior of noanocomposites". Journal of Composite Materials 2018, Vol. 52(17) 2365-2374
- 114. Sasidhar Jangam, A.Hema Devi, S.Raja, K. Hemachandra Reddy, G. Vijay Kumar, "The Tensile Fatigue Behaviour of Aligned MWNT/Epoxy Nanocomposites", Proceedings of Fatigue, Durability and Fracture Mechanics, 2018, pp 351-359; online ISBN 978-981-10-6002-1

#### B. National Journals (24)

- 1. Dr. K. Hemachnadra Reddy, "Multi-Dimensional Flow Modelling Techniques", Engineering Today, Vol-5 on March 2003.
- 2. Dr. K. Hemachnadra Reddy, "Simulative comparison of inventory polices used in service oriented distribution centers of supply chain, Industrial engineering journal", Official journal of Indian institute of industrial Engineering, Navi Mumbai, Page no: 15-21, special issue 2006.
- 3. Dr. K. Hemachnadra Reddy, T.Venkateswara Rao, "Bio Diesel development and performance evaluation in C.I engine for rural transport", Engineering Today, May 2007, pp-03-09.
- 4. Dr. K.Hemachandra Reddy, T.Venkateswara Rao, Dr.G.Prabhakar Rao, "Biodiesel development and Performance Evaluation in C.I Engine", Engineering Today, May 2007, pp 03–09.
- Mr.A.Sreekanth Gowd, Prof.V.Ganesan and Prof.K.Hemachandra Reddy, "Predication of In-cylinder flow in D.I Diesel Engine with RNG k- ε Model", Journal of Institution of Engineers (India), Vol.88, October, 2007. (Won the Merit Award).
- 6. Dr. K. Hemachnadra Reddy, "Prediction of the Spray Characteristics in a Di Diesel Engine with Different Combustion Chamber Geometries", Journal on Future Engineering & Technology, Volume 3, No. 2, November 2007.
- 7. Dr. K. Hemachnadra Reddy, "Multi-Dimensional Modelling and Analysis of Direct-Injection Diesel Engine Spray Distribution with Different Injector Installation Angles", Engineering Today, Journal of Technological World, Volume X, Issue-3, March 2008.
- 8. Dr. K. Hemachnadra Reddy, "Flectural and Compressive Properties of Bamboo and Glass Fiber-reinforces Epoxy Hybrid Composites", Journal of Reinforced Plastics and Composites, 2009.
- R. Manjunatha, P. Badari Narayana and Dr. K. Hemachnadra Reddy, "Application of Artificial Neural Networks for Emission Modelling of Biodiesels for a C.I Engine under Varying Operating Conditions", National Journal of Modern Applied Science, Vol. 4, No. 3 March 2010, pp. 77-89.
- E.Venkata Subba Reddy, , Dr. A. Varadarajulu, Dr.G. R. Reddy, and Dr. K. Hemachandra Reddy "Chemical Resistance, Compressive Properties and Impact Strength of Glass and Bamboo Fibers Reinforced Polyester Hybrid Composites", Journal of the Institute of Engineers (India), Vol.91,. Pp .5-8, September, 2010.
- P. Vijaya Kumar, Dr. B. Sudheer Perm Kumar and Dr.K. Hemachandra Reddy, "Experimental Investigation on A Phase Change Material Encapsulated Building Roof for Cooling Application", The Engineering Today, Volume XII, Issue 8 PP. 79-92, August 2010.
- 12. M. Ashok Kumar, Dr. K. Hemachandra Reddy, Y. Venkata Mohana Reddy, G. Ramachandra Reddy, N. S. Venkatesh Kumar and B.H. Nanjunda Reddy, "Assessment of Nanoclay Filled Epoxy on Mechanical, Thermal and Chemical Resistance Properties of

Nanocomposites", Journal of Metallurgy and Materials Science, Vol. 52, No. 4, October – December 2010, PP. 305-315.

- Dr. K. Hemachandra Reddy, G. Naga Malleswara Rao and M. Sreenivasa Reddy, "An Experimental Investigation of Effect of Mantle Inlet Position on Stratification in a Solar Domestic Hot Water System", SESI Journal 2010 Solar Energy Society of India Vol.20 No.1 & 2 June – December, 2010. Pp: 43-54.
- Mithun V. Kulkarni, K. Elangovan, Dr. K. Hemachandra Reddy and J. N.Prakash, "Influence Of Moisture Content On 3-Body Abrasive Wear Analysis Of ABS Plasitic", i-Manager's Journal on Mechanical Engineering, Volume-I, No.3, pp: 37-41,. May-July 2011.
- 15. Dr. K. Hemachandra Reddy, G. Naga Malleswara Rao and M.S. Reddy, "Simulation of Energy Storage Tank with Mantle Heat Exchanger: Influence of Preheating and Mantle Fluid Entry on Heat Transfer" Journal of The Institution of Engineers (India), Mechanical Engineering Volume 92, July 18, 2011 PP. 44-50.
- Mithun V. Kulkarni, Elangovan K, Dr. K. Hemachandra Reddy and Prakash J.N "Investigations of The Influence of Filler on The impact Properties of Polyamides and its Composites", i-Manager's Journal on Mechanical Engineering, Research Papers Vol. 1, No.4, August-October 2011, pp. 1-6.
- 17. Mithun V Kulkarni, K Elangovan, K Hemachandra Reddy, J N Prakash, "Investigations of the influence of filler on the impact properties of polyamides and its composites", i-manager's Journal on Mechanical Engineering, Vol. 1 (4), , pp. 1-6, 2011.
- R. Manjunatha, P. Badari Narayana, K. Hema Chandra Reddy, "Radial Basis Function Neural Networks In Prediction and Modeling Of Diesel Engine Emissions Operated for Biodiesel Blends Under Varying Operating Conditions", Indian Journal of Science and Technology Vol. 5 No.3 (Mar 2012).
- 19. Mithun V. Kulkarni, K. Elangovan, Dr. K. Hemachandra Reddy, "Development of Electroplating Setup for plating ABS plastics" i-manager's Journals on Mechanical Engineering, Vol.2. No.3, .May –July 2012.
- P.Badari Narayana, Dr.S. Srinivasa Rao and Dr.K. Hemachandra Reddy, "Development of Distributed Topographical Forecasting Model for Wind Resource Assessment Using Artificial Neural Networks" Journal of Sustainable Manufacturing and Renewable Energy, ISSN: 2153-6821.
- 21. A.Raj Kumar, Dr. G.Janardhana Raju., Dr. K.Hema Chandra Reddy, published a paper On " Experimental Investigation of an Air Enhancement Device on the Performance of a Compression Ignition Engine" Journal of Material Science and Mechanical Engineering(JMSME), JSSN:2393-9095 April-June 2015.
- M. Mastanaiah and Prof. K. Hemachandra Reddy, "Effect of Geometric and Operating Parameters on Solar Flat Plate Collector Performance – A CFD Approach" Journal of Research in Mechanical Engineering Volume 4, Issue 3, May – June, 2016, pp. 06-14 ISSN Online: 2347-5188 Print: 2347-8772.
- 23. P. Ravichandra Ganesh and Prof.K.Hemachandra Reddy, "Experimental Investigation of Performance and Emission Characteristics on a Diesel Engine using Aqueous Aluminium

Oxide and Iron Oxide Nanoparticles as Additives", Journal of Chemical and Pharmaceutical Sciences, July-September-2016. Volume 9, Isssue-3, ISSN: 0974-2115. 1747-1751.

24. Dr. Sreekanth Gowd. A, Prof. Hemachandra Reddy. K., Dr. Srinivasa Reddy. M. " CFD Simulation on Effect of Fuel-air mixture formation in DI Diesel Engine with Different Piston Bowl Configurations", The Journal for Automobile Engineering. Photon 109 (2016) 130-137.

#### C. International Conferences (40)

- 1. Dr. K. Hemachnadra Reddy, "Biodiesel development and Performance Evaluation in C.I Engine for Rural Transport", International Conference on Frontier Technologies for the Industry Business and Education in Adiyamman College of Engineering, Hosur, (T.N) on Sept-2006
- Dr. K. Hemachnadra Reddy, "Forward Analysis Of Establishing Basic Climatic Design Decisions Of A Building in Hot And Dry Climate", ICORE-2007, New Delhi on 27-28<sup>th</sup> Nov-2007.
- 3. Dr. K. Hemachnadra Reddy, "Prediction of the Spray Penetration in a DI Diesel Engine Combustion Chamber with Different Bowl Configurations", ICONICE-2007, International Conference on IC Engines, JNTU, Hyderabad, (In association with Combustion Institute, India) on Dec 6-9, 2007.
- P. Sanjeeva Rayudu, Dr. K. Hemachandra Reddy, "Simulation Modeling for Numerical Calculations of Natural Ventilation Parameters of a Building for Energy Efficiency", Proceedings of International Conference on Environmental Management; Scenario and Strategies to 2020 (EMASS-2020), organized by Ujjain Engg. College, Ujjain, M.P.; 26<sup>th</sup>, 27<sup>th</sup>, December, 2007, pp. 140-146.
- P. Sanjeeva Rayudu, Dr. K. Hemachandra Reddy, "Forward Analysis of Establishment Basic Climate Design Decisions Of A Building in Hot And Dry Climate", Proceedings of International Congress on Renewable Energy 2007 (ICORE 2007), Organized by Solar Energy Society of India (SESI); 27<sup>th</sup> – 28<sup>th</sup> November, 2007, pp. 8-11.
- 6. Dr. K. Hemachandra Reddy, "Design and development of a scale test laboratory for the study of MEMS Accelerometer for intelligent Steering wheel of an Automobile system", ISERIA, Vo1.No.1/2/3/4,2008.
- T. Hari Prasad, R. Meenkshi Reddy and Dr. K. Hemachandra Reddy, "Performance and Combustion Analysis of Diesel Engine Using Methyl Esters of Fish Oil", Proceedings of the International Conference on Emerging Research and advances in Mechanical Engineering, ERA 2009, Velammal Engineering College, Chennai, during 19<sup>th</sup> & 21<sup>st</sup> March 2009. Pp. 208-217.
- T. Hari Prasad, B. Anjaneya Prasad, K. Hema Chandra Reddy and M. Muralidhara Rao, "Optimization of Transesterification Process for Bio-diesel Production from Fish oil" International conference on Advances in Mechanical and Building Sciences In The 3<sup>rd</sup> Millennium (ICAMB – 2009) pp.379-383 (December 14 – 16, 2009).
- 9. R. Meenakshi Reddy, N. Nallusamy, T. Hari Prasad, B. Anjaneya Prasad and Dr.K. Hemachandra Reddy, "Thermal Energy Storage System using Phase Change Materials-Constant Heat Source", Proc. Of the 3<sup>rd</sup> International Conference on Advances in

Mechanical Engineering, (ICAME- 2010) NIT, Surat – 395 – 007, during 4-6<sup>th</sup> January, 2010. Pp. 70-75. S.V. National institute of Technology.

- R. Meenakshi Reddy, N. Nallusamy, T. Hari Prasad, B. Anjaneya Prasad and Dr.K Hemachandra Reddy, "Solar Energy based Thermal Energy Storage System by using Phase Change Materials", International Conference on Advances in Energy Conversion Technologies (ICAECT2010), MIT, Manipal. Karnataka during 7<sup>th</sup> -10<sup>th</sup> January 2010 pp: 321-325.
- K. Ramanaiah, A.V. Ratna 22rasad, K.Hemachandra Reddy, K. Mohan Rao K., N.C. Kaushik, "Flexural and Impact Properties of Borassus Flabellifer Fruit Fiber Reinforced Polyester Composites", International Conference on Frontiers in Mechanical Engineering – FIME 2010, Dept. of Mechanical Engineering, National Institute of Technology, Surathkal, 20-22<sup>nd</sup> May, 2010.
- 12. R. Meenkshi Reddy and Dr. K. Hemachandra Reddy, "Optimization of Thermal Energy Storage System by using Taguchi Method". Proceedings of the International Conference on Frontiers in Mechanical Engineering FIME 2010, during may 20-22, 2010, National Institute of Technology Karnataka, surathkal, Mangalore, India..
- T. Hari Prasad, R. Meenakshi Reddy, Dr. K. Hemachandra Reddy "Comparative Analysis of Emission of Diesel Engine using Methyl Esters of Non-Edible Oils as Fuel", International Conference on Advances in Mechanical Engineering (ICAME-2010). NIT, Surat. Gujarat. During 4-6 January 2010. Pp. 104-105,
- 14. T. Hari 22rasad, R.Meenaski Reddy, Dr.K.Hema Chandra Reddy and Dr.M.Muralidhara Rao, "Comparative Analysis of Emissions of Diesel Engine using Methyl Esters of Non-Edible Oils as Fuel", International Conference on Advances in Mechanical Engineering (ICAME-2010) organized by S.V. National Institute of Technology, Surat from 4-6 January, 2010.
- 15. T. Hari Prasad, Dr.K. Hemachandra Reddy and Dr. M. Muralidhara Rao, "Experimental Studies on the Performance of C.I Eengine with Tallow Methyl Eester (tme) as Fuel for Various Blends of Diesel and LPG", International Conference on "Global Environment and its Sustainability: Implications and Strategies" at Presidency College, Chennai, Tamil Nadu, India. (2010).
- 16. M. Ashok Kumar, G. Ramachandra Reddy, G. Harinath Reddy, Dr. K. Hemachandra Reddy and Y. Venkata Mohana Reddy, "Influence of Short Sansevieria Cylindrica Fibres Filled Epoxy Composites on Thermal and Mechanical Parameters", International Conference on Advancement in Polymeric Materials March 25-27,2011 Organised by Advanced Research School for Technology & Product Simulation pp. 229.
- K. Ramanaiah, A.V. Ratna Prasad, Dr. K. Hemachandra Reddy, K. Mohan Rao and D. Ravi Chandra, "Flexural Properties of Borassus Seed Shot Fiber Reinforced Polyester Composites", International Conference on Advancement in Polymeric Materials", Organised by Advanced Research School for Technology & Product Simulation, March 25-27, 2011pp. 235.
- M. Ramesh, K. Palanikumar and Dr. K. Hemachandra Reddy, "Analysis in Machining Characteristics of composite Materials based on Surface Roughness" International Conference on Design and Advances in Mechanical Engineering (ICDAAME-2011), SKP Engineering College, Tamil Nadu, India., accepted for Presentation.

- K. Ramanaiah, A.V. Ratna Prasad, Dr. K. Hemachandra Reddy, K. Mohan Rao, and D. Ravi Chandra, "Thermal Properties of Borassus Seed Shoot Fiber Reinforced Polyester Composites", International Conference on Advancement in Polymeric Materials" March 25-27, 2011 Organised by Advanced Research School for Technology & Product Simulation pp. 236.
- K. Ramanaiah, A.V. Ratna 23rasad, K.Hemachandra Reddy, K. Mohan Rao K., D. Ravi Chandra, "Thermal properties of Borassus Seed Shot fiber reinforced polyester composites", International Conference on Advancements in Polymeric Materials" – APM 2011, CIPET, Chennai, 25-27<sup>th</sup> Mar-2011.
- K.Mallikarjuna, Dr.V.Veeranna and Dr. K. Hemachandra Reddy, "Effect of Transportation Cost with Discrete Population for FMS Layout Design – A Genetic Algorithm Approach", SMBS, VIT University, Vellore, India.ICAMB 2012, Jan 9-11, 2012,
- R.Meenakshi Reddy, N.Nallusamy, T.Hari Prasad, B.Anjaneya Prasad, K. Hemachandra Reddy, "Studies on PCM based TES system for various sizes of PCM capsules", Proceedings of the International Conference on Recent Advances& Challenges in Energy 2012. MIT, Manipal, Karnataka, during 4 -6<sup>th</sup> January, 2012, pp. 590-598.
- 23. R.Meenakshi Reddy, Nallusamy.N, K.Hemachandra Reddy, "Experimental Studies on Phase Change Material based Thermal Energy Storage System for Solar Water Heating Applications" Proceedings solarisis-2012 organized by IIT Delhi during February 07-09, 2012 at Varanasi, U. P., INDIA.
- D.Sreenivasulu Reddy, Dr. K.Sreenivasa Reddy, Dr. K. Hemachandra Reddy and V.Vamsidhar, "Optimization of Paratone and Teflon Additives in the Base Oil to reduce Frictional Losses in E-LHR Di Diesel Engine", International Conference on Recent Advances and Challenges in Energy – 2012, January 04-06, 2012, Manipal Institute of Technology, Manipal – 576104.
- 25. D.Sreenivasulu Reddy, Dr. K.Sreenivasa Reddy and Dr. K. Hemachandra Reddy, "Performance and Exhaust Emission Characteristics of a Direct Injection Diesel Engine with Insulated Combustion Chamber" International Conference on Challenges and Opportunities in Mechanical Engineering, Industrial Engineering and Management Studies (ICCOMIM – 2012), MSRIT, Bangalore 11-13 July, 2012.
- 26. Hemachandra Reddy.K., Veeranna V, and Mallikarjuna K, "Effect of Transportation Cost with Discrete Population for Optimum FMS Layout Design: A Genetic Algorithm Approach", Proceedings of the Second International Conference on Advances in Mechanical Manufacturing and Building Sciences ICAMB-2012', held at VIT University, VELLORE, Tamilnadu, INDIA.
- 27. D. Sreenivasulu Redy, Dr. K. Sreenivasa Reddy and Dr.K. Hemachandra Reddy, "Design and Fabrication of Direct injection C.I. Engine combustion Chamber to Improve the Thermal Efficiency", Under TEQIP –II 21<sup>st</sup> & 22<sup>nd</sup> June 2013.
- 28. Hemachandrareddy.K., Veeranna V, and Mallikarjuna K, "Optimization of Loop Layout in Flexible Manufacturing System with Scheduling constraints –An Approach of Evolutionary Algorithm and Trajectory Based Method", Proceedings of the International Conference on Computational Intelligence & Advanced Manufacturing Research, ICCIAMR-2013', held at VELS University, Chenna, Tamilnadu, INDIA.

- 29. Dr. K. Hemachandra Reddy, "Effect of In-Cylinder Fluid flows and Nox Emissions with Central-Squish-Lip in the piston–Bowl of DI Diesel Engine: A CFD Prediction" NAFEMS world International Congress/SPDM Conference 2013 held during 9<sup>th</sup> to 12<sup>th</sup> June, 2013 in Salzburg, Austria.
- 30. Hemachandrareddy.K. Veeranna V, and Mallikarjuna K,. (2011), "Effect of Transportation Cost With Discrete Population for Optimum FMS Layout Design: A Genetic Algorithm Approach", Proceedings of the Second International Conference on Advances in Mechanical Manufacturing and Building Sciences ICAMB-2012', held at VIT University, VELLORE, Tamilnadu, INDIA.
- M. Ramesh, K. Palanikumar and K. Hemachandra Reddy, "Impact response analysis of randomly oriented sisal/jute fiber reinforced glass fiber epoxy composites", In: Proceedings of the IEEE-International Conference on Research and Development Prospectus on Engineering and Technology (ICRDPET 2013), ISBN: 978-1-4673-4948-2, Vol.1, 254-258, 2013.
- 32. Hemachandrareddy.K. Veeranna V, and Mallikarjuna K (2011), "Optimization of Loop Layout in Flexible Manufacturing System with Scheduling constraints –An Approach of evolutionary algorithm and Trajectory based method", Proceedings of the International Conference on computational intelligence & Advanced Manufacturing Research ICCIAMR-2013', held at VELS University, Chennai, Tamilnadu, INDIA.
- K. Ramanaiah, A.V. Ratna 24rasad, K.Hemachandra Reddy, "Fire Properties Of Elephant Grass Fiber And Glass Fibre Reinforced Polyester Composites", International Mechanical Engineering Congress – IMEC 2014. National Institute of Technology, Tiruchirapalli, 13-15 June, 2014.
- 34. K. Ramanaiah, A.V. Ratna 24rasad, K.Hema Chandra Reddy, "Flammability of Unsaturated Polyester Resin and its Composites with Natural and Synthetic Fibres", International Conference on Recycling and Reuse of Materials, Mahatma Gandhi University, Kottayam, 11-13 April, 2014.
- 35. M. Ramesh, K. Palanikumar, K. Hemachandra Reddy, "Experimental Investigation and Analysis of Machining Characteristics in Drilling Hybrid Glass-Sisal-Jute Fibre Reinforced Polymer Composites", 5<sup>th</sup> International & 26<sup>th</sup> All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) December 12<sup>th</sup>–14<sup>th</sup>, 2014, IIT Guwahati, Assam, India.
- 36. M. Ramesh, K. Palanikumar and K. Hemachandra Reddy, "Experimental Investigation and Analysis of Machining Characteristics in Drilling Hybrid Glass-Sisal-Jute Fiber Reinforced Polymer Composites", Proceedings of 5<sup>th</sup> International & 26<sup>th</sup> All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014), IIT Guwahati, Assam, India, 2014, 461(1-6).
- 37. P.Badari Narayana, Dr.K Hemachandra Reddy, "*Wind energy resource assessment & forecasting using radial basis function neural networks*", International Conference ICEE 2014 (International conference on Environment and Energy Jawaharlal Nehru Technological University Hyderabad) Dec 15-17, 2014.
- 38. Mr.S Sreenivas, Dr.U Chandrasekhar., Dr.K Hemachandra Reddy, Dr. K Elangovan, "Development of multi-layer thin film coatings over additive manufactured gas turbine engine components" ICAM-3D, Chennai, Feb 6-7, 2015.

- A. Raj Kumar, G. Janardhana Raju and K. Hemachandra Reddy Comparison of Air Swirl Generating Devices in A Diesel Engine Performance and Emissions International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT) – 2016.
- 40. Dr. K. Hemachandra Reddy, Experimental Investigation of Performance and Emission Characteristic on a Diesel Engine using Aqueous Aluminum oxide and Iron oxide Nano Particles as Additives, Second International Conference on Recent Advancement in Mechanical Engineering & Technology (ICRAMET'16) at Aarupadai Veedu Institute of Technology, Chennai on April 28<sup>th</sup> & 29<sup>th</sup> 2016.

#### D. National Conferences (44)

- Dr. K. Hemachandra Reddy, "Parametric Study of Fluidized Bed Combustion" National symposium on Power Plant and Fly Ash Utilization and Waste Heat Recovery Systems, Organized by University College of Engineering, Osmania University, Hyderabad(A.P) India on May 1995.
- Dr. K. Hemachandra Reddy, "High Efficiency Flat Plate Collector"- Southern Regional symposium on Solar Energy Organized by Pondicherry Engineering College, Pondicherry, India on 20<sup>th</sup> May 1995.
- 3. Dr. K. Hemachandra Reddy, "Hydrogen as a Future Automobile Fluel"– National Seminar on Energy for better Tomorrow Organized by K.I.T.S. Ramtek, Nagpur, India during Dec 1997.
- 4. Dr. K. Hemachandra Reddy, "Upward Heat Flow Analysis in Basin Type Solar Still"- National Seminar on Energy for better Tomorrow Organized by K.I.T.S. Ramtek, Nagpur, India Dec 1997.
- 5. Dr. K. Hemachandra Reddy, "Future Refrigerants-Problems and Prospects"- All India Seminar on Refrigeration and Air-Conditioning, Organized by The Institution of Engineers (India), Aurangabad & Videocon Appliances Ltd., Aurangabad on Dec 1998.
- Dr. K. Hemachandra Reddy, "Cryogenics and its Applications in Diversified Fields 17<sup>th</sup> National Symposium on Cryogenics Organized by Priyadarshini College of Engineering & Architecture, Nagpur, India on Feb.1999.
- Dr. K. Hemachandra Reddy, "Challenges Ahead-Need for Multi-dimensional Modeling of I.C. Engines – International Conference on Intelligent Flexible Autonomous Manufacturing Systems Organized by C.I.T. Coimbatore (T.N) on Nov.1999.
- 8. Dr. K. Hemachandra Reddy, "Feasibility of Three Dimensional Computations to Predict In-Cylinder Flow Field" International Conference on Intelligent Flexible Autonomous Manufacturing Systems Organized by C.I.T. Coimbattoor (T.N) on Nov.1999. (**Won the Best Paper award).**
- 9. Dr. K. Hemachandra Reddy, "Prediction of the Effect of Offset Bowl in the Piston on the Fluid Flow and Spray Distribution in D.I. Diesel Engine Cylinder" 26<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power IIT, Kharagpur, India on Dec. 1999.
- Dr. K. Hemachandra Reddy, "The Domestic Refrigerators, Its Progress" National Conference on Advanced Trends in Mechanical Engineering Research and Development at J.N.T.U College of Engineering, Anantapur (A.P) on June-2000.

- 11. Dr. K. Hemachandra Reddy, "Future of Diesel Engines for personal Transportation" National Conference on Advanced Trends in Mechanical Engineering Research and Development at J.N.T.U College of Engineering, Anantapur (A.P) on June-2000.
- Dr. K. Hemachandra Reddy, "Prediction of Initial Swirl Ratio on the Fluid Flow in a D.I. Diesel Engine Cylinder" – 27<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power at FCRI, Phalghat on Dec. 2000.
- 13. Dr. K. Hemachandra Reddy, "Numerical Prediction of the Effect of piston Bowl Offset on Turbulence and Temperature Distribution inside the cylinder of D.I. Diesel Engine", National Conference on Advanced trends in Mechanical Engineering Research and Development at Department of Mechanical Engineering, JNTU College of Engineering Anantapur on 18 October 2001.
- 14. Mr.E.Ramjee, Mr.M L S Deva Kumar, Mr.A.Sreekanth Gowd and Mr.B. Chandramohan Reddr, Use of Alcohols in Diesel Engine with the concept of surface ignition, for 'MINAC 2001' in JNTU Anantapur in 2001.
- 15. Mr.A.Sreekanth Gowd, Mr.M.Ramakrishna, Mr.M.Rajendra Kumar and Mr.T.Anand Kumar, 'Performance of glow plug surface ignition engine with ethyl easter of symrouba oil as fuel" , MINAC-2001' in JNTU, Anantapur,2001.
- Dr. K. Hemachandra Reddy, "Pre-crash Sensing for Automobiles Using Neural Network Signal Processing" – National Conference on Recent Advances in Electrical Engineering (EAR-2005) at Dept. of Electrical Engineering, JNTU College of Engineering, Anantapur on 10<sup>th</sup> December 2005.
- Dr. K. Hemachandra Reddy, "Concurrent Engineering is a tool for Advanced Manufacturing Design" – National Conference on Computer Applications in Mechanical Engineering (CAME-2005) at Dept. of Mechanical Engineering, JNTU College of Engineering, Anantapur on 21<sup>st</sup> December 2005.
- Dr. K. Hemachandra Reddy, "Neem Oil as a Bio Diesel: Experimental Analysis" National Conference on Computer Applications in Mechanical Engineering (CAME-2005) at Dept. of Mechanical Engineering, JNTU College of Engineering, Anantapur on 21<sup>st</sup> December 2005.
- Dr. K. Hemachandra Reddy, "Simulation of Single and Stepped Basin Solar Stills" National Conference on Computer Applications in Mechanical Engineering (CAME-2005) at Dept. of Mechanical Engineering, JNTU College of Engineering, Anantapur. On 21<sup>st</sup> December 2005.
- P. Sanjeeva Rayudu, Dr. K. Hemachandra Reddy, "Modeling of a High-Performance Day Lighted Building Using EQUEST", Proceedings of National Conference on Computer Applications in Mechanical Engineering. (CAME -2005), organized by Dept. of Mech. Engg., JNT University College of Engineering., Anantapur, 21<sup>st</sup> Dec' 2005, pp. 272-275.
- 21. Dr. K. Hemachandra Reddy, "Improving the driving standards of ground vehicle by using stand alone CAN controller at National Conference on Emerging trends in Electronics and Communications Engineering. -2007 (NCE-MERGE-2007), Dept. of ECE, JNTUCE, Anantapur.
- Dr. K. Hemachnadra Reddy, "Investigations On Human Comfort Housing With Natural Ventilation In Hot And Dry Climates", at Silver Jubilee All India Young Scientist Congress M.P. Council of Science & Technology, Bhopal (M.P.) on 23-25<sup>th</sup> Nov 2007.

- 23. Dr. K. Hemachnadra Reddy, "Captive Power generation through waste heat recovery gases from a sponge iron production plants", National conference on sustainable technology for better tomorrow, at VIT Univ, Vellore, on 19-20, Dec, 2007.
- 24. Dr. K. Hemachnadra Reddy, "Air pollution and its control in the sponge iron plants, National Conference on Sustainable Technology for Better Tomorrow", at VIT Univ, Vellore, on 19-20, Dec, 2007.
- 25. Dr. K. Hemachnadra Reddy, "Modeling Of Tropical Climatic Building For Habitable, National Conference on Recent Advances in Structural Engineering", RASE-2008. Dept. of Civil Engg., JNT University of College of Engg., Anantapur. On 4<sup>th</sup> April 2008.
- 26. Dr. K. Hemachnadra Reddy, "Optimization Techniques in Engineering Sciences and Technologies", Third National Conference at Bannari Amman Institute of Technology, Erode Dt, Tamil Nadu, During 27-28 March, 2008.
- 27. Hemachandrareddy.K. Veeranna V, and Mallikarjuna K,."Optimization of FMS Scheduling using Non-Traditional Techniques", Proceedings of the Third National Conference on Optimization Techniques in Engineering Sciences and Technologies, OPTEST- 2008', held at BIT, Sathyamangalam-638401, from 27<sup>th</sup> 28<sup>th</sup> March, 2008. Tamilnadu, INDIA.
- 28. P. VijayaBhaskara Reddy Dr. K. Hemachandra Reddy, and CH R. Vikram Kumar, "Modeling of wire Electrical Discharge Machining of WP7V Steel Material using ANN", National Conference on AMMMT-10 at Siddaganga Institute of Technology, 24-09-2010. Pp.1-7. Tumkur-572103, Karnataka.
- 29. M.Ramesh, K. Palanikumar and Dr. K. Hemachandra Reddy, "Analysis in Machining Characteristics of Composite Materials using Cemented Carbide Insert" Proceedings of National Conference on Recent Trends in Mechanical Engineering (RTME-2011), GKM College of Engineering and Technology, Tamil Nadu, India.
- 30. M.Ramesh, K. Palanikumar and Dr. K. Hemachandra Reddy, "Optimization of Machining Parameters Based on Surface Roughness in Machining of Composite Materials", Proceedings of National Conference on Technological Advances in Manufacturing, Modeling and Analysis (TAMMA-2011), St. Joseph's College of Engineering, Tamil Nadu, India.
- 31. M. Ramesh, K. Palanikumar and Dr. K. Hemachandra Reddy, "Optimization of Machining Parameters Based on Surface Roughness in Machining of Composite Materials" Proceedings of National Conference on Technological Advances in Manufacturing, Modeling and Analysis (TAMMA-2011), St. Joseph's College of Engineering, Tamil Nadu, India.
- 32. Mr. C.V. Subba Reddy, Dr. K. Hemachandra Reddy and C. Eswar Reddy, "Effect of Tangential Grooves on the Piston Crown and Helical Grooves in Inlet Manifold of D.I. Diesel Engine" 22<sup>nd</sup> National Conference on I.C. Engines and Combustion (22<sup>nd</sup> NCICEC 2011) National Institute of Technology Calicut. **(won the Best Paper)**
- 33. Mithun V. Kulkarni, K. Elangovan and Dr.K. Hemachandra Reddy, "Design and development of Hydraulically Actuated Press Mould for fabricating Fibre Reinforced Nylon6 Composites", National Conference on Innovations in Mechanical Engineering, NCIME-1 G.S.B.T – Department of Mechanical Engineering – March 26,2011.
- 34. Basavaraj M Shrigiri, Omprakash D Hebbal, K. Hemachandra Reddy, "Tobacco seed oil as an alternative fuel for Low Heat Rejection Engine", National Conference in Recent Advances in Mechanical Engineering and Their Impact on Indian Industries, Department of

Mechanical Engineering, Sponsored by TEQIP, P.D.A. College of Engineering, Gulbarga, 20-22 September, 2012.

- 35. A. Raj Kumar ,Dr. K. Hema Chandra Reddy., Dr. G. Amarendar Rao., An Overview of the Effects of Exhaust Gas Recirculation on the Emissions of Heavy Duty Diesel Engines. In: Proceedings of National conference AIME-2012 at Kamala Institute of Technology & Science(KITS), Huzurabad, 18<sup>th</sup> February 2012.
- Basavaraj M. Shrigiri, Dr. Omprakash D. Hebbal, Dr. K. Hema Chndra Reddy, "Tobacco Seed Oil As Alternative Fuel For Low Heat Rejection Engine", National conference on Recent advances in Mechanical Engineering and their impact on Indian industries (RAMEIII-2012), at Poojya Doddappa Appa College of Engineering, Kalburagi, pp. 154-156, 20-22<sup>nd</sup>, Sept. 2012.
- 37. D. Sreenivasulu Redy, Dr. K. Sreenivasa Reddy and Dr.K. Hemachandra Reddy, "Design and Fabrication of Direct injection C.I. Engine combustion Chamber to Improve the Thermal Efficiency", Under TEQIP –II 21<sup>st</sup> & 22<sup>nd</sup> June 2013.
- 38. A. Raj Kumar, Dr. K. Hema Chandra Reddy., Dr. G. Janardhana Raju., Effect of Exhaust Gas Recirculation and performance of Diesel Engine with Isobutonal blends. In: Proceedings of National conference AIME-2014 at Rajiv Gandhi Memorial College of Engineering, Nandyal on 22<sup>nd</sup> March 2014.
- 39. A. Raj Kumar, Dr. K. Hema Chandra Reddy., Dr. G. Janardhana Raju., The effect of Exhaust gas recirculation on duel fuel (biogas+ diesel blends) Diesel Engine performance. In: Proceedings of National conference ETIME-2015 at Osmania University, Hyderabad on 29<sup>th</sup> and 30<sup>th</sup> December 2014.
- 40. A.Raj Kumar, Dr. K. Hema Chandra Reddy., Dr. G. Janardhana Raju., Experimental investigation of an Air enhancement device on the Performance of a Compression Ignition Engine. In: Proceedings of International conference on Innovative Trends in Mechanical and Material, Manufacturing, Automobile and Aeronautical Engineering ITMMMAAE-2015 at Bapatla Engineering College on1&2<sup>nd</sup> April 2015.
- 41. Dr. K. Hemachandra Reddy, Performance Analysis of 1 MW Solar Power Plant by using Antireflection Mirror Over absorbed Plate, National Conference on Trends in Mechanical Engineering (TIME' 15) at JNTUA College of Engineering, Anatapuramu on 23<sup>rd</sup> Sept 2015.
- Dr. K. Hemachandra Reddy, Experimental Investigation on Two Stroke engine with Copper Coated Piston using Gasoline – Butanol Blends., National Conference on Trends in Mechanical Engineering (TIME' 15) at JNTUA College of Engineering, Anatapuramu on 23<sup>rd</sup> Sept 2015.
- 43. Prof. K. Hemachandra Reddy, Design and Analysis of Conveyor Belt in Groundnut Thresher Machine. in: National Conference on Emerging Trends in Mechanical Engineering (NC e-TIME'16) at JNTUA college of engineering on 27<sup>th</sup> August 2016.
- 44. Dr. K. Hemachandra Reddy, Correlation Effects (Performance and Emission) of Nano Particles as Additive to the Diesel Ethanol and Surfactant Blended Fuel on a DI (Direct Injection) – Diesel Engine, One day national Conference on Civil Engineering at Dr. M.G.R Educational And Research Institute on 11<sup>th</sup> April 2016.