

BIO-DATA OF Dr. T.P.ASHOK BABU

Professor

Department of Mechanical Engineering

National Institute of Technology Karnataka

Srinivasnagar - 575 025, MANGALORE, KARNATAKA,

INDIA

1. **NAME** : T.P.ASHOK BABU



2. **DATE OF BIRTH** : 24-01-1957

3. **PLACE OF BIRTH** : Birur, Chickmagalore District
Karnataka State, India.

4. **NATIONALITY** : Indian

5. **ACADEMIC QUALIFICATIONS:**

Degree Obtained	University	Year of Passing	Class & Rank	Percentage obtained / Specialization
B.E.(Mech.)	Mysore	1979	First class with distinction	73.3
M.E.(Heat Power)	Mysore	1984	First class with distinction	82.82
Ph.D.	IIT New Delhi	1997		Refrigeration & Air conditioning

6. TEACHING AND RESEARCH EXPERIENCE: Years as on, the break-up is as follows:

S. No	Name of Employees	Period From To	Designation	Nature of Employment
1	National Institute of Technology Karnataka, Srinivasnagar Post, Pin - 575 025	21-1-10 To Date	Professor	Teaching, Research, Consultancy, Administration
1	National Institute of Technology Karnataka, Srinivasnagar Post, Pin - 575 025	21-1-07 To 22-1-2010	Professor & Head	Teaching, Research, Consultancy, Administration
2	National Institute of Technology Karnataka, Srinivasnagar Post, Pin - 575 025	17-2-03 To 21-1-07	Professor	Teaching, Research, Consultancy, Administration
3	National Institute of Technology Karnataka, (KREC) Srinivasnagar Post, Pin - 575 025	17-2-1995 To 16-2-03	Assistant Professor	Teaching, Research, Consultancy, Administration
4	Karnataka Regional Engineering College, Srinivasnagar Post, PIN -575 025	29-9-1989 To 16-2-1995	Senior Lecturer	Teaching, Consultancy
5	Karnataka Regional Engineering College, Srinivasnagar Post, PIN -575 025	29-9-1983 To 28-9-1989	Lecturer	Teaching
6	Bapuji Institute Of Engineering and Technology, Davangere – 577 004	2-9-1980 To 23-11-1981	Lecturer	Teaching
7	Karnataka Regional Engineering College, Srinivasnagar Post, PIN -575 025	10-10-1979 To 1-9-1980	Research Assistant	Research

7. MEMBERSHIP OF PROFESSIONAL BODIES:

- 1) ISTE Life member LM 3457 1989
- 2) Fellow Member of the Institution of Engineers (India) F-112303-5
- 3) ISHMT Life Member No. 541

8. **EXPERIENCE:**

(1) Research 3 Years 6 months. (Under QIP IIT New Delhi)

1 year as research assistant, GOI Project KREC. 1979-1980

(2) Teaching 32 Years (as on 11-2-2014) (Total teaching)

9. **AREA OF RESEARCH ACTIVITIES**

Refrigeration and Air conditioning, Heat Transfer, Solar Energy,

Renewable energy, Fluid Mechanics/machinery, I.C. Engines, and CFD.

Officially recognised as the P.hD. guide for the following universities.

- a National Institute of Technology Karnataka.
- b Manipal Academy of Higher Education. (Deemed University)

10. **ACADEMIC AND TECHNICAL CONTRIBUTIONS:**

a) List of Publications in Conferences and Journals

- Vide separate sheets attached - ANNEXURE- I

b) List of M.E. and B.E/B.Tech. Thesis Guided

- Vide separate sheets attached - ANNEXURE-II

c) Special Lectures Delivered:

- Vide separate sheets attached - ANNEXURE-III

d) Contribution to the Department Laboratories:

- Vide separate sheets attached - ANNEXURE-IV

e) Contribution to Departmental Consultancy and Testing (to generate the funds)

- Vide separate sheets attached - ANNEXURE-V

f) Contribution to the Universities Activities:

- Vide separate sheets attached - ANNEXURE-VI

g) Contribution to the Institution Functioning:

- Vide separate sheets attached - ANNEXURE-VII

h) Any other Information:

i) Expert Committee etc.:

- Vide separate sheets attached - ANNEXURE-VIII

11. TEACHING EXPERIENCE: (SUBJECTS HANDLED AND THE YEARS OF HANDLING)

- Vide separate sheets attached - ANNEXURE-IX

12. STAFF PROJECTS UNDERTAKEN SPONSORED FROM GOVERNMENT AND OTHER AGENCIES:

I) Projects Completed:

- Vide separate sheets attached - ANNEXURE-X

13. SHORT TERM COURSES/SHORT TERM TRAINING/SEMINAR/SYMPOSIUM ORGANISED

- Vide separate sheets attached - ANNEXURE-XI

14. SHORT TERM COURSES/SHORT TERM TRAINING/SEMINAR/SYMPOSIUM ASSISTED IN ORGANISING

- Vide separate sheets attached - ANNEXURE-XII

15. REVIEWED ARTICLES:

- Vide separate sheets attached - ANNEXURE-XIII

16. SHORT TERM COURSES/SHORT TERM TRAINING/SEMINAR/SYMPOSIUM ATTENDED

- Vide separate sheets attached - ANNEXURE-XIV

17. ADMINISTRATION:

INSTITUTE LEVEL

-Vide separate sheets attached - ANNEXURE-XV

DEPARTMENT LEVEL

-Vide separate sheets attached - ANNEXURE-XV

18. FOREIGN VISITS MADE:

-Vide separate sheet attached – ANNEXURE - XVI

ANNEXURE - I

DETAILS OF PAPER PUBLICATIONS:

(a) PAPERS PUBLISHED IN INTERNATIONAL JOURNALS

S1 No	Journal Name	Year	Title of Paper
1	Energy 56 (2013) 8-24	Available on line 25-5-2013	Experimental and Theoretical Investigations on the Operation of TSA (Thin Film) Air Dehumidification Packed Beds of SiO ₂ Particles
2	Experimental Heat Transfer, Taylor & Francis Publication	Online available 21-3-2012	Experimental investigation of pool boiling heat transfer in ammonia/water

	2009 Impact Factor: 0.488		nitrate solution
3	International Journal of Refrigeration.	Online available 2011	"Performance Studi Desiccant Packed Varying Particl Distribution along
4	Journal of Heat Transfer, ASME Publication	October 2011, Vol. 133/101506-1	Nucleate pool boil transfer measurem flow visualizati ammonia-water mixt
5	Heat Transfer-Asian Research, Wiley Publication	Available on line 31-5-2011 Wiley Publication, 40(6), 2011, pp: 483-494	Vapour Liquid Equil Ammonia-Water-Lith Nitrate Solutions
6	International Journal of Heat and Fluid Flow,	Volume 32, Issue 3, June 2011, Pages 719-729 Experimental Heat Transfer, Taylor & Francis Publication 2009 Impact Factor: 0.488	Experimental inve in pool boiling heat of ammonia/water mi heat transfer corr
7	Experimental Thermal and Fluid Science, Elsevier Publication	Article in Press, Available online 27 February 2011 Elsevier Publication, 35 (6), (Sept., 2011) pp: 1046-1054 2009 Impact Factor: 1.234	Experimental st nucleate pool boil transfer ammonia-water-lith bromide solution
8	Renewable energy an international journal	February 2011, issue 2, Volume 36, ISSN 0960-1481	Improved utiliza desiccant material bed dehumidifier composite particle
9	International Journal of Heat and Mass Transfer	Available on line 11 Nov. 2010	Semi-analytical me heat and moisture tr packed bed of sili
10	International Journal of Fluid Mechanics Research	Volume 37, No. 3, May 22 2010, Published Bimonthly by Begell House, INC. ISSN 1064-2277	Characterisation o Ring Cavitatio Centrifugal Pumps w and Viscous Oil
11	International Energy Journal (IEJ)	Volume 11, Issue 1 (March 2010) This article also appeared in the journal's online journal system at http://www.rericjournal.ait.ac.th . IEJ is a publication of the Regional Energy Resources Information Center (RERIC), Energy Field of Study, Asian Institute of Technology , Thailand .	"Experimental Analy Engine Performan Emission Charac with Gasoline- Spirit Blends as Al Fuels".

12	International Journal of Mechanical and Automobile Engg., SERC Publication	10(1), 2010, pp. 16-23	Vapour Liquid Equilibrium of Ammonia-Water-Lithium Bromide Solution
13	Journal "Frio Calor Aire Acondicionado" Spain	Nov. 2009	HABITACIÓN MECÁNICAMENTE ELIMINACIÓN DEL MODELO PARA EL AIRE
14	European Journal of Lipid Science and Technology. [Impact Factor : 1.354]	June, 2009	Study of variables affecting the synthesis of biodiesel from Madhuca Indica
15	Journal of Energy Institute, UK. [Impact Factor: Nil]	Vol 82, No. 4, 2009, PP 242-243	Synthesis of biodiesel from edible and non-edible oils and characterization
16	Energy Sources	Part A -Recovery, Utilization and Environmental Effect (Impact Factor :0.868 as on 9-2009)	Analysis of Cycle time fluctuation in combustion parameter in CI engine operation for bio-fuels
17	Journal of Oleo Science	Vol.58, No.12 (2009).	Evaluation of Properties and Storage stability of Indica Biodiesel,
18	International Journal of ChemTech Research,	Vol.1 (2), pp 278-282, April-June 2009	Technical Aspects of Biodiesel and its Storage Stability,
19	Heat Transfer - Asian Research Wiley Publication	38 (7), 2009 Volume 38, Issue 7(2009) page 401-408,	"Assessment of boiling heat transfer correlations ammonia/water mixture"
20	Journal of Heat and mass transfer, IIT Chennai, India	2009,45:767-774, DOI 10.1007/s00231-008-0466-5	Evaluation of heat transfer surfaces for recuperator using ammonia
21	Journal of Middle European Construction and Design of Cars	No. 1, 2009, Volume VII	Theoretical Model and Simulation Study of Cavitation in Lubrication

			Oils
22	Journal of Middle European Construction and Design of Cars	Number 02 2008, Volume VI, PP 32-36	Performance Characteristics of Injection Diesel Fueled with CNG -
23	Heat and Mass Transfer	On line available Dec 2008	Evaluation of heat surfaces for recuperator using a
24	International Journal of Dynamics of Fluids	RIP, New Delhi , 2008	Modeling and Ana Sealing Ring Cavity Pumps with Water a
25	Thermal Science-International scientific journal	Vol 12 No. 3. vol.12(2008)No.3 pp.45-53. June	"Thermodynamic simu Ammonia/water Air Refrigeration Syst
26	Fuel, ScienceDirect, a division of Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands	FUEL (Impact Factor: 2.52 as on 9-2009) Vol No87, PP3550-3561.Fuel, Corrected Proof, , Available online 24 July 2008, Dec 2008 published	Bio-fuel variants f CI engine at de off-design regimes
27	International Journal of Dynamics of Fluids	ISSN 0973-1784 Volume 4, Number 1 (2008), pp13-21	Modeling and Ana Sealing Ring Cavity Pumps with Water a
28	Journal of Middle European Construction and Design of Cars	Number 01 2008, Volume VI PP 42-47	Mitigation of Gro Gas Emissions from - Operating Oprimisation
29	Changing Villages	Jan.-Feb. '89 Vol.8, No.1	Indoor Solar Cooke
30	Changing Villages	Sept.-Oct. '85 Vol.7, No.5	Briquetted Cold Sto for Indian Village
31	Changing Villages	Sept.-Oct. '84 Vol.6, No.5	Optimal Solar Biomass Hybrid Sys Hot Water in Hos Rural Areas

32	Changing Villages	Sept.-Oct. '84 Vol.6, No.5	Total Energy System House based on Woo
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(b) PAPERS PRESENTED IN INTERNATIONAL CONFERENCE

Sl. No.	Conference	Title of the Paper	Authors
1	The International Conference & Utility Exhibition On Power and Energy Systems: Issues and Prospects for Asia (ICUE 2011), 28-30 September 2011, Pattaya City, Thailand, Asian Institute of Technology, P.O Box 4, Klong Luang, Pathumthani, 12120, THAILAND	EFFECT OF AQUEOUS DENATURED SPIRIT ON ENGINE PERFORMANCE AND EXHAUST EMISSIONS	P. A. Hubballi, T.P. Ashok Babu
2	Proceedings of International Conference on Thermal Energy and Environment (INCOTEE) March 24-26, 2011, Kalasalingam University, Tamilnadu	Effect of Salt on Vapour Liquid Equilibrium of Ammonia-Water Mixture	Sathyabhama A, T.P. Ashok Babu
3	Proceedings of International Conference on Advanced Materials, Manufacturing, Management and Thermal Sciences [AMMMT – 2010] November 18 th & 19 th , 2010 at SIT, Tumkur	Vapour-Liquid Equilibrium of Ammonia-Water Mixture	Sathyabhama A, T.P. Ashok Babu
4	7th Asia-Pacific Conference on Combustion, National Taiwan University, Taipei, Taiwan 24-27 May 2009 Session 16: Engine Combustion, ID: 10156	Some Studies on Chemical Composition, and Properties of Ester of Edible and Inedible Vegetable Oils, and Their Use in CI Engine	Sudesh Bekal, T.P. Ashok Babu
5	7 th Asia Pasific Conference on combustion, National Taiwan University, Taipei,	Effect of Denatured Spirit-Water on Engine Perofrmance and Exhaust Emissions	T.P. Ashok Babu, P. A. Hubballi

	Taiwan, 24-27 Mar 2009, PP 292		
6	<i>Proc. of the International Conf. on ERA 2009, Velammal Engineering College, Chennai – 600 066, Tamil Nadu, India pp142-148</i>	“Boiling Heat Transfer In ammonia/Water Mixture And Their Pure Components”	Sathyabhama A, Dr.T.P. Ashok Babu
7	ICEE 2009 Conference Secretariat Department of Mechanical Engineering Pondicherry Engineering College PUDUCHERRY 605 014, INDIA 7 - 9 January 2009 Tel: 91 413 2655281 Ext 254	STUDY OF PERFORMANCE AND EXHAUST EMISSIONS OF SI ENGINE USING DNS85 AS ALTERNATE FUEL	T.P. Ashok Babu, P.A. Hubballi
8	12th International Refrigeration and Air Conditioning Conference, Purdue University, USA, 14 – 17 th July, 2008, 140 S. Intramural Drive, West Lafayette, IN 47907-2031	Air Flow Modeling In a Mechanically Ventilated Room	T P Ashok Babu , G S Sriram, Aneesh S Vadvadgi, Ravindra Siddeshwar
9	12th International Refrigeration and Air Conditioning Conference, Purdue University, USA, 14 – 17 th July, 2008, 140 S. Intramural Drive, West Lafayette, IN 47907-2031	USE OF A CFD CODE IN THE ANALYS OF HEAT TRANSFER SURFACES	Mohammad Shekoor T & Dr.T.P. Ashok Babu
10	Indo-Italian Conference on Green and Clean Environment (GCE 2008) 20-21 March 2008, MAEER’S MIT College of Engineering (MITCOE), Kothrud, Pune The Embassy of Italy, 50E, Chandra Gupta Marg, Chanakyapuri, New Delhi – 110 021	Theoretical Investigation and Temperature Distribution in a Vortex Tube Using Natural Refrigerants Air, Argon, Carbon Dioxide and Oxygen	Dr. T P Ashok Babu, Joy V J

11	Indo-Italian Conference on Green and Clean Environment (GCE 2008) 20-21 March 2008, MAEER'S MIT College of Engineering (MITCOE), Kothrud, Pune The Embassy of Italy, 50E, Chandra Gupta Marg, Chanakyapuri, New Delhi – 110 021	IMPACT OF SI ENGINE EXHAUST EMISSIONS ON ENVIRONMENT	Dr. T P Ashok Babu P. A. Hubballi
12	Indo-Italian Conference on Green and Clean Environment (GCE 2008) 20-21 March 2008, MAEER'S MIT College of Engineering (MITCOE), Kothrud, Pune The Embassy of Italy, 50E, Chandra Gupta Marg, Chanakyapuri, New Delhi – 110 021	Eco Friendly Alternative Refrigerants to Replace R22 in Window Air Conditioner	T.P. Ashok Babu, Rajeev R., Raghavendra Reddy
13	Indo-Italian Conference on Green and Clean Environment (GCE 2008) 20-21 March 2008, MAEER'S MIT College of Engineering (MITCOE), Kothrud, Pune The Embassy of Italy, 50E, Chandra Gupta Marg, Chanakyapuri, New Delhi – 110 021	Nox Emission Reduction In Ci Engine To Lessen Damage To Environment	Sudesh Bekal, T P Ashok Babu
14	Indo-Italian Conference on Green and Clean Environment (GCE 2008) 20-21 March 2008, MAEER'S MIT College of Engineering (MITCOE), Kothrud, Pune The Embassy of Italy, 50E, Chandra Gupta Marg, Chanakyapuri, New Delhi – 110 021	Minimum Carbon-Di-Oxide Emission Buildings For Storage Of Food Grains	Dr. T.P.Ashok Babu, I.V.D.Prasad and S.Sagar Borker

15	Proceedings Of The International Conference On Materials For The Future Icmf-2008 17-19 JAN 2008 Government Engineering College, Thirissur, Kerala, India, organized by AICTE and ISRO	Improved Grades Of Lubricating Oils For Cavitation - Free Operation Of Journal Bearings	T. P. Ashok Babu Gangadharan Nair,
16	19th National & 8th ISHMT-ASME Heat and Mass Transfer Conference January 3 - 5, 2008 JNTU Hyderabad, India	Theoretical Performance Analysis of a Micro Heat Pipe with Different Working Fluids	T.P. Ashok Babu M. Venkatesh
17	International Conference on Modeling and Simulation, Coimbatore, 27-29 August 2007	Use of a CFD code in Analysis of Cross Corrugated Heat Transfer Surfaces for Compact Recuperator	T.P. Ashok Babu, Mohammad Shekooor T.
18	International Conference on Modeling and Simulation, Coimbatore, 27-29 August 2007	Influence of Sealing Ring Dimensions on Clearance Cavitation in a Radial Flow Pump	Gangadharan Nair, T. P. Ashok Babu
19	6 th Asia-Pacific Conference on Combustion (ASPACC 07) Nagoya, Japan, May 20 - 23, 2007	Use of Vegetable Oil Ester in CI Engine: Some Studies under Overload Condition	Sudesh Bekal, T. P. Ashok Babu
20	International Conference on Bio Fuels Vision 2015, Engineering College Bikaner (October 13-15, 2006) Rajasthan	NOX and particulate emission studies for overload condition of a CI engine fueled by vegetable oil ester	Sudesh Bekal, T. P. Ashok Babu
21	International Refrigeration and Air Conditioning Conference at Purdue, USA, July 17-20, 2006.	Development of Zero ODP, Low TEWI Binary, Ternary and Quaternary Mixtures to Replace HCFC-22 in Window Air-Conditioner	Dr.T.P.Ashok Babu, Mr.Vikas.V.Samaje, Mr.Rajeev.
22	ICEET – 2003, 8 - 10 October 2003, MNIT, Jaipur, INDIA	Environmental Friendly Energy Technology for Air Conditioning	Dr.T.P.Ashok Babu , Rajaram K. Kulkarni
23	ICEET – 2003, 8 - 10 October 2003, MNIT, Jaipur, INDIA	Integrated Energy Conversion Technology using Natural Refrigerants to Replace CFCs and HCFCs in Domestic Refrigerators	Dr.T.P.Ashok Babu , Aravinda

24	IIR Conference, 19 - 20 March 1998, IIT, New Delhi, INDIA	Design Modifications Needed in the Compressor for Using Alternate Refrigerants to R 12	Dr. T. P. Ashok Babu & Dr. C.P. Arora
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(b) PAPERS PUBLISHED IN NATIONAL JOURNALS

S l o	Journal Name	Year	Title of Paper	Authors	Awards
1	International Journal on Theoretical and Applied Research in Mechanical Engineering	Vol 1 Issue 1 2012, Institute of Research and Development India (IRD INDIA), Plot no L/293, Rasulgarh, Bhubeneshwae , Odisha	CFD study of single phase flow distribution in Rectangular, wavy and offset Minichannels with water	Sreebhas h S Kutty T.P. Ashok Babu	
2	Pumps valves and systems	Vol 3, Issue 4, March -April 2012,	Prediction of oil Cavitation in Centrifugal Pump bearings	K. Gangadhar Nair, T. P. Ashok babu	
3	Pumps valves and systems	Vol 2, Issue 6, July-Aug 2011,	Prediction and Control of Sealing Ring Cavitation in Centrifugal Pumps	K. Gangadhar Nair, T. P. Ashok babu	
4	Institution of Engineers	Vol 91, July, 2010	Use of a CFD Code in the Investigation of Cross Corrugated Heat Transfer	T.P. Ashok babu, & T. M. Shekoo	Awarded the N K Iyengar Memorial Prize by Institute

			Surfaces		of Engineers on 16-12-201 1
5	NITK Research Bulletin	June 2007, Vol 16 No. 1	Theoretical & Experimental Performance Analysis of Window Air Conditioner	T. P. Ashok Babu, V.A. Thomas & Raju S Tarihal	

(d) PAPERS PUBLISHED IN NATIONAL CONFERENCES:

Sl.No.	Conference	Title of Paper	Authors	Remarks
1	NCRAC 2011, Refrigeration and Air conditioning conference from 7 th July to 9 th July 2011, IIT Chennai	CFD ANALYSIS FOR OPTIMUM LOCATION OF AIR CONDITIONER IN OFFICE TO ATTAIN MAXIMUM THERMAL COMFORT	G Sreenivasulu Reddy, Raghavendra N Ch , Mallikarjun Ashok Babu T P	
2	NCRAC 2011, Refrigeration and Air conditioning conference from 7 th July to 9 th July 2011, IIT Chennai	SELECTIVE SURFACE TO REDUCE THE HEAT GAIN IN SOLAR PASSIVE HOUSES	Srisaran Srinivas.A, Raghavendra N Ch ¹ , Ashok Babu.T.P	
3	Emerging Research and Advances in Mechanical Sciences (ERA 2011) , Velammal Engineering College at Chennai on 23rd March 2011.	MITIGATION OF SI ENGINE EMISSIONS BY ALTERNATIVE FUEL TECHNOLOGY	P. A. Hubballi, T.P. Ashok Babu	
4	21 st National Conference on I C Engines and Combustion, (21 st NCICE 2009), BIET, Davangere	Effect of Injection Time on the Performance and Emissions of Mahua Biodiesel Operated Diesel Engine	<i>N. Kapilan, T.P. Ashok Babu, Ranapratap Reddy</i>	<i>Best Paper award received</i>

5	National Conference on Refrigeration and Air Conditioning (NCRAC 2009) 8-10 January 2009, IIT Madras	PERFORMANCE ANALYSIS OF WINDOW AIR CONDITIONER WITH THE MIXTURE R 22/R 152A.	<i>Dr.T.P.Ashok Babu, Rajaram K Kulkarni, Jagadeesh L.R</i>	
6	National Conference on Energy, Economy and Environment ENERGY 2008, 31 st Jan – 1 st Feb 2008, Department of Mechanical Engineering, National Institute of Technology, Calicut, Kerala state, India	ENERGY SAVING AND ECOFRIENDLY BUILDINGS FOR HUMAN COMFORT USING SOLAR ENERGY	Dr. T.P.Ashok Babu, S.Sagar Borker and I.V.D.Prasad	
7	National Conference on Energy, Economy and Environment ENERGY 2008, 31 st Jan – 1 st Feb 2008, Department of Mechanical Engineering, National Institute of Technology, Calicut, Kerala state, India	ENERGY EFFICIENT CENTRIFUGAL PUMPS ON CAVITATION POINT OF VIEW	T. P. Ashok Babu, Gangadharan Nair	
8	First national conference on Emerging Trends in Mechanical Engineering and Sciences (ETIMES – 2007) 19 th to 20 th December 2007 Department of mechanical Engineering, Bannari Amman Institute of Technology (An ISO 9001:2000 Certified and Accredited Institution) Satyamangalam – 638 401, Erode District, Tamil Nadu.	Development of Model for the Prediction of Clearance Cavitations in Journal Bearings	T. P. Ashok Babu, Gangadharan Nair	
9	First national conference on Emerging Trends in Mechanical Engineering and Sciences (ETIMES – 2007) 19 th to 20 th	Theoretical Performance Analysis of Ammonia/Water Absorption Refrigeration System	Sathyabhama A and T. P. Ashok Babu	

	December 2007 Department of mechanical Engineerng, Bannari Amman Institute of Technology (An ISO 9001:2000 Certified and Accredited Institution) Satyamangalam – 638 401, Erode District, Tamil Nadu			
10	National conference, Trends in Mechanical Engineering TIME 2007 Department of Mechanical Engineering, Poona District Education Association's, A.G. Awate College of Engineering, Hadapsar, Pune – 411 028, (Maharastra) September 5 to 6 th 2007	Effect of salt on vapour Pressure of Ammonia/Water Solutions	Sathyabhama A and T.P. Ashok babu	
11	National Conference RAME 2007 (March 28 th & 29 th , 2007), at Dr B R Ambedkar college of agricultural engg & Tech, Etawah, U.P.,	Theoretical performance analysis of centrifugal chillers using third generation R11 substitutes"	T. P. Ashok Babu, Vijayakumar Hindasagiri, Rajeev R	
12	National Conference on "Energy & Environment" held at Jaipur Engineering College, Jaipur, 25-26, Nov. 2006.	. "Experimental Investigation of CI engine with lower and higher blends of vegetable oil biodiesel and petrodiesel"	Sudesh Bekal, T.P.Ashok Babu	
13	12th ISME Conference, Crescent engineering college, Vandalur, Chennai, 10-12th Jan 2001	Simplified Correlations for Saturated Thermodynamic and Thermo physical Properties of Alternate Refrigerants to CFCs and HCFCs.	Dr. T. P. Ashok Babu, V. A. Thomas, Raju S Tarihal and Balaraj R. Bhajantri	
14	National Solar Energy Convention - 1986,	Design Development and Testing of Simulated	T.P. Ashok Babu and B.T. Nijaguna	

	Madurai	Solar Refrigeration System		
15	National Solar Energy Convention -1984, Bhopal	Optimal Solar Thermal Biomass Hybrid Systems for Hot Water in Hostels	T.P. Ashok Babu and B.T. Nijaguna	

ANNEXURE - II
 THESIS GUIDED:

I) PhD THESIS GUIDED AND GUIDING

SL.No	Name of the student	Reg. Year and status (FT/PT)	Thesis Title	Other Supervisor(if any)Name &Dept.	Completed/Ongoing	
1	G Kiran Kumar	FT	Ocean Energy for Air-conditioning topic changed	NIL	On going	19-07-2012
2	Y Giridhar Babu	PT	Heat Transfer Studies on Hot Section Components of Gas Turbine Engines.	NIL	On going	19-07-2012
3	S. Saboor	FT	Experimental and Theoretical Studies of Green Energy Building using various Building materials and orientation	NIL	On going	22-7-2011
4	Sreebash Kutty	ME10F07, FT	CFD Analysis Of Plate Fin Heat Exchangers For Boiling And Condensation Heat Transfer Coefficients	NIL	On going	28/07/2010

5	M. Amaranatha Raju	092008ME09P09, PT	Boiling Heat Transfer & Flow friction coefficients studies on Compact Plate-fin Heat Exchanger surfaces	Dr. C. Ranganayakulu, FAvH Scientist-‘G’, ADA, Bangalore	On going	11/01/2010
6	K. V. Ramana Murthy	092007ME09P08, PT	Exploration Of Condensation Heat Transfer Coefficient And Pressure Drop On Serrated And Wavy Fin Surfaces	Dr. C. Ranganayakulu, FAvH Scientist-‘G’, ADA, Bangalore	On going	11/01/2010
7	AHMED RAMZY ABBAS	ME08F03	Theoretical and experimental investigations to enhance the transient heat and moisture transfer in vertical desiccant packed bed	Dr. Ravikiran Kadoli	Submitted May 2012	Viva on 28-9-2012
8	Satyabhama	2005 PT	Experimental investigation on bubble point temperature and boiling heat transfer coefficient for ammonia-water and ammonia-water-salt mixtures	NIL	Submitted on 29-6-2011	Viva on 21-2-2012
9	Mohammad Shekooor	2004 FT	Boiling and Condensing Heat Transfer coefficient studies in Alternate refrigerants	NIL	Submitted March 2009	Awarded 2-12-2009
10	Gangadhar Nair	2004 PT	Cavitation studies in Bearings and Pumps	NIL	Ongoing Submitted on 7-12-2009 Resubmitted on 29-11-2010	
11	Kapilan Natesh	ME 04 P4 2004 July	Effect of process variables on transesterification of	Dr. Rana Pratap Reddy Reva College of	Submitted on 23-3-2010	Finished viva voce on

			Mahua oil and studies on performance and emissions of a LPG-Methyl ester of Mahua oil of DI Dual fuel engine	Engg and Management Bangalore		21-1-2011
12	Prakesh Huballi	2003 PT	Performance study of Alcohol Blends	NIL	Ongoing Submitted on Nov 2010	Finished viva voce on 17-6-2011
13	Sudesh Bekal	2003 PT	EXPERIMENTAL INVESTIGATION ON THE USE OF ESTER-DIESEL BLEND AND WATER-IN-ESTER EMULSION IN CI ENGINE AT DESIGN AND OFF-DESIGN REGIMES	NIL	Submitted Oct 9 2009	Awarded 8-3-2010

II) M.TECH. THESIS GUIDED:

S. No.	Title of Thesis	Year
1	Computer - Aided Design of R22-dmf Vapor Absorption System.	1989-90.
2	Design, Fabrication and Testing of Air Conditioning Test Rig	1990-91.
3	Minimum Energy Consumption Buildings	1991-92.
4	The Study of Drying Parameters of Green Tiles	1996 -97
5	Optimization of Shell and Tube Heat Exchangers	1997-1998.
6	Analytical Modeling of a Summer Air Conditioning System incorporating Air-Washer	1997- 1998
7	Heat Transfer Analysis of a High Pressure Turbine Nozzle Guide Vane	1997-1998.
8	Theoretical Analysis of Window Air-Conditioner with R 22 and Alternate Refrigerants	1998-1999
9	Inception of Stall in Centrifugal Compressor	1998-99
10	Analysis of Starting Torque of Reciprocating Compressor for R 22 and Alternate Refrigerant R 290	1999-2000
11	Experimental Performance Analysis of Window Air Conditioner	1999-2000
12	HCFC alternatives for Air-Conditioners	2000-2001

13	Experimental Investigation of R-22 and Alternative in Window Air- Conditioner	2000- 2001.
14	Development of Thermodynamic Properties for Alternative Refrigerant Mixtures and Their Performance Analysis in Air-Conditioners	2001-2002.
15	Design, Fabrication and Testing of Vapor Pressure Determination Test Rig	2001-2002.
16	Design of Heat Exchanger for Dryer and Aseptic Processing Systems in Food Applications	2001-2002.
17	Theoretical and Experimental Performance Analysis of Domestic Refrigerator with Optimizing Capillary length and Composition for Eco friendly HC- blend to substitute R-12	2002-2003.
18	Performance Analysis of Window Air-Conditioner with Binary mixture as Alternative to R 22 & Capillary length Optimization	2002-2003.
19	Vapor Pressure Measurement of Conventional and Alternate Refrigerants and Standardization of Vapor pressure data	2002-2003.
20	Thermal Analysis of Nozzle Guide Vane of Small Turbo-Jet Engine	2002-2003.
21	2D and Quasi-3D Compressible Navier-Stokes Solver using Rational Runge-Kutta Time Marching method for Cascade Flows	2002-2003.
22	Thermal and Structural Analysis of Gas Turbine Rotor of a Turbojet Engine	2003-2004
23	Development of Cryogenic Heat Pipe for Spacecraft Thermal Control Application	2003-2004
24	Theoretical and Experimental study of Domestic Refrigerator to Replace R12 by Hydrocarbons	2003-2004
25	Development of Thermodynamic Properties of Binary Mixtures: R 32/R 134a, R 22/R 152a, R 290/R 600a & R 134a/R 600a	2003-2004
26	Theoretical Performance Analysis of Centrifugal Chiller Using Third Generation R11 substitutes	2004-05
27	Design and Measured Performance of Evaporative Coolers for Preservation of tomatoes	2004-05
28	Development of Thermodynamic Properties of new Alternative Refrigerant Mixtures to Investigate the Performance of Window Air-Conditioner to replace R22	2004-05
29	Theoretical Performance Analysis of a Micro Heat Pipe with different working Fluids	2004-05
30	Theoretical Investigation of Binary and Ternary Mixtures to Replace R 22 in Window Air Conditioner	2005-06
31	Alternative Working Fluids for Cascade Refrigeration System	2005-06
32	Experimental Performance Analysis of a Micro Heat Pipe with Different Working Fluids	2006-07
33	Theoretical and Experimental Investigation of Micro Heat Pipes for Electronics Cooling	2005-07
34	Optimisation of Building Materials and Orientation of Walls and roofs for Passive Solar Thermal Comfort Houses	2005-07
35	Design and Theoretical Analysis of Vortex Tube	2005-07
36	Theoretical and Experimental Investigation of Chlorine free Refrigerants to Replace R22 in Air Conditioner	2005-07

37	STEADY STATE THEORETICAL ANALYSIS OF LOOP HEAT PIPE	2006-08
38	THEORETICAL AND EXPERIMENTAL INVESTIGATION OF PASSIVE SOLAR WAREHOUSE	
39	EXPERIMENTAL STUDY ON THE RANQUE-HILSCH VORTEX TUBE	2006-08
40	EXPERIMENTAL INVESTIGATION OF THE FLOW CHARACTERISTICS OF MULTI HOLE ORIFICE PLATE	2006-08
41	FLOW ANALYSIS OF MIXING LEAK OFF ADMISSION AND IP EXHAUST	2006-08
42	THEORETICAL STUDY ON THE THERMAL PERFORMANCE OF MICRO HEAT PIPE WITH POLYGONAL CROSS-SECTION	2006-08
43	EXPERIMENTAL PERFORMANCE AND EMISSION CHARACTERISTICS OF CI ENGINE WITH METHYL ESTER OF NONEDIBLE OILS BLEND AT DIFFERENT INJECTION TIMING	2006-08
44	DESIGN OF DIRECT ELECTRICITY GENERATION SYSTEM FROM OCEAN WAVE ENERGY FOR WEST COAST OF INDIA	2007-09
45	STUDY AND DESIGN OF EXPANSION DEVICES FOR R -744 (CO ₂) TRANSCRITICAL VAPOUR COMPRESSION CYCLE	2007-09
46	STUDY OF TECHNOECONOMICAL FEASIBILITY OF AIR ENGINE	2007-09
47	Optimized Location of Airconditioning Unit for an Office Room	2009-10
48	Design of Turbine for Electricity Generation for West Coast of India	2009-10
49	Design and Analysis of Compressed Air Engine	2009-10
50	Performance Testing and Performance Enhancement of a Water Cooling Tower	2009-10

III) UNDER GRADUATE THESIS GUIDED:

Sl. No.	Title of Thesis	Year
1.	Solar Steam Cooker Using Cylindrical Parabolic Collector	1985-86
2.	Design and Fabrication of Passive Solar Pump	1985-86
3.	Microprocessor Controlled Dual Fuel I.C.Engine	1986-87
4.	Single Hand Controlled Three Wheeler	1986-87
5.	Design of a Robot	1987-88
6.	Two Dimensional Heat Transfer with Isothermal and Convective Boundaries - A Numerical Study	1987-88
7.	Lifting and Collapsing Mechanisms Incorporation in a Wheel Chair	1988-89

8.	Heat Conduction Problems - A Computer Aided Numerical Analysis	1988-89
9.	Software Development of Vapor Absorption Refrigeration System Components	1988-89
10.	Design and Fabrication of a Robotic Arm	1989-90
11.	Solar Cooler (Intermittent Solid Absorption Refrigeration Cycle).	1989-90
12.	Performance Analysis of wood Burning Stoves.	1990-91
13.	Stress Analysis Using F.E.M.	1990-91
14.	Design, Fabrication and Performance testing of Wood Burning Stoves.	1991-92
15.	Estimation of Conductive Heat Transfer Coefficient in a Vertical Vessel, Heated with Constant Heat Flux from Bottom Using FEM.	1991-92
16.	Central Air-Conditioning for KREC Silver Jubilee Auditorium.	1995-96
17.	Localized Air Conditioning Techniques for Energy Conservation.	1996-97
18.	Software for Analysis and Design of Vapour Absorption Refrigeration System.	1997-98
19.	Simulation, Fabrication and Testing of a Passive Solar House.	1997-98
20.	Theoretical Performance Analysis and Design of System Components with Alternative Refrigerants to R 12 in Refrigerator.	1998-99
21.	Software for Estimation of the Load Capacity and Design of Duct for a Centralized Air-conditioning System.	1998-99
22.	Modifications in R 12 Refrigerator to use Alternate Refrigerant R 290.	1999-2000
23.	Development of Thermodynamic Properties at Saturation States for Mixtures.	2000-01
24.	Experimentation with R 12 and Development of Saturation Properties for the R 152a and R 290 Mixtures.	2000-01
25.	Selection of the composition of a mixture of R 600a/R 134a as a substitute	2001-02
26.	Development of software for the computation of Thermodynamic Properties of any Binary Mixture.	2001-02
27.	Sizing of Evaporator with Conventional and Alternate Refrigerants.	2002-03
28.	Role of Mechatronics in Safety Aspect of Using Alternate Refrigerants and Effect of Alternate Refrigerants on Existing Compressor	2002-03
29.	Removal of Moisture in the Compressed Air by Vapour Compression Refrigeration System Using R 22 and Alternate Refrigerants.	2003-04
30.	Design of Thermo acoustic Refrigeration.	2003-04
31.	Design of Performance Simulation of Low Temperature Rankine Cycle System with Organic Fluids.	2003-04
32.	Analysis and Design of Reversed Sterling cooler	2004-05
33.	A Project report on Low Grade Energy Thermal Power Cycle	2004-05
34.	Air Flow Modelling in a Mechanically Ventilated Enclosure	2007-08
35.	Harnessing Wave Energy for Propulsion of Boat	2008-09
36.	Renewable energy for propulsion of boat	2009-10
37.		

ANNEXURE-III

10. **ACADEMIC AND TECHNICAL CONTRIBUTIONS:**

c) Special Lectures Delivered:

Sl. No.	Title of Lecture	Year	Organizer
1	Harnessing Wave Energy	22-5-2013	Faculty Development Program, Mechanical Engineering Department, Malnad college of Engineering, Hassan
2	Multidisciplinary Engineering Systems	27-12-2011	Key note address, International Joint Colloquium on Emerging Technologies in Computer Electrical and Mechanical - CEM 2011, N N College of Engineering Campus, Shimoga,
3	Passive Solar Refrigeration Systems	27-6-2011	Faculty Development Program, Mechanical Engineering Department, SIT, Tumkur
4	Recent Developments in Solar Refrigeration	27-6-2011	Faculty Development Program, Mechanical Engineering Department, SIT, Tumkur
5	Governing Equations and Introduction to CFD	20-1-2011	Faculty development program, Mechanical Engineering Department, Canara Engineering College, Benjanapadavu, Bantwal
6	Solar Energy as Future Energy	25-11-2009	Mechanical Engineering Department, Government college of engineering, Kannur, STTP on Advances in Energy Systems and Engineering
7	Energy and Environment	25-11-2009	Mechanical Engineering Department, Government college of engineering, Kannur, STTP on Advances in Energy Systems and Engineering
8	Solar Energy as Alternative Source of Energy	16-10-2009	Refresher course for College & preuniversity Students, Science and Technology Department, Government of Karnataka, Organised by Pelikola Center for science & Technology and Govind

			Das college, Surathkal,
9	Research Potential in Refrigeration & Cryogenic Field	23-9-2009	College of Engineering, Trivandrum
10	DESIGN OF EXPERIMENTAL SETUP	23-9-2009	College of Engineering, Trivandrum
11	Ecofriendly Alternative Cooling Systems	29-8-2009	Mechanical Department association with Indian Society of Heating Refrigeration and Air conditioning Engineers (ISHRAE), Two day national Seminar, Nagarjuna Engineering College, Bangalore
12	Energy Conservation Techniques in Refrigeration and Air conditioning Systems	19-5-2009	AICTE Faculty development program on Optimum Energy Utilisation in Thermal system, Mechanical Engineering Department, NIT Calicut, Calicut
13	Alternative Refrigeration Technologies to Conserve Energy and Reduction of Pollution	25-3-2009	Visiting Faculty Scheme, Mechanical Engineering Department, Government College of Engineering, Kannur, 670 563
14	COMPUTATION OF THERMODYNAMIC PROPERTIES OF PURE AND MIXTURE WORKING FLUIDS	2 nd February,2009,	ONE WEEK WINTER SCHOOL On Experimentation and computation approaches to design of mechanical components and systems 02-07 February, 2009, Mechanical Engineering Department, NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, Mangalore
15	DESIGN OF EXPERIMENTAL SETUP	6 th February,2009,	ONE WEEK WINTER SCHOOL On Experimentation and computation approaches to design of mechanical components and systems 02-07 February, 2009, Mechanical Engineering Department, NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, Mangalore
16	Ecofriendly Bio Fuel – Ethanol	18-12-2008	Biofuel conversion Technologies – Research Directions, DST Sponsored Five days National Level Workshop, Organised by Department of Mechanical Engineering, JNN College of Engineering, Shimoga,

			15 th to 19 th Dec. 2008
17	Conversion of Bifuel to Environmental Friendly	18-12-2008	Biofuel conversion Technologies – Research Directions, DST Sponsored Five days National Level Workshop, Organised by Department of Mechanical Engineering, JNN College of Engineering, Shimoga, 15 th to 19 th Dec. 2008
18	Hybrid Energy System	Oct 2008	Emerging Trends in Energy Technologies and Management, AICTE Short term training programme, Department of Electrical and Electronics Engineering, NITK, Mangalore 575 025
19	Operations of Pumps and Valves	4-6-07, 25-6-07	CCE, NITK, Training programme for Konkan Railway MPUM staff, Attavar, Mangalore
20	PROPERTIES DEVELOPMENT OF ECOFRINDLY REFRIGERANTS	6th April 2007	TWO-DAY WORKSHOP ON "ECO-FRIENDLY REFRIGERATION" sponsored under world bank aided TEQIP, Department of Mechanical Engineering University B.D.T.College of Engineering Davangere-577004, INDIA.
21	Eco-friendly Refrigeration Technology	5th April 2007	TWO-DAY WORKSHOP ON "ECO-FRIENDLY REFRIGERATION" sponsored under world bank aided TEQIP, Department of Mechanical Engineering University B.D.T.College of Engineering Davangere-577004, INDIA.
22	Manufacture of Steel and Quality Control	12-3-2007	One day seminar on Challenges of steel as a structural materials, Society of Structural Engineers Srilanka, 2 nd floor, The professional Centre, OPA Building, 275/75, Prof. Stanley Wijesundra Mawatha, Colombo 00700, Sri Lanka
23	“Alternative Energy Sources for the 21st Century”, organised by	5-4-2006	NSS-Energy club, College of Fisheries, Mangalore - 575 002, Karnataka Veterinary, Animal and Fisheries Sciences University,.

24	Technical, Finance and Project Report Writing	25-3-2006	Final Year NITK students, NITK, Surathkal
25	Insulating Materials	20-8-2004.	AICTE - ISTE STTP, Recent Advances in Materials & Manufacture of Thermal Systems (RAM & MTS) Mechanical Engineering Department, B.I.E.T., Davangere - 577 004 Karnataka
26	Thermal Systems with Alternate Refrigerants	19-8-2004	AICTE - ISTE STTP, Recent Advances in Materials & Manufacture of Thermal Systems (RAM & MTS) Mechanical Engineering Department, B.I.E.T., Davangere - 577 004 Karnataka.
27	Centrifugal compressors, pumps, Ejectors	17-5-2004 to 22-5-2004	Advanced Refresher Course on Fluid Mechanics for Plant Operation supervisors, BARC, Mysore, conducted by CCE and Dept. of Chemical Engg., (20 hours)
28	Inaugural key note address given on "Alternate Refrigerants", in Seminar on Alternate Refrigerants	18-11-2003.	Mechanical Engineering Department, LBS college of Engineering, Kasargod
29	Awareness in Engineering Concepts, MCF Staff	13-10-2003 to 25-10-2003	Organized by CCE and Mechanical Engineering Department.
30	Ozone Layer Depletion and Global Warming	28-10-2003	Hotel Woodlands, arranged by the Institution of Engineers, Mangalore Local Chapter.
31	Solar Air Conditioning System	28-1-2003.	ISTE winter school, N.I.T.K.
32	Solar Water Heating System	22-1-2003	ISTE winter school, N.I.T.K.
33	Refrigeration Systems	2-3-2001 & 5-3-2001.	Training program for Mechanical Supervisor of BARC, Mysore, Conducted by Mechanical Engineering Department, KREC.
34	Resource person for the programme and delivered key note address and Guest lectures delivered on a) Vapor absorption system as Alternative to Vapor Compression system and b) Alternate Refrigerants and Vapour Compression System.	26th June 2000.	ISTE student chapter, STJ Institute of Technology, Ranebennur, Havari district, organized one day workshop on Refrigeration and Air-conditioning on 26th June 2000

35	CFC 12 and the need for its Replacement	27-02-1998	Hotel Woodlands, arranged by the Institution of Engineers, Mangalore Local Chapter.
36	Impact of CFCs and HCFCs on Environment Pollution	12-12-1997	ISTE winter school, K.R.E.C.
37	Refresher course in Fundamentals of Mechanical Engineering	Jan. 1990 to June 1990.	KREC, C.C.E.
38	Valve Timing Diagrams and Compression ratio of I.C. engines Laboratory	1985	Extension course in Automotive Technology Organized by CCE KREC.
39	Solar vapor absorption refrigeration device for utilization of solar energy for cooling purposes	1985	ISTE Summer School, Energy Devices and Options, KREC

ANNEXURE-IV

10. ACADEMIC AND TECHNICAL CONTRIBUTIONS:

d) Contribution to the Department Laboratories:

Sl. No.	Contribution	Year
1	Design and fabrication of Heat Transfer Equipments	1984.
2	Design and Fabrication of Heat Pump, Vapor Absorption Refrigeration Unit, Air Conditioner Test Rig for Refrigeration and Air-conditioning Laboratory	1990-91
3	Involved in Development of Manufacturing Systems Laboratory I for M.Tech.(AME)	1989-90 & 91.
4	Developed Refrigeration Research Laboratory, to cater M.Tech and Research students under MHRD projects	2000
5	Developed the Central Wrokshop, to cater to the Institute needs	2005-07
6	Developed BOSCH Power tools training centre	June 2007
7	Heat Transfer and Fuel Laboratories Refurbishment and Procurement of New Equipments	Jan 2008

ANNEXURE-V

10. ACADEMIC AND TECHNICAL CONTRIBUTIONS:

e) **Contribution to Departmental Consultancy and Testing (to generate the funds)**

Sl. No.	Organisation	Type of Consultancy	Amount Rs	Year
1	BIET, Davangere	Consultancy work had been taken up for design, fabrication and testing of Heat Transfer Equipment to other engineering colleges.	35000.00	1984-1985
2	M/S Praxair Carbon Dioxide Pvt. Ltd. 26, Panambur, Mangalore - 575 010	Air circulation system for Industries.	5500	1999
	M/S L & T Limited, Bulk Cement Terminal, Beach Road, Panambur, Mangalore - 575 010	Air circulation system for Industries.	2000	1999
	M/S Chiramith Precision (INDIA), D.NO. 3-45, NH 48, OPP. POST OFFICE, KANNUR, MANGALORE-575 007, INDIA.	Air circulation system for Industries.	2500	1999
3	Shri. P.R. Bhandary, Deputy General Manager, Corporation Bank, Head Office: Mangaladevi Temple Road, MANGALORE - 575 001	Cooling load estimations for multistoried Bank buildings. Comparative statement done for the quotations called by the bank, and recommendation made which is least and best for the quoted work. Supervision, was under taken during installation period	10000.00	1999-2000
4	NMPT	Consultancy given for the water supply system of New Mangalore Port Trust (N.M.P.T.)	3000.00	2001
5	L&T	Consultancy given for the air flow rates in the industries L&T cement plant, Panambur.	2500.00	2001
6	The Dy. Manager – Terminal, Indian Oil Corporation Limited, P.B.No. 6, Mangalore Terminal	Consultancy given for IOCL regarding Hydraulics study – Furnace oil pipe line – Suggestive diameter	5000.00	2006

	Panambur, Mangalore – 575 010			
7	Deekay Traders,Manufacturer and Distributors for Marine LPG KIT, H NO 30, Dalvi Building, Chougulewadi , Tilakwadi, Belgaum (Karnataka),	Consultancy given for Field study of Commercial LPG KITs for Marine fishing boats.	11240.00	2006
8	Kokke Shri Subramanya Temple Ashlesha inn building Shri Kokke Subramanya temple Subrahmanya – 574 238 Sullia Taluk, Dakshina Kannada	solar water heater installation & performance	11240.00	2007
9	GMR Energy Limited Near NMPT Guest House,Panambur, Mangalore – 575 010	Technical Expertise and skill development for GMR Staff	50562.00	2007-08
9	KIOCL, Bangalore	Educational Counsalty	40000.00	2008-09
10	The Managing Director, Karnataka Fisheries Development corporation Limited, Hoige Bazar, Mangalore – 575 001	Technical Supervision, Scrutinisation and certifying the work of Installation of cold storage unit at Bangalore	11030.00	2009-10
11	The Managing Director, Karnataka Fisheries Development corporation Limited, Hoige Bazar, Mangalore – 575 001	Technical Supervision, Scrutinisation and certifying the work of Installation of cold storage unit at Gangoli	11306.00	2009-10
12	The Managing Director, Karnataka Fisheries Development corporation Limited, Hoige Bazar, Mangalore – 575 001	Technical Supervision, Scrutinisation and certifying the work of Installation of cold storage unit at Mangalore	8548.00	2009-10
13	The Managing Director, Karnataka Fisheries Development corporation Limited, Hoige Bazar, Mangalore – 575 001	Technical Supervision, Scrutinisation and certifying the work of Installation of cold storage unit at Malpe	5515.00	2009-10
14	The Managing Director, Karnataka Fisheries Development corporation	Technical Supervision, Scrutinisation and certifying the work of Installation of	12133.00	2009-10

	Limited, Hoige Bazar, Mangalore – 575 001	cold storage unit at Bhatkal		
15				
15		Testing work calibration of pressure gauges and thermometers etc. has been done.		

ANNEXURE-VI

10. ACADEMIC AND TECHNICAL CONTRIBUTIONS:

f) Contribution to the Universities Activities:

Sl. No.	Nature of work	Year
1	Member for P.G. (HPE) Board of Examiners. (Mangalore University)	1996-97
2	Member for U.G. Board of Examiners. (Mangalore University).	1997-98.
3	Member for P.G. (HPE) Board of Examiners. (Mangalore University).	1998-99
4	Member for U.G. Board of Examiners.(Mangalore University).	1999-2000
5	Coordinator for Mangalore University Central Evaluation for examinations	Dec. 2000 and Jan 2001
6	Worked as Chairman for P.G. (HPE) Board of Examiners (Mangalore University).	2001-02.
7	Chairman for P.G. (HPE) Board of Examiners. (National Institute of Technology Karnataka).	2002-03.
8	Counseling the IGNOU Students	Since 2001
9	Chairman for P.G. (HPE) Board of Examiners. (National Institute of Technology Karnataka).	2003-04
10	Member of Board of Examiners for PG (Thermal Engineering System Technology and Machine Design), Kuvempu University.	2004
11	Nominated as member of Board of Studies of Kuvempu University	2005 - 2008
12	Nominated as member of Board of Studies of Kuvempu University	2008 - 2010
13	Nominated as member of Board of Studies of VT University	2008 - 2011
14	Nominated as member of Board of studies of JNTU, Ananthpur	2010 - 2012
15	Advisory committee member National Conference on TECHNOLOGICAL ADVANCES FOR NEW POWER GENERATING UNITS AND FOR PERFORMANCE ENHANCEMENT OF PRESENT PLANTS 18 -19 th November, 2010 CENTRAL POWER RESEARCH INSTITUTE PROF. SIR.	

C.V. RAMAN AVENUE, PO BOX 8066, SADASHIVANAGAR PO, BANGALORE 560 080 Phone: +91(0)80 2360 4682; Fax: +91(0)80 2360 4682 / 1213 NATIONAL CONFERENCE ON 'TECHNOLOGICAL ADVANCES
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ANNEXURE-VII

10. ACADEMIC AND TECHNICAL CONTRIBUTIONS:

g) Contribution to the Institution Functioning:

Sl. No.	Nature of Work	Year
1	Supervised the repair of the CCC centralised Air Conditioning Unit	2000-2001.
2	Nominated as member of the Board of Governors of NITK Society from the faculty of the Institute for one year	From 13-12-2003 to 13-12-2004.
3	Director assigned the responsibility of scrutinizing and certifying all AC works of the Institute	From 9-2-05 to date
4	Central workshop facility in charge Under TEQUIP	From 2004- to date

ANNEXURE-VIII

10. ACADEMIC AND TECHNICAL CONTRIBUTIONS:

h) Any other Information:

i Expert Committee etc.:

Sl. No.	Nature of work	Year
1	Worked as Advisory committee member two day National conference on "Advances in Mechanical Engineering" from 24th to 25th Sept 2010	Department of Mechanical Engineering, JNN college of Engineering, Shimoga-577204
2	Went as a selection committee expert for M. National Institute of technology, Bhopal .	1-5-2010
3	Expert committee member NBA Thermal PG at National Institute of Technology, Surat, Gujarat	May 2 nd to 4 th 2008
4	Expert committee member NBA Thermal PG at National Institute of Technology, Warangal, Andhra Pradesh	Sept 21 st to 23 rd 2007
5	Went as a selection committee expert for National Institute of technology, Calicut 26-6-2007.	26-6-2007
6	Went as a selection committee expert for near by Private Engineering Colleges.	Aug 2002
7	Went for the re-inspection of the Royal Postgraduate Centre, JRS Colony, Rayadurg, Anantpur District as	Sept 4 th 2002.

	AICTE expert committee member.
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ANNEXURE IX

11. TEACHING EXPERIENCE: (SUBJECTS HANDLED AND THE YEARS OF HANDLING)

S.No.	Title of thesis	Class	Year
1	Thermodynamics I	III Semester	1983, 84,96,97,98,99, 00, 01,02
2	Heat Engines	IV Semester	1985,86,87,88
3	Mechanical Technology	III Semester	1986,87
4	Fluid mechanics	III Semester	1986,87,88,89,90,96,00
5	Thermodynamics II	IV Semester	1987,88
6	Engineering Drawing I	I Semester	Since 1984 to 2000
7	Engineering Drawing II	II Semester	Since 1984 to 2000
8	Mechanical Laboratory	I, II, III, V, VI, VII Semesters	Since 1984 to 2000
9	Heat Transfer	VI Semester	1989,90,91,92,96,97,98,99, 2000, 2001, 2002, 2003, 2004, 2005,06,10,11,12,13,14
10	Thermodynamics and fluid mechanics	IV Semester	1989
11	Manufacturing System Laboratory I	I M.Tech. (AME)	1990-91,91-92
12	Air Conditioning and Refrigeration	VIII Semester	1990-91,91-92,98-99,2004
13	Metrology Laboratory	VIII Semester	1989-90
14	Elements of Mechanical Engineering	II Semester	1979-80,1980-81,96-97
15	Refrigeration & Air Conditioning	I MTech.(HPE)	1996-97,97-98,99-2000
16	Heat and Mass Transfer	I MTech. (HPE)	1996-97,97-98,99-00,00-01
17	Finite Element Methods	I MTech. (HPE)	1998-99
18	Applications of Microprocessors & Computers in Thermal Engineering.	I MTech. (HPE)	1998-99
19	Advanced Refrigeration Technology	I MTech. (HPE)	2000-01, 02,03,04
20	Air Conditioning Technology	II MTech. (HPE)	2000-01, 02,03
21	Applied Computational Methods in Heat Transfer	II MTech (HPE)	2001-02, 03, 04

	& Fluid Mechanics		
22	Basic Engineering Thermodynamics	III Sem B.E.(Mech)	2001, 02, 04,05,06,10,11,12,13
23	Advanced Heat Transfer	I MTech (HPE)	2002,08
24	Professional Major Theory 1	I Sem BE	2003
25	Refrigeration and Cryogenics	I MTech (HP-E), THE from 07	2005,06,07,08,09,10,11,12,13,14
26	Design of Air Conditioning Systems	II MTech (HPE), THE from 07	2006,07,08,09,10,11,12,13,14

ANNEXURE-X

12. STAFF PROJECTS UNDERTAKEN SPONSORED FROM GOVERNMENT AND OTHER AGENCIES:

Sl. No.	Projects Completed:	Year	Completion Year	Funding Agent	Amount in Rs
a)	An integrated approach to Solar Energy Utilization in West Coast	1983	1985.	Government of India Project	100000.00
b)	Performance Analysis of Wood Burning Cook Stoves	1988	July 1989	NRDC Project	10000.00
c)	Alternate Refrigerants To CFCs & HCFCs	1997-98	2002	Plan Scheme for Research and Development (R&D), AICTE Project	600000.00
d)	Plan Scheme for Modernisation and Removal of Obsolescence of Laboratories.	1998-99	2002	AICTE funded, Refer. No:23-10/98 TS 1. College Refer. No. 4233/98-99/A1 dated 17-02-1999	1000000.00

ANNEXURE XI

13. SHORT TERM COURSES/SHORT TERM TRAINING/SEMINAR/SYMPOSIUM

ORGANISED

Sl.No.	Title of Programme	Period	Institute	Stake holders	Funding Agency	No Participants
1.	Recent Trends in Refrigeration Technology -AICTE-ISTE Short Term Training Programme - 1999- 2000	12.11.99 to 26.11.99 (15 days)	K.R.E.C. Srinivasnagar	Various Engineering colleges INDIA	ISTE	35
2.	An Intensive Short Term Training Programme on Reciprocating Compressor - For MCF Ltd	12.1.2000 to 31.1.2000 (21 days)	K.R.E.C. Srinivasnagar	MCF Employees	IIP Cell, KREC	15
3.	One day Workshop for Central Workshop Facilities under TEQIP	8-5-2004	N.I.T.K. Srinivasnagar		TEQIP	50
4.	Three day workshop on Alternative Refrigerants and Cycles	10-9-2004 to 12-9-2004	N.I.T.K. Srinivasnagar	Various Engineering colleges INDIA	HIDECOR-Swiss agency	30
5	Four days training program on BOSCH power tools	9-7-2007 to 12-7-2007	N.I.T.K. Srinivasnagar	In House for Faculty & Technical staff	TEQIP	60
6	Two days training program on BOSCH power tools	29 th & 30 th May, 2008	N.I.T.K. Srinivasnagar	Rural unorganized sector participants	TEQIP	11
7	Two days training program on BOSCH power tools	5 th & 6 th , June 2008	N.I.T.K. Srinivasnagar	Rural unorganized sector and ITI students participants	TEQIP	56

8	Two days training program on BOSCH power tools	12 th & 13 th June 08	N.I.T.K. Srinivasnagar	Rural unorganized sector and ITI students participants	TEQIP	70
9	Two days training program on BOSCH power tools	16 th & 17 th June 2008	N.I.T.K. Srinivasnagar	Rural unorganized sector and ITI students participants	TEQIP	46
10	Two days training program on BOSCH power tools	1 st & 2 nd July 2008	N.I.T.K. Srinivasnagar	Women Participants ITI	TEQIP	22
11	Two days training program on BOSCH power tools	7 th & 8 th July 2008	N.I.T.K. Srinivasnagar	SC & ST Participants	TEQIP	10
12	Two week STTP on Impact of Energy Generation and Conservation on Environment	21st July 2008 to 1 st Aug 2008	N.I.T.K. Srinivasnagar	Various Engineering colleges INDIA	AICTE	40
13	Two days training program on BOSCH power tools	17 th & 18 th Nov, 2008	N.I.T.K. Srinivasnagar	Kannada Medium High School Students X std	TEQIP	70
14	Two days training program on BOSCH power tools	25 th & 26 th Nov, 2008	N.I.T.K. Srinivasnagar	Rural unorganized sector and ITI students participants	TEQIP	15
15	Two days training program on BOSCH power tools	27 th & 28 th , Nov 2008	N.I.T.K. Srinivasnagar	Rural unorganized sector and ITI students participants Women	TEQIP	31
16	Two days training program on BOSCH power	1 th & 2 nd Dec 2008	N.I.T.K. Srinivasnagar	English Medium High	TEQIP	58

	tools			School Students X std		
17	Two days training program on BOSCH power tools	4 th & 5 th Dec 2008	N.I.T.K. Srinivasnagar	Rural unorganized sector and ITI students participants Women	TEQIP	32
18	Experimentation and computation approaches to design of mechanical components and systems	2 nd to 7 th Feb 2009	NITK Srinivasnagar	Engineering and Polytechnic Teachers	MHRD	35
19	Two days training program on BOSCH power tools	10 th & 11 th Dec 2009	N.I.T.K. Srinivasnagar	ITI students participants		32
20	Two days training program on BOSCH power tools	14 th & 15 th Dec 2009	N.I.T.K. Srinivasnagar	ITI students participants		32
21	One day seminar on BOSCH Chord less power tools	7 th January, 2010	N.I.T.K, Srinivasnagar	Faculty and Students of NITK	BOSCH Power tools section	300

ANNEXURE XII

14. SHORT TERM COURSES/SHORT TERM TRAINING/SEMINAR/SYMPOSIUM ASSISTED IN ORGANISING

Sl.No.	Title of Programme	Period	Institute
1.	Energy Devices and Options- ISTE Summer School	08.07.85 to 20.07.85	K.R.E.C. Srinivasnagar
2.	I.S.T.E. Winter School on Reliability and Optimization Techniques in Mechanical Engineering Design	24.12.90 to 05.01.91	K.R.E.C. Srinivasnagar

ANNEXURE-XIII

15. REVIEWED ARTICLES

Sl	Reviewed Article	Organisation	Year
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No			
1	Third revision of IS 1476 Domestic Refrigerators (Mechanically Operated) and Comments have been sent to Director (Heavy Mechanical Engineering)	Bureau of Indian Standards, New Delhi	1998
2	Engineering Thermodynamics, 2e, by P. K. Nag.	Tata McGraw-Hill, New Delhi	7 th to 27 th June 2004.
3	Fundamentals of Fluid Mechanics by Yunus A. Çengel and John M. Cimbala	McGraw Hill Education (Asia) Based in Singapore	11-7-2004
4	Schaum's Outline of Thermodynamics for Engineers, 2e by Potter	McGraw-Hill Education (India) Pvt. Ltd	8-8-2009
5	Chapter 7-9 of 1000 Solved Problems in Fluid Mechanics by K Subramanya	McGraw-Hill Education (India) Pvt. Ltd.,	18-11-2009
6	Reviewer for African Journal of Environmental Science and Technology		29-4-2010
7	Introduction to Fluid Mechanics and Machines, 2/e by Som and Biswas	Tata McGraw-Hill, New Delhi	24-9-2010
8	Reviewed technical paper for "Engineering Applications of Computational Fluid Mechanics" Journal	The Hong Kong Polytechnic University	1-10-2010
9	Ch 1-5 of Fluid Mechanics, 6/e (SIE) by Frank M White	McGraw-Hill, New Delhi	20-12-2010
10	IC Engines, 3/e by Ganesan	McGraw-Hill, New Delhi	20-12-2010
11	The Experimental Investigation of Heat Transport and Water Infiltration in Granular Packed bed due to Supplied Hot Water From the Top(Influence of Supplied water flux, Particle sizes and Supplied water temperature)	Heat Transfer Elsevier Publication	28-3-2011
12	The Coupling Study For Solar Heating System And Membrane Distillation System	Journal Paper Engineering Applications of Computational Fluid Mechanics Publisher Name: The Hong Kong Polytechnic University	20-5-2011
13	Chapters 1, 2, 4, 6 of Basic Fluid	McGraw-Hill, New Delhi	7-8-2011

	Power Transmission		
15	International Journal of Green Energy, Taylor and Francis group,		18-10-2011
14	Pool boiling heat transfer in diluted water/glycerol binary solutions	Heat Transfer Engineering, Journal, ASME	24-11-2011
			7-6-2013

ANNEXURE XIV

16. SHORT TERM COURSES/SHORT TERM TRAINING/SEMINAR/SYMPOSIUM ATTENDED

Sl.No.	Title of Programme	Period	Institute / Place
1	Intensive Course on Engineering, Applications of Microprocessor	06.02.84 to 10.03.84	I.I.Sc. Bangalore
2	Short Term Industrial Training Under Q.I.P.	12.07.84 to 11.08.84	MICO, Bangalore
3	Energy Devices and Options- ISTE Summer School	08.07.85 to 20.07.85	K.R.E.C. Srinivasnagar
4	Efficient Energy Utilization in Thermal System - An Exergy Approach - Q.I.P. Summer School	19.05.86 to 30.05.86	I.I.T., Bombay
5	Seminar on 'Modernization of Roofing Tile Industry'	10.07.86 to 11.07.86	Hotel Mothi Mahal Mangalore
6	ISI Standards Program - Educational Utilization of Standard in Engineering	05.12.86 to 06.12.86	K.R.E.C., Srinivasnagar
7	International Symposium on "Processes of Boiling, Condensation and Two Phase Flow"	04.01.87 to 07.01.87	Andhra Univ. Vishakapatnam
8	Finite Element Method in Fluid Mechanics and Heat Transfer - Q.I.P. Summer School	04.05.87 to 15.05.87	I.I.T., Madras
9	Industrial Robotics – ISTE Summer School	01.06.87 to 12.06.87	I.I.T., Madras
10	National Workshop on Solar Energy Applications for Rural Development – UGC Winter School	11.12.87 to 22.12.87	Annamalai University, Chidambarum
11	Recent Development in I.C. Engines - Q.I.P. Summer School	16.05.88 to 27.05.88	I.I.T., Madras

12	Industrial Applications of Computer Aided Design and Computer Graphics – ISTE Summer School	05.06.88 to 18.06.88	Anna University Madras
13	Workshop on Futures Studies Methodologies	15.09.89 to 17.09.89	K.R.E.C., Srinivasnagar
14	Heat Pump Technology – Q.I.P. Summer School	07.05.90 to 18.05.90	I.I.T., Madras
15	Summer Course on Microprocessors (GOI)	04.06.90 to 16.06.90	K.R.E.C., Srinivasnagar
16	I.S.T.E. Winter School on Reliability and Optimization Techniques in Mechanical Engineering Design	24.12.90 to 05.01.91	K.R.E.C., Srinivasnagar
17	One-day Workshop on Patent Awareness Srinivasnagar	09-06-1997	K.R.E.C.,
18	One-day Seminar on Nuclear Power Plants Srinivasnagar	27-09-1997	K.R.E.C.,
19	One-day Seminar on IGNOU		K.R.E.C.
20	Workshop on Central Instrumentation facilities	1-5-2004	NITK TEQIP
21	N.B.A. Assessors Training Workshop	8,9 -5-2004	NITK AICTE
22	One-day Seminar on Innovations in Professional & Technical Higher Education	22-1-2005	Taj-West end Hotel Bangalore
23	Workshop on Rapid Manufacturing Technologies	Feb 28 – Mar 2 2006	J.N. Tata Auditorium, IISc, Bangalore
24	Orientation workshop for NBA chairman/experts	1 st and 2 nd July 2011	R.V. College of Engineering, Mysore Road, R.V. Vidyaniketan Post, Bengaluru – 560 059

ANNEXURE XV

17. ADMINISTRATION:

A. INSTITUTE LEVEL

S. NO	Position	Duration
1	Member of BOG of NITK	13-12-2003 to 13-12-2004
2	Senate Member	20-5-2004
3	Academic Affairs Committee Member	1-2-2004 to 2005
4	Health care Committee Member	2005

5	GE Scholarship Committee Coordinator	2003, 2004,2005,2006,2007,2008,2009,2010
6	Coordinator Central Work Shop facilities	2004, 2005,2006
7	RPAC Member for Mechanical Dept., Applied Mechanics Dept., Computer Dept., Mining Dept.,	2004,2005,2006, 2007,2008,2009,2010,2011,2012,2013,2014
8	Co-coordinating MOU of HEIG-VD 1School of Engineering and Business Vaud THERMAL ENGINEERING INSTITUTE 20 AVENUE DES SPORTS 1401 YVERDON-LES-BAINS SWITZERLAND	2010,2011,2012,2013,2014
9	Faculty In charge of scrutinizing and certifying all the AC works of the Institute	2005 to date

B. DEPARTMENT LEVEL

S.NO	Committee Member	Year
1	Head	2007
2	Class Committee Chairman – III Sem	2004,2005,2006
3	Selection Committee of M.Tech and Ph.D. Students and Asst. Lecturers	2000,01,02,03,04,05,06, 07,08,09, 10,11
4	DAAB, Chairman, Chairman,	2004-05, 2005-06,06-07,07-08
5	DRPC, Chairman, Chairman, Chairman,	2004-05, 2005-06, 06-07,07-08,08-09,09-10, 10-11
6	DPGC, Chairman, chairman, Chairman,	2004-05, 2005-06,06-07,07-08, 08-09, 09-10
7	DUGC, Chairman, Chairman, ,Chairman,	2004-05, 2005-06,06-07,07-08, 08-09, 09-10

ANNEXURE XVI

18. FOREIGN VISITS MADE:

SL	Country	Duration	Purpose	Details
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NO	visited			
1	SriLanka	10-13 March 2007	Delivering Key Note Address on Heat Transfer Effects, c on quality of structural steel, Full day seminar on challenges of steel as structural materials	conducted by Society of structural Engineers, Srilanka
2	USA	13-18 July 2008	Presenting Technical Research Papers	12th International Refrigeration and Air Conditioning Conference, Purdue University, USA, 14 – 17 th July, 2008, 140 S. Intramural Drive, West Lafayette, IN 47907-2031
3	Switzerland	1-12th July 2010	HEIG-VD, Yverdon-les-Bains, Vaud, Switzerland NITK & MOU with summer university	Lausanne
4	Pattaya City, Thailand	28-30 September 2011	Asian Institute of Technology, P.O Box 4, Klong Luang, Pathumthani, 12120, THAILAND	The International Conference & Utility Exhibition On Power and Energy Systems: Issues and Prospects for Asia (ICUE 2011),