

Curriculum Vitae of **Dr.V.KIRUBAKARAN**



1 Present Position Assistant Professor

2 Educational Qualifications B.E., M.Tech., Ph.D.,

Ph.D (Energy Engineering) -National Institute of Technology (NIT), Trichy, Tamilnadu, India – May 2007.

M. Tech (Energy Engineering) -Regional Engineering College (REC), Trichy, Tamilnadu, India - 80.89% - First Class with Distinction - Dec.1998.

B.E (Mechanical Engineering.) - Government College of Engineering, Salem, Tamilnadu, India – University of Madras - 69.17% - First Class - Apr. 1997.

3 Special Training undergone

- ✓ Attended Two day Training workshop on “**Combustion & Gasification in CFX 5.6**” organized by CFX India, Bangalore from 10-11th July 2003
- ✓ Attended a training course on “**CAD / CAM (Pro/ENGINEER)**” organized by Department of Production Engineering, Regional Engineering College, Trichy from 05th-28th April 2001.
- ✓ Attended a “**Basic Training course on CFD-CFX**” conducted by M/s AEA Technology, Bangalore in August 23rd to 25th 1999.
- ✓ “**Equipment Related Training**” conducted by “Unique Instrument and Manufacturers Ltd., Bangalore from 02-04th June 1999.

4 Teaching and Research Experience

Post	Duration
Research Associate	January 1999 to July 2002
Project Investigator	August 2002 to January 2006
Lecturer	February 2006 onwards

5 New Courses / Programmes Evolved / Organized

Courses

1. Energy Engineering

Programmes

1. M.Phil in Energy (Regular & Distance Mode)
2. Certificate Course in Energy Auditing

6 Laboratories / Department established

1. Established Fluid Mechanics Laboratory
2. Established Energy Engineering Laboratory

7 Involvement in Institute Development

- ❖ Convener, Rural Energy Centre
- ❖ Coordinator M.Phil in Energy Studies – Distance Mode Programme
- ❖ Coordinator Certificate Course in Energy Auditing
- ❖ NSS Programme Officer

8 Research Guidance

03 (on going)

9 Research Project undertaken

S. N.	Title of the Project	Funding Agency	Amount, Rs.	Position	Status
1	Studies on Gasification of Poultry Litter	DST	12.52 lakhs	PI	Completed - 2006
2	Integrated Rural Energy Planning for Dindigul Dt	MNRE	04.00 lakhs	Co- PI	Completed -2007
3	Evaluation Study on Solar Water Heater and Air Heaters installed in Tamilnadu	TEDA	01.15 lakhs	CO-PI	Completed -2008
4	Evaluation of Solar Street & Home Lighting installed in remote habitations Tamilnadu	TEDA	06.45 lakhs	Co-PI	Completed- 2008

S. N.	Title of the Project	Funding Agency	Amount, Rs.	Position	Status
5	Energy Efficient Wooden Log Stove	DST	16.99 lakhs	PI	Completed-2009
6	Energy Conservation Awareness Programme	PCRA	01.25 lakhs	PI	On going
7	Design and Development of Muscular Electric Power Generator	UGC	01.70 lakhs	PI	Ongoing

10 List of Publications

International Journal

1. D.Kalyanakumar & **V.Kirubakaran**, ““D-STATCOM based voltage regulation and harmonic damping”, International journal of computer applications, Vol.7 (4), pp 39-43 (2010), ISSN 0975-8887
2. D.Kalyanakumar, **V.Kirubakaran** & K.Ramesh Kumar, ““Hybrid Seven Level H-Bridge inverter based DSTATCOM control using sub harmonic pulse width modulation technice”, Journal of Theoretical and applied information technology, Vol 21. No. 1 E-ISSN 1817-3195 / ISSN 1992-8645
3. M.Ravindran and **V.Kirubakaran**, “A Novel Technique for Energy & Cost effective Drives for AC & DC motors”, International Journal of Electrical Engineering, Vol. 3(1), pp 241-250 (2010), ISSN 0974-2158
4. **V.Kirubakaran** & T.Kumaresan, “Whole House Electric Energy Management”, International Journal of Power Engineering, 2(1), pp 95-109 (2010) ISSN: 0975-380X
5. D.Kalyanakumar & **V.Kirubakaran**, “Harmonic Distortion in Power Systems – A Threat for Reliability and Power Quality?”, International Journal on Integrated Energy Systems, Vol.1,(2), pp 111-118 [2009] ISSN: 0975-2978
6. **V.Kirubakaran**, V.Sivaramkrishnan, S.Shanmuga Priya, M.Premalatha and P.Subramanian, “Auto catalytic kinetics and mechanism of biogas generation”, Energy Sources – Part A – Vol.31, pp 1700-1707 [2009] **Taylor & Francis**

7. **V.Kirubakaran**, and P.Subramanian, “Environmental Impacts of Poultry litter disposal and Sustainable Technology for Energy Production”, International Interdisciplinary Journal on Environment Vol. 1 (1) DOC 20090109 – ISSN 0975 0657
8. **V.Kirubakaran**, V.Sivaramkrishnan, R.Nalini, T.Sekar, M.Premalatha and P.Subramanian, “Studies on Auto-Gasification of Bio-Residues”, Energy Sources – Part A, Vol.31, pp 967-973 [2009] **Taylor & Francis - Published.**
9. **V.Kirubakaran**, V.Sivaramkrishnan, R.Nalini, T.Sekar, M.Premalatha and P.Subramanian, “A review on gasification of Biomass” Renewable and Sustainable Energy Reviews Vol. 13(1) pp 179-186 [2009] – **Elsevier – Published.**
10. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Kinetics of Auto-Gasification of poultry litter” , International Journal of Green Energy , V 4, pp 519-534 [2007] **Taylor & Francis - Published.**
11. I.Neethimanikam, **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Kinetics of Auto-Gasification of coir pith”, Journal of Current Sciences (An International Triannual publication of Society of Sciences – ISSN 0972-6101) Vol. 10 (1), pp 33-42 [2007] - **Published.**
12. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Experimental study on waste heat recovery for sustainable industrial systems” Journal of Current Sciences (An International Triannual publication of Society of Sciences – ISSN 0972-6101) Vol. 9 (2), pp 489-496 [2006] - **Published.**

National Journal

1. M.Premalatha, S.Shanmuga Priya and **V.Kirubakaran**, “Tapioca: source of bio fuels for India”, eNREE, TERI, 4 (1), pp 4-7 [2007]
2. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Kinetics of Auto-Gasification of bagasse for energy augmentation”, Indian Journal of Environment and Eco Planning (An official triannual publication of Society of Environmental Scientists ISSN0972-1215), Vol 12 (3), pp 591-598 [2006]
3. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Investigation of Energy Recovery from Poultry Litter and Municipal Solid Waste by Thermochemical Conversion Method in India”, Journal of Environmental Science & Engineering 47, 4, pp 266-275 [2005]

International Conference

1. **V.Kirubakaran** & P.Subramanian, “Effect of heating rate on Auto-Gasification of poultry litter” Renewable Energy Asia 2008 – an international conference organized by Indian Institute of Technology, Delhi, 11-13th December 2008 pp 906-912.
2. V.Sivaramkrishnan, **V.Kirubakaran**, S.Shanmuga Priya, M.Premalatha and P.Subramanian, “Elucidation of Kinetics of Bagasse Gasification in Nitrogen and Air” International Conference on Advances in Energy Research (ICAER-2007), organized by IIT, Bombay, 12-14th December 2007.
3. V.Sivaramkrishnan, **V.Kirubakaran**, S.Shanmuga Priya, M.Premalatha and P.Subramanian, “Experimental Investigation of gasification characteristics of biomass and effect of bio-oxygen”, Proceedings of International conference on Modeling and Simulation (CITCOMS -2007), organized by Coimbatore Institute of Technology, Coimbatore, August 27-29, 2007, pp 14.
4. M.Premalatha, **V.Kirubakaran**, S.Shanmuga Priya, V.Sivaramkrishnan, and P.Subramanian, “Segregated flow modeling of Solar Flat Plate Collector”, Proceedings of 3rd International conference on Solar Radiation and Day Lighting (SOLARIS 2007), organized by I.I.T, Delhi – Feb. 7-9,2007 – pp 15-23.
5. S.Shanmuga Priya, M.Premalatha and **V.Kirubakaran**, “Coupled Solar Bio process for Industrial effluent treatment”, Proceedings of International Conference on Cleaner Technologies and Environmental Management organized by Pondichery Engineering College, Pondichery, - January 4-6, 2007 – pp 308-314.
6. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Establishing Auto-Gasification of Bagasse using Thermogravimetric Analysis”, Proceedings of International Conference on Cleaner Technologies and Environmental Management organized by Pondichery Engineering College, Pondichery, - January 4-6, 2007 – pp 303-307.
7. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Pasteurization of drinking water using solar energy for rural application”, Proceedings of International Conference on Cleaner Technologies and Environmental Management organized by Pondichery Engineering College, Pondichery, - January 4-6, 2007 – pp 204-207.

8. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Sustainable technology for drinking water system through combined heating and cooling”, Proceedings of International conference on The Challenges and Strategies for the Sustainability of Safe Drinking Water (25-27th October 2006) organized by Gandhigram Rural University, Gandhigram, pp 179.
9. I.Neethimanickam, **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Establishing Auto-Gasification of Coir Pith using Thermogravimetric Analysis”, Proceedings of International Conference on Bio-Fuels Vision 2015 (October 13-15, 2006) organized by Engineering College, Bikaner, pp 99-100.
10. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Investigation on Poultry Litter: Renewable Energy Source for Sustainable Development”, Proceedings of International Congress on Renewable Energy (Feb 9-11, 2006) organized by Solar Energy Society of India-pp 503-508.
11. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Wind Energy: Current Trends and Application for Sustainable Development”, Proceedings of International Conference on Wind Energy Trends and Issues (January 4-6, 2006) organized by Technical Teachers Training and Research Institute, Bhopal pp T1-1-8.
12. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Environmental Impacts of Poultry litter disposal and Sustainable Technology for Energy Production”, Proceedings of International Interdisciplinary conference on Sustainable Technologies for Environmental Protection (Jan. 7-9, 2006) organized by Coimbatore Institute of Technology , Coimbatore – pp 41.
13. M.Premalatha, P.Subramanian, V.Sivaramkrishnan and **V.Kirubakaran**, “Possibilities of increasing PV panels’ utilization in India”, Proceedings of International Interdisciplinary conference on Sustainable Technologies for Environmental Protection (Jan. 7-9, 2006) organized by Coimbatore Institute of Technology , Coimbatore pp-92.
14. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Sustainable Technology for Drinking Water System through Combined Heating and Cooling”, Proceedings of International Interdisciplinary conference on Sustainable Technologies for Environmental Protection (Jan. 7-9, 2006) organized by Coimbatore Institute of Technology , Coimbatore pp 97.

15. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Analysis of low cost fuel for Energy Conservation in Industrial Furnaces”, CHECON-05 (14-17th December 2005) organized by IIT, Delhi.
16. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Implementing the Gasification Technology and Waste Heat Recovery System for an Indian Restaurant - A Case Study on Combined Heat and Power for Eco-Friendly Environment”, CHECON-05 (14-17th December 2005) organized by IIT, Delhi.
17. **V.Kirubakaran**, V.Sivaramkrishnan, H,Stalin Vinoth and M.Premalatha, “CFD Simulation of Flow Through Pipe Bends for energy conservation used in Process Industries”, CHECON-05 (14-17th December 2005) organized by IIT, Delhi.
18. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Computational Fluid Dynamics Simulation for evaluation of flow performance of Wind Mill Rotor”, Proceedings of Computational & Experimental Engineering and Sciences (1-6 December 2005) organized by IIT, Madras, pp1704-1709.
19. **V.Kirubakaran**, M.Premalatha, Shoba Jose, V.Sivaramkrishnan, and P.Subramanian, “Computational Fluid Dynamics modeling of biomass gasifier for renewable energy application”, Proceedings of 7th ISHMT-ASME Heat and Mass Transfer Conference organized by IIT, Guwahati – pp 1505-1512.
20. M.Premalatha, **V.Kirubakaran**, R.Ganesh, V.Sivaramkrishnan, and P.Subramanian, “Computational Fluid Dynamics Simulation and Experimental Investigation of Flow Distribution in a Solar Flat Plate Collector”, Proceedings of 7th ISHMT-ASME Heat and Mass Transfer Conference organized by IIT, Guwahati –pp 956-960.
21. **V.Kirubakaran**, V.Sivaramkrishnan and M.Premalatha, “Strategies for Waste Water Management”, Proceedings of International conference on “Advances in Industrial Waste Water Treatment” organized by Anna University, Chennai pp 541.

National Conference

1. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Devolatilization characteristics of poultry litter using thermogravimetric analysis” Proceedings of National Conference in Energy Efficiency : The Environmental Impacts (EEES’07) [27th&28th December 2007] Organized by National Institute of Technology, Trichy, pp81-92.

2. **V.Kirubakaran**, A.Gururaj, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Studies on flow properties in an Impeller using Computational Fluid Dynamics Software”, Proceedings of National Conference in Recent Trends in Mechanical Engineering (10th February 2007) organized by Saranathan College of Engineering, Trichy pp 111-114.
3. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Establishing Auto-Gasification of Poultry litter using Thermogravimetric Analysis”, Proceedings of National Conference on Advances in Energy Research (4-5th December 2006) organized by Indian Institute of Technology, Bombay, Mumbai – pp 134-138.
4. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Impacts of Waste Heat Recovery for Energy conservation – Case Studies”, Proceedings of National Conference on Environmental Conservation (1-3 September 2006) organized by Birla Institute of Technology and Science, Pilani, pp 239-245.
5. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Role of Poultry litter Gasifier for Rural Development ”, Proceedings of National Conference on Environmental Conservation (1-3 September 2006) organized by Birla Institute of Technology and Science, Pilani, pp 433-439.
6. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Analysis of applicable process for better utilization of sugarcane bagasse”, Proceedings of 4th Indian Environment Congress 2006 (28-29th April 2006) organized by Amirta Viswa Vidya Petham, Amirthapyri campus, Kolam.
7. **V.Kirubakaran**, A.Gururaj, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Role of CFD software for Energy Conservation Applications” in the Convergence,2005- ANSYS India Conference December 1st & 2nd 2005, Bangalore.
8. **V.Kirubakaran**, V.Sivaramkrishnan, M.Premalatha and P.Subramanian, “Poultry Litter: Future Fuel for Agro Industries”, Proceedings of Development-Cum- Environment Friendly Future Industrial Fuels (19-21st May 2005) organized by Kumaraguru College of Technology, Coimbatore, pp 118-122.
9. V.Sivaramkrishnan, **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Heat Recovery for Energy Conservation and Eco Friendly Environment – Case Study”, Proceedings of Development-Cum- Environment Friendly Future Industrial Fuels (19-

- 21st May 2005) organized by Kumaraguru College of Technology, Coimbatore pp 59-63.
10. **V.Kirubakaran** and V.Sivaramkrishnan, “Simulation of Smoke Dispersion from Chimney using Computational Fluid Dynamics Software”, Proceedings of Globally competitive Eco Friendly Technologies In mechanical and Mechatronics Engineering conference (15-16th April 2005) organized by Kongu Engineering College, Erode pp J40-J46.
 11. **V.Kirubakaran**, “Application of CFD-CFX in renewable energy systems” in the 2004 Ansys India Users’ Meet & The Second CFX India Users’ Meet December 1st & 2nd 2004, Bangalore.
 12. **V.Kirubakaran**, M.Premalatha and P.Subramanian, “Power from Poultry Litter”, Proceedings of All India Conference on “Energy Conservation and Policy options for Small and Medium Scale Industries” (23-24, July 2004) organized by PSG College of Technology, Coimbatore, pp 27-30.

Book Published

1. Manual on “Energy Efficient Wooden Log Stove” (Tamil & English)
2. Course Module for “Energy Engineering” Subject for B.Tech. Students

Chapter in Edited Books

1. Editor: Arvind Kumar and Pashupati Kumar Roy, Environmental Resource Management : Critical Issues, ISBN 81-7035-551-9, Contributed 2 chapters.
2. Editor: Dr. Satish Kumar Mehla., Biodiesel Production Technologies Jaipur, Pointer Publishers. 2007. ISBN: 8171325177 KK-53774 contributed 1 chapter
3. Nova Publishers, USA contributed 1 chapter for the “Biomass Gasification: Chemistry, Processes and Applications” **ISBN 978-1-60741-461-2.**

11 Short Term Courses / Symposium / Conference Attended

International Conference

1. International Conference on “**Cleaner Technologies and Environmental Management**” organized by Pondichery Engineering College, Pondichery, - January 4-6, 2007
2. International Interdisciplinary conference on “**Sustainable Technologies for Environmental Protection**” organized by CIT, Coimbatore from Jan. 7-9, 2006.

3. Fifth Indo-Swedish workshop on “**Biofuel conversion**” organized by IIT, Madras from 14-16th December 2005.
4. “**Computational & Experimental Engineering and Sciences**” organized by IIT, Madras from 1-6 December 2005.
5. “**Advances in Industrial Waste Water Treatment**” organized by Anna University, Chennai from 9-11th February 2005.
6. Indo-Swedish workshop on “**Biofuel conversion**” organized by IIT, Madras from 9-11th December 2003
7. International Workshop on **Energy & Environment** (IWEE) organized by Periyar Maniyammai College of Technology for Women, Vallam from 01st-03rd November 2001.
8. “**Sustainable Customerization for Sustainable Energy**” conducted by “Intermediate Technology Consultancy (ITC), Regby, UK” 3-5th December 1998.

National Conference

1. “**Energy Efficiency : The Environmental Solutions**” organized by National Institute of Technology, Trichy, 27th & 28th December 2007.
2. “**Recent Trends in Mechanical Engineering**” organized by Saranathan College of Engineering, Trichy on 10th February 2007.
3. “**Advances in Energy Research**” organized by Indian Institute of Technology, Bombay, Mumbai on 4-5th December 2006.
4. “**Environment Awareness & Pollution Impacts**” organized by CEESAT, NIT, Trichy Sponsored by AICTE, New Delhi on 26th November 2004.
5. “**Performance Testing of SHP stations**” organized by IIT, Roorkee from 7-9th, October, 2004.
6. “**Energy Conservation and Policy options for Small and Medium Scale Industries**” organized by PSG College of Technology, Coimbatore 23 –24th July 2004.
7. “**Renewable Energy and Energy Conservation – Awareness and Strategies**” organized by Kumaraguru College of Technology, Coimbatore during 15-17th December 2001.

Workshops

1. Attended one day workshop on “**Solar Passive Architecture**” organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology,

- Tiruchirappalli on 22nd July 2006 Sponsored by Tamilnadu Energy Development Agency, Chennai & Ministry for Non conventional Energy Sources, New Delhi
2. Attended One Day workshop on **“Rural Electrification”** organized by M/s John F Welch Technology Laboratory, Bangalore on 15th February 2006.
 3. Attended One Day Seminar on Rajiv Gandhi Memorial One-Day Seminar on **“Renewable Energy – Energy of the Future”** organized by Arasu Engineering College, Kumbakonam on 23rd August 2005 Sponsored by Tamilnadu Energy Development Agency, Chennai.
 4. Attended One Day Workshop on **“Renewable Energy – Energy of the Future”** organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Tiruchirappalli on 20th August 2005 Sponsored by Tamilnadu Energy Development Agency, Chennai & Ministry for Non conventional Energy Sources, New Delhi .
 5. Attended one day workshop on **“Instrumentation for Thermal Analysis”** organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Trichy on 30th April 2005 sponsored by M/s PerkinElmer (India) P Ltd., Chennai.
 6. Attended two day workshop cum discussion on **“Small Hydro Power Projects”** Jointly organized by Alternate Hydro Energy Centre, Indian Institute of Technology, Roorkee and CEESAT, National Institute of Technology, Trichy on 22nd –23rd April 2005 sponsored by Ministry of Non conventional Energy Sources, New Delhi.
 7. Attended one day workshop on **“Solar Home Appliances”** organized by CEESAT, NIT, Trichy on 5th March 2005.
 8. Attended Intercollegiate Oneday seminar on **“Renewable Energy”** organized by Department of Physics & District Rural Development Agency, Trichy on 28th August 2004 sponsored by Tamilnadu Energy Development Agency, Chennai in commemoration of Rajivi Gandhi Renewable Energy day.
 9. Attended One-day workshop on **“Energy & Environment”** organized by M/s Thermax on 14th August 2004.
 10. Attended One day workshop on **“Computational Fluid Dynamics-Emerging Trends 2003”** organized by Indian Institute of Metals, Trichy on 8th December 2003.

11. Attended one day workshop on “**PerkinElmer ICP, Elemental Analyzer and AAS Instruments – Working Principle & Applications**” on 23rd February 2001 organized by M/s LabIndia Instruments P Ltd., Chennai at Hotel Germannus Days Inn, Madurai.
12. Attended one day workshop on “**Eco Energy Village**” Jointly organized by Joint Council for Tribal Development, Trichy & CEESAT, REC, Trichy.

Training Programme:

1. Attended one day training programme on “**Instrumental Methods of Thermal Analysis and Data Interpretation**” organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Tiruchirappalli on 25th November 2006 under Technical Education Quality Improvement Programme.
2. Attended Two day Training workshop on “**Combustion & Gasification in CFX 5.6**” organized by CFX India, Bangalore from 10-11th July 2003
3. Attended a training course on “**CAD / CAM (Pro/ENGINEER)**” organized by Department of Production Engineering, Regional Engineering College, Trichy from 05th-28th April 2001.
4. Attended a “**Basic Training course on CFD-CFX**” conducted by M/s AEA Technology, Banaglore in August 23rd to 25th 1999.
5. “**Equipment Related Training**” conducted by "Unique Instrument and Manufacturers Ltd., Bangalore from 02-04th June 1999.
6. **Inplant Training** :Trichy Steel Rolling Mills Limited, Trichy – 4 from 7-12th June 1995.

Summer / Winter Schools:

1. Attend “**Refresher Course on Renewable Energy**”, organized by Gandhigram Rural Institute, Gandhigram from 01.12.2010 to 22.12.2010 sponsored by University Grants Commission, New Delhi.
2. Attend “**Interdisciplinary Refresher Course on Rural Development with focus on Science and Technology**”, organized by Gandhigram Rural Institute, Gandhigram from 10.11.2009 to 30.11.2009 sponsored by University Grants Commission, New Delhi.
3. Attended Short Term Training Programme on “**Emerging Energy Technologies**” organized by CEESAT, NIT, Trichy from 17-28th May 2004 sponsored by AICTE & ISTE, New Delhi.

4. Attended a course on “**RMU Studies of SHP stations**” organized by IIT, Roorkee from 20-24th January, 2004 sponsored by Ministry of Non conventional Energy Sources, New Delhi..

Seminars:

1. Participated in the UGC sponsored National Seminar on ”Family, Youth and Futures” organized by Centre for Future Studies & Centre for Women’s Studies, GRI – 04th to 05th February 2010
2. Participated in Energy Day 09 organized by National Institute of Technology, Trichy- 24th April 2009

12 Short Term Courses / Seminar / Conferences Organized

1. Organizing Secretary for the “**INSPIRE Internship**” for School Students from 27.12.2010 to 31.12.2010.
2. Operation and Demonstration Training Programme for the “**Energy Efficient Wooden Log Stove**” for the Athoor Block, Dindigul Dt. Mid Day Meal Organizers on 21.07.2009
3. Conference Secretary for the National Conference on “**Energy Security for Rural Development – ESRD 2009**” sponsored by Ministry of New and Renewable Energy & University Grants Commission on 26.03.2009
4. Member in organizing team of **Energy Conservation Awareness Programme** during the Farmers Mela at Krishi Vigyan Kendra, Gandhigram Rural University sponsored by Petroleum Conservation Research Association on 16.03.2009.
5. Member in organizing team of **Energy Conservation Awareness Programme** during Science Day Celebrations 28.02.2009
6. Member in organizing team of the one day workshop on “**Role of Village leaders in Solid Waste Management in Dindigul District**” at Gandhigram Rural University, Gandhigram.
7. Member in the organizing team of National Seminar on “**Tribals, Forests and Futures**” at Gandhigram Rural University, Gandhigram.
8. Seminar Director for the One day State Level seminar on “**Renewable Energy & Energy Conservation for Rural Development**” Sponsored by University Grant Commission, New Delhi, Ministry of New and Renewable Energy Sources, New Delhi

on 01st November 2006 organized by Rural Technology Centre, Gandhigram Rural University, Gandhigram.

9. Member in organizing team of “**Science Day Celebrations**” sponsored by University Grant Commission, New Delhi organized by Gandhigram Rural University, Gandhigram.
10. Member in the organizing team of One Day Workshop on “**Renewable Energy – Energy of the Future**” organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Tiruchirappalli on 20th August 2005 Sponsored by Tamilnadu Energy Development Agency, Chennai & Ministry for Non conventional Energy Sources, New Delhi
11. Member in the organizing team of one day workshop on “**Instrumentation for Thermal Analysis**” sponsored by M/s PerkinElmer (India) P Ltd., Chennai organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Trichy on 30th April 2005.
12. Member in the organizing team of two day workshop cum discussion on “**Small Hydro Power Projects**” sponsored by Ministry of Non conventional Energy Sources, New Delhi Jointly organized with Alternate Hydro Energy Centre, Indian Institute of Technology, Roorkee on 22nd –23rd April 2005.
13. Co coordinator for the “**Basic Training Programme on CFD-CFX 5.7.1**” from 01-05th March 2005.
14. Member in organizing team of one day workshop on “**Solar Home Appliances**” organized by CEESAT, NIT, Trichy on 05th March 2005.
15. Member in organizing team of National Conference on “**Environment Awareness & Pollution Impacts**” Sponsored by AICTE, New Delhi on 26th November 2004.
16. Member in organizing team of Short Term Training Programme on “**Emerging Energy Technologies**” Sponsored by AICTE & ISTE, New Delhi from 17-28th May 2004.
17. Member in organizing team of “**Eco Energy Village**” Jointly organized by Joint Council for Tribal Development, Trichy & CEESAT, REC, Trichy.

13 Membership in Scientific Bodies / Association

- ✓ Life Member – Indian Society for Technical Education [ISTE] [LM29759] (2000)
- ✓ Associate Member in Institute of Engineers [India] [IE(I)] [AM091629-6] (2003)

- ✓ Life Member in Solar Energy Society of India [SESI] [1103/LM/04] (2004)
- ✓ Life Member in Indian Society for Heat & Mass Transfer [ISHMT] [470] (2005)
- ✓ Fellow in Society for Sciences [F.S.Sc] (2007)

14 Resource Person (Inaugural address / Guest Lecture/Chairman)

1. Delivered a lecture on **“Energy Conservation”** at PG Department Association Meeting, Sowrastra College, Madurai – 04.01.2011
2. Delivered a lecture on **“Energy Conservation in Rural Industries”** in the UGC Sponsored Refresher Course on Rural Industries and Management organized by Gandhigram Rural Institute, Gandhigram – 24th November 2010
3. Delivered a lecture on **“Energy Auditing of Boilers & Power from Poultry litter”** in the National Seminar on “Energy Conservation” organized by Institute of Engineers, Thoothukudi Local Chapter & Petroleum Conservation Research Association – 09th & 10th November 2010
4. Chief Guest for the National Level Technical Symposium **“EINOVA 10”** at RVS College of Engineering & Technology, Dindigul – 03.09.2010
5. Delivered a lecture on **“Energy Efficient Wooden Log Stove”** in the Review Cum advisory meeting on firming S&T inputs for Mid Day Meal Scheme organized by Department of Science and Technology, New Delhi – 03.08.2010
6. Delivered a lecture on **“Power from Bio Residues - A Case Study”** in Staff Development Programme on “Future Electrical Energy Requirement and Energy Management” at Kalaingar Karunanithi College of Engineering, Coimbatore on 03.06.2010.
7. Delivered a lecture on **“Energy Auditing”** in National Seminar on Energy Auditing & Energy Management at Dhanalakshmi Srinivasan Engg. College, Perambalur on 11.02.2010
8. Chief Guest for the **“Energy Conservation Day Celebrations”** organized by Institution of Engineers (Student Chapter), R.V.S. Polytechnic College, Dindigul on 14.12.2009.
9. Delivered a special lecture on **“Gasification of poultry litter for power generation”** in the AICTE sponsored 2 weeks Staff Development Programme on “Recent Trends in Energy Engineering & Management” at P.S.N.A. College of Engineering & Technology,

Dindigul on 29.05.2009

10. Delivered a Valedictory address in the Biology Association organized by Department of Biology, GRU on 31.03.2009 in the topic “**Energy Sources**”
11. Delivered a Lecture on “**Eco friendly disposal of poultry litter**” at Regional Seminar on **Environmental Studies** on 03-04th December 2008 organized by Centre for Futures Studies, Gandhigram Rural University, Gandhigram.
12. Delivered a lecture on “**Energy Scenario**” in the UGC Sponsored Refresher Course on Recent trends in Quality assurance and management in food and dairy industries organized by Gandhigram Rural Institute, Gandhigram – 14th November 2008.
13. Inaugurated “Energy Club” and delivered a lecture on “**Indian Energy Scenario**” at P.S.N.A College of Engineering and Technology, Dindigul on 28.08.2008
14. Judged the student paper presentation and delivered a lecture on “**Energy Conservation**” in Seminar on Energy Conservation organized by Field Publicity Office and Petroleum Conservation Research Association at Anna University, Tirunelveli on 20.08.2008.
15. Delivered a lecture on “**Role of Renewable Energy for Rural Development**” in one day workshop on Sustainable Energy for Rural Development at National Institute of Technology, Trichy on 06.06.2008.
16. Presented status report for the “**Integrated Energy Planning for Dindigul Dt.**” in the review meeting organized by the Tamilnadu Energy Development Agency at Anna University, Chennai on 30.11.2007.
17. Presented status report for the “**Integrated Energy Planning for Dindigul Dt.**” in the review meeting organized by the Tamilnadu Energy Development Agency at P.S.G. College of Technology, Coimbatore on 11.10.2007.
18. Delivered a Lecture on “**TGA, DSC & CHN Analysis**” in one day training programme on “Instrumental Methods of Thermal Analysis and Data Interpretation” on 25th November 2006 at CEESAT, NIT, Trichy.
19. Delivered a Lecture on “**Energy from Bagasse – Some aspects of Agricultural Waste Management**” in State Level Seminar on “Renewable Energy & Energy Conservation for Rural Development” on 01st November 2006 at Gandhigram Rural University, Gandhigram.

20. Delivered a Lecture on “**Recent Trends in Wind Energy Applications**” in State Level Seminar on “Renewable Energy & Energy Conservation for Rural Development” on 01st November 2006 at Gandhigram Rural University, Gandhigram.
21. Delivered a Lecture on “**Combined Heat and Power Scheme for a Chemical Industry-A Case Study**” in State Level Seminar on “Renewable Energy & Energy Conservation for Rural Development” on 01st November 2006 at Gandhigram Rural University, Gandhigram.
22. Delivered a Lecture on “**Gasification : Viable Technology for Textile Industries**” in Regional Seminar on “Management of Textile Industries in the Changing Global Business Scenario” on 29-30th March 2006 at Gandhigram Rural Institute, Gandhigram.
23. Delivered a Lecture on “**Opportunities for Energy Conservation in Textile Industries in the Changing Global Business Scenario**” in Regional Seminar on “Management of Textile Industries in the Changing Global Business Scenario” on 29-30th March 2006 at Gandhigram Rural Institute, Gandhigram.
24. Delivered a lecture on “**Wind Energy**” in Rajiv Gandhi Renewable Energy celebrations organized by Department of School Education on 25th August 2005
25. Delivered a lecture on “**Wind Energy – Potential and Application**” in Rajiv Gandhi Memorial One-Day Seminar on “Renewable Energy – Energy of the Future” organized by Arasu Engineering College, Kumbakonam on 23rd August 2005.
26. Delivered a lecture on “**Hydro Power Generation**” in One-Day Workshop on “Renewable Energy – Energy of the Future” organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Tiruchirappalli on 20th August 2005.
27. Delivered a lecture on “**Instrumentation for Thermal Analysis**” in the one day workshop on “Instrumentation for Thermal Analysis” sponsored by M/s PerkinElmer (India) P Ltd., Chennai organized by Centre for Energy & Environmental Science And Technology, National Institute of Technology, Trichy.
28. Delivered a lecture on “**Measurement of Noise, Vibration, Temperature and Pressure**” in the two day workshop cum discussion on “Small Hydro Power Projects” sponsored by Ministry of Non conventional Energy Sources, New Delhi Jointly organized by Alternate Hydro Energy Centre, Indian Institute of Technology, Roorkee

and CEESAT, National Institute of Technology, Trichy on 22nd –23rd April 2005.

29. Delivered a lecture on **“Wind Energy and its application & Poultry Litter Gasifier”** in the One day workshop and exhibition on “Renewable Energy Sources” organized by Govt. College of Engg., Salem on 02nd February 2005.
30. Delivered a lecture on **“Gasification of Poultry litter”** in the Short Term Training Programme on “Emerging Trends in Energy Management and Non Conventional Energy” organized by Department of Chemical Engineering, NIT, Trichy Sponsored by AICTE & ISTE New Delhi from 22nd November 03rd December 2004.
31. Delivered a lecture on **“Role of Poultry Litter Gasifier for Rural Development”** in the Short Term Training Programme on “Present and Future role of bio resources and Technologies for Rural Development” organized by School of Energy, Kumaraguru College of Technology, Coimbatore Sponsored by AICTE & ISTE New Delhi from 01-05th November 2004.
32. Delivered a lecture on **“Wind Energy – Potential and Application”** in an Intercollegiate One day seminar on “Renewable Energy” organized by Department of Physics & District Rural Development Agency, Trichy Sponsored by Tamilnadu Energy Development Agency, Chennai in commemoration of Rajivi Gandhi Renewable Energy day on 28th August 2004.
33. Delivered a lecture on **“Gasification of Poultry litter”** in the Short Term Training Programme on “Emerging Energy Technologies” organized by CEESAT, NIT, Trichy Sponsored by AICTE & ISTE New Delhi 17-28th May 2004.
34. Delivered a lecture on **“Introduction to Computational Fluid Dynamics”** in the Short Term Training Programme on “Emerging Energy Technologies” organized by CEESAT, NIT, Trichy Sponsored by AICTE & ISTE New Delhi 17-28th May 2004.
35. Delivered a lecture on **“Need for Energy Audit and Audit Procedure”** in the one week short term training program on “Energy Audit & Demand side management in power utilities” conducted by National Power Training Institute, Neyveli.

15 Reviewer of Journals

Chemical Engineering Journal – Elsevier

16 Recognition (Local, National, International)

- ✓ Associate Editor International Journal on Integrated Energy Systems
- ✓ Approved **Energy Auditor / Energy Manager** by Bureau of Energy Efficiency, Government of India.
- ✓ Nominated for inclusion of biography “**Who’s Who in the World**” by Marquis Who’s Who in the World – 25th Edition.
- ✓ Second Best Oral Presentation in International Interdisciplinary conference on Sustainable Technologies for Environmental Protection (Jan. 7-9, 2006) organized by Coimbatore Institute of Technology , Coimbatore for the paper titled “Environmental Impacts of Poultry litter disposal and Sustainable Technology for Energy Production” – Cash Award of Rs.2,000/-
- ✓ Best paper award in International Conference on Cleaner Technologies and Environmental Management organized by Pondichery Engineering College, Pondichery, - January 4-6, 2007 for the paper titled “Pasteurization of drinking water using solar energy for rural application”
- ✓ Received **Vikas Ratna Shiromani Award** and **Achiever of India Gold Medal** from Society of friendship and National Unity, New Delhi.

17 Committee Member

- ✓ Member for the Student Research Project Selection Committee for Engineering & Technology Division.
- ✓ Member, Board of Studies, Rural Energy Centre, Gandhigram Rural Institute
- ✓ B.Tech. Admission committee member
- ✓ Member, Purchase Committee of following GRI Departments
 - Rural Energy Centre
 - Rural Technology Centre
 - Centre for Futures Studies
 - Centre for Women’s Studies
 - Centre for Jatropha and Biofuel Research Centre

- ✓ Member in the team for performance testing of Mini Hydel 2 × 2 MW Small Hydro Station at Madhavaram, Nippulavagu, Kurnool Dt. Andhra Pradesh State from Dec13-16,2004.
- ✓ Member in the team of “Feasibility study of Wooden Log Gasifier for Textile and Dying Industries in cluster of Erode”
- ✓ Member in the team of “Wooden log gasifier to M/s BHEL canteen” (Preparing DPR)
- ✓ Member in the team of “Feasibility analysis of Energy Conservation opportunities” at TNPL, Kakithapuram

18 Fellowship Received

- Qualified in GATE 1997 ; Percentile Score: 81.14
- Young Scientist Fellowship by Department of Science and Technology, GOI

19 Student Project Guided

M.Tech Energy Engineering :

S.N.	Topic	Year	Student Name
1	Optimization of heat recovery in a plate heat exchanger using CFD-CFX	2003	Shobha Jose
2.	Simulation of solar dryer using CFD-CFX	2003	Dheepa.R
3.	Wind mill rotor design using CFD-CFX	2003	Ashok Kumar. M
4	Simulation of flow distribution through a solar flat plate collector using CFX	2003	Ganesh. R
5.	Hydrodynamics analysis of fluidized bed gasifier in CFD-CFX	2003	Visala Gupta. B
6.	Visualization of pressure rise with change in blade profile in an impeller in CFD	2003	Gururaj.A
7	Simulation of Updraft and Downdraft gasifier using CFD	2003	Ganapathy Sudaram
8	CFD analysis of combustion behavior of biomass gasifier & Performance improvement of teashop boiler	2004	Shobha Jose

S.N.	Topic	Year	Student Name
9	Fabrication and simulation of domestic solar dryer & Energy Audit in rice mill	2004	Dheepa.R
10	Gasification of Poultry Litter & Energy Auditing In Dicalcium Phosphate and Ossein Manufacturing Industry	2004	Kalirajan. U
11	Kinetic Studies of Rice Husk	2005	Kalirajan. U
12	Validation of bubble column reactor using CFX5.7.1	2006	Santhosh Reddy. P
13	Heat Transfer analysis of Tube banks using CFX software.	2006	Koppruravuri K Kumar

B.Sc (Rural Technology & Sustainable Technology Management)

S.N.	Topic	Year	Student Name
1	Studies on solar drying of fruits	2007	D.Raja, S.Rajkumar & S.Senthilkumar

P.G Diploma (Electrical Energy Management & Energy Auditing)

S.N.	Topic	Year	Student Name
1	Energy Audit in Modern Rice Mill.	2007	Suresh Kumar

20 Personal Information

Date of Birth : 15.04.1975
 Citizenship : Indian
 Marital Status : Married
 Languages Known : Tamil, English
 Email : kirbakaran@yahoo.com
 Mobile : 91 94438 59066