Dr.S.RAJAJKUMAR Assistant Professor

Department of Mechanical Engineering

Anna University Regional Campus Tirunelveli

Contact Number: 9894307215

Mail. ID: rajkumar1998@yahoo.co.in



> Research Area:

Energy Engineering, Wind Energy systems

> Educational Qualifications:

Qualification	Department	Institution	Year	
B.E.	Mechanical Engg	Institute of Road and Transport Technology,	1998	
		Erode. (Presently Government		
		Engineering College, Erode)		
M.Tech	Energy Engg	National Institute of Technology, Trichy	2003	
Ph.D.	Mechanical Engg	Anna University	2013	

> <u>Teaching Experience</u>: 23 years

Name of Company / Institutions	Designation of Post	From	То	Experience in Year
Regional Campus Anna University, Tirunelveli	Assistant Professor	28.10.2009	Till Date	13 years
Infant Jesus College of Engineering and Technology, Tuticorin	Assistant Professor	22.06.2009	26.10.2009	4months
SCAD College of Engineering and Technology, Tirunelveli, Tamilnadu.	Assistant Professor	28.11.2007	18.06.2009	1year 7 months
National Engg. College, Kovilpatti, Tamilnadu	Senior Lecturer	01.06.2007	19.11.2007	5 months
National Engg. College, Kovilpatti, Tamilnadu	Lecturer	18.01.1999	31.05.2007	8 years 4 months

> SOFTWARE SKILLS:

15 years of working experience in handling CAD softwares for UG and PG

AutoCAD

• **CREO** Sketch, Solid, Surface Modeling, Assembly,

Mechanism, Manufacturing, Detailing, Structural &

Thermal Analysis.

• **Solid Works** Sketch, Solid, Surface Modeling, Assembly,

Mechanism, Detailing, Structural Analysis.

> CATIA Sketch, Solid, Surface Modeling, Assembly, Drawing

• **ANSYS** Structural, Thermal, Fluid, Fluent CFD Analysis

• **3D Printing** Working experience in CURA, Flashprint software and Flash forge 3D printer and Resource Person for conducting 3D printing workshops in Engineering Institutions

> Awards:

- 1. Received "Sir Rajendra Nath Mookerjee Memorial Award" from The Institution of Engineers (India) for best paper publication in The Journal of Institution of Engineers (India) on 20th December 2013 at 28th Indian Engineering Congress held at Chennai.
- 2. Received "Best paper award" for paper titled "Effect of Tubercle leading edge control surface on the performance of the double delta wing figher aircraft" from International association of Engineering & Technology for skill development on 24th May 2015.

> Additional / Academic Responsibilities at University:

- 1. Placement Officer of Anna University of Technology Tirunelveli from 16.08.2011 to June 2012.
- 2. Deputy Warden for the boys Hostel of Regional Centre of Anna University, Tirunelveli from 19.08.2013 to 11.07.2016.
- 3. Worked as Head of Mechanical Engineering Department from 05.10.2015 to 04.02.2020
- 4. Committee member to indentify and monitor issues related to ragging in the campus in 2014.
- 5. Hostel Mess Monitoring Committee member.
- 6. Magazine (2013-2014) Editorial Committee member.
- 7. Board chairman of Mechanical Engineering for the Central Valuation of Anna University from 2013 to 2017.
- 8. Academic council member of Anna University of Technology, Tirunelveli from 2010 to 2011.
- 9. Chief Superintendent of Anna University Examination from 8.4.2019 to 27.5.2019.
- 10. Chief Superintendent of Anna University Examination from 04.11.2019 to 12.11.2019
- 11. Exam Cell Coordinator in Anna University Regional Campus from 03.07.2019 to 20.01.2020
- 12. Camp Officer for Anna University Examination Nov./Dec 2020 (Reexamination) and April/May 2021.
- 13. Faculty in charge of Placement cell in Anna University Regional Campus from 04.11.2020 to 23.06.2021.
- 14. Faculty in charge of logistic in Anna University Regional Campus from 04.11.2020 to till date.
- 15. Coordinator of Entrepreneurship cell in Anna University Regional Campus from 09.07.2021 to till date.

> Professional Activities:

- 1. Technical Committee member for installation of 1.5 MW Solar power plant at Manonmanium Sundaranar University, Tirunelveli in 2018.
- 2. Recognized Research Supervisor in Mechanical Engineering of Anna University, Chennai and Nine Ph.D. Research Scholars are doing research work.
- 3. Expert member for the Syllabus Committee meeting at Sankar Polytechnic College, Tirunelveli in 2016.
- 4. Member of Board of Studies for Mechanical Engineering in National Engineering College, Kovilpatti (Autonomous Institution) from 2011 to 2013 as University Representative
- 5. Editorial board member of Journal of Advanced Engineering Research.
- 6. Peer Reviewer of
 - a. International Journal Portugaliae Electrochimica Acta
 - b. The Journal of Institution of Engineers (India)
 - c. Renewable and sustainable energy reviews
 - d. Desalination
- 7. Editorial board member of Journal of Advanced Engineering Research.
- 8. Peer Reviewer of the International Journal Portugaliae Electrochimica Acta

> Membership of Scientific and Professional Societies:

Life Member in ISTE

> Completed B.E/M.E Projects:

a. Number of ME Projects Completed : 72b. Number of BE Project Completed : 22

> PhD Research Guidance (Completed) : 2

> PhD Research Guidance (Ongoing) : 2

> Consultancy Activities:

Energy Auditing in District Collectorate Tirunelveli

Duration: 3 months Role: Energy Auditor

Agency : District Collectorate Tirunelveli

<u>List of Seminar / Short Term Course /FDP/ Workshop attended:</u>

- 1. "**Teacher-Learner Strategy**" (2000) organised by National Engineering College ISTE Staff chapter on 26.2.2000. (1 Day)
- 2. "Renewable Energy & Energy Conservation Awarness & Strategies" (2001) organised by Centre for Energy studies, Kumaraguru College of Technology, Coimbatore during 15.12.2001 to 17.12.2001. (3 Days)
- 3. AICTE-ISTE sponsored short term Training programme on "Renewable Energy Sources & Conversion Technology" (2003) organised by Coimbatore Institute of Technology, Coimbatore from 26th May 2003 to 31st May 2003. (6 Days)
- 4. Faculty Development Programme on **"Mechatronics"** (2004) organised by Anna university, Chennai at National Engineering College from 24th to 29th May 2004. (6 Days)
- 5. Two days Workshop sponsored by Anna University on "**Environment & Pollution Control**" (2004) at National Engineering College on 5th May to 6th May 2004.
- 6. One day Workshop on "**Virtual Instrumentation based on LabView**" (2005) organized by National Engineering College, Kovilpatti on 18th December 2006. (1 Day)
- 7. One day workshop organised by Confederation of Indian Industry, Tirunelveli on 8th April 2011.
- 8. Two -week ISTE Workshop on **"Engineering Thermodynamics"** (2012) organised by Indian Institute of Technology Bombay from 11th to 21st December 2012. (11 Days)

- 9. Short Term Training on "Application of Finite Element Analysis in Industries" at CPLR from 13.06.2012 to 17.06.2012.
- 10. "Short Term Traning on ANSYS" at Sowdambika College of Engineering from 12.06.2013 to 18.06.2013.
- 11. National level One day workshop on "Wind Tunnel Testing: Measurement and flow visualization techniques" at Karunya University, Coimbatore on 14th October 2016.
- 12. Faculty Development Training Programme on "**Finite Elelment Analysis"** (2016) organised by Regional centre, Anna University, Tirunelveli from 5th to 15th December 2016 (7 Days)
- 13. One day hands on **"workshop on 3Dprinting"** organised by 3Ding at Chennai on July 15, 2017
- 14. AICTE Sponsored Seminar on "Smart grids and green systems (smart greens)" (2017) at Pondicherry Engineering College on 5-6 October 2017. (2 Days)
- 15. Interdisciplinary Short Term course under quality Improvement Programme on "Recent Developments in conventional and Non conventional Energy Resources" (2017) at Pondicherry Engineering College on 6-10 November 2017. (5 Days)
- 16. FDTP on **"Finite Element Analysis"** (2017) at PSNA College of Engineering at Dindigul from 23.11.2017 to 29.11.2017 (7 Days)
- 17. AICTE Sponsored Two week FDP on "Computational fluid dynamics in Engineering & Design" (2017) at Sethu Institute of Technology from 4-17 December 2017. (14 Days)
- 18. **"Foundation program in ICT for Education"** (2018) organised by IIT Bombay from 08.03.2018 to 12.04.2018 (2 Weeks)
- 19. "Pedagogy for Online and Blended Teaching Learning Process" organinsed by IIT Bombay from 03.05.2018 to 30.05.2018 (2 Weeks)
- 20. "AICTE ISTE Sponsored FDP on Emerging Trends in Autonomous Mobile Robots" (2018) at EGS Pillai Engineering College from 04.06.2018 to 09.06.2018 (6 Days)
- 21. **AICTE ISTE sponsored Faculty Development Programme on "Smart Building**" from 25-30th June 2018 at Ramkrishna Institute of Technology, Coimbatore (6 Days)

- 22. Anna University sponsored Faculty Development Programme on "Engineering Mechanics" from 11-24th December 2018 at Anna University, University College of Engineering, Ramanathapuram (14 Days)
- 23. Autodesk and Anna University sponsored "**Fusion 360 Faculty Development Program"** at University College of Engineering, Nagercoil from 07.01.2019 to 09.01.2018. (3 Days)
- 24. AICTE sponsored Two week Faculty Development Programme on "Digital India through solid modeling and 3D Printing Techniques for Indian Industries" at K.L.N.College of Engineering from 6-19 June 2019. (14 Days)
- 25. "Industrial Training on Mechanical Engineering Applications in **Telecom Industry**" conducted by Rajiv Gandhi Memorial Telecom Training Centre (RGM TTC), BSNL Tamilnadu Telecome Circle, Chennai from 30.07.2020 to 19.08.2020. (3 weeks)
- 26. "Government Officials Training Program on 3D Printing/Additive Manufacturing (3DP/AM)" under 'FutureSkills PRIME' Programme from 1st March 2021 to 12th March 2021 organized by NIELIT Chennai. (2 weeks)
- 27. "Short term Training Programme on Avenues for Energy Conservation in Residential Buildings" sponsored by AICTE and conducted by the Institute for Energy studies, Anna University from 24.01.2022 to 31.02.2022.
- 28. "Faculty Development Programme on Automation and smart Manufacturing" conducted by Department of Manufacturing Engineering & Centre for Constituent Colleges, Anna University from 25th to 29th April 2022.
- 29. Nan Mudhalvan Training program on "Smart and Advanced manufacturing Design simulation" sponsored by Skill development corporation, Tamilnadu from 13.02.2023 to 17.02.2023 at Government College of Engineering Tirunelveli.

> International Conferences Participated:

- 1. International conference on "Recent Advances in Material proceeding Technology" (2005) conducted by National Engg. College from 23 25 Feb. 2005.
- 2. International conference EAST 2005, Noorul Islam College of Engg., Thukkalay, Tamilnadu, India, and presented on "Design Optimization and Stress Analysis of Wind Turbine Blade NACA 4435", 16th &17th Nov 2005.
- 3. International Conference on Recent Advances in Mechanical Engineering, Noorul Islam University, Thuckalay, Tamilnadu, and presented on "Aerodynamic Analysis of different NACA 4 series Airfoils", 8th & 9th April 2010.
- 4. International Conference on innovative research and technology (ICIRT 2015), Sri Venkateswara College of Arts and science and International organization of innovative research and publishers, Dharmapuri and presented on "CFD analysis and optimization of washing machine pulsator", 23rd May 2015.
- 5. International Conference on innovative research and technology (ICIRT 2015), Sri Venkateswara College of Arts and science and International organization of innovative research and publishers, Dharmapuri and presented on "Design and analysis of A5 Rocket adapter using ALS", 23rd May 2015.
- 6. International Conference on innovative research and technology (ICIRT 2015), Sri Venkateswara College of Arts and science and International organization of innovative research and publishers, Dharmapuri, and presented on "Vibration analysis of small wind turbine", 23rd May 2015.
- 7. International Conference on innovative trends in mechanical and civil engineering (ICITMC 2015), PET Engineering College, Vallioor and presented on "Numerical investigation of energy efficient building heat gain", 10th April 2015.
- 8. International Conference on current innovations in engineering and technology (ICCIET 2015), Coimbatore and presented on "Effect of Tubercle leading edge control surface on the performance of the double delta wing fighter aircraft", 24th May 2015.

- 9. International Conference on Recent trends in Engineering & Technology, St. Joseph Institute of Technology and presented on "Modeling and Analtysis of VAWT Savonious type", 5th May 2017.
- 10. International Conference on Recent trends in Engineering & Technology, St. Joseph Institute of Technology and presented on "Design and analysis of vertical axis wind turbine Darrieus type", 5th May 2017.
- 11. International Conference on "Current research in Engineering Science and Technology" and presented on Design and Performance improvement of Darrieus type VAWT and solar hybrid system at Jayaram College of Engineering and Technology on 30.04.2018.
- 12. International Conference on "Recent trends in Engineering and Technology" and presented on Design and Development of Waving Blade of small wind Turbine at St. Joseph Institute of Technology on 04.05.2018.

> National Conferences Participated:

- 1. National Conference on Gobal Technologies in Manufacturing and Thermal Sciences (GTMTS 2007), Sethu Institute of Technology, Kariapatti, Madurai, Tamilnadu, India and presented "Aerodynamic Behaviour of HAWT Blades NACA 63-918 and Analysis of Lift and Drag forces", 29th & 30th March 2007.
- 2. National Conference on Emerging Materials and Technologies for India 2020, National Institute of Technology, Tiruchirappalli and presented on "Micro Analysis of foam using unit cell approach (RHOMBODO DECA HEDRON) Closed cell?" India.
- 3. National Conference on Recent Advances in Mechanical Engineering, National Engineering College, Kovilpatti, India and presented on "Determination of J.Intergral and stress intensity factor using Abaqus", 20-21 March 2008.
- 4. National Conferences on Advanced Design and Manufacture, Einstein College of Engineering, Tirunelveli, Tamilnadu and presented on "Study of Optimization design in HAWT Blades", 06th and 07th January 2011.
- 5. National Conference on Advances in Mechanical Engineering, Mohamed Sathak Engineering College and presented on "Design of a PV Power Vaccine Refrigerator", 4th April 2011.

- 6. National Conference on Advances in Mechanical Engineering, Mohamed Sathak Engineering College and presented on "Solar Dish engine design and analysis", 4th April 2011.
- 7. National Conference on Recent Trends in Mechanical Engineering, Dr.Sivanthi Aditanar College of Engineering, Tiruchendur, Tamilnadu, and presented on "Design and Implementation of solar energy storage system in a passive high capacity solar water heater", 25th March 2011.
- 8. National Conference on Recent Trends in Mechanical Engineering, Dr.Sivanthi Aditanar College of Engineering, Tiruchendur, Tamilnadu, and presented on "Numerical simulation of Transient temperature distribution in friction stir welding of AZ61A Magnesium Alloy", 25th March 2011.
- 9. National Conference on Technical Challenges in Manufacturing Engineering, SACS M.A.V.M.M. Engineering College and presented on "Design of timed solar tracker and performance measurement of photovoltaic panel", 31st March 2012.
- 10. National Conference on Innovative & Emerging Trends in Engineering and Technology, Oanimalar Institute of Techynology and presented on "Investigation of chemical deposition on thin film photovoltaic panel" on 14th May 2015.
- 11. National Conference on Automotive systems Design, Manufacturing and Integration" and presented on Design of energy efficient building using phase change material at Kumaraguru College of Technology on 28.04.2018.
- 12. National Conference on "Automotive systems Design, Manufacturing and Integration" and presented on Design and Fabrication of a Piezoelectric energy harvester at Kumaraguru College of Technology on 28.04.2018.

International Journals Publications:

- 1. Venkatachalam, G., Harichandran, R., Rajakumar, S., Dharma raja, C.Pandivelan. C., "Determination of J-integral and stress intensity factor using the commercial FE software ABAQUS in austenitic stainless steel (AISI 304) plates", Int J Adv Manuf Tech., Special Issue, pp. 1-4, 2008. (Impact Factor:1.238)
- 2. **Rajakumar, S.** and Ravindran, D. "Performance Evaluation of Different NACA 4 Series Airfoils for Wind Turbines", International Journal of Fluids Engineering, Vol. 2, pp. 57-68, 2010.
- 3. **Rajakumar, S.** and Ravindran, D. "Computational fluid dynamics of wind turbine blade at various angles of attack and low Reynolds number",

- International Journal of Engineering Science and Technology, Vol. 2, pp. 6474-6484, 2010.
- 4. M.Koilraj Gnanadason, P.Senthil Kumar, **S.Rajakumar**, M.H.Syed Yousuf, "Effect of Nanofluids in a vacuum single basin solar still" International Journal of Advanced Engineering research and Studies, Vol.1, issue.1, pp.171-177, 2011.
- **5. Rajakumar, S.** and Ravindran, D. "Iterative approach for optimizing coefficient of power, coefficient of lift and drag of wind turbine rotor", Renew. Energy, Elsevier, Vol. 38, pp. 83-93, 2012. (Impact Factor: **8.6**)
- **6. Rajakumar, S.** and Ravindran, D. "Optimization of wind turbine power coefficient parameters using hybrid technique", J. Inst. Eng. India Ser. C, Springer, Vol. 93, No. 2, pp. 141-149, 2012. **(SNIP Impact Factor: 1.31)**
- 7. Abinaya Sorna Jothi, P. and **Rajakumar, S.**, "Performance of PCM and Cooking Vessel in Solar Cooking System", International Journal of Engineering Inventions, Vol.2, No.6, pp.83-89, 2013.
- 8. Sowmini Priya and **Rajakumar, S**., "An Energy Storage System for Wind Turbine Generators-Battery and Supercapacitor", International Journal of Engineering Research and Applications, Vol.3, No.2, pp.1219 1223, March April 2013.
- 9. Dhanusia and **Rajakumar, S**., "Thermal Analysis of PCM based building wall for cooling", International Journal of Science, Engineering and Technology Research, Vol.2., No.4., pp. 850-857, 2013.
- 10. Kokila, R.N. and **Rajakumar, S**., " *Performance Evaluation of Solar Assisted Heat pump water heating system*", IOSR Journal of Engineering, Vol.3, No.4., pp.12-17, 2013.
- 11. Prawyn Jeba.V.P. and **Rajakumar, S.**, "Improving the Reliability in PMSM for Wind Turbine", International Journal of Engineering Research and Development, Vol.6, No.11., pp.55-61, 2013.
- 12. Esakkimuthu N and **Rajakumar, S**., "Structural Analysis of Composite Material Drive Shaft Using FEM", The International Journal of Science & Technoledge, Vol.2, No.4., pp. 140-146, 2014.
- 13. Muruganantham G and **Rajakumar**, **S**., "Finite Element Analysis of Torispherical Shell" The International Journal of Science & Technoledge, Vol.2, No.4., pp. 130-135, 2014.
- **14.** Kokila R N and **Rajakumar**, **S**., "Thermal performance analysis and optimization of solar Assisted heat pump water heater", Applied Mechanics and Materials, Vols. 592-594, pp 2416-2421, 2014. (Impact Factor: 3.88)

- **15.** Vishnu Prasad, G. Venkatachalam, Akshat Rathi, **Rajakumar, S.**, "Finite Element Analysis of Jute Fibre Made Hybrid Polymer Matrix Composite" Applied Mechanics and Materials, Vols. 592-594, pp 363-367, 2014.(**Impact Factor: 3.88**)
- **16.** Vishnu Prasad, Ajil Joy, G. Venkatachalam, S.Narayanan, **S.Rajakumar**, "Finite Element analysis of jute and banana fibre reinforced hybrid polymer matrix composite and optimization of design parameters using ANOVA technique", Procedia Engineering, Vol. 97, pp.1116 1125, 2014.(Impact Factor: **0.334**)
- **17.** N. Karthikeyan , K. Kalidasa Murugavel, S. Arun Kumar, **S. Rajakumar**., "Review of aerodynamic developments on small horizontal axis wind turbine blade" Renewable and Sustainable Energy Reviews, Vol. 42 (2015), pp. 801–822. (Impact factor:16.79)
- **18.** A.Sethu Ramalingam, **Rajakumar**, **S.**, "Parametric modeling & study of structural characteristics of wind turbine blade", International journal of engineering and computer science", Vol. 4, No. 5, pp. 141-149, 2015
- 19. P.Premalatha, **S.Rajakumar**, "Design of the small horizontal axis wind turbine blade with and without winglet", International Journal of Research in Science & Technology, 6 (1) 40-50 (2016)
- 20. T.Vijay, **S.Rajakumar**, "Generation of electric current from industrial exhaust by using turbocharger", International Journal of Research in Science & Technology, 6 (1) 67-72, (2016)
- 21. R.Immanual, **S.Rajakumar**, "Performance evaluation and optimisation of cross flow cooling tower", International Journal of Research in Science & Technology, 6 (1) 81-89, (2016)
- 22. K.K. Dinesh Kumar, **S.Rajakumar**, "Review on biogas production from codigestion of cow dung and food waste with water hyacinth", International Journal of Research in Science & Technology, 6 (1) 119-124 (2016)
- 23. S.John Paul Devaseelan, **S. Rajakumar**, "Review on mechanical & thermal properties of hybrid reinforcement polymer composite", International Journal of Research in Science & Technology, 6 (1) 125-139 (2016)
- 24. J.Jaisy, **Dr.S.Rajakumar**, "Turbulence analysis on a 5kw horizontal axis wind turbine using CFD", International Journal of Research in Science & Technology, 6 (1) 148-157 (2016)

- 25. M.Annal Rajam, **S.Rajakumar**, "Control of temperature in bio-digester using phase change material (PCM)", International journal of research in social sciences & humanities, 6 (1) 86-93 (2016)
- 26. B. Paul **Vinofer, S.Rajakumar**, Cooling load calculation and design of air conditioning system in automobile, International journal of research in social sciences & humanities, 6 (1) 94-103 (2016)
- 27. G.Sureshkumar, **S.Rajakumar**, "Empirical review on car radiator by using nanofluids", International journal of research in social sciences & humanities, 6 (1) 118-124 (2016)
- 28. S.Premkumar, **S.Rajakumar**, "A review paper on development of microwind turbine for automotives", International journal of advances in engineering research 10 (6) 139-144 (2015)
- 29. A Suresh, **S Rajakumar**, "Design and experimental investigation of micro wind turbine", International journal of advances in engineering research, 10 (6) 216-224 (2015)
- 30. S. Daniel Selvakumar, R. Immanual, **S. Rajakumar**, "Calculation of cooling load for mushroom cultivation", International journal of advances in engineering research, 10 (6) 196-202 (2015)
- 31. B.Paul Vinofer, **S.Rajakumar**, "CFD evaluation on effect of double glazing over single glazing in a small utility vehicle", International journal of Research in Science & Technology, 6 (3) 82-89 (2016).
- 32. S.Daniel Selvakumar, R.Immanual, **S.Rajakumar**, "Design and fabrication of photo voltaic refrigeration system for mushroom cultivation", International journal of Research in Science & Technology, 6 (3) 90-95 (2016).
- 33. S.Premkumar, **S.Rajakumar**, "Development on microwind turbine for automotives", International journal of Research in Science & Technology, 6 (3) 96-102 (2016).
- 34. G.Sureshkumar, S.Rajakumar, **S.Ayyappan**, "Experimental and numerical analysis on car radiator by using nanofluids", International journal of Research in Science & Technology, 6 (3) 103-111 (2016).

- 35. K.K.Dinesh Kumar, **S.Rajakumar**, S.Ayyappan, "Kinetic study on the effect of water hyacinths in food waste biogas production", International journal of Research in Science & Technology, 6 (3) 112-117 (2016).
- 36. R.Immanual, **S.Rajakumar**, B.Ragupathi, S.P.Ramkumar, "Decrease the outlet water temperature of cross flow cooling tower", International journal of advances in engineering research, 11 (6) 1-7 (2016)
- 37. C.Ashok, **S.Rajakumar**, Y.Balamurali, "Finite element analysis of aluminum sandwich composite material", International journal of advances in engineering research, 11 (6) 8-14 (2016)
- 38. T.Vijay, **S.Rajakumar**, S.Ayyappan, "CFD analysis on electric current generation from industrial exhaust by using turbocharger", International journal of advances in engineering research, 11 (6) 15-21 (2016)
- 39. S.John Paul Devaseelan, **S.Rajakumar**, "Mechanical & Thermal properties of hybrid reinforcement polymer composite", International journal of advances in engineering research, 11 (6) 29-37 (2016)
- 40. P.Premalatha, **S.Rajakumar**, "CFD analysis of the small horizontal axis wind turbine blade with and without winglets", International journal of advances in engineering research, 11 (6) 38-46 (2016)
- 41. J.Jaisy, **S.Rajakumar**, "CFD analysis of 5kw horizontal axis wind turbine", International journal of advances in engineering research, 11 (6) 47-55 (2016)
- 42. **S. Rajakumar**, D.Ravindran, M. Sivakumar, G.Venkatachalam, S. Muthukumar, "Optimization of Power Coefficient of Wind Turbine Using Genetic Algorithm", J. Inst. Eng. India Ser. C, Springer, Vol. 98 No. 2 111–118 April (2017) (Impact Factor: 1.31)
- 43. Vandana Vidyadhari, **S.Rajakumar**, "Aerodynamic design of mach 5 nozzle in large hypersonic wind tunnel", International Journal of Research in Science and Technology, Vol.7, Issue No. III, Jul-Sep 2017.
- 44. L.Anantha Raman, **S. Rajakumar** "*CFD Modeling and experimental measurement of fluid flow characteristics, swirl motion, Tumble motion in compression ignition engines A Review*", Journal of Research Innovations in Engineering & Technology, Vol. II, Issue 2, pp 16-24, 2016

- 45. L. Anantha Raman, **S. Rajakumar**, Lokesh Paradeshi, "Effect of thermal barrier coating on performance and emission characteristics of a diesel engine", International Journal of Advanced Engineering Technology, Vol. VII, Issue I/Jan.-March, 851-853, 2016
- **46.** Anantha Raman, L., **Rajakumar S**, Deepanraj B, and Paradeshi L, "Study on performance and emission characteristics of a single cylinder diesel engine using exhaust gas recirculation", THERMAL SCIENCE, Year 2017, Vol. 21, (2), pp. S435-S441, 2017 (Impact Factor:1.87)
- 47. **Rajakumar.S** and Aumugasamy.M "Design and performance imporvement of darrieus type VAWT and solar hybrid system", SSRG International Journal of Electrical and Electronics Engineering (SSRG-IJEEE)-Special Issue ICCREST, pp 23-28, April 2018
- 48. E.Varadha and **Rajakumar.S** "Design And Optimization of Piezoelectric Cantilever Beam for Improving Energy Harvesting using Taguchi's Analysis", TAGA Journal, pp 502-513, 2018
- 49. E.Varadha and **Rajakumar.S** "Performance improvement of piezoelectric materials in energy harvesting in recent days a review", JOURNAL OF VIBROENGINEERING, pp 2632-2650, Vol. 20, Issue 7, NOVEMBER 2018(Impact Factor:0.723)
- 50. Gowtham and **Rajakumar**, "Investigation of Natural Fiber Composite Material for Building Cooling System", International Journal of Science and Research, pp 1154 1156, Vol.8, No.1, January 2019.
- **51.** L. Anantha Ramana, B. Deepanraj, **S. Rajakumar**, V. Sivasubramanian, "Experimental investigation on performance, combustion and emission analysis of a direct injection diesel engine fuelled with rapeseed oil biodiesel", FUEL, pp 69 74, Vol.246, February 2019.(Impact Facor:8.03)
- 52. Gowtham and **Rajakumar**, "Design and Analysis of Concrete Building without Insulation and with Insulation using ANSYS 15 Software", International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, Volume: 06, Issue: 05, pp 6392-6395, May 2019
- **53.** A. Suresh and **S. Rajakumar**, "Design of small horizontal axis wind turbine for low wind speed rural applications", Materials Today: Proceedings, Volume:23, Issue:1, pp 16-22, 2020 https://doi.org/10.1016/j.matpr.2019.06.008(Impact Factor:0.575)

- 54. A.Manikandan and **S.Rajakumar**, "A review on natural fiber and its characteristics", Industrial Engineering Journal, ISSN: 0970-2555, Volume:13, Issue:3, pp 21 28, March 2020.
- 55. S.Kaviyarasu and **S.Rajakumar**, "Review on Battery Thermal management system using phase change material", International Research Journal of Modernization in Engineering Technology and science, e ISSN: 2582-5208, Volume: 2, Issue: 3, pp 797 814, March 2020.
- 56. E. Varadha, **S. Rajakumar**, R. Immanual, X.S. Ashok Jain, "Vibration analysis of transverse galloping of different bluff bodies", Materials Today: Proceedings, Vol.45, Part 2, pp 1274-1279, May 2021 https://doi.org/10.1016/j.matpr.2020.05.017 (Impact Factor: 0.575)
- 57. N. Muthu Saravanan, **S. Rajakumar**, A. Arul Marcel Moshi, "Experimental Investigation on the performance enhancement of single basin double slope solar still using kanchey marbles as sensible heat storage materials", Materials Today: Proceedings, Vol 39, Part 4, pp 1600 -1604, March 2021. https://doi.org/10.1016/j.matpr.2020.05.710 (Impact Factor: 0.575)
- **58.** E.Varadha, **S.Rajakumar** and X.S.Ashok Jain, "Wind Driven Leaf like Thin Film Piezoelectric harvester fro low Wind applications", Journal of Vibration Engineering & Technologies, Vol.9, pp. 1005-1022, January 2021.(**Impact Factor: 2.3**)
- **59.** V. Gopalan, S. Rajarajan, M. Wilson, J. Venkatesan, M. Elango, S. Natarajan, **S. Rajakumar**, "Studies on fly ash/coir/sugarcane reinforced epoxy polymer matrix composite", Materials Science & Engineering Technology, https://doi.org/10.1002/mawe.202200037, Feb 2023. (Impact Factor: 1.85)

International Conferences Publications:

- 1. **S.Rajakumar,** P.Prabaharan Graceraj, P.Mahendra Kumar and S.Ayyapan, "Design Optimization and Stress Analysis of Wind Turbine Blade NACA 4435", Proceedings of International conference EAST 2005, Noorul Islam College of Engg., Thukkalay, Tamilnadu, India, pp. 1016-1028, 16th &17th Nov 2005.
- 2. **S.Rajakumar** and D.Ravindran, "Aerodynamic Analysis of different NACA 4 series Airfoils", Proceedings of International Conference on Recent Advances

- in Mechanical Engineering, Noorul Islam University, Thuckalay, Tamilnadu, pp.149 154, 2010.
- 3. R.K.Kiruthika, **S.Rajakumar**, "Structural Analysis of Wind turbine blades", International Conference on Advances in Engineering and Technology, May 27-28, 2011.
- 4. A.Panimaya Selvi Isable and **Rajakumar**, "Thermal analysis of Pin Fin heat sink for low temperature heat dissipation in electronic device", International Conference on Thermal Energy and Environment (INCOTEE 2011), Kalasalingam University, 24-26 March 2011.
- 5. A.Santhosh Raja, I.Kirubakaran, A.Suresh and **S.Rajakumar**, "*Performance of Small Wind Turbine Blade for various materials*", Proceedings of International Conference on Renewable Energy Technologies, PSG College of Technology, Coimbatore, Tamilnadu, India, pp.114 -118, 16th -17th December 2011.
- 6. P.Saji Raveendran, S.Rajakumar, "CFD Analysis of Airfoil of Wind Turbine Blades", Proceedings on International Conference on Thermal Energy and Environment (INCOTEE 2011).
- 7. I.Kirubakaran, **S.Rajakumar**, "Development of small wind turbine blades with low cost material", International Conference on Recent Advances in Mechanical Engineering, Dr.M.G.R. Educational and Research Institute University, 19th and 20th April, 2012.
- 8. G.Xaviour, **S.Rajakumar**, "Design of timed solar tracker and performance measurement of photovoltaic panel", International Conference on Recent Advances in Mechanical Engineering, Dr.M.G.R. Educational and Research Institute University, 19th and 20th April, 2012.
- 9. M.Prakash, **S.Rajakumar**, "Effect of various absorbing materials on the thermal performance of solar stills", International Conference on Recent Advances in Mechanical Engineering, Dr.M.G.R. Educational and Research Institute University, 19th and 20th April, 2012.
- 10. A.Suresh, **S.Rajakumar**, "Design of micro wind turbine blade", International Conference on Recent Advances in Mechanical Engineering, Dr.M.G.R. Educational and Research Institute University, 19th and 20th April, 2012.

- 11. W.Mary Nishanthi and **S.Rajakumar**, "Development of Correlation for Coefficient of lift and drag using parametrical modeling", International Workshop and Conference on "Renewable Energy and Climate Change Exploring Opportunities for Sustainable Development, Madurai Kamaraj University, Madurai, Tamilnadu, India, 5th 7th April 2012.
- 12. A.Ramesh Devi and **S.Rajakumar**, "Maximization of Power Coefficient of wind turbine blade using Genetic Algorithm", International Workshop and Conference on "Renewable Energy and Climate Change Exploring Opportunities for Sustainable Development, Madurai Kamaraj University, Madurai, Tamilnadu, India, 5th 7th April 2012.
- 13. J.Evangelin Jesly and **S.Rajakumar**, "Optimization of wind turbine blade using neural network and genetic algorithm", International Workshop and Conference on "Renewable Energy and Climate Change Exploring Opportunities for Sustainable Development, Madurai Kamaraj University, Madurai, Tamilnadu, India, 5th 7th April 2012.
- 14. **Prince Chandrakanth. T and S.Rajakumar**, "Performance evaluation of small wind turbine using combined BEM method and CFD", International Conference on technological convergency of information, health, food and energy security", Central leather research institute, Council of scientific and industrial research, 1st and 2nd May 2015.
- 15. S.Madasamy and **S.Rajakumar**, "Finite element analysis of automobile crankshaft with various materials", Proceeding of International Conference on Applied research in Engineering and Technology ICArEt 2015, pp. 80-82, 2nd May 2015
- 16. **Sri Ram and S.Rajakumar**, "Design and performance improvement of wind turbine using thin Airfoils", TEQIP II Sponsored International Conference on sustainable energy systems and energy management, 2015
- 17. R.Immanual, E.Varadha and **S.Rajakumar**, "Study and design of weight controlled suicidal preventive clamp" Proceedings of the International Conference on Materials, Design and Manufacturing Process ICMDM '16 February 17-19, 2016, Chennai.
- 18. L. Anantha Raman, **S. Rajakumar**, B. Deepanraj, Lokesh Paradeshi, "Study on performance and emission characteristics of a single cylinder diesel engine using Exhaust gas ecirculation", *International Conference cum Exhibition on Renewable and Sustainable Energy (ICRSE-2017), Coimbatore, India,pp.* 216 224, *April* 12-13, 2017

- 19. L. Anantha Raman, **S. Rajakumar**, B. Deepanraj, M. Srinivas, "Performance, combustion and emission analysis of a compression ignition engine using rapeseed oil bio-diesel", *International Conference cum Exhibition on Renewable and Sustainable Energy (ICRSE-2017), Coimbatore, India,pp.* 248 259, *April 12-13, 2017*
- 20. Varadha and **Rajakumar**, "Optimization of Cantilever Beam in Wind Energy Harvesting System" Proceedings of International Conference on Trends and Advanced Research in Green Energy Technologies, ICTARGET-2017 organised by VIT University, Vellore, March 30 31, 2017
- 21. Greeshma and **RajaKumar**, "Analysis of Fatigue Characteristics of Horizontal Axis Wind Turbine Blade" Proceedings of International Conference on Trends and Advanced Research in Green Energy Technologies, ICTARGET-2017 organised by VIT University, Vellore, March 30 31, 2017
- 22. Rajasekaran, Suresh and **Rajakumar**, "Design and Development of Low Reynolds Number Airfoil for Small Horizontal Axis Wind Turbine" Proceedings of International Conference on Trends and Advanced Research in Green Energy Technologies, ICTARGET-2017 organised by VIT University, Vellore, March 30 31, 2017
- 23. **S.Rajakumar** and Arumugasamy. M, "Design and Performance improvement of Darrieus type VAWT and solar hybrid system", Proceedings of International Conference on Current research in Engineering Science and Technology organised by Jayaram College of Engineering and Technology, pp. 77-82, 30th April 2018.
- 24. C.Kaarthiganesh and **S.Rajakumar**, "Experimental Investigation of PV/T System by splash type cooling tower with cooling storage material", Proceedings 2nd International Conference on frontiers in Engineering, Applied Sciences and Technology organised by National Institute of Technology Tiruchirappalli, pp. 197-184, 27-28th April 2018.
- 25. S.Rakesh, A.Suresh and **S.Rajakumar**, "Design and development of waving blade of small wind turbine", Proceedings of 3rd International Conference on Recent Trends in Engineering and Technology (ICRTET 2018), organised by St.Joseph's Institute of Technology, 4th & 5th May 2018

26. N.Muthu Saravanan and **S.Rajakumar**, "An Experimental Performance analysis of single basin double slope solar still with Kanchey Marbles", Proceedings of International Conference on Desalination (InDACON – 2018),organised by National Institute of Technology, Tiruchirappalli & Indian Desalination association on 20th & 21st April 2018.

National Conferences Publications:

- 1. P.Mahendra Kumar, **S.Rajakumar**, S.Somesh Subramanian, S.Ayyappan and P.Prabhakaran Graceraj, "Effect of Composite Material in the Performance & Emission Characteristics of S.I. Engine", AICTE sponsored National Conference on Production & Processing of Composite Materials, Mahendra Engineering College, Namakkal, India, pp. 68-73, 26-27 Nov 2004.
- 2. G.Venkatachalam and **S.Rajakumar**, "Micro Analysis of foam using unit cell approach (RHOMBODO DECA HEDRON) Closed cell", National Conference on Emerging Materials and Technologies for India 2020, National Institute of Technology, Tiruchirappalli, India.
- 3. G.Venkatachalam and **S.Rajakumar**, "Determination of J.Intergral and stress intensity factor using Abaqus", National Conference on Recent Advances in Mechanical Engineering, National Engineering College, Kovilpatti, India, 20-21 March 2008.
- 4. Mariappan and **S.Rajakumar**, "Fluid flow analysis of centrifugal pump impeller using computational fluid dynamics", National Conference on Recent trends in Mechanical Engineering (RTIME'08), Sardar Raja College of Engineering, Alangulam, Tamilnadu, India, 05th April 2008.
- 5. E.Varadha and **S.Rajakumar**, "Study of aerodynamic performance of airfoils using BEM method", First National Conference on Energy Efficient Mechanical system design and manufacturing, PSG Institute of Technology, Coimbatore, Tamilnadu, India, 11-12th March 2011.
- 6. **S.Rajakumar** and E.Varadha, "Study of Optimization design in HAWT Blades", Proceedings of National Conferences on Advanced Design and Manufacture, Einstein College of Engineering, Tirunelveli, Tamilnadu, pp.220 225, 06th and 07th January 2011.
- 7. S.Muthukumar and **S.Rajakumar**, "Design Optimization of Wind Turbine Blades", National Conference on Recent Trends in Mechanical Engineering,

- Dr.Sivanthi Aditanar College of Engineering, Tiruchendur, Tamilnadu, 25th March 2011.
- 8. S.Angel Selva Packyam and **S.Rajakumar**, "Flow Analysis in a burner for Domestic Application", Two day National Conference on Emerging Trends in Engineering and Technology (NCETET-2013), pp.414 418. 11th & 12th April 2013.
- 9. Paranthaman.K, **S.Rajakumar**, :CFD Simulation Of Wind Turbine Blade For Low Wind Site", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli.
- 10. Gokulkumar K.G, **S. Raja kumar**, "Optimisation of chord and twist angle of the wind turbine blade", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli.
- 11. Anish.A, **S. Raja kumar**, "Performance analysis of hemispherical fin plate heat exchanger", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli.
- 12. Shankar ganesh.P, **S. Raja kumar**, "Structural Analysis Of Wind turbine Blade Using Uni Directional Carbon Fibre Composite Material", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli.
- 13. S.Prabaharan, **S. Raja kumar**, "Effect Of Optimum Pitchon Performance Of Wind Turbine", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli.
- 14. V.Anto, **S. Raja kumar**, "Solar dryer for drying banana fruit", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli
- 15. M.S.Sinda Peer kahder Mohideen, **S. Raja kumar**, "Performance analysis of solar assisted heat pump using alternate refrigerant", Sixth national conference "EDQUEST 14" Dept of Mechanical Engg, Government college of Engineering, Tirunelveli
- 16. **Prince Chandrakanth. T and S.Rajakumar**, "Performance evaluation of small wind turbine using CFD", TEQIP II sponsored National Conference on contemporary approaches in design and manufacturing (CADAM 15), Alagappa chettiar college of engineering and technology, 23rd April 2015

- 17. **L. Anantha Raman, S. Rajakumar and B. Deepanraj,** "Performance, Combustion and Emission Analysis of a Compression Ignition Engine using Rapeseed Oil Bio-Diesel", *Proceedings of the National Conference on Waste to Energy, Carbon Capture and Storage (NCWECCS 2017) NIT Rourkela, India, 3-5 August 2017*
- 18. N.Ayyappan and **S.Rajakumar**, "Design of Energy Efficient Building using phase change material", Proceedings for 2nd National Conference on Automaotive systems design, Manufacturing and integration (ASDMI 18), organised by Kumaraguru College of Engineering, 28th April 2018.
- 19. P.Jeevanatham and **S.Rajakumar**, "Design and Fabrication of a Piezoelectric energy harvester", Proceedings for 2nd National Conference on Automaotive systems design, Manufacturing and integration (ASDMI 18), organised by Kumaraguru College of Engineering, 28th April 2018.

<u>Seminars/Schools/Conferences/Workshops Organised:</u>

- 1. Organised One day Technical symposium "**MECHNA 2K**" on Feb 14th of 2006 at National Engineering College, Kovilpatti, Tamilnadu.
- 2. Organsied One day Seminar on "Awarness on Global Warming and Renewable Energy Sources" on 14th August 2007 sponsored by MNRE and TEDA at National Engineering College, Kovilpatti, Tamilnadu.
- 3. Coordinator for Organising Two days Exhibition on "**Renewable Energy Sources**" on 8th & 9th Feb.2008 at SCAD College of Engg. and Tech., Tirunelveli, Tamilnadu.
- 4. Conducted Guest Lecture program on "**Application of Finite Element Method**" on 27th August 2014 at Anna University Regional Centre Tirunelveli.
- 5. Coordinator of a one day workshop on "**Solar and Wind Energy**" on 11th March 2015 at Regional centre, Anna University, Tirunelveli.
- 6. Coordinator for **Short Term Course on CAD/CAE CAD using CREO** from 06.03.2016 to 17.04.2016 at Regional Centre, Anna University, Tirunelveli.

- 7. Coordinator for the **Faculty Development Training Programme on Engineering Mechanics** from 14th to 20th December 2015 at Regional Centre, Anna University, Tirunelveli.
- 8. Coordinator for **One day Workshop on "Bridge the Gap between Academic and Industries"** on 11th November 2020 at Anna University Regional Campus, Tirunelveli.

Special/Invited Lectures Delivered:

- 1. Delivered a Guest Lecture on "**Wind Energy**" at Saranathan College of Engineering, Trichy on 30th September & 1st October 2002.
- 2. Presented Guest Lecture on Solar Energy in One day Workshop on "Renewable Energy Energy of the future" organized by PET Engg. College, Vallioor on 18/08/2006.
- 3. Presented Special Lecture On Solar Energy in One day Workshop on "**Renewable Energy**" organized by Energy Club of National Engineering College on 19/08/2006.
- 4. Presented Guest Lecture on "Wind Energy Conversion Technology" at M.S.P.V.L Polytechnic College, Poovorchatram on 06.08.2007.
- 5. Resource person of **National level Technical symposium (JACSIUM 2011)** at Jayaraj annapackiam C.S.I College of Engineering on 19th March 2011.
- 6. Presented Guest Lecture on "**Scope for Mechanical Engineers**" at Chandy Polytechnic College, Thoothukudi on 08.02.2013.
- 7. Presented Expert lecture on "Wind Turbine Technologies" in the Faculty development programme organized by Department of Mechanical Engineering, Government College of Engineering, Salem on 21.10.2013.
- 8. Presented Expert lecture on "Advanced Computational Fluid Dynamics in Green Technologies" in the AICTE Sponsored Faculty Development Programme organized by Department of Mechanical Engineering, Sethu Institute of Technology, Virudhunagar on 05.11.2013

- 9. Acted as Panel member to conduct interview at S.Veerasamy Chettiar College of Engineering and Technology on 03.07.2014
- 10. Served as Jury for the Technical session of **15**th **National level Technical symposium Efficacy 2K15** at Institute of Road and Transport Technology, Erode on 6th March 2015.
- 11. Resource person for "**Two Days workshop on Finite Element analysis**", at Einstein College of Engineering on 29th &30th May 2015.
- 12. Chief Guest for **Mechanical Engineering Association Inaugural function** at Dr.Sivanthi Aditanar College of Engineering on 30th July 2015.
- 13. Resource person for the GoI Ministry o New & Renewable Energy Sponsored State level seminar on "Advances in Solar Thermal Energy systems" at Francis xavier Engineering College, Tirunelveli On 31st July 2015.
- 14. Presented Guest Lecture on "Awareness on learning mechanical software" at Einstein College of Engineering, Tirunelveli on 14.08.2015
- 15. Resource person for the "One day workshop on Application of Finite Element Method in Aerospace Industry" on 27th February 2017 at PSN College of Engineering & Technology, Tirunelveli.
- 16. Chairperson & Advising Committee member for "A One day National Conference on Innovations and Recent Trends in Mechanical Engineering" on 20th February 2017 at University V.O.C College of Engineering, Tutircorin.
- 17. Jury for the 4th national Level Technical Symposium "**PEMETRIX 17**" on 23th February 2017 at University V.O.C College of Engineering, Tutircorin.
- 18. Resource person of "National Level Technical Workshop on 3D Printing" at Rohini College of Engineering and Technology, Kanyakumari on 11.08.2017.
- 19. Resource person of "One day Workshop on 3D Printing Technology" at Annai Vailankanni College of Engineering, Kanyakumari on 18.08.2017.
- 20. Resource person of "Workshop on Recent Advancements in 3D Printing" at V V College of Engineering, Kanyakumari on 30.08.2017 & 31.08.2017.

- 21. Resource person of "**Workshop on 3D Printing**" at Dr.Sivanthi Aditanar College of Engineering on 12.09.2017
- 22. Resource person of "One Day Workshop on 3D Printing" at PET Engineering College on 15.09.2017.
- 23. Delivered Chief guest address at 5th National level Technical Symposium JOINTS'17 at Mother Theresa Engineering College on 25.09.2017.
- 24. Resource person of "**One Day Workshop on 3D Printing**" at DMI Engineering College on 22.01.2018.
- 25. Resource person of "One Day Workshop on Computational Fluid Dynamics" at PET Engineering College on 13.02.2018.
- 26. Guest of Honour for **National level technical symposium MECHTRONZ 2K18** at JP College of Engineering on 21.02.2018
- 27. Resource Chairman in International Conference on Recent Trends in Mechanical and Civil Engg at PET Engineering College on 04.04.2018.
- 28. Resource person in **AICTE ISTE sponsored refresher program on smart buildings** at Sri Ramakrishna Institute of Technology on 29.06.2018
- 29. Resource Person for **Orientation program** at SCAD College of Engg & Tech. on 09.07.2018
- 30. Presented Guest Lecture on "**Power plant Engineering**" at PET Engineering College on 18.07.2018.
- 31. Resource person for the presentation on "**Renewable Energy Sources**" in the Training program students for Indian Engineering services Examination at Government Engineering College, Tirunelveli on 21.07.2018.
- 32. Resource person of "One Day Workshop on 3D Printing" at DMI Engineering College on 03.08.2018.
- 33. Resource person of Entrepreneurship Awareness Camp sponsored by EDII/DST-NIMAT, Govt. of India, New Delhi and delivered about "*Creativitiy and Innovations in Mechanical Engineering*" at Francis xavier Engineering College Tirunelveli on 16th Aug.2018.

- 34. Resource person for the presentation on "**Solar Energy**" in the Training program students for Indian Engineering services Examination at Government Engineering College, Tirunelveli on 01.09.2018.
- 35. Resource person of "**One Day Seminar**" at Rohini College of Engineering & Technology on 05.09.2018.
- 36. Resource person of **"Workshop on Additive manufacturing**" at Francis Xavier Engineering College, Tirunelveli 19th and 20th September 2018.
- 37. Resource person of "3D printing using Additive Manufacturing Technology" at V.V. College of Engineering on 26th and 27th September 2018.
- 38. Resource person of "One day National level workshop on Additive Manufacturing" at Sree Sowdambika College of Engineering on 28th September 2018.
- 39. Resource person and Chief Guest of "Symposium of Mechanical Engineering" at Raajas Engineering College on 04.10.2018.
- 40. Resource person for "**Finite Element methods and applications**" at PET Engineering College on 11.01.2019.
- 41. Resource person for delivering lecture on "**Importance of Energy Audit**" at Department of Industries and Commerce, Nagercoil on 01.02.2019.
- 42. Resource person for "International Conference on Recent Trends in Mechanical and Civil Engineering", PET Engineering college on 16th Febrary 2019.
- 43. Resource person for delivering lecture on "Energy Conservation in Mechanical systems" at Department of Industries and Commerce, Nagercoil on 19.02.2019.
- 44. Judge for **National Level Technical Symposium**, Department of Mechanical Engineering, Government College of Engineering, Tirunelveli on 28.02.2019.
- 45. Resource person for "One day Workshop on Application of 3D Printing in Mechanical Engineering" at Einstein Engineering College on 10.11.2021.
- 46. Guest Lecture on **"Rapid prototyping A demo view"** at Grace College of Engineering on 09.12.2021.
- 47. Resource person for **"Workshop on 3D Printing Technology"** at the Innovation Hub, District Science Centre, Tirunelveli on 20.08.2022

48. Guest Lecture on **"Application of 3D printing"** at Thamirabarani Engineering College, Tirunelveli on 06.12.2022.