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Area Specialization:

IC Engines, Heat Transfer

List of Publications

International Journal

1. **Sivalakshmi S.** and Balusamy T. “Performance and emission characteristics of a diesel engine fuelled by neem oil blended with alcohols”, International Journal of Ambient Energy, Vol.32:No.4, December **2011**, pp.170-178.
2. **Sivalakshmi S.** and Balusamy T. “Effects of oxygenated organic compounds-neem oil blends on the performance and exhaust emissions of a DI diesel engine”, SAE International Journal Paper No. **2011-01-0331**.
3. **Sivalakshmi S.** and Balusamy T., “Combustion, Performance and Emission Characteristics of a Diesel Engine fuelled with *Azadirachta indica*, Non-edible Oil”, International Energy Journal, **2011**, Vol. 12:2, pp.115-122.
4. **Sivalakshmi S.** and Balusamy T., “Experimental Investigation on a Diesel Engine Fuelled with Neem Oil and its Methyl Ester”, Thermal Science, Vol. 15, No. 4, pp. 1193-1204.
5. **Sivalakshmi S.** and Balusamy T., “Effects of Dimethylcarbonate-biodiesel Blends on the Combustion, Performance and Exhaust Emissions of a DI Diesel Engine”, SAE International Journal Paper No. 2012-01-0870, 2012.
6. **Sivalakshmi S.** and Balusamy T., “Influence of ethanol addition on a diesel engine fuelled with neem oil methyl ester”, International Journal of Green Energy, Vol: 9, No: 4, pp.218-228, **2012**.

7. V Narasiman, S Jeyakumar, M Mani and **S Sivalakshmi**, Performance and emission characteristics on methyl esters of sardine oil fuelled in diesel engine, **International Journal of Chemical Sciences** **10 (4)**, **2117-2126**.
8. **Sivalakshmi S.** and Balusamy T., "Effects of biodiesel and its blends with diethyl ether on the Combustion, Performance and Exhaust Emissions from a diesel engine", Elsevier Journal, Fuel 106 (2013) 106 -110.
9. **Sivalakshmi S.** and Balusamy T., "Performance, combustion and emission characteristics of neem oil methyl ester and its diesel blends in a diesel engine", Accepted for publication in Energy Sources-Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis Journal 36:142–149, **2014**.
10. **Sivalakshmi S.** and Balusamy T., "Effect of biodiesel and its blends with oxygenated additive on the combustion, performance and emissions from a diesel engine", Accepted for publication in Energy Sources-Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis Journal, 36:357–365, **2014**.
11. **Sivalakshmi S** and Rajesh V., Experimental analysis of solar air heater duct having regular spaced protrusions as roughness element on absorber plate. International Journal of Applied Engineering Research, 2015. Vol. 10, No. 50 (2015), 802-806.
12. **Sivalakshmi. S** and Lenin V.R., Investigation on the combustion, performance, and emissions of a diesel engine fuelled by biodiesel and its blends with different oxygenated organic compounds. International Journal of Ambient Energy, 2015. Vol. 37, No.5 (2015), 1-7.
13. Lenin V. R and **Sivalakshmi S.**, Experimental investigation on single-sided transient natural ventilation driven by buoyancy. Thermal Science Journal, 2017. S489-S496, Vol.21, No.2(2017),
14. Lenin V. R and **Sivalakshmi S**, Numerical investigation of unsteady buoyancy driven indoor air flow characteristics under a various range of internal heat

- generation. Int. J. Environment and Sustainable Development, Vol. 17, Nos. 2/3, 2018.
15. **Sivalakshmi S** and Karthi K., Performance of a Forced Convection Solar Drier Integrated with Latent Heat Storage Unit. International Journal of Research in Engineering and Advanced Research, 2018. Volume 6, Issue 2, April - May, 2018.
 16. **Sivalakshmi S** and Deepak R., Thermal Analysis of Polystyrene Sheet Parabolic Solar Cooker Using Different Reflective Material, International Journal of Research in Engineering and Advanced Research, 2018. Volume 6, Issue 2, April - May, 2018.
 17. Lenin V. R , **Sivalakshmi S**, and Raja M., Optimization of window type and vent parameters on single-sided natural ventilation buildings, **Journal of Thermal Analysis and Calorimetry**. **136**, pages 367–379(2019).
 18. Lenin V. R , **Sivalakshmi S**, and Raja M, “A study on the residential building construction information, thermal sensation and the behavior of households in Tamilnadu State – a questionnaire survey”, **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects**, 2020, <https://doi.org/10.1080/15567036.2020.1823528>.
 19. **S. Sivalakshmi** , V. Sethupathi, M. Pachiyannan., A comparative analysis on the thermal performance of solar chimney with smooth and dimpled absorber plate, **Materials Today: Proceedings**, 2019, MATPR 17588. Accepted for Publication.
 20. **S. Sivalakshmi**, M. Raja, G. Gowtham, “Effect of helical fins on the performance of a double pipe heat Exchanger”, **Materials Today: Proceedings**, 2019, MATPR 17589. Accepted for Publication.
 21. **S. Sivalakshmi**, M. Raja, **G. Gowtham**, “Thermal performance of wall solar chimney integrated with a room under warm and humid conditions”, **Materials Today: Proceedings**, 2019, MATPR 17589. **Accepted for publications.**
 22. Raja M, **Sivalakshmi S** and Santhoshini S., Numerical investigation of heat transfer enhancement in a narrow rectangular channel with wings, **International journal of Ambient Energy**, <https://doi.org/10.1080/01430750.2020.1824943>.

National Journal

23. **Sivalakshmi S.** and Balusamy T., “Effect of biodiesel and its blends with oxygenated additives on performance and emissions from a diesel engine”, Journal of Scientific and Industrial Research, Vol. 70, pp. 879-883, 2011.

International Conferences

1. **Sivalakshmi S.** and Balusamy T., “Research on Di-ethyl Ether as an Oxygenated Additive with Biodiesel in CI Engine”, PEA-AIT International Conference on Energy and Sustainable Development: Issues and Strategies (ESD 2010). The Empress Hotel, Chiang Mai, Thailand. 2-4 June 2010.
2. **Sivalakshmi S.** and Balusamy T., “Performance analysis of a Variable Compression Ratio Engine”, Proc. of Int. Conf. on Recent Trends in Mechanical, Instrumentation and Thermal Engineering 2011, Trivandrum, Kerala, India. 25-26 August 2011.
3. **Sivalakshmi S.** and Balusamy T., “Performance and emission characteristics of a variable compression ratio engine fuelled with methyl ester of pongamia pinnata”, Proc. of the 1st International Conference in South Asia on "Global Manufacturing Systems & Management" (ICGMSM - 2011), Coimbatore Institute of Technology, Coimbatore. Tamil Nadu.
4. **Sivalakshmi S.** and Balusamy T., “Performance and exhaust emissions of a diesel engine fuelled with biodiesel using artificial neural network”, ICDAAME-2011, Thiruvannamalai. Tamil Nadu.
5. **Sivalakshmi S.**, Balusamy T, and Yuvaraj R., “Modelling and simulation of NO_x formation in a IC engine fuelled with biodiesel”, COSMA 2011- Second

International Conference on Simulation Modeling and Analysis. Amirta Institute of Tech, Coimbatore. Tamil Nadu.

6. **S. Sivalakshmi**, T.Balusamy, L. Renugambal, G. Sharath ram, M.Prabhu., “Performance and Emission Characteristics of a Variable Compression Ratio Engine Operating on Methyl Ester of Neem Oil”. Second International Conference on “Advances in Mechanical, Manufacturing and Building Sciences (ICAMB – 2012). VIT, Vellore. Tamil Nadu.

National Conferences

1. P.Mariappan, **S.Sivalakshmi** and T.Balusamy., “Performance and emission characteristics of Pongamia oil on C.I. engines”. Proceedings on Advances and Challenges in Mechanical Engineering (ACME-2010). Erode Sengunthar Engineering College, Erode, Tamil Nadu.
2. K.Saravana Kumar, **S.Sivalakshmi** and T.Balusamy., “Performance and Emission characteristics of a C.I engine fuelled with Filtered Neem oil”, Proceedings on Recent Advancements in Mechanical Engineering 2010 (RAME-2010, K.S.R College of Technology, Tiruchengode, Tamil Nadu.
3. Lenin, S. **Sivalakshmi** and Balusamy.T., “Analysis of Performance and emission characteristics of a Diesel engine fuelled with biodiesel – diesel blends”, National Conference on Recent Innovation in Mechanical Engineering 2011, Mahendra Institute of Technology, Salem, Tamil Nadu.
4. **S.Sivalakshmi**, Balusamy.T, Agni Seshan.P, Prasanna Kumar.B, and Sathya Sabari.M., “Performance and Emissions of a single cylinder DI diesel engine operating on biodiesel-diethylether blends”, Proceedings

on Emerging trends in Mechanical Engineering 2012, Sathiyabama University, Chennai, Tamil Nadu.