

## Faculty Profile



### **Dr.Selvakumar R.**

#### **Assistant Professor (Senior Scale)**

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Total Experience (in years): 06

Research Area: Alternative Fuels for I.C Engines, Dual Fuel Engines

### **Recent Publications:**

**Selvakumar, R.**, Sasikumar, N., Prudhiv, P., Jagadeesh Babu, S., Rakesh, V. and Raghu, N., 2021. Monitoring and Detection of Vehicle Emissions on Steady State Mode using Internet of Things. *International Journal of Vehicle Structures & Systems (IJVSS)*, 13(3).

Mayakrishnan, J. and **Selvakumar, R.**, 2021. Effect of Variable Compression Ratio on Performance and Emissions in Compression Ignition Engine Fuelled with Waste Cooking Oil with Copper Oxide Nano Fluid Blends. *International Journal of Vehicle Structures & Systems (IJVSS)*, 13(3).

**Raja, S.**, Mayakrishnan, J., Nandagopal, S. and Elumalai, S., 2021. Effect of Compression Ratio on the Performance, Emission, and Combustion Characteristics of CI Engine Using Waste Cooking Oil and Its Emulsion as Fuel. In *Advances in Materials Research* (pp. 701-711). Springer, Singapore.

Jaikumar Mayakrishnan, **Selvakumar Raja**, Senthil Kumar Masimalai, Vijayabalan Palanimuthu, Sasikumar Nandagopal, Sangeethkumar Elumalai, and Ramanathan Velmurugan. (2020). Effects on Performance, Emission and Combustion Characteristics of Dual Fuel Mode CI Engine Operated with Waste Cooking Oil - Ethanol as Fuel. *SAE International.*, 2020-28-0433.

Jaikumar Mayakrishnan, Sangeethkumar Elumalai, Sasikumar Nandagopal, Induja Saravanan, **Selvakumar Raja**, and Ramanathan Velmurugan. (2020). Experimental Study on Influence of Iron Oxide Nano fluids on Characteristics of a Low Heat Rejection Diesel Engine Operated with Methyl Esters of Waste Cooking Oil. *SAE International.*, 2020-28-0412.

Sasikumar Nandagopal, Shridhar Anaimuthu, Jaikumar Mayakrishnan, **Selvakumar Raja**, Vamshidhar Busireddy, and Madhu Kovuru. (2020). Effective Utilization of Low Carbon Fuels in Agricultural Engines Using Low Cost Electronic Primary Fuel Injection Unit. *SAE International .*, 2020-01-1369.

Jaikumar Mayakrishnan, Ramanathan Velmurugan, Induja Saravanan, Sasikumar Nandagopal, Sangeethkumar Elumalai, **Selvakumar Raja**, and Karma Bhutia. (2020). Effect of Hybrid Nano additives on Performance and

Emission Characteristics of a Diesel Engine Fueled with Waste Cooking Oil Biodiesel. *SAE International* .,2020-28-0521.

Srinadh, Reddy, Velmurugan Ramanathan, Mayakrishnan Jaikumar, **Raja Selvakumar**, V. A. Shridhar, E. Sangeethkumar, and N. Sasikumar. (2020). Effect of Ethanol Fumigation on Performance and Combustion Characteristics of Compression Ignition Engine Fuelled with Used Cooking Oil Methyl Ester in Dual-Fuel Mode. *In Intelligent Manufacturing and Energy Sustainability.*, 339-352.

Velmurugan, R., Mayakrishnan, J., Induja, S., **Raja, S.**, Nandagopal, S. and Sathyamurthy, R. (2019). Comprehensive Study on the Effect of CuO Nano Fluids Prepared Using One-Step Chemical Synthesis Method on the Behavior of Waste Cooking Oil Biodiesel in Compression Ignition Engine. *Journal of Thermal Science and Engineering Applications*, 11 : 4.

Sangeethkumar Elumalai, Jaikumar Mayakrishnan, Sasikumar Nandagopal, **Selvakumar Raja**, and Ramanathan Velmurugan. (2019). Experimental Study on Combined Effect of Yttria Stabilized Zirconia Coated Combustion Chamber Components and Emulsification Approach on the Behaviour of a Compression Ignition Engine Fuelled with Waste Cooking Oil Methyl Esters. *SAE International*. 2019-28-0164.

**Selvakumar Raja.**, Jaikumar Maya Krishnan., Sasikumar Nandagopal., Sangeethkumar Elumalai and Ramanathan Velmurugan. (2018) Comparative Study on Smoke Emission Control Strategies of a Variable Compression Ratio Engine Fueled with Waste Cooking Oil. *SAE International* ., 2018-01-0908.

Jaikumar Mayakrishnan and Sasikumar Nandagopal, Vasanthaseelan Sathiyaseelan and **Selvakumar Raja**. (2018). Canola Oil as a Fuel for Compression Ignition Engine – An Experimental Investigation. *SAE International.*, 2018-01-0910 .

Sangeethkumar Elumalai, Jaikumar Mayakrishnan, Sasikumar Nandagopal, **Selvakumar Raja**, and Sudip Mukherjee. (2018). Thermal Analysis and Experimental Investigations on the Effect of Thermal Barrier Coating on the Behavior of a Compression Ignition Engine Operated with Methyl Esters of Waste Cooking Oil. *SAE International.*, 2018-01-0663.