

## Faculty Profile



### Mr. V. Ramanathan

Assistant Professor (SG)

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Total Experience (in years): 25

Research Area: Alternative Fuels for IC Engines, Emission and Pollution Control, Dual Fuel Engines, Nanofluids

### Recent Publications:

#### List of Journal Publications:

1. Velmurugan, Ramanathan, Jaikumar Mayakrishnan, S. Induja, Selvakumar Raja, Sasikumar Nandagopal, and Ravishankar Sathyamurthy. "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, no. 4 (2019).
2. Velmurugan, Ramanathan, Jaikumar Mayakrishnan, Vijayabalan Palanimuthu, Sasikumar Nandagopal, Sangeethkumar Elumalai, Shridhar Anaimuthu, and Vamshidhar Busireddy. *Development of Dual Fuel Engine Fueled with Used Cooking Oil Biodiesel and Ethanol-an Experimental Study on Performance and Combustion Characteristics*. No. 2020-01-0803. SAE Technical Paper, 2020.
3. Mayakrishnan, Jaikumar, Ramanathan Velmurugan, Induja SARAVANAN, Sasikumar Nandagopal, Sangeethkumar Elumalai, Selvakumar Raja, and Karma Bhutia. *Effect of Hybrid Nano additives on Performance and Emission Characteristics of a Diesel Engine Fueled with Waste Cooking Oil Biodiesel*. No. 2020-28-0521. SAE Technical Paper, 2020.
4. Srinadh, Reddy, Velmurugan Ramanathan, Mayakrishnan Jaikumar, Raja Selvakumar, V. A. Shridhar, E. Sangeethkumar, and N. Sasikumar. "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*, pp. 339-352. Springer, Singapore, 2020.
5. Raja, Selvakumar, Jaikumar Mayakrishnan, Sasikumar Nandagopal, Sangeethkumar Elumalai, and Ramanathan Velmurugan. *Comparative Study on Smoke Emission Control Strategies of a Variable Compression Ratio Engine Fueled with Waste Cooking Oil*. No. 2018-01-0908. SAE Technical Paper, 2018.
6. Sangeethkumar, E., M. Jaikumar, K. M. N. Sridath, V. Ramanathan, and Ravishankar Sathyamurthy. "Tribological study on hybrid metal matrix composites for application in automotive sector." *Materials Research Express* 6, no. 5 (2019): 055703.
7. Elumalai, Sangeethkumar, Jaikumar Mayakrishnan, Sasikumar Nandagopal, Selvakumar Raja, and Ramanathan Velmurugan. *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*. No. 2019-28-0164. SAE Technical Paper, 2019.
8. Mayakrishnan, Jaikumar, Sangeethkumar Elumalai, Sasikumar Nandagopal, Induja SARAVANAN, Selvakumar Raja, and Ramanathan

Velmurugan. *Experimental Study on Influence of Iron Oxide Nanofluids on Characteristics of a Low Heat Rejection Diesel Engine Operated with Methyl Esters of Waste Cooking Oil*. No. 2020-28-0412. SAE Technical Paper, 2020.

9. Mayakrishnan, Jaikumar, Selvakumar Raja, Senthil Kumar Masimalai, Vijayabalan Palanimuthu, Sasikumar Nandagopal, Sangeethkumar Elumalai, and Ramanathan Velmurugan. *Effects on Performance, Emission and Combustion Characteristics of Dual Fuel Mode CI Engine Operated with Waste Cooking Oil-Ethanol as Fuel*. No. 2020-28-0433. SAE Technical Paper, 2020.

**List of Conference Publications:**

1. Ramanathan, V., M. Jaikumar, S. Induja, E. SangeethKumar, and N. SasiKumar. "Effect of nanofluids in waste cooking oil biodiesel fuel: An experimental investigation on diesel engine characteristics." In *IOP Conference Series: Earth and Environmental Science*, vol. 573, no. 1, p. 012012. IOP Publishing, 2020.
2. Sangeethkumar, E., M. Jaikumar, P. Vijayabalan, N. Sasikumar, and V. Ramanathan. "Effective Implementation of low thermal conductivity material Yttrium Stabilized Zirconium Coating on a Diesel Engine Components Fuelled with neat Waste Cooking Oil-An Assessment Study." In *IOP Conference Series: Earth and Environmental Science*, vol. 573, no. 1, p. 012009. IOP Publishing, 2020.
3. Ramanathan, V., M. Jaikumar, Shaik Abdul Aleem, S. Induja, and E. SangeethKumar. "Experimental investigation on effect of zinc oxide nanofluid on performance, emission and combustion characteristics of CI engine fuelled with waste cooking oil biodiesel." In *Journal of Physics: Conference Series*, vol. 1706, no. 1, p. 012199. IOP Publishing, 2020.