

RESUME

Dr. G.Nataraj
Assistant Professor (Sr.)
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SUMMARY

I am working as a Senior Assistant Professor in the school of mechanical engineering, VIT University Vellore for the past 2 years. My research specialization is in the field of internal combustion engines, more specifically in Low-temperature combustion technology like premixed charge compression ignition (PCCI), homogeneous charge compression ignition (HCCI), and reactivity controlled compression ignition (RCCI) engines.

EDUCATION

Ph.D. –Mechanical Engineering

Anna University, Chennai, Tamil Nadu

01/2019

Master of Engineering – Thermal Engineering

Anna University, Tiruchirappalli, Tamil Nadu

04/2015

Bachelor of Engineering – Mechanical Engineering

V.S.B Engineering College, Karur, Tamil Nadu

05/2013

EXPERIENCE

Assistant Professor (Sr.)
School of mechanical engineering
VIT University Vellore, Tamil Nadu
05/2019 to till date

RESEARCH EXPERTISE

- Thermal Engineering
- Internal Combustion engines
- Alternative fuels (Biodiesel, Methanol, Biogas, Hydrogen, and CNG)
- Energy from waste
- Nano technology

PAPER PUBLICATIONS

1. **Ganesan, N.**, Masimalai, S., Ekambaram, P., & Selvaraju, K. Experimental Assessment of Effects of n-Butanol on Performance, Emission, and Combustion Characteristics of Mahua Oil Fueled Reactivity Controlled Compression Ignition (RCCI) Engine.
2. Pradeep Raju, Senthil Kumar Masimalai, **Nataraj Ganesan**. "Extracting methyl-ester from waste cooking oil for fueling a light duty diesel engine – a dual fuel approach." Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (2020): 4-10.
3. Raju, Pradeep, Senthil Kumar Masimalai, **Nataraj Ganesan**, and S. V. Karthic. "Engine's behavior on hydrogen addition of waste cooking oil fueled light duty diesel engine-A dual fuel approach." Energy 194 (2020): 116844.
4. Kumar, AR Mahesh, M. Kannan, and **G. Nataraj**. "A study on performance, emission and combustion characteristics of diesel engine powered by nano-emulsion of waste orange peel oil biodiesel." Renewable Energy 146 (2020): 1781-1795.
5. Karthic, S. V., M. Senthil Kumar, **G. Nataraj**, and P. Pradeep. "An assessment on injection pressure and timing to reduce emissions on diesel engine powered by novel biodiesel." Journal of Cleaner Production (2020): 120186.
6. Karthic, S. V., M. Senthil Kumar, **G. Nataraj**, and P. Pradeep. "Experimental investigations on the influence of hydrogen and LPG mixtures on performance behavior of a mahua bio oil-powered dual fuel engine." International Journal of Green Energy 16, no. 12 (2019): 878-889.
7. **Ganesan, Nataraj**, and Senthilkumar Masimalai. "Experimental investigation on a performance and emission characteristics of single cylinder diesel engine powered by waste orange peel oil biodiesel blended with antioxidant additive." Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (2019): 1-12.
8. Masimalai, Senthil Kumar, **Nataraj Ganesan**, S. Pasupathiraju, and T. Mohanraj. Investigations on the Combined Effect of Oxygen Enrichment and Water Injection Techniques on Engine's Performance, Emission and Combustion of a Mahua Oil Based Compression Ignition Engine. No. 2018-01-0929. SAE Technical Paper, 2018.
9. Kumar, M. Senthil, **G. Nataraj**, and S. Arul Selvan. "A comprehensive assessment on the effect of high octane fuels induction on engine's combustion behaviour of a Mahua oil based dual fuel engine." Fuel 199 (2017): 176-184.

10. Masimalai, Senthilkumar, Jai Kumar Mayakrishnan, and **Nataraj Ganesan**. A Comprehensive Assessment on Combined Effect of Thermal Barrier Coating and Emulsification Techniques on Engine Behavior of a Mahua Oil Based Diesel Engine. No. 2017-01-0873. SAE Technical Paper, 2017.

TEACHING EXPERTISE

- Heat Transfer
- Automotive engines
- Emission control and techniques
- Thermal engineering systems

Yours truly,
G.NATARAJ