### Dr. Gautham M G

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# Education

	Degree	Year	Institute	Specialization
1	BE	2005	Siddaganga Institute of Technology,Tumkur	Mechanical
2	M. Tech.	2009	Siddaganga Institute of Technology,Tumkur	Thermal Power Engineering
3	PhD	2019	IITMadras, Chennai	Aerospace Engineering (Propulsion)

# Professional Experience

	Date (from-to)	Designation	Organization
1	2009 to date	Assistant Professor	Siddaganga Institute of Technology,Tumkur

# Affiliations of Professional organizations

High Energy Materials Society of India (HEMSI)-Chennai Society of India

# **Courses Taught**

### **Undergraduate Courses**

- Foundations of Mechanical Engineering
- Basic Thermodynamics
- Applied Thermodynamics
- Turbo Machinery
- Non-Conventional Energy Sources
- Gas Dynamics & Propulsion
- Theory of Gas Turbines

### Postgraduate Courses

• Thermal Power Station-I

### Research Areas

- Alternative fuels for IC Engines
- Solid Fuel Combustion

# **Sponsored Projects**

## **Ongoing Projects:**

1. Title: Experimental Investigation of Performance, Combustion and Emission Characteristics of CI engine using Stable Methanol-in-Diesel Emulsion Fuels

Funding Agency: SERB TARE

Amount: 18.6 Lakh Duration: 3 Years

Role: Principal Investigator

#### **Publications**

#### Journals

- Gautham M. G. and P. A. Ramakrishna, "Combustion Characteristics of Aluminum Water Gelled Composite Solid Propellant", Journal of Propulsion and Power. Vol. 34, No. 5 (2018), pp. 1345-1354.
- Gautham M. G. and P. A. Ramakrishna, "Propulsive Performance of Mechanically Activated Aluminum-Water Gelled Composite Propellant", Journal of Propulsion and Power. Vol. 36, No. 2 (2020), pp. 294-301.
- Gautham M. G., Balakrishna C. Rao and P. A. Ramakrishna, "Combustion synthesis
  of alumina with possible CO-GENERATION of power" International Journal of
  Hydrogen Energy. Vol. 46, No. 24 (2021). Pages 12682-12692.
- Desai S, Dubey S. and Gautham M.G. "Analytical and Numerical Approach for Performance Evaluation of Thermoelectric Generator", Journal of Mines, Metals and Fuels, Vol 71, 2023, Pages 432-440

### **Conference Proceedings**

- Nida Ahamed, Md. Tousif Alam, Hardik Roy and M.G. Gautham, "Analysis of crack on the labyrinth part of the gas turbine engine", (2021) Materials Today: Proceedings.
- M G Gautham, Nikunj Rathi and P.A. Ramakrishna, "Combustion of Large Specific Surface Area Aluminum Particles (pyral) with Water", (2017) Proceedings of the European Combustion Meeting.

- Gautham M G, Nikunj Rathi and P A Ramakrishna, "Performance Study of Aluminum based Water Ramjet", (2017) 11th International High Energy Materials Conference & Exhibits, HEMCE-2017.
- Gautham M G and P A Ramakrishna, "Propulsive Performance of Aluminum Water Gelled Composite Propellant". (2018) National Conference on Future Directions in Propulsion, ASeT 2018.