


Faculty Profile

	Dr. D. BALAJI	Academic Credentials <ul style="list-style-type: none"> • Under-Graduation: B.E (Mechanical Engineering) • Post-Graduation: M.E (Thermal Engineering) • Doctoral Degree: Ph.D. (Mechanical Engineering)
Designation	Professor	Experience
E-Mail ID	dbalaji@hindustanuniv.ac.in	<ul style="list-style-type: none"> • Teaching – 23 years
Scopus	https://www.scopus.com/authid/detail.uri?authorId=56015909300	Research Areas
Google Scholar	https://scholar.google.com/citations?hl=en&user=_vFZAqgAAAAJ	<ul style="list-style-type: none"> • Bio-Energy • Fuels • Combustion
Recent Publications		
<ol style="list-style-type: none"> 1. Balaji Dhanapal, Ravishankar sathyamurthi., “Optimization of thermal efficiency on solar parabolic collectors using phase change materials- Experimental and numerical study” Environmental Science and Pollution Research, Springer, 29, 14719 – 14732, 2022. 2. P. Muruganatham, Balaji Dhanapal, “Optimal Forecasting of thermal conductivity and storage in parabolic trough collector using phase change materials” Journal of Engineering research, Vol 9, No.2, pp.249-268, June 2021. 3. Balaji Dhanapal, et al., “Effect of Isobutanol blends in Spark Ignition Engine as an Alternative” Journal of Institution of Engineers (India): Series E, 102,155-161, 2021 4. Balaji Dhanapal, et al., “Performance, Combustion and Emission Characteristics of a DI-CI diesel engine fuelled with corn oil methyl ester biodiesel blends’ Sustainable energy technologies and Assessment, Issue No:43, 2021. 5. Balaji Dhanapal, et al., “Effect of water depth and insulation on the productivity of an acrylic pyramid solar Still-Experimental study,” Journal of Ground water sustainable development, Vol 10, April, 2020. 		
Funded Projects		
Project Name:	AICTE ATAL FDP – HYBRID AND ELECTRIC VEHICLE	
Funding Agency:	AICTE	
Amount:	1.00 Lakh	
Research Significance:	This FDP mainly focus on the fundamental concepts, principles, analysis and design of Hybrid electric vehicle and deeper into the various aspects of hybrid and electric drive train such as configuration, type of electric machines that can be used, energy devices etc.	
Industry Consultancy Projects		
Project Name:	<ul style="list-style-type: none"> • Infrared furnace of high-speed heating with less loss in temperature • Power generation using hybrid wind and solar 	
Industry:	Orbit controls and services	
Amount:	₹2.25 lakhs	
Patents		
1.	Magnesium chloride hexahydrate as phase change thermal energy storage material in solar parabolic trough collector.	
2.	A system and method for preparing lignite oil tar slurry for substitute for furnace oil.	
3.	A method for Development of refractory castable for enhancing the life of CFBC boilers.	
Awards and Honours		
1.	Received best teacher award in the year 2011 and 2012 at Panimalar Institute of Technology, Chennai	
2.	Received 100% result award four times in Mechanical Engineering subjects	