

## CURRICULUM VITAE

### **Dr.D.B.SIVAKUMAR**

Assistant Professor

Department of Mechanical Engineering  
UCE – BIT Campus, Tiruchirappalli 620 024

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### **Research Area:**

Internal Combustion Engines, Alternative Fuels, Biofuels, Combustion .  
Thermal Energy Storage systems(Sensible and Latent),  
Nano-fluids and Solar Energy

### **➤ Educational Qualifications:**

<b>Qualification</b>	<b>College/University</b>	<b>Year of completion</b>	<b>Percentage</b>	<b>Class</b>
Ph.D. (MECHANICAL)	University College of Engineering /Anna University	2020		
PG (THERMAL ENGINEERING)	Mohamed Sadak College of Engineering / Anna University	2004	70.3	FC
UG (MECHANICAL)	MVJ College of Engineering/ Bangalore University	2001	70.0	FCD

### **Experience:** (chronological order)

<b>Name of Company / Institutions</b>	<b>Designation of Post</b>	<b>From</b>	<b>To</b>	<b>Experience in Year</b>
University College of Engineering , BIT Campus Tiruchirappalli	Assistant Professor	15-09-2008	Till date	15Y
Rajiv Gandhi Institute of Technology, Bangalore	Senior Lecturer	11-08-2006	31-08-2008	2Y 22D
East Point College of Engineering, Bangalore	Lecturer	10-10-2005	10-08-2006	10M

Rajiv Gandhi Institute of Technology, Bangalore	Lecturer	20-10-2004	10-10-2005	11M 21D
MVJ College of Engineering, Bangalore	Lecturer	21-11-2001	20-09-2002	9M 30D
Keerthi Industries, Mathur , Trichy	Production Engineer	24-09-2000	15-08-2001	9M 30D

➤ **Awards / Honours Received:**

NIL

➤ **Additional / Academic Responsibilities at University/Institute:**

1. Coordinator-Exam Cell (Presently)
2. Coordinator-Students Affairs (Feb2016-Nov2023)
3. Anti Ragging committee Member(Presently)
4. Co-coordinator-Academics(Presently)
5. NBA Core Committee Member(Presently)

➤ **Membership of Scientific and Professional Societies:**

1. Life Member of ISTE
2. Life Member of COMBUSTION INSTITUTE
3. Life Member of INDIAN INSTITUTTE OF ENGINEERS

➤ **Fellowships and Grants received:**

➤ NIL

➤ **Completed PG/UG Projects:**

- a. Number of PG Projects Completed: 20 Nos
- b. Number of UG Project Completed: 60 batches

➤ **Research Guidance (M.S/Ph.D.) (Completed):**

Sl. No	Name of the scholar	Title of the thesis	Year of registration	Date of viva voce
1.	NIL			

➤ **Research Guidance (M.S/Ph.D.) (Ongoing):**

Sl. No	Name of the scholar	Tentative Title of the thesis	Year of registration	Status
1.	NIL			

➤ **Publications:**

**a. Books / book chapters:**

1. Iyathantrakalin ikakaviyal (Dynamics of Machine, Tamil Version)-Not Yet published

**b. International Journals**

Authors	Title	Publication	Pages	Year
T. Senthil kumar, <b>D. B. Sivakumar,</b> D.Mala, M.Chandrasekar, T. Elango;	Performance evaluation of a single cylinder diesel engine fuelled with rice bran oil as alternate fuel	International Journal of Environmental pollution Control & Management	69-81	2009
M.Periasamy , <b>D B.Sivakumar,</b> Dr. T. Senthil kumar	Dampening flow induced vibration due to branching of duct at Elbow	International journal of computational engineering Research Volume 2	1001-1004	2012
J. Donald joe, <b>D B Sivakumar</b> P. Sivakumar;	Production of hydrogen by Anion exchange membrane using AWE	International Journal of Scientific & Technology Research	38-42	2014
Pradeep . N, <b>D B.sivakumar,</b>	Experimental analysis of Automotive Refrigeration system by WHR	International journal of Applied Engineering Research (IJAER) Volume 10	357-360	2015
R. Rajaram, <b>Sivakumar,D.B</b>	Increase of solar panel performance by cooling using Copper Sulfate hepta hydrate	International journal of Applied Engineering Research (IJAER) Volume 10	354-356	2015
Kannan, p; <b>D B Sivakumar</b>	Experimental study of Nanofluids in Automobile radiator	Journal of chemical and Pharmaceutical sciences ISSN,974	2115	2015

Pradeep . N, <b>D B Sivakumar</b>	Theoretical analysis of automotive refrigerationsystem by waste heat recovery	International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) Volume 2	41-45	2015
N.Madhukrishna, <b>D B Sivakumar</b> Dr.M.Arulmozhi, T.Senthilkumar, M.Chandrasekhar;	Performance and emission analysis of cotton seed oil Biodiesel with Alumina nanoparticle additive	International Journal of Research Science and Engineering		2016
V.Ragavan, <b>DBSivakumar</b> Dr.M.Arulmozhi, T.Senthilkumar, M.Chandrasekhar;	Emission analysis of dimethyl carbonate blended neem biodiesel blends on diesel engine	International Journal OfResearch Science And Engineering		2016
<b>DBSivakumar</b> Dr.M.Arulmozhi, DrT.Senthilkumar	Experimental study on performance and emission characteristics of a spark ignition engine with MTBE and DIPE	Asian journal of Research inSocial Sciences and Humanities, Volume 6	2309-2320.	2016
<b>D B Sivakumar</b> Dr.M.Arulmozhi, Dr T.Senthilkumar	Experimental investigation on the performance of SI engineusing oxygenate additives	Asian journal of Research in Social Sciences and Humanities, volume 6	246-253	2016
Mahendrarvarman, <b>D B Sivakumar</b> P. Sivakumar;	Experimental study on performance and emission characteristics of a direct injection compressionignition engine with Te3O4 nanoparticles	Advances in Natural and Applied Sciences.	139-144	2016
Jesurar, K; <b>D B Sivakumar</b> B.Kumaragurubaran, Dr T.Senthilkumar	Heat Enhancement in Solar Water Heater	International journal of Engineering science. Volume 6, Issue 5	7314-7316	2016
M.Ravishankar, <b>DBSivakumar</b> T.Senthilkumar	Optimization and performance analysis of CI engine by usingTransformer oil blends with diesel as alternative fuel	International journal of Engineering science. Volume 6, Issue 5	5235-5238	2016
S.Arunkumar, <b>D B Sivakumar</b> Dr T.Senthilkumar	Fabrication and performance analysis of Cooling Tower	International journal of Engineering science. Volume 6, Issue 5	5359-5362	2016

Devaraj Rangabashiam, Dinesh Babu Munuswamy, <b>Sivakumar Duraiswamy Balasubramanian,</b> Durai Christopher	Performance, emission, and combustion analysis on diesel engine fueled with blends of Neem biodiesel/diesel/additives	Energy sources, part a: recovery, utilization, and environmental effects	1-11	2020
<b>DB Sivakumar,</b> M Arulmozhi, S Sathyanarayanan, Sridharan	Optimization of Gasoline Engine parameters fueled with DIPE-gasoline blend: Comparative evaluation between response surface methodology and fuzzy logic expert system	Process safety and environmental protection Issue 158	291-307	2021

**Patents:**

Patent number: **2021105245**

**Title of invention:**

CORROSION, PERFORMANCE, COMBUSTION, EMISSION ANALYSIS OF FOUR STROKE SINGLE CYLINDER DI DIESEL ENGINE LOADED IN CISSUS QUADRANGULARIS

**Name of inventor(s):**

R. SARAVANAN; KRISHNAN, P.NAVANEETHA; M. RANGASAMY; **D.B.,SIVAKUMAR;** C.SARAVANAN; E. DHARMARAJ; T. KUMARASAN and PRABHAKARAN.

**Term of Patent:**

Eight years from 10 August 2021

➤ **Sponsored Research Projects:**

Sl.No	Name of the project	Funding agency	Project value (Rs.)	Duration	Status
	<u>NIL</u>				

➤ **Consultancy Activities:**

Sl.No	Name of the work	Role (PI/Co PI)	Agency	Amount	Duration
	<u>NIL</u>				

➤ **List of Seminar / Short Term Course /FDP/ Workshop organized:**

Sl No	Course Title	No. Of Days	Organizing institution and Sponsor
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1	A WALK WITH NANOCALOR	1	Anna university, BIT campus Trichy under TEQIP
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➤ **List of Seminar / Short Term Course /FDP/ Workshop attended:**

Sl No	Course Title	Duration			Organizing institution and Sponsor
		From	To	No. Of Days	
1.	Foundation skills in Integrated product development(fsipd)	19/01/16	23/01/16	5	UCE,BIT Campus ,Trichy under TEQIP II With NASSCOM
2	Automotive Materials	18/02/16	20/02/16	2	UCE,BIT Campus ,Trichy under TEQIP II
3	Advanced manufacturing Methods and materials	22/06/16	06/07/16	14	UCE,BIT Campus ,Trichy under TEQIP II
4	Thermal Engineering Application For Sustainable Movement	15/06/15	28/06/15	14	UCE,BIT Campus ,Trichy under TEQIP II
5	Advanced Manufacturig Process	20/05/15	02/06/15	14	UCE,BIT Campus ,Trichy under TEQIP II
6	Innovation N Engineering Design	29/4/14	30/04/14	2	UCE,BIT Campus ,Trichy under TEQIP II & SAE
7	Recent AdvancesIn Material Chemistry	07/03/14	08/03/14	2	UCE,BIT Campus ,Trichy with SCIENCE ACADEMICS
8	Research AvenuesIn Welding Technology	01/08/13	08/08/13	8	UCE,BIT Campus ,Trichy under TEQIP II
9	Recent trends in renewable and non renewable energy Resources	26/08/13	01/09/13	7	UCE,BIT Campus ,Trichy under TEQIP II

10	Engineering Graphics	23/07/13	27/07/13	5	Centre for Faculty Development, AnnaUniversity chennai and TEQIP II
11	Bio Fuel Engine And Its Applications	21/02/13	22/02/13	2	Annamalai University With Ministry of Earth Science

➤ **National / International Conferences organized / Participated:**

NATIONAL CONFERENCE					
<b>D B Sivakumar;</b> P Navaneetha krishnan, M Arunkumar;	Performance investigation of R134A-DMA based 3 fluid VARsystem	National conference on Innovations in Engineering Design	291-294	2014	
Dr T.Senthilkumar <b>D B Sivakumar;</b> G Esther rani;	Performance test on single cylinder CI using Algae	National conference on Innovations in Engineering Design	283-286	2014	
P.Sindhuja, <b>D B Sivakumar;</b> P.Navaneetha krishnan, P Sivakumar;	Simulation of the performance of a refrigerator with modifications for energy efficiency enhancement	National conference on Innovations in Engineering Design	247-251	2013	
Narayanan, C.Saravanan, K.Ssubramanian, <b>Sivakumar,D.B</b> M.Sathyanandhan, R.Sankaranarayanan;	Fabrication of Aluminium metalmatrix composite –a review	National conference on recent trends and developments in sustainable green technologies	82-87	2015	
INTERNATIONAL CONFERENCE					
<b>Sivakumar,D.B.</b> Arulmozhi.M. Dr. T. Senthilkumar	Performance & emission of SI engine with oxygenated fuel	International Conference on Advances in Engineering, Science and Management (ICASEM- 2012)	117-120	2012	
P.Kannan, <b>D B sivakumar;</b>	Experimental study of nano fluids in Automobile radiator	International conference on Energy Efficient Technologies for Automobiles (EETA' 15)	173-176	2015	

A.Balavignesh, <b>D B Sivakumar;</b>	Investigation on the single Slope solar still with reflecting materials	International conference on Energy Efficient Technologies for Automobiles (EETA' 15)	170-172	2015
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➤ **Professional recognitions:** (details like chairperson/member of a committee, reviewer, editor ...etc)

- University Affiliation Committee Member

**(A) Chairperson for conferences / Seminar / Technical symposia:**

- JURY Member for National Level Technical symposium TECHGYAN 2023 at Sri Ramkrishna College of Engineering, Perambalur-621113.

**(B) Guest lecturers delivered:**

NIL