CURRICULUM VITAE

Dr. V. ARUL MOZHI SELVAN

Associate Professor / Mechanical Engg.
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Date of Birth : 15.05.1972
Gender : Male
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Brief Profile:

Dr. V. Arul Mozhi Selvan is currently working as an Associate Professor in the Department of Mechanical Engineering and Former Associate Dean (Academic) for the Post Graduate Programmes, National Institute of Technology Tiruchirappalli (NIT-T), a Centrally Funded Technical Institute of National Importance, Government of India. He has 26 years of Teaching and Research experience at B.Tech., M.Tech. and Ph.D. Levels. He graduated M.Tech. Degree in Energy Engineering and Ph.D. Degree in Mechanical Engineering from National Institute of Technology (NIT-T), Tiruchirappalli. He established Advanced Automotive Engine Research Laboratory. He published over 100 research articles in International Journals and Conferences. He is an active reviewer for the International Journals. He successfully produced 05 Ph.D. doctorates and 10 are currently doing research under his guidance. He guided 54 M.Tech. and 38 B.Tech Thesis. He delivered over 50 Expert Lectures at various Engineering Colleges and Universities in India. He attended 28 Short Term Training Programs (STTP) and organized 08 National Level

Faculty Development Program (FDP) for the benefit of Teachers of Engineering Colleges in India. He visited over 20 industries of Automotive, Power, Energy, Electrical, Electronics and Communication Systems. He is serving as a Faculty Advisor for the National Level All Terrain Design, Fabrication and Racing Competition - BAJA, organized by SAE India every year. He is the Coordinator for "NITT Community Radio Station", where variety of programs are being created and broadcasted through "NITT Radio FM 90.8 MHz" and through Internet Radio "http://radio.nitt.edu" to provide "Education to the Society". He is currently holding the office as President of the Officers' Club of N.I.T., Trichy. Dr. V. Arul Mozhi Selvan received "Green Environment Award" for his self-financed contribution towards creation and maintenance of Green Environment at NIT-T. He filed 6 Patents on the theme "Waste Management" to Intellectual Property India, Government of India. Dr. V. Arul Mozhi Selvan is the Life Member of Indian Society for Technical Education Member and Member of Society of Automotive Engineers (SAE), India. Based on his technical contributions, his biography was included in Marquis Who's Who in the World in the year 2011.

I. QUALIFICATIONS:

- B.E. (Mechanical Engineering), Bharathiar University, Coimbatore, 1994.
- M.Tech. (Energy Engineering), Regional Engineering College, Tiruchirappalli, 1999.
- Ph.D. (Mechanical Engineering), National Institute of Technology, Tiruchirappalli, 2010.

II. THESIS TITLE:

- **M.Tech. :** Nucleate Pool Boiling Heat Transfer in Liquids and Their Mixtures at Sub-Atmospheric Pressures
    - Guide: Dr. (Mrs). S.K. Pandey, Professor, Dept. of Chemical Engg., NIT-T.
- **Ph.D. :** Performance and Emission Characteristics of a Variable Compression Ratio Engine using Diesel-Biodiesel-Ethanol-Nanoparticle Blends
    - Research Supervisors: Dr. R.B. Anand, Professor & Dr. M. Udayakumar Professor, Dept. of Mech.Engg., NIT-T.

III. SPECIALIZATION:

- Energy Engineering

IV. AREA OF INTEREST:

- Biofuels & Engine Research
- Waste to Energy
- Renewable Energy
- Automobile and NVH
- Advanced Engineering Materials

V. EXPERIENCE:

- Teaching & Research : 26 Years

VI. EMPLOYMENT DETAILS:

1. Associate Professor (Pay Level/Index - 13A2/5), Department of Mechanical Engineering, National Institute of Technology, Trichy from 12.03.2018 to till date.
2. Assistant Professor (AGP 8000), Department of Mechanical Engineering, National Institute of Technology, Trichy from 01.07.2011 to 11.03.2018.
3. Assistant Professor (AGP 7000). Department of Mechanical Engineering, National Institute of Technology, Trichy from 01.07.2008 to 30.06.2011.
4. Assistant Professor (AGP 6000), Department of Mechanical Engineering, National Institute of Technology, Trichy from 29.03.2006 to 30.06.2008
5. Assistant Professor, Department of Mechanical Engineering, J.J. College of Engineering and Technology, Trichy from 01.07.2002 to 28.03.2006.
6. Lecturer, Department of Mechanical Engineering, J.J. College of Engineering & Technology, Trichy from 01.07.1996 to 30.06.2002

VII. PROFESSIONAL MEMBERSHIP:

- Life Member of Indian Society for Technical Education (ISTE) – LM 37042
- Member, Society of Automotive Engineers (SAE), India

VIII. REVIEWER IN INTERNATIONAL JOURNALS:

- Energy & Fuels, ACS (American Chemical Society)
- Energy, Elsevier

- Applied Energy, Elsevier
- Renewable Energy, Elsevier
- Renewable and Sustainable Energy Reviews, Elsevier
- Chemical Engineering Communications, Taylor and Francis
- Journal of Petroleum Technology and Alternative Fuels, Academic Journals
- Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor and Francis

IX. PATENTS:

1. Waste Plastic Bottle Reinforced Concrete Bricks for Green Building, Patent Filed to Intellectual Property India, Government of India. Application No: 201741039392 – Patent Published.

2. E-Waste Concrete Block, Patent Filed to Intellectual Property India, Government of India. Application No: 201741039393 – Patent Published.

3. Waste Tire Infused Plastic Bottle Reinforced Concrete Bricks, Patent Filed to Intellectual Property India, Government of India. Application No: 201741039394, 2017 – Patent Published.

4. Development of Tool Box Material From Hybrid Composites Reinforced With NC, NDL, NK, GF and NP-MMC, Patent Filed to Intellectual Property India, Government of India. Application No: 201941045139, 2019 – Patent Published.

5. Development of a Novel Catalyst Derived From Mosquito Coil Ash for Biodiesel Production, Patent Filed to Intellectual Property India, Government of India. Application No: 202041020683, 2020 – Patent Filed.

6. A Novel Green Catalyst: Synthesis of Potassium Modified-Nanohydroxyapatite for Biodiesel Production, Patent Filed to Intellectual Property India, Government of India. Application No: 202041036297, 2020 – Patent Filed.

X. LIST OF PUBLICATIONS:

Sl. No.	Details of Papers Published in International / National Journals
1.	Ganapathi Karunanithi, Arul Mozhi Selvan Varadappan (2022) Exploring the effectiveness of novel Coffea Arabica leaf pigment as a natural antioxidant additive for date seed biodiesel, Fuel, 324, Part A, 124561 https://doi.org/10.1016/j.fuel.2022.124561 (SCIE)
2.	P. Ramesh, V. Arul Mozhi Selvan, D. Babu (2022) Selection of sustainable lignocellulose biomass for second-generation bioethanol production for automobile vehicles using lifecycle indicators through fuzzy hybrid PyMCDM approach, Fuel, 322, 124240 https://doi.org/10.1016/j.fuel.2022.124240 (SCIE)
3.	CN Kowthaman, P Senthil Kumar, V Arul Mozhi Selvan, D. Ganesh (2022)A comprehensive insight from microalgae production process to characterization of biofuel for the sustainable energy, Fuel 310, 122320 https://doi.org/10.1016/j.fuel.2021.122320 (SCIE)
4.	CN Kowthaman, V Arul Mozhi Selvan, P Senthil Kumar (2021) Optimization strategies of alkaline thermo-chemical pretreatment for the enhancement of biogas production from de-oiled algae, Fuel, 303, 121242 https://doi.org/10.1016/j.fuel.2021.121242 (SCIE)
5.	C.N. Kowthaman, P. SenthilKumar, V. Arul Mozhi Selvan (2021) Micro-patterned graphite electrodes: An analysis and optimization of process parameters on hydrogen evolution in water electrolysis, Fuel 305, 121542, pp 01-10 https://doi.org/10.1016/j.fuel.2021.121542 (SCIE)
6.	P. Kanthasamy, V. Arul Mozhi Selvan (2021) FTIR and GCMS analysis on useful methyl ester compound from industrial waste animal fleshing oil (WAFO), Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.06.255 (SCOPUS)
7.	Bhavin K Bharath, V Arul Mozhi Selvan, Pansuriya Rutvik Kanojkumar (2021) Artificial neural network architecture for rheological property prediction of a novel hybrid nanolubricant for automotive spark-ignition engine, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 43, 323 (SCIE) https://doi.org/10.1007/s40430-021-03050-0
8.	M. Kirubakaran, V. Arul Mozhi Selvan (2021) Experimental investigation on the effects of micro eggshell and nano-eggshell catalysts on biodiesel optimization from waste chicken fat, Bioresource Technology Reports, Volume 14, 100658, ISSN 2589-014X, https://doi.org/10.1016/j.biteb.2021.100658 (SCIE)
9.	Aravind, A., Saravanan, S., Bharath Bhavin, K., & Arul Mozhi Selvan, V. (2021). Investigation on methanol - gasoline - aluminum oxyhydroxide nanoparticle blends on the emission characteristics of an SI engine. Environmental Quality Management, 1– 11. https://doi.org/10.1002/tqem.21745 (SCOPUS)
10.	Bharath, B.K., Arul Mozhi Selvan, V. (2021) Influence of Higher Alcohol Additives in Methanol–Gasoline Blends on the Performance and Emissions of an Unmodified Automotive SI Engine: A Review. Arabian Journal for Science and Engineering, 46, 7057–7085. https://doi.org/10.1007/s13369-021-05408-x (SCIE)

11.	Bharath, B.K., Arul Mozhi Selvan, V. (2021) An Experimental Investigation on Rheological and Heat Transfer Performance of Hybrid Nanolubricant and Its Effect on the Vibration and Noise Characteristics of an Automotive Spark-Ignition Engine. International Journal of Thermophysics, 42, 37. https://doi.org/10.1007/s10765-020-02784-8 (SCI)
12.	Kirubakaran M. Arul Mozhi Selvan V. (2020) Biodiesel production from waste chicken oil using nanoeggshell heterogeneous catalyst with isopropyl ether as cosolvent. Environmental Quality Management. 2020; 1-14. https://doi.org/10.1002/tqem.21718 (SCOPUS)
13.	Kowthaman C.N., Arul Mozhi Selvan V., Synthesis and characterization of carbon nanotubes from engine soot and its application as an additive in Schizochytrium biodiesel fuelled DICI engine, Energy Reports, Volume 6, 2020, Pages 2126-2139, https://doi.org/10.1016/j.egyr.2020.08.003 (SCIE)
14.	C.N. Kowthaman, V. Arul Mozhi Selvan, Waste to green fuels: Kinetic study of low lipid waste algae for energy development, Bioresource Technology Reports, Volume 11, 2020, 100510, https://doi.org/10.1016/j.biteb.2020.100510 (SCOPUS)
15.	Bhavin K Bharath & Arul Mozhi Selvan V (2020): Effect of ternary blends on the noise, vibration, and emission characteristics of an automotive spark ignition engine, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, https://doi.org/10.1080/15567036.2020.1788673 (SCI)
16.	Kanthasamy, P., Arul Mozhi Selvan V & Shanmugam, P. Investigation on the performance, emissions and combustion characteristics of CRDI engine fuelled with tallow methyl ester biodiesel blends with exhaust gas recirculation. Journal of Thermal Analysis and Calorimetry, 141, 2325–2333 (2020). https://doi.org/10.1007/s10973-020-09770-0 (SCI)
17.	V. Arul Mozhi Selvan and G. Arumugam (2020), Experimental Investigations of Noise, Vibration and Combustion Characteristics of Diesel and Pongamia Biodiesel Blends on a CI Genset Engine, SAE Technical Paper 2020-28-0471 (SCOPUS) https://www.sae.org/publications/technical-papers/content/2020-28-0471/
18.	Sathiyaseelan A and V. Arul Mozhi Selvan (2020) Modeling and Simulation of a Fighter Aircraft Cabin Temperature Control System Using AMESim, SAE Technical Paper 2020-28-0497 (SCOPUS) https://www.sae.org/publications/technical-papers/content/2020-28-0497/
19.	A Sathiyaseelan, V Arul Mozhi Selvan (2020) Temperature Control of Combat Aircraft Environmental Control System by Time-delay in loop with Control Input Normalization, **IEEE *Xplore,*** **DOI:** 10.1109/ICISC47916.2020.9171174 (SCOPUS) 2020 Fourth International Conference on Inventive Systems and Control (ICISC), ICISC 2020, Coimbatore, 8 January 2020 - 10 January 2020.
20.	H Mohit, V Arul Mozhi Selvan (2020) Effect of a novel chemical treatment on the physico-thermal properties of sugarcane nanocellulose fiber reinforced epoxy nanocomposites, International Polymer Processing, 35(2), 211-220 https://doi.org/10.3139/217.3855 (SCOPUS)
21.	Hemath, M, V, AMS (2020) Effect of Al-SiC nanoparticles and cellulose fiber dispersion on the thermomechanical and corrosion characteristics of polymer

	nanocomposites. *Polymer Composites*. 2020; 41: 1878– 1899. https://doi.org/10.1002/pc.25505 (SCI)
22.	H. Mohit, V. Arul Mozhi Selvan, Optimization of the tensile strength of sintered Al6061/SiC nanocomposites using response surface methodology, Materials Today: Proceedings, 27(3), 2020, pp. 2801-2805. https://doi.org/10.1016/j.matpr.2019.12.201 (SCOPUS)
23.	C. Pandi Selva Durai, **V. Arul Mozhi Selvan,** T.K. Singha, S. Kumaran (2020), Effect of nano-yttria dispersion on the microstructure and mechanical properties of W-Ni-Co alloys, *International Journal of Materials and Product Technology*, Inderscience, 59(4). https://doi.org/10.1504/IJMPT.2019.104553 (SCIE)
24.	**C.N. Kowthaman** and **V. Arul Mozhi Selvan** (2019) Synthesis of biodiesel from Schizochytrium oil using renewable catalyst and study of its quaternary blend phase behaviour, *IOP Conf. Series: Earth and Environmental Science 268 (1) 012107.* https://iopscience.iop.org/article/10.1088/1755-1315/268/1/012107 (SCOPUS)
25.	H. Mohit and **V. Arul Mozhi Selvan** (2019) Physical and thermomechanical characterization of the novel aluminum silicon carbide-reinforced polymer nanocomposites, *Iranian Polymer Journal*, Springer Berlin Heidelberg, 28(10), pp. 823-837. https://doi.org/10.1007/s13726-019-00746-y (SCIE)
26.	Mohit, H. and Arul Mozhi Selvan V (2019) Thermo-mechanical properties of sodium chloride and alkali-treated sugarcane bagasse fibre, Indian Journal of Fibre and Textile Research, 2019, 44(3), pp. 286-293. http://nopr.niscair.res.in/handle/123456789/50554 (SCIE)
27.	**C.N. Kowthaman** and **V. Arul Mozhi Selvan** (2019) Influence of surfactants on quaternary emulsion blend and experimental investigations on the influence of hydrogen enriched quaternary blend in DICI engine. *International Journal of Hydrogen Energy*, ScienceDirect, *45(42),* pp. 22349-22363 https://doi.org/10.1016/j.ijhydene.2019.07.248 (SCIE)
28.	**Chakrapnani Nagappan Kowthaman, Arul Mozhi Selvan Varadappan (2019)** Synthesis, characterization, and optimization of Schizochytrium biodiesel production using Na+- doped nanohydroxyapatite, International Journal of Energy Research, Wiley, 2019, 43(8), pp. 3182-3200. https://doi.org/10.1002/er.4387 (SCIE)
29.	C. Pandi Selva Durai, **V. Arul Mozhi Selvan,** T.K. Singha, S.Kumaran (2019), Tensile and compression behaviour of nano-yttria dispersed W-Ni-Co heavy alloys processed by liquid phase sintering, *Transactions of the Indian Institute of Metals*, Springer, 2019, pp 1443–1446. https://doi.org/10.1007/s12666-019-01632-0 (SCIE)
30.	H. Mohit, **V. Arul Mozhi Selvan** (2019), Influence of chemical surface modification on micro-wear characteristics of sugarcane nanocellulose epoxy nanocomposites, *MATTER*: *International Journal of Science and Technology*, 4(3), pp. 157-178. https://dx.doi.org/10.20319/mijst.2019.43.157178
31.	H. Mohit and **V. Arul Mozhi Selvan (2019)** Effect of a novel chemical treatment on nanocellulose fibers for enhancement of mechanical, electrochemical and tribological characteristics of epoxy bio-nanocomposites, *Fibers and Polymers*, **Springer, 20,** 1918–1944.

	https://doi.org/10.1007/s12221-019-1224-7 (SCIE)
32.	Sethumadhavan P and Arul Mozhi Selvan V (2018) Experimental Investigation on Anaerobic Co-Digestion of Food Waste, De-Oiled Chicken Fat and Bio-Briquette, International Journal of Mechanical Engineering and Technology, 9(11), pp. 1865-1872. https://iaeme.com/Home/article_id/IJMET_09_11_194 (SCOPUS)
33.	M. Kirubakaran, **V. Arul Mozhi Selvan** (2018), Eggshell as heterogeneous catalyst for synthesis of biodiesel from high free fatty acid chicken fat and its working characteristics on a CI engine, *Journal of Environmental Chemical Engineering*, *Elsevier*, Vol. 6 (4), 4490-4503. (Int. Renowned Journal) https://doi.org/10.1016/j.jece.2018.06.027
34.	H. Mohit & **V. Arul Mozhi Selvan** (2018), A comprehensive review on surface modification, structure interface and bonding mechanism of plant cellulose fiber reinforced polymer based composites, *Composite Interfaces*, Taylor & Francis, 25:5-7, 629-667. https://doi.org/10.1080/09276440.2018.1444832 (SCI)
35.	P.Sethumadhavan, **V. Arul Mozhi selvan** (2018), Effect of Spent Mushroom Substrate and Waste Paper Briquette on Methane Production from Anaerobic Digestion, *Journal of Environmental Biology*, 39(2), 269-276. http://doi.org/10.22438/jeb/39/2/MRN-456 (SCOPUS)
36.	M. Kirubakaran, **V. Arul Mozhi Selvan** (2018) A Comprehensive Review of Low Cost Biodiesel Production from Waste Chicken Fat, *Renewable and Sustainable Energy Reviews*, 82 (2018) pp 390-401. http://dx.doi.org/10.1016/j.rser.2017.09.039 **(SCIE)**
37.	**Arul Mozhi Selvan V**, Mohit H. (2016) Experimental Investigation on Mechanical Properties of Chicken Keratin Fiber Reinforced Isophthalic Polymer Matrix Composite. *Indian Journal of Engineering*, 2016, 13(33), pp 371-378. http://www.discoveryjournals.org/engineering/current_issue/2016/A27.pdf (Int. Renowned Journal)
38.	Pushparaj.T., Ramabalan,S., **Arul Mozhi Selvan, V.** (2015) Performance Evaluation and Exhaust Emission of Diesel Engine Fuelled with CNSL Biodiesel. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, Taylor and Francis, 37(18) *pp.* 2013-2019. http://dx.doi.org/10.1080/15567036.2011.643343 (SCI)
39.	Pushparaj. T., Ramabalan,S., **Arul Mozhi Selvan, V.** (2015) "Performance and Emission Characteristics of CI Engine Fuelled with Diesel and Oxygenated Fuel Blends" *International Journal of Global Warming*, Inderscience, *7(2) pp 173-183* https://doi.org/10.1504/IJGW.2015.067748 (SCIE)
40.	Naresh Kumar Gurusala, **V Arul Mozhi Selvan** (2015) Effects of Alumina Nanoparticles in Waste Chicken Fat Biodiesel on the Operating Characteristics of a Compression Ignition Engine, *Clean Technology and Environmental Policy*, 17(3) pp 681-692. https://doi.org/10.1007/s10098-014-0825-5 (SCIE)
41.	Naresh Kumar Gurusala , Richu Zachariah, **V. Arul Mozhi Selvan** (2014) Effect of EGR on Combustion and Emissions Characteristics of a CI Engine Fuelled with

	Waste Chicken Fat Biodiesel, *Applied Mechanics and Materials*, Vol. 592 – 594, pp 1481-1486 https://doi.org/10.4028/www.scientific.net/AMM.592-594.1481 (Int. Renowned Journal)
42.	**V. Arul Mozhi Selvan**, R.B. Anand, M. Udayakumar (2014) Effect of Cerium Oxide Nanoparticles and Carbon Nanotubes as fuel-borne additives in Diesterol blends on the performance, combustion and emission characteristics of a variable compression ratio engine, *Fuel*, *Elsevier*, 130, pp. 160–167. https://doi.org/10.1016/j.fuel.2014.04.034 **(SCIE)**
43.	Naresh Kumar Gurasala, **Arul Mozhi Selvan,V.**, Ajay Balan, Shreyas Athreya (2013), Optimization of Waste Chicken Fat Pre-Treatment Process for Biodiesel Production, *SAE Technical* Paper No. 2013-32-9131. https://doi.org/10.4271/2013-32-9131
44.	**Arul Mozhi Selvan,V.,** Anand,R.B. and Udayakumar,M. (2009) Combustion Characteristics of Diesohol using Biodiesel as additive in a Direct Injection Compression Ignition Engine under Various Compression Ratios. *Energy & Fuels*, **23(11)**, 5413–5422. https://doi.org/10.1021/ef900587h (Web of Science)
45.	**Arul Mozhi Selvan,V.,** Anand,R.B. and Udayakumar,M. (2009) Stability, Performance and Emission Characteristics of Diesel-Ethanol Blend with Castor Oil as Additive in Variable Compression Ratio Engine. *JSAE/SAE International* Paper No. 20097120/2009-32-0120. https://www.sae.org/publications/technical-papers/content/2009-32-0120/
46.	**Arul Mozhi Selvan,V.,** Anand,R.B. and Udayakumar,M. (2009) Stability of Diesohol using Biodiesel as Additive and its Performance and Emission Characteristics in a Compression Ignition Engine under Various Compression Ratios. *International Journal of Applied Engineering Research*, **4(9)**, 1723–1738. https://www.ripublication.com/Volume/ijaerv4n9.htm (Intl. Renowned Journal)
47.	**Arul Mozhi Selvan,V.,** Anand,R.B. and Udayakumar,M. (2009) Effects of Cerium Oxide Nanoparticle Addition in Diesel and Diesel-Biodiesel-Ethanol Blends on the Performance and Emission Characteristics of a CI Engine. *Journal of Engineering and Applied Science*, **4(7)**, 01-06. http://envirox.pl/envirox_pdf/referencje/NITT.pdf
48.	P.Sethumadhavan, **V.Arul Mozhi selvan** (2014), Performance Evaluation of A Novel Low Cost Biogas System For Rural Application, *International Journal of Advanced Technology & Engineering Research* (IJATER), Vol 4, Spec.Issue 2, pp 98-102
49.	**Arul Mozhi Selvan,V.,** Anand, R.B. and Udayakumar,M. (2009) Stability of Diesohol blend with castor oil as additive and its performance and emission Characteristics in a variable compression ratio engine. *International Journal of Power Engineering*, **1(2)**, 99-113.

Sl. No.	Details of Books / Book Chapter Published with International Publishers
1.	H. Mohit, G. Hemath Kumar, V. Arul Mozhi Selvan, M.R. Sanjay, Suchart Siengchin, R. Ruban, (2021) 9 - Fabrication and characterization of chicken feather fiber-reinforced polymer composites, Editor(s): Md Enamul Hoque, Ahmed Sharif, Mohammad Jawaid, In Woodhead Publishing Series in Biomaterials, Green Biocomposites for Biomedical Engineering, Woodhead Publishing, Elsevier, ISBN 9780128215531, pp 225-247, https://doi.org/10.1016/B978-0-12-821553-1.00011-9
2.	Hemath, M., Hemath Kumar, G., Arul Mozhi Selvan, V., Sanjay, M.R. and Siengchin, S. (2021). Effect of Micro-Dry-Leaves Filler and Al-SiC Reinforcement on the Thermomechanical Properties of Epoxy Composites. In Mechanical and Dynamic Properties of Biocomposites (eds S. Krishnasamy, R. Nagarajan, S.M.K. Thiagamani and S. Siengchin). WILEY-VCH GmbH, pp 191-205. https://doi.org/10.1002/9783527822331.ch10
3.	Ramesh P., Mohit H., Arul Mozhi Selvan V. (2021) Environmental Impact of Wood Based Biocomposite Using Life Cycle Assessment Methodology. In: Mavinkere Rangappa S., Parameswaranpillai J., Kumar M.H., Siengchin S. (eds) Wood Polymer Composites. Composites Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-16-1606-8_13
4.	Ruban R., Mohit H., Ramesh P., Arul Mozhi Selvan V., Kumar G.H. (2021) Introduction to Wood Polymer Composites. In: Mavinkere Rangappa S., Parameswaranpillai J., Kumar M.H., Siengchin S. (eds) Wood Polymer Composites. Composites Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-16-1606-8_1
5.	Sivagnanamani G.S., Ramesh P., Kumar M.H., Arul Mozhi Selvan V. (2021) Fracture Analysis of Fused Deposition Modelling of Bio-composite Filaments. In: Mavinkere Rangappa S., Satishkumar T.P., Cuadrado M.M.M., Siengchin S., Barile C. (eds) Fracture Failure Analysis of Fiber Reinforced Polymer Matrix Composites. Engineering Materials. Springer, Singapore. https://doi.org/10.1007/978-981-16-0642-7_4
6.	P Ramesh, H Mohit, V Arul Mozhi Selvan (2021) Environmental Impact Study on Biobased Composites Using Lifecycle Methodology, In Biobased Composites: Processing, Characterization, Properties, and Applications, (eds A. Khan, S.M. Rangappa, S. Siengchin and A.M. Asiri). John Wiley & Sons, https://doi.org/10.1002/9781119641803.ch15
7.	Mohit H., Vishwanath H.B., Kumar G.H., Selvan V.A.M., Sanjay M.R., Siengchin S. (2021) Applications and Drawbacks of Bamboo Fiber Composites. In: Jawaid M., Mavinkere Rangappa S., Siengchin S. (eds) Bamboo Fiber Composites. Composites Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-15-8489-3_14

8.	H Mohit, Sanjay Mavinkere Sanjay, Suchart Siengchin, G. Hemath Kumar, V. Arul Mozhi Selvan, R. Ruban (2020). Future Challenges and Applications of Polymer Coatings. In Polymer Coatings Technologies and Applications (eds Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, Suchart Siengchin) https://doi.org/10.1201/9780429199226
9.	Hemath, M., Varadhappan, A.M.S., Govindarajulu, H.K., Mavinkere Rangappa, S., Siengchin, S. and Kumar, H. (2020). Mechanical and Physical Test of Hybrid Fiber Composites. In Hybrid Fiber Composites (eds A. Khan, S.M. Rangappa, M. Jawaid, S. Siengchin and A.M. Asiri). https://doi.org/10.1002/9783527824571.ch3

Sl. No.	Details of Papers Published in International/National Conferences
1.	Aravind A, Balamurugan C, Ramesh P, Arul Mozhi Selvan V (2021), Studies on Sound absorption properties of 3D printed open porous PLA material structures for noise suppression in Hybrid Electric Vehicles, iTEC India 2021, International Transportation Electrification Conference, SAE India & IEEE IAS, December 16, 2021.
2.	Sathiyaseelan A, Arul Mozhi Selvan V (2021), Sensitivity Analysis of Cockpit Temperature Control System of an Advanced Aircraft ECS, ICETMCCT 2021, Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies, December 9-10, 2021.
3.	V. Arul Mozhi Selvan and G. Arumugam (2020), Experimental Investigations of Noise, Vibration and Combustion Characteristics of Diesel and Pongamia Biodiesel Blends on a CI Genset Engine, International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'20), 24-25, July 2020, Chennai. SAE Technical Paper 2020-28-0471 (SCOPUS) https://www.sae.org/publications/technical-papers/content/2020-28-0471/
4.	Sathiyaseelan A and V. Arul Mozhi Selvan (2020) Modeling and Simulation of a Fighter Aircraft Cabin Temperature Control System Using AMESim, International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'20), 24-25, July 2020, Chennai. SAE Technical Paper 2020-28-0497 (SCOPUS) https://www.sae.org/publications/technical-papers/content/2020-28-0497/
5.	A Sathiyaseelan, V Arul Mozhi Selvan (2020) Temperature Control of Combat Aircraft Environmental Control System by Time-delay in loop with Control Input Normalization, 2020 Fourth International Conference on Inventive Systems and Control (ICISC), JCT College Of Engineering And Technology, Coimbatore, 8th – 10th Jan, 2020, **IEEE *Xplore,* DOI:** 10.1109/ICISC47916.2020.9171174 (SCOPUS)

6.	M. Kirubakaran, Arul Mozhi Selvan V (2020) Effect of nano-eggshell heterogeneous catalyst with isopropyl ether as co-solvent on the production of waste chicken oil biodiesel, WILEY International Conference on Sustainable Future: Resource Recovery & Concentrate Management, Theme Number: 4, Sub-topic: Waste to Energy, Anna University, Chennai, 6th Jan. 2020
7.	Bhavin K Bharath, Arul Mozhi Selvan V (2020) Stability of dual bio-alcohol blends and its effect on the performance and emission characteristics of an unmodified automotive SI engine, WILEY International Conference on Sustainable Future: Resource Recovery & Concentrate Management, Theme Number: 1, Sub-topic: Resource Recovery, Anna University, Chennai, 6th Jan. 2020
8.	Aravind A, Saravanan S, Bhavin K Bharath, Arul Mozhi Selvan V (2020) Investigation on Methanol - Gasoline - Aluminum Oxyhydroxide Nanoparticle blends on the Emission characteristics of an SI Engine, WILEY International Conference on Sustainable Future: Resource Recovery & Concentrate Management, Theme Number: 3 Sub-topic: Cleaner Production - Process Modification, Anna University, Chennai, 6th Jan. 2020
9.	**C.N. Kowthaman** and **V. Arul Mozhi Selvan** (2019) Synthesis of biodiesel from Schizochytrium oil using renewable catalyst and study of its quaternary blend phase behaviour, International Conference on Sustainable Energy and Green Technology 2018 11–14 December 2018, Kuala Lumpur, Malaysia, *IOP Conf. Series: Earth and Environmental Science 268 (1) 012107.* https://iopscience.iop.org/article/10.1088/1755-1315/268/1/012107 (SCOPUS)
10.	Kowthaman CN, Arul Mozhi Selvan V. (2019) Kinetic Study of Na+ Doped Nano Hydroxyapatite for the Production of Biodiesel from Schizochytrium Limacinum, SEGT 2019 International Conference on Sustainable Energy and Green Technology, Bangkok, Thailand, 13th Dec, 2019.
11.	P. Kanthasamy, V Arul Mozhi Selvan, P. Shanmugam (2019) Performance and Emission Study on CRDI Engine Fueled with Tallow Methyl Esters and Diesel With Exhaust Gas Recirculation, 2nd International Mechanical Engineering Congress - IMEC2019, National Institute of Technology, Tiruchirappalli, 29th Nov to 1st Dec, 2019.
12.	A. Sathiaseelan, V. Arul Mozhi Selvan (2019) Temperature Control Strategy of an Advanced Fighter Aircraft Environmental Control System, International Conference on Instrumentation and Control Engineering - ICECON-2019, National Institute of Technology, Tiruchirappalli, 19th - 21st Dec, 2019.
13.	H. Mohit, V. Arul Mozhi Selvan, Optimization of the tensile strength of sintered Al6061/SiC nanocomposites using response surface methodology, International Conference on Materials and Manufacturing Methods, MMM 2019, Tiruchirapalli, 5 July 2019 - 7 July 2019 This paper is also published in Materials Today: Proceedings, 27(3), 2020, pp. 2801-2805. https://doi.org/10.1016/j.matpr.2019.12.201 (SCOPUS)

14.	C.N. Kowthaman and **V. Arul Mozhi Selvan** (2018) Synthesis of biodiesel from Schizochytrium oil using renewable catalyst and study of its quaternary blend phase behaviour, *International Conference on Sustainable Energy and Green Technology*, Double Tree by Hilton Kuala Lumpur, Malaysia. 11-14 December 2018.
15.	H. Mohit, **V. Arul Mozhi Selvan** (2018), Influence of chemical surface modification on micro-wear characteristics of sugarcane nanocellulose epoxy nanocomposites, *International Conference on science and technology research*, National University of Singapore, Singapore, 16-17 November 2018.
16.	H. Mohit and **V. Arul Mozhi Selvan** (2017), Experimental Investigation on Corrosion, Dielectric, Thermal and Morphological Properties of Chicken Feather Fiber Reinforced Polyester Matrix Composite, *International Conference on Emerging Trends in Materials and Manufacturing Engineering*, National Institute of Technology, Tiruchirappalli, 10-12, March, 2017.
17.	C.N. Kowthaman and **V. Arul Mozhi Selvan** (2016), Evaluation of Biogas Production from Waste Microalgae, *International Conference on Waste Management, RECYCLE 2016*, Indian Institute of Technology Guwahati, Guwahati, 1-2, April, 2016.
18.	H. Mohit and **V. Arul Mozhi Selvan** (2016), Studies on Dry Leaves Fiber Reinforced Vinyl Ester Polymer Metal Matrix Nanocomposite, *4th International Conference on Nanoscience and Nanotechnology, COCHIN NANO 2016*, Cochin University of Science and Technology, Cochin, 20-23 February, 2016.
19.	H. Mohit and **V. Arul Mozhi Selvan** (2016), Experimental Investigation on Mechanical Properties of Chicken Keratin Fiber Reinforced Isophthalic Polymer Matrix Composites, *International conference on Trends in Industrial and Mechanical Engineering (ICTIME-2016)*, Maulana Azad National Institute of Technology, Bhopal, 4-16, February, 2016.
20.	H. Mohit and **V. Arul Mozhi Selvan** (2015), Investigations on Chicken Feather Fiber Epoxy Polymer Metal Composite, *International Conference on Nanomaterials for Energy, Environment, Catalysis and Sensors, ICNEECS-15*, Madurai Kamraj University, Tamilnadu, India, 11 - 12 December 2015.
21.	H. Mohit and **V. Arul Mozhi Selvan** (2015) , Studies on Chicken Fiber Reinforcement in Isophthalic Polymer Metal Matrix Nanocomposite, *XXVII IUPAP Conference on Computational Physics: CCP2015*, Indian Institute of Technology Guwahati, Guwahati, 2-5, December, 2015.
22.	C.N. Kowthaman and **V. Arul Mozhi Selvan** (2015) Extraction and Characterization of Spirulina Platensis Oil for Bio-Diesel Production, *International Conference on Advances in Mechanical Engineering*, University College of Engineering, Anna University, Villupuram, 15-16 October 2015.
23.	H. Mohit and **V. Arul Mozhi Selvan** (2015) Studies on Structural Properties of Dry Leaves Fiber Reinforced Vinyl Ester Polymer Matrix Composites, *International Conference on Advances in Mechanical Engineering*, University College of Engineering, Anna University, Villupuram, 15-16 October 2015.
24.	H. Mohit and **V. Arul Mozhi Selvan** (2014) Mechanical Properties of Polymer and Metal Matrix Composites – A Review, *International Conference on Advance Design*

	and Manufacturing, National Institute of Technology, Tiruchirappalli, 5-7 December 2014.
25.	Naresh Kumar Gurusala, **V.Arul Mozhi selvan** (2014), Optimization of Biodiesel Production from Waste Chicken Fat Through Two-Step Catalyzed Process, *International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control (ICGTEPC 2014),* National Institute of Technology, Tiruchirappalli, 27- 29 September 2014.
26.	C.N. Kowthaman, **V.Arul Mozhi selvan** (2014), Microalgae & its Characteristics as a Potential Biofuel - A Review, *International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control (ICGTEPC 2014)*, National Institute of Technology, Tiruchirappalli, 27- 29 September 2014.
27.	M**.** Kirubakaran, **V.Arul Mozhi selvan** (2014) Experimental Investigations On Algal Oil Production For A Sustainable Biofuel Feedstock, *International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control (ICGTEPC 2014),* National Institute of Technology, Tiruchirappalli, 27- 29 September 2014.
28.	Mohit, **V.Arul Mozhi selvan** (2014) A Review On Natural Fiber Reinforced Composites For Green Environment, *International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control (ICGTEPC 2014),* National Institute of Technology, Tiruchirappalli, 27- 29 September 2014.
29.	P.Sethumadhavan, **V.Arul Mozhi selvan** (2014) Experimental Investigations On Biomethanation As A Sustainable Waste Management Solution For Temples In India, *International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control (ICGTEPC 2014),* National Institute of Technology, Tiruchirappalli, 27- 29 September 2014.
30.	Naresh Kumar Gurusala, **Arul Mozhi Selvan V** (2014) Effect of EGR on Combustion and Emission Characteristics of a CI Engine Fuelled with Waste Chicken Fat Biodiesel, *International Mechanical Engineering Congress (IMEC 2014),* National Institute of Technology, Tiruchirappalli, 13-15 June 2014.
31.	Sethumadhavan P, **Arul Mozhi selvan V** (2014) Performance Evaluation of Biogas Energy for Rural Application, International Conference on Renewable Energy and Sustainable Developments (ICRESD-2014), Trinity College of Engineering and Research, Pune, India, January 9-10, 2014
32.	Naresh Kumar Gurusala, **Arul Mozhi Selvan V** (2013) Effects of Alumina Nanoparticles in Waste Chicken Fat Biodiesel on the Operating Characteristics of a CI Engine, *4th International Conference on Advances in Energy Research (ICAER 2013)*, Indian Institute of Technology Bombay, Mumbai, 10-12, December 2013
33.	P.Sethumadhavan, **V.Arul Mozhi selvan** (2013) Waste Oil Moisture Evaporation Using Solar Energy, *3rd International Conference on Materials for the Future - Innovative Materials, Processes, Products and Applications*, Government Engineering College Trichur, Thrissur, 06-08 November 2013.
34.	Naresh Kumar Gurusala, **Arul Mozhi Selvan V**, Ajay Balan and Shreyas Athreya (2013) Optimization of Waste Chicken Fat Pre-Treatment Process for Biodiesel Production, Paper No: JSAE 20139131, *Small Engine Technology Conference*, Taipei, 8-10, October 2013.

35.	Naresh Kumar Gurusala, **Arul Mozhi Selvan V** (2013) Experimental investigation on the solubility of e-diesel as a fuel for automobiles, *International Conference on Advances in Mechanical Engineering*, College of Engineering, Pune, 29-31, May 2013.
36.	Yuyulsu Krishnan. K and **Arul Mozhi Selvan V**, "Experimental Investigation on the Vibration Exposure of Mini Truck Drivers", *Advances in Mechanical Sciences AIMS-2013- CAE CONCEPTS*, Kumaraguru College of Technology, Coimbatore, 19 April, 2013.
37.	Krishna Chaitanya S and **Arul Mozhi Selvan V**, "Experimental investigation on heat transfer enhancement using nanofluids in automobile radiator", *Advances in Mechanical Sciences AIMS-2013- CAE CONCEPTS*, Kumaraguru College of Technology, Coimbatore, 19 April, 2013.
38.	Naresh Kumar Gurusala and **Arul Mozhi Selvan V**, "Biodiesel production from waste chicken fat", *Advances in Mechanical Sciences AIMS-2013- CAE CONCEPTS*, Kumaraguru College of Technology, Coimbatore, Accepted for Presentation, 19 April, 2013.
39.	T.Shivadhandayuthabani, M.Nachiappan, T.Thulasitharan, **V.Arul Mozhi Selvan**, "Effect of Muffler Design on Engine Noise" *National Conference on Advances in Mechanical Sciences*, Government College of Technology, Coimbatore, April 1st, 2011.
40.	**Arul Mozhi Selvan,V**., Anand,R.B., Udayakumar,M. Stability of Diesohol blend with castor oil as additive and its performance and emission Characteristics in a variable compression ratio engine. *National conference on Energy Security for Rural Development (ESRD 2009)*, sponsored by Ministry of New and Renewable Energy (MNRE), Government of India and University Grants Commission (UGC), organized by Gandhigram Rural University, Gandhigram, March 26, 2009.
41.	**Arul Mozhi Selvan,V**., Anand,R.B. and Udayakumar,M. Stability, Performance and Emission Characteristics of Diesel-Ethanol Blend with Castor Oil as Additive in Variable Compression Ratio Engine, *Small Engine Technology Conference (SETC 2009)*, Penang, Malaysia, November 2009. (This paper has also been published in the Transactions of JSAE/SAE International Paper No.20097120/ 2009-32-0120).
42.	Anand,R., Rajasekar Reddy,K., **Arul Mozhi Selvan,V**., Velmathi, S. and Senthil Kumar,T. (2009) Study of performance, emission and combustion characteristics of a diesel engine using methyl ester of cottonseed oil. *8th International Oil and Gas Conference and Exhibition, PETROTECH – 2009*, organized by Indian Oil, New Delhi, under the aegis of Ministry of power and natural gas, Government of India, January 11-15, 2009.
43.	**Arul Mozhi Selvan,V.**, Anand,R.B., Udayakumar,M.(2008) Stability and Performance Characteristics of Diesohol Using Biodiesel as Additive in Compression Ignition Engine. *International conference on Fascinating Advances in Mechanical Engineering-FAME'08*, Mepco Schlenk Engineering College, Sivakasi, December 11-13, 2008.
44.	Premkumar,K., Sivakumar,K., **Arul Mozhi Selvan,V.** and Udayakumar,R. (2006) Performance Optimization of a single cylinder Two-Stroke Petrol Engine under Supercharging mode using Genetic Algorithm, *National conference on*

	Contemporary Approaches in Design and Manufacturing (CADAM '06), A.C. Tech., Karaikudi, April 21-22, 2006.
45.	**Arul Mozhi Selvan,V.** and Udayakumar.R., (2005) Studies on Supercharging on a single cylinder Two-Stroke Petrol Engine. *19th National Conference on IC Engines and Combustion*, Annamalai University, Chidambaram, under the auspices of Combustion Institute (Indian Section), Dec 21-23, 2005.
46.	Pandey,S., **Arul Mozhi Selvan,V.**, and Pandey,S.K. (2000) Transient Heat Transfer and Nucleate Pool Boiling Studies of Liquids and their Mixtures at subatmospheric Pressures. *Indian Chemical Engineering Congress*, 53rd Annual Session of Indian Institute of Chemical Engineers, Calcutta, Dec. 18 – 21, 2000.

XI. SPONSORED PROJECTS:

Sl. No.	Title of the Project	Amount in Rs.	Funding Agency	Period	Remarks (Completed/ Ongoing)
1.	Studies on Growth, Lipid Extraction, and Biodiesel Conversion Characteristics of Micro-Algae as a Potential Alternate Fuel for Compression Ignition Engines	38,42,880/-	MHRD	3 Years	Completed

XII. RESEARCH GUIDANCE:

(i). List of Ph.D. Scholars:

Sl. No.	Name of the Ph.D. Research Scholar	Research Area	Batch/Year of Admission	Status
1.	M. Kirubakaran Roll No. 411913003	Experimental Investigation on the Working Characteristics of a Biofuel Engine	July 2013 Part-Time On campus	Ph.D. Completed on 19.05.2021
2.	C.N. Kowthaman Roll No. 411114003	Studies on Algae as an Alternate Fuel for IC Engines	July 2014 Project Category	Ph.D. Completed on 30.06.2020
3.	C. Pandi Selva Durai Roll No. 411915007	Experimental Investigations on Ceramic Reinforced Metal Matrix Nanocomposites	July 2015 Part Time External	Ph.D. Completed on 20.05.2020

4.	H. Mohit Roll No. 411114002	Experimental Investigations on Sugar Cane Fiber Reinforced Polymer Metal Matrix Composites	July 2014 Full-Time	Ph.D. Completed on 18.10.2019
5.	Naresh Kumar Gurusala, Roll No: 411110052	Experimental Investigation on the Performance, combustion and Emission Characteristics of Waste Chicken Fat Biodiesel on a CI Engine	January 2011 Full-Time	Ph.D. Completed on 27.02.2015
6.	P.Sethumathavan Roll No. 411911052	Experimental Investigation on Biowaste to Energy	January 2012 Part-Time External	Synopsis Submitted on 08.01.2019
7.	A. Sathiyaseelan Roll No. 411914054	Investigation on the Performance Characteristics of a Combat Aircraft Environmental Control System	Jan 2015 Part-Time External	Comprehensive Viva-Voce Completed
8.	T. Prabhu, Roll no. 411915002	Experimental Investigations on waste plastic reinforced composites	July 2015 Part Time External	Comprehensive Viva-Voce Completed
9.	K. Jayakumar Roll No. 411915051	Experimental Investigation on the Performance and Emission Characteristics of a Waste Oil Fired Furnace	Jan 2016 Part Time External	Comprehensive Viva-Voce Completed
10.	Arumugam G, Roll No. 411916006	Experimental Investigation on Used Rubber Tyres to Energy Products	July 2016 Part Time External	Comprehensive Viva-Voce Completed
11.	Mr. P. Kanthasamy Roll No. 411916007	Experimental Investigation on the Performance and Emission Characteristics of a DICI Engine Using Biodiesel From Leather Processing Wastes	July 2016 Part Time External	Comprehensive Viva-Voce Completed
12.	Mr. K. Ganapathy Roll No. 411116051	Experimental Investigation on the effect of Nanoadditives on the Performance, Combustion and Emission Characteristics of an IC Engine	Jan 2017 Full-Time	Comprehensive Viva-Voce Completed

13.	Mr. S. Palanisamy Roll No. 411916051	Experimental Investigation on Bio-waste to Energy	Jan 2017 Part –Time On campus	Comprehensive Viva-Voce Completed
14.	Mr. Bhavin K Bharath Roll No. 411117008	Experimental Investigations on the Performance and Emission Characteristics of Nano-catalyst Blended Biofuels on an SI Engine	Full-Time Q.I.P (Engg. Scheme)	Synopsis Submitted on 12.05.2022
15.	Mr. Sriram Prasanth Roll No. 411918007	Experimental Investigations on the Performance and Emission Characteristics of Biomethanol on an SI Engine	July 2018 Part Time (On campus)	Comprehensive Viva-Voce Completed

(ii). List of M.Tech. Scholars:

Sl.No.	Name of the M.Tech. Scholar	Title of the Project	Year of Submission
1.	211220022	Experimental study of hybrid nano lubricant on noise and vibration reduction in automobile	2021-22
2.	211220009	Overcurrent protection analysis for Battery supplied system	2021-22
3.	211220024	Effect of ternary blend on noise, vibration and emission characteristic of SI Engine	2021-22
4.	211220022	Enhancing machine safeguarding with digital checklist	2021-22
5.	211220024	Investigation on PCM based composite material to be used as thermal insulation material to mitigate thermal runaway in Lithium-ion batteries	2021-22
6.	211220009	Modeling and Testing of Inverse Time Overcurrent Relay for Earth and Phase Fault	2021-22
7.	Mohit Gujre (211319012)	Thermal and Structural Analysis of Pulsar 220 CC	2020-2021 May 2021
8.	Pulak das 211319016	Comparison study on diffuser augmented wind turbine (DAWT) with various brim configurations	2020-2021 May 2021
9.	Mohit Gujre (211319012)	CFD Analysis of Biodiesel Blend and Combustion using Ansys Fluent	2020-2021 Dec 2020
10.	Pulak das 211319016	Comparison Study of Non-Premixed Combustion of Propane and Methane by using Ansys Fluent	2020-2021 Dec 2020

11.	MEERA R (211218010)	Design and Validation of Safety for Earth Mesh Grid of Substation	2019-2020 May 2020
12.	SARATH M (211218022)	Experimental Study on Effectiveness of adding Zeolite to Melamine Phosphate Fire Suppressant Powder	2019-2020 May 2020
13.	MEERA R (211218010)	Failure Analysis of Distribution Transformers Using Fuzzy Based FMEA	2019-2020 Dec 2019
14.	SARATH M (211218022)	Multi Route Evacuation Strategy and Fire Safety Auditing of a Theatre	2019-2020 Dec 2019
15.	Kammaganti Lakshmi Vani (211217026)	Analysis of Effluent Treatment Plant	2018-2019 May 2019
16.	Saranya V S (211212025)	Power Quality Improvement Using Machine Learning for Enhanced Safety in Grid Connected Photovoltaic System	2018-2019 May 2019
17.	P Naveen Karun (211217024)	Prevention and Control Using Influence Network Method for Fall From Height	2018-2019 May 2019
18.	Kammaganti Lakshmi Vani (211217026)	Analysis of Smoke and Fire Gases Venting in Industrial Areas	2018-2019 Dec 2018
19.	Saranya V S (211212025)	Fuzzy Based Failure Mode Effects Analysis (FMEA) of Grid Connected Photovoltaic System	2018-2019 Dec 2018
20.	P Naveen Karun (211217024)	Safety Integrity Level to Electrical Equipments and Systems Using a Modified Risk Graph Method	2018-2019 Dec 2018
21.	Sachin Chandran M (211216021)	Effect of Compartment Fire on Firefighters and Fire Fighting Using Carbon Dioxide	2017-2018 May 2018
22.	Nived KV (211216011)	Musculoskeletal Discomfort Assessment of Workers in a Locomotive Workstation	2017-2018 May 2018
23.	Charis Xavier (211216008)	Simulation and Analysis on the Response Characteristics of Photoelectric Smoke Detectors below Grid Ceilings of Different Hollowing Rate	2017-2018 May 2018
24.	Delvin George (211216006)	Development of District Disaster Management Plan for Tiruchirappalli	2017-2018 May 2018
25.	Sachin Chandran M (211216021)	Fire Protection for LPG Tank and Design Deluge Water Fire Sprinkler	2017-2018 Dec 2017

26.	Nived KV (211216011)	Musculoskeletal Discomforts in Firefighters and the Effects of Personal Protection Equipment	2017-2018 Dec 2017
27.	Charis Xavier (211216008)	Experimental Study on Heavy Metal Removal from Industrial Waste Water Using Biomass Derived Adsorbent	2017-2018 Dec 2017
28.	Delvin George (211216006)	Development of District Disaster Management Plan for Tiruchirappalli	2017-2018 Dec 2017
29.	S. Sravan Kumar (211314031)	Investigation on Performance and Emission characteristics of Homogeneous Charge Compression Ignition Engine	2015-16 May 2016
30.	Jay Prakash (211314018)	Effects of Al_2O_3 Nanoparticles addition in Lubrication oil on Performance and Emission characteristics of a CI Engine	2015-16 May 2016
31.	S. Sravan Kumar (211314031)	Experimental Investigation on Homogeneous Charge Compression Ignition Engine For Reduction of Emissions	2015-16 Dec 2015
32.	Jay Prakash (211314018)	Experimental Investigation on Role of Nano Additives in Lubrication Oil	2015-16 Dec 2015
33.	Unmesh Shukla (211313016)	Experimental Investigation of Performance Characteristics and Emission of Gasoline Alcohol Blends in SI Engine	2015-16 May 2015
34.	Hari Om (211313028)	Effect of Nanolubricants on the Performance and Emission Characteristics of a CI Engine	2015-16 May 2015
35.	Unmesh Shukla (211313016)	Cold Flow Simulation of an Ethanol Fuelled SI Engine	2015-16 Dec 2014
36.	Aghil M (211213018)	Evaluation of Whole Body Vibration in Backhoe Loaders	2014-15 Dec 2014
37.	Hari Om (211313028)	Effect of Nanolubricants on the Performance and Emission Characteristics of a CI Engine	2015-16 Dec 2014
38.	Kisana M. Narnaware (211312013)	Production of Chicken oil from Waste Chicken Fat using Solvent Extraction Method	2013-14 May 2014
39.	Richu Zachariah (202312008)	Effects of Combustion Geometries on the Performance of a CI Engine Fuelled with Waste Chicken Fat Biodiesel	2013-14 May 2014

40.	Richu Zachariah (202312008)	Effect of EGR & Catalytic Convertor on NOx Emissions of a CI Engine Fuelled with Waste Chicken Fat Biodiesel	2013-14 Dec 2013
41.	Kisana M. Narnaware (211312013)	Impact of Diesel Particulate Matter on Exhaust Gas Recirculation on a Diesel Engine	2013-14 Dec 2013
42.	Nithin Mathew George (202312023)	Production of Fuel From Used Railway Engine Oil Using Distillation and fuel Characterization	2013-14 Dec 2013
43.	Rajesh Kant Chand Mishra (211212025)	Analysis of Hand Transmitted Vibration During Tile Cutting Operation	2013-14 Dec 2013
44.	S Krishna Chaitanya (211311003)	Numerical Analysis & Heat Transfer studies on the Performance of Flat Tube Radiator Using Nanofluids	2012-13 May 2013
45.	Yuyulsu Krishnan K (211211009)	Experimental Investigation and Mathematical Modeling of Transmissibility variation on Mini Truck Drivers	2012-13 May 2013
46.	S Krishna Chaitanya (211311003)	Experimental Study on Heat Transfer Enhancement Using Nanofluid in Automobile Radiator	2012-13 Dec 2012
47.	Yuyulsu Krishnan K (211211009)	Experimental Investigation of Vibration Exposure for Mini Truck Drivers	2012-13 Dec 2012
48.	Reni David (211310015)	Optimization of Biodiesel Production from High Free Fatty Acid	2011-12 May 2012
49.	Reni David (211310015)	Fuel Spray Characteristics of Gasoline-Ethanol Blends of a MPFI System	2011-12 Dec 2011
50.	Sanoj Varghese (211309010)	Experimental Investigation on the Fuel Spray Behaviour of an SI Engine	2010-11 May 2011
51.	Madhavarao Bitragunta (211209014)	Experimental Study of Emission Level Distribution from Light Duty Vehicles and Its Effects	2010-11 May 2011
52.	D. Vijaykumar (211309023)	Performance Analysis of Catalytic Converter	2010-11 May 2011
53.	Sanoj Varghese (211309010)	In –Cylinder Flow Analysis of an SI Engine	2010-11 Dec 2010
54.	Madhavarao Bitragunta (211209014)	Testing and Analysis of Firework Emissions	2010-11 Dec 2010
55.	D. Vijaykumar (211309023)	Performance Analysis of Catalytic Converter	2010-11 Dec 2010
56.	Raghu (211308012)	Numerical Analysis of Flow-Induced Vibration in an Elastically Mounted Circular Cylinder	2009-10 Dec 2009

57.	Durga Mallik CH (MEA0601)	Design of Combustion Chamber for SI Engine to Enhance Turbulence Using CFD	2007-08 May 2008
58.	G.Raghuraman (MEA0514)	Analysis on fuel-Air Mixing Process of a semi-direct injected spark ignition engine.	2006-07 May 2007
59.	B.Hariprasanna (ENA0510)	Solar Heat Sheet for Air Heaters	2006-07 Dec 2006
60.	G.Raghuraman (MEA0514)	Analysis on fuel-Air Mixing Process of a manifold injected spark ignition engine	2006-07 Dec 2006

(iii). List of B.Tech. Scholars:

Sl.No.	Name of the B.Tech. Scholar	Title of the Project	Year of Submission
1.			
2.	111118031 111118067 111118087	Aerodynamic Design Optimization of Electric Vehicle using Computational Fluid Dynamics	2022
3.	111118036 111118040 111118082	Investigation on thermal management of electric vehicles	2022
4.	Anup Kumar Sah (111117015) Shamees Rahman (111117080) Ugyen Tashi Penjore (111117098)	An Optimization Design for the Stair-Climbing Wheelchair	2021
5.	Batchu Vamsi Krishna Reddy (111117022) Gaurav M. Chaudhary (111117025) Chillarige Venkat Anirudh (111117026)	Thermostructural Analysis of Connecting Rod Mechanism	2021
6.	Ashwin Sankar (111117018)	Study of Downsizing and Design of Split Crankshaft Engine	2021
7.	Aditya Joshi (111117047) Nitin Sehra (111117063)	Flow Acoustic Analysis of a typical commercial Acoustic Muffler	2021
8.	M. Yuktesh 111116045	Gas Cleaning for IC Engine Applications from Fixed Bed Biomass Gasification	2021

9.	Jerosh J (111117045) K J Dharani Dharan (111117053)	CFD Study on Aerodynamic Effects of a Rear Wing/Spoiler on a Passenger Vehicle	2021
10.	Gopi R (111116025) Rakshan Chaitanya M (111116065) Ugesh Kumar R (111116099)	Comparison Of Different Nano Particles In Lubricants According To Their Tribological, Thermophysical, Rheological Properties And Their Automotive Applications	2020
11.	K A Parvesh (111116035) Sanjay Raman R (111116077) Surya Ramachandiran (111116093)	AI-Enabled Prescriptive Maintenance For Diesel Engine Using Vibration And Noise Signals	2020
12.	George Joseph Pynadath (111116024) Himanshu Bareth (111116028) Pansuriya Rutvik Kanojkumar (111116058)	Optimization Of Nanofluid Production Using Artificial Intelligence, Statistical Analysis And Data Analytics	2020
13.	Tanubhav Kumar Srivastava (111115098) Nivedita Suresh (111115068) Guhan Ashok Ganesh (111115029)	Design and Analysis of Portable Micron-Level Allergen Cleaner P-MAC	2019
14.	Koppusetti Chaitanya (111115045) Maloth Naveen (111115050) Perumalla Prasanth (111115072)	Emission Control in SI Engines Through Fuel Blends	2019
15.	Anand Mahesh (111114015) Rahul Jhade (111114073)	Production, Characterization and Kinetic Study of Pongamia Pinnatta Biodiesel	2018
16.	Prashanth K (111114053) Sai Vinayak (111114083) Thayappan S	Development of In-Wheel Planetary Gear Reduction System for BAJA ATV	2018

	(111114104)		
17.	A Aravinda De Chinnu (114113001) C. Chakkaravarthy (114113022)	Aerodynamic Analysis of On-Road and Racing Cars Using CFD	2017
18.	Aqeel Mohammed (111111014) V. Srinivasan (111111097) Vishnu (111111102)	Biodiesel Production From Waste Chicken Fat & Its Operating Characteristics on a CI Engine	2015
19.	Aswin Kumar (111111025) I. Eswanth (11111039) K.Rishi (111111042)	Desalination of Sea Water	2015
20.	Alok Kumar Choudhary (111111008) Bijendra Kumar (1111111027) Rishi Kapoor (111111078)	Investigation of Materials for IC Engine Exhaust Gas Recirculation Environment	2015
21.	Prasanna Srinivasan (111110061) Tony (111110100)	Design and Fabrication of Mechanical Mosquito Control Device	2014
22.	Sanjay Jay Menon (111109088) Saranyan A Sakthivel (111109089) T. Shriram (111109098)	Effect of Spark and Fuel Injection Timing on Performance and Emission Characteristics of an Engine Using Microcontroller	2013
23.	Naveen Tandon (111109064) Pradeep Shejule (111109094) V. Srinivas Ayer (111109097)	Optimization of Biodiesel Production Using Microwave Radiation	2013

24.	M. Gowtham Shankar (111108027) Saurav Banerjee (111108057) Jayaram Pillai (111108078)	Synthesis and Analysis of Biodiesel from Waste Cooking Oil	2012
25.	Ajay Balan (114108008) Shreyas S (114108109)	Evaluation of Performance and Emission Characteristics of Biodiesel Extracted from Waste-Chicken Fat	2012
26.	Akash Selvaraj (111108035) Anantha Padmanabhan (111108002) Kashveen (111108081)	Feasibility of Using Nanofluids as Coolant in an Automobile Radiator	2012
27.	Debarun Saha (111107048) Nitish Vinay Gadgil (111107050) Jithendar Singh Thakur (111107085)	Effect of Piston Crown Shapes on In-Cylinder Cold Flow of an SI Engine	2011
28.	M. Nachiappan (111107023) T. Sivadhandayuthabani (111107025) T. Thulasitharan (111107065)	Investigation of Active Noise Control Muffler on Engine Noise	2011
29.	J. Srinivas (111106060) S. Selvamuthu Kumaran (111106053) Ashwini Rajkumar (111106007)	Effects of Nanoparticle Additive in a Biodiesel Fuelled CI Engine	2010
30.	Vikas Kumar (ME10569) Mahendra Kumar Meena (ME10528) M. Amit Singh (ME10532)	Experimental Investigation on Biodiesel Production and Its Performance and Emission Characteristics	2009

31.	Kunal Kishore Sinha (PR10527) Rakesh Kumar (PR10543) Simarjit Singh (PR10551)	Emission Control Biodiesel Fuelled CI Engine Using Nanoparticle Additives	2009
32.	Harish Sekar (ME10517) Shakti Singh Rathore (ME10559)	Performance and Emission Studies on Nanoparticle Addition in Biodiesel and Diesel Fuelled Engine	2009
33.	M. Pradeep (ME10432) P. Prasanna (ME10439) Sandeep C (ME10452)	Experimental Study on Stability, Performance and Emission Characteristics of Ethanol-Biodiesel-Diesel Blends	2008
34.	B. Shankar (ME10411) Gregory Koshy George (ME10420) Asish Vishwanath (ME10409)	Simulation of In-Cylinder Flow of Air-Fuel Mixture in a GDI Engine	2008
35.	Nivas P (PR10433) Pugazhenthi P.M. (PR10438)	Study on Ethanol Production from Sugarcane Molasses	2008
36.	Hijam Kumarjit Singh (ME10316) Hemant Bedi (ME10315) Shashank Shukla (ME10345)	Performance Evaluation of Kerosene Stove Using Porous Burner Technology	2007
37.	Kapil Siwariya (ME10317) Sharad Chandra (ME10344)	Performance Evaluation of LP Gas Burner Using Porous Burner Technology	2007
38.	Rahul Sasi (ME10333) Sujith S (ME10350)	Prototype Biodiesel Plant	2007

39.	Arivadivan (80702114002) Chandran S (80702114008) Govindaraj G (80702114015) Santhosh Kumar P (80702114042)	Experimental Investigations for Optimum Performance in Two-Stroke Petrol Engine	2006
40.	M. Prakash (80701114037) S. Sakthivel (80701114049) K. Venkatasubramanian (80701114065)	Development of Computer Simulation for Compression Ignition Engine Design	2005
41.	H.M. Munavar Pasha (E721459) S. Natarajan (E721464) S. Shenthiel Kumar (E721484) K. Vinothbabu (E721501)	Implementation of Super Charger for Two-Stroke Bikes	2001

XIII. ADMINISTRATIVE EXPERIENCE:

Sl. No.	Post Held	Function	Duration
1.	President, Officers' Club of NIT-T	Administration of Officers' Club	2020
2.	Chief Invigilator	UPSC & TNPSC Examinations 2019	2019
3.	Member, Siemens Centre of Excellence	Mechatronics Lab Incharge	2018
4.	Secretary, Medals and Certificates, Convocation 2018	Medals and Degree Certificates preparation for Convocation 2018	July 2018
5.	Associate Dean (Academic)	Academic Administration for Post Graduate Programmes	2017 to till date
6.	Staff Advisor, Festember 2017	Organizing inter- collegiate cultural festival	Sep 2017
7.	Member, eGov-NITT	Implementation of Management Information System	2017 to till date

8.	Coordinator, Community Radio Station, NITT Radio FM 90.8 MHz	Content Creation, Studio Recording, Editing, Mastering and Broadcasting	2016 to till date
9.	Member, NITT Transport Committee	Vehicle Inspection and Maintenance	2016 to 2018
10.	Warden, NITT Hostels	Jasper, Ruby, Pearl, Emerald, MM – II (North)	2016 to 2018
11.	Member, MS/Ph.D. Admission Committee	Centralized MS/Ph.D. Admission	2013 to 2018
12.	Member, Department Administrative Council (DAC)	Department Activities	2012 to till date
13.	Staff Advisor, SAE INDIA Collegiate Club (BAJA &SUPRA)	Motivating and accompanying the students for co-curricular activities	2012 to till date
14.	Member, NIT Driving School	Planning and Maintenance	June 2014 to till date
15.	Time Table In-charge, Mech. Engg. Dept.	Time Table Preparation	2006 to till date
16.	Thermal Lab In-charge (JJCET, NITT)	Maintenance of Lab for smooth functioning of the Lab & Classes	1996 to 2016
17.	Automobile Lab in-charge	Maintenance of Lab for smooth functioning of the Lab & Classes	2016 to till date
18.	Member, Obsolete Removal Committee	Removal of Obsolete from Laboratories	2017 till date
19.	Coordinator, Board of Studies, Mech. Engg. Dept.	Up gradation of Syllabus	2006 to till date
20.	Member, NBA Committee	BoS Documentation, Modernization of Thermal and Automobile Laboratory	2006 to till date
21.	Member, DPEC	Project Evaluation	2012 to till date
22.	Member, Department Purchase Committee	Purchase of Lab Equipments	2006 to till date
23.	Member, Curriculum Development Committee	Up gradation of Syllabus	2011 to till date
24.	PAC Chairman, Mech. Engg. Dept.	Class Committee Meeting and publication of result	July-Dec 2011- (IIIrd Semester) Jan-Apr 2012 (VIIIth Semester)
25.	Stock Verification Officer, NITT	Stock Verification	2009-10, 2010-11, 2013-14
26.	AIEEE Central Counselling	B.Tech. Admission	2008-2011

27.	PG Counselling	M.Tech. Admission	2008-2011
28.	Member, Convocation Committee	Smooth conduct of Convocation	2008 to till date
29.	Member, Institute Day Committee	Distribution of Medals/Certificates	2008 to till date
30.	Member, Hospital Infrastructure Development Committee	Purchase of Medical equipments	2009 to 2010
31.	Staff Advisor, Fine Arts (Music Club), NITT	Motivating and accompanying the students for extra-curricular activities	2007 to 2018
32.	Faculty Advisor, Fine Arts Society, JJCET	Motivating and accompanying the students for extra-curricular activities	1996 to 2006
33.	Coordinator, JIG JAZZ	Organizing inter- collegiate cultural festival	1998-2006
34.	Staff Advisor, Purchase of Musical Instruments	Purchase of Musical instruments at JJCET & NITT	1996 to 2018

XIV. INVITED / GUEST LECTURES DELIVERED:

Sl. No.	Details of Guest Lectures Delivered
1.	Delivered Lecture on Nanoparticles in Engine Research, Guest Lecture Series, Organised by Department of Mechanical Engineering, Alliance University, Bengaluru Alliance University, Bengaluru, 31.01.2022
2.	Delivered Lecture on Novel Materials in IC Engines, AICTE Training and Learning (ATAL) Academy Sponsored Online Faculty Development Programme from 25.10.2021 to 29.10.2021 on "Novel Materials" Indian Institute of Information Technology Tiruchirappalli (IIIT), Tiruchirappalli, 25.10.2021
3.	Delivered Lecture on Combustion Characteristics in SI & CI Engines, One-week online faculty development programme (FDP) on "Recent Advances in Automobiles" during 6th to 12th May 2021, Sponsored by AICTE - Indian Society for Technical Education (ISTE), New Delhi Government Polytechnic College, Gandharvakottai, Tamil Nadu. 08.05.2021
4.	Delivered Lecture on Noise Vibrations and Harshness of Vehicles, One-week online faculty development programme (FDP) on "Recent Advances in Automobiles" during 15th to 21st April 2021, sponsored by AICTE - Indian Society for Technical Education (ISTE), New Delhi Government Polytechnic College, Gandharvakottai, Tamil Nadu. 19.04.2021

5.	Delivered Lecture on Automobile Emission & Control, AICTE Sponsored FDP on Recent Advances in Automobiles, Government Polytechnic College – Gandharvakottai, 2021
6.	Delivered Lecture on Electric Vehicle, AICTE Sponsored FDP on Recent Advances in Automobiles, Government Polytechnic College – Gandharvakottai, 2021
7.	Delivered Lecture on Challenges in Developing Research Culture in Educational Institute, AICTE Sponsored STTP - Series III, Sri Krishna College of Technology, Coimbatore, 2020
8.	Delivered Lecture on Challenges in Developing Research Culture in Educational Institute, AICTE Sponsored STTP - Series II, Sri Krishna College of Technology, Coimbatore, 2020
9.	Delivered Lecture on Challenges in Developing Research Culture in Educational Institute, AICTE Sponsored STTP - Series I, Sri Krishna College of Technology, Coimbatore, 2020
10.	Delivered Lecture on Effect of Nanoadditives on the Performance and Emission Characteristics of Internal Combustion Engine, Kingston Engineering College, Vellore, 2020
11.	Delivered Lecture on Combustion in SI & CI Engines, Online Webinar Series, Francis Xavier Engineering College Tirunelveli, 2020
12.	Delivered Lecture on Effect of Nano Additives on Automotive Engine, Online Webinar Series, Crescent Institute of Science & Technology Chennai, 2020
13.	Delivered Lecture on Basics of Thermal Engineering, Faculty Development Program, Chennai Institute of Technology, Chennai, 2020
14.	Delivered Lecture on Resources, Benefits and Future of Bio-Fuels Expert Speaker, Gayatri Vidya Parishad, Visakhapatnam, 2020
15.	Delivered a Guest Lecture on "Automobile Emission Control" at National Institute of Technology, Tiruchirappalli on 12th June, 2019.
16.	Delivered a Lecture on "Recent Trends on SI and CI Engines and Emission Regulations" at Seshasayee Institute of Technology, Tiruchirappalli on 11th March, 2019.
17.	Delivered a Lecture on "Advanced IC Engines" at Department of Mechanical Engineering, CARE Group of Institutions Tiruchirappalli on 27th February, 2019.
18.	Delivered a guest Lecture at the Faculty Development Training Programme on ME8493 Thermal Engineering I at University College of Engineering, Anna University, Villupuram on 11th December, 2018.
19.	Delivered a Lecture on "CFD Analysis on the In-cylinder Flow of an SI Engine" at Government Polytechnic College, Gandharvakottai, on 4th October, 2018.
20.	Delivered a Lecture on "Effect of Nano-additives in Liquid Fuel on the performance and emissions characteristics of a CI engine" for the AICTE sponsored Faculty Development Program on "Smart Materials & Fuel Efficient Technologies for Automotives", Annamalai University, Chidambaram, 12th December, 2017.

21.	Delivered a Lecture on "Renewable Energy" for Institution of Engineers sponsored one day seminar on Role of Automation in Integrating Renewable Energy at Mahendra Engineering College, Namakkal, October 11th, 2017.
22.	Delivered a Lecture on "Heat Transfer and Its Applications" at Kalasalingam University, Krishnanakoil on 19th March 2017.
23.	Delivered a Lecture on "Bio-Diesel as Alternative and Emission Characteristics" at M.Kumarasamy College of Engineering, Karur on 7th March, 2017.
24.	Delivered a Lecture on "Thermal Engineering" for Anna University Sponsored Faculty Development Program at Ankalaiammal Mahalingam Engineering College, Kovilvenni on 29th November, 2016.
25.	Delivered a Lecture on "Engine Emission Control using Nanoparticle Additives" in the workshop on Nano materials for Energy & Environment, Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli, 15th June 2016.
26.	Delivered a Lecture on "Combustion Chemistry of SI Engine" at the Faculty Development Program, Anna University of Technology, Tiruchirappalli, 2nd June 2016.
27.	Delivered a Lecture on "Psychrometry" for Anna University Sponsored Faculty Development Program on ME6301 Engineering Thermodynamics at P.S.N.A College of Engineering & Technology, Dindigul on 29.05.2016.
28.	Delivered a Keynote Lecture on "Biofuels for Sustainable Energy" at the International Conference on Mechanical Engineering Research & Intelligence Technologies (ICONMERIT 2K16), Nehru Institute of Engineering and Technology, Coimbatore, March 30-31, 2016.
29.	Delivered a Keynote Lecture on "Present and Future of Biofuels", during Research Week 2016 Event at Gujarat Technological University, Ahmedabad, 21st March, 2016.
30.	Delivered a Lecture on "Combustion In SI and CI Engines" at Bannariamman Institute of Technology, Sathiyamangalam, February, 2016.
31.	Delivered a Lecture on "Automotive Fuels and Emission" at Kumaraguru College of Technology, Coimbatore, February, 2016.
32.	Delivered a Lecture on "Waste Chicken Fat Biodiesel and Optimization of Production Process" at Pondicherry Engineering College, Pondicherry on 17th December, 2015.
33.	Delivered a Keynote Lecture on "Biofuels for Sustainable Energy"at the 3rd National Conference on Systems, Energy and Environment, organized by Government College of Engineering, Kannur, Kerala, 10-11 September, 2015.
34.	Delivered a Lecture on "Simulation of IC Engines" for the Short Term Course on Engine Research, organized by National Institute of Technology, Tiruchirappalli, during 07-08, October, 2014.
35.	Delivered a Lecture on "Sustainable Energy Developments: Concept and Design" for the Faculty Development Program on Renewable Energy Technologies, organized by National Institute of Technology, Tiruchirappalli, during 26-27, September, 2014.
36.	Delivered a Lecture on "Production and Effective Use of Biofuels in Energy Sector" for the CSIR Sponsored Seminar on Biofuels for Automotive Use-Benefits and Application, organized by Shree Venkateswara Hi-Tech Engineering College, Gobichettipalayam, Erode on 20th September, 2014.
37.	Delivered a Keynote Lecture on "Biofuels for Green Energy" on the Inauguration of Mechanical Engineering Association, organized by K.Ramakrishnan College of Technology, Tiruchirappalli on 22nd August, 2014.

38.	Delivered a Lecture on "Energy Scenario and Biofuels Research for Sustainable Future" for the TEQIP-II Sponsored Faculty Development Program (FDP) on Powering the Engineering College Campus with Renewable Energy, organized by PSG College of Technology, Coimbatore on 18th March, 2014.
39.	Delivered a Lecture on "Creating Awareness and Enhancing Rural Development" for the National Seminar on Renewable Energy Technologies, organized by Karpagam College of Engineering, Coimbatore on 18th March, 2014.
40.	Delivered a Lecture on "Alternate Fuel for Green Vehicles" for the workshop on Green Vehicle Technologies – First Gear '13, organized by Kumaraguru College of Technology, Coimbatore during 16-17, August, 2013.
41.	Delivered a Lecture on "Resources, Benefits & Future of Biofuels" for the TEQIP-II Sponsored Short Term Course on Automotive Fuels and Emission, organized by National Institute of Technology, Tiruchirappalli, during 12-14, June, 2013.
42.	Delivered a Lecture on "Biodiesel – Modern Era in CI Engines", CSIR Sponsored National Seminar on Alternate Fuels – Sustainable Sources and Utilization Techniques, Kongu Engineering College, Erode, 31.08.2012.
43.	Delivered a guest lecture on "Alternate Fuels Present and Future", National Level Technical Symposium, organized by Shivani Engineering College, Tiruchirappalli, 2012
44.	Delivered a Lecture on "Recent Trends on Biofuels", A Southern Regional Railway seminar on "Green Energy, organized by Southern Railway, Tiruchirappalli, 25.11.2011
45.	Delivered a Lecture on "Nanotechnology for Internal Combustion Engines", AICTE Sponsored Staff Development Programme on "Recent Advances in Nano-Technology and its Applications" - RAINTA- 2011, organized by Pondicherry Engineering College, Pondicherry, 21.10.2011.
46.	Delivered a Lecture on "Evaluation and Introduction of Nanotechnology", CSIR Sponsored seminar on Emerging Applications of Nanofluids in Mechanical Engineering, K.S.Rangasamy College of Technology, Erode, 15.03.2011.
47.	Delivered Keynote address on "Recent Trends in IC Engine" at National Level Students Technical Symposium, Technothrist-11, A.V.C. College of Engineering, Mayiladuthurai, 25.02.2011.
48.	Delivered a Lecture on "Flexible fuel vehicles", DST Sponsored seminar on Flexible Fuel Vehicle, Kongu Engineering College, Perundurai, Erode, 29.10.2010.
49.	Delivered a Lecture on "Renewable Energy" at National Power Training Institute, Neyveli, 28.06.2010.

XV. LIST OF SHORT TERM COURSES ORGANIZED:

Sl. No.	Details of Short Term Courses/Faculty Development Program Organized
1.	Coordinator for a workshop on Combustion Generated Pollution Control, conducted at National Institute of Technology, Tiruchirappalli, during 16-20, Dec, 2019.

2.	Coordinator for a workshop on Biofuels and Combustion Research, sponsored by Technical Education Quality Improvement Program -II, Government of India, conducted at National Institute of Technology, Tiruchirappalli, during 26th Sep – 01st Oct, 2016.
3.	Coordinator for a Short Term Course on Engine Research, under Self-Financed Category, conducted at National Institute of Technology, Tiruchirappalli, during 07-08, October, 2014
4.	Coordinator for a Faculty Development Program on Renewable Energy Technologies, under Self-Financed Category, conducted at National Institute of Technology, Tiruchirappalli, during 26-27, September, 2014
5.	Coordinator for a Short Term Course on Automotive Fuels and Emission, under Technical Education Quality Improvement Program -II, Government of India, conducted at National Institute of Technology, Tiruchirappalli, during 12-14, June, 2013
6.	Coordinator for a Work shop on "Recent trends in Alternative fuels and Emission Control Technologies in Internal Combustion Engines", under Technical Education Quality Improvement Program, Government of India, conducted at National Institute of Technology, Tiruchirappalli from 19-20, December, 2007
7.	Coordinator for a Q.I.P. - Short term course on "Energy Conservation Measures for Manufacturing and Process Industries", under Quality Improvement Program, Government of India, conducted at National Institute of Technology, Tiruchirappalli from 10-14, December, 2007
8.	Coordinator for a Q.I.P. - Short term training program on "Recent trends in IC Engine Testing and Analysis" under Quality Improvement Program, Government of India, conducted at National Institute of Technology, Tiruchirappalli from 9-14, February, 2007

XVI. LIST OF SHORT TERM COURSES ATTENDED:

Sl. No.	Details of Short Term Courses/Faculty Development Program Attended
1.	Proficiency Improvement Program on "Automotive Fuels and Emission" organized by The Automotive Research Association of India (ARAI), Pune, 04.03.2013 to 08.03.2013.
2.	Outbound Experiential Learning for Team building & Effective Group Dynamics, Adventure Zone, Madhurandhagam, 11.02.2013 to 12.02.2013.
3.	ISTE Workshop on Aakash for Education, Under the Mission on Education through ICT, Conducted by Indian Institute of Technology, Bombay from 10.11.2012 to 11.11.2012.
4.	MHRD Sponsored ISTE Workshop on "Thermodynamics in Mechanical Engineering" Under the Mission on Education through ICT, Conducted by Indian Institute of Technology, Bombay from 11.12.2012 to 21.12.2012.
5.	MHRD Sponsored ISTE workshop on "Heat Transfer", Under the Mission on Education through ICT, Conducted by Indian Institute of Technology, Bombay from 29.11.2011 to 10.12.2011.
6.	MHRD Sponsored ISTE Workshop on "Thermodynamics in Mechanical Engineering" Under the Mission on Education through ICT, Conducted by Indian Institute of Technology, Bombay from 14.06.2011 to 24.06.2011.

7.	AICTE-MHRD Sponsored Staff Development Program on "Quantitative Research techniques for Engineers and Researchers", Organized by Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli from 21.12. 2009 to 02.01. 2010.
8.	AICTE-MHRD Sponsored faculty Development Program on "Applied Mechanical Measurements" organized by Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli from 29.06.2009 to 11.07.2009.
9.	AICTE-MHRD Sponsored Faculty Development Program on "Recent Advances in Modelling and Simulation of Joining Materials", Organized by Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli From 29.12. 2008 to 10.01.2009.
10.	MHRD Sponsored Quality Improvement Program (QIP) on "Instructional Design and Delivery System", Organised by National Institute of Technical Teachers Training & Research, Chennai from 21.08.2008 to 27.08.2008.
11.	Low carbon Technologies for Decentralized Power Production, Indian Institute of Technology, Madras, Chennai, 17.03.2008 to 18.03.2008.
12.	Advanced Tools and Techniques for Research in Engineering Problems, AICTE-QIP sponsored. Department of Production Engineering, National Institute of Technology, Tiruchirappalli, 25.02.2008 to 29.02.2008.
13.	Instrumentation and Control Engineering – Pre-conference tutorial on SCILAB, National Institute of Technology, Tiruchirappalli, 27.12.2007.
14.	Burner Design for Clean and Efficient Combustion-BDCEC'07, Institute of Technology, Madras, Chennai, under the auspices of The Combustion Institute, Indian Section, 16.11.2007 to 17.11.2007.
15.	Recent Trends in Energy Management, The Institution of Engineers(India), Tiruchirappalli Local Centre, 12.10.2007 to 13.10.2007.
16.	Faculty Development Program on ANSYS, ACTIVE, ANSYS certified Training in Value Engineering, held at National Institute of Technology, Tiruchirappalli, 04.07.2007 to 13.07.2007.
17.	Trends in Industrial Measurements and Automation – Pre-conference tutorial on Nano, Neuro, Bio & info Technologies, Mems, Nems and Neuro surgery, National Institute of Technology, Tiruchirappalli, 04.01.2007.
18.	Introductory FLUENT" and "GAMBIT Training, FLUENT (India), Pune, 19.06.2006 to 23.06.2006.
19.	Energy Week Program, Energy Centre of Vellore Institute of Technology (VIT), Vellore and University of Applied Science, Aachen, Germany, 11.03.2004 to 13.03.2004.
20.	Computational Fluid Dynamics – The New Technology for the Future, Mahendra Engineering College, Namakkal with sponsorship from All India Council for Technical Education, New Delhi, 25.03.2004 to 26.03.2004.
21.	Solar Energy & other Renewable for Educational Institutions, TEDA, Chennai, 08.03.2003.

22.	Faculty Development Program on "Automobile Engineering", Arulmigu Kalasalingam College of Engineering, KrishnanKoil with Joint venture of Centre for Faculty Development, Anna University, Chennai, 24.11.2003 to 29.11.2003.
23.	Instructional Design and Delivery, Technical Teachers Training Institute (TTTI),Taramani, Chennai in association with J.J.College of Engineering and Technology, Tiruchirappalli, 11.11.2002 to 15.11.2002
24.	Renewable energy and Energy Conservation- Awareness and Strategies, Kumaraguru College of Technology, Coimbatore, Jointly with Anna University, Chennai, TEDA, Chennai, CII Coimbatore & CODISSA, 15.12.2001 to 17.12.2001.
25.	Sustainable Customerization for Sustainable Energy, Intermediate Technology Consultants(ITC) Rugby, UK Jointly with CEESAT, Regional Engineering College, Tiruchirappalli, 03.12.1998 to 05.12.1998.
26.	Solar Cooling and Heating Technology, Indian Institute of Technology (IIT,Madras), Chennai, 09.06.1997 to 13.06.1997
27.	Popularization of Music, Fine Arts and performing arts among Youth, Bharathidasan University, Tiruchirappalli, 23.09.1997.
28.	Inter-University Special Camping Program for Culturals, Tamilnadu NSS cell, NSS Regional Centre, Dept. of Youth affairs & Sports, Government of India along with Bharathidasan University, Tiruchirappalli, 14.08.1997 to 15.08.1997.

XVII. INNOVATIVE TEACHING LEARNING:

1. Prepared animation and videos to understand the complex mechanism such as Gear Box, Clutch, Differential, Anti-lock Brake systems, MPFI, GDI and CRDI Engine, Cooling and Lubrication systems, Airbag Safety systems, etc.
2. Simulation of IC Engine using Fluent.
3. Automobile engineering theory course is enriched with laboratory sessions.
4. Prepared power points presentations for Renewable Energy Systems such as Solar, Wind and Biomass.
5. Development of thermal engineering laboratory using modern Data Acquisition System.

XVIII. INVOLVEMENT IN LABORATORY DEVELOPMENT:

1. In-charge of the Automobile Engineering Laboratory from 2017 to till date.
2. In-charge of the Thermal Engineering Laboratory from 2006 to 2017.
3. Purchase Initiator for the following major equipments for Thermal Engineering Lab and Automobile Engineering Lab.

- Computerized Variable Compression Ratio Multi-Fuel Engine Test Rig. For IC Engine Research Lab.
- Multi-cylinder Petrol Engine with eddy current dynamometer
- Multi-cylinder Diesel Engine with eddy current dynamometer
- Twin cylinder diesel engine with electrical dynamometer
- Two Stroke Petrol Engine with eddy current dynamometer
- Single Cylinder Diesel Engine with eddy current dynamometer
- AVL Five Gas Emission Analyzer
- AVL Smoke Meter
- Fuel property testing equipments
- Noise Analyser
- Computerized Wheel Alignment and Balancing Machine
- BMW twin-power turbo inline 4 cylinder 2.0 litre diesel engine with 8 speed steptronic automatic transmission system
- Hyundai iRDE 4 cylinder 1.1 litre petrol engine powered car with automatic transmission system
- Computerized Single Cylinder CI Engine Test rig with National Instruments Data Acquisition System
- Automotive Emission Test Facility

4. Modernization of Thermal Engineering Laboratory and Automobile Engineering Laboratory by removal of obsolete items and development with modern equipment and layout from 2006 to till date.

XIX. DEVELOPMENT OF LABORATORY EXPERIMENTS:

Sl. No.	Name of the Experiment	Utilization
1.	Morse Test in Multi-cylinder Petrol Engine	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for UG and PG Project Work.
2.	Performance and Heat Balance Test on Twin Cylinder Diesel Engine	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.

3.	Emission Analysis using AVL Five Gas Analyser and Smoke Meter	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
4.	Measurement of Engine Smoke	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
5.	Study on Computerized Multi-fuel Variable Compression Ratio Engine with Data Acquisition System	Demonstration in Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
6.	Viscosity Measurement using Saybolt and Redwood Viscometer.	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
7.	Calorific Value Measurement using Bomb Calorimeter	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
8.	Flash and Fire Point Tests	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
9.	Performance, combustion characteristics of a VCR Engine	Regular Lab class for B.Tech. Mechanical, Chemical & ICE. This can also be used for Ph.D Research Work, UG and PG Project Work.
10.	Automotive Emission Measurement	Regular Lab class for B.Tech. Mechanical
11.	Performance and Emission Characteristics of Automobile / Agricultural Engines	Regular Lab class for B.Tech. This can also be used for Ph.D Research Work, UG and PG Project Work.
12.	Performance and combustion characteristics of a single cylinder SI Engine	Regular Lab class for B.Tech. This can also be used for Ph.D Research Work, UG and PG Project Work.
13.	Automotive Radiator Test Rig.	Regular Lab class for B.Tech. This can also be used for Ph.D Research Work, UG and PG Project Work.

14.	Engine Noise & Vibration Measurement	Regular Lab class for B.Tech. This can also be used for Ph.D Research Work, UG and PG Project Work.
15.	Computerized Wheel Alignment and Balancing Machine	Regular Lab class for B.Tech. This can also be used for Ph.D Research Work, UG and PG Project Work.

XX. VISIT TO THE INDUSTRIES:

Sl. No.	Details of Industrial Visit
1.	Factory Visits to Heavy Alloy Penetrator Project (HAPP), Tiruchirappalli, 2017
2.	Factory Visits to Railway Workshop, Ponmalai, Tiruchirappalli, 2014
3.	Factory Visit to Ordnance Factory (OFT), Tiruchirappalli, 2013
4.	Factory Visits to Bharat Heavy Electrical Limited (BHEL), Tiruchirappalli, 2012
5.	Factory Visit, Mahindra & Mahindra Two Wheeler Division, Indore, 2017, organized by SAE INDIA BAJA
6.	Factory Visit, Mahindra & Mahindra. Farm Equipment Division, Nagpur, 2014, organized by SAE INDIA BAJA
7.	Factory Visit, Continental Automotive Malaysia and Motosikal dan Enjin Nasional Sdn. Bhd (MODENAS), Malaysia Sdn Bhd, 2nd November, 2009
8.	Attended "Mission to Nokia" at Chennai on 15th February, 2007, organized by Confederation of Indian Industry (CII), Trichy Zone.
9.	Attended "Mission to Groundfos Pumps" at Chennai on 15th February, 2007, organized by Confederation of Indian Industry (CII), Trichy Zone.
10.	Laboratory visit to "Centre for Energy Studies", Indian Institute of Technology, Delhi on 21st and 22nd December 2007.
11.	Attended "Mission on Best Manufacturing Practices at Hyundai Motors, Sriperumpudur, on 24th November, 2006, organized by Confederation of Indian Industry (CII), Trichy Zone.
12.	Attended "Mission on Best Manufacturing Practices at Visteon Automotive systems" at Chennai on 24th November, 2006, organized by Confederation of Indian Industry (CII), Trichy Zone.
13.	Attended "Industrial Mission to SRF & Rane TRW Steering systems Limited", at Viralimalai on 21st April, 2006, organized by Confederation of Indian Industry (CII), Trichy Zone.
14.	Factory Visits to Thermal and Hydro Power Plants, Mettur, 1993

15.	Undergone inplant training at Cheran Transport Corporation Ltd., Coimbatore (10.06.7992 to 27.06.1992).
16.	Undergone vocational Training at The General Electric Company of India Ltd (GEC), Coimbatore (03.06.1991 to 13.06.1991)

XXI. EXTRA-CURRICULAR ACTIVITIES:

- Music Composer / Jingles for NIT-T Community Radio FM 90.8 MHz from 2016.
- Staff Advisor, Festember 2017, National Institute of Technology, Tiruchirappalli
- Coordinator for the State level Inter-collegiate cultural competitions "JIG JAZZ 98" held at J.J. College of Engineering and Technology, Tiruchirappalli (MARCH 1998)
- Coordinator for the State level Inter-collegiate cultural competitions "JIG JAZZ 01" held at J.J. College of Engineering and Technology, Tiruchirappalli (MARCH 2001)
- Coordinator for the State level Inter-collegiate cultural competitions "JIG JAZZ 02" held at J.J. College of Engineering and Technology, Tiruchirappalli (MARCH 2002)
- Coordinator for the State level Inter-collegiate cultural competitions "JIG JAZZ 03" held at J.J. College of Engineering and Technology, Tiruchirappalli (FEB 2003)
- Entertainment Program organized on New Year Eve at Kailasapuram Club, BHEL Township, Tiruchirappalli (31.12.2003)
- Coordinator for the State level Inter-collegiate cultural competitions "JIG JAZZ 04" held at J.J. College of Engineering and Technology, Tiruchirappalli (JAN 2004)
- Entertainment Program organized on New Year Eve at Kailasapuram Club, BHEL Township, Tiruchirappalli (31.12.2004)
- Playing Keyboard and Guitar, Rhythm Pad and Conducted various Orchestra from 1996 to 2006
- Worked for the production of an audio cassette on Lord Ayyappa, 1999
- Won "Best Singer Award" in the event Pattukku Pattu organized by SUN TV, 1997.

XXII. AWARDS, HONOURS:

- Distinguished Alumni Award 2017, Sri Krishna College of Technology, Coimbatore
- Biography Included in Marquis Who's Who in the World 2011 (28th Edition)
- “Green Environment Award”, National Institute of Technology, Tiruchirappalli, 2013.

Dr. V. ARUL MOZHI SELVAN

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Updated on 06.07.2022