

CURRICULUM VITAE

DR. V. ARUL MOZHI SELVAN

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Department of Mechanical Engineering,
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Date of Birth : 15.05.1972
Gender : Male
Nationality : Indian

QUALIFICATIONS:

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

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. M. Udayakumar, Professor, & Dr. R. B. Anand, Asso. Professor, Dept. of Mech.Engg., NIT-T.

SPECIALIZATION:

- Mechanical Engineering, Energy Engineering

AREA OF INTEREST:

- Biofuels & Engine Research
- Waste to Energy

- Renewable Energy
- Nanoparticle Additives
- Automobile Engineering

EXPERIENCE:

- Teaching & Research : 21 Years

EMPLOYMENT DETAILS:

1. Assistant Professor (AGP 8000) in Mechanical Engineering at National Institute of Technology, Trichy from 01.07.2011 to till date.
2. Assistant Professor (AGP 7000) in Mechanical Engineering at National Institute of Technology, Trichy from 01.07.2008 to 30.06.2011.
3. Assistant Professor (AGP 6000) in Mechanical Engg. Department at National Institute of Technology, Trichy from 29.03.2006 to 30.06.2008
4. Asst. Professor in Mechanical Engg. Department at J.J.College of Engineering and Technology, Trichy from 01.07.2002 to 28.03.2006.
5. Lecturer in Mechanical Engg. Department at J.J. College of Engg & Technology, Trichy from 01.07.1996 to 30.06.2002

PROFESSIONAL MEMBERSHIP:

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

REVIEWER IN INTERNATIONAL JOURNALS:

- Energy & Fuels, ACS (American Chemical Society) Publications
- Energy, Elsevier Publications
- Applied Energy, Elsevier Publications
- Renewable Energy, Elsevier Publications
- Chemical Engineering Communications, Taylor and Francis Publications
- Journal of Petroleum Technology and Alternative Fuels, Academic Journals Publications

PATENT:

- "Diesterol Nanofluids for Engine Emission Control" – Submitted to IPR, PFC, TIFAC (DST), Vishwakarma Bhawan, New Delhi, Under Review from 17.01.2011.

LIST OF PUBLICATIONS:

Sl.No.	Details of Papers Published in International/National Journals
1.	Arul Mozhi Selvan V , Mohit H. (2016) Experimental Investigation on Mechanical Properties of Chicken Keratin Fiber Reinforced Isophthalic Polymer Matrix Composite. <i>Indian Journal of Engineering</i> , 13(33), pp 371-378.
2.	Naresh Kumar Gurusala, V Arul Mozhi Selvan (2014) Effects Of Alumina Nanoparticles In Waste Chicken Fat Biodiesel On The Operating Characteristics Of A Compression Ignition Engine, <i>Clean Technology and Environmental Policy</i> , DOI 10.1007/s10098-014-0825-5.
3.	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, <i>Fuel</i> 130, pp 160–167
4.	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, <i>Applied Mechanics and Materials</i> , Vol. 592 – 594, pp 1481-1486
5.	P.Sethumadhavan, V.Arul Mozhi selvan (2014), Performance Evaluation of A Novel Low Cost Biogas System For Rural Application, <i>International Journal of Advanced Technology & Engineering Research (IJATER)</i> , Vol 4, Spec.Issue 2, pp 98-102
6.	Naresh Kumar Gurasala, Arul Mozhi Selvan,V. , Ajay Balan, Shreyas Athreya (2013), Optimization of Waste Chicken Fat Pre-Treatment Process for Biodiesel Production, <i>Transactions of SAE</i> , Paper No. 2013-32-9131, DOI: 10.4271/2013-32-9131
7.	Ramabalan,S., Pushparaj.T., Arul Mozhi Selvan, V. (2013) “Performance and Emission characteristics of CI engine fuelled with diesel and oxygenated fuel blends” <i>International Journal of Global Warming</i> , Vol. 7, No. 2, pp 173-183.
8.	Ramabalan,S., Pushparaj.T., Arul Mozhi Selvan, V. (2015) Performance Evaluation and Exhaust Emission of Diesel Engine Fuelled with CNSL Biodiesel. <i>Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</i> , Vo. 37, Issue 18, 2013-2019. DOI: 10.1080/15567036.2011.643343
9.	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. <i>Transactions of JSAE/SAE International</i> , Paper No. 20097120/2009-32-0120.
10.	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. <i>International Journal of Applied Engineering Research</i> , 4(9) , 1723–1738.
11.	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. <i>Energy & Fuels</i> , 23 , 5413–5422. (DOI:10.1021/ef900587h.)
12.	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. <i>Journal of Engineering and Applied Science</i> , 4(7) , 01-06.
13.	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. <i>International Journal of Power Engineering</i> , 1(2) , 99-113.

Sl.No.	Details of Papers Published in International/National Conferences
1.	H. Mohit and V. Arul Mozhi Selvan (2016), 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.
2.	C.N. Kowthaman and V. Arul Mozhi Selvan (2016), Evaluation of biogas production from waste microalgae, <i>International Conference on Waste Management, RECYCLE 2016</i> , Indian Institute of Technology Guwahati, Guwahati, 1-2, April, 2016.
3.	H. Mohit and V. Arul Mozhi Selvan (2016), Studies on Dry Leaves Fiber Reinforced Vinyl Ester Polymer Metal Matrix Nanocomposite, <i>4th International Conference on Nanoscience and Nanotechnology, COCHIN NANO 2016</i> , Cochin University of Science and Technology, Cochin, 20-23 February, 2016.
4.	H. Mohit and V. Arul Mozhi Selvan (2016), Experimental Investigation on Mechanical Properties of Chicken Keratin Fiber Reinforced Isophthalic Polymer Matrix Composites, <i>International conference on Trends in Industrial and Mechanical Engineering (ICTIME-2016)</i> , Maulana Azad National Institute of Technology, Bhopal, 4-16, February, 2016.
5.	H. Mohit and V. Arul Mozhi Selvan (2015), Investigations on Chicken Feather Fiber Epoxy Polymer Metal Composite, <i>International Conference on Nanomaterials for Energy, Environment, Catalysis and Sensors, ICNEECS-15</i> , Madurai Kamraj University, Tamilnadu, India, 11 - 12 December 2015.
6.	H. Mohit and V. Arul Mozhi Selvan (2015) , Studies on Chicken Fiber Reinforcement in Isophthalic Polymer Metal Matrix Nanocomposite, <i>XXVII IUPAP Conference on Computational Physics: CCP2015</i> , Indian Institute of Technology

	Guwahati, Guwahati, 2-5, December, 2015
7.	C.N. Kowthaman and V. Arul Mozhi Selvan (2015) Extraction and Characterization of Spirulina Platensis Oil for Bio-Diesel Production, <i>International Conference on Advances in Mechanical Engineering</i> , University College of Engineering, Anna University, Villupuram, 15-16 October 2015.
8.	H. Mohit and V. Arul Mozhi Selvan (2015) Studies on Structural Properties of Dry Leaves Fiber Reinforced Vinyl Ester Polymer Matrix Composites, <i>International Conference on Advances in Mechanical Engineering</i> , University College of Engineering, Anna University, Villupuram, 15-16 October 2015.
9.	H. Mohit and V. Arul Mozhi Selvan (2014) Mechanical Properties of Polymer and Metal Matrix Composites – A Review, <i>International Conference on Advance Design and Manufacturing</i> , National Institute of Technology, Tiruchirappalli, 5-7 December 2014.
10.	Naresh Kumar Gurusala, V. Arul Mozhi selvan (2014), Optimization of Biodiesel Production from Waste Chicken Fat Through Two-Step Catalyzed Process, <i>International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control</i> , Tiruchirappalli, 27- 29 September 2014.
11.	C.N. Kowthaman, V. Arul Mozhi selvan (2014), Microalgae & its Characteristics as a Potential Biofuel - A Review, <i>International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control</i> , Tiruchirappalli, 27- 29 September 2014.
12.	M. Kirubakaran, V. Arul Mozhi selvan (2014) Experimental Investigations On Algal Oil Production For A Sustainable Biofuel Feedstock, <i>International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control</i> , Tiruchirappalli, 27- 29 September 2014.
13.	Mohit, V. Arul Mozhi selvan (2014) A Review On Natural Fiber Reinforced Composites For Green Environment, <i>International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control</i> , Tiruchirappalli, 27- 29 September 2014.
14.	P.Sethumadhavan, V. Arul Mozhi selvan (2014) Experimental Investigations On Biomethanation As A Sustainable Waste Management Solution For Temples In India, <i>International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control</i> , Tiruchirappalli, 27- 29 September 2014
15.	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, <i>3rd International Conference on Materials for the Future - Innovative Materials, Processes, Products</i>

	<i>and Applications</i> , 06-08 November 2013.
16.	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, <i>Small Engine Technology Conference</i> , Taipei, 8-10, October 2013.
17.	Naresh Kumar Gurusala, Arul Mozhi Selvan V (2013) Experimental investigation on the solubility of e-diesel as a fuel for automobiles, <i>International Conference on Advances in Mechanical Engineering</i> , College of Engineering, Pune, 29-31, May 2013.
18.	Naresh Kumar Gurusala, Arul Mozhi Selvan V , “Experimental investigation on the solubility of e-diesel as a fuel for automobiles”, <i>International Conference on Advances in Mechanical Engineering</i> , College of Engineering, Pune. – Accepted for Presentation, 29-31, May 2013
19.	Yuyulsu Krishnan. K and Arul Mozhi Selvan V , “Experimental Investigation on the Vibration Exposure of Mini Truck Drivers”, <i>Advances in Mechanical Sciences AIMS-2013- CAE CONCEPTS</i> , Kumaraguru College of Technology, Coimbatore, 19 April, 2013.
20.	Krishna Chaitanya S and Arul Mozhi Selvan V , “Experimental investigation on heat transfer enhancement using nanofluids in automobile radiator”, <i>Advances in Mechanical Sciences AIMS-2013- CAE CONCEPTS</i> , Kumaraguru College of Technology, Coimbatore, 19 April, 2013.
21.	Naresh Kumar Gurusala and Arul Mozhi Selvan V , “Biodiesel production from waste chicken fat”, <i>Advances in Mechanical Sciences AIMS-2013- CAE CONCEPTS</i> , Kumaraguru College of Technology, Coimbatore, Accepted for Presentation, 19 April, 2013.
22.	T.Shivadhandayuthabani, M.Nachiappan, T.Thulasitharan, V.Arul Mozhi Selvan , “Effect of Muffler Design on Engine Noise” <i>National Conference on Advances in Mechanical Sciences</i> , Government College of Technology, Coimbatore, April 1st, 2011.
23.	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. <i>National conference on Energy Security for Rural Development (ESRD 2009)</i> , 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.
24.	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, <i>Small Engine Technology Conference (SETC 2009)</i> , Penang, Malaysia, November 2009. (This paper has also been published in the Transactions of JSAE/SAE International Paper No.20097120/ 2009-32-0120).
25.	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. <i>8th International Oil and Gas Conference and Exhibition, PETROTECH – 2009</i> , organized by Indian Oil, New Delhi, under the aegis of Ministry of power and natural gas, Government of India, January 11-15, 2009.
26.	Arul Mozhi Selvan,V. , Anand,R.B., Udayakumar,M.(2008) Stability and Performance Characteristics of Diesohol Using Biodiesel as Additive in Compression Ignition Engine. <i>International conference on Fascinating Advances in Mechanical Engineering-FAME'08</i> , Mepco Schlenk Engineering College, Sivakasi, December 11-13, 2008.
27.	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, <i>National conference on Contemporary Approaches in Design and Manufacturing (CADAM '06)</i> , A.C. Tech., Karaikudi, April 21-22, 2006.
28.	Arul Mozhi Selvan,V. and Udayakumar.R., (2005) Studies on Supercharging on a single cylinder Two-Stroke Petrol Engine. <i>19th National Conference on IC Engines and Combustion</i> , Annamalai University, Chidambaram, under the auspices of Combustion Institute (Indian Section), Dec 21-23, 2005.
29.	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. <i>Indian Chemical Engineering Congress, 53rd Annual Session of Indian Institute of Chemical Engineers, Calcutta</i> , Dec. 18 – 21, 2000.

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	Ongoing

RESEARCH GUIDANCE:

Sl. No.	Details of the Research Scholar	Research Area	Batch/Year of Admission	Status
1.	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	Completed Ph.D. Public Viva Voce on 27.02.2015
2.	P.Sethumathavan Roll No. 411911052	Experimental Investigation on Biowaste to Energy	January 2012 Part-Time External	Comprehensive Viva-Voce Completed
3.	M. Kirubakaran Roll No. 411913003	Experimental Investigation on the Working Characteristics of a Biofuel Engine	July 2013 Part-Time Oncampus	Comprehensive Viva-Voce Completed
4.	C.N. Kowthaman Roll No. 411114003	Studies on Algae as an Alternate Fuel for IC Engines	July 2014 Project Category	Comprehensive Viva-Voce Completed
5.	H. Mohit Roll No. 411114002	Experimental Investigations on Sugar Cane Fiber Reinforced Polymer Metal Matrix Composites	July 2014 Full-Time	Comprehensive Viva-Voce Completed
6.	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
7.	T. Prabhu, Roll no. 411915002	Experimental Investigations on waste plastic reinforced composites	July 2015 Part Time External	Course work Completed
8.	C. Pandi Selva Durai Roll No. 411915007	Experimental Investigations on Ceramic Reinforced Metal Matrix Nanocomposites	July 2015 Part Time External	Course work 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	Studying Course work

10.	Arumugam G, Roll No. 411916006	Experimental Investigation on Used Rubber Tyres to Energy Products	July 2016 Part Time External	Studying Course work
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	Studying Course work

List of M.Tech. Scholar Guidance:

Sl.No.	Name of the M.Tech. Scholar	Title of the Project	Year of Submission
1.	S. Sravan Kumar (211314031)	Experimental Investigation on Homogeneous Charge Compression Ignition Engine For Reduction of Emissions	2015-16
2.	Jay Prakash (211314018)	Experimental Investigation on Role of Nano Additives in Lubrication Oil	2015-16
3.	Unmesh Shukla (211313016)	Experimental Investigation of Performance Characteristics and Emission of Gasoline Alcohol Blends in SI Engine	2015-16
4.	Hari Om (211313028)	Effect of Nanolubricants on the Performance and Emission Characteristics of a CI Engine	2015-16
5.	Kisana M. Narnaware (211312013)	Studies on oil Extraction from Waste Chicken Fat using Solvent Extraction Method	2013-14
6.	Richu Zachariah (202312008)	Effects of Combustion Geometries on the Performance of a CI Engine Fuelled with Waste Chicken Fat Biodiesel	2013-14
7.	Richu Zachariah (202312008)	Effect of EGR & Catalytic Convertor on NOx Emissions of a CI Engine Fuelled with Waste Chicken Fat Biodiesel	2013-14
8.	Kisana M. Narnaware (211312013)	Impact of Diesel Particulate Matter on Exhaust Gas Recirculation on a Diesel Engine	2013-14
9.	Nithin Mathew George (202312023)	Production of Fuel From Used Railway Engine Oil Using Distillation and fuel	2013-14

		Characterization	
10.	Rajesh Kant Chand Mishra (211212025)	Analysis of Hand Transmitted Vibration During Tile Cutting Operation	2013-14
11.	S Krishna Chaitanya (211311003)	Numerical Analysis & Heat Transfer studies on the Performance of Flat Tube Radiator Using Nanofluids	2012-13
12.	Yuyulsu Krishnan K (211211009)	Experimental Investigation and Mathematical Modeling of Transmissibility variation on Mini Truck Drivers	2012-13
13.	S Krishna Chaitanya (211311003)	Experimental Study on Heat Transfer Enhancement Using Nanofluid in Automobile Radiator	2012-13
14.	Yuyulsu Krishnan K (211211009)	Experimental Investigation of Vibration Exposure for Mini Truck Drivers	2012-13
15.	Reni David (211310015)	Optimization of Biodiesel Production from Animal Fat	2011-12
16.	Reni David (211310015)	Fuel Spray Characteristics of Gasoline-Ethanol Blends of a MPFI System	2011-12
17.	Madhavarao Bitragunta (211209014)	Experimental Study of Emission Level Distribution from Light Duty Vehicles and Its Effects	2010-11
18.	D Vijaykuar (211309023)	Performance Analysis of Catalytic Converter	2010-11
19.	Sanoj Varghese (211309010)	Experimental Investigation on the Fuel Spray Behaviour of an SI Engine	2010-11
20.	Sanoj Varghese (211309010)	In –Cylinder Flow Analysis of an SI Engine	2010-11
21.	Madhavarao Bitragunta (211209014)	Testing and Analysis of Firework Emissions	2010-11
22.	D Vijaykuar (211309023)	Performance Analysis of Catalytic Converter	2010-11
23.	Raghu (211308012)	Numerical Analysis of Flow-Induced Vibration in an Elastically Mounted Circular Cylinder	2009-10
24.	Durga Mallik CH (MEA0601)	Design of Combustion Chamber for SI Engine to Enhance Turbulence Using CFD	2007-08
25.	G.Raghuraman	Analysis on fuel-Air Mixing Process of a semi-direct injected spark ignition engine.	2006-07
26.	B.Hariprasanna	Solar Heat Sheet for Air Heaters	2006-07
27.	G.Raghuraman	Analysis on fuel-Air Mixing Process of a manifold injected spark ignition engine.	2006-07

ADMINISTRATIVE EXPERIENCE:

Sl. No.	Post Held	Function	Duration
1.	Coordinator, Community Radio Station, NITT Radio FM 90.8 MHz	Content Creation, Studio Recording, Editing, Mastering and Broadcasting	2016 to till date
2.	Member, MS/Ph.D. Admission Committee	Centralised MS/Ph.D. Admission	2013 to till date
3.	Member, Department Administrative Council (DAC)	Department Activities	2012 to till date
4.	Staff Advisor, SAE INDIA Collegiate Club (BAJA & SUPRA)	Motivating and accompanying the students for co-curricular activities	2012 to till date
5.	Member, NIT Driving School	Planning and Maintenance	June 2014 to till date
6.	Time Table In-charge for Mechanical Engineering Department	Time Table Preparation	2006 to till date
7.	Thermal Lab In-charge (JJCET, NITT)	Maintenance of Lab for smooth functioning of the Lab & Classes	1996 to till date
8.	Coordinator, Board of Studies for Mech. Engg. Dept.	Up gradation of Syllabus	2006 to till date
9.	Member, Department Purchase Committee	Purchase of Lab Equipments	2006 to till date
10.	Member, Curriculum Development Committee	Up gradation of Syllabus	2011 to till date
11.	PAC Chairman, Mechanical Engg.	Class Committee Meeting and publication of result	July-Dec 2011- (III rd Semester) Jan-Apr 2012 (VIII th Semester)
12.	Stock Verification Officer, NITT	Stock Verification	2009-10, 2010-11, 2013-14
13.	AIEEE Central Counselling	B.Tech. Admission	2008-2011
14.	PG Counselling	M.Tech. Admission	2008-2011
15.	Member, Convocation Committee	Smooth conduct of Convocation	2008 to till date
16.	Member, Institute Day Committee	Distribution of Medals/Certificates	2008 to till date
17.	Member, Hospital Infrastructure Development Committee	Purchase of Medical	2009 to 2010

		equipments	
18.	Staff Advisor, Fine Arts (Music Club), NITT	Motivating and accompanying the students for extra-curricular activities	2007 to till date
19.	Faculty Advisor (Fine Arts Society) JJCET	Motivating and accompanying the students for extra-curricular activities	1996 to 2006
20.	Coordinator, JIG JAZZ (An inter-collegiate cultural festival)	Organizing inter-collegiate cultural festival	1998-2006
21.	Staff Advisor, Purchase of Musical Instruments (JJCET,NITT)	Purchase of Musical instruments	1996 to till date

INVITED / GUEST LECTURES DELIVERED:

Sl.No.	Details of Guest Lectures Delivered
1.	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, 15 th June 2016
2.	Delivered a Lecture on “Combustion Chemistry of SI Engine” at the Faculty Development Program, Anna University of Technology, Tiruchirappalli, 2 nd June 2016
3.	Delivered a Keynote Lecture on “Present and Future of Biofuels”, during Research Week 2016 Event at Gujarat Technological University, Ahmedabad, 21 st March, 2016
4.	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
5.	Delivered a Lecture on “Combustion In SI and CI Engines” at Bannariamman Institute of Technology, Sathiyamangalam, February, 2016
6.	Delivered a Lecture on “Automotive Fuels and Emission” at Kumaraguru College of Technology, Coimbatore, February, 2016
7.	Delivered a Lecture on “Waste Chicken Fat Biodiesel and Optimization of Production Process” at Pondicherry Engineering College, Pondicherry on 17 th December, 2015
8.	Delivered a Keynote Lecture on “Biofuels for Sustainable Energy” at the 3 rd National Conference on Systems, Energy and Environment, organized by Government College of Engineering, Kannur, Kerala, 10-11 September, 2015
9.	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
10.	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

11.	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 20 th September, 2014
12.	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 22 nd August, 2014
13.	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 18 th March, 2014
14.	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 18 th March, 2014
15.	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
16.	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
17.	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
18.	Delivered a guest lecture on “Alternate Fuels Present and Future”, National Level Technical Symposium, organized by Shivani Engineering College, Tiruchirappalli, 2012
19.	Delivered a Lecture on “Recent Trends on Biofuels”, A Southern Regional Railway seminar on “Green Energy, organized by Southern Railway, Tiruchirappalli, 25.11.2011
20.	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.
21.	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
22.	Delivered a Lecture on “Flexible fuel vehicles”, DST Sponsored seminar on Flexible Fuel Vehicle, Kongu Engineering College, Perundurai, Erode, 29.10.2010
23.	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.
24.	Delivered a Lecture on “Renewable Energy” at National Power Training Institute, Neyveli, 28.06.2010.

LIST OF SHORT TERM COURSES ORGANIZED

Sl. No.	Details of Short Term Courses/Faculty Development Program Organized
1.	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 26 th Sep – 01 st Oct, 2016.
2.	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
3.	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
4.	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
5.	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
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 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

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.

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.

INVOLVEMENT IN LABORATORY DEVELOPMENT:

1. In-charge of the Thermal Engineering Laboratory from 2006 to till date. The following major equipments are purchased for Thermal Engineering Lab during this period.
 - 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
 - Fully Automatic Bomb Calorimeter
 - Fuel property test equipments such as Saybolt Viscometer, Redwood Viscometer, Flash and Fire point Tester, Junkers Bomb calorimeter
2. Coordinating with NBA Accreditation for modernization of Thermal Engineering Laboratory such as new layout and removal of obsolete items from 2006 to till date.

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. Also 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. Also 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. Also 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. Also 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. Also 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. Also 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. Also 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. Also 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. Also used for Ph.D Research Work, UG and PG Project Work.

VISIT TO THE INDUSTRIES:

Sl. No.	Details of Industrial Visit
1.	Attended “Mission to Nokia & Grundfos Pumps” at Chennai on 15 th February, 2007, organized by Confederation of Indian Industry (CII), Trichy Zone.
2.	Laboratory visit of Centre for Energy Studies at Indian Institute of Technology, Delhi on 21 st and 22 nd December 2007.
3.	Attended “Mission on Best Manufacturing Practices at Hyundai Motors & Visteon Automotive systems” at Chennai on 24 th November, 2006, organized by Confederation of Indian Industry (CII), Trichy Zone.
4.	Attended “Industrial Mission to SRF & Rane TRW Steering systems Limited”, at Viralimalai on 21 st April, 2006, organized by Confederation of Indian Industry (CII), Trichy Zone.
5.	Undergone inplant training at Cheran Transport Corporation Ltd., Coimbatore (10.06.1992 to 27.06.1992).
6.	Undergone vocational Training at The General Electric Company of India Ltd (GEC), Coimbatore (03.06.1991 to 13.06.1991)
7.	Accompanied the B.Tech. Mechanical Engineering and Electrical Engineering Students to Ponmalai Railway Workshops, Ordnance Factory, BHEL, Rane Power Steering, Mettur Thermal and Hydro Power Plants.

EXTRA-CURRICULAR ACTIVITIES:

- 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.

AWARDS, HONOURS:

- Biography Included in Marquis Who's Who in the World 2011 (28th Edition)
- Biography included in International Biographical Centre, Cambridge, England in 2000 outstanding intellectuals of the 21st Century – 2011.
- “Green Environment Award”, National Institute of Technology, Tiruchirappalli, 2013.

DR. V. ARUL MOZHI SELVAN
