Name : Dr. SHAIK AMJAD

**Designation**: Professor

**Department**: Automobile Engineering

Mail ID : amjad s@vnrvjiet.in

Experience (in years): Teaching: 23 Research: 18

## 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1.	B.E., University College of Engineering, Osmania University, Hyderabad, India.	1997	Mechanical Engineering
2.	M.E., Madras Institute of Technology (MIT), Anna University, Chennai, India	2000	Automobile Engineering
3.	Ph.D., Anna University, Chennai, India.	2013	Automobile Engineering

## 2. Teaching and Learning:

- 2.1. Teaching Interests: Electric & Hybrid Vehicles, Alternative Fuels, Automotive Engines, Automobile Engineering and Automotive Pollution & Control,
- 2.2. Novel Teaching & Learning Techniques adopted: Flipped classroom & Learning by doing
- 2.3. Involvement in curriculum updating / Design: BoS member and syllabus revision

### 3. Co-curricular and Extra-Curricular Activities:

- 3.1. Interests and Hobbies: Reading papers, net surfing of latest technologies, updation of knowledge
- 3.2. CCA/ECA Organized: Projects and seminars coordination and labs updation
- 3.3. CCA/ECA participated: Sintillashunz, R&D show case, Stock Varification
- 3.4. Counseling and Mentoring Activity: Mentor
- 3.5. Committees involved in:

Department level: Member - BoS and In-charge - Major Project

Institute Level: Chairmen - Minority Cell, Member - Grievance Redressal

Committee, Member - Industry Institute Interaction Cell

### 4. Conference / Workshop / Seminar / Guest Lectures:

## 4.1 Conducted:

Sl.No.	Nature of activity	Funded agency	Amount sanctioned (Rs.)	Period
	Three day National Workshop on			04.12.2014
1.	"Alternative Fuels and Powertrain	TEQIP	70,000	_
	Systems"			06.12.2014
	Two day Faculty Development	QIS		19.10.2013
2.	Programme on "Research	Institutions	1,00,000	_
	Methodology"	Ongole		20.10.2013
3.	Two week Staff Development	AICTE	7.00.000	27.05.2012
3.	Programme (SDP) on "Automotive	New Delhi	7,00,000	-



	Ergonomics and Safety"			09.06.2012
	Two day National Seminar on	Бет		20.07.2012
4.	"Automotive Materials and	DST Navy Dallai	40,000	_
	Manufacturing"	New Delhi		21.07.2012
	Two day National Workshop on			23.09.2011
5.	"Hybrid & Fuel Cell Electric Vehicles	DST	30,000	23.09.2011
٥.	and Competing Automotive Power-	New Delhi	30,000	24.09.2011
	trains"			24.07.2011
	Two day National Seminar on			17.06.2011
6.	"Nanotechnology & Converging	CSIR	20,000	_
0.	Technologies in Automotive	New Delhi	20,000	18.06.2011
	Applications"			
_	Two week Staff Development	AICTE	1.00.650	21.11.2010
7.	Programme (SDP) on "Intelligent	New Delhi	1,99,650	- 04.12.
	Vehicle Initiatives"	3.6/ 4.1.1		2010
O	One and half year PG Diploma	M/s Ashok	1 27 500	2008-10
8.	Programme in "Automobile Sales and	Leyland Chennai	4,37,500	(Batch II)
	Service" for Ashok Leyland Engineers Two National Seminar on "Global	Chennai		
9.	Environmental and Energy Implications	CSIR	20,000	12.03.2010-
9.	of Plug-In Hybrid Electric Vehicles"	New Delhi	lew Delhi	
	Three day Training programme on			
	"Entrepreneurship Awareness Camp"	PSG-STEP		29.01.2010
10.	for final year Automobile Engineering	Coimbatore	10,000	_
	students of batch 2007-11	Commoutore		31.01.2010
	One and half year PG Diploma	M/s Ashok		•00= 00
11.	Programme in "Automobile Sales and	Leyland	5,80,000	2007-09
	Service" for Ashok Leyland Engineers	Chennai	- , ,	(Batch I)
	, , ,	Robert Bosch		
	Two day Training Draggemens on	Engineering		20.02.2009
12.	Two day Training Programme on "Vehicle Dynamics" for Engineers of	and Business	64,000	- 21.02.
12.	Robert Bosch	Solutions	04,000	2009
	Robert Bosch	Ltd.		2009
		Coimbatore		
	Two week Staff Development	AICTE		14.12.2008
13.	Programme (SDP) on "Plug-in Hybrid	New Delhi	1,99,650	- 27.12.
	Electric Vehicles"	1,0,, 20111		2008
				26.07.2008
		Robert Bosch		30.07.2008
	One day Training Programmes on	Engineering		31.07.2008
14.	"Vehicle Systems and Engine Testing"	and Business	2,00,000	09.08.2008
	for Engineers of Robert Bosch	Solutions		30.08.2008
		Ltd. Coimbatore		08.09.2008 10.09.2008
		Compatore		30.09.2008
	One day Workshop on "ISO –			30.09.2006
	9001:2000 Implementation Issues" for			
15.	supporting staff of both the PSG	ETC, PSGCT	40,000	24.01.2004
15.	College Technology and the PSG	Coimbatore	.5,550	251.200 /
	Polytechnic College			
	1 01,00011110 0011050	l .		1

#### 4.2 Attended:

- 1. Attended 12 weeks NPTEL-AICTE Faculty Development programme on "Introduction to Internet of Things" during January-April 2023.
- 2. Attended 12 weeks NPTEL-AICTE Faculty Development programme on "The Joy of Computing using Python" during July-October 2022.
- 3. Attended International Mobility Conference Sustainable Multi-Modal Mobility Ecosystem (SIIMC 2022) during 7<sup>th</sup> 9<sup>th</sup> September 2022 organised by SAEINDIA at Bengaluru.
- 4. Attended Phase III of the AICTE-ISTE sponsored online one week induction/refresher Program on Hybrid Energy Storage Systems-DPE from 19.05.2021 to 25.05.2021 organised by the Department of Electrical and Electronics Engineering, Pragati Engineering College, Surampalem, AP.
- 5. Attended one day Webinar on "Eride E mobility webinar" organized by department of Automobile Engineering, VNRVJIET, Hyderabad on 9th April 2021.
- 6. Attended two day national level seminar on "Characterization of Machinability Studies of Metal matrix Composites & Friction Stir Welding" organized by department of automobile Engineering, VNRVJIET, Hyderabad during 26-27 February 2021.
- 7. Attended one day Webinar on "After treatment Systems for BS VI Vehicles" organized by department of Automobile Engineering, VNRVJIET, Hyderabad on 24th February 2021.
- 8. Attended a five-day AICTE Training And Learning (ATAL) Academy Online FDP on "Electric Vehicles" held during 2nd to 6th November 2020 organised by Department of Mechanical Engineering, Hindustan Institute of Technology and Science, Chennai.
- 9. Attended AICTE sponsored online STTP on "Fuel Cell Technologies for Hybrid and Electric Vehicles" during 17.08.2020 to 22.08.2020 organized by Department of mechanical Engineering, Maharaj Vijayaram Gajapathi Raj College of Engineering (MVGRCE), Vizianagaram, AP, India.
- 10. Attended Webinar on "Preparing oneself for Industry 4.0" by Sri. Vemuri Venkata Ramana, Founder Director, Industry 4.0 Virtual Guild on 13.08.2020 organized by department of Mechanical Engineering, VNRVJIET, Hyderabad.
- 11. Attended AICTE sponsored online STTP "Introduction to Electric Vehicle; Opportunities and Challenges Case Studies" during 03.08.2020 to 08.08.2020 organized by Department of Electrical and Electronics Engineering of SAINTGITS College of Engineering, Kottayam, Kerala, India.
- 12. Attended a five day Online Faculty Development Program (FDP) on "Sustainable Mobility Solutions in the Indian Context" held during 27th to 31st July 2020 organised by Department of Automobile Engineering, VNRVJIET, Hyderabad.
- 13. Attended Webinar on "How to write winnable research proposals" by Dr. Uma Raghunarthan, Director, RFD (Research, Institutional and Faculty Development) AICTE on 28.07.2020 organized by department of Computer Science and Engineering and Research & Consultancy Center, VNRVJIET, Hyderabad in collaboration with CSI SC & IEEE CS SBC.

- 14. Attended one week workshop on "VNR Initiatives and Awareness on OBE (Outcome based Education)" from 06.07.2020 to 11.07.2020 organised by department of Computer Science and Engineering, VNRVJIET, Hyderabad.
- 15. Attended Webinar on "Scope in Automotive Industry" by Sunder Iyer, Research & Development ME, Rochester IT, USA, on 08.07.2020 organized by Department of Mechanical Engineering, MVSR Engineering College, Hyderabad.
- 16. Attended faculty development programme on "Digital Image Processing using MATLAB" during 23rd to 27th April 2020.
- 17. Attended a two day National Workshop on "Electric Vehicles and Ecosytem" held during 17th to 18th February 2020 organised by Department of Automobile Engineering, VNRVJIET, Hyderabad.
- 18. Attended 5-day faculty development programme on "Learning by Doing Python" during 18th to 23rd November 2020 conducted by Competency Development Centre (CDC), VNRVJIET, Hyderabad.
- 19. Attended 3rd edition of International Transportation Electrification Conference organized by SAEINDIA along with IEEE from 17th to 19th December 2019 at Bengaluru.
- 20. Attended 5-day faculty development programme on "Automation Studio Software" during 24th 28th September 2019 conducted by department of Mechanical Engineering, VNRVJIET, Hyderabad.
- 21. Three day TEQIP sponsored National Workshop on "Recent Trends and Research Opportunities in Manufacturing process" during 9<sup>th</sup> to 11<sup>th</sup> March 2016 organised by the Department of Automobile Engineering at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
- 22. Three day TEQIP sponsored National Workshop on "Alternative Fuels and Powertrain Systems" during 4<sup>th</sup> to 6<sup>th</sup> December 2014 organised by the Department of Automobile Engineering at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
- 23. Three day Faculty Development programme on "New Technologies in Automotive Industry" from 4<sup>th</sup> 6<sup>th</sup> August 2014 jointly organised by CII and Bosch Ltd., Bangalore.
- 24. Two day Faculty Development Programme on "Research Methodology" during 19<sup>th</sup> 20<sup>th</sup> October 2013 organised by QIS Institutions, Ongole.
- 25. Two day DST sponsored National Seminar on "Automotive Materials and Manufacturing" during 20<sup>th</sup> 21<sup>st</sup> July 2012 organised by Department of Automobile Engineering, PSG College of Technology, Coimbatore.
- 26. Two week AICTE Sponsored Staff Development Programme (SDP) on "Automotive Ergonomics and Safety" during 27<sup>th</sup> May to 9<sup>th</sup> June 2012 organised by the Departments of Automobile Engineering and Production Engineering at PSG College of technology, Coimbatore.
- 27. Four days Faculty Development Programme on "Automotive Electronics" organized by Robert Bosch Engineering and Business Solutions Ltd., Chennai during 13<sup>th</sup> 16<sup>th</sup> December 2011.

- 28. 16<sup>th</sup> Asia pacific Automotive Engineering Conference (APAC16) on "Sustainable Technologies for Safe and Smart Mobility" organized by APAC Member Societies and SAE INDIA during 6<sup>th</sup> 8<sup>th</sup> October 2011 at Chennai.
- 29. Two day DST sponsored National Workshop on "Hybrid & Fuel Cell Electric Vehicles and Competing Automotive Power-trains" during 23<sup>rd</sup> 24<sup>th</sup> September 2011 organised by Department of Automobile Engineering, PSG College of Technology, Coimbatore.
- 30. Two day CSIR sponsored National Seminar on "Nanotechnology & Converging Technologies in Automotive Applications" during 17<sup>th</sup> 18<sup>th</sup> June 2011 organised by Department of Automobile Engineering, PSG College of Technology, Coimbatore.
- 31. Two week AICTE Sponsored Staff Development Programme (SDP) on "Intelligent Vehicle Initiatives" during 21<sup>st</sup> November to 4<sup>th</sup> December 2010 organised by the Departments of Automobile Engineering and Production Engineering at PSG College of technology, Coimbatore.
- 32. Two day CSIR sponsored National Seminar on "Global Environmental and Energy Implications of Plug-In Hybrid Electric Vehicles" during 12<sup>th</sup> 13<sup>th</sup> March 2010 organised by Department of Automobile Engineering, PSG College of Technology, Coimbatore.
- 33. One day workshop on "Writing up for Thesis and Publications" on 12<sup>th</sup> September 2009 organised by Department of English, PSG College of Technology, Coimbatore.
- 34. Two day national conference on "Emerging Areas in Thin Film Science and Technology Focal Theme: MEMs and Nanotechnology" during13<sup>th</sup> 14<sup>th</sup> February 2009 organised by Department of Physics, PSG College of Technology, Coimbatore.
- 35. One day workshop on "Communication Skills" on 7<sup>th</sup> February 2009 organised by Department of English, PSG College of Technology, Coimbatore.
- 36. One day workshop on "How and Why of Value Education" on 6<sup>th</sup> February 2009 organised by PSG ETC, PSG College of Technology, Coimbatore.
- 37. Two week AICTE Sponsored Staff Development Programme (SDP) on "Plug-in Hybrid Electric Vehicles" during 14<sup>th</sup> 27<sup>th</sup> December 2008 organised by the Departments of Automobile Engineering and Production Engineering at PSG College of technology, Coimbatore.
- 38. One day Indo-German workshop on "Microsystems for Automotive and Machine Tool Industries" on 13<sup>th</sup> February 2008 organised by Department of Mechanical Engineering, PSG College of Technology, Coimbatore.
- 39. Three day International Mobility Conference (SIIMC 2008) on "Emerging Automotive Technologies Global and Indian Perspective" during 9<sup>th</sup> 11<sup>th</sup> January 2008 organised by SAEINDIA.
- 40. Two day national conference on "Modeling, Simulation and Organisation of Mechanical Systems" during 23<sup>rd</sup> 24<sup>th</sup> August 2007 organised by Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore.
- 41. Three day International Conference on "Automotive Electronics and Intelligent Vehicle Initiative" during 16th to 18th August 2007 organised by Consortium of Electronic Industries of Karnataka (CLIK) and SAEINDIA.
- 42. Conference on "Urban Mobility" on 20<sup>th</sup> July 2007 organised by Confederation of Indian Industries (CII), Chennai in Collaboration with Michigan University, Chicago.

- 43. Two day Training Programme on "AMESim Software" organised by Department of Automobile Engineering at PSG College of Technology, Coimbatore during 23<sup>rd</sup> 24<sup>th</sup> April, 2007.
- 44. Two day National Workshop on "Inculcating Open Source Software Development and its uses in Multi-disciplinary Engineering Domains" organised by Open Source Initiative Department of Computer Science and Engineering, PSG College of Technology, Coimbatore during 8<sup>th</sup> -9<sup>th</sup> March, 2007.
- 45. One day Faculty Development Training Programme on "Manufacturing Engineering" organised by PSG College of Technology, Coimbatore on 27<sup>th</sup> January, 2007.
- 46. Two day Seminar on "Auto-MEMS (Application of Micro-Electro Mechanical Systems in Automobile)" organised by Department of Mechatronics at Kongu Engineering College, Perundurai during 19<sup>th</sup> 20<sup>th</sup> January, 2007.
- 47. One day Seminar on "ISO / TS 16949 Automotive Standard" at PSG Institute of Management, Coimbatore on 8<sup>th</sup> December, 2006.
- 48. Two day Training Programme on "AMESim Software" organised by Department of Automobile Engineering at PSG College of Technology, Coimbatore during 6<sup>th</sup> 7<sup>th</sup> November, 2006.
- 49. One day Training Programme on "Low Cost Automation" organised by Department of Mechanical Engineering at PSG College of Technology, Coimbatore on 25<sup>th</sup> October, 2006.
- 50. Two day national level Training Programme on "Automotive Software Engineering Methodologies" at Vellore Institute of Technology, Vellore during 1<sup>st</sup> 2<sup>nd</sup> September, 2006.
- 51. One day Training Programme on "An Experience Sharing Session on Pedagogic Systems" held at PSG College of Technology, Coimbatore on 5<sup>th</sup> August, 2006.
- 52. One day Training Programme on "Design for Assembly Software" organised by Department of Mechanical Engineering at PSG College of Technology, Coimbatore on 31st March, 2006.
- 53. One day national level Workshop on "Automotive Electronics WAE 06" held at Kumaraguru College of Technology, Coimbatore on 11<sup>th</sup> March, 2006.
- 54. One day Workshop on "Increasing your chances of successful publication in academic journals" conducted by PSG Institute of Management and PSG College of Technology, Coimbatore.
- 55. One day Workshop on "Research Methodology for College Teachers" organised by ETC, PSG College of Technology, Coimbatore on 3<sup>rd</sup> December, 2005.
- 56. Two week AICTE sponsored Faculty Development Programme (FDP) on "Applications of CAD/CAM/CAE and IT in Product Development and Discrete Manufacturing" organised by Department of Production Engineering at PSG College of Technology, Coimbatore during 6<sup>th</sup> 19<sup>th</sup> November 2005.
- 57. One day Training Programme on "Interfacing of sensors & Transducers" organised by Department of Mechanical Engineering at PSG College of Technology, Coimbatore on 7<sup>th</sup> August, 2005.

- 58. One day Workshop on "Internal Quality Auditor Training (ISO 9001)" organised by PSG Institute of Management and PSG College of Technology, Coimbatore on 6<sup>th</sup> August, 2005.
- 59. Two day national level Seminar on "Automotive Electronics" at M.S.Ramaiah School of Advanced Studies, Bangalore during 28th 29th January, 2005.
- 60. Two week AICTE sponsored Short Term Training Programme (STTP) on "Emission Control Measures and Techniques for Automobiles" at Kongu Engineering College, Perundurai during 28th November to 11th December, 2004.
- 61. Two day national level Conference on "TELE TRANS 2004 Telematics in transportation" organised by CII at Chennai during 6<sup>th</sup> 7<sup>th</sup> September, 2004.
- 62. Three day national level Workshops on "Developments in the Automotive Technologies" Organised by SAEINDIA Southern Section at IITM, Chennai during 11<sup>th</sup> 13<sup>th</sup> June, 2004.
- 63. Four day national level Training Program on "Renewable Energy Technologies" organised by MNES at PMCTW, Vallam, Thajvur during 23<sup>rd</sup> 26<sup>th</sup> February, 2004.

## 5. Academic Contribution and Research & Consultancy:

## **5.1. Invited Lectures:**

- 1. Guest lecture on "Hybrids to Plug-in Hybrids For a Sustainable Future" in a five-day Faculty Development Program on "Fuel powered, Hybrid Electric and Modern Vehicles" held during 19<sup>th</sup> to 24<sup>th</sup> July 2021 Organized by the Department of Automobile Engineering, VNRVJIET, Hyderabad.
- 2. Guest lecture on "Advancements on Alternative Powertrain Technologies" in a five-day National level Online Workshop on "Emerging Trends in Thermal Engineering" held on 3rd May 2021 Organized by the Department of Mechanical Engineering at Sree Chaitanya College of Engineering, Thimapur.
- 3. Conducted a session on Career in Engineering Streams as part of A Career Workshop on 19th August 2020 for Oakridge International School, Hyderabad.
- 4. On 27th July 2020, delivered invited talk on "Electric and Hybrid Vehicles" in a five day Online Faculty Development Program (FDP) on "Sustainable Mobility Solutions in the Indian Context" held during 27th to 31st July 2020 organised by Department of Automobile Engineering, VNRVJIET, Hyderabad.
- 5. On 18th February 2020, delivered invited talk on "Alternative Powertrains for Automobile" in a two day National Workshop on "Electric Vehicles and Ecosytem" held during 17th to 18th February 2020 organised by Department of Automobile Engineering, VNRVJIET, Hyderabad.
- 6. Training programme to R&D Team, ECD Department, Hyundai Motors Ltd., Hyderabad) on "Electric Vehicle and Battery Technology" (Series of lectures for 5 days from 14th May to 27th August 2019.
- 7. "Advances in Automobile Engineering and Hybrid Vehicles" on 29th January 2017, on the occasion of World's Automobile Day at Eswar College of Engineering, Narasaraopet.

- 8. "Electrification of Powertrain Systems" on 5th December 2014, in connection with TEQIP sponsored three day National Workshop on "Alternative Fuels and Powertrain Systems" held during 4th to 6th December 2014 at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
- 9. "Alternative Powertrains for Automobile" on 15th September 2014, in connection with Engineers' Day celebrations at Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh.
- 10. "Automotive Engine Sensors and Actuators" on 21st February 2013, in connection with CSIR sponsored two day national seminar on Mechatronics for Dual Fuel Technology in Automobiles at K. S. Rangasamy College of Technology, Tiruchengode.
- 11. "Fundamental Quantities" on 2nd February 2013 in connection with Vocational Training Programme for Associate Trainees at Daimler India Commercial Vehicles Private Limited, Chennai.
- 12. "Electrification of Powertrain Systems towards Zero Emission Vehicles" on 25th January 2013, in connection with the Institution of Engineers (IE), Coimbatore Chapter at PSG College of Technology, Coimbatore.
- 13. "Automotive Engines" on 22nd June 2012 to the engineers of Robert Bosch Engineering and Business Solutions Ltd., Coimbatore.
- 14. "Automotive Brake System" on 18th June 2012 to the engineers of Robert Bosch Engineering and Business Solutions Ltd., Coimbatore.
- 15. "Electrification of Powertrain Systems" on 16th March 2012, in connection with one day workshop on Electric and Hybrid Vehicles at Karpagam College of Engineering, Coimbatore.
- 16. "Hybrid Vehicle Technology" on 25th January 2012 in connection with CSIR Sponsored National Workshop on Recent Developments in Alternate Fuels at Coimbatore Institute of Engineering and Technology, Coimbatore.
- 17. "Braking and Steering System" on 15th December 2009, in connection with One credit course for the Departments of Mechatronics and Foundry Technology, PSG Polytechnic College, Coimbatore Development Programme on Plug-in Hybrid Electric Vehicles.
- 18. "Electrification of Powertrain Systems" on 15th December 2008, in connection with AICTE Faculty Development Programme on Plug-in Hybrid Electric Vehicles at PSG College of Technology, Coimbatore.
- 19. "Automotive Sensors and Actuators" on 26th December 2008, in connection with AICTE Faculty Development Programme on Plug-in Hybrid Electric Vehicles at PSG College of Technology, Coimbatore.
- 20. "Anti-lock Braking System" on 21st February 2008, in connection with Training Programme on Vehicle Dynamics to engineers of Robert Bosch Engineering and Business Solutions Ltd., Coimbatore.
- 21. "Powertrain System and Emission Testing" (8 days) during 26th, 30th & 31st July, 9th & 30th August, 8th, 10th & 20th September 2008, in connection with Training Programme on Vehicle Systems and Emission Testing to engineers of Robert Bosch Engineering and Business Solutions Ltd., Coimbatore.
- 22. "Special Lectures on Advances in Engine, Chassis and Transmission Systems" during 23rd to 24th November 2007, in connection with An Intensive Training programme on

- Basics of Automobile Engineering and servicing, organized by Continuing Education Cell at PSG College of Technology, Coimbatore.
- 23. "Special lectures on Automotive Electrical and Electronics" during 14th May to 3rd August 2007, in connection with Skill Development Programme on Auto Electrician, organized by PSG-STEP at PSG College of Technology, Coimbatore.
- 24. "Anti-Lock Braking system" on 8th June 2007, in connection with Training Programme to L&T Executives, Chennai at PSG College of Technology, Coimbatore.
- 25. "Automotive Sensors and Actuators" on 28th October 2006, in connection with Top Tech Programme organised by SAEINDIA southern section, Chennai to Executive Engineers at PROCOL, Coimbatore.
- 26. "Special Lectures on automotive topics" during 5th 14th May, 2005, in connection with Entrepreneurship Development Programme (EDP) Sponsored by Tamil Nadu State Council for Science and Technology, Chennai, organised by Department of Automobile Engineering, PSG College of Technology, Coimbatore.

## 5.2. Articles / Chapters published in Books: -

## 5.3. Books published as single author or as editor: -

## **5.4. Projects Guided:**

a) UG: 33 b) PG: 08

**5.5. Research Interests:** Electric/Hybrid/Solar vehicles, Alternative Fuels and Emission Control

#### 5.6. Ph.D students:

a) Enrolled: -b) Submitted: -c) Awarded: -

## 5.7. Papers published in reviewed Journals:

S.No	Title of the Paper	Journal Name Vol. No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Design and development of low-cost electric microcar for urban commute	SAE International Technical Paper No. 2022-28- 0332	ISSN 0148- 7191	Impact Factor: 0.64 / SJR H Index: 119	International
2	A low cost self- driven electric three wheeler with foldable ramp for physically	SAE International Technical Paper No. 2022-28- 0335	ISSN 0148- 7191	Impact Factor: 0.64 / SJR H Index:	International

	challenged persons			119	
3	Experimental investigation of argon gas induction on diesel engine performance and emission characteristics: A comprehensive study on de-NOx techniques	Process Safety and Environmental Protection, 152, pp. 471-481, 2021, Elsevier Publishers	ISSN: 0957-5820	Impact Factor: 6.158 / SJR H Index: 76	International
4	Design Considerations and Analysis of Electric Microcar for Cities	SAE International Technical Paper No. 2019-28- 0161	ISSN 0148- 7191	Impact Factor: 0.62 / SJR H Index: 107	International
5	Development and Testing of Electric Microcar for Indian Cities	SAE International Technical Paper No. 2019-28- 0008	ISSN 0148- 7191	Impact Factor: 0.62 / SJR H Index: 107	International
6	Recent trends on drivetrain control strategies and battery parameters of a hybrid electric vehicle	SAE International Technical Paper No. 2019-28- 0155	ISSN 0148- 7191	Impact Factor: 0.62 / SJR H Index: 107	International
7	Design Analysis and 3d Printing Of Non- Pneumatic Tyre	SAE International Technical Paper No. 2019-28- 0059	ISSN 0148- 7191	Impact Factor: 0.62 / SJR H Index: 107	International
8	Enhancement of Performance and Emission Characteristics of SI Engine Using Multi Ground Spark Plug With Alcohol Fuel Blends	SAE International Technical Paper No. 2019-28- 0154	ISSN 0148- 7191	Impact Factor: 0.62 / SJR H Index: 107	International
9	Implementation and evaluation of change-over speed in plug-in hybrid electric two wheeler	International Journal of Energy, Vol. 109, pp. 858- 865, 2016, Elsevier	ISSN: 0360-5442	Impact Factor: 7.147, SJR H Index: 193	International

		Publishers			
10	Experimental investigation of animal fat biodiesel blends on diesel engine	Pollution Research, Vol. 35 (4), pp. 73- 78, 2016, EM International	ISSN: 0257-8050	Impact Factor: 0.52 / SJR H Index: 23	International
11	Development of Range Extended - Solar Power Assisted Electric Vehicle	SAE International Technical Paper No. 2015-26- 0111, 2015	ISSN: 0148-7191	Impact Factor: 0.62 / SJR H Index: 107	International
12	The effect of sponge liner colors on the performance of simple solar stills	International Journal of Energy Sources Part A: Recovery, Utilization and Environmental Effects, Vol. 34, pp. 1984-1994, 2012, Taylor & Francis Publishers	ISSN: 1556-7036	Impact Factor: 3.447, SJR H Index: 45	International
13	Plug-in hybrid conversion of three wheeler using a novel drive strategy	International Journal of Alternative Propulsion, Vol. 2, No. 2, pp. 148-164, 2012, Inderscience Publishers	ISSN: 1741-8011	SJR H Index: 10	International
14	Modeling and simulation of plug-in hybrid electric two-wheeler for all-electric range requirements	SAE International Technical Paper No. 2011-28- 0002, 2011	ISSN: 0148-7191	Impact Factor: 0.62 / SJR H Index: 107	International
15	Assessment of petroleum saving and greenhouse gas emission reduction from two-wheeler segment: 2011–2021	International Journal of Transportation Research Part D, Vol. 16D, Issue 3, pp. 265-269, 2011	ISSN: 1361-9209	Impact Factor: 5.495, SJR H Index: 99	International
16	Impact of real world driving pattern and all-electric range on battery sizing and cost of plug-in	International Journal of Power Sources, Vol. 196, Issue 6, pp. 3371-	ISSN: 0378-7753	Impact Factor: 9.127, SJR H Index:	International

	hybrid electric two- wheeler	3377, 2011		302	
17	Evaluation of energy requirements for all- electric range of plug-in hybrid electric two-wheeler	International Journal of Energy, Vol. 36, Issue 3, pp. 1623-1629, 2011	ISSN: 0360-5442	Impact Factor: 7.147, SJR H Index: 193	International
18	Review of design considerations and technological challenges for successful development and deployment of plugin hybrid electric vehicles	International Journal of Renewable and Sustainable Energy Reviews, Vol. 14, Issue 3, 1104-1110, 2010	ISSN: 1364-0321	Impact Factor: 14.982, SJR H Index: 295	International
19	Diesel engine combustion simulation using computational fluid dynamics	AMAE International Journal on Production and Industrial Engineering, Vol. 1, Issue 1, pp. 17-21, 2010	ISSN: 2162-0016	-	International
20	A novel approach for energy management in plug in HEV	SAE International Technical Paper No. 2008-28- 0046, 2008	ISSN: 0148-7191	Impact Factor: 0.62 / SJR H Index: 107	International
21	Modeling and simulation of midsized electric car suitable for Indian driving conditions	National Journal of Technology, Vol. 6, No.2, pp. 63-69, 2010	ISSN: 0973-1334	-	National
22	Variable compression ratio engine: a future power plant for automobiles - an overview	Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, Vol. 221, No. 9, pp. 1159-1168, 2007	ISSN: 0954-4070	Impact Factor: 1.484, SJR H Index: 65	International

# **5.8. Papers presented at National / International Conferences:**

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Design and development of low-cost electric microcar for urban commute	SAEINDIA International Mobility Conference (SIIMC 2022)	International	2022
2	A low cost self-driven electric three wheeler with foldable ramp for physically challenged persons	SAEINDIA International Mobility Conference (SIIMC 2022)	International	2022
3	Design Considerations and Analysis of Electric Microcar for Cities	SAE International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'19)	International	2019
4	Development and Testing of Electric Microcar for Indian Cities	SAE International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'19)	International	2019
5	Recent trends on drivetrain control strategies and battery parameters of a hybrid electric vehicle	SAE International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'19)	International	2019
7	Design Analysis and 3d Printing of Non- Pneumatic Tyre	SAE International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'19)	International	2019
8	Enhancement of Performance and Emission Characteristics of SI Engine Using Multi Ground Spark Plug With Alcohol Fuel Blends	SAE International Conference on Advances in Design, Materials, Manufacturing and Surface Engineering for Mobility (ADMMS'19)	International	2019
9	Development of Range Extended - Solar Power Assisted Electric Vehicle	Symposium on International Automotive Technology (SIAT) 2015 Organised by ARAI	International	2015
10	Battery management system for hybrid/electric vehicles	4th National Conference on Integrated Engineering in Automobiles (NCIEA13), PSG College of Technology, Coimbatore, 2013	National	2013
11	Regenerative braking in plug-in hybrid electric	3rd National Conference on Integrated Engineering in	National	2012

	two wheeler	Automobiles (NCIEA12), PSG College of Technology,		
		Coinege of Technology,  Coimbatore		
12	Parallel hybrid electric scooter simulation	3rd National Conference on Integrated Engineering in Automobiles (NCIEA12), PSG College of Technology, Coimbatore	National	2012
13	Modeling and simulation of plug-in hybrid electric two-wheeler for all- electric range requirements	16 <sup>th</sup> Asia Pacific Automotive Engineering Conference (APAC16) on "Sustainable Technologies for Safe and Smart Mobility", Chennai	International	2011
14	Development of solar/battery electric auto rickshaw	National Conference on Energy Resources Planning and management, PSG College of Technology, Coimbatore	National	2011
15	Development of vehicle operated with compressed biogas	National Conference on Energy Resources Planning and Management, PSG College of Technology, Coimbatore	National	2011
16	Design and simulation of electromechanical brake system	2nd National Conference on Integrated Engineering in Automobiles (NCIEA11), PSG College of Technology, Coimbatore	National	2011
17	Design of a battery- ultracapacitor hybrid sources for electric vehicle	2nd National Conference on Integrated Engineering in Automobiles (NCIEA11), PSG College of Technology, Coimbatore	National	2011
18	Diesel engine combustion simulation using computational fluid dynamics	International Conference on Advances in Mechanical Engineering, AMAE, Trivandrum	International	2010
19	Design and Development of Control Strategy for Series Hybrid Electric Vehicle	3 <sup>rd</sup> National Conference on Intelligent and Efficient Electrical Systems, PSG College of Technology, Coimbatore	National	2009
20	A novel approach for energy management in plug in HEV	SAE INDIA International Mobility Conference (SIIMC 2008), New Delhi	International	2008
21	Variable compression ratio technology to enhance the engine efficiency by moving the crankshaft axis position	National Conference on modeling Simulation and Optimization of Mechanical Systems, MSOMS'07, Karpagam College of Engineering, Coimbatore	National	2007

# **5.9. Sponsored research Projects:**

S.No	Title	Agency	Period	Grant amount (Rs.)	Ongoing / Completed
1.	Development of Low- cost Plug-in Microcar and Investigation on Potential of Solar Power Assistance and Optimization of Battery Pack	SEB-SURE New Delhi	04.05.2023 - 03.05.2026	27,38,360	Ongoing
2.	Major Research project on "Development of Solar Power-Assisted Electric Vehicle and Investigations on Optimisation of Solar Panel with Battery Pack"	UGC New Delhi	01.02.2013	10,49,300	Completed
3.	Major Research project on "Development of Plug-in Hybrid Electric Two-Wheeler and Investigations for better Performance, Fuel Economy and Emission Characteristics"	UGC New Delhi	01.02.2011	10,63,700	Completed
4.	Villgro-Student Project on "Biomass Vehicle" through PSG-STEP	Villgro Nodal Centre	2010-11	47,000	Completed
5.	Villgro-Student Project on "Development of Plug-in Hybrid Auto Rickshaw using Wheel Hub Motors" through PSG-STEP	Villgro Nodal Centre	2009-10	57,500	Completed

## **5.10 Consultancy Projects:**

S.No	Title	Agency	Period	Sanctioned Amount (Rs.)	Ongoing / Completed
1.	Engine Testing	M/s. Roots Multiclean Limited, Coimbatore	05.01.2008	5,510	Completed
2.	Gear Box Testing	M/s. Shanti Gears Limited, Coimbatore	15.12.2006	14,974	Completed
3.	Gear Box Testing	M/s. Shanti Gears Limited, Coimbatore	24.06.2006	16,836	Completed
4.	Testing of Special Product in Engine Manifold	M/s. Roots Auto products Private Limited, Coimbatore	20.03.2006	5,510	Completed

#### 6. Awards / Honors received:

#### **Achievements:**

- 1. "Development of Electric Microcar" Awarded with **Gold Certificate** in International Innovation Fair 2019 organized by International Innovators Association (IIA) and Telangana State (TS) on 3rd December 2019.
- 2. Got **Best Student Innovator Award** for the student project guided "Development of Foldable Electric Bike" by ISTE TS on 13th Chapter Annual Convention and Awards 2018.
- 3. Got **TCS Best Student Project Award** for the student project guided "Development of Range Extended Solar Power Assisted Electric Vehicle", 2015.

#### **Reviewer:**

- 1. Anna University, Ph.D. and M.S. Thesis
- 2. International Journal of Renewable and Sustainable Energy Reviews, Elsevier Publishers.
- 3. International Journal of Electrical Power and Energy Systems, Elsevier Publishers.
- 4. International Journal of Energy, Elsevier Publishers.
- 5. International Journal of Applied Energy, Elsevier Publishers.
- 6. International Journal of Petroleum Technology and Alternative Fuels, academic Journals.
- 7. International Journal of Transportation Research Part D: Transport and Environment, Elsevier Publishers.
- 8. Journal of Vibration and Control, SAGE Publications Inc.
- 9. International Journal of Scientific Research and Essays, academic Journals.
- 10. The Arabian Journal for Science and Engineering, Springer Publishers.
- 11. International Journal of Physical Sciences, academic Journals.
- 12. Journal of Engineering and Technology Research, academic Journals.

## **Memberships:**

- 1. Member SAE (7180410049), Society of Automotive Engineers India (SAEINDIA)
- 2. Life Member (M-143487-4), the Institution of Engineers (India)
- 3. Life member (LM 57708), the Indian Society for Technical Education (ISTE)
- 4. Member (IAENG 205487), the International Association of Engineers

#### **Additional Information:**

- SAE Faculty Advisor at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
- Establishment of Vehicle Maintenance and Testing Laboratory at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
- Development of Electric and Hybrid Electric Vehicle Laboratory at PSG College of technology, Coimbatore.
- Coordinator for Awareness Programme on "Road Safety Patrol, Coimbatore during 15<sup>th</sup>

   17<sup>th</sup> march 2010.
- Coordinator for Skill Development Programme on "Auto Electrician" organized by PSG-STEP and sponsored by DST, New Delhi during 14<sup>th</sup> May to 3<sup>rd</sup> August 2007.
- Instructor for Service to Community on "Entrepreneurship Development Programme (EDP)" Sponsored by Tamil Nadu State Council for Science and Technology, Chennai
- Examiner / Question Paper Setter for Jawaharlal Nehru Technological University, Anna University (Chennai & Coimbatore), Karunya University, Satyabama University, Kalikut University, St. Peters University, Vinayaga Missions University and Karpagam University.
- Active organizing committee member in conferences / programmes / AutoXplode organized by the Department of Automobile Engineering in PSG College of Technology, Coimbatore.
- Acted as Judge / Chairman / Co-chairman for paper presentations and various student related competitions / activities.
- 7. Motto: Yad bhavam tad bhavati you become what you believe