

Dr. V. Vinodkumar M.E.,Ph.D



Contact

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SCI Journals: 04

Scopus Journals: 03

Other Journals: 06

h-index: 04

Patent: 01

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Scopus link:

<https://www.scopus.com/authid/detail.uri?authorId=57340417900>

Summary

A dedicated faculty with 13 years of academic experience as an Assistant Professor. Creative and industrious approach to building rapport with, and drawing excellence from, students. Applies curriculum development knowledge to assist colleagues and students in cultivating challenging educational courses.

Skill Highlights

- Auto CAD
- MS Office
- Fluent
- DoE

Education

Ph.D (Internal Combustion Engines)

(Jul 2018 – Apr 2023)

Sathyabama Institute of Science and Technology
(Deemed to be University)
Chennai, India

Master of Engineering (Internal Combustion Engineering)

Aug 2008 – Apr 2010

CGPA: 6.65/10 - First Class

College of Engineering, Guindy Campus, Chennai, India
Anna University

Bachelor of Engineering (Mechanical Engineering)

Jul 2002 – Apr 2006

Percentage: 70 % - First Class

Thangavelu Engineering College, Chennai, India
Anna University

H.S.C (Mathematics, Biology)

June 2001- April 2002

Percentage: 84.58 % - First Class

Government Higher Secondary School, Naickenpet
Kanchipuram

S.S.L.C

June 1999- April 2000

Percentage: 77.4 % - First Class

Government Higher Secondary School, Naickenpet
Kanchipuram

Academic Experience (13 Years & 3 months)

Assistant Professor-Selection Grade – Department of Automobile Engineering KCG College of Technology (Autonomous), Chennai, India

Mar 2024 - Present (1 Month)

- Created lesson plans and developed instructional materials covering required topics and learning objectives.
- Co-ordinator for Two Wheeler Skill Development Centre
- Admission Coordinator
- Involving in research for the reputed publication.

Assistant Professor - Department of Mechanical Engineering Chennai Institute of Technology (Autonomous), Chennai, India

May 2023 - Feb 2024 (9 Months)

- Created lesson plans and developed instructional materials covering required topics and learning objectives.
- Acting as a Placement coordinator.
- Involving in Incubation Cell for students' start-up.
- Involving in research for the reputed publication.

Assistant Professor - Department of Mechanical Engineering Sasi Institute of Technology and Engineering (Autonomous), Andhra Pradesh, India

Oct 2022 - May 2023 (7 Months)

- Coordinator for NAAC Criteria II and IIC
- Created lesson plans and developed instructional materials covering required topics and learning objectives.
- Engaged students in lectures by encouraging sharing of opinions and group interactions.
- Evaluated student progress, graded assignments and provided students with feedback.
- Participated in faculty meetings to discuss department goals and strategy.

Assistant Professor - Department of Mechanical Engineering Panimalar Institute of Technology, Chennai, India

Jun 2012 - July 2022 (10 Years and 1 Month)

- Coordinator for NAAC Criteria II and NBA Criteria V
- Created lesson plans and developed instructional materials covering required topics and learning objectives.
- Engaged students in lectures by encouraging sharing of opinions and group interactions.
- Evaluated student progress, graded assignments and provided students with feedback.
- Provided guidance for student thesis and dissertation work.
- Participated in faculty meetings to discuss department goals and strategy.
- Performed research in I.C Engines and published papers in reputed journals.

Lecturer - Department of Mechanical Engineering Anand Institute of Higher Technology, Chennai, India

Jan 2011 - Apr 2012 (1 Year & 3 Months)

- Created instructional and lecture plans for classes in compliance with course objectives.
- Tutored students requiring further assistance with learning concepts and course material.
- Engaged with students outside of lecture halls and classrooms through discussions and small group sessions.
- Used PowerPoint to develop visual, feature-rich presentations to engage students.

Lecturer- Department of Mechanical Engineering
SMK Fomra Institute of Technology, Chennai, India
July 2010 – Jan 2011 (6 Months)

- Created instructional and lecture plans for classes in compliance with course objectives
- Delivered course lectures using modern technology to enhance student comprehension

Industrial Experience (1 Year)

Piping Engineer

Petro Araldite Pvt Ltd, Chennai, India

Jan 2007 - Dec 2007 (1 Year & 0 Month)

- Reviewed contractors' schedules and submission of shop drawings and samples.
- Created 2D drawings according to GD&T standards.

Subjects Handled

Theory Subjects

Engineering Thermodynamics
Thermal Engineering
Heat and Mass Transfer
Advanced I.C Engines
Gas Dynamics and Jet Propulsion
Power Plant Engineering
Engineering Graphics
Engineering Mechanics
Process Planning and Cost Estimation
Fundamentals of Management

Laboratory Courses

Thermal Engineering Laboratory-I
Thermal Engineering Laboratory-II
Engineering Practices Laboratory
Fluid Mechanics and Machinery Laboratory
Manufacturing Laboratory-I
Computer Aided Drafting and Modelling
Laboratory

Project

Studies on the effect of higher alcohols on conventional and premixed combustion mode in a CI engine fuelled with biodiesel blend (**Ph.D Thesis Title**)

Experimental Analysis on LPG-Biodiesel dual fuel engine with Exhaust Gas Recirculation technique. (**PG Project**)

Numerical Flow simulation through a Nozzle Using Computational Fluid Dynamics. (**UG Project**)

Co-Curricular / Extra Curricular Activities

- Recognised supervisor for guiding Ph.D scholars of Anna University (**Ref.No : 4320003**)
- Involved in NBA (Criteria-V) and NAAC (Criteria-II) work.
- Recognition as a mentor for the NPTEL online certification course for Engineering Thermodynamics (Jan-Mar 2017)
- Delivered a lecture in the Anna University approved FDTP Programme on ME 6502 – Heat and Mass Transfer which was conducted by Panimalar Engineering College from 30.05.2016 to 07.06.2016.
- Delivered a lecture in the Anna University approved FDTP Programme on ME 6301 – Engineering Thermodynamics which was conducted by Panimalar Engineering College from 25.05.2015 to 02.06.2015 .

- Conducted Symposium and Faculty Development Training Program.
- Acting as a coordinator for Design and fabrication project.
- Overall department attendance coordinator for Anna University web portal entry.

Publications

Web of Science/SCI Journals

1. **V. Vinodkumar**, A. Karthikeyan, J. Jayaprabakar, G. Senthil Kumar, L. Ranganathan, ‘**Optimization of port injection of n-decanol in a PCCI engine using response surface methodology**’, Heat Transfer (2023). **(Web of Science/ESCI, Q2)**
2. G. Senthilkumar, **V. Vinodkumar**, T. Mayavan, G. Rathinasabapathy, G. David Amos, ‘**Optimization of process parameters for a solid-state-welded AISI joint with the GRG reinforced response surface methodology**’, Materials and Technology 57 (2023) 5. **(SCI Indexed, Q3, IF: 0.65)**
3. **Vinodkumar V**, Karthikeyan A (2022), ‘**Effect of manifold injection of 1-hexanol on a reactivity controlled compression ignition engine fuelled with neem oil methyl ester blend**’, Environmental Progress & Sustainable Energy. **(SCI Indexed, Q2, IF: 2.824)**
4. **V. Vinodkumar**, A. Karthikeyan, ‘*Effect of manifold injection of n-decanol on neem biodiesel fuelled CI engine*’, Energy 241 (2022) 122856. **(SCI Indexed, Q1, IF: 9.0)**

Scopus Journals

5. **Vinodkumar Vajravel**, Karthikeyan Alagu (2022), ‘**Influence of ternary fuel blends of decanol/neem oil biodiesel/diesel on combustion, emission and performance characteristics of an unmodified diesel engine**’, International Journal of Ambient Energy. **(Scopus Indexed, Q2)**
6. G. Puthilibai, B. Prabhu, **V. Vinodkumar** et al., (2022), ‘**Study on the impact of twisted tapes on the water temperature enhancement in solar water heater**’, Materials Today: Proceedings. **(Scopus Indexed, Q2)**
7. **Vinodkumar V**, Karthikeyan A (2021), ‘*Effect of ternary fuel blends on performance and emission characteristics of single cylinder diesel engine*’, Journal of physics-Conference Series 2054 012007. **(Scopus Indexed)**

UGC/Other Journals

8. **Vinodkumar V**, Hariharan J, Gowrishankar M, Kamalesh T, Kailash K, (2021), ‘*Design and analysis of disc brake rotor for all terrain vehicles*’, International Research Journal of Engineering and Technology (IRJET), Volume 8, e-ISSN: 2395-0056.
9. B Dhanasakkaravarthi, K Balasubramanian, I Paul Thiophilus, **V Vinod Kumar**, S Santhosh Kumar (2018), ‘*Design and Analysis of an Off-Set fin in a radiator*’, International Journal of Advance Engineering and Research Development, Volume 5, e-ISSN (O): 2348-4470.
10. B. Dhanasakkaravarthi, K. Balasubramanian, **V. Vinodkumar**, S. Santhosh Kumar, V. Sharun (2018), ‘*Design and Analysis of Flange in Stainless Steel Exhaust Manifold*’, International Journal of Advance Engineering and Research Development, Volume 5, e-ISSN (O): 2348-4470.
11. R. Vigithra, N. Nithyanandan, **V. Vinod Kumar**, B. Prabhu (2016), ‘*Designing Industrial Robots Using Automated Guided Vehicle*’, Australian Journal of Basic and Applied Sciences 10 (1), 124-128.

12. R. Vigithra, K. Rajakarthykeyan, G. Senthil Kumar, **V. Vinodkumar** (2016), '*Performance analysis of catalytic degradation of waste plastic into fuel oil*', International Research Journal of Engineering and Technology (IRJET), Volume 3, e-ISSN: 2395-0056
13. **Vinodkumar V**, Ranganathan L, Joseph Manuel D (2015), '*Experimental Analysis on LPG-Jatropha Dual Fuel Engine*', Journal of Mines, Metals and Fuels, Special Edition-Mechanical Engineering Volume I, ISSN 0022-2755.

Patent Publications

1. **V.Vinodkumar**, R. Sathiyamoorthi, Micheal Agnelo Browne, M. Suvaji (2024), '*Design and Fabrication of Sieving Machine For Segregate Materials*', Indian Pat.Appl, 202341073479.

National / International Conferences

2. **V.Vinodkumar**, L.Ranganathan, T.Anand, V.Velmurugan (2023), '*Effect of EGR and LPG addition on jatropha biodiesel fuelled CI engine*', International Conference on Advances in Additive Manufacturing Technologies, Chennai Institute of Technology, Chennai.
3. **Vinodkumar V**, Gokul B, Akash K, Akash B, Akash V (2021), '*Influences of Nano additive on performance and emission characteristics of CI engine powered by ternary fuel blend*', National Conference on Advanced Research in Mechanical Sciences, SRM Institute of Science & Technology, Vadapalani Campus, Chennai.
4. Hariharan J, Gowrishankar M, Kamalesh T, Kailash K, **Vinodkumar V** (2021), '*Design and analysis of disc brake rotor for all terrain vehicles*', Sixth International Conference on Innovative and Emerging Trends in Engineering and Technology, Panimalar Institute of Technology, Chennai.
5. **Vinodkumar V**, Karthikeyan A (2021), '*Effect of ternary fuel blend on performance and emission characteristics of single cylinder diesel engine*', International Conference on Advances in Thermal Engineering and Applications, SRM Institute of Science and Technology, Kattankulathur, Tamilnadu.
6. **Vinodkumar V**, Karthikeyan A, 2019, '*Experimental Investigation on Performance and Emission Characteristics of PCCI-DI Engine fuelled with LPG- Lemongrass Biodiesel*', Fourth International Conference on Innovative and Emerging Trends in Engineering and Technology, Panimalar Institute of Technology, Chennai.
7. **Vinodkumar V**, Ranganathan L, Joseph Manuel D (2015), '*Experimental Analysis on LPG-Jatropha Dual Fuel Engine*', International conference on Science Technology Engineering & Management, Jeppiaar Engineering College, Chennai.

FDP, Workshop, STTP & Certification Courses

1. Completed 4 weeks online course in Coursera (Nov-Dec 2023) on **Introduction to Data Analysis on Excel**.
2. Completed 6 weeks online course in Coursera (Nov-Dec 2023) on **Designing Learning Innovation**.
3. Completed 6 weeks online course in Coursera (Nov-Dec 2023) on **Speak English Professionally: In Person, Online & On the Phone**.
4. Participated in the AICTE recognized Short Term Course on **Recent Trends in Data Sciences** from 03.01.2022 to 08.01.2022 conducted by Anna University, Chennai.

5. Participated in the four days online International Faculty Development Programme on **Solar Energy Applications** from 14.07.2020 to 17.07.2020 conducted by Hindusthan College of Engineering and Technology, Coimbatore.
6. Participated in the Faculty Development Programme on **CFD Simulation and Thermal Management of Batteries and Power Converters** on 28.05.2020 conducted by Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai.
7. Participated in five day online FDP on **Engineering Thermodynamics Essentials** from 23.05.2020 to 27.05.2020 conducted by Sri Venkateswara College of Engineering, Sriperumpudur, Tamilnadu.
8. Participated in FDP on **Latex** from 14.05.2020 to 17.05.2020 jointly conducted by MIT College of Railway Engineering Research, Barshi and IIT, Bombay.
9. Participated in the AICTE recognized Short Term Course on **Entrepreneurial Opportunity Identification and Project Formulation in Service Sector** from 13.05.2019 to 17.05.2019 conducted by NITTTR, Chandigarh, India.
10. Completed 12 weeks NPTEL-AICTE FDP (Jan-Apr 2019) on **IC Engines and Gas Turbines** and Secured 61 %.
11. Participated in the AICTE recognized Short Term Course on **Industry 4.0 Standard through ICT** from 23.01.2019 to 25.01.2019 conducted by NITTTR, Chandigarh, India.
12. Participated in three days' workshop on **Recent Trends in Vehicle Dynamics & NVH Control** from 26.11.2018 to 28.11.2018 conducted by Panimalar Institute of Technology, Chennai.
13. Participated in ISTE approved FDP on **Human Values in Higher Education** on 17.12.2018 conducted by Panimalar Institute of Technology, Chennai.
14. Participated in ISTE approved FDP on **C.N.C Programming and Operations** on 28.06.2018 conducted by Panimalar Institute of Technology, Chennai.
15. Participated in ISTE approved FDP on **Design of Experiments using Minitab** on 27.06.2018 conducted by Panimalar Institute of Technology, Chennai.
16. Completed 12 weeks NPTEL course (Jul-Oct 2017) on **Engineering Thermodynamics** and Secured 72 %.

Personal Information

Name	: V. VinodKumar
Father's Name	: K. Vajravel
Date of Birth	: 05.06.1985
Nationality	: Indian
Gender	: Male
Marital Status	: Married
Languages Known	: Tamil, English
Passport Number	: P1350391
Date of Expiry	: 20.06.2026
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Declaration

I hereby declare that the above-stated information are genuine and correct to the best of my knowledge.

Yours truly

Place: Chennai, India

Date :

V.VINODKUMAR