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Present Position

Associate professor, Department of Automobile Engineering, Madras Institute of Technology, Anna University, Chennai from October-2012.

Present Additional Responsibility

- Assistant Director, Centre for Entrepreneurship Development, Anna University, Chennai from October-2014.

Previous Positions

- Assistant Professor, Department of Automobile Engineering, Madras Institute of Technology, Anna University, Chennai during October-2009 and October-2012.
- Lecturer Sr. Grade, Department of Automobile Engineering, Madras Institute of Technology, Anna University, Chennai during August-2008 and October-2009.
- Lecturer, Department of Automobile Engineering, Madras Institute of Technology, Anna University, Chennai during August-2003 and August-2008.
- Teaching Research Associate, Department of Automobile Engineering, Madras Institute of Technology, Anna University, Chennai during March-2002 and August-2003.

Previous Additional Responsibility

- Deputy Director, , Anna University, Chennai during September-2009 and May-2014.
- Deputy Warden, Boys Hostel, Anna University, Chennai during July-2008 and June-2010.
- Treasurer, MIT Student Cooperative Stores, Anna University, Chennai during October-2007 and November-2009.

Degree

- ❖ M.C.A., Bharathiar University (2000 - 2003).
- ❖ M.E. MADRAS INSITUTE OF TECHNOLOGY, ANNA UNIVESITY (2000 - 2002).

- ❖ B.E. in PRODUCTION ENGINEERING , P.S.G. College of Technology, Bharathiar University (1996 - 2000).

Research Degree

- ❖ Ph.D. in from Faculty of MECHANICAL ENGINEERING, MADRAS INSITUTE OF TECHNOLOGY, ANNA UNIVESITY (2002 - 2008).
Title: DESIGN AND FABRICATION OF QUARTER CAR MODEL TO STUDY THE PERFORMANCE OF ACTIVE SUSPENSION SYSTEM.

Area of Specialisation

- > ACTIVE SUSPENSION SYSTEM
- > AUTOMOTIVE ELECTRONICS

Membership in Professional Organization

- > ACME, SAE

Research Guidance

Number of Ph.D Scholars Guiding : 6
Number of M.E./ M.Tech. Projects : 44
Guided
Number of M.E./ M.Tech. Projects : 4
Guiding

Papers Published in Journals

Research Papers Published in International Journals : 8
Research Papers Published in National Journals : 0

1. P. Tamilporai, N. Baluswamy, P. Mannar Jawahar, S. Subramaniam, S. Chandrasekaran, K. Vijayan, S. Jaichandar, J. Janci Rani, K. Arunachalam, " Simulation and Analysis of Combustion and Heat Transfer in Low Heat Rejection Diesel Engine Using Two Zone Combustion Model and Different Heat Transfer Models", SAE Technical Paper, pp. 2003 - 01-1067 (2003).
2. K. Arunachalam, Mangalam Ravi and Mannar Jawahar P, "Mathematical Modeling and Performance Investigation of Active Suspension System Using Electronic Control", International Journal on Engineering & Technology, Vol. 1, Issue 3, pp. 46-52 (2006).
3. K. Kamalakannan, A. ElayaPerumal, S. Mangalaramanan, K. Arunachalam, " Performance Analysis and Behavior Characteristics of CVD (Semi Active) in Quarter Car Model", Jordan Journal of Mechanical and Industrial Engineering, Vol. 5, Issue 3, pp. 261-265 (2011).

4. K. Arunachalam, Lijin V. Jacob and K. Kamalanand, "Design and analysis of finite element based sensors for diagnosis of liver disorders using biocompatible metals", *Technology and Health Care*, Vol. 22, Issue 6, pp. 867 - 875 (2014).
5. K. Arunachalam, P. Mannar Jawahar, "Design of Walking Beam Pendle Axle Suspension System", *WASET - International Journal of Mechanical, Aerospace*, Vol. 8, Issue 9, pp. 1601 - 1604 (2014).
6. K. Arunachalam, P. Mannar Jawahar, "Conversion of Mechanical Water Pump to Electric Water Pump for a CI Engine", *WASET - International Journal of Mechanical, Aerospace*, Vol. 8, Issue 12, pp. 1959 - 1962 (2014).
7. S. Prabhakar, K. Arunachalam, "comfort enhancement of Semi-Active suspension with Bi-linear Optimal Control theory for different road profiles", *International Journal of Applied Engineering Research*, Vol. 10, Issue 15, (2015).
8. Dr. K. Arunachalam and G. Sundara Pandian, "Modeling and Analysis of Clutch Facing Made up of Biodegradable Coir Fibre Based Composite Material", *Polymers & Polymer Composites*, Vol. 24, Issue 7, pp. 463-468 (2016).

Papers Presented in Programmes

Research Papers Presented in International Programmes : 5
Research Papers Presented in National Programmes : 4

1. "Design optimization of Front axle for commercial vehicles" presented in a International level conference on International Conference on Computational Intelligence & Advanced Manufacturing Research , organised by Vels University, Chennai, India from 02-May-2014 to 03-May-2014.
2. "Optimization of steering system and linkage design for truck" presented in a International level conference on International Conference on Computational Intelligence & Advanced Manufacturing Research , organised by Vels University, Chennai, India from 02-May-2014 to 03-May-2014.
3. "Simulation and Analysis of Passive suspension system for different road profiles with variable damping and stiffness parameters" presented in a National level conference on National conference on Recent Trends and Developments in Sustainable Green Technologies, organised by Department of Automobile Engineering, MIT Campus, India from 24-Mar-2015 to 25-Mar-2015.
4. L. Prakash, K. Arunachalam, "Combined ride and handling model of a commercial vehicle with rigid suspension" presented in a National level conference on National conference on Recent Trends and Developments in Sustainable Green Technologies, organised by Department of Automobile Engineering, MIT Campus, India from 24-Mar-2015 to 25-Mar-2015.
5. "Optimisation of Eddy Current Braking Systems using Magnetic Fluids in Automobile" presented in a National level conference on National Conference on Research Trends in Mechanical Engineering, organised by Sri Ramakrishna Engineering College, Coimbatore, India from 10-Apr-2015.

6. K. Arunachalam, K. Sanjay , "Injector Optimization for HC Emission Reduction in 4 – Stroke SI Engine" presented in a National level conference on First National Conference on Emerging Trends in Mechanical and Automobile Engineering, organised by Srinivasa Institute of Engineering and Technology, India from 11-Apr-2015.
7. "Comparison of Mechanical and Thermal Properties of Clutch Facings made up of Kevlar49 / Epoxy resin and Biodegradable Coconut shell / coir / Epoxy resin composite materials" presented in a International level conference on International Conference on Civil, Mechanical and Environmental Engineering Technologies, organised by SVS College of Engineering, Coimbatore, India from 26-Feb-2016 to 27-Feb-2016.
8. "Special Maintenance Tools – Rear Axle" presented in a International level conference on International Conference on Civil, Mechanical and Environmental Engineering Technologies, organised by SVS College of Engineering, Coimbatore, India from 26-Feb-2016 to 27-Feb-2016.
9. B. Vivek Aravind, K. Arunachalam, "Modelling and Analysis of Clutch facing made up of Biodegradable coir based composite materials" presented in a International level conference on International Conference on Civil, Mechanical and Environmental Engineering Technologies, organised by SVS College of Engineering, Coimbatore, India from 26-Feb-2016 to 27-Feb-2016.

Programme Organized

1. Coordinator, National level seminar on "Recent Trends and Development in Automobile Engineering" from 13-Feb-2015 to 14-Feb-2015.

Programme Attended

1. Participated in a National level workshop on "Re-Engineering Teaching Skills" organized by Centre for Faculty Development, Anna University, Chennai, India from 06-Apr-2004 to 07-Apr-2004.
2. Attended a National level Short Course on "Refresher course in the subject Mechatronics" organized by Dept. of Production Engineering, MIT Campus, Anna University, Chennai, India from 22-Nov-2004 to 11-Dec-2004.
3. Attended a International level seminar on "National seminar on Electronic Engine Management System" organized by Dept. of Automobile Engineering, MIT Campus, Anna University, Chennai, India from 10-Mar-2006 to 11-Mar-2006.
4. Participated in a National level workshop on "One day workshop on Effective Teaching" organized by Centre for Empowerment of women, Anna University, Chennai, India from 16-Mar-2006.
5. Participated in a National level workshop on "Hands on workshop on Multi Body Dynamics / Simulation" organized by Prosim R&D Center, Bangalore, India from 10-Jan-2007 to 12-Jan-2007.

6. Attended a National level Short Course on "AICTE Sponsored SDP on Dimensional Management" organized by PSG College of Technology, Coimbatore, India from 12-Nov-2007 to 25-Nov-2007.
7. Attended a National level Short Course on "AICTE Sponsored SDP on Finite Element Analysis" organized by Dr. Mahalingam College of Engineering and Technology, Pollachi., India from 25-May-2008 to 07-Jun-2008.
8. Participated in a National level workshop on "Indo-German workshop on Advanced Technologies" organized by Department of Aeronautical Engineering, MIT Campus, Anna University, Chennai, India from 03-Dec-2009 to 04-Dec-2009.
9. Participated in a National level workshop on "Recent trends and developments in Engine Management Systems and Alternative Fuels" organized by Department of Automobile Engineering, MIT Campus, Anna University, Chennai, India from 22-Mar-2010 to 23-Mar-2010.
10. Attended a National level Short Course on "FDP on Fluid Mechanics and Machinery" organized by Department of Automobile Engineering, MIT Campus, Anna University, Chennai, India from 01-Jun-2011 to 08-Jun-2011.
11. Attended a National level Short Course on "ISTE Workshop on Thermodynamics in Mechanical Engineering" organized by IIT Bombay through Remote Centre of Anna University, India from 14-Jun-2011 to 24-Jun-2011.
12. Participated in a National level workshop on "Purchase Procedure Of Anna University" organized by Anna Institute of Management, Chennai, India from 29-Sep-2011 to 30-Sep-2011.
13. Attended a National level Short Course on "FDP on Finite Element Analysis" organized by Department of Production Technology, MIT Campus, Anna University, Chennai, India from 02-Dec-2011 to 08-Dec-2011.
14. Attended a National level Short Course on "FDP on Automobile Engineering" organized by Department of Automobile Engineering, MIT Campus, Anna University, Chennai, India from 03-Dec-2012 to 09-Dec-2012.
15. Participated in a National level workshop on "How to Write for and Get Published in Scientific Journals and Publish Manuscripts " organized by Department of Information Science and Technology, Anna University, Chennai, India from 29-Jan-2013.
16. Participated in a National level workshop on "Awareness Course on ISO 9001 : 2008" organized by Bureau Veritas, India from 12-Mar-2013.
17. Attended a National level Short Course on "FDP on Automotive Electrical and Electronics " organized by Department of Automobile Engineering, MIT Campus, Anna University, Chennai, India from 10-Jun-2013 to 16-Jun-2013.
18. Attended a National level Short Course on "ISTE Workshop on Engineering Mechanics" organized by IIT Bombay through Remote Centre of Anna University, India from 26-Nov-2013 to 06-Dec-2013.
19. Participated in a National level workshop on "IEEE Workshop on LaTeX" organized by Saveetha Engineering College, Chennai, India from 28-Feb-2014 to 01-Mar-2014.

20. Participated in a National level workshop on "Author Workshop on Book / Journal Publishing " organized by University Library, Anna University, Chennai, India from 29-Sep-2014.
21. Participated in a National level workshop on "Author Workshop on Book / Journal Publishing" organized by Springer & University Library, Anna University, Chennai, India from 17-Mar-2015.
22. Attended a National level Short Course on "DST sponsored two weeks FDP on Entrepreneurship" organized by P.S.G. College of Technology, Coimbatore, India from 18-May-2015 to 29-May-2015.
23. Attended a National level Short Course on "FDP on Engine and Vehicle Management" organized by MIT Campus, India from 08-Jun-2015 to 14-Jun-2015.

Experience Abroad

1. Visited Nagoya Institute of Technology, Hiroshima University, Tokyo Institute of Technology, JAPAN from 05-Mar-2009 to 15-Mar-2009. Purpose of visit :Study Tour.