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## Present Position

Professor, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai from December-2013.

## Present Additional Responsibility

- Additional Director, AU-FRG Institute for CAD/CAM, Anna University, Chennai from May-2014.

## Previous Positions

- Professor, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai from December-2013.
- Associate professor, , College of Engineering Guindy, Anna University, Chennai during December-2007 and December-2013.
- Assistant Professor, , College of Engineering Guindy, Anna University, Chennai during December-2003 and December-2007.
- Teaching Research Associate, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai during December-2000 and December-2003.

## Previous Additional Responsibility

- Head Of The Division, , Anna University, Chennai during March-2015 and January-2019.
- Ps To Vice Chancellor, Administrative Office, Anna University, Chennai during January-2006 and July-2012.

## Other Employment

- Lecturer, Amrita Institute of Engineering and Technology for 1 Year 6 Months.

## Degree

- ❖ M.E. in ENGINEERING DESIGN , Government College of Technology (GCT), Coimbatore, Bharathiar University (1997 - 1999).
- ❖ B.E. in MECHANICAL ENGINEERING , Government College of Technology (GCT), Coimbatore, Bharathiar University (1993 - 1997).

## Research Degree

- ❖ Ph.D. in Fracture Mechanics, Engineering Design from Faculty of Mechanical Engineering, College of Engineering, Guindy (CEG), Anna University (2001 - 2005).  
Title: Some Studies on Ratcheting in Pipe Bends.

## Area of Specialisation

- > New Product Design, Electro Magnetic Forming, Metal Matrix Composites

## Membership in Professional Organization

- > Life Member, ISTE
- > Member, ASME

## Research Guidance

Number of Ph.D Scholars Guided	: 3
Number of Ph.D Scholars Guiding	: 10
Number of M.E./ M.Tech. Projects Guided	: 43
Number of M.E./ M.Tech. Projects Guiding	: 5
Number of Ph.D Scholars Guiding as Joint-Supervisor	: 1

## Papers Published in Journals

Research Papers Published in International Journals	: 25
Research Papers Published in National Journals	: 1

1. M. Pradeep Kumar, K. Shanmuga Sundaram and A. Rajadurai, " Finite Element Analysis of Machining AISI1045 Steel with a Grooved Tool", Journal of Material Processing Technology , published by Elsevier. (2005).
2. K.Shanmuga Sundaram and G. Thanigaiyarasu, "Correlation of Test and FEA Results on Ratcheting Behavior in Pipe Bends", Journal of Manufacturing Technology Today, published by CMTI. pp. 8-12 (2005).
3. Rajiv, S., Shanmuga Sundaram K and Pablo Pasquale, "A Study and Analysis on Electromagnetic Compression Forming Processed Aluminum Alloy Tubes", Advanced Materials Research, published by Trans tech Publication. Vol. 337, pp. 560-563 (2011).

4. Rajiv, S., Shanmuga Sundaram, K and Pablo Pasquale, "Experimental Investigation and Analysis on Electromagnetic Compression Forming Processed Aluminum Alloy Tubes", Proceedings and publish the papers via the server of TU Dortmund's library of the 5th International Conference on High Speed Forming, Dortmund, German, pp. 73-82 (2012).
5. Rajiv, S., Shanmuga Sundaram K and Pablo Pasquale, "Experimental Investigation and Finite Element Analysis on Electromagnetic Compression Forming Processed Aluminum Alloy Tubes", Applied Mechanics and Materials, published by Trans tech Publication. Vol. 110, pp. 1706-1710 (2012).
6. Rajiv, S., Shanmuga Sundaram K and Narendran C, "Finite Element Analysis of Electromagnetic Compression Forming of Steel Tubes", Procedia Engineering, published by Elsevier. Vol. 38, pp. 2520-2524 (2012).
7. K.Gurusami, K.Shanmuga Sundaram, N.S.Azagarasan and Harish Gopal, " Experimental Investigation on Microstructure and Mechanical Properties of Nd-yAG laser treated Cp-Ti and Ni-Cr alloys for Dental Applicataion", Procedia Engineering, published by Elsevier. Vol. 64, pp. 1173-1182 (2013).
8. Rajiv, S., and Shanmuga Sundaram, K, "Experimental Investigation on Roll Forming of Aluminum Alloy AA6101 Tubes", Journal of Mechanical Engineering Research, published by Academic Journals. Vol. 5, Issue 1, pp. 21-25 (2013).
9. Rajiv, S., and Shanmuga Sundaram, K, "Experimental Investigation and Finite Element Analysis of the Roll Compression Forming of Aluminum Alloy Tubes", Advanced Science Focus, published by American Scientific Publisher. Vol. 1, Issue 1, pp. 1-3 (2013).
10. Arumugam P, Shanmuga Sundaram K, Kamala Kanna K, " Experimental study of electromagnetic sheet metal forming process", Procedia Engineering, published by 12th Global Congress on Manufacturing and Managem. pp. 277-290 (2014).
11. K.Gurusami, K.Shanmuga Sundaram, R.Gnanamoorthy, Velamurali, N.S.Azhagarasan, R.Vijay, G.Harish Gopal, "Experimental Study on Microstructure, Fracture Surface Characterization and Mechanical Properties of Nd: YAG Laser Surface Treated Commercially Pure Titanium and Cobalt-Chromium Alloy", International Journal of Applied Engineering Research, (2014).
12. G. Saravanan K. Shanmugasundaram.b, M.Prakash, A.Velayutham, "Tribological Behaviour of Hybrid (Al356 + SiC + Gr) Metal Matrix Composites", Applied Mechanics and Materials, (2014).
13. G. Saravanan, K. Shanmuga Sundram, M. Prakash, A. Velayutham, " Physical Properties and Associated Tribological Performance of Stir Cast Graphite based Hybrid Al-SiCp Composites", International Journal of Mechanical Sciences , (2014).
14. K. Shanmuga Sundaram, G. Saravanan, " Optimization of Machining Parameters in End Milling Process of Hybrid Aluminium Matrix Composites", International Journal of Earths Sciences and Engineering , (2014).
15. Velmurugan C, Saravanan G, Shanmuga Sundaram K, "Optimization of Machining Parameters in Milling of Hybrid Aluminium Metal Matrix Composites", IOSR Journal of Mechanical and Civil Engineering, pp. 88-92 (2014).

16. Dr. Shanmuga Sundaram Karibeeran, Mr. Prakash M, " Study on impact of CAD / CAM tools on production of punched cards by Indian silk saree designers for handloom industry ", Procedia CIRP, published by Elsevier. Vol. 17, pp. 818-823 (2014).
17. Rajiv Selvam, Shanmuga Sundaram Karibeeran and Million Merid, "Experimental Approach to Predict the Forming Limit in Aluminum Alloy Tubes with Electromagnetic and Roll Forming Process", Int. J. Mech. Eng. Autom., Vol. 2, Issue 11, pp. 491-496 (2015).
18. K. Shanmuga Sundaram, Yamini. S, "Study on mechanical behavior of natural fibre composite made using coir and aloe vera", International Journal of Emerging Technology in Computer Science and Electronics, published by ISSN: 0976-1353. Vol. 13, Issue 4, (2015).
19. G. Saravanan, K. Shanmuga Sundaram, "Influence of ageing temperature on mechanical properties and thermal expansion of aluminium hybrid composite", Revista Tecnica De La Facultad De Ingenieria Universidad Del Zulia, (2015).
20. K.Gurusami, K.Shanmuga Sundaram, R.Vijay, " Influence of Nd:Yag laser Shock Peening Process Parameters on Tribo-Mechanical Behaviour of Dental Cast Alloys", Journal of the Balkan Tribological Association, (2015).
21. Saravanan G, Shanmugasundaram K, " Microstructural and Mechanical behaviour of Aluminium Matrix Composites reinforced with coated SiC particles fabricated by Stir Casting", Applied Mechanics and Materials Journal , (2015).
22. G. Saravanan, K. Shanmuga Sundaram, "Influence of ageing temperature on mechanical properties and thermal expansion of aluminium hybrid composite", Rev. Téc. Ing. Univ. Zulia, Vol. 39, Issue 1, pp. 10-17 (2016).
23. Dhanalakshmi S, ShanmugaSundaram K, Balasubramanian M, Sivakumar P, "Elevated Temperature properties of Extruded Aluminium Matrix Composites Reinforced with Nickel Coated Silicon Carbide Particles", Research & Reviews: Journal of Materials Sciences, Vol. 10, (2017).
24. Dhanalakshmi Sathishkumar, S.Anand, K. Shanmuga Sundaram, and P. Siva Kumar, "Finite Element Analysis and Experimental study on the effect of extrusion ratio during hot Extrusion process of Aluminium Matrix Composites", Defence Science Journal, Vol. 67, Issue 4, pp. 428-436 (2017).
25. M. Jaivignesh, A. Suresh Babu S. Dhanalakshmi, K. Shanmuga Sundaram, "Evaluation of Mechanical Properties of Al (2014)-Nickel Coated SiC Composites Subjected to Equal Channel Angular Pressing", Journal of Advanced Microscopy Research, Vol. 13, pp. 1-11 (2018).
26. V Paranthaman, K Shanmuga Sundaram and A Vinoth Jebaraj, "Analysis of structure property relationship of super duplex stainless steel AISI 2507 weldments for severe corrosive environments", Materials Research Express, Vol. 5, Issue 9, (2018).

## Papers Presented in Programmes

Research Papers Presented in International Programmes	: 30
Research Papers Presented in National Programmes	: 12

1. P.Narendra Kumar, K.Shanmuga Sundaram and S.Asok Kumar, "Quality testing of machined components using interferometry technique" presented in a National level conference on Proceedings of National Seminar on Computer Integrated Design and Manufacturing, organised by Amirta Institute of Technology and Science, Coimbatore, India from 14-May-2001 to 15-May-2001.
2. Shanmuga Sundaram K, Senthilkumaran S, and Rajendra Boopathy, "Simulation of cells in cellular Manufacturing Sysyem" presented in a National level conference on Proc. National Conference on Computer Integrated Design and Manufacturing, organised by Amirta Institute of Technology and Science, Coimbatore, India from 14-May-2001 to 15-May-2001.
3. K.Shanmuga Sundaram and G.Thanigaiyarasu, "Some Studies on Ratcheting in Pipe Bends" presented in a International level conference on Procs. Indo- Japan Conference on Damage Tolerant Design and Materials, organised by IIT, Madras, Chennai, India from 17-Dec-2004 to 18-Dec-2004.
4. Shanmuga Sundaram K and G.Thanigaiyarasu, "Analysis of Fuel Handling Machine" presented in a National level conference on Proc. National Conference on Advances in Engineering Design, organised by Bannari Amman Institute of Technology, India from 29-Apr-2005 to 30-Apr-2005.
5. Shanmuga Sundaram K and G.Thanigaiyarasu, "Studies on Onset of Ratcheting in Pipe Bends" presented in a International level conference on ASME 2005 International Design Engineering Technical Conference , organised by ASME, USA from 24-Sep-2005 to 28-Sep-2005.
6. Shanmuga Sundaram K and G.Thanigaiyarasu, "Correlation of Test and FEA Results on Ratcheting Behavior in Pipe Bends" presented in a International level conference on 2005 ASME International Mechanical Engineering Congress and Exposition, organised by ASME, USA from 05-Nov-2005 to 11-Nov-2005.
7. Shanmuga Sundaram K and G.Thanigaiyarasu, "Studies on Ratcheting in Pipe Bends" presented in a International level conference on 2005 ASME International Mechanical Engineering Congress and Exposition, organised by ASME, USA from 05-Nov-2005 to 11-Nov-2005.
8. "Experiment Study on Mechanical Behaviour of Hybrid Alsic Composite" presented in a National level conference on National Conference on Recent Advances in Design, Applications and Manufacturing Systems (RADAMS'13), organised by Thanthai Periyar Government Institue of Technology, Vellore from 18-Apr-2013 to 18-Apr-2013.
9. Vasanthraj S, Shanmuga Sundaram K, on Recent Advances in Design, Applications and Manufacturing Systems (RADAMS'13), organised by Thanthai Periyar Government Institute of Technology, India from 18-Apr-2013 to 18-Apr-2013.
10. Prabhu R, Shanmuga Sundaram K, "Experiment Study on Mechanical Behaviour of Hybrid Alsic Composite" presented in a National level conference on Recent Advances in Design, Applications and Manufacturing Systems (RADAMS'13), organised by Thanthai Periyar Government Institue of Technology, India from 18-Apr-2013 to 18-Apr-2013.

11. K. Gurusamy, Dr. K. Shanmuga Sundaram, "Experimental Investigation on microstructure and mechanical properties of Nd:YAG laser treated CP-Ti and Ni-Cr alloy for Dental applications" presented in a International level conference on IconDM2013, organised by Indian Institute of Information Technology Design & Manufacturing, India from 18-Jul-2013 to 20-Jul-2013.
12. Dr.K.Shanmuga Sundaram and S.Rajiv, "Experimental Study on Electromagnetic Forming of Copper Sheets" presented in a International level conference on 2013 ASME International Mechanical Engineering Congress and Exposition, organised by ASME, U.S.A from 15-Nov-2013 to 21-Nov-2013.
13. "Experimental Investigation of Mechanical Behaviour of Femtosecond Laser Surface Treated Nickel Chromium (Ni-Cr) and Cobalt Chromium (Co-Cr) non noble Base metal Alloys for Dental Applications" presented in a International level conference on NUICONE-2013, organised by Nirma University, India from 28-Nov-2013 to 30-Nov-2013.
14. Sasindhar V, Shanmuga Sundaram K, "Optimization of Machinig Parameter in Milling & Experimental Study on the Mechanical Properties of Hybrid Aluminium Metal Matrix Composite" presented in a National level conference on Recent Trends in Manufacturing Science(RTMS'14), organised by Dhanalakshmi Srinivasan College of Engineering & Technology, India from 20-Mar-2014 to 20-Mar-2014.
15. "Study of Electromagnetic Sheet Metal Forming Process" presented in a National level conference on Recent Trends in Manufacturing Science(RTMS'14), organised by Dhanalakshmi Srinivasan College of Engineering & Technology, India from 20-Mar-2014 to 20-Mar-2014.
16. "Tribological Behaviour of Metal Matrix Composite" presented in a National level conference on Recent Trends in Manufacturing Science(RTMS'14), organised by Dhanalakshmi Srinivasan College of Engineering & Technology from 20-Mar-2014 to 20-Mar-2014.
17. "Analysis and Optimiztion of Brayton Cycle" presented in a National level conference on Recent Advances in Mechanical Engineering, organised by University College of Engineering, Vizinagaram, India from 22-Mar-2014 to 22-Mar-2014.
18. "Development of Fire Control System for Air Defence Gen" presented in a National level conference on Emerging Trends in Design, Thermal and Manufacturing (ETDM'14), organised by Saveetha Engineering College, India from 27-Mar-2014 to 27-Mar-2014.
19. "Axle Housing Design for Commercial Vehicle" presented in a International level conference on Emerging Trends in Design, Thermal and Manufacturing(ETDM'14), organised by Saveetha Engineering College, India from 27-Mar-2014 to 27-Mar-2014.
20. Prabhu R, Shanmuga Sundaram K, "Experiment Study on Mechanical Behaviour of Hybrid Alsic Composite" presented in a National level conference on Recent Innovations in Mechanical Engineering, organised by Easwari Engineering College, India from 11-Apr-2014 to 11-Apr-2014.
21. Dr. K. Shanmuga Sundaram, M. Prakash, "Study on impact of CAD / CAM tools on production of punched cards by Indian silk saree designers for handloom industry " presented in a International level conference on 47th CIRP Conference on Manufacturing Systems, organised by University of Windsor, Canada from 28-Apr-2014 to 30-Apr-2014.

22. Dhanalakshmi S, Shahul Hameed M, Rajendran R, Ramanjaneyulu G and Shanmuga Sundaram K, "Microstructural and Mechanical behaviour of Aluminium Matrix Composites reinforced with coated SiC particles fabricated by Stir Casting" presented in a International level conference on International Conference on Advances in Materials and Manufacturing Engineering" ICAMME'14, organised by "International Conference on Advances in Materials and Manufacturing Engineering" ICAMME'14, December 19-20, 2014, Chennai. INDIA, India from 19-Dec-2014 to 20-Dec-2014.
23. "Finite element simulation for hot extrusion process of aluminium alloy - silicon carbide composite" presented in a International level conference on International Conference on Materials, Design and Manufacturing Process (ICMDM 2016, organised by Anna University, India from 17-Feb-2015 to 19-Feb-2015.
24. "Microstructure and mechanical properties for dissimilar welded Joint of super duplex stainless steel and duplex stainless steel" presented in a International level conference on International Conference on Materials, Design and Manufacturing Process (ICMDM 2016, organised by Anna University, India from 17-Feb-2015 to 19-Feb-2015.
25. "The effect of age hardening in the tribological behaviour of aluminium (LM 25) metal matrix composite reinforced with SiC and MOS2" presented in a International level conference on International Conference on Materials, Design and Manufacturing Process (ICMDM 2016, organised by Anna University, India from 17-Feb-2015 to 19-Feb-2015.
26. "Evaluation of Mechanical Properties of Al 2014-Coated and Uncoated SiC Metal Matrix Composites" presented in a International level conference on 6th International Conference on Advancements in Polymeric Materials, organised by APM 2015, India from 20-Feb-2015 to 22-Feb-2015.
27. "Study on mechanical behavior of natural fibre composite made using coir and aloe vera" presented in a International level conference on International Conference on Emerging Technology 2015, organised by Jaya Engineering College, India from 28-Mar-2015 to 28-Mar-2015.
28. "Mechanical testing analysis on drum stick, Glass fiber and CaCo3 hybrid composites" presented in a International level conference on International Conference on Frontiers in Materials Processing Applications, organised by Research & Technology, Novotel International Convention Center, Hyderabad, India from 31-May-2015 to 31-May-2015.
29. "Effect of reinforcement type and extrusion on the microstructure and mechanical behaviour of aluminium alloy composites" presented in a International level conference on International Mechanical Engineering Congress & Exposition, organised by ASME, USA from 13-Nov-2015 to 19-Nov-2015.
30. "Computer Assisted Design And Analysis Of Shedding Mechanism Of Powerloom Machineries" presented in a International level conference on International Mechanical Engineering Congress & Exposition, organised by ASME, USA from 13-Nov-2015 to 19-Nov-2015.
31. Dhanalakshmi Sathishkumar, Anand Shanmugam, Ajith Damodaran, and Shanmuga Sundaram Karibeeran, "The effect of age hardening in the tribological behaviour of aluminium (LM 25) metal matrix composite reinforced with SiC and MOS2" presented in a International level conference on International Conference on Materials, Design and Manufacturing Process, organised by Anna University, India from 17-Feb-2016 to 19-Feb-2016.

32. "Microstructure and mechanical properties for dissimilar welded Joint of super duplex stainless steel and duplex stainless steel" presented in a International level conference on International Conference on Materials, Design and Manufacturing Process, organised by Anna University, India from 17-Feb-2016 to 19-Feb-2016.
33. "Finite element simulation for hot extrusion process of aluminium alloy - silicon carbide composite" presented in a International level conference on International Conference on Materials, Design and Manufacturing Process, organised by Anna University, India from 17-Feb-2016 to 19-Feb-2016.
34. "Effect of Load and sliding Velocity on Wear and Coefficient of Friction of Al/SiC and Al/Si<sub>3</sub>N<sub>4</sub>" presented in a International level conference on Second Heat Treatment & Surface Engineering , organised by ASM International Conference , India from 12-May-2016 to 14-May-2016.
35. Vasudevan Murugan K Shanmuga Sundaram Stephen Samuel, "The Influence of Laser Irradiation Parameters on Tribological behavior of Commercially Pure Titanium for Dental Prostheses" presented in a International level conference on International Mechanical Engineering Congress & Exposition, organised by ASME, USA from 11-Nov-2016 to 17-Nov-2016.
36. "Assessment of Dissimilar Weld between Duplex stainless Steel Grades for Severe Corrosive Applications" presented in a International level conference on International Mechanical Engineering Congress & Exposition, organised by ASME, USA from 03-Nov-2017 to 09-Nov-2017.
37. "Design and Analysis of Jacquard Shedding Mechanism in Weaving Machinery" presented in a International level conference on International Conference of Contemporary Design and analysis of Manufacturing and Industrial Engineering Systems , organised by NIT Trichirapalli, India from 18-Jan-2018 to 20-Jan-2018.
38. "Friction Stir Welding of Small Diameter Aluminium Pipes" presented in a International level conference on International Conference of Contemporary Design and analysis of Manufacturing and Industrial Engineering Systems , organised by NIT Trichirapalli, INDIA from 18-Jan-2018 to 20-Jan-2018.
39. "Investigation of Mechanical Properties and Tribological Properties of Sic Nano Particle Reinforced AA2014 Metal Matrix Composite" presented in a International level conference on International Conference of Contemporary Design and analysis of Manufacturing and Industrial Engineering Systems , organised by NIT Trichirapalli, INDIA from 18-Jan-2018 to 20-Jan-2018.
40. "Effect of sacrificial filler material on the microstructure and Mechanical properties of 316L stainless steel foam" presented in a International level conference on International Conference of Contemporary Design and analysis of Manufacturing and Industrial Engineering Systems , organised by NIT Trichirapalli, INDIA from 18-Jan-2018 to 20-Jan-2018.
41. "Influence of Tool Rotation Speed on Mechanical and Microstructural behavior of Friction Stir Butt welded dissimilar AA6061-AA7075 Aluminum Alloys" presented in a International level conference on International Conference of Contemporary Design and analysis of Manufacturing and Industrial Engineering Systems , organised by NIT Trichirapalli, INDIA from 18-Jan-2018 to 20-Jan-2018.



42. "Development and characterization of aluminum based nano composites for structural applications" presented in a International level conference on International Mechanical Engineering Congress & Exposition, organised by ASME, USA from 09-Nov-2018 to 15-Nov-2018.

## Books Published

1. "Hydraulics and Pneumatics - Understanding Made Easy" - 6th edition authored by K.SHANMUGA SUNDARAM and published by S. Chand & Co, New Delhi, New Delhi.(2006)

## Current Sponsored Projects

1. "Design and Development of Screw based Elevator" ( August-2017 - October-2018 ). Project Cost: 118000.00.

## Sponsored Projects Completed

1. "Development and characterization of aluminum based nano composites for structural applications" (February-2017 - July-2018). Project Cost: 905350.00.

## Programme Chaired

1. Co Chairman, International level conference titled "AMPC 2013" conducted by Anna University from 06-Feb-2013 to 08-Feb-2013.
2. International level conference titled "ADVANCES IN MATERIALS AND MANUFACTURING ENGINEERING" conducted by SAIRAM INSTITUTE OF TECHNOLOGY from 19-Dec-2014 to 20-Dec-2014.
3. International level conference titled "ADVANCES IN MATERIALS AND MANUFACTURING AND APPLIED SCIENCES" conducted by SAIRAM INSTITUTE OF TECHNOLOGY from 30-Mar-2017 to 31-Mar-2017.

## Programme Organized

1. Assistant Secretary, International level conference on "AMPC 2006" from 28-Aug-2006 to 30-Aug-2006.
2. Coordinator, International level workshop on "International Workshop on Electro Magnetic Forming Technology" from 10-Nov-2010 to 11-Nov-2010.
3. Assistant Secretary, International level conference on "AMPC 2013" from 06-Feb-2013 to 08-Feb-2013.
4. Coordinator, International level conference on "International Conference on Materials, Design and Manufacturing Process" from 17-Feb-2016 to 19-Feb-2016.

## Programme Attended

1. Participated in a International level conference on "International Conference on Mechanical and Aerospace Engineering" organized by IACSIT, Bangkok from 29-Jul-2011 to 31-Jul-2011.
2. Participated in a International level conference on "International Conference on Modelling, Optimization and Computing" organized by Noorul Islam University, Nagercoil, India from 12-Apr-2012 to 15-Apr-2012.
3. Participated in a International level conference on "Experimental Investigation on Microstructure and Mechanical Properties of Nd:YAG Laser treated Cp-Ti and Ni-Cr alloys for dental Applicataions" organized by IITD&M, INDIA from 18-Jul-2013 to 20-Jul-2013.
4. Participated in a International level conference on "ELECTROMAGNETIC FORMING PROCESS - ESTIMATION OF MAGNETIC PRESSURE IN TUBE COMPRESSION" organized by Coimbatore Institue of Technology, INDIA from 29-Jul-2013 to 31-Jul-2013.
5. Participated in a International level conference on "ELECTROMAGNET SHEET METAL FORMING" organized by Coimbatore Institue of Technology, INDIA from 29-Jul-2013 to 31-Jul-2013.
6. Participated in a International level conference on "EXPERIMENTAL STUDY ON MECHANICAL BEHAVIOUR OF LASER TREATED NICKEL CHROMIUM AND COBALT CHROMIUM FOR DENTAL APPLICATIONS" organized by Coimbatore Institue of Technology, INDIA from 29-Jul-2013 to 31-Jul-2013.
7. Participated in a International level conference on "EXPERIMENTAL INVESTIGATION AND ANALYSIS OF HYDROFORMED STAINLESS STEEL TUBES " organized by Coimbatore Institue of Technology, INDIA from 29-Jul-2013 to 31-Jul-2013.
8. Participated in a International level conference on "ELECTROMAGNET FORMING AS ALTERNATE FOR FORMING OPERATION" organized by Coimbatore Institue of Technology, India from 29-Jul-2013 to 31-Jul-2013.
9. Participated in a International level conference on "Experimental Investigation on Mechanical Behaviour of Fento see and Laser Surface Treated Nickel Chromium (Ni-Cr) and Cobalt Chromium" organized by Nirma University, INDIA from 29-Jul-2013 to 31-Jul-2013.
10. Participated in a National level conference on "Recent Trends in Manufacturing Science(RTMS'14)" organized by Dhanalakshmi Srinivasan College of Engineering & Technology, India from 20-Mar-2014 to 20-Mar-2014.
11. Participated in a International level conference on "APAC Research Intelligence Conference" organized by Nanyang Technological University, Singapore from 10-Jun-2014 to 11-Jun-2014.

## Honours

1. "Innovation Award" given by CTD - Anna University from India (2015).

## Patents Filed

1. Filed patent rights for Electromagnetic Sheet Metal Formingin India. File number: 2280 Filed Date: 07-Jun-2012.

## Invited Lectures

1. Delivered a Lecture on "Hydraulics and Pneumatics" in Faculty Development Programme organized by Noorul Islam College of Engineering, Thackulay, Nagercoil.
2. Delivered a Lecture on "Hydraulics and Pneumatics" in Faculty Development Programme organized by NITTTR, Chennai.
3. Delivered a Lecture on "Drawing Features in CAD" in Faculty Development Programme organized by Anna University, Chennai (18-Jun-2014).

## Extension & Outreach Programme

1. Co- Coordinator, FDP on Fracture Mechanics, participated by Teachers and Research Scholars and funded by Centre for Faculty Development at Department of Mechanical Engineering during and . No. of participants: 20.
2. Expert, Delivered Lecture for the Course Hydraulics and Pneumatics, participated by Students and funded by CFD, EDUSAT at CFD during and . No. of participants: 3000.
3. Participant and Expert, Training on Basic, Electropneumatic and PLC based Pneumatic Course, participated by Teachers and funded by TEQIP at SMC Pneumatics (Australia) Pty Ltd, Sydney during 19-Mar-2007 and 23-Mar-2007. No. of participants: 20.
4. Coordinator, Faculty Development Programme on Hydraulics and Pneumatics, participated by Teachers and Research Scholars and funded by Centre for Faculty Development at Department of Mechanical Engineering during 17-May-2010 and 21-May-2010. No. of participants: 25.