


Department of Mechanical Engineering  
Government of Engineering College Thrissur.

**Bio-Data**

1. Name	:Dr. K.K Ramachandran.	
2. Designation	:Associate Professor	
3. Date of birth:02.05.1967		
4. Highest qualification	: PhD	
5. Date of joining service	:29.07.1996	
6. Date of joining GEC Trichur	:20.10.2000	
7. No. of FDPs/STTPs or other events conducted	: 2	
8. No. of FDPs/STTPs or other events attended as resource person	:18	
9. No. of FDPs/STTPs/Workshops attended as participant*	:24	
10. No. of Conferences attended as participant	:34	
11. Details of awards/ recognition/ Achievements	:Best Paper Award - 2	
12. Details of additional charges at department level	:Group Tutor UG & PG, TEQIP Purchase, Staff in charge Mech. Engg. Association	
13. Details of additional charges at institute level	:CEC Committee, Anti-Sexual Harassment Cell, NBA Accredatation	
14. Details of responsibilities at university level or other social organization (more than 150 inspections so far)	:Expert Commissioner, CDRFs, Kerala	
15. No. of Journal Publications	:12	
16. No. of publication in International conferences	:28	
17. No. of publication in National conferences	: 4	

**PUBLICATIONS**

**INTERNATIONAL CONFERENCE**

- 1 Numerical Simulation of Flow, Heat Transfer, Mass Transfer and Electrochemical Reactions in PEM Fuel Cell, *International conference on materials for future, ICMF2013, GEC Thrissur*
- 2 Numerical Simulation of Semiconductor Type Thermoelectric Generator, *International Conference on Environment and Sustainable Technologies iCEST – 2014, 3 - 5 January, 2014, MIT, Manipal, India.*
- 3 An assessment on friction stir welding of high melting temperature materials, , *International Mechanical Engineering Congress (IMEC 214), NIT Trichy, Tamil Nadu, India*
- 4 Mechanical properties and microstructural characteristics of friction stir welded dissimilar AA5052H32 aluminium alloy and IRSM42-97 micro alloy steel butt joints', *Twenty-Third*

*International Conference on Processing and Fabrication of Advanced Materials PFAM XXIII 2014, IIT Roorkee, India.*

- 5 Friction stir welding of dissimilar aluminium alloy:AA 5502 H 32 and high strength low alloy steel:IRS M 42 -93 Butt joints, *International welding symposium (IWS 2014), Mumbai*
- 6 Effect of heat input on mechanical properties of friction stir welded 316 L Austenitic stainless steel, *International welding symposium (IWS 2014), Mumbai*
- 7 Effect of interface position and geometry of tool pin on the performance of friction stir welded dissimilar aluminium alloy:AA 5052 H 32 and HSLA steel:IRSM 42-93 BUTT JOINT, *ISRS 2014 , IIT MADRAS,Chennai India*
- 8 Friction Stir Welding of 316L Austenitic stainless steel – Microstructure and Mechanical properties, *23<sup>rd</sup> International Conference on Processing and Fabrication of Materials PFAM23, 2014, 5 – 7 December 2014, IIT Roorkee, India*
- 9 Friction stir dissimilar butt welding of aluminum alloy, AA5052 and high strength low alloy steel using a modified FSW process, *1. International Conference on Advanced Materials and Manufacturing for Strategic Sectors ICAMPS 2015, ISM, Thruvananthapuram, India.*
- 10 Effect of cooling rate on Mechanical and Microstructural Characterization of Friction Stir Welded 316 L Austenitic Stainless Steel Joints, *International Conference on Advanced Materials and Manufacturing for Strategic Sectors, ICAMPS 2015, ISM, Thruvananthapuram, India.*
- 11 Influence of axial pressure on the characteristics of friction stir dissimilar butt welded aluminium alloy, AA5052 and HSLA steel, *International Workshops Conferences and Expo on Military and Marine Applications IWCEM 2015, NIRDESH, Pune, India.*
- 12 Effect of tool tilt angle on the characteristics of dissimilar friction stir welded aluminium alloy AA5052 and HSLA steel butt joints, *International Conference on Cutting Welding and Surfacing CWS2015, IWS, Tamil Nadu, India.*
- 13 Tool materials for friction stir welding of high temperature materials – a review, *National Seminar on Recent Advances in Welding and Non Destructive Testing, IWS, Tamil Nadu, India, 2013*

### **International Journal**

- 1 An assessment on friction stir welding of high melting temperature materials  
*Applied Mechanics and Materials, vol. 592-594, pp. 43-47, 2014,2*
- 2 Effect of tool axis offset and geometry of tool Pin profile on the characteristics of friction stir welded dissimilar joints of aluminium alloy AA5052 and HSLA steel, *Materials Science And Engineering A, vol. 639, no. 15, pp. 219–233*
- 3 An Assessment on Mechanical and Microstructural properties of Friction Stir Welded 316 L Austenitic Stainless Steel, *Applied Mechanics and Materials, Vol. 787, pp 381-385*
- 4 Study on dissimilar butt joining of aluminum alloy, AA5052 and high strength low alloy steel through a modified FSW process, *Materials Science Forum, vol. 830-831, pp. 278-281*
- 5 Friction stir welding of aluminum Alloy AA5052 and HSLA steel: mechanical and microstructural characterization of dissimilar friction stir welded butt joints, *The Welding Journal, vol. 94, pp. 291-300 (American Welding Society)*
- 6 Effect of cooling rate on Mechanical and Microstructural Characterization of Friction Stir Welded 316 L Austenitic Stainless Steel Joints, *Materials Science Forum Vol. 830-831, pp 314-318*
- 7 Influence of tool traverse speed on the characteristics of dissimilar friction stir welded aluminium alloy, AA5052 and HSLA steel joints, *Archives of Civil and Mechanical Engineering, vol. 15, pp. 822-830*

- 8 Performance analysis of dissimilar friction stir welded aluminum alloy AA5052 and HSLA steel butt joints using response surface method, *International Journal of Advanced Manufacturing Technology*
- 9 Influence of tool material on mechanical and microstructural properties of friction stir welded 316L austenitic stainless steel butt joints, *Int. Journal of Refractory Metals and Hard Materials*, Vol. 58, pp 196–205
- 10 Influence of Axial Force on the Characteristics of Friction Stir Butt Welded Aluminium Alloy/Steel Joints, *Journal of Materials Engineering and Performance* (accepted for publication)
- 11 Effect of tool tilt angle on mechanical and microstructural characteristics of friction stir welded 316L austenitic steel joints, *Int. Journal of Metals and Alloys* (under review)