

Department of Mechanical Engineering  
Government of Engineering College Thrissur.

Bio-Data



- Name : Sudheesh R.S
1. Designation : Assistant Professor
2. Date of birth : 06.05.1975
3. Highest qualification : PhD
4. Date of joining service : 20.06.2002
5. Date of joining GEC Trichur : 05.11.2005
6. No. of FDPs/STTPs or other events conducted : 3
7. No. of FDPs/STTPs or other events attended : 4  
as resource person
8. No. of FDPs/STTPs/Workshops attended : 9  
as participant
9. Details of additional charges at department level : Computational Mechanics Lab  
in charge,  
  
Group tutor M.Tech Production Engg.,  
Website in charge for Mech. Engg.
- Dept.
- Details of additional charges at institute level :
10. Details of responsibilities at university level or other : Nil  
social organization
11. No. of Journal Publications : 4
12. No. of publication in International conferences : 3
13. No. of publication in National conferences : Nil

Degree	University	Institution	Month & year of acquiring the degree
B.Tech (Mech. Engg.)	Calicut University	NSS College of Engg. Palakkad	October 1996
M.E (Engg.)	Bharathiar	PSG College	

Design)	University	of Technology Coimbatore	February 2001
Ph.D	Indian Institute of Technology Madras	Indian Institute of Technology Madras	27.11.20 13

### Work Experience

Worked as Asst. Professor in Mech. Engg. In Govt. Engg. Colleges in Wayanad, Calicut and Thrissur 14 years 6 months. Experienced in teaching a variety of Mechanical Engineering subjects such as Mechanics of Solids, Advanced Mechanics of Solids, Finite Element Methods, Computer Programming, Engineering Mecanics, Engineering Graphics etc.

Worked in the field of software development of CAD (Computer Aided Design) using C++ for a period of two years after acquiring M.E. This involved coding for development of softwares to translate CAD files from one format to another.

Worked as engineer with India's leading petrochemical industry for a period of one year.

### Ph.D thesis:

PhD was completed under QIP from IIT Madras in the year 2013. The work involved analysis of welds using finite element methods. The study included numerical solution of transient coupled thermo-mechanical problems involving material and geometric non-linearities. The project work was funded by Department of Science and Technology, New Delhi.

### ***International Journals***

1. Sudheesh R S. and N. Siva Prasad(2010), '*Studies on residual Stress and distributes in TIG Welding of thin plates with trailing heat sink*', Acta Mechanica Solida Sinica. Vol. 23 S.1, pp.109-114
2. Sudheesh R S and N. Siva Prasad(2011), '*Finite element study of residual stresses and distortions in arc welding with a trailing liquid nitrogen heat sink*', International Journal of Numerical Methods for Heat & Fluid Flow. Vol. 21 No. 8, 2011, pp. 1050-1065

3. Sudheesh R S & N. Siva Prasad(2013), *Comparative study of Heat Transfer Parameter estimation using Inverse Heat Transfer models of a Trailing Liquid Nitrogen Jet in Welding*. vol. 36, issue 2, pp. 178-185
4. Sudheesh R S and N Siva Prasad(2014), '*Parametric Studies on Effect of Trailing Liquid Nitrogen Heat Sink on TIG Welding of Steels*', *Advanced Materials Research* Vols. 875-877 (2014) pp 1595-1599.
5. Anoop K C and Sudheesh R S (2016), 'Experimental and Numerical Investigations in Friction Welding of Tube to Tube Plate using an External Tool', *international journal on Recent & Innovative trends in technology*, Vol.2, Issue 2, PP. 11-16

### **International Conferences**

1. K M Peethambaran, Sudheesh R S and N Asok Kumar, *Eco-Friendly Refrigeration systems Analysis Using Simulation Techniques at the 2<sup>nd</sup> International Congress of Chemistry and Environment, Indore, 2005.*
2. K M Peethambaran, Sudheesh R S and N Asok Kumar, *Energy Economy Analysis of Household Refrigeration Systems in view of the Alternative Refrigerants at the 2<sup>nd</sup> National Conference on Recent Trends in Renewable Energy Technology, 2005.*
3. Sudheesh R S and N Siva Prasad *Finite element study of residual stresses and distortions in arc Welding with a trailing liquid nitrogen heat sink at the **Workshop on Recent Progress in Heat and Fluid Flow Research Bangalore, 2010***
4. N S Lakshmi, Sudheesh R S and Raja Mohan, *Flux Cored Arc Welding Process Parameter Optimization using Grey Based Taguchi Method at the **3<sup>rd</sup> International Conference on Materials for the Future Innovative Materials, Processes, Products and Applications (ICMF), Thrissur, 2013.***
5. M Shafikh and R S Sudheesh, *Parameter Optimization using Genetic Algorithm in Gas Metal Arc welding of Mild Steel at the **3<sup>rd</sup> International Conference on Materials for the Future Innovative Materials, Processes, Products and Applications (ICMF), Thrissur, 2013.***
6. Shibu M P, Sudheesh R S and Bindu M D "*Simulation of Austenite to Ferrite Transformation during continuous cooling in Low carbon steel using Cellular Automata (CA) model, **factura, national level***

***PG Research Conference on Emerging trends in manufacturing NSS College of Engineering Palakkad, 2016.***

7. Sachin Prakash K and Sudheesh R S, "thermal analysis of thin sheets in Dissimilar metal welds", ***factura, national level PG Research Conference on Emerging trends in manufacturing NSS College of Engineering Palakkad, 2016.***
8. Mathews Joseph and Sudheesh R S, 'Studies on the Effect of Welding Parameters in LASER Spot Welding using ANSYS APDL', ***International Conference on Systems, Energy and Environment - ICSEE 2016, 05- 06 August 2016, Organized by Centre of Excellence in Systems, Energy and Environment Government College of Engineering Kannur,***

***Details of STTPs Coordinated***

1. Faculty Development Programme on FINITE ELEMENT ANALYSIS USING ANSYS, December 2012.
2. Short Term Training Programme on FINITE ELEMENT ANALYSIS USING ANSYS, December 2013.
3. Short Term Training Programme on FINITE ELEMENT ANALYSIS USING ANSYS, January 2017.

***Resource Person***

Presented sessions on application of finite elements in different short term courses conducted by Govt. Engg. Colleges.

***M.Tech Thesis Supervision***

Lakshmi N S "Effect of flux cored arc welding process parameters on weld bead geometry and parameter optimization using grey based Taguchi method"

Shafikh M" Parameter Optimization using evolutionary algorithm in Gas Metal Arc welding of Mil Steel

Anoop K C "Experimental and Numerical Investigations on friction welding of tube to tube plate using an external tool"

Sajin Cherian " Investigation on residual stress distribution in dissimilar metal welds"

Vithu Nath T "Parametric optimization of multi-pass turning process using teaching learning based algorithm"

Mathews Joseph “Studies on the effect of welding parameters on the Bead Geometry in Laser Spot Welding”

Sachin Prakash K “ Studies on deformation of thin sheets in Dissimilar metal welds”

Shibu M P “Simulation of Austenite to Ferrite Transformation during continuous cooling in Low carbon steel using Cellular Automata (CA) mode”

### **Ph.d Supervision**

Currently guiding one Ph.D in the field of fracture mechanics using finite element method.

### **Other Achievements:**

Obtained a score of 92.61 in GATE 1999.