

Arjun Thangaraj R

GRADUATE, ENVIRONMENTAL ENGINEERING, GEORGIA TECH

EDUCATION	<p>Indian Institute of Technology Palakkad, Kerala, India <i>Bachelor of Technology, Mechanical Engineering,</i> CGPA: 7.71/10 <i>Jul' 16 - Jul' 20</i></p> <p>The Vikasa School, Tuticorin, Tamilnadu, India <i>Higher Secondary</i> Percentage: 94.8 <i>Jun' 15 - Apr' 16</i></p>
RESEARCH INTERESTS	Sustainable energy technologies, Alternate Fuels, Environmental Impact Assessment, Pollution Mitigation, Techno-economic analysis
RESEARCH PROJECTS	<p>Sustainability Analysis of Biodiesels - Energy, Environment, Social and Techno-economic Considerations <i>Supervisor : Prof. Pramod S Mehta</i> <i>Aug '19 - Jun '20</i></p> <ul style="list-style-type: none"> - Developing an approach for a holistic sustainability analysis for biodiesel fuels including social and techno-economic impacts besides the energy and environment considerations - Carrying out a case study on sample biodiesel fuels viz. coconut and jatropha biodiesel - Developing a transesterification facility for biodiesel production to carry out related measurements for different blends of biodiesel and fossil diesel
RESEARCH PUBLICATIONS	<p>Farm to Fire Analysis of Karanja Biodiesel <i>Mishra, A., Thangaraj R, A. and Mehta, P.S. (2021), Farm-to-fire analysis of karanja biodiesel. Biofuels, Bioprod. Bioref.. https://doi.org/10.1002/bbb.2271</i> <i>Jul '21</i></p> <p>Life Cycle Analysis for Biodiesel Fuels - A Holistic Approach <i>Mishra, A., Thangaraj R, A. and Mehta, P.S. (2020 November). International conference on Smart Technologies for Energy ,Environment and Sustainable Development(Publication under process to Springer Proceedings in Energy)</i> <i>Nov '20</i></p>
RESEARCH EXPERIENCE	<p>Soot Modelling and Measurements in a Counter-flow Diffusion Flame <i>Dr. Krishna Sesha Giri</i> <i>Nov '20 - Jul '21</i></p> <ul style="list-style-type: none"> - Rsearch Assistant - Soot Modelling in counter-flow jet flames using the mixture fraction approach - Simulations on OpenFOAM, and experimental results.
INTERNSHIPS	<p>Internship at VJP Aluminium Foundry, Coimbatore <i>Supervisor : Mr.Sudharsan Manivel</i> <i>May '19 - Jul '19</i></p> <ul style="list-style-type: none"> - Design and manufacturing of a sandwiched aluminium cold plate - Setting up an experiment to compare the heat transfer properties of a sandwiched cold plate with a vacuum moulded cold plate - Applications of the vacuum moulded cold plate and the potential products it can replace effectively <p>Internship at Larsen and Toubro Defence (Precision Manufacturing and Systems Complex, Coimbatore) <i>Supervisor : Mr.P. Venkateswaran</i> <i>May '18 - Jul '18</i></p>

- Designing a bevel gear system for the automation of the tail stock of a circular seam welding station
- Manufacturing and installation of the automation system to reduce the time of operation of the tail stock by 50 fold.
- Designing and manufacturing a filler wire cleaning machine for thorough cleaning of MDN steel filler wires used in TIG welding of 3m dia MDN cylindrical shells

TECHNICAL SKILLS Matlab, OpenFoam, AutoCAD, Autodesk Fusion, Unigraphics, ANSYS - Mechanical APDL, GREET, C, JAVA (BlueJ)

RELEVANT COURSES Sustainable Energy Technologies, Thermodynamics, Turbomachinery, International Relations, Principles of Economics, Aerospace Engineering, Ecology and Environment

ACHIEVEMENTS **B.Tech Project Excellence Award**

- Awarded the certificate of excellence for best undergraduate project in the mechanical engineering department

Abacus Competitions

- Distinction in the International Standard of Abacus Mental Arithmetic Proficiency Examination
- Secured first position in State level and second position in National level competitions.

Chess

- International FIDE rating of 1287
 - Secured first position in District level and sixth position in State level competitions.
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POSITIONS OF RESPONSIBILITY - Secretary, Sports Affairs (Feb 2018 - Feb 2019)
 - Class representative (Jan 2018 - Apr 2018)

EXTRA CURRICULARS **NSS:** Taught physics and maths to higher secondary school children at a government school

Inter IIT Sports Meet: Contingent leader of IIT Palakkad at 53rd and 54th Inter IIT Sports meet at Guwahati and Kharagpur
 Represented the institute in cricket, football, table tennis and chess during the sports meets.

Best Sportsman Award: Received award for Best Sportsman in IIT Palakkad.