

INTERNATIONAL CONFERENCE ON MECHANICAL ENGINEERING AND ENERGY TECHNOLOGIES URJA 2021



Organized By
Department of Mechanical Engineering



Under the Aegis of

YUKTHI 2021

International Conference on Emerging Trends in Engineering

24th to 26th September 2021

Keynote Speakers



24th September 11:00 AM [kcu-ukxh-qbk](#)

DNA of Engineering Innovation

Dr. Swami Nathan Subramanian
Director of Innovation & Business Development,
The Axia Institute - Michigan State University, United States



25th September 09:30 AM [iyz-phfz-vqy](#)

Solid Oxide Fuel Cell & Negative Emission Technologies

Prof. Dr. P V Aravind
Professor & Chair of Energy Conversion,
University of Groningen, Netherlands



26th September 09:30 AM [iyz-phfz-vqy](#)

Atomistic and Experimental Determination of the Structural and Thermophysical Properties of the Accident Tolerant Fuel Materials

Dr. Linu Malakkal
Computational Material Scientist Post Doctoral Research Associate,
Idaho National Laboratory, United States

JOIN THE CONFERENCE!

Inauguration

24th September 09:30 AM


Google Meet



[kcu-ukxh-qbk](#)

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YUKTHI-2021

International Conference on Mechanical Engineering and Energy Technologies

Schedule of the Conference

24-09-2021

Inauguration Function



09:30-10:30 AM	Inauguration
11:00-11:45 AM	Keynote : <i>DNA of Engineering Innovation</i> , Dr. Swami Nathan Subramanian, The Axia Institute - Michigan State University, United States
11:45-12:30 PM	Keynote : <i>Emerging Trends in Nano Devices</i> , Dr. Roy P P, IIT Gauhati
01:30-02:30 PM	Keynote : <i>Issues and Challenges in Technical Education</i> , Dr. Pratap Singh K. Desai
02:30-03:30 PM	Keynote : <i>Aviation Biofuels - Routes and Challenges</i> , Dr. Suchithra T. G. University of Nottingham, Malaysia
03:30-04:30 PM	Keynote : <i>Environmental Forensics</i> , Dr. George K Varghese, NIT Calicut

25-09-2021

Forenoon : Thermal Stream



09:30-10:30 AM	Keynote : Prof. Dr. P V Aravind, Professor & Chair of Energy Conversion, University of Groningen, Netherlands	
Session Chairs	Dr. Pradeep Kammath: Asst .Prof. ,MED,GEC Thrissur Dr. Jithesh P K: Asst .Prof. ,MED, GEC Kozhikode	
10:30-10:45 AM	Use of Alternate Refrigerants in Vortex Tubes for improved performance – a simulation approach	Amaldev A.V, GEC Kozhikode
10:45-11:00 AM	Thermo-hydraulic analysis of air to water heat exchanger with turbulence enhancement	Satheesh Kumar T.K, GEC Kozhikode
11:00-11:15 AM	Analysis of heat exchanger with PCM for thermal storage in buildings	Aswanth A K, GEC Kozhikode
11:15-11:30 AM	Theoretical Analysis of Atmospheric Water Generator using Thermoelectric Cooler	Siddhant Avhad, Sinhgad College of Engineering, Pune
11:30-11:45 AM	Experimental Investigation on Heat transfer Enhancement in Micro-channel Heat sinks	Shiblemon K V, St. Joseph's College of Engineering and Technology, Palai
11:45-12:00 PM	Exergy Analysis in a Mini-channel with Nanofluid	Jils John, GEC Kozhikode
12:00-12:15 PM	Heat Transfer Augmentation in Double Pipe Heat Exchanger: A Review on Passive Methods	Satheesh Kumar T.K, GEC Kozhikode

Afternoon : Energy Stream



Session Chairs	Dr.Rekha L: Professor, MED, GEC Thrissur Dr.Sajith P P: Professor, MED, GEC Kozhikode	
02:00-02:15 PM	Using vortex generators to improve the range of Electric Sport Utility Vehicles and increase their market viability	Nitin Saidha, School Of Mechanical Engineering, Vellore Institute of Technology, Vellore, India
02:15-02:30 PM	Optimization of a Hybrid Solar-MED-OTEC System for freshwater and hydrogen production.	Aravind Ramachandran, GEC Kozhikode
02:30-02:45 PM	Review on Performance Evaluation of Solar Photovoltaic Based Hybrid Drying systems	Dinu George, St. Joseph's College of Engineering and Technology, Palai
02:45-03:00 PM	Battery Thermal Management Systems based on Phase Change Materials for Electric Vehicle - A Review	Maria Terese, College of Engineering Trivandrum
03:00-03:15 PM	Performance Analysis of modified nozzle –diffuser augmented horizontal axis hydro-kinetic turbine	Ananthu Joshy, GEC Kozhikode
03:15-03:30 PM	Numerical Investigation on the Absorption Characteristics of Helmholtz Resonator Based Absorber with Neck Opening on the Wall	Mahesh K, College of Engineering Trivandrum
03:30-03:45 PM	Self Sanitizing Toilet Module	Fathima Sana P, GEC Kozhikode

26-09-2021

Forenoon : Material Science & Manufacturing Stream



09:30-10:30 AM	Keynote : Dr. Linu Malakkal Computational Material Scientist Post Doctoral Research Associate, Idaho National Laboratory, United States	
Session Chairs	Dr. Hanas, Asst .Professor ,NIT Calicut Dr.Sajith Babu C, Professor ,MED, GEC Kozhikode	
10:30-10:45 AM	Effect of Layer Height on Impact Strength of Additively Manufactured Short Carbon Fiber Reinforced Composite	Mahesh Naik, Defence Institute of Advance Technology , Pune
10:45-11:00 AM	Evaluation of the tribological and rheological properties of various vegetable oils as the base oil for bio-lubricant: A Preliminary study	Pranav P, College of Engineering Trivandrum
11:00-11:15 AM	Feasibility analysis of 3D printing of a boat using carbon fibre composite	Shebin A Thomas, College of Engineering Trivandrum
11:15-11:30 AM	Investigation of Tensile Strength and Biodegradability of Jute Fiber Reinforced Composites	Menoniyoti Kalita, Jorhat Institute of Science and Technology, Assam
11:30-11:45 AM	Study on the Microstructure and Mechanical Properties of AlSi10Mg Parts Produced by the Selective Laser Melting (SLM) Additive Manufacturing Technology	Shekera Parveen, J.B Institute of Engineering & Technology (JBIET), Hyderabad
11:45-12:00 PM	Design and extraction of Arrowroot (<i>Curcuma angustifolia</i>) starch by screw extruder: Preparation, Assembly and End product development	Albin Mathew George, Toms College of Engineering, Kottayam
12:00-12:15 PM	Applying Six Sigma DMAIC Approach on Plastic Rotomolding Process	Karishma Raut, Viva Institute of Technology, Virar