

Dr Sreeramulu Munagala



Name: Dr. Sreeramulu Munagala

Designation: Professor of Mechanical Engineering & HOD

Total Experience: 23 Years

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Specialization

Thermal Engineering

Academic Qualification

B.E-Mechanical Engineering in 1999 from University of Madras.

Master of Technology-Heat Power (R & A/C) in 2004 from JNTU Hyderabad.

Ph. D (Thermal Engineering) in 2012 - from JNTUH Hyderabad

Total Teaching Experience

23 Years

International Journals:

1. **M. Sreeramulu**, A.V.S.S.K.S. Gupta and T. Srinivas, *Exergy Analysis of Gas Turbine – Fuel Cell based combined cycle power plant*, International Journal of Engineering Science and Technology. Vol.3 No.6 June 2011, pp. 5227-5236.
2. **M. Sreeramulu**, A.V.S.S.K.S. Gupta and T. Srinivas, *Exergy Analysis of Gas Turbine – Solid Oxide Fuel Cell based Combined Cycle Power Plant*, International Journal of Energy Technology and Policy Vol.7, Nos.5/6, pp. 469-488, 2011.
3. **M. Sreeramulu**, *Thermodynamic analysis of Ethanol and Diesel Fueled SOFC based Gas Turbine Combined Cycle Power Plant*, International Journal of Engineering Research and Technology, Vol.2, Issue 11, 2013.
4. **M. Sreeramulu**, K. Deepak, *Thermodynamic modeling of Solid Oxide Fuel-Cell Gas Turbine Combined Cycle Power Plant*, Journal of Current Engineering and Technology, Special Issue on International Conference on Advances in Mechanical Sciences (ICAMS-2014).

5. P. V. Durga Prasad, A.V.S.S.K.S. Gupta, **M. Sreeramulu**, L. Syam Sundar, M.K. Singh, Antonio C. M. Sousa, *Experimental study of heat transfer and friction factor of Al₂O₃nanofluid in U-tube heat exchanger with helical tape inserts*, Experimental Thermal Fluid Science, Elsevier, 62,141-150, 2015.
6. Mythili Ch, **M. Sreeramulu**, Darshan. B.G, K. Deepak, Characterization of Mechanical and Tribological Behaviour of Hybrid Fiber Reinforced Polymer Composites, Progress in Industrial Ecology, An International Journal (PIE)", Progress in Industrial Ecology, Inderscience Publishers, (ICRAME-2017).
7. Anandbabu Desamala, **Sreeramulu. M**, Srinivasarao. M, Fasil Alemayehu, Viscous oil-water flow through an undulated pipeline in valley configuration by experimental and CFD simulation, International Journal of Modern Engineering and Research Technology, (NCAMENT-2018).
8. M. Suresh, **Sreeramulu. M**, R. Hari Prakash, B. Durga Prasad, Effect of Additives to Thurayi Seed Oil on Combustion and Emission in CI Engine with Toroidal Combustion Chamber, International Journal of Research in Advent Technology (ICADMMES-2K18).
9. Mythili Chaganti, Sanjay Ch, **Sreeramulu M.**, Mechanical Behaviour of Natural Fibre Reinforced Polyester Composite Material Under Different Environmental Conditions, IJRAT, Special Issue, NCRCEST 2019 E-ISSN: 2321-9637.
10. Prem Ritesh Kumar, M. Vikram Raj, N Shiva Prasad, B Kalyani, **Dr. M Sreeramulu**, Design and Fabrication of Portable Solar Thermoelectric Refrigerator, IJRAT, Special Issue, NCRCEST 2019 E-ISSN: 2321-9637.
11. Santosh Madeva Naik, **Sreeramulu M**, Naik Sachin Ashok, PVN Saichandu, Improvement In Tribological And Mechanical Properties Of Al6061-Sic, International Journal of Research in Advent Technology, Special Issue, NCRCEST 2019 E-ISSN: 2321-9637
12. Santosh Madeva Naik, Hema Mahajan, B Yakub, **Sreeramulu M**, Implementing PBL to Enhance Technical Knowledge through Design Thinking Process, Journal of Engineering Education Transformations, Scopus Indexed, Special Issue No. 1, November 2019, Volume No.33, eISSN 2394-1707
13. Santosh Madeva Naik, Hema Mahajan, **Sreeramulu M**, Ch Kannaiah., Implementing JIGSAW pedagogy to Enhance Learning in RES Course, Journal of Engineering Education Transformations, Volume 33, January 2020, Special issue, eISSN 2394-1707

Publication Details

14. Santosh Madeva Naik., Vinod Moger. Veeranna Gedigeri., Ajith Kumar., **M. Sreeramulu**, Tribological properties of Cissus quadrangularis stem fiber reinforced isophthalic polyester composites, Materials Today: Proceedings - Scopus Indexed, <https://doi.org/10.1016/j.matpr.2020.06.031>
15. Hema Mahajan, Santosh Madeva Naik, **Dr. Sreeramulu M**, Ch Kannaiah, Syed Majeedullah, Impact of Project-Based Learning for Improving Students Skills by Incorporating Design Thinking Process, Journal of Engineering Education Transformations, Volume 34, January 2021, Special issue, eISSN 2394-1707

International Conferences:

1. **M. Sreeramulu**, L. Syam Sundar, P.V. Durga Prasad, Ch. Venkatrao, *Model Analysis of Low-Pressure Boiler Sleeve with Different Metal Coatings by using FEM*, International Conference on Advances in Machine Design And Industry Automation (ICAMDIA-2007), at College of Engineering, Pune from 10th to 12th Jan, 2007.
2. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Exergy Analysis of Gas Turbine – Solid Oxide Fuel Cell based combined Cycle Power Plant*, International conference on Thermal Exergy and Environment (INCOTEE 2011), 24-26 March 2011 at Kalasalingam University, Anandnagar, Krishnankoil, Tamilnadu (state).
3. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Energy and Exergy Analysis of Gas Turbine – Fuel Cell based combined cycle Power Plant*, ASME 5th International Conference on Energy Sustainability & 9th Fuel Cell Science, Engineering and Technology conference, August 7-10, 2011 (ES Fuel Cell 2011), Washington, DC, USA.
4. **M. Sreeramulu**, A.V.S.S.K.S. Gupta and T. Srinivas *Parametric Analysis of Molten Carbonate Fuel Cell–Gas Turbine hybrid Power Plant fed with different fuels* International Conference on Mechanical Engineering Research (ICMER 2011) Pahang, Malaysia December 5-7, 2011.
5. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Parametric Thermodynamic Analysis of SOFC-Gas Turbine Combined Cycle Power Plant fed with different fuels*, International Conference on Futuristic Trends in Materials and Energy Systems (FTME 2011), 29th– 30 December 2011 at Siddhartha Engineering College, Vijayawada.
6. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Thermodynamic Performance analysis of integrated Pressurized Fuel Cell–Gas Turbine Combined Cycles for Power Generation*, International Conference on Advances in Mechanical and Building sciences (ICAMB 2012), 9-11 January 2012 at VIT, Vellore.

7. A.V.S.S.K.S. Gupta, **M. Sreeramulu**, B.V. Reddy, *Exergy Analysis Of Gas Turbine – Molten Carbonate Fuel Cell Hybrid Power Plant*, 5th International Conference on Computer and Electrical Engineering (ICCEE 2012) October 26-27, 2012, Hong Kong, China.
8. **M. Sreeramulu**, T. Srinivas, P.V. Durga Prasad, *Thermodynamic Analysis of Methane Fed Molten Carbonate Fuel Cell gas Turbine Combined Cycle Power Plant*, International Symposium on “Recent Advances in Integrated Energy and Energy Conservation (RAIEEC-2012) December 19-20, 2012, JNTUH, Hyderabad.
9. P.V. Durga Prasad, A.V.S.S.K.S. Gupta, **M. Sreeramulu**, *Turbulent flow Heat Transfer and Pressure drop in a double pipe u-tube heat exchanger with helical tape swirl generators*, International Symposium on Recent Advances in Integrated Energy and Energy Conservation (RAIEEC-2012) December 19-20, 2012, JNTUH, Hyderabad.
10. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, B.V. Reddy, *Exergy Analysis of Liquid (Ethanol / Diesel) Fueled SOFC based Gas Turbine Hybrid Power Plant*, 1st International Conference on “ADVANCES IN THERMAL AND ENERGY SYSTEM (AITES-2013) August 09-10, 2013, at Gandhi Engineering College, Bhubaneswar.
11. **M. Sreeramulu**, K. Deepak, *Thermodynamic modeling of Solid Oxide Fuel-Cell Gas Turbine Combined Cycle Power Plant*, International Conference on Advances in Mechanical Sciences (ICAMS-2014), 9-11, January 2014, at Vardhaman College of Engineering, Hyderabad.
12. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, K. Deepak, *Performance Analysis of Fuel Cell – Gas Turbine Hybrid Cycles for Micro Power Generation*, 2nd International Conference on Bio-Energy, Environment & Sustainable Technologies, 28-31 Jan’2015, at Arunai Engineering College, Tiruvannamalai, Tamilnadu (state).
13. M. Sreeramulu, Mythili Ch, Darshan. B.G, Yalew Dessalegn, Leulseged Belay, *Characterization of Mechanical and Tribological Behaviour of Hybrid Fiber Reinforced Polymer Composites*, 5th International Conference on the Advancement of Science and Technology (ICAST-2017), 19-20, May 2017, Bahir Dar, Ethiopia,
14. P.V. Durga Prasad, R. Venkateswar Rao, **Dr. M. Sreeramulu**, *Numerical analysis of heat transfer and pressure drop characteristics for the plate-fin and tube heat exchanger*, International Conference on Applied Mechanical Engineering Research (IC-AMER2019) NIT Warangal, India – May 02-05, 2019.

15. Mythili Chaganti, Eswaraiah, **Sreeramulu M**, K. Ramanaiah, K Deepak, Ecofriendly biodegradable composite material for thermal insulation application, 4 th International Conference on Advances in Mechanical Sciences (ICAMS 2021) VCE, Hyderabad, India – Nov 26-27, 2021.

National Conferences:

1. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Exergy Analysis of Gas Turbine - Fuel Cell based combined Cycle Power Plant*, National Conference on Emerging Trends in Engineering & Technology (NET 2011), 25-26 February 2011 at Government Engineering College, Kozhikode, Kerala.
2. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Thermodynamic Analysis of Molten Carbonate Fuel Cell – Gas Turbine Combined Cycle Power Plant for different fuels*, 21st national and 10th ISHMT-ASME Conference 27 – 30 December 2011 at IIT, Madras.
3. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, T. Srinivas, *Thermodynamic modeling of ethanol fed molten carbonate fuel cell-based gas turbine combined cycle power plant*, National conference on Modern Trends in Mechanical Engineering (MTiME-2012), 18-19th Feb 2012 at GIET-Gunupur, Odisha.
4. **M. Sreeramulu**, Mythili Chaganti, J. Suresh Kumar, K.V. Ramanaiah, *Characterization of Banana Empty Fruit Bunch Natural Fiber Reinforced Polyester Composite*, 1st National Conference on Robotics, Automation and Mechatronics (NCRAM-2014), 12-13 March, 2014 at JNTUH, Hyderabad.
5. **M. Sreeramulu**, Mythili Chaganti, J. Suresh Kumar, *Mechanical Characterization of Banana Empty Fruit Bunch Natural Fibre Reinforced Polyester Composite Material*, 1st National Conference on Recent Innovations in Mechanical Engineering (RIME2014), 21st March 2014 at CMR TECHNICAL CAMPUS, Hyderabad.
6. **M. Sreeramulu**, A.V.S.S.K.S. Gupta, Integration of Molten Carbonate Fuel Cell gas Turbine for hybrid Power generation, All India Seminar on Fuel Cells & Hybrid Vehicle Technology, 18-19, August, 2017, Institute of Engineers(India), Hyderabad.
7. **Dr. Sreeramulu M**, Dr. Anteneh Mohammed, Luelseged Belay, Seid Endro & Wubishet Degife Sustainable Energy & Exergy Analysis of Fuel Cell based Gas Turbine Combined Cycle Power Plant, National Conference on Science, Technology and Innovation for Sustainable Development (STISD-2018), 09-10 June, 2018 at KIoT, Wollo University, Ethiopia.

<p>Awards/Honors</p>	<ul style="list-style-type: none"> ❖ Best paper award in thermal sciences for the paper presented in National conference at Govt. Engg. College at KOZHIKODE, KERALA in 2011. ❖ Worked as Principal (Ratified by JNTUH), during Sept 2012 - Nov 2016. ❖ Joint Patent publications: on Electric Power Generation by using the Thermal Energy of an Exhaust Gas Generated in a crematory, 202041019361 and Advanced Robotic Controlled Land Vehicles, 202241014399. ❖ Completed TEQIP-III Research project sanctioned by JNTUH on experimental investigation of the spray characteristics of nano particles blended water- diesel/ biodiesel emulsion fuels. ❖ Completed NPTEL courses on Thermodynamics, Heat Transfer, R& A/C with Elite certification and authored a chapter on AI based Hybrid Intelligent Electric Vehicle in the book titled Applications of AI in Real World. (ISBN: 978-93-91074-36-4)
<p>Workshops / Seminars / Conferences / Training Programs Conducted</p>	<ul style="list-style-type: none"> ❖ National Conference on Recent Challenges in Engineering Science and Technology (NCRCEST-2019) on 26th April 2019 at Hyderabad Institute of Technology and Management (HITAM), Hyderabad. ❖ One-week FDP on Design & Analysis of Composite Materials Mechanics of Composite Materials Using AUTO DESK HELIUS Composite Software from 26th – 30th June 2020 at Hyderabad Institute of Technology and Management (HITAM), Hyderabad. ❖ One-week FDP on Recent Advances in Thermal Engineering, RATE-2020, 22-26th September 2020, at Hyderabad Institute of Technology and Management (HITAM), Hyderabad.
<p>Workshops / Seminars / Conferences / Training Programs Attended</p>	<ol style="list-style-type: none"> 1. Orientation Course (General) from 31.05.2010 to 28.06.2010 at ASC JNTUH, Hyderabad 2. International Winter School on Advances in Aeronautical Material Materials and Technologies–2010, during 15-21st, December 2010, by RCMA(Materials), CEMILAC, DRDO & MGIT, Hyderabad at Taramati Baradari Heritage Complex, Gandipet, Hyderabad. 3. Two Week ISTE Workshop on Thermodynamics in Mechanical Engineering, during 14 – 24 June 2011 under National Mission on Education through ICT by IIT Bombay at Remote Centre, JNTUHCE, Hyderabad. 4. Two Week ISTE Workshop on Heat Transfer, during 29th November to 10th December 2011 under National Mission on Education through ICT by IIT Bombay at Remote Centre, JNTUHCE, Hyderabad. 5. Two Week ISTE Workshop on Computational Fluid Dynamics, during 12th June to 22nd June 2012 under National Mission on Education through ICT by IIT Bombay at Remote Centre, JNTUHCE, Hyderabad.

6. Two Week ISTE Workshop on Introduction to Research Methodologies, during 25th June to 4th July 2012 under National Mission on Education through ICT by IIT Bombay at Remote Centre, JNTUHCE, Hyderabad.
7. Two Week ISTE Workshop on Fluid Mechanics in Mechanical Engineering, during 20th to 30th May 2014 under National Mission on Education through ICT by IIT Kharagpur at Remote Centre, TITS, Patancheru, Hyderabad.
8. Two Week ISTE Workshop on Pedagogy for effective use of ICT in Engineering Education, during 5th to 7th January 2015 & 19th to 21st January 2015 under National Mission on Education through ICT by IIT Bombay at Remote Centre, GITAM University, Hyderabad.
9. One Week National Level Refresher Course on Refrigeration & Automobile Air - Conditioning (AICTE – ISTE sponsored FDP), during 23rd to 28th July 2018, at MVSR Engineering College, Nadargul, Saroornagar, Hyderabad.
10. Chaired the technical session in International Conference on Manufacturing, Material Science & Engineering (ICMMSE-2019), Organized by CMRIT, Hyderabad, on 16th August 2019.
11. Regional Research Symposium on Problem Based Learning (RRSPBL-2019) during 21st to 23rd November 2019 in KLE Technological University, Hubballi, India.
12. AICTE inculcating Universal Human Values in Technical Education, during 12-16 Oct 2020.
13. ATAL FDP on Green Technology & Sustainable Engineering, 19-23 Oct 2020, Dr B R Ambedkar NIT, Jalandhar.
14. ATAL FDP, Thermochemical Energy Storage, 23-27 Nov 2020, IIT Roorkee.
15. 5 Day Online Workshop on Recent Advances in Science and Engineering-2021, 14-18 June 2021, by CREC, Tirupati
16. 5 Day FDP on Spectroscopical Studies in Structural Analysis-Modern era Applications, 25-29 Jan 2021, by HITAM, Hyderabad.
17. 5 Day International Online FDP on Thrust Areas of Research in Mechanical Engineering-2021, 22-26th June 2021, by GIST, Nellore.
18. FDP on Developing Activities for OBE attributes 07-11th Feb 2022, by NITTTR Chennai.